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MICHELA BELLA

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WILLIAM JAMES

PSYCHOLOGY AND ONTOLOGY OF CONTINUITY

Sous la direction de :

Prof.ssa Rosa Maria CALCATERRA
Prof. Claude M. GAUTIER

Devant la commission d'examen formée de :

Prof. Rosa Maria CALCATERRA	Università di Roma Tre	Directeur
Prof. Massimo FERRARI	Università di Torino	Membre
Prof. Claude M. GAUTIER	ENS-Lyon	Co-Directeur
Prof. Mathias GIREL	ENS-Paris	Membre
Prof. Stéphane MADELRIEUX	Université Jean Moulin III	Membre
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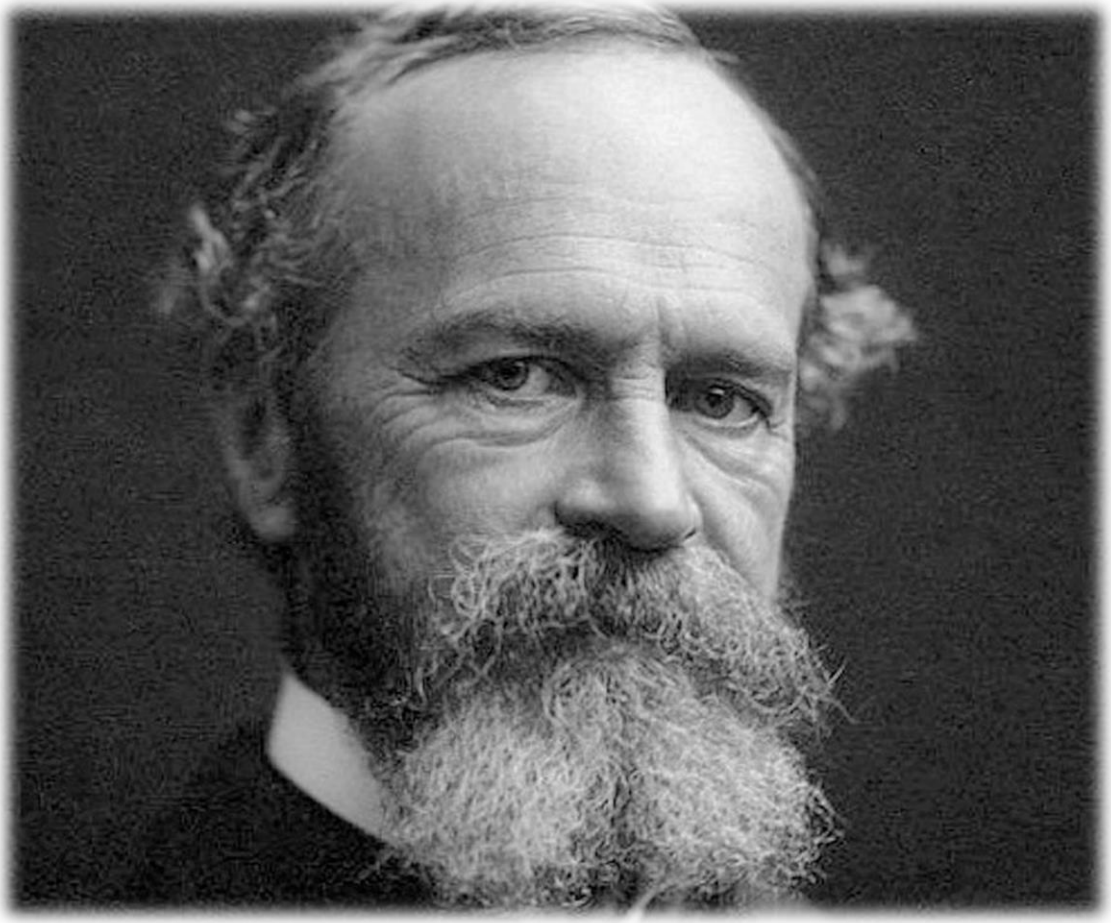
PSYCHOLOGY AND ONTOLOGY OF CONTINUITY



WILLIAM JAMES
(New York, 11.01.1842 – Chocorua, 26.08.1910)

Contents

III. Epistemology and Ontology of Continuity

Abbreviations

William James

CWJ – *The Correspondence of William James*

EP – *Essays in Philosophy*

EPS – *Essays in Psychology*

ERE – *Essays in Radical Empiricism*

ERM – *Essays in Religion and Morality*

MEN – *Manuscripts, Essays and Notes*

MT – *The Meaning of Truth. A Sequel to Pragmatism*

P – *Pragmatism. A New Name for Some Old Ways of Thinking*

PBC – *Psychology. Briefer Course*

PP – *The Principles of Psychology, 2 vols.*

PU – *A Pluralistic Universe*

TT – *Talks to Teachers on Psychology and to Students on Some of Life's Ideals*

VRE – *The Varieties of Religious Experience*

WB – *The Will to Believe and Other Essays in Popular Philosophy*

Ch. S. Peirce

CLL – *Chance, Love and Logic*

CP – *The Collected Papers of Charles Sanders Peirce, 8 vols.*

EP – *The Essential Peirce, 2 vols.*

RLT – *Reasoning and the Logic of Things*

SW –*The Philosophy of Peirce: Selected Writings*

Henri Bergson

DI – *Essai sur les données immédiates de la conscience*

EC – *L' évolution créatrice*

LPM – *Leçons de psychologie et de métaphysique*

MM – *Matière et mémoire, essai sur les rapports du corps à l'esprit*

PM – *La pensée et le mouvant*

Introduction

The thesis *William James: Psychology and Ontology of Continuity* addresses the issue of the continuity of consciousness in William James, considering also its possible actualization. In particular, this work aims at outlining critically the various theoretical perspectives that influenced James's philosophical discourse. On the wave of the Darwinian theory of evolution, James's reflections originate in the field of late 19th century physiological psychology where he develops more and more intensely the exigency of a renewed epistemology and a new metaphysical framework for gathering the most interesting scientific theories and discoveries about the human mind. The analysis of the theme of continuity allows us to capture, from the historical and the theoretical point of view, the importance of James's gradual translation of psychological experimental observations of the continuity of thought into an ontological perspective according to which continuity constitutes a feature of reality. Indeed, such an analysis clarifies James's position within his own historical context, as well as highlighting the most original outcomes of his work.

Whilst many of James's phenomenological and psychological insights had an important and far-reaching influence, the aspect of continuity, although mentioned by some scholars, has not been properly analysed to date. This is firstly due to the great attention that interpreters have commonly paid to James's individualist attitude, hence to the tychistic or *variant* features of reality. Secondly, it is important to consider that the main interpretative stream of pragmatism narrowed the comparison between James and Charles S. Peirce into a paradigmatic polarization, so that James was mainly considered as the philosopher of nominalism and individuality, while Peirce was labeled as the realist in search of a mathematical continuum that would match with his theory of infinite semiosis.

It is important to acknowledge that James was immediately intrigued by the contradictory synthetic unity of mental states that he could draw from his description of the continuity of the states of consciousness, in so far as they preserved both real continuity and real divisibility. The vague aspect of experience was not fully reproducible in conceptual terms, and in logical terms it resulted in a contradiction. James's elaboration of this problematic issue should be considered

within the shift of paradigms that was taking place in the first half of the 20th century. Such an epochal change affected James's elaboration, particularly through the theoretical and methodological advancements that were made in the fields of physiology and biological sciences throughout the 19th century. The formulation of a continuum capable of retaining both the synthetic and the power of individuation also became a critical issue for James. By developing his philosophical arguments, he persuaded himself that the dualistic approach was unsatisfactory when defining a descriptive ontology. A new scientific paradigm, that he himself would have helped later to criticize and change from within, was necessary to establish a gradual amelioration of his research work.

The work of James is for the most part a work of epistemological critique, since he relentlessly claimed that temperamental and metaphysical assumptions affected even the supposed neutral direction of science, as it did every other field of human knowledge. Sellars's challenge to the "myth of the given" is the ripest fruit of the critical work internal to the empiricist-naturalist-positivistic mentality, but such criticism of the supposed neutrality of sense data began long before and in different fields of knowledge with the contribution of thinkers such as Peirce, Ernst Mach (1838 - 1916) and, in a particular mode, Henri Bergson (1859-1941). Many critics, including James himself, recognized that Peirce's and, especially, Bergson's theories were the most significant philosophical sources for James's elaboration of the continuity of reality. In fact, whilst there are specific differences between their philosophies, James gleaned important philosophical legitimacy from Bergson's sharp criticism of intellectualism (or absolute rationalism) and his assertion that the "philosophy of mechanicism" implies "psychological determinism" was, most probably, particularly appreciated by James. However, considering the results of James's and Bergson's inquiries, it seems clear that there are significant differences between their theoretical outcomes. Such differences are connected with their own differing philosophical training and, more generally, different cultural frameworks : James remains profoundly committed to Anglo-American empiricism, whereas Bergson shows distinctive traits of the Cartesian tradition. Nevertheless, their philosophical engagement with *freedom*, that is to say, with the deconstruction of all idealisms that might obstruct the honest *s*earch for truth, is the most significant and, indeed, resistant undertone of both their philosophies.

James's and Bergson's temporalization of scientific paradigms accords with the rehabilitation of theories of direct perception within a more extended and enriched conception of experience. In this sense, it seems that the effort to preserve a real space for the freedom of research in the scientific and *latu sensu* cultural fields of society was a common trend at the time, involving also Peirce and Mach. That is to say that the liberty was to be practically pursued in the methodology of research which tirelessly attempted to recognize and take into account the powers involved in epistemological play. The social and natural observable features of human beings suggested that these powers consist in the conceptual meanings transmitted by historical tradition, and the physiological and biological interests that affect human beings. More specifically, James claimed that these psychological tendencies worked exactly in the direction of dogmatic assumptions. The tangle of conceptual and physiological cognitive dimensions is thus the crucial point that emerges in these years, and it reveals particularly interesting interdisciplinary and insightful aspects in the pragmatism reception.

The introductory section of this work will present the main lines of research and indicate a possible new outcome in the attempt to denote in a *vitalistic* sense the epistemological realism of James. Moreover, the theoretical and methodological criteria will focus upon identifying and clarifying the key terms of his analysis, in particular with regard to philosophical terms. Considering the naturalist and continuum ontology embraced by James, and taking into account the pluralistic definition of his metaphysics, it seems important to dwell upon the distinction between ontology *and* metaphysics. The cultural atmosphere of the beginning of the 20th century can be revived through the clarification of the current interpretations of these terms, at least in the Anglo-American context. To such an aim, framing the objectives of James's polemical discourse and acknowledging the characteristic mixture of some unjustified assumptions that silently influenced the progress of scientific research, is very promising.

The thesis is divided into three main chapters. The first chapter is a direct reading of some key chapters of the *Principles of Psychology* (1890), and of James's articles that can be considered as previous drafts. The analysis will focus particularly upon PP IX *The Stream of Thought*, X *The Consciousness of Self*, XV *The Perception of Time*; PP II XIX *The Perception of Reality*, and XX *The Perception of Space*. Through this overview, I will also try to reconstruct the indirect state of

psychological research, particularly that of experimental psychology. James mounted lucid criticisms of the atomism of sensation and associationist psychology, focusing upon critical interconnections between psychology and philosophy, methodology and theory. This chapter is an important support for my epistemological reading of James's theories.

The second chapter is a recollection of the most interesting contributions to the issue of continuity produced by three major interlocutors of James, to whom extensive correspondence and interesting analogies have traditionally drawn scholars' attention. At the time, Peirce, Bergson, and Mach were three resonant voices on the cultural horizon and nowadays their influence is regarded as undeniable, especially with regard to the critical-methodological and epistemological aspects of their reflections in different areas of research. Such an indirect reconnaissance of the main influences on and criticisms of James's elaboration of the issue of continuity will be outlined in proportion to the intensity of the relationship between James and these authors, and some of the most interesting topics at that time will be focused upon. This work of clarification, which is pursued through the acquisition of contemporary external points of view, is important to show both the historical and theoretical context of certain assumptions made by James (e.g. synechistic pluralism) and to emphasize the peculiarities of his philosophical reflection. An accurate contextualization enables us to notice James's adherence and contribution to that group of thinkers that witnessed the collapse of mechanical models in physics due to the irruption of the issue of temporality. Such a situation opened the way to theories of relativity and new epistemic models based upon the idea of uncertainty rather than on absolute truths or solid certainties.

The third chapter finally focuses upon the philosophical texts of James. The intention of this analysis is to highlight the psychological assumptions and the epistemological principles that James firstly developed within his psycho-physiological training. More specifically, the aim of such analysis is to show that these principles remain important acknowledgments because they shape significant traits of James's view. In this regard, the cognitively active *and* selective description of mind suggested to James a necessary enrichment of the notion of rationality to the extent that it included 'personal reasons'. His paradigmatic distinction between rationalists *and* empiricists already appears in 1897 as the physiological and

temperamental distinction between 'tender- minded' and 'tough- minded', and was already expression of James's tendency towards a new radically empiricist epistemology. The general enrichment of the scientific approach to human beings and their faculties found in pragmatism a natural and valuable new methodology. According to pragmatist methodology, in fact, the meaning of concepts could be enhanced by considering all their possibly conceivable (theoretical and practical) consequences.

From the beginning, James's radicalization of empiricism was connected to a pluralistic metaphysics which was supposed to leave room for every human reason and to consign to human beings' potentialities the actualization of novelty. In SPP he still thought of the alternative between monism and pluralism as the possibility of real novelty. Like change, novelty was really possible in a world still in-the-making, but it was difficult to show how it could happen and he finally formulated the hypothesis of small drops in which reality comes to be all at once. This solution was assumed to be possible and probable by James, even if it raised some difficulties as to what his general view concerns. Some tensions still remain between his monistic or pluralistic connotation of pluralism, which can be relevant even for his more general connection of epistemology and ontology, and the classification of his hypothesis of pure experience. However, his urgency to stress the sensualist side of knowledge and reality was mainly due to James's effort to avoid falling into surreptitious intellectualist lines of thought. Some of the essays included in MT and ERE are particularly interesting for the analysis of feelings and relations. They treated some core arguments for James's recovery of the theory of direct perception within his doctrine of radical empiricism and his metaphysical theory of pure experience.

The Conclusion focused upon the relevance of some of James's most precious studies and insights have for our times. Recollecting the key points and the theoretical issues upon which James seemed to devote long and deep reflection, and given the general reconstruction of his philosophical view, interesting lines of influence can be drawn, connecting him to contemporary branches of psychology and philosophy. For instance, there are interesting continuities with contemporary revivals of Dewey's psychology and other significant affinities can be found with certain contemporary phenomenological approaches to neuroscience.

I

PSYCHOLOGY OF CONTINUITY

Introduction

> Life's task for some philosophers is the quest for certainty, the determination of what is indubitable. For others it is systematizing a hierarchy of moral values, and for still others it is developing a perspective from which to interpret world history. For James, I submit, it was one of philosophically justifying his belief that *continuity* pervades both experience and nature. He deeply wanted to authenticate this belief, […] Introspection can reveal the continuity of introspectible experience, but speculation and argument, on top of introspection, are required for concluding that *all* experience and nature conform to a metaphysics of continuity (G. Myers, PP: xx).

William James (1842-1910) was one of the most famous American psychologists and philosophers of the 19th century. As a philosopher, he is one of the fathers of Pragmatism[1], he formulated a challenging theory of truth, an epistemological doctrine which he called 'Radical Empiricism', and the metaphysical hypothesis of 'Pure Experience'. In psychology he is chiefly remembered for his concept of functionalism, his theory of emotion (James-Lang), and his considerations of self and the innovating image of the stream of consciousness. Many of his most interesting philosophical insights are considered to be in a certain sense derivative of his physiological and psychological studies, and these latter are at least profoundly intertwined with his later theories. It took him twelve years to write his *Principles of Psychology* (1890)[2], a book intended to make psychology «a natural science» (PP: 270). Reading this two volumes, it is clear that James found himself involved in crucial epistemological issues which were, in principle, not neatly soluble only on psychological grounds. In other words, he acknowledged that psychology and philosophy in the psychological dimension of human beings were far more intertwined. Despite the explicit intention of the author, many scholars have considered this work to be a piece of phenomenology[3] rather than a work of psychology.

As is known, the second half of the 19th century was a crucial moment in the autonomous development of psychology as a natural science[4]. Many authors were concerned with methodological issues and the definitions of the limits and possibilities of the new science. Moreover, this academic and cultural crisis on the one hand wrought so many important scientific consequences for the development

of psychology itself; on the other, it was a loss for philosophy, which either lost its adherence to a scientific approach to reality or became a sort of *ancilla scientiarum*. Imbibed in this atmosphere and moving from physiological and psychological standing points, James succeeded in exploring the territory of cognition, pointing out pivotal psychological questions which definitely crossed philosophical lines, making it clear how shifting and marginal were the limits of these two branches of knowledge.

In his masterpiece James acknowledged that our thought is *continuous*, that is to say, our awareness of the experience of relational continuity. This constitutes the major omission of introspective psychology. James' critiques mainly addressed the assumption made by classic empiricists of the atomistic conceptualization of sensation. Because of their intellectual approach, their lack of introspective attention, and the difficulty of confronting such a fleeting issue, they were led to ignore living parts of the human mind, which is transitive. James's insistence upon the presence and richness of the relational aspect of our inner life is due to the profound misunderstandings that such a failure, in his view, has provoked in psychology, as well as in the history of philosophy. Idealists came to their dogmatic and strictly logical assertions from a very similar psychological point of view, that of the *absolute* disconnection of sensibility.

The perceptual continuous character of experience, which is strictly connected to James's conception of feelings[5], seems to be both the starting point of James's inquiry and the very requirement of his long-life critique of intellectualism. In G. Myers's words, to James «reality is not beyond the reach of sensation, is not something that must be inferred or constructed as lying beyond all actual or potential sensations» (PP: xxiii).Such a profound concern, which is even more actual today in a world made of images and virtual realities, was the very commitment that James took on until the end of his life[6]. His engagement with the continuity of experience became more and more clear to James, and in 1909 he confesses to have been much troubled by Green's criticisms of English sensationalism, so strong yet was James's belief that sensations were the original and natural human way to be acquainted with external world.

James believed the excessively conceptual-abstract approach to reality, that was performed both by British empiricist psychology (J. Mill, J. S. Mill, A. Bain) [7], and the successors of Kant, to be dangerous for human freedom. He individuated a

common idealistic root at the basis of their misconceptions which in psychology was conveyed by the atomistic conception of sensation, whereas absolute idealists pursued Kant's definition of sensation as blind. His conceptions of space-perception and consciousness are strictly connected in their opposition to this classic position. His theory of native *acquaintance* with the world was a way of claiming the concrete inexhaustible variety of reality and defending the epistemological and existential possibility of both a humanistic realism[8] and a realistic humanism. Therefore, *perception* (in so far as continuous with sensations) remains the very field in which an anti-intellectual approach to reality should be accounted for.

I.1 The Naturalistic Activity of Mind

Ralph Barton Perry has underlined how much James was influenced by Charles Darwin, in particular as to his view of «the human mind with a liberal share of *inborn* traits and aptitudes. This appears in his long list of human instincts, and his apparent readiness to add to the list, as well as in his recognition of *innate* categories which predetermine the human modes of thinking and even of experience» (Perry 1935, vol. II: 80). According to another important biographer of James, Gerald Myers, this active view of mind together with his doctrine about the nature of sensations form the main features of James's *nativism* (PP: xii).

Soon after James's death in 1910, J. J. Putnam wrote a brief article in the «Atlantic Monthly» about the life and work of his colleague and friend. He underlines that James's earlier papers dealt with physiological questions, and he pointed out that: «Even in these his psychological and philosophical interests were foreshadowed, while, on the other hand, his early training as a physiologist affected all his later work»[9]. Bruce Kuklick has rightly suggested that James's guiding principles were implicit in all his writing. He points out two significant aspects. First, his penchant for popularizing, and second his ability to speak to successive generations and different nationalities of readers[10]. James wrote a great introduction to psychology and another, unfinished, introduction to philosophy, and most of his writings first appeared as public lectures. According to Kuklick, these traits of his works manifested his need to convey to others his sense of the world and to communicate his attitude toward life, in fact expressing profound needs. We might say that all James's philosophy is a positive inquiry into the radically precarious state of human existence.

The American reception of Darwinism is one of the most important influences on James's thinking. We know that, initially the evolutionary view made him afraid of a mechanistic universe. In 1865, while attending Harvard Medical School, he joined the scientific expedition to Brazil organized by Louis Agassiz, who was a famous defender of the theory of the divine creation of species. In fact, the Swiss biologist had become a convinced anti-Darwinist in 1859 and the antagonist of Asa Grey, who, instead, welcomed Darwin's book and tried to spread his ideas in the scientific community at Harvard, whilst maintaining his religious views. Both Grey

and Agassiz were professors at Harvard University, Grey taught natural history and Agassiz was professor of zoology and geology, and a key member of the Lawrence Scientific School, which James attended for almost a year in 1861-1862 before switching to medicine. His correspondence from Brazil shows that James soon had a change of heart and became opposed to Darwin's ideas. The 'Thayer expedition' was, however, an important experience for young James. According to Luis Menand (2002), in his notebook Z James seems to have begun to think in terms of relations as to what concerns the development of manners. He speculated as to whether race or circumstances made individuals polite. Moreover, he remained indelibly affected by the inexhaustible variety of the forms and colors of Brazilian nature. On 15 July he wrote to his brother Henry Jr. from the "Original Seat of the Garden of Eden" :

> Darling Harry
> This place is not 20 miles fm. Rio, wh. damnable spot I left this mrng at six and now (II p.m) am sitting on a stone resting fm. my walk and thinking of thee and the loved ones in Bosting. No words, but only savage inarticulate cries can express the gorgeous loveliness of the walk I have been taking. Houp la la! The bewildering profusion & confusion of the vegetation, the inexhaustible variety of its forms & tints (& yet they tell us we are in the winter when much of its brilliancy is lost) are literally such as you have never dreamt of (CWJ 1: 9-10).

This first impression is also very important for the development of his philosophical view, which would become deeply pluralistic. In January 1866 James returned home. He resumed medical school but was beset by assorted ailments—back pain, weak vision, digestive disorders, and thoughts of suicide—some or most of which were exacerbated by indecision about his future. In 1867 he went to France and Germany for nearly two years. He tried to attend Helmholtz's classes and other leading physiologists in Berlin, and became thoroughly conversant with the New Psychology. During this period, he discovered his beloved Renouvier, the French philosopher who helped James to overcome his strong depression and to believe in the will and positive engagement in life. The impression that purposeful activity was illusory, and existence could have no meaning was deeply depressing for James. In the light of mechanical determinism and death, none of his interests seemed to be justified, whether art, medicine, or biological sciences.

Just as we cannot understand James's philosophical elaboration considered it apart from his naturalistic perspective and psychological training, the originality and urgency of his philosophical reflection cannot be fully appreciated without

taking into account his existential engagement. James's sensitivity to the *radically precarious* state of human existence is a precious interpretative key. Contingency was to James the real condition of human beings since we are functionally and practically obliged to choose. The most interesting psychological acquisition was the active nature of minds. As we shall see in his early articles, and in selected chapters of the *Principles of Psychology*, such a characteristic activity was conjugated with a certain interpretation of Darwinian theory and Peirce's pragmatic maxim.

The historical roots of the connection between pragmatism and Darwinism lie in the 'Metaphysical Club'. When James returned to Cambridge, he took his medicine degree at the Lawrence Scientific School in 1869, and in 1872 he was appointed instructor in anatomy and physiology at Harvard. In his famous book, Louis Menand (2002) claims that the club was funded in 1872. According to Bruce Kuklick (1977), after the trauma of the Civil War many societies flourished in New England. These quasi-institutional forms attempted to revitalize American intellectual life beyond academia, although they remained very close to cultural and political institutions. All these clubs sought social and philosophical solutions and were inspired by the new speculative style of R.W. Emerson. The *Metaphysical Club,* so called by its members "half-ironically and half defiantly", like the greater number of cultural societies founded at that time, soon declined after the reform of Harvard University and the general re-centralization of intellectual activity. This brief experience was very formative for the young James. The core of the club consisted of men such C.S. Peirce, James Holmes, Chauncey Wright, Nicholas St. John Green, and Joseph Bangs Warner. Wright and Green were the intellectual leaders of the group and it was composed by «the very topmost cream of Boston manhood» (CWJ 4: 245)[11], mainly lawyers and scientists interested in philosophy.

In his lecture *The influence of Darwin upon philosophy*, first published in «Popular Science Monthly» under the title *Darwin's Influence upon Philosophy* (1909), Dewey argues that Darwin's influence resides in: «having conquered the phenomena of life for the principle of transition, and thereby freed the new logic for application to mind and morals and life. When he said of species what Galileo had said of the earth, e pur si muove, he emancipated, once and for all, genetic and experimental ideas as an organon of asking questions and looking for explanations» (MW 4: 7-8)[12].

The young American generation of intellectuals was ready to welcome Darwin's theory. Indeed, James was an evolutionist even before 1865. At that time, he had already reviewed the works of Thomas Huxley and Alfred Wallace. But, according to Menand, James refused to accept Darwinism as a law and he sharply contested the normative interpretations of the theory offered by Huxley and Herbert Spencer. James was a Darwinian but not a *Darwinist* (Franzese, 2009: 34). He did not believe that a unique general theory of life could explain everything. To him, Darwinism was a descriptive hypothesis which was proving to be scientifically workable, but philosophical and scientific attempts to develop it into a normative hypothesis would have led to a monistic determinism which was to James Darwin's evident misconception. As Kuklick (1977) underlines, Darwinism was allied with skeptical empiricism and even if some thinkers argued that the empiricism of Mill and Hume led to skepticism towards science and religion equally, many empiricists rejected only religion. Darwin postulated two principles to explain the development of life on earth: the principle of *fortuitous variations*, and the principle of *natural selection*. According to the first principle, offspring exhibited slight variations from the form of their parents. These variations were inheritable and thus the diversity of species could be explained by the endless proliferation of forms diverging from the original ancestors. The principle of selection, rather, explained the direction of the succession of these forms.

Darwin's evolutionary theory was not free from ambiguities and scientific problems. Nevertheless, it provided a fertile setting for the psychological and physiological description of a human being's mental life. James was particularly challenged by the possible connections of Darwinism with neurophysiology and antideterminism. The comparative analysis of our processes of thinking was an important means of corroborating the power of inductive scientific methodology and to widen its range of applicability. Focusing upon a particular empirical process, such as the perceptively continuous processes of thought, and given the evolutionary framework in which he could generalize the functions of our mental structure as successive adaptive acquisitions, James slowly developed the philosophical consequences of the pragmatic method and exposed his humanistic or radically empirical doctrine.

The ethical problem of freedom was at the core of James's approach to philosophy. He fretted about teleological and mechanicist determinism. Sergio

Franzese focuses upon the anthropology that James found in a certain reading of Darwinism. The Darwinian description of *chance* was a natural guarantee of free will, which is the condition for moral and ethical instances. Actually, the way in which James emphasizes our anthropological condition is a prelude to his epistemological humanism and even the breaking point with some of Darwin's ideas. James's philosophy is not completely reducible to the Darwinian matrix. There were some difficulties with the conception of the unilinear evolution of man. For instance, Wright was critical of the link between human reason and animal instinct. Nevertheless, James's reading of Darwin's anthropology is considered by Franzese to be the basis of his will to believe and the premise to his version of pragmatism as a theory of truth. This interpretation is very interesting and fitting, particularly as to what concerns the hypothetical nature of variations as a working hypothesis. Darwinism offered James the idea of continuous change in time in the natural world, which meant to him the possibility of real novelty and a melioristic-pluralistic universe. Franzese claims Darwin's «a-teleological indeterminateness» is a key concept with which to understand James's epistemological holism and radical humanism (Franzese, 2009).

To understand James's reading of Darwinism, we shall consider at least three interesting articles. In 1876 he reviewed Spencer's work and made clear his own conception of mind as an active faculty. Then in 1880 in the «Atlantic Monthly», he quarreled with supporters of Spencer, an event which help us to focus James's reading of Darwinian accidental varieties as the natural ground for free will. The brief essay *The Importance of Individuals*, which was supposed to be published after Grant Allen and John Fiske replies to James, came out only in 1890 and was subsequently published again together with *Great Men, Great Thought and the Environment* in *The Will To Believe* (1897).

In his *Remarks on Spencer Definition of Mind as Correspondence* (1876), James contests Spencer's reading of mental phenomena as limited and biased. According to James, different conceptions of mental activity open the way to very different philosophical conceptions of human beings. In particular, James analyses carefully the meaning of Spencer's definition of mental action as "correspondence", which the British philosopher adopted in the third part of his *Principles of Psychology* (1855)[13]. The evolution of mind is assimilated to the evolutionary processes of biological life and, on account of this similarity, Spencer argues that the level of

mental perfection can be measured by the same definition that he used in his *Principles of Biology* to describe the evolution of living forms : «The continuous adjustment of internal relations to external relations» (H. Spencer, 1896, vol. I: 203). In other words, Spencer believed that, just as complex living forms of being show rising internal capacities to correspond to environmental relations, the same formula can classify the level if mental evolution. Hence correspondence would be the sufficient law of mental growth. According to James, even if Spencer aims to cover the entire process of mental evolution, including the complexity of the human mind, his formula only succeeds in representing cognitive phenomena. In this view, Spencer does not seriously take into account the wider phenomenology of human mental states – such as sentiments, aesthetic impulses, religious emotions, personal affections – and consequently he avoided all the explicative difficulties of dealing with a highly evolved mind which shows acts of spontaneity. His formula can only describe a mind which is almost entirely shaped by the environment, far closer to animals than to humans. Common empirical experience rejects simplicity and passivity as characteristics of the human mind. Therefore, James continues his demolition of Spencer's definition of mind as correspondence in order to show that this is not a neutral view. James shows that the definition of correspondence is highly teleological since it postulates the distinction between the pure and simple mental action and the right mental action. Moreover, such a definition also suggests which are the criteria to evaluate the intelligence of the right mental action, that is, the ideal ends of :«physical prosperity or survival». The intelligent action serves certain ideal ends: «which are pure *subjective interests* on the animal's part, brought with it upon the scene and corresponding to no relation already there» (EP: 11). At this point, James focuses upon the concept of interest which is a key element in understanding all pragmatist philosophers, and no doubt pivotal in James. Perceiving beings show interested relations with the world and their interests move and order their actions, so that James claims that these practical (and aesthetic) interests are: «the real *a priori* element in cognition» (*ibidem*).

A definition of mental action cannot be based upon the notion of mere or neutral correspondence with the outer world, for it would not be valuable. Spencer's definition becomes comprehensible only by evaluating the adaptive capacity of mind in respect to certain ideal ends. James maintains that Spencer intentionally does not make clear this important part of his working definition . In fact, it is much

more problematic to explain active interests and spontaneous subjectivity within a rigorous evolutionary framework. The difficulty consists in drawing an apparently brand new factor from previous evolutionary grades. James attempts to escape a rigid psycho-physical reductionism. Indeed, the general principle of Spencer's definition – the fact that what comes first in so far as it comes first should dictate the law of our mind – seems to him to lead to absurd conclusions. However, James's criticism of Spencer's reticence is particularly vehement owing to the illicit act attempted by the British philosopher. James believes that Spencer is trying to formulate a regulative, not a constitutive, law of thought.

> Now, every living man would instantly define right thinking as thinking in correspondence with reality. But Spencer, in saying that right thought is that which conforms to existent outward relations, and this exclusively, undertakes to decide what the reality is. In other words, under cover of an apparently formal definition he really smuggles in a material definition of the most far-reaching import. […] In fact, the philosophic problem which all the ages have been trying to solve in order to make thought in some way correspond with it, and which disbelievers in philosophy call insoluble, is just that: What is the reality? […] To attempt, therefore, with Mr. Spencer, to decide the matter merely incidentally, to forestall discussion by a definition— to carry the position by surprise, in a word—is a proceeding savoring more of piracy than philosophy. No, Spencer's definition of what we ought to think cannot be suffered to lurk in ambush; it must stand out explicitly with the rest, and expect to be challenged and give an account of itself like any other ideal norm of thought. (EP: 16).

I have quoted this passage in full because James will raise the same criticism in PP to show that scientific discourses are not neutral, but always need to take into account surreptitious metaphysical infiltrations. Overall, they should not "smuggle" metaphysical contents behind formally psychological definitions. Whilst attempting to speak of correspondence in neutral terms, according to the truism that right thinking is thinking in correspondence with reality, Spencer implies some tacit and improper assumption about what reality is. Spencer's scientific definition of thought vacillates between: «mere passive mirroring of outward nature, purely registrative cognition and […] thought in the exclusive service of survival, would seem to be his ideal». These are both postulates or teleological hypotheses the truth of which we can only verify in the course of experience, not *a priori*. As we shall see in MT, James is already suggesting his theory of truth is ambulative, even if he does not yet consider how strict the inter-experiential social control of circulating ideas can be.

However, James immediately specifies that, in the case of the right mental action and physical prosperity and survival, means and ends are accidentally connected: «The reference to survival in no way preceded or conditioned the intelligent act; but the fact of survival was merely bound up with it as an incidental consequence, and

may, therefore, be called accidental, rather than instrumental, to the production of intelligence. It is the same with all other interests» (EP: 19). It is a fact that the right mental action is bound up with surviving, but it does not instrumentally serve the end of survival. James shows the essential difference between the point of view of consciousness and that of outward existence. He claims that, in the latter case, we can judge intelligent acts only in teleological terms hypothetically, or else introducing an external contemplating mind commenting upon facts according to a private teleological standard. In fact, from an external point of view, we always have to distinguish the means that we can see in action and the evaluation of ends (e.g. the pertinence of mental action) which is always added to facts. From an internal point of view, rather: «consciousness itself is not merely intelligent in this sense. It is *intelligent intelligence*». Actually, James maintains that, from the point of view of consciousness, it seems to supply both the means and the standard by which they are measured. Consciousness not only serves a final purpose, but brings a final purpose—posits, declares it. In this view, James claims that the phenomena of subjective interest appears upon the scene as a new factor which is supposed to be already latent in the physical environment. In conclusion, James underlines that the apparently scientific and neutral analysis made by Spencer is not really scientific in so far as it does not remain a hypothesis: «no law of the *cogitandum*, no normative receipt for excellence in thinking, can be authoritatively promulgated».

These authors have very different approaches to mind and, consequently, different theories. The spontaneity of mind is to James an unavoidable empirical element. Spontaneity goes together with variety, activity, and novelty. Not only cognition but also interests, ideals, and emotional idiosyncrasies carried on by cognitive mental states are fundamental parts of our mental life, and as such they find a scientific locus in Darwin's notion of spontaneous variations. It is very striking to read that, already in 1876, James was clearly stating that : «The only objective criterion of reality is coerciveness, in the long run, over thought» (EP: 21). Because of the present state of knowledge about ultimate things and ourselves, any exclusion of ideals and interests from how we think would be a dogmatic assumption such as to say that all human ideals aim at survival. In place of Spencer's formula of correspondence, James can only provide «several individual hypotheses, convictions, and beliefs», which, in turn, are verified only by the future.

James claims that these are all laws of the ideal in the sense that it is all a matter of interests which can be more or less useful for life. The core point is that: « decided or not, "go in" we each must for one set of interests or another». Our natural condition is to be interested and, as to what concerns the worth of the particular forms of æsthetic interest that we happen to prefer, there is no *a priori* mark. Experiences are the only human way to prove ideals and preferences. For his part, James believes that the knower is an actor, not a: «mirror floating with no foot-hold anywhere». The activity of mind also means that the knower is a co-efficient of the truth and the one who registers the truth that he has contributed to create.

In 1880 James took part in a philosophical debate in the «Atlantic Monthly». In his article *Great Men and Their Environment*, which was published in *The Will to Believe* (1897) as *Great Men, Great Thoughts and The Environment*, he sustained the importance of individual activity against the dogmatic methodological assumptions of social studies. His attempt to support individuality is carried on in a scientific anti-reductionist fashion. Specifically, he discusses some studies connected with a mechanistic reading of the influence of geographical environment and social circumstances on the direction of historical events. In this regard, James emphasizes the real importance of «great men» for the development of history. By saying so, James regains a theme dear to the American literary tradition of Carlyle and Emerson contra Spencer, but also in defense of those empirical instances, such as concreteness and individuality, that were seriously in danger within the scientific community of the time. Given the stage of uncertainty in certain areas of research, James contests the positivistic attitude of some scientists. In his opinion, they were surreptitiously affectionate to a materialistic and deterministic metaphysics and put the veto (or accuse of being anti-scientific) on every alternative position that wished to maintain the possibility to believe in personal *freedom*, in *indeterminism* and in the efficacy of *individual* characters. Moreover, James claims that these instances convey vital needs of human beings and as such they are legitimate and inalienable. This anti-intellectualist attention to the vast and complex phenomenology of human expression is so radical in James as to guide his pragmatic reformulation of the notion of experience and orients his metaphysics towards pluralism.

The question to which James gives his personal answer in this 1880 article is: «What are the causes that make communities change from generation to generation, - that make the England of Queen Anne so different from the England

of Elizabeth, the Harvard College of to-day so different from that of thirty years ago?» (WB: 164). An important part of that debate, and of James's scientific commitment to individuals, is to be sought in a different reading of evolutionism. Herbert Spencer and his followers proposed a markedly mechanicist understanding of evolution. Whereas James argued that social and environmental conditions alone are necessary but not sufficient to cause social-historical evolution. What makes communities change from generation to generation, in fact, are mainly direct or indirect actions of genius. At certain moments they succeed in establishing accidental relations with their social environment and become ferments of novelty. In other words, James was maintaining an anti-reductionist view of evolution and by doing so he was also convinced by Darwin's theory, or at least to the most peculiar aspect of the analysis proposed by the English biologist. In fact, Darwin (1859) distinguished between two different cycles of operation in nature relatively independent of one other.

> And this brings us nearer to our special topic. If we look at an animal or a human being, distinguished from the rest of his kind by the possession of some extraordinary peculiarity, good or bad, we shall be able to discriminate between the causes which originally *produced* the peculiarity in him and the causes that *maintained* it after it is produced; and we shall see, if the peculiarity be one that he was born with, that these two sets of causes belong to two such irrelevant cycles. It was the triumphant originality of Darwin to see this, and to act accordingly. Separating the causes of production under the title of `tendencies to spontaneous variation,' and relegating them to a physiological cycles which he forthwith agreed to ignore altogether, he confined his attention to the causes of preservation, and under the names of natural selection and sexual selection studied them exclusively as functions of the cycle of the environment (WB: 167).

Given the importance of adaptive-functional changes, that is, all those modifications that are due to direct pressure exerted by the environment on the body, and in which the internal relations would correspond to their external efficient cause, the triumphant originality of Darwin was to show how much greater is the mass of changes produced at the molecular level. These causes remain almost completely unknown to us[14]. With respect to sociology, James thus stressed the *anti-essentialist instance* of Darwinism and he also contributed to corroborate the possible indeterministic declension of the theory. These traits are characteristic of James's pragmatism. Darwin's molecular variations are internal novelties, invisible to the naked eye, and accidental. In this view, James attacks the reductionistic implications of the necessary methodological generalizations of sociology, which identified behaviours and reactions of the average individual regardless of the

concrete variety of physiological characteristics and especially of individual possibilities.

Grant Allen replied emphatically to James in his article *Genesis of Genius* published in March 1881 in the «Atlantic Monthly». Without hesitation, Allen argues that science should be concerned with explaining the mass-average and not the individual. John Fiske was, rather, more receptive and moderate in his reply to James, *Sociology and Hero Worship* («Atlantic Monthly», January 1881). The well-known follower of Spencer tried to clarify the distinction between history and sociology, thus meeting James's legitimate concern with an almost impersonal history of events and not individuals or, in other words, his preoccupation with a possible «collapse of history in sociology» (Franzese, 2009: 77). Fiske re-evaluates the appropriate contribution of social studies and their methodology in the field of history.

Actually, James reads the evolution in such a way as to make the most of the innovative and creative elements of society, which in his opinion remain individual outcomes selected and maintained by the environment. This view enables him to enhance not only the contribution of genius but, as one can see, also that of each man and woman. In fact, within the bio-evolutionary analogy carried out by James, every human being exhibits slight physiological variations which show a certain amount of power in conditioning their environment effectively, and through environmental selection, the same direction of history.

We can see that, on the ground of methodology, James was fighting against the deterministic assumptions of the social sciences, and especially against their arbitrary absolutistic outcome. Therefore, it would be profoundly wrong to read James's view as absolutistic in turn. For the evolution of communities, the role of the social environment remains a factor as important as individuals since it contains the possibility of change and ensures its continuity.

> The mutations of societies, then, from generation to generation, are in the main due directly or indirectly to the acts or the examples of individuals whose genius was so adapted to the receptivities of the moment, or whose accidental position of authority was so critical that they became ferments, initiators of movements, setters of precedent or fashion, centers of corruption, or destroyers of other persons, whose gifts, had they had free play, would have led society in another direction (WB: 170).

Both the functional description and the philosophical elaboration of the processes of interaction between individual and social in the shape of novelty and continuity would posed challenges to all of James's later elaboration. The

historical-environmental-social constraints of the present moment can create factual incompatibilities, precluding several possible directions in evolution, or making other possibilities redundant. Nevertheless, these constraints only generically determine the individual agent, they do not determine positively their specific *modus operandi*. James was trying to warn of the dangers associated with such an undue conclusion for science, which in this case would be made by pseudo-sociologists. As in biology, the social-historical evolution remains continuously open owing to the possibility of spontaneous variations. These latter are due to genetic mechanisms, not observable and multifaceted, whose positive outcomes are not predictable in their singularity. Living beings, such as the individual and the community for James, do not seem to be subject only to the direct influence of their environment, but they exhibit that physical and psychical concreteness. They preserve the signs of historical change, so that their evolution is written on those stratifications that our ancestors have chosen and preserved over time. Such a physiological, historical, and social thickness of living beings leads to a greater complexity and a far more irreducible uncertainty as to what concerns the concrete results of their interaction with the natural and social environment.

In another famous article published in 1879 in «Mind» entitled *Are We Automata?*, which will be the basis of James's fifth chapter of his *Principles of Psychology* (1890), he returns to the role of mental activity, this time to challenge the theory of automatism, and clarifies his conception of the activity of thought as cognitive and selective. James explains the theory expounded by Huxley (1874) that: «in everything outward we are pure material machines» (EPs: 38). According to Huxley, feelings *are* a byproduct of our nerve processes, mere shadows, epiphenomena. The causal relationship that we believe exists between our thoughts, in so far as we feel them connected by internal congruity or logical necessity, would be in reality the relationship between the underlying brain excitations to which our feelings are related. According to James, the common physiological argument of continuity, which postulates the impossibility of mental activities which do not have corresponding neuronal activities, can be explained in two ways. Firstly, assuming the presence of a consciousness lower in degree wherever intelligent behaviours are revealed, even where we would not suspect its presence. And secondly, with Huxley, Clifford, and Hodgson, starting from observations on lower animals, maintaining that, as brain mechanisms lie behind unconscious behaviours,

it is possible to suppose more complex mechanisms behind more intelligent activities. Discussing these scholars' position, James speaks of a certain dogmatism owing to a kind of religious faith which responds to aesthetic needs. As we have already seen in Spencer, the need for the *simplicity* of matter would be a hallmark of the scientific mentality and it would involve an inevitable impatience with the presence of destabilizing factors such as feelings and all that class of hardly classifiable mental phenomena (Cf. PP [VII]). Epistemological dualism, in this sense, shows itself to be a comfortable hypothesis. It grants absolute causal inertia to mental status and enables scientists to continue their laboratory research without disturbance. Common sense, rather, supports a unified vision of reality, without radical distinctions between mental and physical levels. In this way, it responds to another aesthetic ideal, that of *unity*. At the 19th century state of scientific knowledge, James believes that we cannot verify exactly the truth of a position with respect to the other, but these are both possible assumptions. Even here, however, James committed himself to the active role of consciousness. There is much evidence, in fact, that support the causal efficacy of consciousness, even against the theory of automatism.

Psychology as a natural science has to put the metaphysical problem of mind and body interaction aside and move from factual data naïvely considered. The naïveté of psychology must be real. In fact, a serious theoretical analysis of the problem of causality is not yet possible[15]. This is an obscure process for speculation in both the psychic and the physical processes. James claims that we cannot speak with absolute certainty of material causation and pretend that Hume, Kant, and Lotze never existed. The debate is still based on *a priori* assumptions from which the inevitability of the automaton theory is not deductible, except with «unwarrantable impertinence». From these brief hints, we notice that James's preference for individualism seems to be rooted in a certain reception of Darwinian evolutionism and widely nourished by the physiological debate of that time. Yet his interpretation of variation and selection is an expression of his radical empiricism and metaphysical pluralism. James's opposition to every form of speculative dogmatism in the scientific field conveys the pragmatist idea that human beings act on certainties and assumptions which are postulates that it will be for future experiences of verification b to decide whether and which constitute the right way to think, that is, that way that corresponds to reality.

With great acumen, Franzese underlines «la "natura d'ipotesi" che ogni individuo variante riveste nel quadro generale del mondo naturale, in modo da agevolare quel passaggio teorico analogico che porta dalla teoria darwiniana della selezione alla concezione pragmatista della verità» (Franzese, 2009: 23). The truth does not result in a speculative dispute. We cannot decide *a priori* what is reality, what matches it correctly. James believed that the truth of reality will take form only «in the long run» and «ambulando»; and above all, in this empirical process there is no absolute purity, no cognition without emotions, no relation with reality unencumbered by natural interests.

Considering James's psychological investigation, in the ninth chapter of *The Principles of Psychology* (1890), James characterizes the activity of consciousness as cognitive and selective, and in the tenth chapter he addresses the theme of personal identity and comes to define the *Self* as pluralistic and dynamic. Self-identity is not defined by the static possession of mental states. Rather, James describes the continuous succession of herdsmen who renegotiate and redefine their properties at every succession. James is well aware of the liability of both the boundaries of the *Self* and its internal relations, and he agrees with T. Ribot that: «the unity of personality stemmed not from a metaphysical underlying principle but from an empirical process» (Bordogna, 2010: 517). This psychological view of mental states and faculties comes under James's anti-essentialist view of individuals, which I have tried to illustrate through the comparison with nascent sociology, and, more generally, with evolutionary studies. Francesca Bordogna suggests that anti-essentialism provided the theoretical framework to revitalize and regenerate American society.

Both on the psychological side of personal identity and on that of social studies, James tried to abandon predetermined essential relationships and their schemas. Only dynamic relationships could be different and change over time. Therefore, individuals are engaged in playing a role in the possible creative improvement of community through their genetic and biographical peculiarity. The hypothetical nature of individuals keeps the world relatively open to modification and, hopefully, amelioration. *Meliorism* is the name of James's metaphysical and ethical view, which is rooted in the accidental biological and physiological nature of human beings. The fortuitous variation, though minimum accidental changes, have

a decisive power to James, which will fully develop in his philosophical view the consequences of this early insight.

At that time, James was already concerned by the attempts of philosophy of science to close the field of research, and all his efforts already went in the direction of preserving a scientific space for human freedom and to train the conscience to think freely in scientific discussion. It may be said that every science, and, in particular: «Philosophy, like life, must keep the doors and windows open» (SPP: 55).

I.2 Scope, Methods, and Classification of The Principles of Psychology (1890): (PP I, VII, VIII)

Yet in the 1890 preface to his *Principles of Psychology* James regrets the length of the book and suggests a different reading path to his readers. He particularly addresses neophytes in psychology to follow a different order of reading, encouraging them to pass directly from Chapter 4. *Habit* to Chapter 23. *The Production of Movement*, 24. *Instinct*, 25. *The Emotions*, and 26. *Will*; and, only at a second time, they will be ready to return to chapters 6. *The Mind-Stuff Theory*, 7. *The Methods and Snares of Psychology*, 8. *The Relations of Minds to Other Things*, 10. *The Consciousness of Self* , 12. *Conception*, 13. *Discrimination and Comparison*, 15. *The Perception of Time*, 17. *Sensation*, 20. *The Perception of Space*, 21. *The Perception of Reality*, and 28. *Necessary Truths and the Effects of Experience*. At first reading, James encouraged his students to skip these chapters in order to preserve their interest for psychology alive. We can extend James's opinion of Chapter [6], which was to him the most metaphysical chapter of the book, to the entire group of chapters. They were considered to be the less psychological, or better, the most pregnant parts from a philosophical point of view, and needed to be read in the light of previous psychological knowledge. The rest of the book, that is to say, Chapter 1. *The Scope of Psychology*, Chapter 2. *The Functions of the Brain*, Chapter 3. *On Some General Conditions of Brain-Activity*, Chapter 5. *The Automaton-Theory*, 9. *The Stream of Thought*, 11. *Attention*, 14. *Association*, 16. *Memory*, Chapter 18. *Imagination*, Chapter 19. *The Perception of 'Things'* , Chapter 22. *Reasoning,* and Chapter 27. *Hypnotism*, were not included in the black list of too metaphysical and difficult chapters. Probably they were suitable

for a first reading too. I will not pay great attention to the more philosophical chapters, with some important exceptions.

In this book, James confesses to have assumed some data uncritically, that is, thoughts and feelings, a physical world in time and space with which they coexist and which our thoughts and feelings know. These data are debatable on metaphysical grounds, but more expert readers should be aware that they are not under discussion in this book. As we shall see, Peirce will disagree with James on this point. According to him, the natural sciences do not accept their data uncritically. However, all that psychology can do, as a natural science, is to ascertain the empirical correlation of the thoughts or feelings, which are vehicles of knowledge, with definite conditions of the brain. Every other attempt falls outside the natural field of psychology. The author's main effort , and indeed the original trait of his work, was to offer a pivotal delimitation of the theoretical *and* methodological field of psychology. Assuming only a positivistic point of view, James was able to set the limits and possibilities of psychological reflection so that he could distinguish a proper psychological way of thinking and arguing from philosophical infiltrations. In a genuinely positivistic fashion, his main effort is to give a scientifically and methodologically accurate treatment to psychological matters in order to contribute to the development of a specific field of research. The data uncritically assumed by James are expressions of the present state of psychology, which «must sometime be overhauled», as should every data assumed by physics and natural sciences because men and women keep thinking and carrying on their research projects.

Actually, James attacks the surreptitious infiltration of «fragmentary, irresponsible, and half-awake, and unconscious that she is metaphysical,» metaphysics in psychology as in every natural science. Both psychological theories and metaphysical theories are useful things themselves when their scientific ambitions are recognized. In particular, spiritualism and associationism are unconsciously metaphysical views which should be kept out of psychology books , just as idealism should stay out of physics. Indeed, James distinguishes healthy science from healthy metaphysics by the mark of completeness. Metaphysics is the effort to think clearly and completely, he argues, so as to overhaul partial assumptions and to explain the ultimate reasons for the world. By contrast, no closed system belongs to science, rather the best mark of its health is an

«unfinished-seeming front». Here again, James insists upon a methodological issue. Natural sciences are descriptive and look after details. Psychology works on the empirical level and treats its objects as integers. It reveals laws of coexistence, for instance between our passing thoughts and brain states. Metaphysics, rather, is explicative and looks for ultimate reasons from a broader point of view. In the following passage, concerning the psychological sense of sameness, James is very clear about the different means and objects which are connected to psychology or philosophy respectively

> Note, however, that we are in the first instance speaking of the sense of sameness from the point of view of the mind's structure alone, and not from the point of view of the universe. We are psychologizing, not philosophizing. That is, we do not care whether there be any *real* sameness in *things* or not, or whether the mind be true or false in its assumptions of it. Our principle only lays it down that the mind makes continual use of the *notion* of sameness, and if deprived of it, would have a different structure from what it has. In a word, the principle that the mind can mean the Same is true of its *meanings,* but not necessarily of aught besides (PP: 435).

The quarrels which psychology avoids are the very matter of metaphysics. Indeed, science can accumulate descriptive details and offer functional descriptions which are helpful when focusing upon some questions which require metaphysical treatment. Such a claim is particularly close to Peirce's observation of the backward state of metaphysics as a science. Peirce pointed out the necessity for metaphysics to become more scientific in the direction of a methodological arrangement developed by the natural sciences, and to clarify its limits and possibilities.

However, according to his initial definition that «Psychology is the Science of Mental Life, both of its phenomena and of their conditions», in the first six chapters James investigates the physiological preliminaries of psychology and pays great attention to the cerebral conditions and concomitants of thinking under different conditions. Indeed, psychology includes «a certain amount of brain-physiology», since: «mental phenomena are not only conditioned a parte ante by bodily processes; but they lead to them a parte post» (PP: 18). On this account, James states: «the general law that *no mental modification ever occurs which is not accompanied or followed by a bodily change*» (*ibidem*). James is aware that the field of psychology is still as vague as the boundary-line of the mental. The question is whether vague subjects should be excluded from psychology, or not. In the case of purposive actions apparently unconsciously performed, for instance, James's opinion is very well known. He prefers to work with a broad conception of the subject because he

considers *vagueness*[16] an unavoidable stage of the development of every science, and most of the time fertile.

> The boundary-line of the mental is certainly vague. It is better not to be pedantic, but to let the science be as vague as its subject, and include such phenomena as these […]At a certain stage in the development of every science a degree of vagueness is what best consists with fertility. On the whole, few recent formulas have done more real service of a rough sort in psychology than the Spencerian one that the essence of mental life and of bodily life are one, namely, 'the adjustment of inner to outer relations.' Such a formula is vagueness incarnate; but because it takes into account the fact that minds inhabit environments which act on them and on which they in turn react; because, in short, it takes mind in the midst of all its concrete relations, it is immensely more fertile than the old-fashioned 'rational psychology,' which treated the soul as a detached existent, sufficient unto itself, and assumed to consider only its nature and properties. I shall therefore feel free to make any sallies into zoology or into pure nerve-physiology which may seem instructive for our purposes, but otherwise shall leave those sciences to the physiologists (PP: 19).

James is apparently reformulating his remarks on *Spencer's Definition of Mind as Correspondence* (1876), and he rehabilitates the British philosopher's vague definition in so far as he takes into account the concrete relations of our minds. James is here more benevolent towards Spencer, since he is addressing an external polemical objective: James and Spencer are on the same front in the battle against old-fashioned rational psychology. Moreover, he argues that psychology distinguishes the manner in which mental life seems to intervene in the mind-world relation by looking at phenomena of attraction. We notice a striking difference between: «Romeo wants Juliet as the filings want the magnet». At the point at which obstacles intervene, a wall for instance, Romeo and Juliet: «do not remain idiotically pressing their faces against its opposite sides like the magnet and the filings with the card. Romeo soon finds a circuitous way, by scaling the wall or otherwise, of touching Juliet's lips directly» (PP: 20). This funny example reminds us of the hypothesis of the 'automatic girlfriend' that James arrives at in *The Meaning of Truth* (MT: 103)[16]. The hypothesis of a mechanic girl was also inspiring to Hilary Putnam (1999). However, the point is that, with the filings, the path is fixed whilst with the lover it is the end which is fixed. In the first case, reaching the end depends upon accidents, in the latter, intelligent agents can modify the path-means indefinitely in view of their ends. They are able to co-operate with the conditions and to adapt their activities to realize the end. In conclusion, the common test used to discriminate between an intelligent and a mechanical performance is: «*The Pursuance of future ends and the choice of means for their attainment, are thus the* mark and *criterion of the presence of mentality* in a phenomenon» (PP: 21).

As in *Are We Automata?*, in Chapter [V] James complains of scientists' attempts to brand consciousness as a mere epiphenomenon owing to the abyss which still exists between mental and physical states. More specifically, in this chapter he accuses supporters of the «automaton-theory» of formulating a metaphysical reading of the mind-body relation, or better, relying upon their view on *a priori* and quasi-metaphysical grounds. This is to James an «*unwarrantable impertinence in the present state of psychology*» (PP: 138). There are also positive reasons to continue to discuss psychology as if consciousness had causal efficacy. Indeed: «the *particulars of the distribution of consciousness point to its being efficacious*». The argument against the automaton-theory important for James to justify the commonsense view that he assumes throughout his book.

In fact, the evolutionary theory, which agrees with the theory of common sense as to the efficacy of consciousness generally considers consciousness as a superadded organ which grows more complex and intense at higher stages of the animal kingdom and is supposed to help animals in their struggle for existence. Hence to be useful, it has to be efficacious and influence nervous systems. Therefore, James attempts to point out which function of consciousness may be complementary to the defects of the organs to which it is supposed to be adding – in particular, he takes into account the organs in which consciousness is most developed – and thus he inductively proves it to be efficacious.

As we shall see, study of the phenomena of consciousness shows that consciousness is primarily a selecting agency, and the nervous system seems to be affected by instability. More specifically, 'high' nerve centers perform indeterminately and unforeseeably in comparison with those of the basal ganglia. The vagueness of these organs constitutes their greatest advantage. In fact their owner is able to adapt their conduct to the minutest alterations in the environment. If consciousness helps living beings in their struggle for existence, it must be useful, and to be useful it must be effective. Otherwise it would not have been conserved in evolutionary development. As a most indeterminate and vague organ, the brain is able to perform multiple adaptive activities, so much so that it needs a kind of assistance in pursuing its survival. As a critique of Darwinism, James stresses the fact that physical matter seems to have no guiding ideals, and in that sense survival would be merely an incidental consequence of the casual combination of processes. Any teleological reading of facts would imply a *superadded* commenting intelligence,

given that the physical organs are not teleologically oriented. Only at the moment in which consciousness is introduced in the evolutionary hypothesis does survival become a certainty.

> The brain is an instrument of possibilities, but of no certainties. But the consciousness, with its own ends present to it, and knowing also well which possibilities lead thereto and which away, will, if endowed with causal efficacy, reinforce the favorable possibilities and repress the unfavorable or indifferent ones (PP: 141-2).

The description of consciousness as a fighter for ends that is triggered by nerve currents, (even if at the present stage of psychology we cannot say how or why) follow interests that consciousness creates by inhibiting or promoting physical activity in their direction. Everything that can be inferred beyond the descriptive level of science is nothing other than legitimate assumption pending verification. In agreement with the common sense point of view, it seems that the systems of the physical and the mental are not so rigidly closed and can act in some way, the one on the other. More circumstantial evidence for the theory is the set of feeling and pain. Peirce will respond to this.

I leave aside Chapter [VI] which will be focused upon in the third part of this work. The Mind-Stuff Theory and the issue of the synthetic unity of consciousness, in fact, will be considered again in the fifth chapter of *A Pluralistic Universe*, in which James explicitly reconsiders his view of the quite metaphysical question of the compounding of consciousness.

Chapter [VII] is very important for James to set methods and point out the main snares of psychology. However, given that the psychologist studies «the mind of distinct individuals inhabiting definite portions of a real space and of a real time», to them these minds are objects of the world. The third person approach of the psychologist, even regarding the objects that one may find when they analyse their own mind, is an important specification. The psychologist makes critical judgments by taking up a position beyond the perceptions that they consider. To them, perceptions are objects. Actually, the psychologist is necessarily a theorist of knowledge, or an *Erkenntnisstheoretiker,* but the great difference between the philosopher and the psychologist lies in the knowledge that they respectively analyse. More specifically, the psychologist does not inquire about the function of knowledge, as the philosopher does. This is not a matter of investigation, but an assumption for the psychologist: «The knowledge he criticises is the knowledge of

particular men about the particular things that surround them». Therefore, when the psychologist labels some knowledge as true or false, it is important for them to keep this distinction in mind and give reasons for their judgment. As is evident, James aims at explaining the specific point of view of this natural science, and also showing which assumptions will not be in question in his book. The Psychologist, the Thought Studied, the Thought's Object and the Psychologist's Reality are: «the irreducible data of psychology». In particular, the Thought Studied, the Thought's Object and the Psychologist's Reality are realities which form the total aim of the psychologist. He just reports their relations as truly as possible.

In this respect, Bruce Wilshire (1968) points out James's initial intention of interpreting thought as a psychical existent which can be treated on its own terms, independent of its object, and providing a basis for correlating thoughts with brain states. However, he stresses the "worldliness of thoughts" which emerges in the attempt to carry out this naturalistic programme. According to Wilshire, James cannot specify thought apart from what it is composed of. Thought is intentional, purposive, and worldly. The relationship of mind and world is of such a nature as to undermine the premise of psycho-physical dualism which James's original enterprise entails and which may still be the assumption on which many contemporary psychological studies rest. The results of James's investigation are a critique of his own programme. He sees this in some senses, yet in others he does not. For Wilshire, the key to uncovering these foundations and basic structures lies in the "transcendental turn" and the quest for necessity and certainty that characterize Husserlian phenomenology. Moving from a description and an analysis of lived experience, one discovers the factors and relations that are necessary to make those experiences possible. The goal of Husserl's phenomenology is to obtain indubitable awareness of necessary truths of this kind. Wilshire shares Husserl's passion for necessity and certainty. His suggestion is that James moves in a Husserlian direction but fails to recognize the full ramifications of his own thinking. Speaking of James, Wilshire writes: «It seems to me that the real force of his own argument in the Principles tends to push us to an admission of necessities of thought; but it is an admission which he himself does not explicitly make» (p. 190). Implicitly, if not explicitly, Wilshire criticizes James for failing to carry the latent phenomenological strand of *The Principles of Psychology* to a full

transcendental turn that results in the necessity and certainty that Husserl desired, and sometimes claimed, for his phenomenological insights. Wilshire acknowledges that James is concerned with the basic structures of human experience and meaning. Nevertheless, James does not push far enough.

However, before addressing the possible psychological fallacies, owing to the peculiar role of the psychologist, James points out the methods of investigation in psychology and specifies a question of nomenclature. The primacy of introspective observation in undeniable. Looking into our minds, we discover states of consciousness. James contends that human beings have cogitations which is the *inconcussum* of philosophy, whereas the undoubted belief that we feel ourselves thinking and distinguishing the mental state as an inward activity or passion is the fundamental postulate of psychology[17]. Discussion of the most convenient terminology of psychology will be commented upon by Peirce, who was interested in the possible alternative hypothesis of classification which James was thereby discussing. The exigency to point out some general term to designate all states of consciousness, apart from their particular quality or cognitive function, is consonant with his later and deeper identification of meaning according to contextual experience. Yet James claims that impartial terms ought always to be preferred, but he is well aware of the linguistic difficulty of covering sensation and thought indifferently owing to the traditional dualistic interpretations of meanings. Some valid alternatives would be either *feeling*, or *psychosis,* or *idea*. The first term has the problem of being sometimes a synonym of *'sensation'* as opposed to *thought*; *psychosis*, as a correlative to *neurosis,* is a technical term and devoid of partial implications, but it has no verb or other grammatical form allied to it; then, *idea* is a good vague neutral word as Locke employed it, but its traditional meaning is not that broad. 'Thought' would be the best word since it immediately suggests the omnipresence of cognition which is to James «the mental life's essence», but it does not cover sensations. Apparently, the only solution to cover the whole ground of mental states seems to be to adopt some pair of terms according to the traditional dualistic mentality – such as impression and idea, presentation and thought. Nevertheless, James informs his readers that he prefers to make an alternative use of the synonyms mentioned so far according to the: «convenience of the context».

> *My own partiality is for either feeling or thought.* I shall probably often use both words in a wider sense than usual, and alternately startle two classes of readers by their unusual

> sound; but if the connection makes it clear that mental states at large, irrespective of their kind, are meant, this will do no harm, and may even do some good (PP: 186-187).

However, the method of introspective observation is affected by inaccuracy and this limit has engendered two opposing fronts. Even if the Spiritualists believe that «the Soul or *Subject* of the mental life is a metaphysical entity, inaccessible to direct knowledge», and therefore introspection can only give us its phenomena, the problem of how the [Subject] can know phenomena themselves still remains. In this respect, some writers talk about a sort of infallibility of the inward apprehension of mental states. The primacy of the first person account of internal states has been a matter of interesting confrontation till the present day. On the other side, August Comte has paradigmatically claimed the absurdity of the introspective cognition of our own world; more precisely, he claimed that: «such observations on ourselves, they can never have much scientific value, and the best mode of knowing the passions will always be that of observing them from without; for every strong state of passion […] is necessarily incompatible with the state of observation. But, as for observing in the same way intellectual phenomena at the time of their actual presence, that is a manifest impossibility» (PP: 188). As an exponent of the English empirical psychology, James quotes John Stuart Mill's reply to this attack which was probably focused upon scholastic results such as principles of internal activity, the faculties, the ego. Mill explains the importance of the medium of memory to get the best knowledge of our intellectual acts: «We reflect on what we have been doing, when the act is past, but when its impression in the memory is still fresh. […] We know of our observings and our reasonings, either at the very time, or by memory the moment after; in either case, by direct knowledge, and not (like things done by us in a state of somnambulism) merely by their results» (PP: 189). According to Mill, the possibility of direct observation goes together with direct awareness. This quotation helps James to focus the discussion upon «the most of practical truth» of introspection, which also means to bear the supporters of «the absolute veracity of our immediate inner apprehension of a conscious state» to: «the fallibility of our memory or observation of it, a moment later». In this view, Brentano clearly maintained the difference between: «the immediate feltness of a feeling, and its perception by a subsequent reflective act».

James attempts to define the professional figure of the psychologist, and to this extent he discusses the mode of consciousness – immediate or reflective – upon

which he must base his methods. The distinction between the psychologist and every common man as to their having immediate feelings or thoughts is the capacity to report, write about, name, classify, compare, and trace the relations of their mental states with other things : «Whilst alive they are their own property; it is only *post-mortem* that they become his prey».

As evident, James tries to underline the illusions of direct observation of our present feelings to reject the infallibility of introspective observation and reaffirm the fallibility of all our processes of knowledge. Following Comte's suggestion, he maintains that: «No subjective state, whilst present, is its own object; its object is always something else». More attentive analysis of our immediate experience will reveal them to be illusory. For instance: « The present conscious state, when I say 'I feel tired,' is not the direct state of tire; when I say 'I feel angry,' it is not the direct state of anger. It is the state of saying-I-feel-tired, of saying-I-feel-angry, —entirely different matters». (PP: 188-9). In these cases, the state of feeling and the state of naming the feeling are continuous and there are not great possibility of get them thing wrong. Nevertheless, the point is to distinguish psychology from philosophy (or rather, metaphysics) on methodological grounds: in psychology there is no way to argue on *a priori* grounds (i.e. *'percipi* is *esse'*) the certainty of our knowledge.

The classification of feelings and their relations to each other show that there is a practical distance between feeling and naming-knowing the feelings, and that: «*introspection is difficult and fallible; and that the difficulty is simply that of all observation of whatever kind*». In this view, the construction of a reliable system of psychological knowledge is the best guarantee the psychologist can give for their particular psychological observations. Like for whatever knowledge, the final consensus is reached by further knowledge. In this sense, gradual and successive continuous acquisition of a specific phenomenon and eventual corrections and integrations bring harmony to a consistent system of knowledge.

Experimental and comparative methods accompany introspective observation. Experimental methods were applied to the discoveries of great German thinkers such as Weber, Fechner, Vierordt, and Wundt. The intent of the experimentalist is to analyse introspective data, eliminating their uncertainty by operating on a large scale and taking statistical means. Their scholars analyse the elements of the mental life and as far as possible reduce them to quantitative scales. The criticism leveled against such a giant enterprise, which has quite changed the face of the science, is

manifest in James's observation that: «in some of these fields the results have as yet borne little theoretic fruit commensurate with the great labor expended in their acquisition». However, the accumulation of facts shall combine and some more consistent theoretical result will emerge. Meanwhile, science has been turned into: «a record of mere work done». James avoids giving any general description of the methods of experimental psychology to not specialist readers, and confines himself to listing the present seven principal fields of experimentation[18].

Finally, the comparative method supplements introspective and experimental methods. This method is based as well on introspective psychology. It investigates the origin and relations of dependence of some psychoses, tracing all: «possible variations of type and combination». James remarks that scientists were quick to *ransack* the instincts of animals and the reasoning faculties of insects, animals, and peculiar men (savages, idiots, babies) to support their theories of mind. Even if the praxis of circulars introduced by Darwin and Galton seemed to be fruitful (foreseeing a modern nuisance perhaps!!), James warns of possible error in the application of this method. In particular, he focuses upon the unavoidable influence of «the personal equation of the investigator» in reporting the facts for comparison. In this field, no definite rules can be fixed in advance. Only comparative observations should be made to test some pre-existing hypothesis, and the observer must use all their sagacity and be candid in their reports.

As mentioned, the psychologist is a «reporter of subjective as well as of objective facts» and his peculiar role is one of the sources of error in Psychology. This situation may engender two varieties of the psychologist's fallacy. The other possible error is due to the misleading influence of speech. The latter is probably the greater and most pervasive obstacle to serious psychological study. James again stresses the practical origin of language as the reason for the supremacy of the objective sense of words. Apart from the cardinal passions of our life (anger, love, fear, hate, hope), the general division of our intellectual activity (remembering, expecting, thinking, knowing, dreaming) and the aesthetic genera (joy, sorrow, pleasure, pain), we lack a special vocabulary for subjective facts. The original sense of our words consists in the objective sense, that is, they were supposed to identify a certain object or property of a common object for the sake of action. Even if very common qualities of sensation (bright, loud, red, blue, hot, cold) stand both for outer qualities and for the feelings which they arouse, still there are many cases in

which «we have to describe our sensations by the name of the object from which they have most frequently been got» (i.e. orange colour, an odour of violets, a cheesy taste). Here the distinction between subjective and objective senses follows from that between individual (or rather personal) idiosyncrasies and collective conventions. The reflective attitude is a later acquisition of humankind. In commercial activity or collaboration for survival, subjective features rather work against the certain, easy, and rapid achievement of practical ends (Cf. Wittgenstein). However, there is a further distinction to make between the characteristic intention and the exigency of communication of personal synthesis. According to classical empiricists, language induces us to suppose the existence of substantive entities beyond collective names, words made to denote groups of phenomena. They did not heed the opposite influence of language to suppose that no entity can be there when we have no word to name that phenomenon. Such a structural deficiency of language led us: «to overlook phenomena whose existence would be patent to us all, had we only grown up to hear it familiarly recognized in speech». This awareness of the objective and discrete mentality suggested by common language is very interesting and full of further implications. I guess that this point connects interestingly with Rorty's familiar metaphors and, given the obvious distinctions, with his paradigmatic anti-epistemological refutation of any philosophical final vocabulary (R. Rorty, 1989). Other interesting connections include the psychological issue of acquisition or loss of certain habits by practice. However, James is clearly pointing to the habits of thinking which a certain use or misuse of language, or a certain activity or inactivity of practical training, seem to generate. We are not used to focusing our attention upon «the nameless», and such an exercise of inattention towards feelings has grown into a habit which is now very problematic for psychology. The «vacuousness in the descriptive parts of most psychologies» is due to the inveterate incapacity to see these phenomena, given the pervasive use of conventional language[19], and eventually legitimate them with new names.

Taking James's critiques in their positive form, he seems to endorse here the possibility of working towards a methodological distinction of thinking and reality. This position was maintained in 1894 in an article entitled *The Psychological Standpoint*, and was seriously attacked at the annual psychological conference in New York (Cf. EP: 87). At that time, James was apparently convinced that the

solution for psychology as a natural science was to leave completely aside the epistemological issue. However, all his insistence upon denouncing the problem of language as the greatest structural difficulty for the natural science of psychology can be seen as a general claim of detaching the epistemological level of reflection from the natural sciences. This conviction can be seen, albeit in a malleable and introverted form, as the bulk of all his mature reflection. The attempt to disentangle science and metaphysics proved to be a failure owing to the naturally deep relationship between methodology and personal world views, so that the same criticisms of his psychological book showed either the unavoidable centrality of epistemological concerns.

Moreover, the problematic preponderance of concepts over percepts is already in focus. Since thoughts are named by their objects, we assume as a natural consequence that thoughts must be as their objects are. This is to say that:

> The thought of several distinct things can only consist of several distinct bits of thought, or 'ideas'; that of an abstract or universal object can only be an abstract or universal idea. As each object may come and go, be forgotten and then thought of again, it is held that the thought of it has a precisely similar independence, self-identity, and mobility. The thought of the object's recurrent identity is regarded as the identity of its recurrent thought; and the perceptions of multiplicity, of coexistence, of succession, are severally conceived to be brought about only through a multiplicity, a coexistence, a succession, of perceptions (PP: 194-5).

The uncritical adoption of atomistic metaphysics conveyed by conventional language to approach the introspective analysis of mind is completely misleading. Here James firmly rejects the treatment of «'ideas' as separate subjective entities that come and go» as well as the entire English (Locke and Hume) and German (Herbart) psychological traditions in so far as they rely upon such an idealistic assumption. Through rigorous empirical methodology, he revives the importance of percepts in respect to more concrete description of existing realities. Actually, on introspective grounds, there are no observations which would justify the sacrifice of our perception of: «continuous flow of the mental stream». Rather, all sorts of paradoxes and contradictions have grown out of the inattentive and vitiated atomistic description of mental states.

Another source of error is the Psychologist's Fallacy *par excellence*. This is when the psychologist confounds: «*his own standpoint with that of the mental fact* about which he is making his report». This snare is partially due to the misleading influence of language. In fact, since the psychologist must name some cognitive state as the thought *of* that object, he is easily induced to suppose that the thought

under examination knows the object in the same way in which the psychologist knows it. The attribution of further or different knowledge, that of the psychologist himself, to the cognitive state observed is a common fallacy which to James is guilty of having introduced very puzzling questions in science, such as the question of presentative or representative perception, and the question of nominalism *and* conceptualism. But there is also another variety of the psychologist's fallacy which is: «*the assumption that the mental state studied must be conscious of itself as the psychologist is conscious of it*» (PP: 195). This peculiar fallacy is the core of James's critique of the neo-Kantian interpretation of consciousness. As we shall see, in Chapter [IX] of the *Principles of Psychology*, James distinguishes inward-direct awareness of the mental state itself from outward-relational awareness of the mental state by the psychologist. This difference of perspective can be misleading as to the definition of the content of that mental state. It is easy to unduly substitute: «what we know the consciousness *is,* for what it is a consciousness *of*, and counting its outward, and so to speak physical, relations with other facts of the world, in among the objects of which we set it down as aware» (PP: 196).

In Chapter [VIII] James has to delineate the field of psychology facing the relation of minds to other objects of the world, and he begins by addressing time relations and space relations. Concrete minds are «temporary existences», and psychology as a natural science should confine itself to the present life in which minds are yoked to a body. Therefore, as to their collective relations, our minds seem to share a common receptacle of time in the present world. Nevertheless, the life of individual consciousness in time seems to be interrupted and the question which arises is: *are we ever wholly unconscious?* The classical quarrel between Descartes and Locke as to whether the mind ever sleeps, seems to be far from any conclusion. This second paragraph is entirely dedicated to an accurate analysis of the ultimate experiments of Pierre Janet and Alfred Binet on hysterical patients. James foresaw that these facts are the beginning of an inquiry: «which is destined to throw a new light into the very abysses of our nature». Moreover, he understands how subtle the limits between normality and pathology appear to be, despite Janet's words. The latter holds that the splitting up of the mind into separate consciousnesses is due to an abnormal nervous weakness, which produces as a consequence defects in the unifying or co-ordinating power of the self. This is what seems to happen to 'hysterical' women. They cannot retain all their conscious states

and the parts abandoned may solidify into a secondary or sub-conscious self. However, the new impressive fact is that: «the *total possible consciousness may be split into parts which coexist but mutually ignore each other*» (PP: 204). As a conclusion of his detailed analysis, James assumes that: «*we must never take a person's testimony, however sincere, that he has felt nothing, as proof positive that no feeling has been there*». This is quite interesting, but it is best to abstain from further conclusion. Even if James considers it more plausible «Locke's view that thought and feeling may at times wholly disappear», all these examples show how deceptive are appearances, and therefore it is possible as well that: «part of consciousness may sever its connections with other parts and yet continue to be».

Then James focuses upon the relations of consciousness to space, or the philosophical question of the seat of the soul. Very briefly, James joins the different answers given to the question to different conceptions of the soul as an extended or un-extended entity. But since consciousness can be present to everything with which it is in relation, it is important to distinguish the cognitive kind of presence, the fact of being present to whatever we perceive, from the dynamic presence of consciousness to the brain, for instance, in so far as it seems to affect nervous processes. On account of this disambiguation, if by [seat] is meant the locality with which consciousness stands in immediate dynamic relations, then James places its [seat]: «somewhere in the cortex of the brain».

As is known, in the history of philosophy, scholasticism conceived the soul to be immediately present to the body because of its un-extended nature and simplicity. On the contrary, two extended entities could only correspond in space with one another, part to part. Finally, James believes that the thinking principle is extended. We know neither its form nor its seat; whilst if un-extended, it is absurd to speak of its having any space-relations at all. The important notation is that: «Space-relations we shall see hereafter to be *sensible* things». Actually, James maintains that relations of positions obtain only between an: «object perceived coexisting in the same felt space». This anticipation of Chapter [XX] makes plain that consciousness is cognitively present: «far beyond the body, and dynamically it does not extend beyond the brain».

However, he finally gets to the relations of minds to other objects, to reaffirm the methodological basis of his psychology. In this view, James distinguishes again the psychologist's point of view regarding the relation of knowing from that of any

theorist of knowledge. Then, given the psychologist's attitude towards cognition is an irreducible dualism of mind knowing and thing known, he introduces the more specific and pivotal distinction between two cognitive functions of consciousness: *knowledge by acquaintance* and *knowledge about*.

Relations of minds are: «either relations to *other minds*, or to *material things*». By 'material things' James means either the brain or anything else. As we have seen, mind-brain relations are of a «unique and utterly mysterious sort», while the mind's relations to other objects seem to be cognitive and emotional relations. Actually, relations of knowing are the only direct relations that our minds can have with other things. They can directly know, misunderstand (or ignore), or be interested in something else. Other relations of activity (or passivity) are, rather, indirect in so far as the mind acts through the brain and the body as a consequence. Again, aside from epistemological or metaphysical grounds, the psychologist has to assume knowledge as an ultimate relation, just like difference or resemblance. Psychology is concerned with «concrete minds of individuals dwelling in the natural world», not the Absolute Mind. Therefore, the psychologist being aware of realities outside the mind, the psychologist can compare them with the realities inside the mind, and ascertain: «whether the minds think and know, or only think». The psychologist uses the tests we all practically use to decide whether the a state of mind is cognitive or merely subjective. According to the criteria of resemblance and practical interference with our own reality: «we are convinced that the waking minds of our fellows and our own minds know the same external world». More specifically, a knowing state of mind can either resemble the psychologist's idea of a certain reality, or «imply that reality and refer to it by *operating* upon it through the bodily organs; or even if it *resembles and operates* on some other reality that implies, and leads up to, and terminates in, the first one»; on the contrary, the mental state under examination is called a subjective state: «if it neither resembles nor operates on any of the realities known to the psychologist». The psychologist, finally, would be in doubt as to the character of a mental state in case: «it resemble a reality or a set of realities as he knows them, but altogether fail to operate on them or modify their course by producing bodily motions which the psychologist sees». As to the weird cases of dreams and unexplained psychological states, James argues that the stronger test of cognitive knowledge remains the power of our mental states to interfere with the course of reality transforming situations according to our ideas.

The mind knowing and things known are thus completely different elements just standing: «face to face in a common world». Of course, no mere existence of a thing outside the brain is a sufficient cause of our knowing it: «some sort of *signal* must be given by the thing to the mind's brain, or the knowing will not occur». As a matter of fact, James makes clear that the thing remains the same whether known or not and knowledge may remain there, whatever becomes of the thing. Knowledge is a new construction in the mind, and «the knowing *per se* in no wise affects the thing», whereas to the consequences of the fact of being known, the thing might then be used and modified according to that knowledge.

Thus the general point about knowledge is that the psychologist assumes a sort of pre-established harmony together with the dualism of subject and object. These superficial assumptions, close to the common sense view, would put psychology in a place safe from monistic metaphysical invasions. On this ground, James can focus on more detailed distinctions, such as that between the knowledge of acquaintance and knowledge-about. This pivotal differentiation is taken from the *Exploratio Philosophica by* John Grote (see also Helmholtz: *Popular Scientific Lectures,* London, pp. 308-9), in which the philosopher points out the distinction expressed in most languages between: «*γνῶναι, ἐδέναι; noscere, scire; kennen, wissen; connaître, savoir*» (PP: 216-7). The distinction between these two functions of cognition was already introduced in the analysis of the stream of thought which was first published in an article in *Mind* entitled *On Some Omissions of Introspective Psychology* (1884) and then edited in Chapter [IX,] and it was also discussed in another article - *On the Function of Cognition* (1885) - which James published again in *The Meaning of Truth* (1909). John McDermott suggests that: «it is significant that James does not bring his earlier contention about relations to bear explicitly upon the problem of cognition». In 1885, in fact, his intent was to show that «the role of percepts, "knowledge-by-acquaintance," is the crucial element in an epistemology, for percepts are: "the only realities we ever directly know" […]At this point in his thought, in an effort to condemn as potentially dangerous a conceptual order not rooted in our actual experiencing, James overstresses the importance of the perceptual. » (ERE: xxi).

However, the first kind of knowledge is the direct presentation of things to our perception. The things that we know by acquaintance are not describable themselves. At least we can give some indications to favour the possibility that

someone else has that perceptive experience in their own way, but nothing more. It is an experience had personally, and, moreover, James claims that such a «dumb way of acquaintance: » is the only knowledge that we can have of all «the elementary natures of the world, its highest genera, the simple qualities of matter and mind, together with the kinds of relation that subsist between them» (PP: 217).

This affirmation is not to be taken absolutely. In human nature there is no ground zero of cognition and as linguistic animals we have: «*some* knowledge about everything». To James, these are rather relative terms whose definition depends upon our practical use. More specifically, the same thought can assume different names according to the relations we focus upon: «the same thought of a thing may be called knowledge-about it in comparison with a simpler thought, or acquaintance with it in comparison with a thought of it that is more articulate and explicit still». This way of reasoning about the classification of our cognitive states according to their practical use in different contexts will return in his later works. He compares the grammatical relation between the subject and its predicate in a sentence, the knowledge about adds relatively more connotations to any object of direct acquaintance. Since this is a practical relation, there is no need to fix any kind of knowledge. At will, we can either shorten our attention span and descend to a mere condition of acquaintance with an object, or reactivate ourselves to ascend from having the object present to our mind to operate upon it with our thought, to know it.

The relative distinction between these two kinds of knowledge can be expressed by the words 'feeling' and 'thought': «through feelings we become acquainted with things, but only by our thoughts do we know about them. Feelings are the germ and starting point of cognition, thoughts the developed tree». Actually, in a very anti-Hegelian[20] way, for James interjections such as 'lo!' 'There!' 'Ecco!' 'Voilà!' or the article or demonstrative pronoun introducing the sentence, such as 'the', 'it', 'that' convey the beginning of knowledge. Furthermore, he claims that feelings mean «the *emotions,* and the *sensations* we get from skin, muscle, viscus, eye, ear, nose, and palate», while thoughts are the conceptions and judgments generally. Different kinds of mental states are identified according to different cognitive functions and values. In particular, feelings, in the sense of emotions and sensations, acquaint us with our bodies, and thoughts are, rather, the only way for us to know about the mental life of other persons. As to the 'objects of memory,' and particularly past

states of mind, James anticipates that they: «appear to us endowed with a sort of warmth and intimacy that makes the perception of them seem more like a process of sensation than like a thought» (PP: 218). All these specifications will be important for James's description of consciousness and self-consciousness. The issue of the past is the very basis of James's reflection about ontological continuity.

I.3 The Stream of Thought and The Consciousness of Self (PP IX-X)

Chapters [IX] and [X] of the *Principles of Psychology* are pivotal. James begins his analysis of the stream of thought, confirming his intention to study the mind from "within" and to remain loyal to the empirical method of investigation. In fact, he observes that, in a majority of works of psychology, the empirical method is abandoned. In these works, the authors' descriptions of thinking begin with sensations as the simplest mental facts, and proceed to the synthetic construction of higher and more complex mental states. The originality of James's description of thinking lies in his radically empirical description of consciousness. He claims that no one ever had a simple sensation by itself, rather:

> Consciousness, from our natal day, is of a teeming multiplicity of objects and relations, and what we call simple sensations are results of discriminative attention, pushed often to a very high degree. It is astonishing what havoc is wrought in psychology by admitting at the outset apparently innocent suppositions, that nevertheless contain a flaw (PP: 219).

Actually, psychology does not have the right to suppose the notion that sensations are the simplest things of mental life and the very starting point of its analysis. Rather, it can only postulate the fact of thinking itself, and move to the analysis of this fact. James states that: «*The first fact for us, then, as psychologists, is that thinking of some sort goes on*». In his view, "thinking" is used for every form of consciousness and should be taken as the expression which is most simple and free from assumption. The process of thinking goes on to display five important characteristics, which James analyses carefully: 1) every thought tends to be part of a personal consciousness; 2) within each personal consciousness, thought is always changing; 3) within each personal consciousness, thought is sensibly continuous; 4) it always appears to deal with objects independent of itself, and 5) it is interested in some parts of these objects to the exclusion of others, and welcomes or rejects, in a word, – chooses from among them all the while.

Note that in the *Briefer Course* (1892), James reduces the characters of thinking to four instead of five. He was aware, in fact, that the cognitive activity of consciousness (point 4) should be best suited to philosophical treatment and, indeed, it was not a part of the fundamental knowledge of a young student of psychology.

However, the first characteristic of thinking is that thoughts tend to be part of a personal consciousness. This preliminary analysis of personal consciousness is further investigated in the tenth chapter, the *Consciousness of Self*. For the moment, James uses metaphorical language to convey the sensible impression of what he is talking about. According to him: «the elementary psychic facts were not *thought* or *this thought* or *that thought,* but *my thought,* every thought being *owned*». The fact that thoughts belong to different personal minds is the most absolute breach in nature. The law is that of: «absolute insulation, irreducible pluralism». James then proceeds to specify his previous description and argues that the immediate datum in psychology can be the personal self rather than the thought. In fact: «the universal conscious fact is not 'feelings and thoughts exist,' but 'I think' and 'I feel'». Psychology must to remain independent of philosophical evaluations, and as such it cannot deny or question the existence of personal selves. This passage can be easily accepted since what the psychologist affirms is only the existence of something which corresponds to the words "personal mind", nothing else. No interpretation of the worth of empirical data is admissible in psychology.

The risk that psychologists end by personifying a natural process, which is claimed by some writers, is not really threatening to James. He suggests that this could happen only if the psychologist refers the notion of personality to something essentially different from the same mental process. But he also underlines that, if the original source of the notion of personality is the process of thinking, this process itself is already personified. And this hypothesis is very plausible since no marks of personality exist outside the stream of thought, which is absent in our thinking, so that, in James's words: « whatever farther analysis we may subject that form of personal selfhood under which thoughts appear, it is, and must remain, true that the thoughts which psychology studies do continually tend to appear as parts of personal selves» (PP: 221-222).

Actually, James used the expression "thoughts *tend to* appear part of personal minds" to account for phenomena of sub-conscious personality and automatic

writing, in particular, those discovered by French experimental psychologists. James has already commented on these exceptional cases in the previous chapter, and he has also recollected the most interesting discoveries in an article entitled *The Hidden Self*, published in 1890. However, the point is that these cases form no important exception to the law that all thought tends to assume the form of personal consciousness. In particular, James's reference is made to the works of Pierre Janet, whose conclusions seem highly probable to James also. Janet carried out several experiments with hysterical patients showing secondary personal selves. In a few words, even if these selves: «are for the most part very stupid and contracted, and are cut off at ordinary times from communication with the regular and normal self of the individual; but still they form conscious unities, have continuous memories, speak, write, invent distinct names for themselves, or adopt names that are suggested; and, in short, are entirely worthy of that title of secondary personalities which is now commonly given them» (PP: 222). Nevertheless, the fact of catalepsy in hysterics should lead us to think that there are also «quite unorganized and impersonal» thoughts. These patients seem insensible and unconscious in these moments of catalepsy, but Janet has recently claimed that these acts are not mere physiological reflexes, but feeling accompanies them. According to Janet, these thoughts: « "are known by *no one*, for disaggregated sensations reduced to a state of mental dust are not synthetized in any personality"». However, what is important for James is that neither this second class of phenomena does not form any important exception to the law that all thought tends to assume the form of personal consciousness, since Janet admits that: «these very same unutterably stupid thoughts tend to develop memory».

The second characteristic of thought, a very important one, is that it is constantly changing. Such change takes place at: «sensible intervals of time». James's decision to respect his commitment to the empirical point of view led him to acknowledge the result: «that *no state once gone can recur and be identical with what it was before*». Following Shadworth Hodgson's general description of consciousness as a «succession of different feelings», James specifies that all the classes of consciousness are complex states. This is the critique of the psychological "theory of ideas". According to the theory, there are mental atoms or molecules that remain unchanged amid the flow of thinking. The difference among the concrete conditions of minds is the resultant effect of: «variations in the *combination* of certain

simple elements of consciousness that always remain the same». Actually, these mental atoms are what Locke called 'simple ideas', and some of his successors described as mere sensations. James is thus interested in questioning such a philosophical break between «the dissolving-view-appearance of the mind» and the unchanging elementary facts from a psychological point of view. Even a cursory look at the matter corroborates the impression of recurring sensations, James claims that: «*there is no proof that the same bodily sensation is ever got by us twice. What is got twice is the same* object». Accordingly, James points out that, for instance, we hear the same note, we see the same quality of green or experience the same species of pain. He thinks that the realities we believe in, either physical or ideal, seems to be unchanging and we draw the inaccurate conclusion that our ideas of them are the same.

The reason for this tricky mechanism is our inveterate habit of disregarding sensations as subjective facts. As James clarifies in the chapter on perception, we use sensations as: «stepping-stones to pass over to the recognition of the realities whose presence they reveal». In other words, we are already practically interested in the reality suggested by our idea, not in the peculiar and unique features of the sensation itself. As a painter, James notes that the colour of the grass out of his window looks different in the daylight than in the shade, some parts are darker than others etc. Things look, smell, and sound different at different distances, under different circumstances, since their real sensational effects are various. Our interest is in ascertaining the sameness of things, and, consequently, we consider roughly identical those sensations which refer to the same thing. All the sensations that confirm the identity of things are identical to themselves. Furthermore, our attention is increasingly focused upon the ratio of our sensation to other contemporary sensations (e.g. the law of contrast). Our sensibilities alter all the time. Awaking from sleep, we see things more brightly. If we are hungry or satiated, we feel things differently. In particular, the different emotions show this evolving sensitivity towards the same objects over a lifetime.

So far, James has collected indirect considerations to infer the essential change in our sensations. But according to his initial assumption that «every sensation corresponds to some cerebral action», the recurrence of an identical sensation is connected to a physiological impossibility. This hypothesis implies that, between the first occurrence of the sensation and the second occurrence, the brain remains

unmodified. More specifically, James observes that an unmodified feeling is impossible owing to its correlation to our brain's activity. Whilst in ordinary conversation we often speak of «'simple ideas of sensation' recurring in immutable shape», we should acknowledge that, theoretically speaking, this is a baseless assumption, as baseless as: «the assumption of immutability in the larger masses of our thought». Our thoughts are never exactly the same. Thoughts of the same fact are only similar in kind, and when an identical fact recurs, we must think of it in a fresh manner. In fact: «the thought by which we cognize it is the thought of it-in-those-relations, a thought suffused with the consciousness of all that dim context». There is an imperceptible but continuous change in our mental state from one moment to the next. We are constantly remoulded by experience and our mental reaction to things results from the whole experience that we have been going through until that moment. The brain is an organ that changes over time and with the activity of thought, its historical dimension means that no state of the brain can recur identically at individual points. Moreover, as for sensations, we have the law of contrast, so for thought we should consider that previous brain activity, with various intensity and in different areas of the brain, influences or co-determines what we feel and our psychic states. The sub-maximal nerve irritation and the summation of apparently ineffective stimuli show that every change in the brain has physiological effects. The brain-tension shifting continuously between relative states of equilibrium presumably gives rise to psychological concomitants, such as the iridescence of mental activity or 'fringes'. Even if psychic states march not in line with the irradiation of the brain, they may be able to harmonize their own internal iridescence with the infinite variety of the brain-redistribution as in the case of a 'telephone plate', which can be made vibrating for years without repeating its internal condition.

Such a «concrete and total manner of regarding the mind's changes» is the only true one for James, and the one which allows science to progress clearly and logically. According to the proposition that James is trying to prove, he distances himself from Locke and Herbart, whose theories seemed increasingly discredited. Even if the atomistic way of thinking mental facts can often be convenient for scientific inquiry, as well as the possibility of building higher mental states out of «unchanging simple ideas», for James, this is not the real state of things. The expressions of Locke and Herbart are symbolic and do not find anything in nature

to correspond to. Actually, James compares the atomistic theory of ideas to the attempt in geometry to describe curves as a collection of small straight lines, or to describe movement by the summation of punctual positions in space and time. In this regard, he claims that: «*A permanently existing 'idea' or 'Vorstellung' which makes its appearance before the footlights of consciousness at periodical intervals, is as mythological an entity as the Jack of Spades*» (PP: 230).

Common language was not made by psychologists. Rather, the genealogical reconstruction of the rise of language would suggest that men were first and foremost interested in the facts revealed by their mental states, not in the mental states themselves. As a rule, these were ideas of this or of that thing and that is it. We have to pay great attention to the consequences of this proximate practical use of language. More specifically, James observes that it is natural to us to conceive thought under: «the law of the things whose name it bears!». Accordingly, a simple thing is thought by a simple thought, a multitudinous thing by a multitude of thoughts, a succession of things by a succession of thoughts and a permanent thing by a thought which is itself permanent. The influence of language on our way of conceiving realities is very incisive. We are led to think that one mental state corresponds to the name of a thing. However, James believes that the agglutinating languages, and the declensions in Greek and Latin, drive us to a more natura destination. In those languages, there are no rigorously fixed names, since they change their form to suit the context in which they are used. The mistake is to attribute to thought the quality of the things which thought helps us to identify through language. On the contrary, the experiential attitude of certain languages helps us to conceive that different (or non-identical) mental states may think the same things.

Interestingly, this anticipates the theoretical consequences of different ways of conceiving mental states. As we shall see in Chapter [X], from the belief in «permanent self-identical psychic facts that absent themselves and recur periodically», follows the «Humian doctrine that our thought is composed of separate independent parts» and our [S]elf is a theatre of representations. Whereas, from James's description of mental facts as vague and changing will descends the description of consciousness as a sensibly continuous stream and the [S]elf as the corresponding succession of presently felt states of consciousness.

The third characteristic of thought is to be sensibly continuous within each personal consciousness. James outlines a working definition of continuity as what is: «without breach, crack, or division». He is suggesting again that the discontinuity between two minds may be the neatest breach which exists in nature. Nevertheless, the feature of sensible continuity within each personal consciousness seems to incur some difficulties. Apparently, there are several interruptions within our thinking. James distinguishes two classes of interruptions, namely, the time-gaps of consciousness, when consciousness recedes for some time and then returns; and the abrupt discontinuities in quality or content of thought. These cases do not form consistent objections to his claim to the continuity of consciousness, in so far as: «1. [That] even where there is a time-gap the consciousness after it feels as if it belonged together with the consciousness before it, as another part of the same self; 2. [That] the changes from one moment to another in the quality of the consciousness are never absolutely abrupt» (PP: 231).

As to what concerns the class of time-gaps, there are either unperceived or perceived interruptions of consciousness. For instance, in cases of anaesthesia, epilepsy, and fainting, consciousness feels unbroken, since we are not aware of the objective interruption of its continuity. To expect that consciousness negotiates its interruptions of sensibility as gaps is just a paradox as it would be to expect the eye to feel a gap of silence. The case of perceived gaps, rather, needs closer examination. When awaking from sleep, we know we have been unconscious for the time slept. For James, this judgment is based upon an inference habitually made from sensible signs. However, even if in the sense of objective time, consciousness has been discontinuous: «in the sense of the parts being inwardly connected and belonging together because they are parts of a common whole, the consciousness remains sensibly continuous and one» (PP: 232). One person's mental states refer to a common whole which is myself, I, or me. The classic example of Peter and Paul waking together helps James to show the feeling of qualities by which we can identify ourselves . The difference between *remembrance* and *conception* is decisive[21]. Peter's past thoughts are appropriated by his present thought alone. He directly feels his memories suffused with warmth and intimacy (and immediacy), while Paul's thoughts do not result for him in the same way. These qualities are possessed by Peter's objects of thought and from his present thought as well. We should note that James is not clear on the distinction between thoughts and objects of thought here.

Some scholars have accurately perceived this point as being nodal for a phenomenological interpretation of the *Principles of Psychology*. However, James does not pay great attention to such a distinction. Given that every thought is, strictly speaking, unique, for him the object of thought corresponds to the complete content of that thought, and therefore to the thought itself . So far, the analysis seems to confirm James's opinion that:

> Consciousness, then, does not appear to itself chopped up in bits. Such words as 'chain' or 'train' do not describe it fitly as it presents itself in the first instance. It is nothing jointed; it flows. A 'river' or a 'stream' are the metaphors by which it is most naturally described. *In talking of it hereafter, let us call it the stream of thought, of consciousness, or of subjective life* (PP: 233)[22].

Another difficulty that James has to overcome to maintain the continuity of consciousness concerns the breaks that are produced by sudden contrasts in the quality of successive segments of the stream of thought. He suggests that this appearance of discontinuity is mainly due to a confusion and to a superficial introspective view. The confusion is between thoughts themselves and things. Things are discreet and discontinuous, whereas the flow of thought by which we are aware of things is unbroken, just as time and space are not interrupted by the things lying in them. Actually, the passing thought or confusion between two definite mental states is another mental state: «The transition between the thought of one object and the thought of another is no more a break in the *thought* than a joint in a bamboo is a break in the wood. It is a part of the consciousness as much as the joint is a part of the bamboo» (PP: 233-4).

Therefore, our introspective view is superficial with regard to the large amount of affinity that remains between the thoughts by means of which we think even the most contrasting things. Upon closer analysis, even the occasion of hearing thunder, thus being suddenly aware of thunder, is not a pure content of a brand new mental state. If we pay more attention, what we hear is a: «thunder-breaking-upon-silence-and-contrasting-with-it». This means that our feeling is always contextual and continuous with previous experiences. The thunder breaking the silence seems far more threatening than thunder following thunder. Together with the feeling of thunder, there are several other things that we perceive just before, meanwhile, and straight after the crash of thunder. Such a thicker description of mental states is very important to James. Even if our language, he writes, «works against our perception of truth», since it works according to conceptions,

nevertheless our thoughts are better represented as fields. Every thought knows clearly the thing that it is used to individuate and from which it receives its name, and more vaguely a thousand other things. Again, in *The Varieties of Religious Experience*, in *Talks to Teachers and Students*, and in his *Essays in Radical Empiricism* and *A Pluralistic Universe*, James remains persuaded of this 'field' theory of consciousness[23] and will provide wide-ranging interpretations of this originally psychological description. According to James, a certain level of attention or awareness of our own body's position, attitude, and condition accompanies our knowledge of everything else. James is very careful to observe that, while we are thinking, we feel our bodily selves as the seat of the thinking, and as mentioned, we recognize our *own* thinking by the peculiar warmth and intimacy which are the qualities with whom we also perceive our own body. More specifically, James introduces here his naturalistic account of the synthetic unity of the self[24]. He writes of a natural habit of human beings to feel the content of their own egos together with everything else, and suggests that such content: «must form a *liaison* between all the things of which we become successively aware». In this view, he appeals to the principles of nerve-action to corroborate his hypothesis of the disregarded gradualness in the change of mental content. In Chapter III, he has shown that no state of the brain is supposed to die instantly, and, as a consequence, the new state arising may be modified by the inertia of the previous state. Here he points out the law of stimuli summation[25], which is very interesting for James's naturalistic perspective. The successive summation of sub-maximal stimuli, ineffectual by themselves, are supposed to be at least important contributions to psychological phenomena of contrasts, which in thought are: «that consciousness of the *whence* and the *whither that always* accompanies its flows». This hypothesis is consistent with the general correlation between «the total neurosis changes» and «the total psychosis change» that James frequently maintains. Moreover, the natural correlation of mental phenomena to brain processes helps James to corroborate his description of continuous consciousness: «as the changes of neurosis are never absolutely discontinuous, so must the successive psychoses shade gradually into each other, although their *rate* of change may be much faster at one moment than at the next» (PP: 236).

I.3.1 Substantive and Transitive parts of the Stream of Thought

As mentioned, James has focused upon the different rate of change which seems to affect neurotic change. Upon this physiological difference stands the subjective difference of mental states. As to what concerns our awareness of objects in the stream of thought, James argues that its parts move at comparatively different pace, that is, slower or faster. The famous metaphor of the stream of consciousness as a bird's life made up of flight and perching is particularly fitting here. In the case of a slow rate of change, we are aware of a more restful and stable object of thought. Whereas in the case of more rapid changes, we are aware only of the passage from this thought to something else. James uses different terms to convey this transitive movement, namely, 'passage,' 'relation', and 'transition', and he proposes to call: *«the resting-places the 'substantive parts,' and the places of flight the 'transitive parts,' of the stream of thought»* (PP: 236). In the second chapter, we will see that Peirce commented on James's selection of words in his correspondence. As a matter of fact, despite all of Peirce's suggestions and critiques, when James was asked to write a brief paragraph on substantive and transitive parts of consciousness for Baldwin's *Dictionary of Psychology and Philosophy*, he maintained his specific nomenclature.

In fact, the 'resting places' are usually occupied by sensorial imagination and can be contemplated for an indefinite period of time without changing. The places of flight, rather, contain thoughts of static or dynamic relations, generally obtained from between the objects of resting places. Language expresses this alternate rhythm of thinking, and James maintains that the main end of thinking is to attain some substantive part of thought, some relative resting place. Therefore: «the main use of the transitive parts is to lead us from one substantive conclusion to another». This quotation already reveals James's later philosophical vision, and it also shows the strict bond with his psychological formation . Indeed, at that time James had already published a very important article - *The Function of Cognition* (1885) - which was the germ of his interesting pragmatist theory of truth. Moreover, according to one of James's greatest scholars, John McDermott's interpretation, *On The Function of Cognition*, *The Knowing of Things Together,* and *On Some Omissions of Introspective Psychology* contain *in nuce,* respectively, the three main features of James's radical empiricism, that is, his radically empirical doctrine of relations, his integrated epistemology of 'pure experience', and his novel doctrine of consciousness. In this

view, the leading function of ideas and the comparative definition of mental states are very interesting points to focus upon.

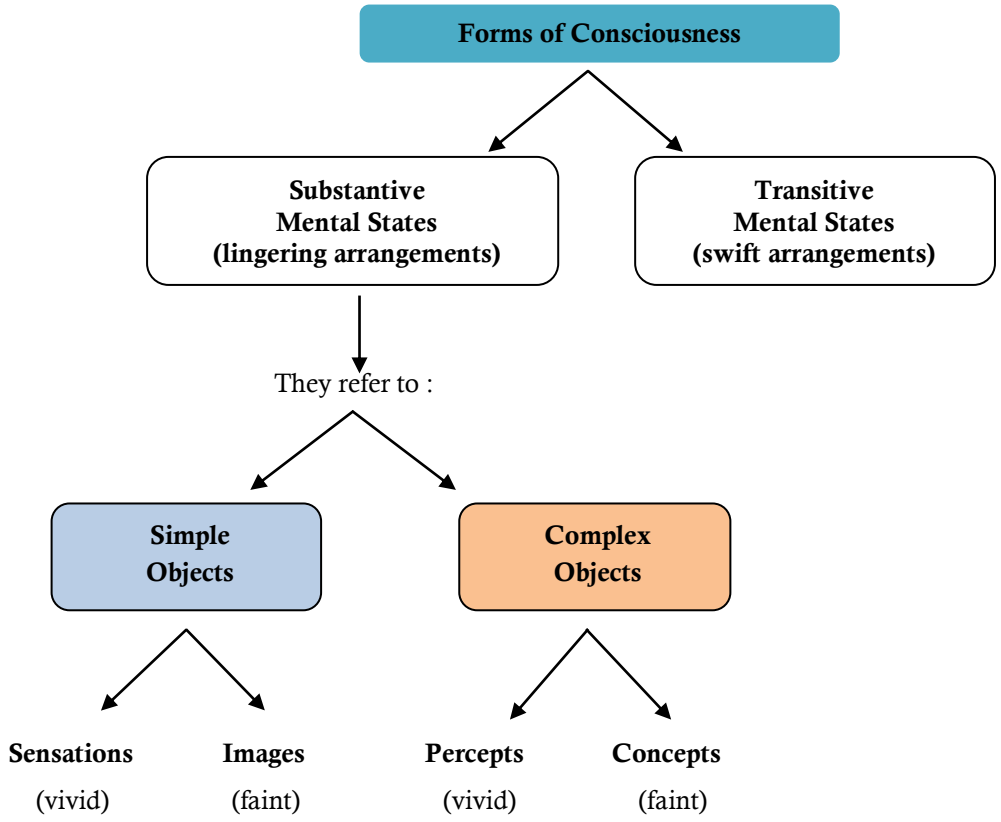
As James suggests in Chapter VII, the method of introspective observation is fundamental and undeniable in psychology, although its application may sometimes be very difficult. This is even more true for the transitive parts of thought as: «flights to a conclusion». Our analysis probably results either in annihilating the feeling of relation, after stopping and observing it before it reached its conclusion, or in swallowing and reducing it to that substantive term. The introspective analysis of these cases is difficult, and the challenge of producing these psychoses to demonstrate their existence is obviously unfair. James is convinced that, because of this difficulty: «the great blunder to which all schools are liable must be the failure to register them, and the undue emphasizing of the more substantive parts of the stream» (PP: 237).

Actually, the schools called into question for having ignored these feelings with different outcomes are Sensationalism and Intellectualism. This paradigmatic distinction will remain pivotal in all James's elaboration, with slightly different arrangements. In his view, sensationalist thinkers deny that feelings of relation exist, apparently because they were not able to find «*named*» internal modifications corresponding to the relations existing among external facts[26]. Some of them, such as Hume and others, even came to deny external relations, most relations out of mind being mere verbal illusions. James implies again his critique of the structural lack of language. Unable to express unnamed feelings; more specifically, he is convinced that no language could ever do justice to the infinite varieties and shades of our mental life. Instead, the intellectualists, loyal to the reality of external relations and incurring the same difficulty finding mirroring substantial mental states, ended up denying feelings as well. The difference resides in the opposite conclusion that they drew: «relations must be known by an *actus purus* of Thought, Intellect, or Reason». T. H. Green is an example. He argues that: «No feeling, as such or as felt, is [of?] a relation. . . . Even a relation between feelings is not itself a feeling or felt» (*Mind,* vol. vii, p. 28). Indeed, few sensationists have maintained that we recognize relations through feeling, and James quotes passages from the works of Destutt de Tracy, Laromiguière, Cardaillac, Brown, and Herbert Spencer.

With the exception of these writers, both schools were generally wrong for: «If there be such things as feelings at all, *then so surely as relations between objects exist in*

rerum naturâ, so surely, and more surely, do feelings exist to which these relations are known. » (PP: 238). All the rich phenomenology of humans' way of speaking – the specific use of certain conjunctions, prepositions, adverbial phrases, syntactic forms, inflections of voice – can be seen as an attempt to express those relations which we «actually feel to exist» between the objects of our thought. James suggests speaking of a: «feeling of *and,* a feeling of *if,* a feeling of *but,* and a feeling of *by,* quite as readily as we say a feeling of *blue* or a feeling of *cold*». The evident limits of language, which has become structured following our habit of preferring conclusions or substantive parts of our thought to practical needs, have been partially acknowledged by the empiricists. Their refutation of the evidence of language as a proof of the existence of abstract entities exactly relies upon their conviction that language make us suppose that, where there is a separate name, there should be a corresponding separate thing. However, they did not see the inverse possible mistake due to language, that is, supposing that: «where there is no name no entity can exist» (PP: 239). This criticisms is going to be developed through James's critiques of Hegel's "vicious intellectualism", which will be focused upon in *A Pluralistic Universe*, yet it was conceived in *On Some Hegelisms* (*Mind*, April 1882; WB: 196-221).

Here emerges James's obstinate intention to rescue «*dumb* or anonymous psychic states» from either suppression or reduction to monotonous thoughts "about" this or that object. The delicate idiosyncrasies of our feelings are appreciable and his aim is to preserve their plurality. Thus James proposes again the image of a kaleidoscope to represent the activity of our brain, and, in particular, the fact that change affects every part of it in different ways. The continuous transformation of the images within a kaleidoscope rotated at a uniform rate may describe the different results produced in the brain while going through a continuous modification. Therefore, the correspondence of brain and consciousness may enforce the hypothesis of «one protracted consciousness, one unbroken stream» which is a melding of dissolving views as well. Just as there are some forms of tension which persist relatively longer than others, the continuous rearrangement of consciousness may generate different kinds of consciousness, according to its own lingering or swift rearrangements (See *Fig. 1*).



(*Fig. 1*)

I.3.2 Feelings of Tendency

Apart from feelings of relation, there are several other «unnamed states or qualities of states» that have been historically overlooked by psychology and philosophy. In fact, either these states have not been recognized, for instance, by traditional sensationalists, or they have been considered only in respect to their cognitive function, as in intellectualist philosophies of mind. These «inarticulate psychoses, due to waxing and waning excitements of the brain» are various, and they all seem to lack a definite object/nature. For instance, James considers the different attitudes of expectancy in which our consciousness is thrown when someone says : 'Wait!' 'Hark!' 'Look!' These attitudes do not generate positive impressions, even though they affect us with a different sense of the direction from which an impression is about to come. Another example occurs when we try to recall a forgotten name. In this case, the gap felt seems to be intensely active, since we reject all the names that do not fit with that peculiar gap in consciousness. The various feelings set off the tremendous inadequacy of our psychological vocabulary. James observes that: «namelessness is compatible with existence». His radically empirical analysis of

mind leads him to complete the empiricist critique and to state that: «the feeling of an absence is *toto cœlo* other than the absence of a feeling: it is an intense feeling» (PP: 243-4). However, James soon argues that even the strong and characteristic shading of feeling something familiar is probably due to the sub-maximal excitement of wide-spreading associational brain-tracts for which we only lack more appropriate names.

Such a collection of a number of feelings without a well-defined nature becomes particularly interesting as soon as James focuses upon the different ways in which we feel the meaning of words or sentences. In this regard, taking verbal structure of logical relation (such as 'either one or the other,' '*a* is *b,* but,' 'although it is, nevertheless,'), James claims that, just like the different sounds of words, the difference of meaning is: «known and understood in an affection of consciousness correlative to it, though so impalpable to direct examination». This amounts to saying that: «large tracts of human speech are nothing but *signs of direction* in thought, of which direction we nevertheless have an acutely discriminative sense, though no definite sensorial image plays any part in it whatsoever» (PP: 244).

This accurate naturalistic survey of mental processes leads to a re-evaluation and reorganization of its stuff. Greater attention to feelings, free from preconceptions and expectations, is the way to offer an alternative (naturalistic) description of relations. The physiological and practical account of relations, which come to be much more qualified and analyzed in their peculiar context, is the way to overcome both the outcomes of empirical skepticism and spiritualism. Psychology as a natural science has to investigate the transcendence of meaning within the rich, abundant, complex, and variegated field of possible experience. Yet such a claim to a sort of radical empiricism, both of objects and tools, in the field of psychology may seem at odds with James's vulgar interpretation of his will to believe. As a matter of fact, the will to believe is rather a serious and radical engagement with all consistency and the various phenomenology of human experience. To require science to adopt such an inclusive and open disposition towards all that is demonstrably human is a high standard and an invitation to more transparent scientific activity. Resting upon fallibilism, science can be part of a democratic way of life, being clear about its natural interests and about what it supposes to be more fruitful or convenient as methodological choices. The authoritativeness of hypothesis is not founded upon absolute necessities or principles, but on their socially controllable workability.

Therefore, stable sensorial images are only a part of our thinking, another part is psychic transitions (logical movement). The first provides us with the full presence of the object of thought, the latter leads us from one set of images to another and provides us with feelings of direction, the fleeting sense of the movement. Actually, this is an internal critique: James is seeking to undermine the empiricist view of tendencies as a psychical zero point. From 1885, he claimed that feeling is not a psychical zero point, although *speechless* it is not meaningless and cannot be reduced to its stable result. Empiricism, rather, shows its atomistic and rationalistic view of mind according to which: «the only possible materials of consciousness are images of a perfectly definite nature» (PP: 246). On this account, empiricists deny the feelings of tendency through the laws of association. The passage between mental images is sometimes so fast that: «we think afterwards we felt the very *tendencies* of the nascent images to arise, before they were actually there». This is a mere illusion because only images are mental states, whereas tendencies are not really felt because relations are: «facts for the outside psychologist rather than for the subject of the observation».

> Now what I contend for, and accumulate examples to show, is that 'tendencies' are not only descriptions from without, but that they are among the *objects* of the stream, which is thus aware of them from within, and must be described as in very large measure constituted of *feelings* of *tendency,* often so vague that we are unable to name them at all. It is, in short, the re-instatement of the vague to its proper place in our mental life which I am so anxious to press on the attention (PP: 246).

The new evidence of experimental and comparative psychology, and the naturalistic framework in which the analysis of mind finds its place, have revealed the inexhaustible and excessive variety of our mental life, so much as to make traditional psychology appear like: «one who should say a river consists of nothing but pailsful, spoonsful, quartpotsful, barrelsful, and other moulded forms of water». Actually, James found himself at that turning point in the history of psychology and philosophy when the continuous and dynamic correlation of mind-brain, and thence mind-world, were acquisitions which allowed for the more fruitful progress of science according to the structural analogy between living-growing-unbroken-natural processes. The reinstatement of the vague to its proper place in our mental life consists in the distinction of psychology as a natural science and the selection of empirical methodology. Some important methodological critiques had already been mounted by name Galton and Huxley, and in the wake of these authors, James

argues for a radical internal reform of empiricism[27]. In particular, he addresses two great inadequacies of empiricist psychology: the theory that we can have no images but of perfectly definite things, and the notion that, whilst simple objective qualities are revealed to our knowledge in subjective feelings, relations are not.

According to McDermott, James considers: «the awareness of the experience of relational continuity [to] constitute[s] the major omission of introspective psychology». Traditional psychology, in fact, elaborated definite images which: «form the very smallest part of our minds as they actually live», and it has generally overlooked «the free water of consciousness»[28]. Another example is our intention to say something. James contends again that a definite mental state should not consist of definite sensorial images. The positive nature of our intention is evident in the continuous process of successive agreements and rejections which goes on in our thinking according to such intention. Except, we do not have definite names for these peculiar feelings of logical relations, tendency, difference, intention, and direction.

In this view, James uses the expression «field of view of consciousness» to convey the «permanent consciousness of whither our thought is going», that is to say: «the halo of felt relations». The extent of the fields of consciousness depends upon the level of mental freshness or fatigue. For instance, in the morning or when our mind is very fresh, it carries an «immense horizon». Another subtle but definite difference of consciousness is when our thought comes to a stop, as opposed to the awareness that our thought is definitively completed; or the difference between the intention to use a common noun in a universal sense and the different intention to mean a certain group of men, or a solitary individual before us by that noun. These intentions are important and influence the entire thought, as well as the sentence.

All these facts of consciousness can be symbolized in terms of brain action. James claims that: «as the echo of the *whence,* the sense of the starting point of our thought, is probably due to the dying excitement of processes but a moment since vividly aroused; so the sense of the whither, the foretaste of the terminus, must be due to the waxing excitement of tracts or processes which, a moment hence, will be the cerebral correlatives of some thing which a moment hence will be vividly present to the thought» (PP: 248). In this view, the mistakes of speech or writing can occasion: «either some local accident of nutrition *blocks* the process that is *due,* so that other processes discharge that ought as yet to be but nascently

aroused; or some opposite local accident *furthers* the *latter processes* and makes them explode before their time». The different processes are like '«overtones' in music», in which the same note can be performed by different instruments and result in different sounds. There is something more than the note which makes its sound unique. As different harmonics: «blend with the fundamental note, and suffuse it, and alter it; and even so do the waxing and waning brain-processes at every moment blend with and suffuse and alter the psychic effect of the processes which are at their culminating point». That is why James proposes calling these phenomena 'psychic overtone*,'* *'*suffusion'*,* or 'fringe'.

> Let us use the words *psychic overtone, suffusion,* or *fringe,* to designate the influence of a faint brain-process upon our thought, as it makes it aware of relations and objects but dimly perceived. If we then consider the *cognitive function* of different states of mind, we may feel assured that the difference between those that are mere 'acquaintance,' and those that are 'knowledges-*about*' (see pp. 216-217) is reducible almost entirely to the absence or presence of psychic fringes or overtones. Knowledge *about* a thing is knowledge of its relations. Acquaintance with it is limitation to the bare impression which it makes. Of most of its relations we are only aware in the penumbral nascent way of a 'fringe' of unarticulated affinities about it (PP: 249-250).

Actually, the word 'fringe' does not mean «some sort of psychic material by which sensations in themselves separate are made to cohere together», but rather the opposite. Correcting the wrong interpretation of Thomas Maguire, James points out that the fringe is: «part of the *object cognized*,--substantive *qualities* and *things* appearing to the mind in a *fringe of relations*». There are no discrete sensations in the stream of consciousness. Rather, substantive and transitive parts of consciousness seem to have different cognitive functions since the former recognize things, and the latter recognize the relations. The sense of affinity leads our train of thought and tinges those feelings that might concern our topic. The topic is the meaning of the thought and it coincides with its conclusion. Only conclusion remains in our memory in a more impressive way and it is generally: «a word or phrase or particular image, or practical attitude or resolve». The mutual relativity of the parts of consciousness is particularly underlined here. James argues, in fact, that whether our conclusion emerges as an answer to a problem or we encounter it accidentally, we recognize it by the peculiar interest attaching to it and treat it in a substantive way. Also, once our attention is focused upon that highly interesting thing, the other parts of the stream are treated as «relative unimportant means». They just provide the attainment of that conclusion. In this view, the notion of interest and context become pivotal for the definition of the function and value of our processes.

Moreover, the same meaning appears to be attainable even by passing through very different paths of affinities. It seems to be a paradox that two heterogeneous sets of images have the same fringe of felt affinity and discord, leading to the same conclusion. The most striking contrast is between the linguistic and not linguistic sets of associations, as «a train of words» and: «an almost wordless set of tactile, visual and other fancies». Can different contents, such as words and images , can be felt to lie in the same halo, fringe, or scheme? A subtle analysis shows that it depends upon the way in which we interpret these different terms. James states that «*quâ* mere sensations», they obviously have different felt affinities (i.e. rhymes are characteristic of words only); but «*quâ* thoughts, *quâ* sensations *understood* », rather, as used in conventional thought, words and visual-tactile ideas run exactly parallel with fringes. To corroborate his view, according to George Campbell, James provides some examples of the vague perception of the words of sentences in conversations. Sense and non-sense are inferred by fringes of affinity between the vocabulary of words, the grammatical sequence, and so forth. No shocking mistakes, no sense of discord are sufficient guarantees to produce the impression that a sentence has a meaning. The psychological feeling of rationality, in particular the impression of sense and non-sense of sentences, might be a matter of further investigation in respect to Wittgenstein's *Remarks on the Philosophy of Psychology* (1980).

The distinction is made between the static and the dynamic meaning of words. In fact, the meaning of a word taken in the context of a sentence may be different from the meaning of the same word taken: «statically and without context». The fringes of felt suitability or unfitness to the context and conclusion form the dynamic meaning. Whereas the static meaning: «when the word is concrete, as 'table,' 'Boston,' consists of sensory images awakened; when it is abstract, as 'criminal legislation,' 'fallacy,' the meaning consists of other words aroused, forming the so called 'definition».

On the philosophical side, this view confirms James's anti-Hegelism. In the famous dictum «pure being is identical with pure nothing», in fact, Hegel takes the words in isolation, in their static meaning, and suggesting no visual image. If we consider this sentence dynamically, the fringes of relations of its words are felt and understood to be absolutely opposed. On the psychological side, rather instead, Hegel's observations seem on the one hand, to remove all appearance of paradox

from those cases of deficient visual imagery revealed by Francis Galton, and on the other, provide a positive answer to the question as to whether thought is possible without language[29]. In fact, in the first case, for some people, memories seem to be made exclusively of verbal images, whereas the deaf and dumb use tactile and visual images. The different [*mental-stuff*] of knowing states, given that both images and words are suitable to practical intents and purposes, is not that important. Even perceptual images can weave into a system of thought quite as effective and rational as that of a user of words. It seems to be a fact, however, that words uttered or unexpressed, being very *rapidly* revivable as actual sensations, are the handiest mental elements.

> The reader sees by this time that it makes little or no difference in what sort of mind-stuff, in what quality of imagery, his thinking goes on. The only images *intrinsically* important are the halting-places, the substantive conclusions, provisional or final, of the thought. Throughout all the rest of the stream, the feelings of relation are everything, and the terms related almost naught. These feelings of relation, these psychic overtones, halos, suffusions, or fringes about the terms, may be the same in very different systems of imagery (PP: 257).

The diagrammatic description of mental means or *internodal consciousness* helps James to convey his conviction of the indifference of the quality of mental stuff in respect to the general and substantial comparison of different ways of thinking. Different thinkers beginning from the same experience A, and through very different paths of thinking, are led to infer the same practical conclusion. Z has had the same thought. This general overview is, indeed, even an implicit reply to possible solipsistic accusation, although the latter has no ground in psychology. Moreover, James offers here an interesting interpretation of thought as a kind of algebra. Following Berkeley's suggestion, he shows that, more recently, G.H. Lewes had developed that empiricist algebra analogy. His definition of ideas as *substitutions* will be a very challenging acquisition for James which he retained in his later writings. More specifically, Lewes claimed that ideas as substitutions: «require a secondary process when what is symbolised by them is translated into the images and experiences it replaces; and this secondary process is frequently not performed at all, generally only performed to a very small extent». The process of reasoning seems to be composed of a chain of ideas accompanied, surprisingly, by few and faint images, for: «the symbols had substituted *relations* for these *values*». The verbal symbols stand for our experiences of their referents, but they only recall its form in

the least qualitative possible way just for the purposes of recognition. The addition that James made to Lewes's description of thinking is important. Although the sequence of terms of algebraic thinking is fixed by their relations rather than by their several values: «the algebrist must give a real value to the *final* one he reaches; so the thinker in words must let his concluding word or phrase be translated». So far, James has pointed out that the scheme of relationship and the conclusion are essential to thinking, whereas the kind of «mind-stuff» is not that essential, even if words seem to be the handiest material for the purpose of thinking.

The fourth aspect of thought is to be cognitive, or possess the function of knowing. From the psychological point of view, «the relatively uncritical nonidealistic point of view of all natural science», we all believe in the existence of realities outside our thought because of judgments of *sameness* (Cf. PP: 435). To acknowledge that my thought and your thought are of the same object, or even that my present thought and my past thought have the same object, let me suppose the independent existence of that object outside our minds. James suggests that things and qualities experienced for the first time may appear in an: «absolute way, as simple *beings*, neither in nor out of thought». The distinction of the notion of realities and its proper collocation in the world come as a consequence of the confrontation with the experiences of others. The fact that one judges several thoughts as having the same object, and no one produces or possesses that object, reveals the cognitive function of our mind. Such a reflective awareness is not primitive, since the mere vague consciousness of objects comes first. However, many philosophers – Kant, Hamilton, Green – maintain that the cognitive function of thought depends upon the reflective consciousness of the *self*. In other words, whereas we are not able to distinguish between the thing and the self, our thought does not know a thing at all. The affirmation that one cannot know without knowing that one knows is perfectly absurd. Rather, James asserts that: «*thought may, but need not, in knowing, discriminate between its object and itself*». In psychology the natural acquisition of knowledge is a gradual process which begins by acquaintance with other objects. The only requirements for the function of knowing are: «that I think O, and that it exist». Additional thoughts, such as «that I exist and that I know O» are welcomed as broader levels of knowledge. These philosophers seem to be guilty of a peculiar 'psychologist's fallacy', in so far as they introduce their own knowledge into that of the thought studied.

At this point, James has also to define the proper use of the term 'object' in psychology. Despite common parlance, in psychology the object of thought is not synonymous with the individual subject of existence, for instance 'Columbus' in the sentence "Columbus discovered the Americas in 1492", rather: «The object of every thought, then, is neither more nor less than all that the thought thinks, exactly as the thought thinks it, however complicated the matter, and however symbolic the manner of the thinking may be». The object makes reference to the act of knowledge and the context in which it is thought. Memory is not able to reproduce but part of our articulate thoughts, while the greatest part of them only vanishes forever. Moreover, James contends that: «*however complex the object may be, the thought of it is one undivided state of consciousness».* This position is in evident contrast with ordinary associationist psychology as James's consequent description of Self-consciousness shall also be. James disagrees with the contention that the thought is made up of the same parts of which its object is made, so that the thought would keep together separate ideas. This empiricist view is open to easy attacks, in particular from those who contend that, without an unifying agency such as the [Ego], no one thought comes out from a bundle of separate ideas. On that basis, James obviously agrees that if things: «are not thought with each other, things are not thought in relation at all». The point that James makes here, and again with particular care in Chapters X and XX, is the mistaken starting point of both associationists and sensationists (empiricism) and the "believers in the Ego" or successors of Kant. They move from the «identical initial hypothesis» that «the elements of the subjective stream are discrete and separate and constitute what Kant calls a 'manifold'», but they respectively draw different conclusions. On this assumption, however, the associationist claim that there can be single knowledge from a discrete manifold is untenable, and the rationalist's introduction of a further hypothesis of the necessary synthetizing activity of an [ego] gets the better of the question[30]. Apart from the existence of the ego, James is claiming a more radically empirical premise: «There is no manifold of coexisting ideas; the notion of such a thing is a chimera. Whatever things are thought in relation are thought from the outset in a unity, in a single pulse of subjectivity, a single psychosis, feeling, or state of mind» (PP: 258).

Again, the psychologist's fallacy explains the confusion between the original thought of a thing and other thoughts about the same thing. Therefore, James

begins an accurate analysis of the thought «'the pack of cards is on the table'» to show that thought is not made up of parts, or at least that these parts are not the separate 'ideas' of traditional psychology. First he takes the thought «the-pack-of-cards-is-on-the-table» to be a subjective phenomenon and like a soap bubble. The parts of the soap bubble are not separate realities, and: «each bubble, [as well as] each thought, is a fresh organic unity, *sui generis*». In other words, his analysis focuses upon: «what passes through the mind as we utter the phrase *the pack of cards is on the table*».

This is a temporal analysis of thought by which James intends to deny the existence of discrete ideas, showing that the object's parts do not correspond to the parts of time. In other words, temporal thinking does not seem to reveal discrete ideas. Given that it takes some time to pronounce the sentence 'the pack of cards is on the table', therefore the thought has time-parts, James asserts that each part we take is always a thought of the whole object, they melt into each other like dissolving views, no two of them feel the object alike, but each feels the total object in a unitary undivided way.

Looking at James's drawing, the first determinate phase of thought is the moment immediately before we begin to pronounce the sentence, when the entire thought is present to our mind in the form of an intention (or transitive state without a definite name); as well, immediately after the last word of the sentence is spoken: «we again think its entire content as we inwardly realize its completed deliverance». The way we feel the content of our utterance is fuller and richer at the end. The vertical sections of the thought are filled with other ways of feeling the sentence's meaning, even if different parts of the object are emphatically present to the mind. Actually, even great analysts of consciousness such as M. V. Egger seem to be wrong in thinking that: «each word as it occupies the mind *displaces* the rest of the thought's content». This author would distinguish the sense of the phrase, which James considers the idea or what he calls the 'total object or meaning' – from the feeling of the words and considers the former a feeble state of consciousness given the noise of the words. Moreover, Egger supposes the consciousness of the idea and that of the words to be not simultaneous. This view enables James to explain in a more detailed way his own position on this matter, and particularly as to the simultaneity of the two states of consciousness.

> Now I believe that in all cases where the words are *understood,* the total idea may be and usually is present not only before and after the phrase has been spoken, but also whilst each separate word is uttered. It is the overtone, halo, or fringe of the word, *as spoken in that sentence.* It is never absent; no word in an understood sentence comes to consciousness as a mere noise. We feel its meaning as it passes; and although our object differs from one moment to another as to its verbal kernel or nucleus, yet it is *similar* throughout the entire segment of the stream (PP: 270-1).

The opposite conclusion is that consciousness of the idea and consciousness of the words are *consubstantial:* «they are made of the same 'mind-stuff,' and form an unbroken stream». During the process of thinking, every word of the thought is suffused by the whole meaning, but each moment of thought knows it from the different point of view of the words. The feeling of suffusion is not as loud as words are. It is a delicate but incisive difference. All this psychological analysis has correspondence at the level of the brain processes where James writes that: «we should find the same processes active through the entire sentence in different degrees, each one in turn becoming maximally excited and then yielding the momentary verbal 'kernel,' to the thought's content, at other times being only sub-excited, and then combining with the other sub-excited processes to give the overtone or fringe» (PP: 271)[31].

The fifth and last characteristic of thinking is its selective nature. The phenomena of selective attention and of deliberative will are examples of the selective activity of thought, but there are several other phenomena in which this function is quite visible. Yet in every perception we accentuate and emphasize something in respect to something else, James argues that it is quite impossible to disperse our attention impartially. For instance, we might break up a monotonous succession of sonorous strokes into rhythms, or perceive dots dispersed on a surface in rows and groups. Our selective emphasis upon parts of place and time result in the ubiquity of the distinctions (*this* and *that, here* and *there, now* and *then*). The self as the centre of this choosing activity is reconsidered in the *Essays in Radical Empiricism* and plays an important role also in *Pragmatism*. But, more specifically, James underlines that we ignore most of the things before us.

Our senses are organs of selection which choose from the world those qualities that can be perceived, dealing with them and excluding the rest. As in the case of movements, the world seems to consist in an infinite chaos of movements but only some of these follow a range of velocity that we, as human beings, are able to perceive. In this view, according to Lange, there seems to be no reason to think of

an abrupt break in Nature like that of our sensations, or matters of subjective value. Actually, the world itself is: «an indistinguishable, swarming *continuum,* devoid of distinction or emphasis, our senses make for us, by attending to this motion and ignoring that, a world full of contrasts, of sharp accents, of abrupt changes, of picturesque light and shade» (PP: 274). Thus, according to the conformation of the organ's termination, we receive certain sensations.

Attention operates a second selection out of all the sensations received from different organs. Actually, there are some sensations of which men may remain unaware all their life, and according to Helmholtz, this is due to the fact that: «we notice only those sensations which are signs to us of *things*». On this ground, James can give his impressive definition of what things are, that is: «nothing but […] special groups of sensible qualities, which happen practically or aesthetically to interest us, to which we therefore give substantive names, and which we exalt to this exclusive status of independence and dignity» (SPP: 274).

The mind is a selective industry which continues to select all the sensations that it has received from a thing till it decides which sensations stand for «the objective reality *par excellence*» of that thing. In fact, among the multitude of sensations, it chooses those which represent the thing more truly, and represent the rest as appearances. James emphasizes the operative value of our practical and aesthetic reasons in setting reality and appearance, moreover, the fact that such a distinction is based upon sensations. The fact that we choose as the real form of the circle «the sensation it gives when the line of vision is perpendicular to its centre», or «the real color of the brick is the sensation it gives when the eye looks squarely at it from a near point, out of the sunshine and yet not in the gloom» tells us something about the line between subjectivity and objectivity – size, distance, tint – in our representative standards .

Perception involves a double choice. Among present sensations, we notice the most significant of absent ones, and out of the absent sensations suggested by the present ones we select the more genuine sensations standing for the reality of an object.

The activity of selection goes on, since empirical thought depends upon experience and experiences are determined by habits of attention. Given different men and women in the very same situation, different private interests emerge. These preferences make attention focus with varying gravity upon the same

objects, therefore experience can be shaped in different ways. Selection is omnipotent even in rational thinking. In reasoning it is important to select the elements of the phenomena that we wish to take into particular consideration and, according to the emergency, to choose the right predicament.

Looking at the 'departments' of aesthetics and ethics, it is even more evident that mind is a selective industry and a theatre of simultaneous possibilities. According to James: «Consciousness consists in the comparison of these with each other, the selection of some, and the suppression of the rest by the reinforcing and inhibiting agency of attention» (PP: 277). As we have seen, selection works at every stage, filters the information received from the outer world, and passes it to higher faculties. However, this natural work of successive stages of filtration and selection shows that: «the mind […] works on the data it receives very much as a sculptor works on his block of stone. In a sense the statue stood there from eternity. But there were a thousand different ones beside it, and the sculptor alone is to thank for having extricated this one from the rest». The naturalistic framework of this view emerges as the ontological continuity of the world. Differences among personal views, preferences, and interests are not absolute in the sense that they: «all lay embedded in the primordial chaos of sensations, which gave the mere *matter* to the thought of all of us indifferently». Actually, the Darwinian theory of evolution observes similar methods of selection for individuals of the same species. So, much as an individual human mind can be original, to a great extent it selects and rejects the same portions of the original *world-stuff*. Biological similarity and natural condition are important factors. Common world emerges from common consciousness. Moreover, the world that we feel and live results from the social and historical construction of reality, it «will be that which our ancestors and we, by slowly cumulative strokes of choice, have extricated out of this, like sculptors, by simply rejecting certain portions of the given stuff» (PP: 277). The world comes out of personal and collective continuous choices, which rely upon our natural disposition to choose. In this regard, both McDermott and Franzese write of the tragic necessity to choose as the real background of James's meliorism. The will to believe is founded upon an adverse cosmology.

The description of the consciousness of Self is introduced through this apparently unique fact that «each of us dichotomizes the Kosmos in a different place». Actually, the fundamental psychological fact is the *unique interest* that every human

mind feels for what it calls *me* or *mine*. This seems to be an unavoidable natural preference and, indeed, the neatest one observable in the whole human world. James's analysis takes the «Self in its widest acceptation, and follow it up to its most delicate and subtle form, advancing from the study of the empirical, as the Germans call it, to that of the pure, Ego» (PP: 279).

According to Taylor Wozniak (1999), James's chapter on the Self introduced numerous self-related concepts and distinctions into psychology. First, the distinction between the *phenomenal self* and the *self thought* (Cf. PP: 350). There would be an experienced self or the self as known (*Me*-self) and the self as knower (*I*-self). The changeable condition of feelings («*fluctuating material*») is the reason why James assumes the Empirical self or Me in its widest possible sense: from the point of view of emotions, feelings and actions, in fact, it is difficult to draw definite line between what is *ours* and *ourselves*, «All these things give him the same emotions» (PP: 279-280). However, there are three interrelated constituents or *aspects* of the Me-self: the *material self*, the *social self* and the *spiritual self*. All those aspects of material existence in which we feel a strong sense of ownership (our bodies, our families, our possessions) form our material self; the recognition which men and women get from their mates constitutes their social selves, « *a man has as many social selves as there are individuals who recognize him* and carry an image of him in their mind« (PP: 281-2); and then our feelings of our own subjectivity or «man's inner or subjective being, his psychic faculties or dispositions, taken concretely» is called the spiritual self. These aspects are then treated in terms of relevant *feelings of self-worth* and *self-seeking actions* as summed up in the table below (PP: 313). Wozniak also claims that in his analysis James made three major contributions to the theory of the self : «he articulated the principle of multiplicity of social selves […], defined self-esteem in terms of the ratio of successes to pretensions, arguing that self-esteem can be as easily increased by lowering aspirations as by increasing successes, and distinguished ideal selves from real selves […]» (Wozniak, 1999). All these insights received a good amount of attention in the field of psychology, still in recent times. Yet another point of interest for our inquiry, is also his interpretation from within of naturalistic *selfishness*. To James instinctual facts suggest that each of us is animated by «a *direct feeling of regard for his own pure principle of individual existence*», but he concludes that «*The words* me, *then, and* self, *so far as they arouse feeling and connote emotional worth, are* objective *designations, meaning* all the

things *which have the power to produce in a stream of consciousness excitement of a certain peculiar sort* » (PP: 304).

The empirical life of Self	**Material**	**Social**	**Spiritual**
Self-Seeking	Bodily Appetites and Instincts	Desire to please, be noticed, admired, etc.	Intellectual, Moral and Religious Aspiration, Conscientiousness
	Love of Adornment, Foppery, Acquisitiveness, Constructiveness	Sociability, Emulation, Envy, Love, Pursuit of Honor, Ambition, etc.	
	Love of Home, etc.		
Self-Estimation	Personal Vanity, Modesty, etc.	Social and Family Pride, Vainglory, Snobbery, Humility, Shame, etc.	Sense of Moral or Mental Superiority, Purity, etc.
	Pride of Wealth, Fear of Poverty		Sense of Inferiority or of Guilt

All James's opinions about the constituents of the phenomenal self, and of the nature of self-regard are shown in the table above, and after this analysis he finally focuses on the postponed issue of pure principle of personal identity or *Pure Ego*. Actually, as a «parenthetical digression», James has already approached the

question of the *spiritual self* to claim that any manner (either abstract or concrete) of considering this aspect of our self is a reflective process yet. In fact, such analysis is «the result of our abandoning the outward-looking point of view, and of our having become able to think of subjectivity as such, *to think ourselves as thinkers*» (PP: 284). Even if the identification of ourselves with the thought rather than with its objects is a «mysterious operation», sooner or later every one become familiar with his subjective life. For the moment James put the concrete view of consciousness aside, and focuses his attention on the abstract way of identifying the whole stream with the self. In this view, «a *certain portion of the stream abstracted from the rest* is so identified in an altogether peculiar degree, and is felt by all men as a sort of innermost centre within the circle, of sanctuary within the citadel, constituted by the subjective life as a whole» (PP: 284-5). To submit the spiritual self to an abstract analysis *means* that in the stream of consciousness it is never found all alone. The feeling of the self is abstracted from the experience of the self which is concretely *felt* together with other things and parts of the stream. Moreover, other subjective parts of the stream seem relatively transient respect to descriptions of this self as the « *active* element […], what welcomes or rejects […] presides over the perception of sensations […] the home of interest, the source of effort and attention, and the place from which appear to emanate the fiats of the will».

The question is thus *what is this self of all the other selves?* Actually, any physiologist would consider in his answer the *close relation* of the self to the process by which ideas and sensations are reflected or passed over into outward acts. But a part from general descriptions, when the intent is to define the *precise nature* of the self, then several very divergent theories arise. The spiritualist, empiricist and transcendentalist theories will be explained in length in another part of the same chapter, but at the moment James is not interested in the physiological or the theoretical methods of analysis and their relative quarrels, but in something quite different. Taking into account the generally accepted fact that the central part of the Self is *felt*, James begins an interesting auto-analysis, explicitly renouncing to generalized result, in which he follows his own *feeling* of this central active self not necessarily to state «what the active self *is,* as a being or principle», rather with the intent to describe more precisely in what it consists, that is to say «what we *feel* when we become aware of its [the spiritual self] existence».

What James can describe as his central nucleus is in the end his «palpitating inward life», which is made of the continuous play of activities in thinking, an incessant reactions of his spontaneity upon objective matters. More particular aspects of spontaneous acts seem to be difficult to catch and describe distinctly, but when James's introspective glance catches one of these manifestations, all that he can «*feel distinctly is some bodily process, for the most part taking place within the head*».

> In a sense, then, it may be truly said that, in one person at least, *the 'Self of selves', when carefully examined*, *is found to consist mainly of the collection of these peculiar motions in the head or between the head and throat.* I do not for a moment say that this is *all* it consists of, for I fully realize how desperately hard is introspection in this field. But I feel quite sure that these cephalic motions are the portions of my innermost activity of which I am *most distinctly aware.* If the dim portions which I cannot yet define should prove to be like unto these distinct portions in me, and I like other men, *it would follow that our entire feeling of spiritual activity*, *or what commonly passes by that name, is really a feeling of bodily activities whose exact nature is by most men overlooked* (PP: 288).

Even if James does not intend to adopt such an audacious hypothesis, he goes on to draw its main consequences. These consist in the reduction of the nuclear Self to a collection of physiological minimal reflex activities. Also Wundt, according to James, talked about these 'adjustments' but in terms of 'feelings of tension', and in a similar way the famous scientist claimed that «the self-consciousness is, at the outset, thoroughly sensational»[32]. These *primary* reactions «constitute the permanent core of turnings-towards and turnings-from, of yieldings and arrests […] holding a sort of arbitrating, decisive position». Furthermore, James suggests here for the first time what he will be claiming in his 1904 article *Does Consciousness Exist?* In fact, were these adjustments the innermost sanctuary of the self, then it would follow that «*all* that is experienced is, strictly considered, *objective*; that this Objective falls asunder into two contrasted parts, one realized as 'Self,' the other as 'not-Self; and that over and above these parts there *is* nothing save the fact that they are known, the fact of the stream of thought being there as the indispensable subjective condition of their being experienced at all» (PP: 290). This part is very interesting since James introduces a distinction between *sciousness* and *con-sciousness*, sometimes overlooked, which is the same ambiguity of Firstness that we can find in Peirce's writings[33]. In James's view, his hypothesis would imply that «the *condition* of the experience is not one of the *things experienced* at the moment; this knowing is not immediately *known.* It is only known in subsequent reflection». Against James

Frederick Ferrier and his theory of con-sciousness as «"thinking its own existence along with whatever else it thinks"», James contends that the stream of thought is rather «a stream of *Sciou*sness pure and simple, thinking objects of some of which it makes what it calls a 'Me,' and only aware of its 'pure' Self in an abstract, hypothetic or conceptual way» (PP: 290-1).

According to this view, the sciousness would be the thinker, but our common belief in the existence of our consciousness as the thinker seems to be rather a «logical postulate» than the result of some «direct inner perception of spiritual activity». Thought may conceivably have no immediate knowledge of Itself. All that we directly perceive are physiological adjustments in the head and throat as well as the sense-consciousness of our present body, from all these organic and emotional phenomena we then would conceive a pure Self (Cf. Peirce on inference, *Chapter 2*). There is no internal or essential distinction of consciousness in *me* and *not-me*, the reflective act of consciousness on its own subjective being is but a secondary process which work on immediate and continuous perceptions. James suggests that each 'section' of the stream is «a bit of sciousness» or immediate knowledge, dealing with 'me' and its 'not-me' as objects performing together. He claims that the postulate of 'Matter,' as something behind physical phenomena may be similar to that of the Thinker behind conscious states. Moreover, some phenomena would pertain more to matter and others more to the thinker, but the definite *identification* of these postulates would require further metaphysical investigation.

As evident, James is well aware that his speculation is not in the line of common-sense, and furthermore its conclusion seems to be against the fundamental assumption of every philosophic school that our *thoughts* exists. The only known exception is the conclusion of Paul Souriau «'que la conscience n'existe pas'» (1886)[34]. This is the reason why James reverts to the path of common sense which he has been following throughout the book, and assumes again the «direct awareness of the process of our thinking as such», not as a secondary order awareness, even if keeps insisting on the fact that self-consciousness is an even more inward and subtle phenomenon than most of us suppose. The only conclusion of his auto-analysis is that, at least for some persons, «the part of the innermost Self which is most vividly felt turns out to consist for the most part of a collection of cephalic movements of 'adjustments' which, for want of attention and reflection,

usually fail to be perceived and classed as what they are; any other of the guesses as to what its nature may be must at present remain an open question». (PP: 291-292).

Addressing the Pure Ego or *I*-self, James turns first to the *feeling of self identity*, the experience that '*I am the same self that I was yesterday*,' pointing out that «*The sense of our own personal identity, then, is exactly like any one of our other perceptions of sameness among phenomena. It is a conclusion grounded either on the resemblance in a fundamental respect, or on the continuity before the mind, of the phenomena compared*» (PP: 318). He then proceeded to review the classical spiritualist, associationist, and transcendentalist theories of personal identity and concluded with an extremely important discussion of the phenomena and implications of multiple personality. In this last especially, we see James struggling with the nature of the abnormal mutations of the self, either in the form of alterations of memory or in the present bodily and spiritual selves. James was, in fact, persuades that «a serious study of these trance-phenomena is one of the greatest needs of psychology, and think that my personal confession may possibly draw a reader or two into a field which the *soi-disant* 'scientist' usually refuses to explore» (PP: 375).

As to what concerns the *sense of personal identity*, yet in his analysis of the stream of thought outlined in *On Some Omissions of Introspective Psychology* James suggested the need to reserve the judgment on the word Ego before further investigation were made on «certain material peculiarities about the way in which segments of the stream are *for* each other when they belong to the *same* Ego» and more specifically, he made reference to «the difference of intimacy , of warmth, of continuity, similar to the difference between a sense-perception and something merely imagined—which seems to point to a special *content* in each several stream of consciousness» (EPs: 167)[35]. In *Principles*, more accurately, the mark of *warmth and intimacy*[36] is the peculiar way in which each thought is aware of those thoughts that belong to his own Ego. The consciousness of personal sameness thus corresponds to the feeling of continuity between thoughts that are suffused of warmth and intimacy. This consciousness can be considered either as a *feeling or subjective phenomenon* or as a *truth or objective deliverance*. In the first case, it is a *judgment of sameness* which should not be taken in the sense of a *subjective synthesis*, which is the Kantian synthetic apperception, as distinguished from the *objective synthesis* or analytic apperception. The sense of personal identity is not the Kantian essential form of thought, according to which thought should be able to think all his thinking together as a

prerequisite to any analytic apperception, rather for James it is «the sense of a sameness perceived *by* thought and predicated of things *thought-about*. These things are a present self and a self of yesterday. The thought not only thinks them both, but thinks that they are identical». It is not a logical necessity, but an actual perception and that is the reason why even if the psychologist might prove the judgment of sameness to be wrong and contests that *real identity* between thoughts be a *fact*, still the *personal identity* would exist as a *feeling*.

So from the critical point of view of the psychologist, James wishes to investigate which is the *meaning* of the affirmation «*I am the same self that I was yesterday*», or what consciousness means when it judges that some thoughts are the same. The answer is that every thought thinks with *warmth and intimacy* about its present self, and such a character of warmth in the present self consists of either « something in the feeling which we have of the thought itself, as thinking, or else the feeling of the body's actual existence at the moment,—or finally to both. We cannot realize our present self without simultaneously feeling one or other of these two things. Any other fact which brings these two things with it into consciousness will be thought with a warmth and an intimacy like those which cling to the present self» (PP: 316). The point is that the perceptual judgment of sameness about our personal identity is not different from any other perceptual judgment on external phenomena. In fact, our thoughts are similar to a «herd of cattle», whenever they are thought they are felt to belong to each other because of their common warmth («herd-mark»). These members can be quite different in other parts, but the brand makes them into a whole, which we treat as a unit. Moreover, «continuity makes us unite what dissimilarity might otherwise separate; similarity makes us unite what discontinuity might hold apart». Actually, the mechanism of re-identification and appropriation of our ideas to our self is based on perception. James is also claiming that the perceptual distinction between what is felt warm and what is felt cold, as only conceivable, is rather unmistakable : «*The sense of our own personal identity, then, is exactly like any one of our other perceptions of sameness among phenomena. It is a conclusion grounded either on the resemblance in a fundamental respect, or on the continuity before the mind, of the phenomena compared*» (PP: 318).

As a matter of fact, James's unity of the Self is *generic* and far from any metaphysical or absolute Unity. The coexistence of unity and plurality from different point of views is another recurrent argument in James, an aspect of his

dynamic attempt to avoid absolutistic or monolithic outcomes. So the different selves are pervaded by «uniform feeling of 'warmth, which makes them the same in *kind*», but *generic* unity coexists with generic differences which are just as real as the unity. The same is for the attribute of continuity: «unbrokenness in the stream of selves» is a perfectly definite phenomenal thing and like « the unbrokenness in an exhibition of 'dissolving views,' in no wise implies any farther unity or contradicts any amount of plurality in other respects» (PP: 319). This means that where the *resemblance* and the *continuity* are no longer felt, there is no sense of personal identity, or at least «no judgment of identity can be decisively cast» and, moreover, that these judgments on partial resemblance of continuous feelings experienced constitutes «*the real and verifiable* '*personal identity*' *which we feel*» in the 'stream' of subjective consciousness. Such a dynamic, uncertain and pluralistic description of personal identity seems to be verified by all the cases of mental pathology, which James will run in detail in the last section of the chapter (Cf. PP: 352-379), and definitely contrasted with substantial and strong views of the Self (Bordogna, 2009). It seems, instead, to be in the line of Hume and Herbart's description of the self as an aggregate of separate fact. The classic empirical psychology, however, has overlooked *more subtle aspects* of consciousness which if taken into account would allow James to give a phenomenal description of the unity of consciousness, or the fact of the belonging-together of thoughts, avoiding the idealistic-absolutistic outcomes of both spiritualism and empiricism, and at the same time meeting common-sense main demands.

To explain his hypothesis, James uses the simile of the «herd of cattle», and makes clear that «the 'owner' symbolizes here that 'section' of consciousness, or pulse of thought, which we have all along represented as the vehicle of the judgment of identity; and the 'brand' symbolizes the characters of warmth and continuity, by reason of which the judgment is made» (PP: 319-20). More specifically, the brand of the owner is the *ratio cognoscendi* of the belonging-together of selves, whereas the belonging is *ratio existendi* of the brand. This description, however, seems to endorse a mere *representative* conception of the selves in the actual pulse of thought. As mentioned, James aims at meeting the features which common-sense finds in the phenomenon of personal identity, and in particular the conviction that «the unity of all the selves is not a mere appearance of similarity or continuity, ascertained after the fact. […]there must be a real proprietor in the case

of the selves, or else their actual accretion into a 'personal consciousness' would never have taken place». James agrees that the unity of the selves remains a mere potentiality till a real center or owner comes and acts. The lack of a *medium* is, indeed, the greatest difficulty of the associationism description of self-identity. As James has shown in Chapter VI about the autonomous compounding of consciousness, in fact, it is not clear the reason why and how successive individual thoughts and feeling should 'integrate' themselves together on their own account.

But in James's description the medium is the «Thought» -- or «the real, present onlooking, remembering, 'judging thought' or identifying 'section' of the stream». Psychology, in fact, assumes these pulses of thought to exist and have the function of knowing and, therefore, the Thought actualizes the possible unity of selves.

Another important demand of common-sense is that «the past thoughts never were wild cattle, they were always owned». In fact, the problem of James's view is to explain what past thoughts become in the temporal intervals between successive present sections of the stream. Such an anti-substantial description of self-identity, in fact, shall provide a solution for the permanence of existing past thoughts which each time are re-appropriated by the actual pulse of thought. According to M. Capek (1950), the ontology of temporality is a very problematic issue for James's philosophical elaboration. We shall focus this matter in the second chapter of our work, while in the following section we will get a glimpse of the psychological perception of time.

The observation that past thoughts never go away but are immediately found as a property already there seems to undermine the possibility for James's dynamic and temporal description of self-consciousness to gain *real unity* of thoughts through continuity and resemblance. Actually common-sense seems to press in the direction of the *substantial identity* of Thought, and both the Metaphysical Soul and Transcendental Ego would be but attempts to satisfy this urgent demand of common-sense. Nonetheless, James proposes a different hypothesis, respect to any ever self-same and changeless principle, to explain the same «appearance of never-lapsing ownership» of common-sense. That is the union of our present and past selves would not imply any substantial or transcendental identity, but it would be a matter of *inheritance*. In this view, the title of self-identity (collective) would be inherited by successive passing Thoughts as his legal representatives, and such

description seems also to reflect the transmission which actually occurs in consciousness.

> Each pulse of cognitive consciousness, each Thought, dies away and is replaced by another. The other, among the things it knows, knows its own predecessor, and finding it 'warm,' in the way we have described, greets it, saying: "Thou art *mine*, and part of the same self with me." Each later Thought, knowing and including thus the Thoughts which went before, is the final receptacle—and appropriating them is the final owner—of all that they contain and own. Each Thought is thus born an owner, and dies owned, transmitting whatever it realized as its Self to its own later proprietor (PP: 322).

The mechanism of adoption of the last self by the immediately following one is the basis of the appropriation of most of the remoter constituents of the self, without necessary implying the identity of the possessors. To corroborate his position, James refers to the analogy that Kant makes between mental states and elastic balls as an argument to respond to the 3rd Paralogism (CRV: A363-4). For James was important that Kant conceived the possibility of a process in which one mental substance communicate all its states to another with this second doing so to a third in such a way that all memories and consciousnesses are being transferred. Thus the last such substance would have a sense that it had been aware of all the previous states and memories as its own even though there would have been no constant identical thing given.

At this point, James claims that his description of self-identity in terms of phenomenal relations which clearly develop in the process of thinking, seems to leave no room for the activity of transcendent agencies of any sort. The only point that remains quite open to objection is the *act of appropriation*, for things just are themselves, they neither appropriate nor disown themselves. So if the present Thought is the agent which choices which appropriations are of its own, it is never an object to itself. This means that it rather «appropriates *to* itself, it is the actual focus of accretion, the hook from which the chain of past selves dangles, planted firmly in the Present, which alone passes for real, and thus keeping the chain from being a purely ideal thing» (PP: 323). Now, since the present moment of consciousness does not known anything *about* itself till it is gone, but it may feel its own immediate existence, James accurately claims that it appropriates its acquisitions to «the most intimately felt *part of its present Object, the body, and the central adjustments*, which accompany the act of thinking, in the head. *These are the real nucleus of our personal identity*, and it is their actual existence, realized as a solid

present fact, which makes us say 'as sure *as I exist*, those past facts were part of myself » (PP: 324).

The conclusion of this intense description is that the psychological facts of consciousness can be fully expressed by the functions of *cognition* and *appropriation* of feelings, and thus there is no need to suppose a non-phenomenal Thinker behind the passing Thought. The distinction between *I* and *Me* which James claims as the facts of personality are «names of *emphasis*; and Thought is always emphasizing something». And in this view, all contrasts and distinction resulting from the free and forceful activity of the human mind in the field of objective knowledge (here/there; now/then; this/that; I/thou) and are to be referred as such to the kernel to which the *represented* parts of the Self are assimilated, accreted, and knit on; and even were Thought entirely unconscious of itself in the act of thinking, these 'warm' parts of its present object would be a firm basis on which the consciousness of personal identity would rest.

> The sense of my bodily existence, however obscurely recognized as such, *may* then be the absolute original of my conscious selfhood, the fundamental perception that *I am*. All appropriations *may* be made *to* it, *by* a Thought not at the moment immediately cognized by itself. Whether these are not only logical possibilities but actual facts is something not yet dogmatically decided in the text» (PP: 323).

At last, James addresses some specific critiques to the three schools, substantialism, associationism, and transcendentalism which have produced almost all rival formulations of the consciousness of self. James requires a class apart for his own formulation, although it incorporates essential elements from all three schools, and he shows his particular endorsement of a version of empiricism saying that «*There need never have been a quarrel between associationism and its rivals if the former had admitted the indecomposable unity of every pulse of thought, and the latter been willing to allow that 'perishing' pulses of thought might recollect and know*» (PP: 350).

I.4 The Perception of Time and Space (PP XV, XX)

We began this chapter on James's psycho-physiological investigation of continuity considering the influence of Darwinism on what is called James's *nativism*. As mentioned initially, nativism is in part also a doctrine about the nature of sensations. Before addressing these two very important chapters on time and space perception, and recollect James's general view about continuity thereby, it is

obligatory to explain his doctrine of sensation and consider as well his distinction between sensation and perception. According to Myers, James is in the line of those philosophers, like Locke and Schopenhauer, who considered sensations are subjective and perceptions objective. Given that these authors also maintain that perceptual knowledge of the world originates in sensations, the difficulty of their original distinction is then how to reconcile the two, or how to «"get out of the sensations in one's own mind into the perception of the world outside"» (PP: xii). Myers suggests that James was convinced that his nativism could reinstate close relation, or rather «genuine continuity», between sensations and perception. Actually, in Chapter XVII, James argues that from the analytic point of view sensation differs from perception in «the *extreme simplicity of its object or content*» (PP: 652). In both the fact is an *immediately present outward reality* unlike thoughts and conceptions, even if the function of sensations seems to be mere *acquaintance with* fact, whereas that of perception is *knowledge about* it. From the physiological point of view, as well, sensations and perception involve the same nerve-currents, only in different degree. In Chapter XIX, James claims that a pure sensation is an abstraction which is never realized in adult life. In fact, associative suggestions of sensations and perception gradually run into each other, and «*Perception thus differs from sensation by the consciousness of farther facts associated with the object of the sensation*» (PP: 723).

As evident, James's definition of perception in terms of an «ever-widening range of sensations» present some difficulty. However, I agree with Myers in setting off the importance of James's effort to reconcile the original mind-world continuity through this theory of *sensation*. In these two chapters, as we shall see, he insists on our direct acquaintance with the real world from the standpoint of sensation, and he claims our native sensible *intimacy* with the world against any intellectualistic attempt to introduce radical distinctions or foreignness. The knowledge of the world is a gradual discovery, but for human beings the process of knowing is rooted in their native acquaintance with external world. The famous description of the very first impressions of the world to a baby who «feels it all as one great blooming, buzzing confusion» gets the point. James claims that the baby is not dealing with any internal world alleged to sensations, but the latter present to the baby the real external world. More precisely, direct acquaintance is not yet perception or knowledge about the contexts and its relations, but natively or from the very outset:

«Sensation and reality are not abruptly separated but are continuous with each other. Nothing "external" to sensation is needed in order to connect it with the real world» (PP: xxiii-xxiv).

In Chapter X, and all throughout *The Principles of Psychology*, James accuses the main philosophical theories of self-consciousness to be superfluous in psychology, besides being mistaken in their descriptions of the activity of mind. In fact, under different respects, his nativist theory is at odds with all the great philosophical traditions, in particular with *transcendentalism* and *associationism.* Kant depicts our mind as an «elaborate internal machine-shop» (PP: 344), which supplies systematic connections and continuities for sensations according to a *poor* and no *evidence-based* conception of sensation. On the contrary, he claims sensations to be *rich* enough to be organized in themselves and to form an orderly world yet. The internal break with British empiricism, instead, is related to the alternative between associationism and nativism. Locke supported the analysis of mind's contents into basic unities, called ideas. The mind was thought as parallel to physical things, so that it had atomic ideas or elements which were related to each other by associations. The parts of mind associate in an almost mechanical way according to laws paralleling those on the physical world. James openly contrasted this doctrine of mental "elements" or "atoms" and their explanation through association, in particular he disagree with the unnatural discontinuities that this doctrine introduced in reality and experience.

More specifically, approaching the theme of the perception of time and space, James sustained «the nativistic or intrinsic spatio-temporal nature of sensations» against the transcendental constitution of human mind. As we noted Kant's claim was superfluous in psychology and his supposition of nontemporal and nonspatial nature of sensations was suspect. Nonetheless, classic empiricism seemed to James to share the same hostility for the spatio-temporal nature of sensations. This view first emerges in Berkeley's analysis of space, in which he denied that *distance* can be a visual sensation, and continue with J. Mill's analysis of color. The empiricist analysis of space perception became the field for James's internal battle and, as a matter of fact, constitutes the longest chapter of *The Principle of Psychology*. Actually, if sensations were mental atoms, these were recurring entities in different complex mental states. All James's description of the continuity of consciousness shows exactly opposite evidences: «sensations are short-lived and cannot endure like desks

and chairs, any two or more successive sensations being necessarily different, so that no one of them can be conceived to *recur*. Further, it seemed to him an impossible task to show how the special nature of a complex mental state can be reconciled with its being dissected into mental atoms or elements» (PP: xxvi-xxvii).

In Chapter XV James deals with the internal perception of time before addressing in the following chapter the perception of past events or Memory. There James suggests that we need to have the notion of past to recognize a thing *as* past. Moreover, we often do not recognize the intrinsic quality of pastness in things, rather we infer that something is past through associative mechanisms. In particular, we associate things with other things that *means* pastness to us and in this way we draw the conclusion that the latter are past as well. Before James has to investigate the original experience of pastness from which we get the meaning of the term. He claims that the immediate sense of time

The absurd hypothesis of short-contracted sensations, according to James, set off by contrast the real nature of consciousness : «*The knowledge of some other part of the stream, past or future, near or remote, is always mixed in with our knowledge of the present thing*» (PP: 571).The first correction to make to classic psychological views on time is that *simple sensation* is an abstraction, whereas all our concrete states of mind represent complex objects. Unlike many other books of psychology, James is introducing only here his definition of sensation, and in fact, the chapter on sensation still away to come (XVII). The echo of both just past and just to arrive objects of thought are parts of this concrete complexity and «the germs of memory and expectation, the retrospective and the prospective sense of time. They give that continuity to consciousness without which it could not be called a stream» (PP: 571-2).

Another ideal abstraction is the present moment of time. We are not able to grasp such a short-instant of becoming in senses, this is not a fact of immediate experience, rather its existence seems to be the necessary conclusion of reflection. James quotes a passage in which the psychologist E. R. Clay distinguishes the Present of philosophy from «the *specious* present» of human apprehension. In fact, in experience time consists of four parts -- the obvious past, the specious present, the real present, and the future – all living in the specious present or all nonentities omitting it. In brief, also James suggests that the «practically cognized present is no knife-edge, but a saddle-back, with a certain breadth of its own on which we sit

perched, and from which we look in two directions into time» (PP: 574). This part is very interesting to compare with Mead and Whitehead's conceptions of the present and their respective theories of time (Bella, 2015). The unit of time perceived is a duration, which is not the result of an inference from the perception of the succession of its parts, rather experience of *duration-block* is immediately a synthetic datum, and to this sensible perception parts are inseparable. In this regard, space and time are quite analogous: «the original experience of both space and time is always of something already given as a unit, inside of which attention afterwards discriminates parts in relation to each other. Without the parts already given as *in* a time and *in* a space, subsequent discrimination of them could hardly do more than perceive them as *different* from each other; it would have no motive for calling the difference temporal order in this instance and spatial position in that» (PP: 575).

The experiments of time-reaction show that when impressions follow very rapid succession in time at first we can be much perplexed in deciding the order in which they came, and sometimes we change the order in judgment, but we are never in doubt that they occupy some duration, and are not simultaneous.

Conscious perceptions are supposed to respond to the changes of the brain awaken by outer forces. In general, perceptions do not mirror the outer waves but represent them symbolically. Helmholtz suggests that the only case in which internal perceptions copy or truly correspond to external reality is that of the *time-succession* of phenomena. The fact that «events, like our perceptions of them, take place in time, so that the time-relations of the latter can furnish a true copy of those of the former» may lead to the crude speculative conclusion that «the mere existence of time in those changes out of the mind which affect the mind is a sufficient cause why time is perceived by the mind» (PP: 591). The mystery of time cognition would be solved through the impression of a like succession of outer changes upon the brain and then copied by the mind. Despite the elliptic way of talking about time, which *per se* is no force, James underlines that this view only stands on the doorstep of cognition. When these changes are finally mirrored by the mind there subsists the chasm between object and subject of cognition. In his words: «*A succession of feelings*, *in and of itself*, *is not a feeling of succession. And since*, *to our successive feelings, a feeling of their own succession is added*, *that must be treated as an additional fact requiring its own special elucidation*» (PP: 591). Therefore, this view

leaves the problem of the relation between *being* successive in time and *knowing* time successions completely untouched.

According to the initial affirmation that «what is past, to be known as past, must be known *with* what is present, and *during* the 'present' spot of time», and given that empty time or time-length without time-breath is a mere abstraction, the representation of James Ward's time succession as an horizontal line intersected by a second perpendicular line of simultaneously thought of objects helps to show that «there is a sort of *perspective projection* of past objects upon present consciousness, similar to that of wide landscapes upon a camera-screen». In a previous paragraph dedicated to our accuracy in estimating short duration, in common experience and experiments on time-perception, James maintained that «our maximum distinct *intuition* of duration hardly covers more than a dozen seconds (while our maximum vague intuition is probably not more than that of a minute or so)». On this account, he now supposes that «*this amount of duration is pictured fairly steadily in each passing instant of consciousness* by virtue of some fairly constant feature in the brain-process to which the consciousness is tied. *This feature of the brain-process, whatever it be, must be the cause of our perceiving the fact of time at all*» (PP: 593).

Note that James considers the constant feature in brain-process to be the cause of the *perceiving*, not the *object perceived*. However, the duration which our brain can steadily perceive seems to be that of the 'specious present', which is an amount of time that goes from 0.12 seconds to less than one minute. In these units of passing time, *contents* are in a constant flux, whereas we have a permanent intuition of the unchanged quality of duration. In this way, James disentangles the sense of time from the reproductive capacity of our memory. In fact, memory can only reproduce the events of these units of duration as completely different psychical facts. That is to say, an event directly perceived in the specious present as a thing immediately past is not the same psychic fact of the same event remembered. Therefore, even persons which have problems of reproductive memory can have sense of time, though limited to immediate units. In fact, memory is full of *dated* things, James argues, which we have associated as being before or after some present (or past or future) thing; and just like in space, things and events *vaguely or exactly dated* (or placed) then become *signs and symbols* of longer time-spaces. Sensations have an intense magnitude, and the perception of duration is thus the origin of our sense of

time: «*the original paragon and prototype of all conceived times is the specious present, the short duration of which we are immediately and incessantly sensible*».

Now, since this feeling or sensibility cannot be due to the mere duration of brain-process, researchers go after the element of neural activity which is the correlate of such feeling. In the case of time, many authors have tried to individuate the *temporal sign* which dates or give a temporal order to our impressions within a duration. In particular, James confronts Ward, Wundt and Mach's analysis of *temporal signs* before offering his *unripe* conclusion. The feeling of a time-duration can be the immediate effect of an overlapping of brain-processes of different phase, as proved in the phenomena of "summation of stimuli" in the nervous system. In particular, he claims that «*there is at every moment a cumulation of brain-processes overlapping each other, of which the fainter ones are the dying phases of processes which but shortly previous were active in a maximal degree. The* AMOUNT OF THE OVERLAPPING *determines the feeling of the* DURATION OCCUPIED. WHAT EVENTS *shall appear to occupy the duration depends on just* WHAT PROCESSES *the overlapping processes are»* (PP: 598). All that James wishes to state is «the most *elemental* form of the psycho-physical conjunction», he is not investigating the reasons why our intuition of the specious present results from such a combination of brain-processes.

Including in his analysis also conceptual brain-processes, besides perceptual ones, James shares the naturalistic contention that different creatures differ enormously in the amounts of duration which they intuitively feel, and this makes them feel very different features of events. The influence of organic constitution on specific perception of time and space, an idea just hinted at in Chapter X, is another interesting aspect to compare with Mead and Whitehead's reflections. In this view, James contends that human beings can *directly perceived* a certain objective amount which at any one moment can never exceed the capacity of our 'primary memory'. Moreover, the feeling of the time immediately-past is not «*what it is because those events are past,* but *because they have left behind them processes which are present. To those processes, however caused, the mind would still respond by feeling a specious present, with one part of it just vanishing or vanished into the past*» (PP: 603).

So far James has supported the hypothesis that the specious present is a constant feeling of limited duration, and this duration is the original intuition of time. The different Kant's notion of an *intuition* of objective time as an infinite necessary continuum, instead, has nothing to support it. The duration of our brain-processes

or our mental changes is the *object* of the intuition, which, being realized at every moment of such duration, must be due to a permanently present cause. This cause —probably the simultaneous presence of brain-processes of different phase— fluctuates; and hence a certain range of variation in the amount of the intuition, and in its subdivisibility, accrues.

In Chapter XX, James affords the analysis of the perception of *space.* This chapter shall read in parallel with his 1879 article *The Spatial Quale*, published in the «Journal of Speculative Philosophy». Talking about space-sensations, he argues, we have first is a "vague totality", only in a second moment we are able to discriminate and to analyze these data in order to *know* them properly. In the above mentioned 1885 article, James had already stated the important distinction between *knowledge by acquaintance* (direct) and *knowledge about* (intellectual) and through his analysis of *feelings* he claimed the precedence of *perceptual knowledge* on the intellectual one, both at the beginning and in the end of every cognitive process[37]. In James's view there is an *element of voluminousness* «discernible in each and every sensation». Such an element is «the original sensation of space», that is, the fundamental path out of which we can get our *knowledge about* space after *discriminative*, *associative* and *selective* processes. Just as temporal intensity, spatial extensity is a particular kind of *feeling* which cannot be described in other terms than itself; it should be called a "sensational element" given together with our particular sensations, indivisible from them in actual experience. Despite the fact that dimensions (i.e. direction, surface, depth) of such a vastness are absolutely *vague*, sensations of different orders can be comparable one another with respect to their volumes. So we can say that the "spatial quality" is *identical* in each and every different sensation. James points out he is considering the *subjective varieties* and not the *objective causes* of spatial feeling[38]. On this ground the spatial quality we *feel* together with sensations is «most distinctly and unmistakably one of vague spatial vastness in three dimensions—quite as much so as is the felt quality of the retinal sensation when we lie on our back and fill the entire field of vision with the empty blue sky» (PP: 782). A vague form or *quale* of spatiality as an element bound up with every sensation, as well as its sensational and not intellectual character, is what James has so far tried to make clear. "Volume" is an immediate psychic effect which always seems to be yielded by the excitement of nerve-processes. Every

nerve-process produces to the mind such an extensive quality of sensations in the shape of a *primitive*, *vague*, *undetermined* and *unordered* "simple total vastness" .

James is then introducing the topic of *real space* : the sensation of space produced by sensations should be apprehend by the mind by a set of intellectual acts (measurement, subdivision and addition) in order to form or synthetize the objective world. Sense-data are *shuffled* and *manipulated*, subdivided and substituted with imagined data by intellectual operations. Since we have seen that we perceive *extent* objects, the question now is *how* the original given spaces (which are chaotically given) could be set in our orderly and regular "world of space"? Against anti-sensationalists statements James here argues *against* the necessity for sense-spaces to be in any particular order of positions or definite spatial relation. James clearly states that different feelings «may coexist in us without assuming any particular spatial order» (PP: 788). Considering the moment *consciousness*[39] enters in this considerations, it needs other conditions to arrange the multitude of sense-spaces. For many sensible extents to be perceived together and in order they have to be placed in a vaster space which the mind can all at once and simply catch. «That a sensation *be discriminated as a part* from out of a larger enveloping space is then the *condition sine quâ non* of its being apprehended in a definite spatial order» (PP: 789).

Discrimination is the very rudiment of an order, there should be given other conditions. Before going on James points out two important terminological analyses: what do we mean talking about "spatial order" and "relations"? Spatial order is an *abstract* term, it covers *concrete f*igures, directions, positions, magnitudes and distances. To discriminate any of these sensations from a larger vastness is partially to introduce an order. Some of these perceptions are qualities of sensation (i.e. lines, figures). Different impressions striking us, we are able to *catch* them though we are not able *to know* their names or something else about them. Taking into account distance and direction we are not considering simple sense-spaces anymore; we need to introduce the category of space-*relations*.

His aim is to give a fully plausible and exhaustive *description* of original space-sensations in sensationalistic terms. Considering the category of relation James is forced to confront his view with the so called *Platonizing psychology*, which is his main subject of criticism together with the Empiricist psychologists. In Helmholtz, Wundt and Lipps's views the relation of position, for instance, can never be directly felt since there is nothing intrinsic in it. Helmholtz called the process through which

mind interprets and evaluates sensations "unconscious inference." It is through this process that mind normally generates ideas or perceptions from sensations, hence we can have no direct knowledge about any external reality. There should be an *act of thought* to connect the two terms of position, or it should be suggested a connection with previous experiences. All these arguments will be considered again later on, but let just notice here that these authors don't see how a simple sensation could *know* something. As the successors of Kant, they do imply a sort of "cognitive triangulation" in order something to be known. This critique is definitely similar to the one James moves against Kant in PP chapter IX and X. As shown, he openly contests that «*thought may, but need not, in knowing, discriminate between its object and itself*» (PP: 264).

The second passage is focused on the term "relation", which is a very *slippery* word and could not be abstractly and hastily considered. In a pragmatic way, James is setting the method to deal with all kind of terms which can easily become ambiguous; that is, making sure what is the precise meaning the word has in the peculiar sphere in which we are using or applying it. Hence, narrowing the field to space-relation we can see that «as in the field of quantity, the relation between two numbers is another number, so *in the field of space the relations are facts of the same order with the facts they relate*» (PP: 791). For instance, if we take «the relation of direction of two points towards each other», the relation of direction is the line itself; it is *identical* with the *peculiar sensation* of the form of space we can see or imagine between two terms; there is nothing more to be done. James describes the *various* phenomenology *of sensations* and *sensational perceptions* that we normally feel and use, without paying great attention. If direction can be explain through the sensational approach, so should be for position and magnitude. In James's words: «They are nothing but sensations of particular lines, particular angles, particular forms of transition, or (in the case of a distinct more) of particular outstanding portions of space after two figures have been superposed» (PP: 793).

As it is for colors, we have *peculiar* sensations giving us the perception of rightness or leftness, and these sensations are corroborated when we are asked to consider just two points one beside the other. We can only *ostensively* point to the right face of a cube, or indicate which is the left face. Lack of attention has been one of the causes of the mistakes made by so much psychology. James is thus contesting the sort of idealism that empiricist psychologists has developed. Although they

moved from Berkeley's good intuition of the primitive chaotic condition of our sense-spaces, they didn't state the sensible form of the primitive spatial experience and made of the *principle of association* the explication of whatever sensible impression. Forgetting Locke's *monitum* that «the mind can frame unto itself no one new simple idea» (PP: 900-1) and denying any *extensive quality* to sensations, they tried to obtain an explication of the space-perceptions by successive associations. In other words, space would come out from *unextended feelings* and *time*. James considers all authors he is commenting as 'psychical stimulists' or Kantists, since they make of the *space* they speak of a "*super-sensational mental product*." The is now to explain how subdivisions are brought to consciousness. James goes on facing the problem under three respects: localization, size and form. In the first instance, he has to confront his theory with Lotze's "local signs." Such a conception on the one hand assumes there is a *qualitative unlikeness of sensations*, that is to say there is an original (not conceptually added) "positional quality" of sensation (i.e. cheek or palm etc.); on the other hand, it denies there could be any spatial or local determination in the sensation itself. Hence, the quality of sensation is a sign suggesting things spatially set. Such a theory implies either we have already experienced the thing associated to the sign, or Reid's theory of "natural sign". In both cases the quality of feeling (sign) and position (thing) are considered two different things.

The paragraph on the conditions of visual perceptions let many difficulties arise. James believes judgment results from the combination of *retinal*, *muscular* and *intellectual* factors with each other. There is no simple law of interaction, every time one of these factors can prevail on the others. To uphold his theory he has to take into account the empiricist position on visual perception, in order to contest Berkley's statements, as well as the ones of his successors. In his *An Essay Towards a New Theory of Vision* the British philosopher analyzed distance and depth perceptions. He stated distance is not immediately perceivable in terms of purely visual feeling; it is an act of judgment grounded on *experience* than of *sense.* He maintained that there is a customary or habitual connection (not a necessary one) between ideas of *touch* and *sight*, that experience has made us to observe between them; such an association suggests us the things signified, as it is for language and signs. Despite the vagueness of Berkley's theory – which is nor perfectly in the line of his later works – James refuses this position considering perceptions to be of

three-dimensions, not of two. He clearly claims that: «The field of view is always a *volume*-unit. Whatever be supposed to be its absolute and 'real' size, the relative sizes of its dimensions are functions of each other. Indeed, it happens perhaps most often that the breadth- and height-feeling take their absolute measure from the depth-feeling» (PP: 848).

The same misleading empirical perspective on sensations has been the cause of mistaken conceptions about *consciousness*. Recovering *direct perception* is a fundamental step in order to restate the nature of relations, that is the *continuity* existing between our psychological functions and the world. Our relations to the world are sensibly *felt*, we do not need to postulate any noumenic entity to justify this natural phenomenon (process), yet it occur to dynamize the ways psychology and philosophy have inherited to look at reality. In Chapter IX of Principles, James is very eloquent about the reasons of his critiques against the assumptions of both Intellectualists and Sensationalists. They are wrong because if such things as feelings do exist at all, «*then so surely as relations between objects exist in rerum naturâ, so surely, and more surely, do feelings exist to which these relations are known*» (PP: 238).

This claim is expressed again in the preface to *The Will to Believe*, where James for the first time gives the name of *radical empiricism* to his general view. Some years later, in another preface to *The Meaning of Truth*, he will present his doctrine stating that it finally consists in the *postulate* that «philosophy should debate only about things given into experience», a *statement of fact* according to which «relations between things are just as much matters of direct particular experience» and the *generalized conclusion* that «parts of experience hold together from next to next by relations that are themselves parts of experience». This all amounts to say that «The directly apprehended universe needs, in short, no extraneous trans-empirical connective support, but possesses in its own right a concatenated or continuous structure» (MT: 6-7). The continuous structure of the universe is this recovered in philosophy claiming all that is given in experience to be the field of philosophical investigation, in this view the experience of relations as parts of experience themselves is found.

S. Madelrieux (2008)[40] – whose brilliant analysis of James's connections with classic empiricism, particularly as to what concerns the perception of space, we have followed so far – suggests that through sensationalism James was recovering empiricism from an intellectualistic outcome. And the recovery of empiricism was a

recovery of the sensational import for perceptual knowledge. What we feel *is* always something, "*feeling is not a psychical zero*". Feelings are our human means to catch reality. We can be wrong, we constantly need to appeal to all our intellectual capacities, to past experiences and to others' testimony to *educate* our own perceptions. But nonetheless James wants to guarantee the role sensations and perception play in our lives. We are deeply bounded to the world, we have a *real direct contact* with the world. Life is something concrete, it is not only made of inferential remands, or intellectual adjustments. We can't *create* reality. May we can *shape* our own reality, but this doesn't mean it is the 'real' world. Reality is something bigger, richer and excessive confronted just to our logical tools. In this regard the comparison between our *field of view* and our *field of consciousness* is very interesting. James centered the perspective on the concrete man, our consciousness is in some way coincidental with what we can see, that is what we are paying *attention* to and all the *fringes* we sensibly *feel* and mnemonically *imagine* around us. Just like in visual perception we can select something only overlooking something else, also at a higher conscious level we are constantly asked to choose which reality we want to live in. James makes our choice depending on *aesthetic and practical interests* (PP: 817), the same mechanism which is active in consciousness. What is 'real' for us is always the result of an intellectual-practical choice, there is a continual correction of our meanings, till we assume convenient *habits* as our second nature. But the *raw materials* of such reality are not passible of being constructed through logical associations. There is a direct 'empathical' spatial relationship with our natural and social world. It follows, on the one hand, that we are gifted with *extended* sensations and on the other hand that *vagueness* and *uncertainty* are always bound up with perception and hence with our cognitive capacity. I guess that a phenomenological study of *feelings* should be interesting, because this middle category is at the core of James's theories on consciousness and perception and it would allow to inquiry how *perceptual consciousness* and *categorical consciousness* are related – as suggested by James Edie (1970: 524). During his lifetime his position remained loyal to the greatest part of his initial intuitions, moving from psychological conceptions, referring to a scientific *dualistic* framework, James considered unavoidable to rethink the structure of reality in order to fit the results of his physiological inquiries. In conclusion, as behind rationalism, as James states, there is a need for *simplicity* and behind common sense there is a need of

unity; behind James's anti-intellectualism there is an existential commitment to concreteness and *Realism*. The method he adopts is a *recovery of empiricism*, as a philosophical and scientific direct disposition to reality.

I.5 Considerations

The 1984 Presidential Address *The Knowing of Things Together* represents James's formal break with dualism. Here James, according to David C. Lamberth (2008), rejects three important presuppositions of his *Principles of Psychology*: the separation of psychology from metaphysics, his preference for description over explanation and his presumption of the unity of mental states. He justified his change of mind with two empirical observations: the firs was that «no conventional restrictions *can* keep metaphysical and so-called epistemological inquiries out of the psychology-books», and the second concerned the «strained way of talking of dreams and reveries, and to quite an unnatural way of talking of some emotional states» which followed from his designation of mental states by their cognitive function so that he was willing to think «mental contents should be called complex, just as their objects are, and this even in psychology» (EPs: 88). Lamberth argues that «James's shift […] can be said to be driven by a more thoroughgoing empirical attitude […], a more earnest attention to phenomena *as they are given.* A "radical" empiricism, which calls into question even the well-worn assumptions of the self-sufficiency of the natural sciences» (p. 76). This view should be integrated with Myers's observation that «the dualism of *Principles* was an advertised stratagem, not a conviction», nonetheless, this text shows James's first version of pure experience and, overall, his abandonment of dualism.

John McDermott underlines, as Madelrieux, the stress of sensation

Notes

1. William James is considered the father of Pragmatism together with C. S. Peirce. Both in 1895 and *Pragmatism* (1907) James used the 'pragmatic maxim' of Peirce's famous article *How To Make Our Ideas Clear* (1868). Peirce saw the pragmatic account of meaning as a method for clearing up metaphysics and encouraging scientific inquiry. Peirce remained unhappy with both his early formulations and the developments made by James and Schiller. This lead him to refine his own earlier account and rename it "pragmaticism" in order to distinguish it from other more "nominalistic" versions. Cf. *What Pragmatism Is*, in «The Monist», XV, 2, 1905, pp. 161-181, p. 166. For further reading on Pragmatism and Pragmaticism see Karl-Otto Apel, *Charles S. Peirce: From Pragmatism to Pragmaticism*, Humanities Press 1981.

2. Hereafter we will use the traditional abbreviation PP, followed by the page number. The number of pages refers to the critical edition *The Works of William James. Edited by Frederick H. Burkhardt, Fredson Bowers, and Ignas K. Skrupskelis. 19 vols. Cambridge, MA and London: Harvard University Press, 1975 - 1988.* The abbreviations of James's main works are noted in the Abbreviations' page.

3. On James and Phenomenology see B. Wilshire (1968), J. Wild (1969), James M. Edie (1970; 1987). The phenomenological reading of the *Principles of Psychology* is an important part in the tradition of James's scholars. In the first volume of his *Logical Investigations* Edmund Husserl claimed that «Von William James hat Cornelius die Bekämpfung der „Mosaikpsychologie", die Lehre den fringes, aber nicht die vorsichtige erkenntnistheoretische Position übernommen. James modernisirt nicht, wie ich es von Cornelius sagen würde, die HUME'sche Phüosophie. Und wie wenig James' geniale Beobachtungen auf dem Gebiet der descriptiven Psychologie der Vorstellungsorlebnisse zum Psychologismxis zwingen, ersieht man aus der vorliegenden Schrift. Denn die Förderungen, die ich diesem ausgezeichneten Forscher in der descriptiven Analyse verdanke, haben meine Loslösung vom psychologistischen Standpunkte nur begünstigt.» (E. Husserl, *Logische Untersuchungen*, note n. 2, vol. I, p. 206).

4. F. Bordogna, *William James at the Boundaries*, Chicago and London, Chicago University Press, 2008.

5. «Through feelings we become acquainted with things, but only by our thoughts do we know about them. Feelings are the germ and the starting point of cognition, thoughts the developed tree» (PP: 222).

6. Still in *A Pluralistic Universe* (1909) James claimed an anti-intellectualistic view, rejecting that kind of logic linked to what he called 'vicious intellectualism'.

7. At the end of XIX century psychology and philosophy were still very close under many respects. As for what concerns the theoretical background, it was mainly divided between the old rational psychology and empirical psychology. The British school of empiricist psychology was obviously bound to the empiricism of Berkeley, Hume and Locke, which was also one of the sources of the German experimental psychology. In his *Handbuch der physiologische Optik* (1867), Helmholtz stated the distinction between empiricists and nativists with regard to the innative data of sensations, considering himself an empiricist. James's critiques are made against authors which he retained to have assumed empiricism in a too "rationalistic-kantian" way. That is to say, he stressed the internal distinction between empiricists-sensationalists (as Hering and Stumpf) and intellectualists (as Wundt, Lipps, and for certain analysis also Helmholtz), together with the necessity to rely on qualities of sensations to avoid a priori outcomes. (S. Madelrieux, 2008).

8. See H. Putnam, *Realism With a Human Face*; J. Conant (ed.). Cambridge: MA, Harvard University Press 1990; S. Pihlström, *'Metaphysics with a Human Face: William James and the Prospects of Pragmatist Metaphysics',* «William James Studies», 2 (2007)

9. J. J. Putnam, *William James*, in «The Atlantic monthly», 1910, vol. 106, No. 6; pp. 835-848.

10. Many are the great philosophers and psychologists which were in correspondence with James. I just mention the French professor Henry Bergson and the young pragmatist Giovanni Papini.

11. «When I get home let's establish a philosophical society to have regular meetings and discuss none but the very tallest and broadest questions to be composed of none but the very topmost cream of Boston manhood. It will give each one a chance to air his own opinion in a grammatical form, and to sneer and chuckle when he goes home at what damned fools all the other members are and may grow into something very important after a sufficient number of years» (CWJ 4: 245).

12. *The Collected Works of John Dewey, 1882-1953. Electronic Edition. The Middle Works of John Dewey, 1899-1924. Volume 4: 1907-1909*. For Dewey and the pragmatists, accordingly, nature is "an indefinite congeries of changes" (p. 47), and the method of inquiry is concerned, not with relating things to the fixed and unchanging, but with tracing patterns of changes. The pragmatic philosopher must "forswear inquiry after absolute origins and absolute finalities in order to explore specific values and the specific conditions that generate them" (p.10). As he saw it, what is needed is not some elaborate and imposing system but rather a tentative, piecemeal reconstruction of stock notions.

13. In a different passage, James suggests the fourth section of Spencer's Principles of Psychology to be the more convincing to him. In fact, that part is about *Special Synthesis* and there is a good chapter on *Feelings*. Spencer addresses the issue of the emotion-cognition connection, however, stressing the stronger role of cognition.

14. These discourses are representative of the late nineteenth century view and it is superfluous to say that the scientific research has done since then huge progress, especially in the field of genetics. For a contemporary consideration of Darwinism from the point of view of contemporary geneticists see

15. According to James even the explanation of the way in which the ultimate relation of knowing works would not be a sufficient explanation of causality. James writes about the causal relation between mind and body, contesting the objections moved against human immortality, in *Human Immortality: Two Supposed Objections to the Doctrine* (1898). From a metaphysical point of view the problem of causation will be treated in *Some Problems of Philosophy*.

16. See William Joseph Gavin, 1992, *William James and the Reinstatement of the Vague*, Temple University Press.

17. Hilary Putnam, *The Threefold Cord: Mind, Body and World*, lecture one *I thought of what I called "an automatic sweetheart"*, pp. 71-94.

18. James lists the main fields of research in experimental psychology: «1) the connection of conscious states with their physical conditions, including the whole of brain-physiology, and the recent minutely cultivated physiology of the sense-organs, together with what is technically known as 'psycho-physics,' or the laws of correlation between sensations and the outward stimuli by which they are aroused; 2) the analysis of space-perception into its sensational elements; 3) the measurement of the duration of the simplest mental processes; 4) that of the accuracy of reproduction in the memory of sensible experiences and of intervals of space and time; 5) that of the manner in which simple mental states influence each other, call each other up, or inhibit each other's reproduction; 6) that of the number of facts which consciousness can simultaneously discern; finally, 7) that of the elementary laws of oblivescence and retention» (PP: 192).

19. In note James expresses his surprise in discovering that: «In English we have not even the generic distinction between the-thing-thought-of and the-thought-thinking-it, which in German is expressed by the opposition between *Gedachtes* and *Gedanke*, in Latin by that between *cogitatum* and *cogitatio*» (PP: 193).

20. See Hegel, *Phenomenologie*, Chapter. I (1807).

21. In particular, James suggests that: «Remembrance is like direct feeling; its object is suffused with a warmth and intimacy to which no object of mere conception ever attains» (PP: 232).

22. For an interesting comparison between James's definition of consciousness as a "stream" and a "river" and Wittgenstein's reflections about "river-beds" see Anna Boncompagni, *Streams and*

River-Beds. James' Stream of Thought in Wittgenstein's Manuscripts 165 and 129, «European Journal of Pragmatism and American Philosophy», 4/2 (2012), pp. 36-53. For further investigations in the relation between James and Wittgenstein see Russell B. Goodman (2002), *Wittgenstein and William James*, Cambridge University Press and Goodman (1994),*What Wittgenstein Learned From William James*, History of Philosophy Quarterly 11 (3):339 - 354; Jaime Nubiola (2000). *Ludwig Wittgenstein and William James*, Streams of William James 2 (3):2-4.; Henry Jackman, *Wittgenstein & James's Stream of Thought*; S. K. Wertz (1972). *On Wittgenstein and James*, New Scholasticism 46 (4):446-448.; Hilary Putnam (1995). *Pragmatism: An Open Question*, Blackwell; Michael Kober (2006). *Wittgenstein and Religion*. Grazer Philosophische Studien 71 (1):87-116; Max Carl Otto (ed.) (1942). *William James*, Madison, University of Wisconsin Press; Frederick Sontag (1995). *Wittgenstein and the Mystical: Philosophy as an Ascetic Practice*, Oup Usa.

23. John E. Smith, *Introduction* to *The Varieties of Religious Experience*, in *The Works of William James*, vol.15, pp. xxiv; other interesting references to the "field of consciousness" are cf. PU: 130; ERE: 85; EP: 158.

24. «Superficially this sounds like Kant's view; but between categories fulminated before nature began, and categories gradually forming themselves in nature's presence, the whole chasm between rationalism and empiricism yawns. To the genuine 'Kantianer' Schiller will always be to Kant as a satyr to Hyperion» (P: 120).

25. The law of stimuli summation is explained in the third chapter of PP. «The law is this, that a stimulus which would be inadequate by itself to excite a nerve-centre to effective discharge may, by acting with one or more other stimuli (equally ineffectual by themselves alone), bring the discharge about. The natural way to consider this is as a summation of tensions which at last overcome a resistance. The first of them produce a 'latent excitement' or a 'heightened irritability'—the phrase is immaterial so far as practical consequences go; the last is the straw which breaks the camel's back. Where the neural process is one that has consciousness for its accompaniment, the final explosion would in all cases seem to involve a vivid state of feeling of a more or less substantive kind. But there is no ground for supposing that the tensions whilst yet submaximal or outwardly ineffective, may not also have a share in determining the total consciousness present in the individual at the time. In later chapters we shall see abundant reason to suppose that they do have such a share, and that without their contribution the fringe of relations which is at every moment a vital ingredient of the mind's object, would not come to consciousness at all» (PP: 89).

26. Note that James quotes Alexander Bain's sensationalist and piecemeal description of consciousness: «The stream of thought is not a continuous current, but a series of distinct ideas, more or less rapid in their succession; the rapidity being measurable by the number that pass through the mind in a given time» (Bain: *The Emotions and the Will*, p. 29).

27. Fact possibilities are not to be decided a priori of experience, or better impossibilities of fact are not to be rationally limited to the actual state of science without making clear this historical specification.

28. «Every definite image in the mind is steeped and dyed in the free water that flows round it. With it goes the sense of its relations, near and remote, the dying echo of whence it came to us, the dawning sense of whither it is to lead. The significance, the value, of the image is all in this halo or penumbra that surrounds and escorts it,—or rather that is fused into one with it and has become bone of its bone and flesh of its flesh; leaving it, it is true, an image of the same thing it was before, but making it an image of that thing newly taken and freshly understood» (PP: 246).

29. The issue of linguistic or non-linguistic thinking is both a classic and contemporaneous quarrel that James is just passing by. In PP James substantially agrees with the possibility of a non-linguistic thinking. Contemporary discussion is set in a very different and more analytic way than it was at that time. For further accurate analysis of this topic see

30. Note that James quotes Mill's classic associationistic view : «There can be no difficulty in admitting that association does form the ideas of an indefinite number of individuals into one complex idea; because it is an acknowledged fact. Have we not the idea of an army? And is not that precisely the ideas of an indefinite number of men formed into one idea?» (James Mill's *Analysis of the Phenomena of the Human Mind* (J. S. Mill's Edition), vol. i, p. 264).

31. [A.N.] The nearest approach (with which I am acquainted) to the doctrine set forth here is in O. Liebmann's *Zur Analysis der Wirklichkeit*, pp. 427-438.

32. Wilhelm Wundt, *Physiologische Psychologie*, 2te Aufl., Bd. ii, pp. 217–19.

33. About the ambiguity of Firstness in Peirce cf. CP 3.362; CP 1.357. In particular, he talks about a basic-vague as to the sentence «Cain killed Abel» in which the subject of proposition are either Cain, or Abel or the act of killing. 15th International Meeting of Pragmatism, PUC, Sao Paulo, November, 5-8, 2013.

34. P. Souriau, *La conscience de soi*, in the «Revue Philosophique», vol. xxii (1886), pp. 449-472. In the same number of the review there is a paper of H. Bergson entitled *De la simulation inconsciente dans l'état d'hypnotisme*, pp. 525-531.

35. As to the discussion on the Ego, it is important to read the note n.9. «One word on my attitude towards the Ego may avert misconception. All I have urged against it in this article, is against it in its alleged exclusive capacity of "relating" agent. I have said there is no need of an agent to relate together what never was separate, and that it is an unnecessary hypothesis for explaining cognition. That feelings can be "for" each other when they do not belong to the same Ego, is proved whenever one person knows what another person thinks. That their being "for" each other when they do belong to the same Ego, is not a consequence of such belonging—but may be more simply formulated by saying that each segment of the stream has its objects, and that the earlier segments become objects for the later—is what I have sought to show. If this "solidarity" of the stream of feelings is all that is meant by the Ego—if the Ego is merely a name for that fact—well and good—we seem agreed! For myself, however, there are certain material peculiarities about the way in which segments of the stream are for each other when they belong to the same Ego, that call for a deeper study of the question, and rather lead us to reserve the word Ego until they are quite cleared up. What is the difference between your feeling cognized by me, and a feeling expressly cognized by me as mine? A difference of intimacy , of warmth, of continuity, similar to the difference between a sense-perception and something merely imagined—which seems to point to a special content in each several stream of consciousness, for which Ego is perhaps the best specific name». (EPs: 167).

36. Many authors were challenged by James's concept of the *'warmth and intimacy'* of bodily self-consciousness, see L. Wittgenstein, *The Bergen Electronic Edition. Wittgenstein's Nachlass.* Items 309 and 310: «Let us now go back to the idea of a feeling of familiarity which arises when I see familiar objects. Pondering about the question whether there is such a feeling or not, we are likely to gaze at some object and say, "Don't I have a particular feeling when I look at my old coat and hat?" But to this we now answer: "What feeling do you compare it with, or oppose it to? Should you say that your old coat gives you the same feeling as your old friend A with whose appearance too you are well acquainted, or that whenever you happened to look at your coat you get that feeling, say of intimacy and warmth ? "But is there no such thing as a feeling of familiarity?" —- I should say that there are a great many different experiences some of them feelings, which we might call "experiences (feelings) of familiarity"» (310 160); J. Dewey: «Formal education is peculiarly exposed to this danger, with the result that when literacy supervenes, mere bookishness, what is popularly termed the academic, too often comes with it. In colloquial speech, the phrase a "realizing sense" is used to express the urgency, warmth , and intimacy of a direct experience in contrast with the remote, pallid, and coldly detached quality of a representative experience» (MW 9: 241); «His thought of himself may lend warmth and intimacy to an object which otherwise would have been cold, while, at the same time, the self is broadened and deepened by taking in the new object of regard» (MW 5: 344). For contemporary examination of recent attempts to recast bodily self-consciousness in strictly neural terms, see Shaun Gallagher, *The body in social context: some qualifications on the "warmth and intimacy" of bodily self-consciousness*, Grazer Philosophische Studien: internationale Zeitschrift fuer analytische Philosophie, vol. 84, pp. 91-121.

37. «A percept knows whatever reality it directly or indirectly operates on and resembles; conceptual feeling, or thought knows a reality, whenever it actually or potentially terminates in a percept that operates on, or resembles that reality, or is otherwise connected with it or with its context. The latter percept may be either sensation or sensorial idea; and when I say the thought must terminate in such a percept, I mean that it must ultimately be capable of leading up thereto, --

by the way of practical experience, if the terminal feeling be a sensation; by the way of logical or habitual suggestion, if it be only an image in the mind» (PP: 22).

38. «The interior of one's mouth-cavity feels larger when explored by the tongue than when looked at. The crater of a newly-extracted tooth, and the movements of a loose tooth in its socket, feel quite monstrous. A midge buzzing against the drum of the ear will often seem as big as a butterfly. The spatial sensibility of the tympanic membrane has hitherto been very little studied, though the subject will well repay much trouble. If we approach it by introducing into the outer ear some small object like the tip of a rolled-up tissue-paper lamplighter, we are surprised at the large radiating sensation which its presence gives us, and at the sense of clearness and openness which comes when it is removed. It is immaterial to inquire whether the far-reaching sensation here be due to actual irradiation upon distant nerves or not» (PP: 781).

39. Consciousness is strictly connected to activity: since we have to act we need to have an ordered space-world. This sentence is similar to the one James uses in an article commenting Spencer's conception of mind. Cf. *Remarks on Spencer's Definition of Mind as Correspondence* (1876).

40. S. Madelrieux, *William James. L'attitude empiriste*, Presses Universitaires de France, Paris 2008.

II

THE PHILOSOPHICAL AND SCIENTIFIC CONTEXT OF JAMES'S ELABORATION OF ONTOLOGICAL CONTINUITY

Introduction

> Of course I can't explain myself in a few words, but I think it would do the psychologists a great service to explain to them my conception of the nature of thought. This then leads to synechism, which is the keystone of the arch. (Ch. S. Peirce, CP 8.255-257)

> Cette tendance devait nécessairement se traduire par un rapprochement entre la philosophie pure et la psychologie d'introspection. On pouvait partir de cette psychologie et l'élargir en philosophie : c'est, si je ne me trompe, la marche qu'a suivie W. James. J'ai fait le chemin inverse. (Henri L. Bergson, Letter to Th. Ribot, 10 juillet, 1905)

In this chapter I consider Charles S. Peirce (1839-1914), Henri Bergson (1859 – 1941), and Ernst Mach's (1838 – 1916) elaborations and critiques of the mind-world continuity in order to provide context for and introduce William James's theory of continuity, which I shall focus upon in Chapter III. These authors were direct interlocutors of James, all were in correspondence with the American philosopher and, most importantly, they shared a common interest in the interactions between psychology, more generally, the natural sciences, and philosophy.

In Appendix C of his *Pluralistic Universe* James recommends that scholars of Bergson read Peirce's articles on «The Monist» (1890-93). In this brief text, James also links his own «pluralistic synechism» to the pluralistic synechisms of his two esteemed colleagues. Indeed, he suggests the existence of internal similarities between Peirce's Agapism and Bergson's «élan vital». Actually, there are undeniable and important connections among James, Peirce, and Bergson. They were interested in the connections between methodology and metaphysics and shared a common interest in the 'continuity of reality'. As mentioned in Chapter I, James soon discovered such experiential continuity moving from an attentive introspective observation of mental activity.

Here I shall consider how Peirce and Bergson discussed the ontological continuity of reality, starting from those articles which James had recommended in his Appendix C. Nevertheless, I will also take into account other important writings concerning continuity. The correspondence between James and Peirce, and that between James and Bergson will be important tools with which to settle this part of

our discussion and to establish its rhythm. In Chapter III I will examine in depth James's philosophical and metaphysical reflections on continuity, relying upon the context that I now set out, as well as the relationship between psychology and ontological issues. As to the reading of Peirce and Bergson, my aim is to highlight pivotal passages in which the most interesting similarities, and the most striking differences, respect to James's theory are worth to be pointed out, looking forward to analyze it in depth within his own works.

James recognized a similar tendency to the recovery of metaphysics as an important feature of both Peirce and Bergson's philosophies. About Peirce's ontology, it is interesting to know that, in the *Collected Papers*, the articles on which James focused in his Appendix C are all included within the 6th volume, entitled *Scientific Metaphysics*.

The texts which act as a preface to this volume are very clear about Peirce's intention to recover metaphysics as a general *observational* science, and about his conviction that the backward of metaphysics has been hampered both for psychological and for the physical sciences. This 6th volume is divided into two books. The first one is entitled *Ontology and Cosmology*, the second is about *Religion*. Moreover, the first book is internally divided into a first section on *Tychism* and a second section on *Synechism and Agapism*. The group of five articles published on «The Monist» between 1891 and 1893 provides the main structure of the first book of the *Collected Papers* and, therefore, of Peirce's ontology. They are put together with various other texts and extracts, most taken either from his Cambridge Lectures of 1898 – those lectures provided to Peirce by James – or from his Harvard Lectures of 1903. It is also interesting to note that in the preface to these collections of texts, Peirce run through some of the questions of metaphysics which in his view at the time begged deeper inquiry. It is evident that there are plenty of metaphysical questions concerning psychological issues.

Ernst Mach was another direct interlocutor of James whose interest in the continuity of perception here assumes an important role to balance and locate James's philosophical position. Their relationship helps to figure out the scientific cultural atmosphere at that time as well as the main sources which were involved in the elaboration of the pivotal notion of «neutral monism». In fact, some scholars consider James's radical empiricism and, in particular, his doctrine of *pure experience* as very close to Mach's view. Mach dedicated the third edition of his *Popular*

Scientific Lectures to James and he also quotes the philosopher in the fourth edition of his *Analysis of Sensations,* agreeing with James's position on *space perception*. In fact, there are astonishing similarities between James and Mach, as well as undeniable differences. In particular, they both draw important inspiration from Hering's visual description of space, and from physiology in general. Moreover, they both persisted in an anti-noumenic naturalist view and a peculiar continuity between common and scientific thinking.

As we have seen, James's discovery of the continuity of consciousness has played a fundamental role in his later reflection upon the mind-world continuum. In order to corroborate this view, I should consider first how continuity has been elaborated by James in his two main fields of inquiry - in psychology and philosophy - and then investigate how he could pass from one field to the other. More specifically, I am interested in detecting his greatest intuitions and the main difficulties he faced in completing the passage from psychological continuity to philosophical continuity. This analysis of Peirce and Bergson's main interest in the issue of continuity and the glimpse of Mach's 'phenomenalist' position are indirectly useful suggestions with which to understand James's "center of the vision" (D. Bjork, 1997). This partial reconstruction of James's scientific context is an important key to the contemporary revival of interest in James's philosophy. Nowadays, some of his intuitions and critiques seem to remain *workable* in philosophy, as we will briefly outline in the conclusion of this work.

II.1 Peirce on Continuity

II.1.1 Peirce and James

In the last fifteen years, most European and American authors have written about the relation between Peirce and James in a brand new way. Indeed, an analytical exploration of James's texts and correspondence for publication (Virginia Press) has revealed those very similarities which have been sustained by Jamesian scholars such as J. McDermott, R. Rorty, R. Bernstein, C. Seigfried, R.A. Putnam, G. Myers and W.J. Gavin, especially since the late 1960s. In Italy appeared an important tradition of James's readers encouraged by the interest of psychologists and philosophers such as G. C. Ferrari, G. Papini, G. Prezzolini, G. Vailati and Giulio Preti in Pragmatism. Lately, there are the works of translation and the introductions to James by N. Dazzi, M. Dal Pra, A. Santucci, G. Riconda, S. Besoli, Storace, R.M. Calcaterra, S. Poggi, A. Civita, and the precious works of S. Franzese, F. Bordogna and S. Marchetti. Nowadays, this line of interpretation has become mainstream, although there is still bias against James's conceptions and often there is prejudicial polarization of the works of the two authors. Of course, asserting similarities does not mean neglecting distinctions. As Rosa M. Calcaterra (2010) recently wrote of *varieties of continuities*, one of the most interesting comparative features between Peirce and James is exactly that of mind-world continuity. In this light, there is not so much literature compared to other issues. Perhaps this is due to the persistence of a current vulgate on James's logical inferiority, and his individualism and nominalism vis-à-vis Peirce's synechism and realism. From their correspondence, however, we know that James and Peirce began to talk about *continuity* in 1902 – surprisingly the same year James's correspondence with Henri Bergson began – even if by March 13 1897 Peirce was to explain to James that Tychism, which James had welcomed, was only a corollary of the general principle of Synechism. Indeed, he had just linked the difference between his pragmatism decide on upper/lower case and that of James to the action of generalization, in particular he argued: «I have seen more thoroughly than I used to do that it is not mere action as brute exercise of strength that is the

purpose of all, but say generalization, such action tends toward regularization, and the actualization of the thought which without action remains unthought » (CP 8.250; cf. also CP 8.272). In another letter, [November 25, 1902], Peirce reveals the systematization of his three normative sciences, that is, logic, ethics, and esthetics and explains to James that these correspond to his three categories, Feeling, Reaction, and Thought which he considers to be fundamental to understanding the nature of pragmatism. In this brief passage, Peirce refutes a nominalistic view of Thought: «as if it were something that a man had in his consciousness». Moreover, he argues that: «Consciousness may mean any one of the three categories. But if it is to mean Thought it is more without us than within. It is we that are in it, rather than it in any of us» (CP8.256). Peirce read James's French paper for the psychological conference in Rome and in his letter of July 23, 1905 he contested only one point of James's lecture, namely, that James's doctrine would be brand new. Indeed, James never said that. On the contrary, in other essays he explicitly suggested that his ideas were not new, but here Peirce underlines that he was again proposing «the well-known doctrine of immediate perception», even if in different fields. Peirce considers such a doctrine, which does not distinguish the objective and the subjective aspects of things, as: «a *corollary from the corollary* of pragmaticism that the object perceived is the immediate object of the destined ultimate opinion, – not of course, identical as a psychological phenomenon […], but identical logically and metaphysically» (CP8.261).

James's work and his correspondence show that his reflection upon *consciousness* soon led him to consider synechism and pluralism as unavoidable philosophical destinations. As we read in the introduction to this chapter, in 1909, significantly, he ended up calling his own philosophy – together with those of Peirce and Bergson – «pluralistic synechisms». Moreover, Peirce's more interesting objections to James are exactly about *space perception* and *consciousness.* In this respect, the guidelines of our work on continuity (space and time perception, consciousness) are corroborated and reveal a deep philosophical correspondence, at least as to what concerns the individuation of the very objects of any philosophical inquiry.

II.1.2 Peirce's review of James' The Principles of Psychology (CP 8.55-71)

In the last ten years, some Peirce scholars and some psychologists interested in philosophy have pursued important work on the connections between Peirce and psychology, moving from a peculiar and innovative perspective. Indeed, already in 1975 Thomas C. Cadwallader encouraged a serious enquiry into Peirce's involvement and contribution to experimental American psychology as an unavoidable way of understanding his complex system of thought. From a psychological standpoint, Harry Procter is currently carrying on a similar attempt, working on the interesting confrontation between Peirce and the father of Systemic Constructivism in psychology, G. A. Kelly (Procter 2014). As Procter writes: «Although Peirce was insistent that logic should not rely on psychology, this does not mean he was averse to developing the implications of his views for psychology. We could say that his vision was the elaboration of a *non-psychologistic psychology*» (Procter, 2014: 184). In his article, Cadwallader (1975) claimed that Peirce, rather than James, should be considered "the first American modern psychologist" and the article offers textual references (essays, letters and reviews), indicative of Peirce's original interest in W. Wundt's psychology, as well as the study of sensations, colours, and the psychology of learning (*habit*).

Despite the question as to who played the primary role in American psychology, what is significant for this work is to highlight the way in which the author focuses upon the apparently contradictory position that Peirce adopted concerning the relation between logic and psychology. In fact, his hypothesis is based upon two observations gained from the *Minute Logic.* The first is the distinction which Peirce identified between *facts* and *theories* of psychology (64: 2.210). The second is Peirce's re-conceptualization of the classification of the sciences. Cadwallader maintains that, when Peirce argues against the possibility of founding logic on psychology, by psychology he means: «any theory of cognition or theory of how the mind works» (1975: 184). Against Sigwart and others, Peirce condemns as vicious the attempt to found an explanation of knowledge upon a theory of cognition since an explanation of the *possibility* of knowledge could not be drawn from principles of psychology[1]. His lesson is that psychology should not be confused with logic. Nevertheless, he always maintained that there is an intimate relationship between logic and

psychology. Cadwallader specifies that, in Peirce's view, until 1901 there was a clear distinction between *facts* and *theories* of psychology, and that in the philosopher's words: «Logic does rest upon certain facts of experience among which are facts about man, but not upon any theory about human mind or any theory to explain fact» (1975: 185). The situation became more complex when Peirce, in 1902, decided upon a reclassification of his system of science. At that time, as we read in a 1904 letter to William James, Peirce neatly distinguished phenomenology from psychology and, in doing so, he outlined some very interesting confrontations between his "phenomenon" and James's "pure experience", which we shall return to. Unlike James, he supported the methodological value of distinguishing standards of certainty and principles for different sciences, namely phenomenology and psychology, these being necessary for the progress of any science. According to such a conviction, he affirmed that, indeed: «logic must be founded on phenomenology» (CP 8.297). Whilst phenomenology shortly gave way to phaneroscopy (64: 1.286; 1.284), Cadwallader rightly observes that: «the judgment that logic was to stem from this science apparently was unaltered (44, Ms. 645), as was the view that it was distinct from psychology (64: 8.303; 44, Ms. 645)» (1975: 185). In the end, even considering phenomenology (phaneroscopy) in Peirce's terms as a *general* science and psychology as a *special* science, according to Cadwallader, we can still maintain that he never denied the relationship between logic and psychology: «in one or another sense, psychology was considered by Peirce from his earliest to his latest days to provide the basis for logic» (*ibidem*). What Peirce seriously rejected, at least in Cadwallader's reading, was the idea that logic could be founded upon a theory of psychology [*theory/facts*]. Moreover, we think that Peirce, like James or even more so, was aware of the need to work on the individuation (limits and possibility) of a science of psychology in order to *distinguish* its methods and aims from its unavoidable philosophical implications.

In this line of thought, that of considering Peirce's interest in psychology as an important perspective upon his philosophy, Mathias Girel has worked on the relationship between metaphysics, logic, and psychology in Peirce's writings, particularly focusing upon Peirce's reading of James's psychology. In fact, despite his critical attitude, Peirce's interest in psychology was indeed genuine and his remarks reveal important clues which help us to elucidate his cosmological and

metaphysical theories. Moreover, such a perspective is definitely interesting from our point of view since James's answers (or lack of answers) are also helpful to clarify his own way of thinking. Indeed, there are a few texts which are representative of Peirce and James's exchange on their common interests.

Let us start with the anonymous review of James's *Principles of Psychology*[12] which Peirce likely wrote in 1891 for *The Nation*. In the correspondence between William and his brother Henry James Jr., there are some passages concerning their reception of the book's review, but nowhere, at least in James's correspondence, can we acknowledge that James knew the author's identity[3]. However, since Peirce used to write reviews of psychological books, and since the critiques which he included in this text, as in many others at the time, are mainly methodological, his attitude towards the standardization of genuinely scientific methods was very well known. Editors of James's correspondence reasonably believe that, given the style of the review, James could easily recognize the hand of his colleague. However, Peirce's direct and sharp objections were meant to be understood as «a tribute of respect» of such a voluminous work. His first, and more general remark, is about the construction of the book. In fact, in his opinion it does not have a proper form. It is neither an essay nor a collection of essays nor a treatise. Owing to this ambivalence, the book ends up missing a coherent unity. It does not have the completeness of a treatise, rather offering to the reader a heterogeneous assortment of articles in one piece: «with tendencies towards sprawling». The reviewer defines James's thought as: «highly original; or at least novel; but it is originality of the destructive kind». Indeed, Peirce rightly gets the work of demystification which James attempted to pursue in his PP, even though he is very severe with the logic that he recognizes in his colleague's arguments. Peirce understands the philosophical point of view adopted by James in his masterpiece, that of methodological materialism inclining towards Cartesian dualism, and he is also able to acknowledge the strong anti-intellectual vein characterizing James's methodological suspicion of every form of idealism or any affinity with idealism, included evolutionism[4].

Quoting extensively a passage from the *Preface* of PP, the texture of Peirce's critiques becomes more goal-oriented. First of all, he firmly rejects James's direct assimilation of "natural science" to human behaviour, talking about what science "declines" to investigate. In fact, he maintains that a natural science is not a person and hence that scientific inquiry cannot be reduced to a matter of personal attitude.

Indeed, personal preferences can have a metaphysical origin but, despite all the human and personal limits of investigators, to call an entire branch of science metaphysical is a weak argument in Peirce's view. It is generally only an expression of the author's distaste for a part of his subject. In particular, by making such a claim, it does not follow that metaphysical considerations throw no light upon scientific questions, or that one could reject some conclusions by calling them 'metaphysical' without offering more serious objections. The positivistic point of view adopted by physicists is not that strict, as James states. In fact, scientific hypothesis always has a general character whereby, for example, students of heat accept kinetic theory, although they cannot directly observe molecules. In James's assertion that «natural sciences accept their data uncritically»[5], Peirce identifies the mistaken 'new principle' which the author employs throughout his book, relying upon his faith in a: «general incomprehensibility of things». Therefore, confining certain inquiries beyond the field of psychology, James would dangerously reverse both «the conclusions of science upon many important points» and, moreover, decide: «upon the character of its data».

The criticism adopted by scientists is of another kind than that used by 'high-flying' philosophers. In this view, Peirce maintains that the 'new kind of liberty of thought' claimed by James's 'critical method' would produce a deep rupture with accepted methods of psychology and science in general. He also points out James's theory of space-perception as evidence of the applicative weakness of this method. Incidentally, it is worth noticing that Peirce rightly understands the essentially critical intent of the book, and by way of an example he decides to analyse the brief section entitled *Is Perception Unconscious Inference?* which is part of the 19th chapter of the first book of PP, *The Perception of 'Things'*.

Revisiting experiments with colour perception undertaken by German psychologists, Peirce expresses his agreement with the theory of perception as a matter of *association,* or as a sort of *reasoning in a general sense*. Most of these authors consider processes of perception as 'unconscious inferences', where the term 'inference' should not be emphasized, but taken as a sort of 'suggestion'. Indeed, these authors are interested in those same processes which in the English psychological tradition have been explained by association. German writers often account for the passage from perceptions to beliefs (or cognitions) in terms of 'unconscious or conscious inferences', distinguishing the two kinds of reasoning at

work in each phenomenon. Peirce attempts to present more clearly the form of reasoning which generally sustains the logic of the German writers. Indeed, he suggests, as Girel and R.L Gregory emphasize, that perceptual judgments are more akin to the form of an «hypothetic inference». Thus 1) A recognized object M has for its ordinary predicates P1, P2, P3, etc.; 2) the suggesting object S has the same predicates P1, P2, P3, etc.; 3) hence S is of the kind M. Peirce points out that this is an unconscious inference because we are led to accept its conclusion without knowing how. Moreover, since in perception conclusions are not *abstractly thought*, but *actually seen*, we do not have an exact perceptual judgment but, Peirce says, something which is tantamount to one. Therefore, the common tendency is to explain a perceptual conclusion by subsuming it, as a special case of judgment, under a more intelligible description of process, and the most intelligible process is that of reasoning. In this view, it is not surprising that: «the logical method of explaining the process of association is looked upon as the most perfect explanation possible».

Having recalled the two general tendencies among modern psychologists, namely the English-materialistic and the German-idealistic modes[6], and after having made clear the possibility by which the 'monist school' conceives «the intellectual process of inference» and «the process of mechanical causation» as a view from the *outside* and one from the *inside* of the same process respectively, Peirce directly contests James's aversion to an inferentialist explanation of perception.

As we saw in Chapter I, in 1879 James published an important article *The Spatial Quale* which was to be the basis for the long XX chapter of PP on space perception. Stéphane Madelrieux (2008) has shown that most of James convictions originated from the dispute between the inferentialist approach of perception pursued by Helmholtz and the sensationalist mode sustained by Hering. This quarrel furnished the tools of James's strategy in his lifelong struggle with every form of radical intellectualism. Since Peirce read this early paper, as well as the four installments which he published in «Mind» in 1887, we can agree with Girel's reading that Peirce already had a well formed opinion of James's main direction of thought. Hence in his critiques he mainly attempted to provide a metaphysical reading of James's psychology in order to affirm that psychology 1) called for a metaphysics, and that 2) it cannot overlook the requisites of logic (Girel 2003: 174).

Peirce quotes James's argument against the theory of perception as an inferential process: «more or less unconsciously or automatically performed». His strategy is not that of explicitly focusing upon the reasoning character given to perception since its meaning depends: «on how broadly the term reasoning is to be taken». Rather, he contests the attempt to associate any *reasoning* process with *unconscious* activities, that is to say, to give an account of lower physical activities in terms of (lower) logical operations. Actually, talking about "unconscious inferences" is for James either: «*a useless metaphor, or a positive misleading confusion between two different things*». On the basis of a sort of direct realist *antelitteram*, James believes that the perceptual situation is made up of "above-board" associates, that is, a *present sign* which directly suggests *an absent reality* (a contiguous thing) to our mind. In his view, there is no need to introduce intermediary or unconscious ideas to make the process work. But a solution is not slow in coming because most German theorists have worked out a more complex hypothesis than indirect perception. In fact, they still contend that perception is a "mediate inference", not an immediate or direct one. But they add that the middle term (M) is unconscious. In their opinion, James argues, once we feel a sensation ("this"), the process which begins in the mind would be of this sort: "'This' is M; But M is A; Therefore 'this' is A". The problem for James is that there is no need to accept such an «additional wheel work in the mind». Furthermore, there are no good grounds to prove it. James describes their way of reasoning as fallacious, since, if one considers the first premise of the syllogism (" 'This' is M ") as an act of perception itself, then one risks ending up with a logical *regressus ad infinitum* which does not allow perception to root itself in concrete sensations. These arguments reveal James's deep concern with a too logical conceptualization of the processes of our mental activity, which would lead to a very abstract and indeed controlled image of physiological activity in general. To avoid the regressus fallacy, Wundt, Helmholtz, and the like represent the form of inference going on in our minds in another way. To James, the only alternative seems to be a more vague formal representation of the perceptual process, such as: "'This' is like *those*; *Those* are A; Therefore 'this' is A". In this manner, the very first act of perception would not be nominative [naming] yet: «only a suggestion of unnamed similar images, a recall of analogous past sensations with which the characters that make up A were habitually conjoined». Even if this hypothesis of a broad 'suggestion' or 'recall' avoids implying an association by contiguity in the

major premise, for James there are still no factual grounds to prove even such an unconscious 'recall' of images from the past. In fact, he says, given the fact that every form of association is just an outline of «habit-worn paths in the brain», thus every image or alternative passage becomes superfluous to explain perceptive phenomena. In a nutshell, James shares the thesis that there are cerebral activities which are easy to take as *habits* and which fix more direct or straight paths of association by experienced co-occurrences (i.e. 'this' (the sign of A)→ the object A). Whilst the possibility of roundabout associative paths ('this'→ 'those' → A) is to be left – not only being directly derivative of contiguous physical response together with a certain sensation stimulus – James specifies that by now these paths «in perception […] are in all probability closed», while in: «*explicit* reasoning […] are doubtless traversed». In James's view, therefore, perception and reasoning are just: «co-ordinate varieties of that deeper sort of process known psychologically as the association of ideas, and physiologically as the law of habit in the brain».

Commenting on this first part, Peirce suggests again that James remains too unclear about the very general sense in which German psychologists talked about perception as an inference. In fact, even James admits that is possible to define perception as an inference and to consider it as a form of reasoning in a broad sense. He then adds: «see no room in it for any unconscious part». Peirce makes clear that James misunderstood the definition of 'unconscious inference', since he should not think about an argument in which any premise or term is unconscious, but the meaning is more general, indeed behavioural[7]. Again, there is an unconscious inference, he reaffirms, if the person who is reasoning is not conscious of: «making an inference». Thus James would be wrong in two senses. He is wrong to deny that perception is, in this very general sense, an unconscious inference; and also in considering such an inference or reasoning process as an immediate one. The mediate *or i*mmediate character of perception is a core point with which to understand the disagreement between Peirce and James. As we have seen, their opinions on perception are derived, respectively, from the inferential-semiotic hypothesis of Helmholtz and the direct-sensationalist one of Hering. Peirce and James's different explications of these processes are mainly due to the different concerns of their views as well as to the different methodologies which they employed in their fields of inquiry. In any case, it is no coincidence that the point at issue concerns the classification of perception, since this is the ground on which the

game between a logical view and a vague and indefinite declension of the issue could ever be played.

In fact, Peirce attacks the logical inaccuracy of his colleague in talking about immediacy. He points out that those who explain an «ordinary process of suggestion» in terms of reasoning use the *modus ponens*. Such an argument - 'If A, then B; But A; Hence B' - can be represented as follows. We have general beliefs or propositions in mind which are not present to consciousness, but they exist in the form of *habits* (represented by the association 'If A, then B'). Then there is a 'suggesting idea' represented by the second premise ('But A') and the 'idea suggested' which formally is the conclusion of the inference ('Hence B'). Indeed, any process of inference can be represented: «now as a *modus ponens*, now as a syllogism with a middle term». Focusing upon the second point contested by James, that is, unconsciousness of reasoning, Peirce asserts that the middle term M is never considered by these German authors as *entirely* unconscious, as James erroneously affirms. Moreover, if these authors believe M to be unconscious and also maintain the premise 'This is M' to be an act of perception, as James concludes, Peirce affirms that, consequently, they (and James who made the corrective hypothesis) should be thinking about: «some ultra-Leibnitzian *unconscious* perception!».

Peirce seems to understand James's concern with the hybrid character of perception, even if he sees perceptual judgments as *non-controlled operations* closer to logical inferences in their strict sense. Actually, Girel points out that: «Peirce develops here in a nutshell the distinction between controlled and non- controlled operations of the mind» (Girel 2003: 176). On the one hand, Peirce confers two inferential characters to perception, saying that «perception attains a virtual judgment, it subsumes something under a class»; and that perceptions: «attach to the proposition the seal of assent». On the other hand, he also notices that perception misses two major features of logical inferences, since it neither presents a *sidethought* like «and so it would be in every analogous case (or in most cases)», nor any conscious acceptance of the conclusion by the reasoner, who: «is not conscious that acceptance of the conclusion is inferential».

About the inferential character of perceptual judgements, Peirce feels confident to limit German psycho-physiologists' arguments to perception, assuring that they do not consider sensation inferential too. If they «do not hold sensation to be inferential», the risk of a *regressus ad infinitum* disclosed by James is rejected. In fact,

the first premise could contain sensations and in this case the logical fallacy would be avoided. Moreover, as we have seen, in Girel's and in Gregory's view, given Peirce's suggestion of considering the perceptual judgement akin to a hypothetical inference, such a « pattern blocks the fallacious aspect of the regress, for it is not impossible that P[1], P[2], and so on, are the result of former hypothetic inferences, and that we never reach simple predicates.» (Girel 2003: 176)[8]. Peirce adds that, even if they did suppose sensation to be inferential itself, in any case: «there would be no *reductio ad absurdum*»[9]. Peirce just wants to show that there are many different positions on this particular issue, since different grades of unconsciousness are imagined as well as stricter *or* wider ways of talking about perception, only some of which include sensations.

About James's conclusion that perception and reasoning are «co-ordinate varieties of that deeper sort of process known psychologically as the association of ideas, and physiologically as the law of habit in the brain», Peirce observes that: «nobody ever [...] claimed that perception is inference in the strict sense of conscious inference». Recalling James's general critique of associationism, Peirce tries to confute his architecture of the argumentation, in fact, substituting 'association' for 'perception', and considering that both of these activities are species of: «reasoning in a generalized sense». We should underline that Peirce's entire argument is built upon an implicit substitution, which is neither explicit, nor required by James's argument, of 'inference' with: 'suggestion or associative suggestion'. This seems to be an *escamotage* to prepare the logical terrain for an easier and almost unavoidable approach of perception to inference. In this view, as reasoning can be considered a special kind of association, Peirce does not understand where exactly James disputes the thesis of perception as an unconscious inference with which he was supposed to disagree. Dismissing James's argument thus far, at the end of the review, Peirce addresses the 'real question at issue' in James's PP, which is a problem worth setting out and, indeed, it is dogmatically answered by James. In fact, if Peirce believes that there is no doubt that perception and association can be considered as inference (suggestion) in a generalized sense, the question to be addressed is: «whether there is any use in so considering them»? That is to say, why is it useful to consider perception and association as inferences? Here, Girel raises a very interesting problem concerning Peirce and James's differing general understandings of the association of ideas. In fact, whereas James

considers association as an explanation of perceptual processes, Peirce believes that association is regulated by the principles of inference, since: it «is nothing less nor more than inference» (W2:237)[10].

> The problem remains unanswered at a higher level: are our associations unconscious inferences? If they are, then our perceptions too are unconscious inferences. Are the laws of nature logical in their essence? If they are, the physiological law of habit follows unconsciously the rules of inference. Peirce has paid considerable attention in the 1880s and 1890s to these questions: the former will find an answer in the context of the separation between the controlled and non-controlled operations of the mind, the latter in Peirce's cosmology.

That is why Peirce's analysis of PP is very interesting. His concerns about the logical feature of natural and physiological laws is a lifelong theme and he had the opportunity to address it on other occasions while commenting on other chapters of James's masterpiece. Particularly, as we will see , his remarks on consciousness are valuable. So far, on the one hand, we have James's concern with a too logical andabstract interpretation of perception and his claim for the importance of discriminating between perception and sensation (cf. PP: 39). On the other hand, we have acknowledged how Peirce reaffirmed those familiarities of perceptual judgment with strict logical reasoning, together with his battle for the methodological necessity of introducing logical distinctions/categories into psychology to avoid pseudo-problems and vain concerns. Indeed, being methodical while making continuous and useful distinctions is a common effort of both Peirce and James works. But they obviously approached this methodological necessity from different sides (logical and sensational). Moreover, we should not forget that James was interested in the genetic evolution of mind processes, while Peirce definitely adopted a logical approach, rather than an evolution-historical-chronological one.

II.1.3 Peirce's Questions on William James's The Principles of Psychology (CP 8.72-90)

In this manuscript (R1099), dated around 1891[11], Peirce 44 (45)[12] questions the first nine chapters of the first volume of *The Principles of Psychology*. Even if in 1902 Peirce and James commenced an important exchange of letters on consciousness (CP 8.270-305), Peirce's questions on PP show that their confrontation on this main topic had already begun in the 1890s. At that time, Peirce was developing his conviction that his three categories – Feeling, Reaction, Thought (CP 8.256) – should be employed to ameliorate psychological studies. In PP James developed a «slightly different taxonomy of consciousness», stating that feelings *and* thoughts are "mental states". This suggestion offered Peirce a new field of investigation to prove his work on consciousness, categories, and abstraction, as well as to verify if James's classification of 'mental states' could be kept scientific enough. Indeed, several of these questions were published in the *Collected Papers*, among which questions 21-30 are directed to Chapter VIII *The Relations of Minds to Other Things*, and questions 31-44 address the Chapter IX *The Stream of Thought*[13]. Actually, Girel maintains that "Questions 22 to 33" could be read as: «"exercises" for the use of categories in the field of consciousness» (2003: 180)[14].

Peirce's general method of dealing with James's oeuvre in regard to some core themes, such as habit, consciousness, and the stream of thought: «acknowledging some insights in James's work, and providing at the same time the relevant conceptual tools to grasp the phenomenon considered» (Girel 2003: 179). So before analysing his comments on consciousness and the stream of thought, Girel briefly shows how Peirce's general approach to James's insights was structured, and as an example he considers his approach to habit

In fact, in PP James maintains that: «the philosophy of habit is [...] in the first instance, a chapter in physics rather that in physiology or psychology» (PP: 105). At the time, Peirce was developing his cosmological counterpart of his theory of habit, so that this view was interesting to Peirce. He also agreed with James about the search for a physical explanation[15] of the correspondence between mental habits and mechanical study of brain matter, acknowledging that: «the phenomena of habit are due to the plasticity of the organic materials of which their bodies are composed» (*ibidem*). But there was a point at which Peirce departed from James,

that is, when James adds that: «nothing is easier than to imagine how, when a current once has traversed a path, it should traverse it more readily still a second time» (PP1: 109). In this manner, irreversible processes of the law of mind, such as habits, would seem to violate the law of the conservation of energy. To avoid such an unscientific outcome, a deeper analysis of the phenomena and a new logical approach were required. In *A Guess at the Riddle* (CP 1.354-416), Peirce will distinguish conservative forces and non-conservative forces, and he will also raise the 'final' aspect which distinguishes mental actions (*habits*) from mechanical ones. As Girel states: «The psychology of habit calls itself for a larger metaphysical picture, and if habit becomes naturalized, the concept of nature itself does not remain unchanged» (2003: 179).

As regards consciousness, in Peirce's view there are four main confusions[16] concerning categories deriving from James's perspective. For instance, James's strategy of refuting the 'Automaton Theory' is to provide counter-examples to the hypothesis of the inefficacy – or not real efficacy – of consciousness. In particular, Peirce attacks the notion of 'pleasures and pains', suggesting that they do not belong to the class of: «pure monadic feelings». Despite James's hedonistic tendency, feelings belong to the first category and hence are not active agencies like pleasures and pains for they belong to the second category (cf. Questions 14 and 33). The same confusion occurs in James's distinction between 'knowledge of acquaintance' and 'knowledge about'. For Peirce, to state that through feelings we become acquainted with things is the very root of bad metaphysics. Again, James is attributing properties of Second to feelings, whereas in Peirce's view acquaintance is a dynamic relation concerned with reactions. As Girel maintains, for Peirce the opposition between these two different ways of gaining knowledge is, indeed, an opposition between Existents and Reals (cf. Question 29).

James's confusion between Second and Third, which earned him the accusation of nominalism, is particularly evident in his analysis of the role of the psychologist who should guarantee the independent reality of objects of thought[17]. Peirce is clear about the necessity of distinguishing between *how we know we have any knowledge*, claiming that independent existence is drawn from experienced resistance to our will; from how we know that a particular belief is in any measure determined by the fact itself or is mere whimsy, that is to say, the reality of facts which is not tested only by being the standard for our opinions, but is an outcome of inquiry (cf.

Question 26). Apart from confusion between categories, Peirce works on three categories while James seems to work only with two and always misses the necessary one (Girel 2003: 182). James also fell prey to another important confusion between First and Third. His irreducible pluralist outcome is due to his confounding: «thought with feeling-qualities». But, thought is public and Peirce mocks James's psychologism with the well-known tale of the 'tongue's privacy' (cf. Questions 31 and 32).

Girel points out another kind of confusion and a consequent mistake. As for Experience and Volition, James confounds aspects of the same category (Second) as a sharp opposition, and hypostatizes such a difference of aspect as a difference of nature. Talking about the mind's relations, James argues that the mind can have *direct* cognitive or emotional relations to other objects, but it can only act *indirectly* on them, that is to say, through the body. This example is particularly clear on the use of categories to avoid fallacies, especially about forms of relations. In fact, there is no other way for the mind to have any dynamic interaction with other things than through its body, indeed to experience and to will are aspects of the same form of existential relation (cf. Question 24).

In the last four questions, Peirce approaches the issue of the 'Stream of Thought' which James discussed in Chapter IX of PP. The passages in which James treats the transitions between thoughts as continuous within the stream of consciousness are the most interesting for Peirce, particularly as he was particularly taken with James's conceptual distinction between 'substantive parts' and 'transitive parts' (Question 41). As Girel rightly comments, these lines have been much studied in the pragmatist tradition for anticipating James's radical empiricism; but they are also of interest to scholars of phenomenology for whom James seemed to be describing the intentionality of consciousness.

As we also see in CP 8, Peirce was convinced of the phenomenological feature of James's descriptive approach to the stream of thought and he contested James's use of the term 'transitive', assuming that 'transitory' would have been a better choice. Their terminological discussion[18] is interesting since it soon turns into a philosophical discussion about the reality of relations (cf. *immediate* and *immediateness* in CP 8). In fact, their long-lasting correspondence is a testimony of the importance of this quarrel which ended in 1900. Thus Peirce's suggestion was to use other terms such as 'volatile' and 'sessile' in order to avoid misunderstandings

owing to James's use of terms already characterized in Logic[19]. Having just recovered from a bout of influenza, James replied that Peirce's suggestions seemed too metaphorical and proposed to use plain 'relational' rather than 'transitive' (CWJ 7: 484). At this point, Peirce makes clear that their views are probably not so close as he had supposed them to be. Indeed, the term 'relational' suggested that James was more concerned with the opposition between *relational* and *non-relational* than with the distinction between an act and the result of an act (Girel 2003: 186), or in Peirce's words between relative and relational[20]. In this view, Girel considers the pragmatist reading of James's distinctions as the more fitting one. As an aside, in his letter of January 28, 1894 Peirce points out that he would not be offended if his philosophy were characterized as: «Schellingism transformed in the light of modern physics. But my philosophy is simply the *synechistic philosophy*».

When Peirce was called upon to write definitions for the second book of the Baldwin Dictionary, Peirce and James talked again about terminological issues, and also discussed the origin of the term 'pragmatism' (CWJ 9: 355). James declared that Peirce was the inventor of pragmatism, as he had already clarified in a lecture entitled "Philosophical Conceptions and practical results" (1898). As to using the word 'transitive' instead, James considered the hypothesis of changing that expression into 'connective' parts of thought, avoiding in this way any arcane technicality suggested by Peirce and assuring wider comprehension (CWJ 9: 369). In the end, James also contributed to the Baldwin's *Dictionary* with a brief definition of 'Substantive and transitive states' which, as Girel points out, shows that James had clearly returned to his first hypothesis of 'Relational states' and so proving his independence of Peirce's suggestions. As to what concerns Peirce's interest in James's intuition, Girel offers a brilliant interpretation of his purpose. James explained the dissection of thought from a psychological point of view considering the difficulty of 'introspective observation'. Peirce's critiques reveal his different conception of thought as a quantifiable process of reasoning which logic treats like every other operation as quantities (Question 42). Girel recalls that in his *Harvard Lectures* Peirce claims that the dissection of thought is the core of the analysis of mathematical reasoning (HL:131-132 (1903)). Actually, in Question 43 Peirce remarks upon James's lack of logical reasoning about Zeno's Paradox, and in Question 44 he complains that only 'shallow blunders' students of relations have been considered by James, probably meaning Sensationalists and Intellectualists

since both denied the reality of relations. Indeed, serious students study relations in mathematics, as Peirce did in his logical works. Quoting a passage from the second section of Peirce's *Critique of Arguments* (CP3.424), Girel gets to the point of his interpretation. Peirce makes clear that James gave a good psychological description of the theorematic process of reasoning that should be interpreted in the field of logic. In fact, the difficulty of catching and converting a 'transient thought' in a 'resting place' of mind was: «exactly the difficulty of diagrammatic reasoning: to make the relations appears *as* relations» (2003: 188). So in conclusion, Peirce was trying to show the connections between James's psychological description of the process of thinking and his mathematical description of abstraction as given in his *logic of relatives*. As Peirce writes in Notes on Symbolic Logic and Mathematics, §8.Relatives, in CP 3.642)[21]:

> For by means of abstraction the transitory elements of thought, the {epea pteroenta}, are made substantive elements, as James terms them, {epea apteroenta}.‡1 It thus becomes possible to study their relations and to apply to these relations discoveries already made respecting analogous relations.

In conclusion, Girel gains three main results: 1) about Peirce-James relationship; 2) about the philosophy of psychology; and 3) about the logic of psychology. First, he shows that Peirce's reading of James's psychology was not a joke. Peirce found many insights in PP and introduced those logical devices that he believed were necessary to correct James's arguments and so avoid his fallacies. According to this view, the confrontation between Peirce and James over psychology emerged as a very interesting field and provides a better understanding of their philosophical disputes. Second, as is evident from his 1891 review, Peirce disagreed with James's psychological methodology. In fact, considering psychology as a natural science, he firmly contrasted James's claim that psychology accepts its data 'uncritically'. Indeed, he found James's attempt to exclude metaphysics from psychology inconsistent since his methodological assumption (dualism): «was in no way neutral as regards metaphysics» (2003: 189). Behind James's psychology, he could foresee a version of pre-established harmony and he aimed at making explicit such an implicit philosophy of psychology in order to make room for his alternative metaphysical conception, which already pointed at a middle point between *tychism* and *synechism*. The question that arises is more general, indeed. Is it possible to have free-metaphysical methods?

The very risk of a 'clandestine' metaphysics was dogmatism, because it was not possible to face these fundamental assumptions only on psychological grounds, even if psychology denied any philosophical compromise as its manifesto. This was the very aim of James's PP, to show the unavoidable intertwining of psychology and philosophy, particularly on issues such as *consciousness* and *perception*. James had the merit of indicating this interconnection from a perspective internal to experimental psychology and to criticize its dogmatic outcomes in order to renegotiate the concrete limits and possibilities of psychology and natural sciences. The third result concerns the nature of the dependence of psychology upon logic. Peirce was convinced that his study of logic, which «implied a new approach to perception, to consciousness, to abstraction and to thought in general» (Girel 2003: 191), illustrates the service which logic would do to psychology.

In CP8.164-170 we read Peirce's review[22] of the second volume of Baldwin's *Dictionary of Philosophy and Psychology* (1902) earlier published in *The Nation* 76 (11 June 1903). The title of the dictionary is indicative of the classical intertwining of these two branches, which were being revived at the beginning of the 20th century. The features of such a cultural enterprise were carefully outlined by Baldwin in the preface to the first volume (1901), and it was immediately clear to readers that the dictionary was an encyclopedic work[23]. In his review of the book, which he himself had largely shaped, Peirce makes four main observations worthy of note. First, he points out the general direction toward scientific criteria undergone by every branch of philosophy and psychology, and envisages the possible adequacy of metaphysics too. A second mark of American philosophy is its disposition to rest upon psychology. Indeed, Peirce wonders how men could think of solve problem in philosophy that reduce them to psychological questions, dreaming of a science which was not dependent upon metaphysical postulates. In particular, by the time psychology had assumed a more sustainable scientific value during the second half of the 19th century, this old Cartesian fashion had revived and only in recent years had the metaphysical assumptions of psychology undergone serious examination. There were at least two different positions. The first claimed that philosophy and psychology, or philosophical sciences in general, can support each other. The second pretended that philosophy cannot be founded upon psychology. The third notation concerned the reaction of philosophy to the agnostic tendency of the previous generation. There was a return to a philosophy of common sense which

excluded incomprehensible explications. Moreover, according to the 'new logic of quantity' of Cantor and Whitehead, from the fact that matter and thought do not interact *directly* cannot be drawn that – even if there is no *tertium quid* – they cannot interact somehow one on the other. Here Peirce suggests his hypothesis of atoms of matter and mind's similar constitution as vortex of ether *ad infinitum* (cf. CP8: 275). At last, Peirce rejoices at the demise of the literary style in philosophy. Philosophy should adopt the form of *memoirs* and this involves a revolution in terminology and freedom from vagueness. The importance of Baldwin's *Dictionary* is also in its endeavour to fix the use of certain terms. But the arduous labour of creating a technical vocabulary is yet to come and Peirce believes this task to be an unavoidable step back that philosophers should take in order to step forward in the direction of science.

II.1.4 Peirce's Theory of Continuum

In the previous section, we focused upon Peirce's interest in James's psychology, and carefully analyzed his *review* of James's masterpiece as well as his review of Baldwin's *Dictionary of Philosophy and Psychology*. Then we turned to the *questions* which Peirce formulated on those pivotal passages of James's *Principles* that he considered the most striking or problematic for his different approach to psychology. In the end, we read some passages from the correspondence between Peirce and James concerning important themes such as pragmatism, consciousness, etc. We may now follow the evolution of Peirce's reflection on continuum, considering his doctrine of continuity, particularly the continuity of mind, turning to the elaborations in his main texts . As is well known, the doctrine of continuity is important to Peirce's metaphysics. It is no coincidence that in a 1902 letter to William James he explicitly wrote that *synechism* was the: «keystone of the arch» (November, 25, 1902).

II.1.4.1 The Architecture of Theory

This is the first of a group of articles published on «The Monist» between January 1891 and January 1893. Cadwallader (1975) rightly suggests that these articles show at best Peirce's interest in psychology. More specifically, according to James in Appendix C of his PU, the articles are concerned with pivotal themes which bring into focus the relation between psychology and philosophy. Moving from Kant and his architectonic metaphor for the construction of a philosophical system, Peirce provides two recommendations when forming an opinion about «fundamental problems» (metaphysical issues). The first is a general recommendation to: «make a complete survey of human knowledge», considering all the successful ideas and their specific applications, in order to look for the solution of a certain problem of philosophy; and a special one, to «make a systematic study of the conceptions out of which a philosophical theory may be built». In this second respect, Peirce suggests turning to various sciences in order to discover conceptions which would be useful to philosophy. Beginning with a brief analysis of the most interesting notions explored in dynamics, particularly the law of the conservation of energy, he then approaches psychology and mathematics.

In the history of modern scientific thought, Peirce indicates which ideas have led in dynamics. Galileo, who inaugurated this science, made a few experiments to found the laws of mechanics. Above all, he appealed to common sense and *lume naturale* and, accordingly, believed true theories were simple and natural. Indeed, there is no more natural or simple notion in itself (i.e. line/curves) than a straight line simply because of the laws of mechanics governing phenomena which influence our minds and hence provide us with a sort of «natural prompting», a direction in our search for a law. Therefore, the research of Huygens and others led to modern conceptions of Force and Law while Newton's discoveries enabled us to use the notion of heat in the explanation of the properties of gas. Later, other phenomena concerned with kinetic theory linked to light vibration (i.e. diffraction, dispersion) required additional hypotheses, and they would become much more complicated. In particular, laws of mechanics lose their mark of simplicity when applied to molecular theory, where they seem to work imperfectly. Of course, certain features of laws such as simplicity should not be binding. Nevertheless, the

law should always provide a reason for its special forms. In this case, a natural history of natural laws might help to detect what kind of laws to expect and to question which suppositions are justifiable, which are worthy of further inquiry. In a nutshell, Peirce is claiming the reasonableness of every scientific theory, since if natural universal laws are supposed to be understood, they have to be: «*par excellence* that thing that wants a reason». More generally, uniformity calls for reasonable explication and the only way to account for them, in Peirce's view, is to consider laws and regularities as results of evolution, which means supposing an element of absolute chance or spontaneity in nature. According to this natural-evolutionist view, laws are not perfectly cogent. They are neither absolute nor perfectly obeyed because of: «a certain swerving of facts from any definite formula».

At this point, Peirce argues against the inverse attempt made by the English philosopher Herbert Spencer to explain evolution through mechanical principles. He contests the theory as half-evolutionary or semi-Spencerian and it is illogical for four reasons: (i) the principle of evolution does not require extraneous cause, since the tendency to growth could have started accidentally; (ii) evolutionism has to suppose law is a result of evolution; (iii) the existing character of heterogeneity could not have been produced by exact laws, and (iv) the law of the conservation of energy implies that operations governed by mechanical laws are reversible. Therefore, these laws cannot explain irreversible growth. The three main theories of evolution, which Peirce presents are, respectively, those of Darwin, Lamarck, and Clarence King. As is known, Peirce's evolutionism is seen as being close to Lamarck, whereas James's insistence on the importance of fortuitous varieties[24] was a likely reading of Darwin. In this passage, Peirce apparently validates this interpretation, especially confirming James's accuracy in stressing the activity of chance. But in the end he draws quite opposite conclusions compared to those of his colleague. In fact, from a philosophical point of view, Peirce considers Darwinian evolution to be: «evolution by the operation of chance, and the destruction of bad results, while Lamarckian evolution is evolution by the effect of habit and effort». The two theories are almost incomplete, since even if both of them imply that species develop through a long series of insensible changes, in contrast with King's theory, then we are only able to explain individual characters through effort and those spontaneously produced which are beneficial to the race but sometimes even mortal to individuals. In this way, Peirce supports a negative

and eventually anti-individualistic version of chance, maybe forced in a neo-Darwinian sense.

When analysing psychology, Peirce immediately recollects the elementary phenomena of mind under his three categories: First – *Feelings*, second – *Sensation of reaction,* and third – *General conceptions*. Feeling is a: «state of mind having its own living quality, independent of any other state of mind». We can have a feeling of pain, blue, cheerfulness, indeed, of all that is immediately present to us. It is a state of consciousness which possibly usurps the whole mind, even if actually this state cannot be realized. Every feeling is perfectly simple in itself. Otherwise, if it had parts it could not monopolize the mind as a whole. In fact, Peirce believes that perception can compound feelings. The sensation of reaction, rather, is a: «sense of connection or comparison between feelings». Peirce calls it a «disturbance of feeling» and explains that such a sensation exists whenever we pay attention to the relation between two feelings which are actually present to us (i.e. a feeling of blue and a feeling of red). A sensation of reaction may either be «a perception of relation between two ideas» or: «a sense of action and reaction between feeling and something out of feeling». The second case, which is a sense of external relation, can assume two forms, that is, «the sense of the access of feeling», when we are passive and simply feel what is happening to us, and «the sense of remission of feeling», that is our sense of resistance. Finally, general conceptions are very different both from feeling and sense of reaction, since thinking implies awareness of the general rules governing the connections between feelings. Intellectual power, in Peirce's view, consists in the facility of assuming habits and following them in cases analogous to those where habits were formed, as well as in remote situations. Indeed, a fundamental law of mental action is a tendency to generalization. To be conscious of mental habits, for instance, of the fact that feelings excited are prone to be excited again, constitutes a general conception. In order to understand psychological notions better, Peirce suggests looking at their physiological descriptions. But he then underlines a «striking contrast» between the laws governing matter and the laws of mind. In fact, physical laws are absolute and require exact relations while: «no exact conformity is required by the mental law». This claim of inexactitude for mental laws is not accidental nor does it hide a sort of softer approach to mind. Indeed, such a lack of cogency is functionally necessary to preserve thought from crystallization, therefore to guarantee further formation of

habits. «The law of mind only makes a given feeling *more likely* to arise», in other words, it deals with probability and statistics. At this point, Peirce has to consider the consequences of the descriptive difference of laws of matter and mind that he has claimed so far on a metaphysical level. Rejecting every form of Cartesian substantial dualism, Peirce indicates three forms of monism (or hylopathy), each providing a different theoretical connection between the laws of matter and those of mind. The first is neutralism which takes the two laws as independent. This position is logically refuted as unnecessary. The second is materialism, which states that mental laws are derived and special, while physical laws are primordial. Peirce considers this position as repugnant both to scientific logic and to common sense [since it rests on the ultimate inexplicable hypothesis that a mechanism feels.]yes? The third is idealism and it claims the ultimate priority of mental law. In particular, Peirce maintains that objective realism is the only intelligible theory of the universe. It means that: «matter is effete mind, inveterate habits becoming physical laws». To accept this theory, philosophy should explain physical phenomena with mathematical clearness and precision. Thus, Peirce is clear about the demonstrative task – arguable, indeed – that philosophy should undertake. The point is to pay attention to the epochal changes that were going on in mathematics at the time. The historical dependence of metaphysical ideas upon geometric axioms is acknowledged and Peirce seems to place himself exactly within this line of inquiry. He believes that there are plenty of fruitful ideas which philosophy ought to import from modern mathematics, in particular the method of generalization, the modern view of measurement, and, most importantly, the mathematical conception of continuity.

Citing several important discoveries in geometry and drawing attention to their philosophical aspects, Peirce points to the conclusion that modern geometry basically questions inveterate certainties. It rethinks previous fundamental acquisitions, mainly the necessity of the exactness of laws. There seems to be no reason for supposing laws to be exact owing of their being expressions of our inborn conception of space, which has an obvious influence on the formation of the mind. In any case, laws can be reasonably inexact. In Peirce's view, since metaphysics has always aped mathematics, as a consequence, it now questions its assumptions, discovering that there are no reason to think that phenomena should be precisely determined by laws. Moreover, variety is the observable vestige of an arbitrary

element in the universe which should be acknowledged. Before concluding, Peirce devotes a few pages to talking about the importance of the mathematical conception of continuity for philosophy. Often, mathematics shows in a clearer way similar logical assumptions, in particular, there are three principles of logic which have important applications in philosophy: the conceptions of First (F), Second (S), and Third (T). These are very broad conceptions which, respectively, consist in the ideas of (F) «being or existing independent of anything else»; (S) «being relative to, […] of reaction with, something else», and (T) «mediation whereby a first and a second are brought into relation». Peirce illustrates these ideas, showing how they could be applied to those conceptions that we have identified so far in metaphysics, psychology, and biology. For instance, in psychology Feelings is First, Sense of reaction is Second and General conception is Third. In biology arbitrary sporting is First, heredity is Second, and the process of fixation of arbitrary characters is Third. In the same order of classification, we have Chance-Law-tendency and Mind-Law-tendency to habit taking, which is First, Matter, and Evolution. As to what concerns metaphysics, Peirce states that, in itself, the idea of the origin of things is First, that of the end is Second, while the process of mediation between the two is Third. Very briefly Peirce turns to the One and Many issue, which is an evergreen question for James. Peirce distinguishes those philosophies which advance the idea of One as dualistic and too attentive to Second (since the One is *the other* of a manifold). On the other hand, philosophies which prefer the Many, that is variety and arbitrariness, are built up on the idea of First.

In conclusion, according to his initial Kantian requirements, Peirce attempts to give an overview of the present state of knowledge at the time and to construct out of it a sort of metaphysics appropriate to the main conceptions that he has considered. Such a theory, he says, would be a Cosmogonic philosophy and would suppose an infinitely remote beginning of the universe from a chaos of unconnected and non-existent feelings. These feelings would have arbitrarily sported a germ of generalization which showed a growing virtue. In this way, the tendency of habit would have begun, subsequently, every other regularity of the universe in evolution. Indeed, he adds, pure chance will remain an operating element of evolution till the world gains a rational perfect form in which mind will finally be crystallized.

II.2.4.2 The Doctrine of Necessity Examined

As we have seen, in his 1891 article Peirce spells out the ideas of chance and habit which structure his view of the universe. Here he examines the doctrine of necessity, considering the proposition which assumes the exactitude of the determination of facts by laws. Indeed, in logical terms, such a claim to absoluteness is at fault because it is an unintelligible ultimate fact. In particular, the point for Peirce is that sciences have to give reasons for their theories and that these reasons have to sound logical. In this view, his corroborating the existence of chance by «loosening the bond of necessity» and making room for a principle of generalization seems to be a better explication insofar as it is able to consider and explain both the variety and regularity of the universe.

However, the focus of his critique is «mechanical philosophy» which he believes to be the usual and most logical form of necessitarianism at the time. Naturally, the formation of this doctrine has a history. Peirce believes that this peculiar linkage of materialism and rigid necessitarianism is due to Stoicism's reception of Democritus's doctrine. That is to say that they did not consider Epicurus's revision [*clinamen*] of the atomic doctrine, admitting absolute chance as a cause hence preserving the freedom of the will. Stoicism was successful mainly because of its departure from Aristotle, as well as the viability of its propositions. In the end, such a view became compatible with the hope inspired by the great discoveries in mechanics, that: «mechanical principles suffice to explain the universe». Moreover, Peirce also considered the contemporary vogue of mechanical philosophy to be a consequence of psychological determinism. Indeed, even if this passage is very short, his position seems to be close to the much more detailed view of the French philosopher Bergson set out in his famous *Essai sur les données immediates de la conscience*[25] In particular, Peirce considers the embedding of psychological associationism into a materialistic frame, which led to the theory of motives etc., as a philosophical mistake. However, the main proposition of this current form of physical necessitarianism or mechanical philosophy is that:

> the state of things existing at any time, together with certain immutable laws, completely determine the state of things at every other time (for a limitation to *future* time is indefensible). Thus, given the state of the universe in the original nebula, and

> given the laws of mechanics, a sufficiently powerful mind could deduce from these data the precise form of every curlicue of every letter I am now writing.

Accordingly, there are at least two main conclusions to draw, that is, «minds are part of the physical world», and: «the instantaneous state of things from which every other state is calculable consists in the position and velocities of particles at any instant». At this point, Peirce asks for the reasons for such a belief in the exact regularity of phenomena, more specifically he reports, and sharply criticizes one by one, the answers usually given (or that he supposes to be given) by mechanicists. Thus the discussion is evidently brought within the field of philosophy, therefore approached from a logical point of view. Such a proposition of universal necessity seems to be believed either as a postulate of scientific reasoning or as a principle derived by the observation of nature, which in the end obscure *a priori* positions.

Peirce claims that to postulate a proposition merely amounts to hoping that such a proposition are true. On practical occasions, we act according to hypotheses which we believe to be true, but that even if these were reveal not to be true, our way of acting upon these beliefs would make no difference. Indeed, he talks about freedom of will as a hypothesis concerning individual facts. In no case can freedom be considered incompatible with universal laws (i.e. with the property of the lever by Archimedes), since they pertain to very different levels of demonstration which do not confute one another. Moreover, science's conclusions pretend to be only probable and a probable inference Peirce writes can: «only suppose something to be most frequently, or otherwise approximately, true, but never that anything is precisely true without exception throughout the universe». More generally, the notion of postulate in logic shall be discussed. Peirce claims that there are three ampliative inferences, which means reasoning apportioning new conclusions, not yet implied in the premises, and these are induction, hypothesis, and analogy. To offer an illustration of the possible application of these «inferences from examples, Peirce imagines stacks of wheat transported on a ship which are completely stirred up. The strategy with which to ascertain the quality of the grain is to take a number of thimble-fulls equally from every part of the ship and to ascertain from these samples the quality of the grain, with a result of 4/5 being of quality A. From such a verification: «we infer, experientially and provisionally, that approximately four fifths of all the grain in the cargo is of the same quality». The adverbs which specify this correct way of thinking are indeed indicative. On the one hand, using the term

'experientially', Peirce narrows the question down to matters of possible knowledge, that is to say, he makes explicit that these kinds of inferences avoid either essential or latent issues, such as what the wheat is in itself and the nature of the unseen grain. Incidentally, Peirce enlarges the signification of experience, considering experience not only: «as something affecting our senses, but also as the subject of our thought».

On the other hand, using the term 'provisionally', he introduces our mental capacity to extend indefinitely our experience and to approximate successfully the form of experience. Even if parameters are not yet assigned and experience is supposed to fluctuate, every time missing any definite ratio, according to the inductive method, «in the long run» our approximations can become indefinitely close to the experience to come, so that in some way we are able to deal with it. At time, we may have to alter our search parameters , but logic can explain variations and we are able to find methods which demonstrate predictive capacity. The restriction of our inferential claims to experience and provision exclude any postulate from their formulations. The only objection to his explication of the rationale of induction which Peirce considers worth mentioning is that his view does not allow the inductive reasoning to obtain all its explicative power; that is to say, according to the example of the wheat, even if the processes of stirring and mixing the grain would had been perfect, one handful of grain would not have any ascertaining power.

Others believe that the principle of necessity is highly probable because we can observe it in nature. Peirce observes that this soft position is indeed deceptive, in fact necessitarianists claim that continuous quantities have exact values. According to this view, their fallacy becomes more evident, since we are not able to ascertain values excluding every possibility of error only by observation. For observation to state absolutely any conclusion - there is no indigo in the wheat, for example - we should rely upon inferential reasoning. But these inferences: «can only [be] rendered valid by positive experiential evidence, direct or remote, and cannot rest upon a mere inability to detect the quantity in question». As to what concerns the determination of chance by observation, we are in a very similar position. In this sense, observations only prove that there are elements of regularity in nature, not their exactitude. Indeed, when scientists try to ascertain any law of nature their observations always present some irregularity which they say are due to errors of

observation. But Peirce believes that chance can explain such falling short of precise observations. In fact, the element of chance is real, it is not just a *causa ad hoc* arbitrary used to solve problematic situations. According to physicists, its effectiveness is particularly evident in the irregular movements of the particles of gases.

So far Peirce has examined those presuppositions which are more consistent with the methods of science, and now he concludes that neither postulates nor observations can respectively prove or render highly probable the proposition that facts precisely and universally conform to laws. Therefore, necessitarianists – by now directly considered as the «advocates of exact regularity» – have to agree to confront their view on the field of *a priori* reasons. Since these reasons have already been definitely refuted by John Stuart Mill, Peirce turns his attention to those misleading empirical arguments or convenient commonplaces which are used to back up *a priori* positions. The first argument is that exact regularity is a natural belief and that it is confirmed by experience. The second is that absolute chance is inconceivable, and the last is that chance is unintelligible. As to natural beliefs, Peirce agrees that they generally have a foundation in truth, but he also states that they carry natural illusions. In fact, approximation to truth comes with adaptation of our genetic products to certain useful ends. In this sense, since adaptation to nature is almost perfect, indeed, this becomes an argument against absolute exactitude. The second argument is left aside as there are many significations of the term 'inconceivable'. In any case, such a statement is not sustainable and does not prove that chance does not exist. The third argument states that the hypothesis of absolute chance does not render phenomena intelligible. It cannot properly give the reason as to *how* or *why* observed fact comes about. This argument is linked to two weaker ones, that is, no facts are known which a supposition can help to explain, and chance is not a necessary hypothesis since it is not a *vera causa*. These claims are worth considering closely. Thus Peirce imagines a hypothetical dialogue between himself and a necessitarianist on a precise situation, that is, the throw of a pair of dice. This helps to focus upon the issue and enables the two opponents to give their reasons. Peirce believes that: «every throw of sixes with a pair of dice is a manifest instance of chance». In his view, of course, an approximate and influencing regularity is undeniable but all the diversity present in nature is due to chance. On the contrary, the necessitarianist believes that: «The diversity is due to

the *diverse circumstances* under which the laws act». The point is met a few lines later, where to Peirce's question as to whether the operation of mechanical law does not increase diversity, the opponent replies «Properly not» since: «the amounts of diversity in the system remains the same at all times». Here we can foresee the same opposition between idealists and evolutionists which was at the core of James's reflection. Indeed, the first believe in a world that is already made, a block-universe where relations are internal and essentially given, while the latter believe that the world is still in the making and, in particular, Peirce claims that diversification, as well as regularization, is *in fieri*.

In the last part of the article, Peirce provides the reasons for his position and then tries to imagine those of his adversaries, which of course will remain unanswered. The first reason to sustain his hypothesis of chance or spontaneity is logical. In fact, from an examined overview of most of the phenomena studied by sciences, all showing that the main fact seems to be growth and increasing complexity through time, it is fair to infer the existence of an operating agency. The second reason is the superior logic of such an explication of real novelty. The third reason is the more intelligible power of the hypothesis of chance, even in accounting for the production of uniformity in nature. The fourth reason is that his hypothesis does not need to reduce the action of mind as a part of the physical world, but makes room for placing the mind in the position of the «fountain of existence». The last and principal reason for Peirce to defend his hypothesis is not yet ready to be shared, but he suggests that, according to new methods of reasoning, the consequences of such a hypothesis show precise mathematical outlines.

Thus contesting the three arguments likely to be maintained by necessitarianists to deny the hypothesis of chance, those of the un-intelligibility of chance, of its lack of any explicative power since chance is not a *vera causa*, Peirce has the opportunity to return to his own reasons. He points out that, while necessitarians leave the specification of the world mainly unaccounted for, his hypothesis of chance is not just an equivalent alternative because he used it to make room for a principle of generalization or tendency of taking habits. Indeed, his form of chance is supposed to show some regularities too. Moreover, variety is for Peirce «the most obtrusive character of the universe»[26] and mechanisms cannot account for it insofar as strict regularities cannot account for a great amount of «inconvenient[s]» (consciousness, feeling etc.) but only block the road of serious inquiry. Variety is a fact and should

be admitted, and for Peirce the theory of chance – this is the important point – amounts to supposing that diversification «does not antedate all time», but continually takes place. In conclusion, he believes that his arguments encourage us: «to doubt the absolute truth of the principle of universal laws».

II.1.4.3 The Law of Mind

This is probably the most important article which concerns our topic. Published in *The Monist* in July 1892, the study of the general law governing the action of mind is part of the evolutionary cosmological project that Peirce was pursuing at the time. He also refers to his «Shelling-fashioned idealism», which he links to the transcendentalist atmosphere felt in Concord, saying that such germs [bacilli] are now probably revealing their effects but in a different version, affected as he was also by his training in mathematics and scientific investigation. In this article Peirce is concerned with the idea of continuity and attempts to provide his own definition of continuity, even if he claims that his main intention is to show: «what *synechism* is, and what it leads to». Synechism, he states, is the tendency to consider continuity, in the sense he means in the article, as an idea of prime importance in philosophy. Therefore, his conception of *tychism* is for the moment put aside in order to focus attention upon this other aspect of his cosmology. Indeed, Peirce confesses to have already proposed the doctrine of synechism many years before in «The Journal of Speculative Philosophy» (vol. III). Peirce considers his previous position as too nominalistic, and a very similar self-critique will be renewed in *Man's Glassy Essence* when Peirce discusses his theory of the person. In this view, in developing the application of his *synechistic* philosophy to mind, Peirce also aims to show that such a doctrine carries with it other doctrines, far from nominalism, which he has already sketched out in previous articles of the series, that is, logical realism; objective idealism, and *tychism*. [evolutionism]

The general law of mind that Peirce discovered through a logical analysis of mental states is that:

> ideas tend to spread continuously and to affect certain others which stand to them in a peculiar relation of affectibility. In this spreading they lose intensity, and especially the power of affecting others, but gain generality and become welded with other ideas.

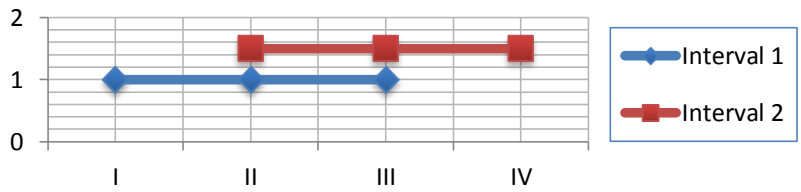
Talking about ideas, Peirce distinguishes between the common use made of the term, that is, substantial entities passing from mind to mind, and their concrete or psychological sense of events belonging to an individual consciousness. In this second definition, Peirce agrees with positions such as that of James which argue that ideas are not substantial things, but every idea is unique and it never represents

itself identically to consciousness a second time. But many problems arise from denying the identity of ideas in view of their similarity, in particular because, if two ideas are not present in the same state of consciousness, they could not ever be compared. Peirce notes that the principles of association most accepted by psychology are contiguity and similarity, that is to say, forms of external or internal connections between different ideas. The problem concerns the «occult power», which James would call the «mysterious agent», which compare past ideas in our thoughts, as well as the unintelligible meaning of talking about affects of past ideas on future ones which are supposed to be completely detached one from the other. Accordingly, Peirce introduces the section on the continuity of ideas, claiming the necessity of stating clearly the terms of the difficulty – which in his view is analogous to the quarrel of *nominalism* and *realism* (cf. CP6.619.624 [Appendix B]) – and then to require the aid of logic to solve it. The question is formulated as: «how can a past idea be present?». Since the relation between ideas can only exist in some consciousness, logic helps on the one hand to exclude the hypothesis of vicarious ideas, which would but partially solve the difficulty, and on the other hand to avoid the illogical conclusion that the past cannot be present, which would turn the past into a Kantian "thing-in-itself". Peirce maintains that the only solution is to recognize that past ideas should be *directly* perceived in the present and this means that the past cannot be wholly past, but can only be going infinitesimally past, that is to say that: «the present is connected with the past by a series of real infinitesimal steps».

At this point, the relation of consciousness to time should be addressed. Peirce claims that psychologists rightly point out that consciousness has to embrace an interval of time. In fact, any possible conception of time is given to us through this relation of consciousness to a section of time. But the point for Peirce is exactly to look for a proper hypothesis of time. There are two observable forms of evidence which must agree with the necessity that consciousness covers an interval of time, that of the possible continuous presence of immediate sensations to consciousness regressing *ad infinitum*, and the nature of a finite interval of time to be no longer present. Therefore, Peirce believes that the interval of time should be thought of as infinitesimal and not finite, namely, we have to acknowledge that: «we are *immediately* conscious through an infinitesimal interval of time». The infinitesimal conception of time allows us to reconcile the subjective sense of the continuous

duration of consciousness through time, together with its immediate capacity to feel its object which is *ipso facto* continuous, because it is directly present to a continuous consciousness. Peirce describes such an «infinitesimally spread out consciousness» as an immediate or: «direct feeling of its contents as spread out». In fact, we have a direct perception of the internal sequence of moments in every infinitesimal interval of time as well as of the succession of different intervals of time (Fig. 1). Thus from these immediate perceptions (points 1, 2 in *Fig.1*), Peirce states that we gain a mediate perception of the relation between all the four instants of the first and the second immediate perceptions, even if subjectively (duration) such a relation is completely embraced in the second infinitesimal duration. Peirce describes mediate perceptions as «inferential acts of comparative perception», implying once again that relation cannot be immediately given.

Fig. 1

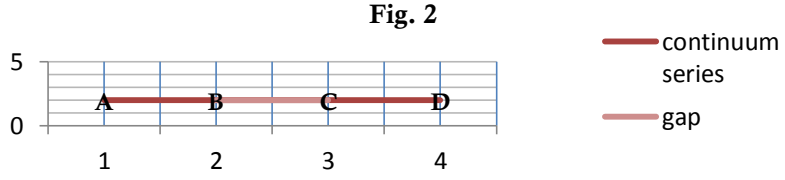


Indeed, we have also an immediate perception of the whole as the sum of two infinitesimal intervals, being itself an infinitesimal interval too. Nevertheless, we can perceive such a relation immediately only in the last 2/3 of the interval. Peirce adds that in a continuous flow of «inferential acts of comparative perception» through a finite time, we would gain «a mediate objective consciousness of the whole time in the last moment», that is to say, in the last moment we would recognize or know the whole series of moments.

His concern is thus to corroborate the hypothesis that infinitesimal quantities are not contradictory. In this contest, he first relies upon his 'logic of relatives' and then on George Cantor's writings, which he only later became acquainted with. To state the distinction between finite and infinite collections, Peirce returns to the "syllogism of transposed quantity" discovered by De Morgan. In this view, he claims that, for every good reasoner, it is easier to deal with infinite quantities because they could avoid such a complicated syllogism. There are two grades of magnitude for infinite collections - endless and innumerable. In the following pages,

Peirce approaches the issue of continuity, examining the analysis of continuity made by Kant, Cantor, and Aristotle, respectively. According to Peirce, even if Kant's analysis is very clear, the German philosopher made the mistake of confounding continuity with infinite divisibility, since he maintains that: «the essential character of a continuous series is that between any two members of it a third can always be found». This view gives rise to many difficulties. For instance, rational fractions ordered according to their magnitude would be an infinite series even if they are numerable and the series of points on a line is innumerable; and, most importantly, if any two points with all that lie between them were cut out of the series, the appearance of continuity would be destroyed, yet Kant's definition would be true. Indeed, such a definition allows for gaps in the series. Cantor defines: «a continuous series as one which is *concatenated* and *perfect*». By 'concatenated', Cantor means a series that, given any two points in it at any definite distance, it is possible to go from A to B through a succession of points (a, b, c, d, e), each situated at a smaller distance from its precedent than that given from A to B [d (a, b) < d (A, B)]. Thus a series is perfect if there is no distance so small that it does not have an infinity of points of the series covering that point. Even if such a definition embraces every continuous series and does not match with any non-continuous series, it shows some defects. It depends upon metrical considerations, while a continuous series is distinguished from a discontinuous one by non-metrical considerations; and, it does not give any positive definition of what a continuous series is. Thus Peirce recovers Kant's definition of a continuum and tries to amend its difficulties through the "property of Aristotelicity" of the series (*Fig. 2*).

Fig. 2



Indeed, Kant's definition allows but one point in the gap (B or C) to be in the series. Aristotle seems to have stated that parts of a continuum have common limits. This property of a continuous series means that it contains the end points which belong to every endless series of points which it contains, and, as a corollary, that: «every continuum contains its limits». Talking about real numbers, it is easy to understand

this property. Real numbers are the limits of several series so that between every two real numbers there is an innumerable series of points. Actually, every approximation to the real number of the series that can be expressed in a finite number of decimals (after the comma) is commensurable, otherwise it is incommensurable. Peirce concludes that continuity supposes infinitesimal quantities which are ordinals formed from infinitum. These quantities are not contradictory, since continuity is never broken by their operations and, moreover, they do not require the difficult "syllogism of transposed quantity" or the Fermatian inference. Peirce prefers to work with infinitesimal what? than with limits, but the latter method does not deny continuity and hence also deals with infinitesimals. Aristotle's principle is useful to understand the relation between consciousness and time that Peirce discusses above. Indeed, Peirce takes two examples, one about colours and the other about velocity, to make clear the interpenetration of instants of time and immediate perception of infinitesimal duration[27]. Supposing a half red and half blue surface, he wonders what would be the colour of the boundary line in the middle. His answer calls for infinitesimal quantities. There are infinitesimal points (instant) on the surface, each one being only red or blue. The surface (moment) is the condition of existence of points and it takes the colour of the point which is present in its immediate neighborhood. In this view, it is clear that «consciousness essentially occupies time» and that the boundary line between the two portions of time will be just half red and half blue, that is to say that, to consciousness, the present is half past and half to come. Moreover, there are no colour relations either between instant points of time and distant parts of the surface, or between my feeling at any distant interval from the present and my present feeling. In the second example: «the velocity of a particle at any instant is its mean velocity during an infinitesimal instant in which that time is contained. Just so my immediate feeling is my feeling through an infinitesimal duration containing the present instant».

The direction of time is what makes such a great difference between the law of mind and the law of physical force. In fact, the latter is reversible and opposite directions make no difference. To analyse the law of mind, Peirce provides a definition of the flow of time and in this view he states that, as regards an «individual state of feeling», there are two other classes of feelings, those affecting the individual state of feeling and those not affecting it. Indeed, directionality of

time means that every feeling is affected by earlier ones, which are retrospectively linked one to the other continuously. Such an affectability is also proportionate to the distance in time, since a past feeling is present to consciousness through the chain of other successive feelings, but in a reduced degree. Peirce claims that continuity of time is the universal form of change and this requires that there be a «continuity of changeable qualities» undergoing such continuous change. His idea is that the development of the human mind has focused upon few dimensions of feelings, which in the beginning could be of an endless number. So now, a variety of feelings can be found in the intensity of feelings and, according to the continuity of time, when any particular kind of feeling is present to consciousness there should also be present a continuum of different shades or gradations of that feeling. Having stated so far that feelings are continuous in intensity, Peirce now considers feeling's continuous extension. As in the article *Man's Glassy Essence*, the object of his analysis is a «gob of protoplasm» since this single cell organism shows properties similar to nerve-cells but it performs less specialized functions. Protoplasm *feels*, indeed it feels when it is excited, but it behaves in a peculiar and simpler way which can be instructive to detect the origin of our coordinated mental activity. It does not have a unitary organ so that, under excitation, its feeling is spread from the irritated part to other parts. What is interesting is our idea that such an uncoordinated motion is feeling, because such an attribution logically leads us to acknowledge that feeling has a subjective or substantial spatial extension. Commenting upon James's position on the perception of space (PP, XX), here Peirce explicitly disagrees with his idea that: «we have a feeling of bigness». As we have just seen in Peirce's view, the feeling is big as a «subject of inhesion». Moreover, he claims that only under focused attention are our feelings coordinated. In fact, it is easy to miss that there is no real unity of feelings except in present attention: feelings are external one to the other. Peirce considers time and space as infinitesimally continuous, and he suggests that, in this view, any action coordination of brain cells can be due to an «immediate community of feeling» existing between infinitesimally near (in space) cells of the brain.

Having claimed that there are feelings affecting other feelings, the question that Peirce has to face is what he means by affection between ideas. We notice how Peirce considers the relation between feelings and ideas since, at a certain point, he seems to be talking indifferently of feelings and ideas, exactly as James does in PP

and MT, but then he adds that ideas are made up of three elements. First, an « intrinsic quality as a feeling», second «the energy with which it affects other ideas»[28], and third, its tendency to bring along other ideas. The spreading of an idea is inversely proportional to its affecting power, while spreading does not considerably change the intrinsic quality of that idea. Again, Peirce claims that there are an innumerable series of feelings in a finite interval of time that, when associated with other ideas, become a general idea. Indeed, by continuous spreading, an idea results in a generalized idea. So far, it is difficult to consider feeling as merely a subjective quality of ideas because Peirce then points out three features of general ideas relying on continuity. First, it is living feeling and we can immediately feel its actual or possible continuum. Second, nominalistic definitions of ideas are to be refuted since it is possible to perceive the affection and the gradual modification of one idea into another. And third, the law of insistence of ideas governing past ideas should be inductively extended also to the future by virtue of habit. In fact, according to this view, we are able to anticipate and influence ideas to come through the suggestion of the past, that is to say, feelings not yet emerging into consciousness can logically be affected by our past ideas as logical predicates affect a subject.

If so far Peirce has shown that ideas are connected by continuity, now he claims that there is no other possible connection between ideas except continuity and through continuity. In particular, against the nominalistic objection, Peirce believes that there is no reason why continuity of ideas should be attributed to absolute necessity rather than coincidence. Indeed, chance can bring into proximity ideas not yet associated, and then the law of continuous spreading intervenes, producing mental associations. An absolute uniformity of phenomena is just an idea and does not provide reasons to explain continuity better than other theories. Peirce maintains that ideas show a tendency to weld themselves into general ideas and that general ideas govern these same connections. Moreover, as he will better explain in *Man's Glassy Essence*, Peirce here introduces his discussion of the personality of general ideas, stating that: «general ideas are living feelings spread out».

The law of mind seems to follow the laws of logic, and in particular Peirce observes that there is a significant correspondence between the three main classes of logical inferences and three modes of action of our mind. Deduction is thus

compared to habit, induction to the regularization of a habit, and the process of hypothetical inference to the formulation of general ideas from qualities. Inductive and hypothetical inferences are probable inferences, while, Peirce observes, deduction can either be necessary or probable. But, laws of mental action show an essential trait of uncertainty since identical reactions under certain given sensations are never assured. The law of mind only states that, on a second occasion and under the same sensation, it is likely that mind reacts again as it reacted the first time, but there is no rigid necessity. In this regard, Peirce talks about a «gentle force» which would influence mind's reaction and explains that a «certain amount of arbitrary spontaneity» remains an essential trait of mental law. Such a grade of irreducible uncertainty is necessary to guarantee the evidence of new habits that keep flourishing. In this view, Peirce seems to be stating an essential difference between laws of mind and laws of matter. We should at least acknowledge that he attributes a different grade of rigidity or a different range of laxity to the activity of these phenomena. It is interesting to recall that James, in the Appendix C of his PU, seems to be referring precisely to *The Law of Mind,* insisting upon the general conviction of the irreducibility of phenomena over any human attempt to get any accurate image of it. In fact, he was convinced that « pluralistic synechisms » were compatible only with a vision of sciences providing approximate or statistically generalized images of reality.

Before approaching the last two sections of the article, which concern particular phenomena of the law of mind, namely those of personality and communication, Peirce summarizes in five points all the steps made so far in order to give a clear summary of the general law of mind. He first excludes any nominalistic approach to ideas as nonsensical. He then maintains that instantaneous feelings flow together in a continuum of feeling that keeps, in a different degree, the vivacity of feeling and also gains generality; thus continua of feelings or general ideas are neither mere words nor descriptions of conditions but living realities just as feelings are. Accordingly, the law of mind is not just a general description or formula, but mental phenomena show themselves to be governed by: «a living idea, a conscious continuum of feeling, which pervades them, and to which they are docile». Such a law preserves a degree of arbitrariness and only requires that mental phenomena influence and be influenced by one another. In this regard, such an degree of arbitrariness seems to be neither insignificant, nor prominent.

Focusing upon human consciousness, Peirce points out that apart from theories, all the phenomena of double or triple personality being studied by psychologists at the time seemed to convey that: «personality is some kind of coördination or connection of ideas». Actually, Peirce states that: «a connection between ideas is itself a general idea, and that a general idea is a living feeling». In this view, he suggests that personality is a kind of general idea, and insofar as it cannot be fully apprehended in an instant, it can be completely embraced in a finite time but: «it has to be lived in time». Again, he discusses moments, that is infinitesimal intervals of time, in which personality can be immediately apprehended as it is presently felt, but only as immediate self-consciousness. Indeed, for personality, the trait of coordination assumes the form of a «developmental teleology». Not only are ideas connected to realize any predetermined end in the present, but «personal character» is essentially oriented to future ends. In this view, personality involves a certain degree of unpredictable development, growth, life. Contrary to any mechanical activities, personality remains open to change because there is no possible certain prevision of the long-term ends of its conscious present acts. Peirce believes that, according to the principle of growth claimed by a «genuine evolutionary philosophy», that is to say, a philosophy that keeps such a principle superior to mechanical laws, evolutionary philosophy turns out to be deeply compatible with the idea of a personal creator of the universe. As he has already explained in *The Doctrine of Necessity Examined*, the problem is indeed the mystification of evolutionary theories pursued by «mechanical philosophy».

In the end, Peirce draws a possible theoretical conclusion from two assumptions coherent with the law of mind. From the statements that ideas can only affect each other, and that to be affected they should be in continuous connection, Peirce concludes that: «matter is not completely dead, but is merely mind-hide bounds with habits». This is another point which James in MM could have considered worthy of a deeper comparison between Peirce and Bergson's definition of matter. As we will see, Bergson considered matter *en gros* as a last grade of the spirit, preserving an immanent metaphysical priority of spirit or mind over matter. Such a "mentalization" of matter seems to emerge in Peirce's view, particularly in the group of articles published on «The Monist» and as we will see, especially in *Man's Glassy Essence*. Peirce points out that diversification is the vestige of life, and matter seems to retain elements of diversification. In this view, he discusses «embodied

ideas» to explain how communication between two minds can happen. What he is looking for is an explicative hypothesis of the relationship between different elements of nature (mind-body) which remains consistent with his theory of continuity and does not rely upon mechanical necessity. Thus Peirce's hypothesis of the still "life" of matter is not absurd since it considers both communication between different minds and between feelings and nerves and this would not leave sensation as a: «general fact absolutely inexplicable and ultimate».

II.1.4.4 Man's Glassy Essence

In this October 1892 article, Peirce proceeds with his discourse. As he recalls, his first article of this "series" – he acknowledged the relationship among this group of articles – was about the «brick and the mortar» of a philosophical system, whereas the followings articles were concerned with the issues of chance and continuity, respectively. In this broader view, he seeks to clarify the: «relation between the psychical and the physical aspects of a substance». To this extent, he begins to look at the constitution of matter in general in order to frame a molecular theory of protoplasm which is the point of the article.

According to contemporary physics: «sensible matter is composed of molecules in swift motion and exerting enormous mutual attractions, and perhaps repulsions, too». Modern molecular theory of matter is derived, in great part, from the mechanical theory of heat. The physicist Joule showed that heat was a form of energy, not a substance. Rankine proved that such an energy could not be due to physical effort and this fact drove physicists to conclude that it should be a «mode of motion». Therefore, gases, liquids, and the molecules of solids were supposed to move along different paths, that is, linear, curvilinear, and in orbits or quasi-orbits, respectively. Peirce is mainly concerned to point out that experiential resistance to compression and to interpenetration of bodies is not absolute but only limited and that such a reaction is due to: «kinetic and positional energy». In a nutshell, for bodies, consequently for molecules and atoms, we cannot talk about «absolute impenetrability» or «exclusive occupancy of space», but, relying on the theory of energy, we should admit: «finite positional attractions and repulsions between molecules». In fact, hypothetical absoluteness of matter has no analogy in existent

known phenomena, and it would be a violation of the principle of continuity which Peirce has stated so far.

> In short, we are logically bound to adopt the Boscovichian idea that an atom is simply a distribution of component potential energy throughout space, (this distribution being absolutely rigid,) combined with inertia.

Thus Peirce tries to explain one of the most important statements of modern molecular physics - R.J.E. Clausius's Law of the Virial. It states that: «total kinetic energy of the particles of a system in stationary motion is equal to the total virial». The application of his theorem provides the equation of the state of gases and it allows us to calculate average total kinetic energy even for very complicated systems that defy an exact solution. Nowadays, this theorem is applied in a variety of fields ranging from statistical mechanics to astrophysics. In Peirce's view, the law of the virial is interesting since it deals with material, and not perfect systems of particles, offering an evident analogy between micro-constitution of matter and macro-constitution of the cosmos[29]. Moreover, according to Amagat's experiments on the elasticity and expansion of gases, we can infer that: «the mean kinetic energy of a given mass of the gas for a given temperature is greater the more the mass is compressed». Since laws of mechanics sustain the notion that the mean kinetic energy of a moving particle should remain constant at any given temperature, the supposition is that, upon condensation of the gas, the mean mass of a moving particle diminishes, that is to say that dissociation goes together with diminishing of the volume since the mass of many molecules is: «dissociated or broken up into atoms or sub-molecules». Arrhenius's doctrine of molecular conductivity follows this hypothesis. However, there are at least three different kinds of dissociation, namely, the dissociation of a chemical molecule to form others, that of physically polymerous molecules, and the dissociation of unsaturated sub-molecules and atoms from the molecule. Indeed, Peirce is interested only in the latter kind of dissociation:

> The molecule may, as I have said, be roughly likened to a solar system. As such, molecules are able to produce perturbations of one another's internal motions ; and in this way a planet, i. e. a sub-molecule, will occasionally get thrown off and wander about by itself, till it finds another unsaturated sub-molecule with which it can unite. Such dissociation by perturbation will naturally be favored by the proximity of the molecules to one another.

Again, we notice that macroscopic-microscopic remands are continuously underlined by Peirce's comments. In this theoretical scientific framework, which deals with energy, real space, and real movements between molecules, Peirce begins to consider the second part of his argument. Thus he comes to focus upon a particular class of substances which is that of the life-slimes or protoplasm. After pointing out its main properties and underlining those which are most interesting for his purposes; he will look for a «hypothesis of the molecular constitution of this compound» which accounts for these same properties.

Protoplasm exists in two states of aggregation, solid (or nearly solid), or liquid (or nearly liquid). Its chemical complexity is evident by its extreme instability. In fact, solid protoplasm can be readily decomposed into liquid condition both by heat and cold. Physicists suppose that the molecules of protoplasm likely contain several thousand atoms and, therefore, their chemical varieties run into billions or trillions of substances. The change of status begins from a point of disturbance, which can be external or spontaneous, and then spreads through the mass. Protoplasm recovers its solid condition as soon as the cause of the disturbing perturbation is removed. When the liquefaction is prolonged or frequent, protoplasm shows a fatigue, a tendency to retain solid status. Whereas a prolonged period in the solid states restores its capacity to be liquefied. Further extraordinary properties of protoplasm include the ability to grow, reproduction, habits taking and feeling. On growing, Peirce underlines how protoplasm grows, preserving its distinctive breed and individual characters so that nerve-slime growing nerve-slime, muscle-slime as muscle-slime, nerve-slime begets nerve-slime, muscle-slime begets muscle-slime etc. Moving on to habits and feeling, it is observed that past paths of liquefaction are likely to be adopted in the future and, most interestingly, that protoplasm feels. Of course we can only rely upon a fair analogical inference to state that all protoplasm feels, since we cannot have direct universal evidence of this property. Indeed, Peirce writes that protoplasm: «not only feels but exercises all the functions of mind». As we foresaw, moving from modern molecular theory, the problem is now to find a hypothesis which explains one and all these surprising properties of protoplasm. For instance, there are precise conditions to be fulfilled in order that a broken molecule of protoplasm assimilates a sub-molecule of food, namely the food should have the right chemical composition, it should be in the right place at the right time, moving in the right direction at the right velocity. If such conditions of stable

retention are not respected, at least not exactly, the assimilated sub-molecules will be in danger of exclusion every time a similar situation recurs. In this way, Peirce considers the law of mind's «peculiar characteristic of not acting with exactitude» still to be explained. This illustration of habit seems to be different from other mechanical examples of actions analogous to habit since it is not static and it does not violate the reversibility of matter stated by the law of energy[30]. At this point, Peirce quotes James's suggestion that: «"the phenomena of habit [...] are due to the plasticity of [...] materials"» (PP: 110)[31]. Plasticity means limited elasticity. The forces of attraction and repulsion showed so far do not strictly follow the law of energy. Thus the molecular actions which take place in a solid strained beyond its limits would only slightly resemble protoplasm's liquefaction by mechanical force. The very special mark of habits taking is the «inexactitude and want of complete determinacy» which is not also characteristic of the solid's capacity to settle. A molecular explanation of habit can be easily applied to systems of atoms having polar forces, so that an advocate of tychism would conclude that the phenomena of habit results from a purely mechanical arrangement. In this view, there would be no need to introduce the hypothesis of habit taking as a primordial principle of the universe. Peirce replies:

> But let the mechanical explanation be as perfect as it may, the state of things which it supposes presents evidence of a primordial habit-taking tendency. For it shows us like things acting in like ways because they are alike. Now, those who insist on the doctrine of necessity will for the most part insist that the physical world is entirely individual. Yet law involves an element of generality. Now to say that generality is primordial, but generalisation not, is like saying that diversity is primordial but diversification not. It turns logic upside down. At any rate, it is clear that nothing but a principle of habit, itself due to the growth by habit of an infinitesimal chance tendency toward habit-taking, is the only bridge that can span the chasm between the chance-medley of chaos and the cosmos of order and law.

This is a very important passage that clarifies Peirce's general view of continuity and chance at the time. His hypothesis of a principle of habit taking which regulates the growth of "an infinitesimal chance tendency" towards habit-taking is a solution which provides a "bridge" – he says – between chaos and order. Avoiding the attempt to explain molecular reproduction, he then approaches protoplasm's property of feeling, which is, together with habit, the most interesting one for his hypothesis.

In particular, Peirce considers such a property of feeling equal to having consciousness and since protoplasm is a chemical compound that can be artificially

reproduced in a laboratory, the question is how such a surprising property could be explained on mechanical grounds, or what element of the molecular arrangement might be the *cause* of protoplasm feeling. Indeed, either we are to accept a form of weak psycho-physical dualism, or we should look for a mechanical explication of feeling. But the laws of mechanics cannot account for feelings unless admitting that physical events are undeveloped psychic events. Here Peirce's monism's allegiance to a late nineteenth century understanding of matter is clear. Thus holding to the monist conviction that phenomena of matter are caused by perceptible influences of habits upon mind, he wonders why protoplasm sometimes displays phenomena of "accommodation". According to the law of mind, these phenomena of physiological breaking up of habits are accompanied by an intensification of feelings[32] on a psychological level. From Baldwin's *Dictionary,* we can see that these phenomena involve moments of «reviving consciousness». Peirce explains that there are situations in which ascertained habits fail to work and remove the stimulus with which they have become associated through time. Such an interruption of regularity introduces the possibility of «non-habitual reaction» which are real infinitesimal changes within that principle of regularity which is habit taking. In other words, at a certain moment and place, new spontaneous reactions can occur and try to weaken consolidated regularities. These differences are almost «insensible fortuitous departures from regularities», Peirce writes, owing to the fact that matter never perfectly obeys its ideal laws. However, in protoplasm they are able to produce large effects because of the specific condition of matter. In fact, protoplasm has a very peculiar unstable equilibrium which allows common departures from regularity to result, particularly enhanced feelings. In this regard, the supposed extremely unstable condition of protoplasm reminds us of James's hypothesis of the brain as an extremely unstable organ (cf. James, The Ingersoll Lectureship,1898) open to new habits.

A mechanical theory of life necessarily ends up relying upon a tychistic idealism. In fact, where we detect chance-spontaneity's aspects of reality, some feeling exists and exactly in the same proportion. Indeed, Peirce claims that feeling is just the internal aspect of chance as far as chance is the external aspect of feeling. According to his cosmological theory, the hypothesis of a "primeval chaos" is from a physical-external point of view a «mere nothing», but on the inward side it is not a «blank zero». Even if chaos did not exist for real, since «real existence, or thing-

ness, consists in regularities», it is probable that there is an extreme intensity of *consciousness-feeling* as well as an almost unlimited diversity of chance. After a non-habitual reaction has taken place and removed the stimulus, passed habits tend to re-establish their normal course of action, and as to what concerns protoplasm the recovery is very quick and only feeling remains to testify that: «the bonds of law have ever been relaxed». According to his view of chance and habit as observable operative tendencies of reality, Peirce's first conclusion about the relationship between psychological and physical fundamental elements is that, where actions occur under established regularities, feeling «takes the mode of a sense of reaction», and such a sense of reaction defines psycho-physical relations. Indeed, Peirce states that it is a question of perspective. Observing from the outside a thing which acts and reacts to other things, it appears as matter; but, from an internal perspective, that is to say, considering its «immediate character as feeling», we can see it as consciousness. These two views are not divisible one from the other, rather they are deeply combined. In fact, both the laws of mechanics and laws of mind hinge on the pivotal principle of habit. They are all acquired habits, and the action of habit is generalization and generalization is the «spreading of feelings».

Peirce then begins to consider the relations that general ideas have with physical elements, namely, how they appear in the molecular theory of protoplasm that he has outlines so far. In particular, he suggests that: «consciousness of a habit involves a general idea». When a certain regular action is performed by protoplasm, certain atoms, which are analogous from a physical point of view, are replaced by others. Peirce claims that, even if these atoms are thrown off on different occasions, they have an «inward sense» of their being analogous. When an associated feeling recurs there is a: «more or less vague sense that there are others, that it has a general character, and of about what this general character is». In this view, although protoplasm can perform habits in slightly different ways, Peirce points out that even general chance motions show a tendency to spread and perfect their own generality. Therefore, such a modification of consciousness (general ideas) can also [go with]? chance actions having any regular/general relation. Moreover, Peirce claims an important analogy between general ideas and persons, properly stating that: «indeed, a person is only a particular kind of general idea». As is well known, this famous assumption has been widely investigated and discussed by Peirce scholars, André de Tienne and Vincent Colapietro having recently written interesting pages

on this topic (see Calcaterra (ed.) 2006). In brief, Peirce believes that every general idea has a personality or internal "unity of the ego" which [persist identical]? in passing from one mind to the other. In a previous article he wrote that «a person is nothing but a symbol involving a general idea», but this position in now sharply criticized as too nominalistic and firmly replaced by the assertion that: «every general idea has the unified living feeling of a person». According to this theory, a person exists whenever the feelings «out of which he is constructed» are able to influence one another. Indeed, Peirce suggests that the law of mind points to the existence of "greater personalities" which a few lines later he shall call «corporate personalities». The general character of *feeling-consciousness* of habits allows Peirce to undertake the personal/unitary characters of consciousness of general ideas and, according to his "theory of person" as a particular kind of general ideas, to draw the possibility for bodies which are in very close and sympathetic relationships to form personal consciousness. Moreover, he proposes a further grade of generalization - that of minds of corporations. Thus it seems that such greater personalities emerge from common shared practices, as in the Society of Christian Endeavor or the Christian church. Such phenomena seem to Peirce to be a much more interesting and stronger field of inquiry than the likely phenomena of telepathy etc.

II.1.4.5 Evolutionary Love

This is the last paper out of five published by Peirce in «The Monist» between 1891 and January 1893. This article is deeply connected with *The Law of Mind*. At many points, Peirce claims to have applied his synechistic philosophy to mind and argues that his kind of synechism calls for an agapasticist sort of evolution, exactly that introduced here. Peirce begins talking about two contrarygospels, on the one hand, the gospel of love according to agapasticism and a sort of sentimentalism, on the other , the gospel of greed which spread following the French Revolution riding a stream of anti-sentimentalism. Peirce appeals to the statements of Saint John to draw the lines of an evolutionary philosophy, teaching that growth comes from love and that mind, as well as cosmos in so far as it is mind, develops in this way. However, the gospel of greed led in recent history, particularly in the 19th century, while economic issues have been at the centre of sociopolitical attention. Political

economy has convinced us to believe that greed was the only way to gain all social *summum bonum*. Peirce ironically remarks upon the paradoxical outcomes that such an association of economy and greed has ultimately produced. In fact, sentiment has been completely dismissed, whereas greed has been seen as having beneficial effects even in the elevation of the human race. Trying to unravel this weave of mystification, Peirce recuperates the value of sentimentalism. Following the 'Reign of Terror' in France, it was completely expunged by rational reflection as a virus of 'correct' thinking. But Peirce believes rightly that it is time to reconsider such an immediate reaction and to claim that sentimentalism is not a bad attitude in itself. In fact, it accompanies those ideas we feel to be true, but of course we have to pay attention to its quantity. So having outlined the two main gospels of progress, the first considering every individual merging their individuality in sympathy with their neighbours, and the other stating that every individual should strive for themself, Peirce confesses his sentimental predilection for the agapastic theory of evolution.

Indeed, Peirce distinguishes three main theories of evolution: 1) evolution by fortuitous variation, or *tychastic* evolution; 2) evolution by mechanical necessity, or *anancastic* evolution, and 3) evolution by creative love, or *agapastic* evolution. These are composed, he says, of the same general elements, only Agapasm exhibits them most clearly. In fact, it is possible to affirm that both Agapasm and tychasm depend upon forms of reproductive creation, «the forms preserved being those that use the spontaneity conferred upon them wise as to be drawn into harmony with their original»; the difference is that tychastic progress is owing to casual distribution of talents (i.e. «it makes the felicity of the lambs just the damnation of the goats»), while the advance of the agapastic advance: «takes place by virtue of a positive sympathy among the created springing from continuity of mind». As for Anancasm, this mode of evolution agrees with Agapasm at the point at which tychasm departs from it. In fact, development goes through ebbs and flows but tends to foreordained perfection. Therefore, tychasm and anancasm are shown to be degenerated forms or species of Agapasm. Peirce believes that the philosophy of Hegel is anancasticist, and that is why living freedom is practically omitted from its method. Actually, anancasticism integrated with tychism produces genuine agapasticism, and Peirce believes that Hegel was aiming at this idea.

Peirce compares these three modes of evolution – tychism, anancasticism, and Agapasticism – to the three fundamental colours: red, green, and violet, claiming

that even if elements are really different, there are no sharp demarcations in nature. We should say that natural or real difference is never neat. In this view, the questions to be posed are «whether three radically different evolutionary elements have been operative» (chance, necessity or habit/growth); and: «what are the most striking characteristics of whatever elements have been operative». Peirce wishes to analyse these two questions in relation to a precise issue, that of the «historical development of human thought», and to do that he should first formulate three different definitions to detect the three conceivable modes of the development of thought that he has indicated so far (T – tychastic; A – anancastic; AG – agapastic).

- (T) slight departures from habitual ideas in different directions indifferently, quite purposeless and quite unconstrained whether by outward circumstances or by force of logic, these new departures being followed by unforeseen results which tend to fix some as habits more than others;
- (A) new ideas adopted without foreseeing where they tend, but (1) having a character determined by causes either external to the mind (changed circumstances of life), or (2) internal (logical developments of ideas already accepted, such as generalizations);
- (AG) adoption of certain mental tendencies, not heedlessly (as in tychism), or quite blindly (by mere force of circumstances or of logic as in anancasm), but by an immediate attraction to the idea itself, divined by the power of sympathy, that is, by virtue of continuity of mind.

This last mental tendency can be of three varieties: 1) affecting people or the community in its collective personality, being thence communicated to such individuals as are in powerfully sympathetic connection with the collective ; 2) affecting a private person directly, he is only able to apprehend the idea by virtue of his sympathy with his neighbours under the influence of a striking experience (i.e. the conversion of St. Paul); 3) affecting an individual, independently of his human affections, by virtue of an attraction it exercises upon his mind, before he comprehends it (i.e. the divination of genius -- due to the continuity between the mind of a man and the «Most High».

According to the reality of these categories of evolution, Peirce claims that it is not possible to have a perfect test or absolute criteria to ascertain the influence of these different factors. Rather it is a matter of «quantitative symptoms» which could be traced and used as valid aids to make an approximate judgment of each

contribution (cf. James, PU, Appendix C). In particular, as to what concerns the historical evolution of thought, we can use the test of minute variation to detect tychasm, even if it satisfies both tychasm and agapasm. A more specific test might be to focus upon those turns contrary to the purposes animating men which in the history of thought occur at certain points through continuous imperceptible steps. For students of the history of mind, this view might confirm the idea that: «tychasm has been the sole method of intellectual development». Peirce is against such an opinion since he believes that, at their very emergence, ideas are just «freaks» and that bigger steps have often been confounded with a succession of smaller steps in order to avoid the unnatural hypothesis either of the "spirit" of an age or of a people (cf. *Man's Glassy Essence*, "corporative personalities"). Indeed, Peirce believes that the development of thought has seldom been of a tychastic nature, with the exception of the history of Christianity. In his example, which considers the 500 years since Constantine's edict (313 A.D.), Peirce points out that the Christian's genuine intention to live and spread universal love was continuously accompanied by small slips into partisan spirit and in the end the tychastic action became evident in the destruction of the libraries of Alexandria and then Rome according to the motto that: "Ignorance is the mother of devotion".

Anancasm, Rather, can be distinguished from tychasm because it proceeds by successive strides with pauses in between. It resembles a succession to the throne between the strongest habits of thought which often do not even belong to the same family but to contrary ones. This mode is also distinguishable from agapasm for its lack of purpose. In particular, as Peirce has already stated, there is a form of external anancasm owing to cataclysms or strong external influences which can occur in several degrees of intensity and even if talking about mind, it is always a matter of internal and external causes. Its presence is in most cases unmistakable. Then there is a form of internal anancasm or «logical groping», which is the rule of the development of philosophy. Such a modality of advancement follows a predestined line that, Peirce claims, it cannot: «foresee if it is to be carried nor to steer its course». Hegel's philosophy was an attempt to turn logic from a subjective guide to correct thinking into the real origin of historical thinking and, moreover, of historical development. But in this view, Peirce admonishes that Logic should be able autonomously to control its own course of development. This implies that there is no room for free choice since, from given premises: «only one conclusion

can logically be drawn». Peirce claims that such a common error is due to an unfair conception of logic, and suggests that, in the «logic of relatives», this false notion does not hold good. Thus, in1893 Peirce introduced his logic of relatives as a fundamental corollary to his discourse. In conclusion, Peirce also tries to state by analogy a proportionate correspondence between the greatest anancastic changes in the development of thought, in the development of a man, and in that of historical movements. He establishes that 33 years is the average for men and 500 years is the approximate period of natural eras.

Finally, the distinctive character of the agapastic development should be its purpose. Indeed: the «purpose being the development of an idea». Peirce claims that the continuity of thought that he has already proved in his paper *The Law of Mind* should provide us with a: «direct agapic and sympathetic comprehension and recognition of it». In his view, the apparent agapastic development of thought and the continuity of mind (synechism) are arguments corroborating each other virtuously. Even if Peirce confesses that he is unable to produce a cogent demonstration of the existence of the 'spirit' of an age or of a people, which would proving simultaneously Agapasticism and Synechism; nevertheless, he feels confident to marshal these arguments to his theory, in particular the fact that different men often make the same discoveries simultaneously. This fact would sustain Peirce's conviction that: «the greatest achievements of mind have been beyond the power of unaided individuals». This evidence is still more resonant if we consider that sublime ideas are pursued by individuals which showed limited intellectual powers. We ought to think either that at certain times the average individual was very well educated and many possessed superior intellectual powers, although this is for Peirce historically untenable; or that there was something else that was in part independent of these individuals' particular skills. Peirce recalls recent discoveries and inventions, such as the planet external to Uranus made by Leverrier and Adams, the mechanical theory of heat exposed in February 1850 by Rankine and separately by Clausius, and the doctrine of natural selection by Wallace and Darwin. In particular, the medical application of ether is indicative for Peirce, since it was not an immediate consequence of scientific discoveries, but rather suggests that the motives for this step are to be attributed to the mainstream idea of the times, that is, the desire for gain and philanthropy. These influences seem to have a historical development independent of particular realities and,

moreover, influence «unreflecting people» at certain points with great force. Hence, Peirce is skeptical about the possibility of considering any great discovery «properly» and completely as individual achievements.

II.1.4.6 CP 6.164-184 and The Logic of Continuity (8th Cambridge Conferences «Reasoning and the Logic of Things» (1898))

The Cambridge Conferences «Reasoning and the Logic of Things» were a set of eight lectures given by Peirce (employed by James) in 1898. In their correspondence, arranging the main topics of the lectures, James wished for a development of his cosmogony, *synechism* and *tychism.* Moreover, he hardly suggests avoiding mathematical demonstrations and chose scattered issues of vitally important character[33]. In particular, I will consider the eighth and last lecture - *The Logic of Continuity* - which is another important element of Peirce's conception of *synechism*.

In the first lecture *Philosophy and the Conduct of Life*, Peirce sketched the main lines of the conferences, as usual contradicting suggestions made by James. According to a classification of sciences that he would reassess in 1903, Peirce considers the correct way of reasoning to be indispensable to metaphysics. Philosophy seems to have only two parts - logic and metaphysics. At this time, Peirce was convinced that a theory of logic should conduct honest and methodical metaphysical reasoning and that logic evidently relies upon mathematics, which is the most abstract of sciences.

Philosophical rationalism can be rightly considered ridiculous, and we often labour under the delusion that we act upon irrational reasons. However, Peirce observes that there is a natural division of tasks or areas of influence between reason and instinct, that is to say, between "disinterested" theory and "utilitarian" practice. However, there is an evident difference for, as to what concerns life and *prima facie* issues of vital importance, we act upon beliefs, while science works in situations. Peirce makes fun of those who are able to instantaneously change their beliefs in order to be coherent to a philosophy of religion or a theory of ethics. Indeed, they are labeled as stupid for not having the intelligence to consider or to feel the change of commitment that such a passage would require. In fact, the change in our beliefs is a slow and stratified process, while in science the fact that

some hypotheses are modified or completely abolished should not result in any particular hardship. Plato was right as to the definition of the two general aims of the sciences, that is, either a moral or a purely theoretical one, and Peirce particularly underlines the latter outcome of the mature philosophy of Plato to sustain his observation that sciences show a historical tendency to evolve into more abstract sciences[34].

In this view, the importance of vital truths – intended in their utilitarian and practical sense – is limited when compared to the importance of eternal and ideal truths. This conclusion is a bit confusing since Peirce has just admitted that he considers instinct to be the deepest and most secure part of our soul compared to reason, its most superficial and fallible part. In a naturalistic and evolutionary framework, Peirce considers as more fundamental those ancient capacities which benefit the entire tradition of human genetic and social history, and according to this view, he also acknowledges that internal changes of human beings happen through experience. Both reasoning and sentiment develop through experiences. Thus superficial or rational knowledge – as a form of experience itself, that which is more apt to change quickly in respect to instinct, is slowly filtered from instinct and comes to change our lives. Such is the most vital change that metaphysics, logic, and mathematics can produce.

Most importantly, Peirce makes very important comments about continuity and connects these observations to the eighth and final lecture *The Logic of Continuity*. As other metaphysicians, Plato disregarded secondary causes (external) and had a negative attitude to matter. Moreover, Peirce believes that, in the early part of his life, Plato kept on making the error, like Heraclitus, of believing that transient things are continuous. Passing things are punctual and discrete while eternal things (space, time, and laws) are really continuous. Only in the last part of his reflection, reconnecting his philosophy to mathematics and pure ideas to numbers, did Plato probably change his mind and attribute potential reality to ideas. In this view, Peirce considers the "pure mathematician" as a sort of Platonic who has corrected the Heraclitean error concerning continuity and goes on to inquire after the eternal world of potential realities.

Before addressing the lecture, we shall consider the collection of extracts about *continuum* that are gathered in the 6th chapter of CP 6.164-184 and in fact precede the 8th Cambridge Lecture of 1898. In the classic collection of Peirce's papers, this

intermediate step seems important to link the 5th chapter - *The Law of Mind* - to the 7th chapter - *The Logic of Continuity*. [These extracts are mainly four]? and are taken from the *Century Dictionary* (CP6.164 1889), while 165-167 is a marginal note on Peirce's copy of the *Dictionary* dated September 1903, CP6.169-173 are part of his definition of «Synechism» for Baldwin's *Dictionary of Philosophy and Psychology*, vol. 2, p. 657 (1902), CP6.174-176 are passages of "The Bedrock beneath Pragmaticism" (1906); and CP6.177-184 is a long extract about Achilles and the Tortoise from *A Sketch of Logical Critic* (c.1911).

In the first section, Peirce provides an exemplification of continuum in mathematics and philosophy. He claims that the continuum is an «intimate» connection of elements like that of the instants in an interval of time, or the property for a point to move between distinct positions in space that are identifiable at each instant of time. He then sums up the three main definitions of continuity given by Aristotle, Kant, and Cantor, underlining the main difficulties for each one and then proposing his own attempt to define continuity through the properties of Kanticity and Aristotelicity. What is most interesting for us is CP 6.168, probably also dated around 1903, because in these lines Peirce reformulates the assumptions about continuum that he made in 1892 in *The Law of Mind*. He points out that further studies have proved that Kant's definition had been misunderstood, first and foremost by Kant himself. In fact, Kant defined continuum as «that all of whose parts have parts of the same kind», but he understood his own definition as infinite divisibility. This confusion was problematic since there are mathematical counterfactuals such as rational fractional values being infinitely divisible even if they do not suit what common sense means for continuity. According to the aim of remaining loyal to the common idea of continuity, Peirce gives two possible readings of Kant's definition. We have to say either «that a continuous line contains no points», or: «that the principle of excluded middle does not hold of these points». Actually, the principle of excluded middle applies only to individuals, but points on a continuous line do not have actual existence. That is why, as soon as this principle is applicable, continuity is already broken for: «a point or indivisible place really does not exist». Paying attention to the difference between infinite divisibility and the common sense idea of continuity, Peirce can consider Kant's definition as correct since it implies that a continuous line contains no points. Individuality of points emerges analytically once that continuity has been broken. Indeed, infinite

divisibility does not gain continuity, for continuity is something dealing with interpenetration not with division. To convey such a distinction, Peirce imagines the action of «breaking grains of sand more and more». The point is that infinite divisibility «only makes the sand more broken», but: «it will not weld the grains into unbroken continuity».

The extract from Baldwin's *Dictionary* concerning the word 'Synechism' is also very interesting. Peirce again proposes the definition of synechism that he gave in *The Law of Mind*, but then goes on to consider the motives for such a philosophical tendency. Its most important reason is to avoid inexplicable explanations, or, better, to deny any explicative power to ultimate and indeed inexplicable hypotheses. Peirce believes that banishing dogmatic unjustifiable hypotheses is the way to leave the road of science open to further inquiry. Except that he must consider some possible misunderstandings that could be drawn from such a synechistic requirement. In particular, he is concerned with the issue of the relation of continuity to generality and with that of the status of synechism. Peirce is very clear about the latter. In fact, he affirms that: «Synechism is not an ultimate and absolute metaphysical doctrine; it is a regulative principle of logic». Such a normative principle prescribes «what sort of hypothesis is fit to be entertained and examined», that is to say, it expunges those hypotheses that do not explain phenomena for they are not "working hypotheses" but only unverifiable justifications pretending to be possible explanations in the future. Generality, rather, is the only way to comprehend facts. It is the condition of possibility of knowledge. Peirce claims that there is a connection between generality and comprehension for generality is a rudimentary form of continuity, and: «Continuity is nothing but the perfect generality of a law of relationship». So the synechist is called to generalize «from that which experience forces upon him» in order to understand facts. Moreover, reality is for the synechist: «the way in which facts must ultimately come to be understood». This statement is not contradictory because Peirce has made clear that Synechism is not an absolute metaphysical doctrine and hence for the synechist "ultimacy" is not to be absolutely realized. In a nutshell, Peirce's synechism amounts to a regulative principle of logic claiming that inexplicabilities, or what is not able to be explained or understood: «are not to be considered as possible explications». Accordingly, ultimate explications and inexplicabilities are coextensive. Continuity does not present ultimate explications

since it is properly: «the absence of ultimate parts in that which is divisible». In this view, continuity and generality are connected to logical understanding for our understanding is only possible under the form of generality and generality is the same as continuity. We should recall that Peirce attempted to demonstrate that generality does not have to be the absolute perfection of laws, especially as to what concerns the law of mind.

In the third extract (1906), Peirce returns to continuity as he treated it in *The Law of Mind* to clarify what he meant by material parts. In the strict sense, in fact, if the object W has material parts, this means that each and every one of these parts are other than W; all parts have some internal nature (i.e. all times, all ideas etc.); they form a collection of objects in which none occur twice; and the being of W is constituted by the being of every part of the collection together with the connection between all sub-collections. But things having «an essential purpose or use» cannot have material parts in this rigorous sense, but only in a looser one. Thus Peirce supposes that there is an object T whose concept implies C and C prevents it having material parts. If W is different from T only because of C, then the material parts of W are in a looser sense also material parts of T. In this view, either the concept of W derived from T is something as vague as its material parts, or the material parts likely belong to an immediate state of W that is a logical entity. To define material parts, Peirce claims that we need the concept of connection. In fact, the minimum connection existing between parts is their co-being parts of the same object, to be a collection. Attempting to give the substance of the definition of Bolzano's «equality in multitude», Peirce argues against the backwardness of logic and the *nominalistic* habit of thinking of logicians, which is no longer compatible with the generality of physical principles discovered in nature. Peirce claims that what mathematicians used to consider as continuum is indeed a pseudo-continuum. They represent continuum by the totality of real values (rational and irrational). These real values are iconized, Peirce says: «by the entire body of decimal expressions carried out to the right to all finite powers of 1/10 without going on to Cantor's ω^{th} place of decimals». Peirce argues that, in the "doctrine of limits", two values differ for a finite value, but this is possible just because such a doctrine does not consider Cantor's ω^{th} place of decimals. Indeed, these unlimited decimal fractions constitute a pseudo-continuum, that is to say: «a collection of objects absolutely distinct from one another». Consistent with the general view of a great

number of logicians who consider the universe constituted by «absolutely distinct individual objects», Peirce believes that a collection of absolutely independent members should be a pseudo-continuum. In particular, he means that every member of a pseudo-continuum is differently determined in some respect from the others.

In the fourth and last extract (c.1911), Peirce argues about continuous movement through the classic paradox of Achilles and the Tortoise. He tells us that three interlocutors had asked his view of this specific issue. Peirce is convinced that this was an arithmetical discussion concerning the research of an appropriate expression for empirical evidence. Then, beginning with the conclusion of Zeno concerning the inconceivability of movement, he focuses upon the main logical mistakes that many important authors made about this paradox. About Zeno's Paradox, he had discussions with James and particularly insists upon their general agreement about the fact that the Paradox confuted Dedekind's theory of continuity as well as their disagreements in the matter. Even if Peirce testifies to the morality of James's attitude towards his own thoughts, he recalls his «almost unexampled incapacity for mathematical thought, combined with intense hatred for logic», and he also apologizes for his arrogance while talking about this issue to James's classes, probably at his Pragmatism Lectures of 1903. Indeed, Peirce arrives at the same conclusion as James, that is, denying Dedekind's view, but he does not agree that this is proved by Achilles's argument as he maintains James believed. Again, he argues that there are no existing points on an existing continuum, and that a point placed on a continuum amounts to a breach of the continuity. The point is exactly about potentiality and its indefiniteness, in fact, even if the possible points of continuity correspond to possible points in the space, their non-actuality means that they are indefinite hence the exclusion of the principle of excluded middle. Peirce underlines that *must-be's* and *may-be's* are «very delicate objects for thought to handle», moreover, in this matter logic seems to touch metaphysics. He writes that he suggested that James read those passages about anticipations of perception in which Kant discusses the continuity of possible realities (CRV A169/B211)[35], even if James would have used that insight as his own and also seemed to disagree with it. Against James's claim, Peirce has to prove that the Achilles argument does not disprove the theory of continuum generally agreed by mathematicians. In fact, he argues that the Paradox which concerns space and time can be translated into

instants and points corresponding to the values of real and rational quantities preserving its truth. If we consider only all those places in space (and those instants in time) whose distances from a selected point (the same for all) are expressible as some fraction of an inch, so that we would have only a series of points whose distance from the fixed point stands to the inch «in the same *ratio* as that of one whole number to another», then the race would have happened as well. In this view, there would have been points in space without continuity. What could be objected is that the constitution of «actual time» is different, and about this hypothesis Peirce recalls his article *The Law of Mind* where he claims to have discussed such an alternative view and considered it a viable mode of inquiry. Also, James, Peirce confesses, considered this paper as one of the best his colleague's best. In this passage Peirce clarifies his notion of the continuity of time and consciousness, as he expressed it in 1892, that we *directly* perceive the continuity of consciousness. Yet to the possible objection that he confused appearance and reality, since something not really continuous can seem so, Peirce is persuaded that something could *seem* continuous if there is: «*some* consciousness that *is* so». This acknowledgment is very interesting , both because Peirce still maintained almost 20 years later the position he held in 1892 concerning continuity; and, that the *reality* and the *direct perception* of the continuity of consciousness is undeniable. It is also interesting to notice that in a letter [CP8.262, July 23,1905], Peirce wrote that he considers Pluralism as an unsatisfying doctrine, since he is sure that the logical doctrines associated with it, such as Achilles and the Tortoise, are false. Nevertheless, Peirce's conclusion is a very affectionate and devoted picture of James as a lover of truth and as an integral man who devoted his life to human understanding. He was a great philosopher, much greater in his personal manner than his lectures ever attested, and indeed a great psychologist: «even greater in practice than in the theory of psychology».

The eighth and last lecture of 1898 is *The Logic of Continuity*. Peirce is convinced that continuity is one of the most difficult concepts for philosophy to approach. First, we need to have a definition of continuity, but even then difficulties arise both on the side of logic, that is, how to establish a philosophical method of reasoning on continuity; and on that of metaphysics, that is, what about the genesis of continuity? As to what concerns the method, according to common sense, Peirce suggests relying upon geometry, more specifically on geometrical topics or topical

geometry[36]. Considering the series of abnumeral multitudes, Peirce states that this series has no limit at least among multitudes of distinct individuals. The only way for such a series to have a meaningful limit is to consider what is potential as general and what is general no longer individual. According to the definition of 'potential' as «indeterminate yet capable of determination in any special case», Peirce claims that there could be «a *potential* aggregate of all the possibilities consistent with certain general conditions» which would be: «greater in multitude than any possible multitude of individuals». But a potential aggregate as such does not contain any individuals, only: «general conditions which *permit* the determination of individuals». The analogy with the collection of whole numbers helps Peirce to get to the point of the nature of the conception of such a collection, which for Peirce is general, potential and vague. This vagueness should not prevent the possible determination of its objects. So although we cannot completely count the aggregate of all whole numbers, for the collection is endless and there is no last whole number, we have a conception of the entire collection of whole numbers: «it is a *potential* conception, indeterminate yet determinable». Back to the series of abnumeral multitudes, which is also a potential collection, Peirce wonders how this determinability could really happen and introduces his hypothesis – methodological and metaphysical – of the logic of relations. In fact, the only way to guarantee that in a potential collection individuals be distinguishable is by means of relations[37].

But what kind of relations? Or what kind of relation defines a perfect continuum? Peirce is looking for a general rule according to which individuals are potentially determinable by completely general characters. According to this view, a dyadic asymmetrical relation would not permit us to distinguish individuals related one to another since its extremities (A and B) would be points of discontinuity. A triadic relation, in which A is related to B by C, will result in a continuous: «self-returning line with no discontinuities whatever». Peirce claims that the logic of relations shows that continuity is a higher type of generality, continuity is «a relational generality». Questioning the way in which a continuum may be derived, Peirce as usual observes how logic evolves and points out that it is likely that all the evolution we know proceeds from vague to definite, from an undifferentiated differencing itself, as time goes from the indeterminate future to the irrevocable past. Hence, as a rule, he maintains that any continuum is derived from a continuum of higher generality. Peirce presents his evolutionary cosmology as a process of derivation

beginning before time and logic, and that it began in the: «utter vagueness of completely undetermined and dimensionless potentiality». Thus the evolutionary process is not the evolution of the existing universe, but an evolution of the Platonic forms. Hence existence may be a stage in this evolution and in particular this existence is a special existence, that is to say, a possible «theatre of reactions» among others. Moreover, Peirce claims that the evolution of forms, which begins in a vague potentiality where forms having a multitude of dimensions are continuous, and are not individually distinguished, must undergo a general «contraction of the vagueness of that potentiality» that makes the world of forms happen. Such a contraction also produces the definition of the relations between the dimensions of the continuum.

At the beginning, the cosmos of sense-qualities had a vaguer stage of development. According to the definition that sense-quality is a feeling, Peirce claims that, from such an indefinite potentiality, a pure sense-quality could emerge only spontaneously, and that such a definite potentiality is made possible by itself for: «it is a First». But this does not mean that qualities arose separately. As Peirce has suggested, it is: «the general indefinite potentiality [that] became limited and heterogeneous»[38]. Thus in his evolutionary cosmology not only would our existing universe have an evolutionary origin but the real Platonic world would too.. Peirce claims that two elements are to be assumed: «Freedom, or Chance, or Spontaneity», and the possibility of accidental reactions between qualities. In fact, the original vagueness became defined by some thousand qualities which spontaneously emerge through eternal possibilities. These possibilities should have reacted as events, that is to say, having an atemporal «here-and-nowness». According to *Tychism*, Peirce believes that «all that there is, is First, Feelings; Second, Efforts; Third, Habits », and therefore his discussion of *chance*: «[to] employ[s] a mathematical term to express with accuracy the characteristics of freedom or spontaneity». Yet this aspect of his evolutionism should not be linked to any materialistic doctrine. Indeed, his metaphysical system can properly be called «Synechism, because it rests on the study of continuity» and continuity is *Thirdness*.

Tracing a white line on a blackboard, Peirce tries to understand the logical process of generalization from occurrences that happens in things. His method is to treat generality from the point of view of geometrical continuity. There is a generalizing tendency or habit that belongs to the original vague potentiality (the

blackboard) more exactly: «It must have its origin in the original continuity which is inherent in potentiality. Continuity, as generality, is inherent in potentiality, which is essentially general». In this example, the white line is first and is not itself general, and the limit between whiteness and the blackness of the blackboard as second is discontinuous. The character of continuity can be derived from the continuous original potentiality (the continuity of the blackboard), and such a potentiality is linked by Peirce to the: «Aristotelian matter or indeterminacy from which the universe is formed»[39]. There are many possible reacting systems springing up in the original continuum, these all are of the order of Platonic worlds, and from one of these possible worlds our particular existing universe has become differentiated[40].

According to this theory of a universal tendency of things to take habits, Peirce claims that laws of nature will necessarily show certain characters. Thus he outlines some methods for reasoning about time and space as: «illustrations of the manner in which reasoning about continuity can be applied to give real vitality to metaphysical reasoning, and to cure it of its deathly impotency». In this lecture in particular, Peirce is clear about his aim and his way of making metaphysics grow up as a science. The metaphysician is concerned with general issues and as such their reasoning should be conducted by logic. Peirce developed his logic of relatives and he remained confident that, despite: «The failure of Herbart, whose attempt was made before either Mathematics or Psychology was ripe for it, does not argue that no success can be attained in that line».

II.1.4.7 Consciousness (CP 7. 524-596; CP 8.270-305)

In CP7 Peirce discusses consciousness as a «bottomless lake»[41]. Such a definition seems interesting and is indeed full of contemporary cross- references, especially to psychoanalysis. Of course, this is far from the focus of our work. Thus we just glimpse those passages that clarify how such a suggestive image can be linked to the issue of continuity. In fact, Peirce aims at describing an image of consciousness which does not correspond to a hypothesis of the brain – as psychology would expect – but to the characters of the phenomena of consciousness. His approach to consciousness is, therefore, *phenomenological* (Harvard Lectures 1903), stating that: «Consciousness is like a bottomless lake in which ideas are suspended at different

depths» (CP7.553). In this collection of papers CP7: Science and Philosophy. Book 3: Philosophy of Mind. Chapter 4: Consciousness (c.1900), Peirce discusses three categories of phenomena, namely monadic experiences, or simples, dyadic experiences, or recurrences, and triadic experiences, or comprehensions, according to a broader sense of the term 'experience'[42]. In his explication, what is interesting is that Peirce attributes *individuality* to the second category of experiences[43], rather than to feelings.

He then approaches the forms of consciousness, claiming that the classic Kantian classification of states of mind in Feeling, Knowledge, and Will should be revisited. In fact, he suggests removing sensation from the department of cognition or knowledge for it contains two different kinds of consciousness, namely feeling and willing. Hence he introduces a broader class of *Altersense* to which both sensation and willing belong and leaves only Mediate Cognitions in the class of knowledge. Thus, for Peirce *Feeling* (or primisense), *Altersense* and *Medisense* are the three correct forms of consciousness[44].

He introduces another important clarification concerning the intensity of feelings. Indeed, Peirce believes that feelings have two kinds of intensity, that is, the intensity of the feeling-consciousness and the intensity of *altersense* or of consciousness: «that lays hold of the feeling ». In his view, the intensity of feeling itself distinguishes, for instance, bright colours from dim ones, while the intensity of *altersense* is called vividness and it helps to distinguish sensation from imagination (i.e. sounds actually heard are more intense than past sounds). Another distinction is to be made between feeling something and to have a reflex feeling. In fact, according to his previous definition of vividness, Peirce claims that consciousness should reach a considerable degree of vividness in order to feel reflexively that there *is* a feeling of something[45]. According to the metaphor of the water in a lake – probably an implicit quotation of James -- Peirce suggests that there are different layers of consciousness at different depths. Reflex consciousness is attached to the upper layer of this lake which is the visible one and by a moderate effort of attention we can bring many items floating at deeper depths onto this layer. Indeed, the items or ideas are literally recognizable by their degree of vividness. They are recovered by our acts of attention and then sink again into the water. Peirce acknowledges that there are uncountable items of consciousness and maybe uncountable layers of depth. Moreover, since our efforts of attention are not

focused, during the time of our activity we do not know exactly the range of the water that we are considering and what influences we are producing in the water of our consciousness, as it were. Moving one of these objects is possible that others receive a certain impulse to emerge. In this view, we have to acknowledge that: «our whole past experience is continually in our consciousness, though most of it sunk to a great depth of dimness» (CP7.547)[46]. Hereinafter, Peirce specifies that every level of consciousness has a finite area, so that bringing up a number of ideas means submerge others.

Another interesting aspect of the metaphor of the lake concerns the continual rain falling upon the lake which, in Peirce's view: «images the constant inflow of percepts in experience». In particular, considering the relation of consciousness to reasoning, Peirce claims that ideas are the medium of consciousness, while percepts are uncovered by the medium. Indeed, he introduces a force of gravitation to convey the fact that deeper ideas require more effort to be discerned and brought to the upper level of consciousness. Actually, a mathematician would call the necessary effort of attention (or «virtual work») to discern ideas at the bottom of the lake as the: «'potentials' of the particles». Peirce explains that such a work is the negative of the potential energy which corresponds to the «degree of vividness of the idea» in the image of the water. Peirce also underlines that ideas «tend to gravitate toward oblivion» and that they: «react upon one another by selective attractions».

Thus ideas are attracted to one another by associational habits and dispositions, according to contiguity or resemblance. Less well perceived ideas require a greater effort to be discerned and controlled. In this view, purposes are ideas showing a particular capacity of association with vivid ideas and Peirce points out that they are apt to be brought up to the surface of consciousness and: «held up near the surface by the inflowing percepts and thus to hold up any ideas with which they may be associated». In reasoning we control our thoughts through our purpose to hold them up at a level of consciousness which can be analysed and present purposes more easily control ideas that are near the surface. Before approaching the issue of §5. Synechism and Immortality, Peirce claims that knowledge comes to us by observation. Part of it is «forced upon us» from an outside *mind* (Nature's mind) and part comes from the inward lake that he tries to depict. He believes that such an inward aspect of mind can only egotistically be called ours, for: «in truth it is we

who float upon its surface and belong to it more than it belongs to us». Finally, the mind seen from the inward depends upon its outward-Creator mind.

In CP 8.270-305, the eighth volume of the *Collected Papers* (Ch. V, § 3), all of Peirce's correspondence to James which directly addresses the theme of consciousness is gathered. So far, we have noticed that the issue of continuity for Peirce is deeply intertwined with those of generality and consciousness and we should now look at this paper before drawing any conclusions. The first letter is that of June 12, 1902 in which Peirce addresses a psychological question concerning which states of feeling pass in consciousness at the moment we form a new belief, suggesting a series of transformations of emotion into irritational feelings induced by fatigue. In particular, he suggests that «a belief is, as to its principal constituent, a habit of expectation» that sometimes can be belied by experience. At this moment, an emotion of surprise appears and then probably under the influence of fatigue it becomes a feeling of irritability, curiosity indeed. Curiosity seems to activate a reaction of looking for some possible account of what has happened, and then the emotion of insight, through fatigue again, is transformed into another irritational feeling called 'suspicion'. As a reaction, suspicion make us unveil the fault of the previous belief, then another emotion of "Bah!" is transformed into a feeling of doubt which bring us to establish a new habit of expectation.

Peirce is in accord with James's position in the VRE, even if he considers the ideas of Truth and Justice to be literally, and not only metaphorically, the great powers in this world. Peirce believes ideas create their defenders exactly like a desire to have the fire poked, he suggests, causes him to get up and poke it. In this action, there are two causes in action. There is an efficient causation and a final or ideal causation, but indeed the former is metaphorical compared to the latter. Final or ideal causation is not metaphorical. Peirce claims that: «material action is the mere husk of ideas». In fact, the brute element exists but: «the end of thought is action only in so far as the end of action is another thought» (see also CP8.250). At this point, he suggests dismissing the word 'thought' and talking about different kinds of "representation" in order to define what kind of representation constitutes consciousness. Then he suggests that James study the new ideas about «multitude and continuity» and offers the example of the plane spiral curve to suggest that, even if: «Being immediately acts only on Being and Representation immediately

acts only on Representation, still there may be two endless series, whereby Being and Representation act on one another without any *tertium quid*». Then, if «atoms are vortices in an ether, which ether is composed of atoms themselves, vortices in another ether, and so on ad infinitum», it is possible to think about a conversion of voice (sound waves) into heat and then that of heat into ether's heat and so on till the sounds assume the form of thoughts in one's mind and he understands the meaning of that sound.

In the second letter [September 28, 1904], which contains some possible references to the previous paper (CP7), Peirce has just read James's article "Does Consciousness Exist?". His first remark is about the term 'entity', that is to say, the notion that James is contesting when he discusses consciousness as a function. In fact, Peirce believes that such a term was not attributable to any definite philosophical position, at least in modern times. Then he discusses the possibility that James's approach in the first article of the *Essays in Radical Empiricism* be considered as phenomenological rather than psychological and that phenomenology is a very different science[47]. In his letter of September 30, 1904, James clearly replied that for 'entity' he intended: «a *constituent principle* of all experience, as contrasted with a certain *function or relation* between particular parts of experience» (CWJ 10: 480-1). James also underlined that he was not interested to what that term could mean in general, but that he supposed 'entity' to refer to: «some imperceptible kind of being». On October 3, 1904, Peirce explains to James – who explicitly said that he could not comprehend a word he had written – in other words what his question about consciousness really implied. In fact, he aimed at linking to three different doctrines about things the three possible senses in which psychologists use the term 'consciousness'. Set out as follows: for someone «*consciousness means feeling*»; for someone else «*consciousness is a dual affair* (therefore *not* feeling which has no duality) *and just how makes little odds*»; or, according to Peirce and others, there are «*three modes of consciousness, that of feeling, that of* EXPERIENCE *(experience meaning precisely that which the history of my life has FORCED me to think; so that the idea of a struggle, of not mere twoness but active oppugnancy is in it), and thirdly the consciousness of the future (whether veridical or not is aside from the question) in expectation, which enters into all general ideas according to my variety of pragmatism*» (CP8.291).

In Peirce's reconstruction, the first definition is provided by sensationalists such as George F. Stout, James Mill, and Lester F. Ward. The second one, rather, could be sponsored by those psychologists insisting on the wider, and opposing, dimension of consciousness such as Alexander Bain, William DeWitt Hyde, Hamilton, and Mary W. Calkins. As to what concerns the last definition of consciousness, Peirce collects under the same label very different philosophical traditions – Thomists, Hegelians, Intellectualists in general – and those scientific thinkers who consider that consciousness denotes all modes of mental life. Michael Maher, Karl Pearson and Josiah Royce would share the same opinion.

According to James's explication of what he meant by the term 'entity', Peirce rightly contests that James used the term perspicuously since it is not the word commonly used to mean: "a constituent principle of all experience". Being aware that the use of certain words could be deceptive, Peirce focused upon a difficult issue for James, and for philosophy in general, even if James succeeded in making clear, at least to Peirce, the position that he was contesting. In Peirce's view, nobody really discusses consciousness as an entity, although James's critique is clearly directed against the idealistic fashion spreading in psychology and philosophy on that matter. Peirce declares himself ready to change his mind reading James's articles, but hitherto he has supported the thesis that there are three different ways in which consciousness is a constituent principle of experience or life. In particular, Peirce believes that first there is «a certain tinge or tone of feeling connected with living and being awake, though we cannot *attend* to it, for want of background»; then experience «consists of our belief about a universe, – "the truth", – over against our opinions and beliefs»; and, at last, he states that we live within a continuous «bass counterpoint melody» of beliefs and that beliefs are expectations of the future, that is what pragmatism is. In this sense consciousness could be considered a general «constituent principle of all our life, and *a fortiori* of experience» (CP8.294).

Peirce is convinced that James's arguments in *Does Consciousness Exist?* belong to phenomenology and no longer to psychology. From a logical and methodological point of view, it is important to distinguish what kind of science one is pursuing because there are different standards of certainty at which each science should aim and there are also different principles to which it must appeal. Yet even if phenomenology and psychology are sciences of observation, they just «look upon

the same world», but they observe different aspects of it and, indeed, their relation to logic is not the same. Peirce carefully distinguishes between phenomenology as a foundational science, claiming that logic depends upon its observations; and psychology as a science that is in need of the aid of logic. There are three remaining observations. The first is a brief reference to James's hints at his pluralism. In fact, influenced by F. E. Abbot, Peirce suggests that there are three distinguishable worlds : the internal, the external, and the logical world. The second one concerns percepts. James complains that his doctrine is not easily understood because of our habit of «to think[ing] of realities as similar to percepts» and Peirce agrees on this point. The problem is that, even if Peirce considers percepts as the data of knowledge have a certain reality, indeed existence, he believes that only signs of a certain description possess a perfect reality. In particular, percepts, he states, are signs in psychology not in phenomenology. Finally, Peirce comes to James's "pure experience" to deny that it is experience at all and claims that there is a «recognized technical vocabulary» for every science[48]. Apart from his terminological remark, he suggests that his "phenomenon" is very near to James's "pure experience", although Peirce specifies that he does not exclude time and that he speaks of «only *one* "phenomenon"».

From James's correspondence, we see that Peirce again wrote to James on October 6, 1904 to apologize for not having sent his wife's message to his family, and confessing that his theory reminded him of the doctrine of immediate perception of Thomas Reid. Indeed, he adds: «Spinoza's notion come pretty much to the same thing». Against James's idea of the I think = I breathe (PP; ERE), Peirce ironically underlines the fact that there are men who involuntarily hold their breath while thinking, so that his equation might be wrong. At last, Peirce believes that «the *immediacy* of feeling» is different from: «the *immediateness* of immediate perception». He suggests calling the immediate feeling, in which no object is considered, «participant consciousness or coincident consciousness»; while the other, the direct consciousness is «*conjoint* consciousness».

In the letter of December 17, 1909, Peirce writes more specifically about the distinction between what he calls "Psychology Proper" and "Phaneroscopy". By 'psychology', he means a physiology of the mind, that is to say, a description which accounts for how the mind works, according to its correspondences to the brain or to generalized kinds of function. Phaneroscopy is, rather, a «description of what is

before the mind or in consciousness, as it *appears*, in the different kinds of consciousness» (cf. CP7.539ff) which he gathers under three headings: First, "Qualisense", second "Molition", and third "Habit". Peirce claims that there are three kinds of consciousness connected to the three elementary forms of his logical analysis (the ideas of *one*, *two*, *three*)[49].

II.2 Bergson on Continuity

II.2.1 Bergson and James

The correspondence between Henri Bergson and William James began in December 1902 when James had just finished reading *Matière et Mémoire* (1896) for the second time and the *Essai sur les données immédiates de la conscience* (1889), probably for the first time. About six years before, Bergson sent these works to James, but he would only receive a reply from the American philosopher much later. Indeed, he received a very enthusiastic letter from James, who sincerely expressed all of the joyful surprise he had in reading lines of philosophy that he felt so brand new and so close to his own way of thinking. James speaks of a « Copernican revolution » and explains that the core assumption he acquired from Bergson was his: « conclusive demolition of the dualism of object and subject in perception » (CWJ10: 167). In fact, he says, he had been working: « for many years past on the same line, only with other general conceptions than yours, I find myself most agreeably corroborated » (*ibidem*). From this moment on, the two confrères would be constantly in touch till James's death in1910. They had the opportunity to meet on different occasions, the first in Paris on 28 May, 1905 during the tour James decided to take in Europe before and after the *V Convegno Internazionale di Psicologia* which was held in Rome (April 26-30, 1905). During these few years, they became more and more careful readers one of the other, and owing to their fruitful exchange of books and articles, they contributed to the disambiguation of their ideas and to the diffusion of the common tissue of their enterprise in other countries (cf. Hibbert Lectures; Introduction to Pragmatisme 1911). At that time, in fact, they honestly sought convergences and divergences and with this aim in mind they used to seek from one another important clarifications of the most interesting or obscure ideas. Therefore, their correspondence is a valuable entrée to their intellectual relationship, their agreements and their differences. In a letter to Th. Ribot (1905), director of the «Revue philosophique», Bergson openly replied to what Gaston Rageot had written in his recent article about the supposed influences between Ward's presentation-continuum, James's theory of the stream of consciousness, and

his conception of écoulement intérieur. While Bergson settles the comparison between his philosophy and Ward's as a « bien lointaine ressemblance», by contrast, he is prompt and careful to correct the chronological details of his acquaintance with James's ideas and vice versa. In fact, once having been melded one with the other, Bergson worried that their philosophies might both be misunderstood. Moreover, he suggested that the article missed a general view on the direction that philosophy was taking at the time. There was a diffused need for a re-elaboration of philosophical issues traditionally approached by thinkers who were trained in mathematics. A number of contemporary philosophers were attempting to formulate a genuinely empiricist philosophy since there was a palpable interest in direct and immediate relations, one that necessarily had, –in Bergson's words, to be translated into a: « rapprochement entre la philosophie pure et la psychologie d' introspection » (Madelrieux 2011: 20)[50].

Hence in this section, my aim is to focus upon continuity as one of the most striking features of the convergence between James and Bergson's reflections. The way Bergson sets out his account of the continuity of consciousness is important if we wish to gain another external perspective, like Peirce's, that shall help us both to contextualize James's reflection and to highlight his originality in dealing with psychological and ontological continuity.

II.2.2 Bergson sur les données immédiates de la conscience

According to this comparative attempt, I shall present a selection of the works that Bergson wrote or published during James's lifetime and to analyse them, indicating possible continuities and discontinuities with James's thinking. We should start with the *Essai sur les données immédiates de la conscience* which is a work written between 1883 and 1887 and published in 1889. In this essay, Bergson already offers his original and well known notion of *durée* and his distinction between the real time of consciousness and external time-space. The argument is approached both from a metaphysical and a psychological point of view since the author wishes to keep these two perspectives together and possibly to clarify the points where they intersect, as well as those passages where we are often led to commit fallacies. In his opinion, in common with James and Peirce, many philosophical difficulties emerge out of "bad psychology" and, particularly in discussions of consciousness,

many misunderstandings are due to the silent shifting from one level to the other and vice versa that occurs in developing arguments. The problem is then to admit the unavoidable blending of these psychological and metaphysical analyses, and then be careful in pointing out similarities and distinctions, that is to say, to individuate which are virtuous shifts and which are vicious ones. In the third part of this 1889 essay, Bergson directly addresses the core issue of his inquiry, which is the problem of freedom. As we will see, he considers contemporary philosophy to be unable even to address the question of the existence of freedom. Following the text, we quickly notice numerous striking passages in which astonishing similarities with James's critiques and with the individuation of the same intellectual enemies (classic empiricists, idealists, and every form of absolutism-dogmatism) clearly arise, as well as a certain inclination towards James's temperamental reading of philosophical views.

The problem of freedom puts mechanicism and dynamism in deep contrast. Mechanicism is concerned with laws, complexity, and abstraction, while dynamism focuses upon facts, concreteness, and simplicity, although they accord different meanings to simplicity. Where the first stresses prevision and calculation as its criteria (inertia), the latter is interested in the real filiation of this notion (spontaneity). In order either to affirm or to reject freedom, one has to return to the idea of activity and that is why these two different philosophical perspectives (mechanicism and dynamism) *a priori* should maintain opposite conceptions of what activity is. Determinism refutes freedom *a posteriori,* adducing evidence of physical or psychological facts. If we are to admit the force of our mental states, then we will link in a necessary way all the antecedents of our current active thought. Otherwise, we can just underline the incompatibility of free activity with the law of the conservation of energy. In this framework, we see that there are two great empirical demonstrations of determinism and, therefore, two different types of determinism emerging: *physical determinism* and *psychological determinism*. Bergson states that, in the end, physical determinism, like every determinism, entails a psychological hypothesis. In this fashion, the problems of physical and psychological determinism are led back to an erroneous conception of the multiplicity of mental states and, moreover, of *durée*.

In Bergson's overview, recent physical determinism was deeply connected to kinetic theories of matter. Every physical phenomenon, chemical activity, or quality

of matter that we can perceive through our senses would be reducible to movements of vibration or translation performed by those atoms of which matter ultimately should be made. Such a kinetic hypothesis applies to the neuronal matter, together with the universal law of the conservation of energy mentioned above. In this way, the position of every atom in our brains and in the universe should be determined by the sum of affections that mechanically other atoms would exert upon it. Human activity could be calculated and foreseen as an astronomical phenomenon, in that our freedom would subsist as a mere psychological illusion. About atomic theory, Bergson underlines its hypothetical character, suggesting current critiques of the problematic existence of undivided parts of matter. Hence the very enemy of any possible conception of freedom is not the questionable elementary theory of matter, but rather the unavoidable principle of determination that Bergson intends to analyse.

Once we have accepted the law of conservation, we are supposed to admit that, in the universe, points of matter act just under forces of attraction and repulsion, whose intensity depends upon the distance. Bergson stresses the fact that such a rigorous spatial bondage means that, at every moment, the position of a point of matter is relative to that of other points so that the spatial relation among them is thoroughly deducible from their own previous positions. But when one attempts to apply this law to the life of mind, they will see that no absolute determination of one state of consciousness from the preceding ones follows. To distinguish mind from body, Bergson uses a very wellknown argument. It is not possible yet to find an ultimate psycho-physical law connecting one single state of mind to its neurophysiological conditions. In recent years many authors have adopted the same critique to contrast philosophical instances of physical reductionism. We need only recall Davidson (1970; 2001), Putnam (1999), and Nagel (1998; 2012) as defenders of an anti-reductionist approach to mental issues. As James argued in PP, Bergson maintains that, whilst everywhere we can experience a quasi-rigorous connection between physiological and psychological series, from empirical evidence we are not allowed to state a more fundamental relation. Great philosophers such as Leibniz and Spinoza sustained or denied freedom *a priori*, but nevertheless they could not affirm a rigorous correspondence between states of consciousness and modes of extension relying upon physical reasons. They discussed different kinds of correspondence – i.e. pre-established harmony and

correspondence between different modes of substance – but they did not believe it could be possible to demonstrate that a movement of matter can *produce* a state of consciousness. Bergson clearly states that physical determinists among his contemporaries are much more vague and imaginative about these issues. Maybe they were not strong on logical studies. First, molecular movements in the brain can cause other molecular movements. They cannot produce conscious states accompanying these physical activities. Conscious appearances are discovered through experience. Secondly, a constant linkage between mental states and molecular movements has been experimentally verified in just a few cases, most of them concerning activities almost independent of our will, so it cannot immediately be accepted for every possible case.

From this moment on, Bergson attempts to explain the reasons why physical determinism has turned such an empirical correspondence into a necessary and universal one. He states that this passage is due both to a psychological error (*durée*) and to a metaphysical bias (causality) that he wishes to explain. In the end, he will be affirming that physical determinism is reducible at bottom to a psychological determinism. In a very Jamesian style, Bergson aims at recollecting and criticizing a number of subtle shifts currently made by determinists in order to propose an alternative theoretical hypothesis. In his opinion, these scholars too easily interpret our awareness that there is some kind of relation between actions and states of consciousness (motifs) as a demonstration that there should also be a relation of necessity between mental states (associationist determinism). Actually, looking at simple mental states, they could verify that they rely upon physical states (i.e. sensations - molecular movements). Hence on the basis of their previous conviction concerning the necessary relation between states of consciousness, only by approximation could they rigorously arrive at sustaining a physical determinism. Now since extending the law of conservation of force to every physical body would not leave us room enough to permit free actions (at best, only free connections between our states of consciousness), and since Bergson eventually believes that determinism rests upon a psychological theory, he rhetorically wondered if a serious inquiry would be worth the effort. What he is seeks to know is if physical determinism really has a psychological theory, which would it be.

Although the principle of the conservation of energy plays a key role in this contemporary phase of certain sciences, Bergson recalls that it has not always been

a governing factor in the history of science. Research is always ongoing and new discoveries are occurring, and although recently the flourishing mechanical theory of heat verifies that such a law is universally applicable to physical-chemical phenomena, in the future we cannot be sure if it is still going to be so. In a nutshell, the principle states that: « what is given is given, what is not given is not given, and in whatever order we add up the same terms we shall get the same result » (DI: 150) [51]. According to this view, science is forever subject to the law of non-contradiction. But such a law does not imply any assumption about the nature of the given. In fact, it only affirms that in nature *creatio ex nihilo* is not possible, and that there should be something constantly persisting in order to be calculated. Bergson believes that only experience has both the means to comment upon the nature of this something given and the ability to recognize it in different systems. In its radical fashion, mechanicism considers consciousness as an epiphenomenon that in some cases may supervene on certain molecular movements, thereby acknowledging a loose bond. Moreover, the law of conservation works in systems where, following movement, points can return to their previous positions, or in other terms, into systems where passing time is not an influencing factor. Points of matter move in an eternal present. If such an implication of mechanicism is probably at odds with systems of living things, surely it is so as with those of conscious beings. In fact, we have, at least apparently, never seen natural realities going back in time and it does not seem to be possible at all, for we can surely maintain the importance of the past for consciousness.

Bergson believes that a psychological mistake has led us to make such an abstract principle of mechanics a universal law. Indeed, we are used to perceiving ourselves not directly, but through external images and similarities. Such a limited capacity of introspection, James would say, together with our metaphysical prejudice of absolutism and the consequent absence or impossibility of an adequate language to represent our inner world, have generated some mistaken identifications, in particular, that we are not used to distinguishing between real and apparent duration. Owing to such confusion, we have carried on a psychological determinism, which is the very background of every physical determinism. In this way, Bergson is clearly stating that determinism, first and foremost, has psychological features and it is generally sustained by a metaphysical bias of absolute necessity. Eventually, it means that we cannot derive determinism

only from scientific evidence. It is not a scientific position, it has much more to do with our way of reasoning than with natural reality. Therefore, Bergson moves the discussion of freedom onto the terrain of consciousness, and he focuses upon psychology as a peculiar science – cognitive and emotional, natural and historical, horizontal and vertical, general and concrete – and as an important crossing point at which science and metaphysics often collapse and, moreover, is itself an unavoidable overlapping feature both in epistemological and metaphysical inquiries.

At that time, physical determinism was influenced by the kinetic theory of matter and psychological determinism entailed an associationist theory of mind. A current state of mind is, therefore, determined from its antecedents. But such a relation cannot be one of geometrical necessity. In fact, *a priori* it is not possible to deduce one state of mind from these others, since it shows a qualitative difference which constrains us to call upon experience in order to see such a transition from previous conscious states to our new one explained. But a further question soon arises: is *explaining* a transition the same as *generating* it? Reporting a personal experience, Bergson begins to deal with a common mental experiment in psychology, one that James reports in a different way, using the names Pietro and Paolo. In Bergson's experience, two persons were talking and, having interrupted their conversation for a while, they have then been able to meet a new identical object of thought. There are a few observations to make. First, the two interlocutors link the same new object of thought to their previous conversation, but, secondly, they connect the new topic to different moments of it. Thirdly, the associations they made to gain the same new thought might be radically different. The problem is: which is the cause and which is the effect? As in the case reported, sometimes it seems that a new mental state comes about and then (ex post – ad hoc) we seek its antecedents in order to confirm the principle of conservation of energy. In hypnotic suggestions, for instance, patients think they have been collecting actions that have a logical/causal internal association, while they are just creating precedents to explain the future action that they have been induced to accomplish. In deliberation, sometimes we have already taken a decision, but nevertheless we need to explain our reasoning. Bergson states that a more attentive psychology can show us: « effects which precede their causes, and phenomena of psychic attraction which elude the known laws of the association of ideas» (DI: 158). Psychological

associationism cannot maintain that an act *absolutely* derives from its motifs, or a state of consciousness from other states of consciousness.

Bergson believes that such a psychological point of view implies a mistaken notion of the Self and of conscious states. In his opinion, Stuart Mill and Alexander Bain had considered the Self to be a collection of distinct mental states, each having a different strength and continuously associating or conflicting among them. In a given situation, the most powerful is supposed to be able to govern our will. Like James, Bergson contests such an atomistic theory since, he argues, it derives from our conventional use of language to convey mental states. We do not have a language for our internal (qualitative) states, and maybe there cannot be one. When an action is momentarily interrupted, for instance, the act of rising to open the window, or in James the act of remembering a word, we cannot re-associate the same action to an idea which is different from the original since we are going to *feel* that it does not fit. So every idea has a particular colour *that* informs the image of movement we are going to perform and which depends upon the end it has to attain[52]. Actually, associationism makes the mistake of disregarding the very different qualities of our ideas since it just does not consider the ends they are meant to attain. Once they have broken the action into conceptual pieces, associationists end up considering ideas and acts which are qualitatively different as geometrically identical and, therefore, turn something which is personal into something which is impersonal. In other words, Bergson maintains the integrity of our experiences and states that our idea of doing something is both shaped and shapes the end of our actions. Associations are a type of James's *psychologist's fallacy* since they are not the first impression we have of reality but emerge from the analytical exigency that psychologists have to account for it. Once we have received some impression, we purify it of its peculiar features, and divide it into analytical pieces, in order to express that impression by common language. But in order to distinguish two impressions of the same thing (i.e. the perfume of a rose), we have to introduce mechanisms of association. That is to say, what is first given as a direct impression is then regained as something personally added to the existing neutral idea of rose and only explains our different perceptions of the same rose. In a nutshell, associationists confound the fact (*explanandum*) with its explanation (*explanans*), the concrete experience of the fact with its philosophical reconstruction. Language turns a unique mental state, where a multiplicity of different states of

consciousness fuse and interpenetrate, into a collection of juxtaposed conventional terms (symbols)[53]. From personal states of consciousness, we can analytically extract « impersonal elements external to one another » (DI: 163), so that conventional (ideal) ideas are what derives from an intrusive and finally omni use of language. Bergson says that the more we dig into our selves, the less language is able to translate exhaustively what we feel and, owing to the irreducibility of our states of consciousness, he has no doubt that: « there is no common measure between mind and language » (DI: 164-5).

Indeed, associationists consider the Self as an aggregate of conscious states, sensations, feelings, and ideas, and because of their atomistic theory of sensations they just cannot see how, from an external multiplicity, one continuous personality may arise. But associationism deals with « insignificant actions » in that it works for those actions which come from habits. In fact, often we act only as « conscious automata » since we do not pay attention to routine actions once the link between an impression and an idea has been regularly solidified. The point is that: « They are, taken all together, the substratum of our free activity, and with respect to this activity they play the same part as our organic functions in relation to the whole of our conscious life» (DI: 168-9). In different situations, Bergson believes « sluggishness and indolence » stop us from acting attentively, and that day after day we can form the habit of no longer listening to our deeper self and end up living our lives superficially and via "hearsay". Nevertheless, good or bad habits cannot properly verify the significance of freedom. The problem in psychology, as in the transitions between psychology and metaphysics, as James clearly stated, is the absence of appropriate qualifications. In this view, Bergson's words can be read as a sharp critique of the incorrect generalization that physiological and psychological studies use to make while passing from very impersonal and simple sensational mental states to much more complex ones. He states an ontological distinction between mind and spirit, as well as a methodological difference between generalization and universalization. In our selves a fundamental distinction should be maintained between the horizontal or superficial level of spatial contiguity and the vertical level of temporal dis/continuity. Bergson concerns the loss of personal responsibility which goes together with the standardization (uniformity and fixity) of social respectability. However, an « inaccurate psychology » cultivates the social construction of our inner states of consciousness because it relies upon the

perception of our inner living life in its spatial-external-linguistic conveyance. What is present in impressions is curved and reduced to what can be said. There is no space left for difference in public arenas. Since there is only one common impersonal language for so many different personal feelings, we become more and more acquainted with unchanging images of our changing feelings and in our everyday life we learn to associate our original ideas with these conventional objects till we end up with thinking that an association of the same abstract objects are identical with our concrete feelings[54]. Such a practical habit of overlooking the concrete quality feature of our personal feelings leads us to neglect their integrity. In fact, they are at one thing with our self, and at a certain level we cannot distinguish our way of loving or hating from ourselves. We act and feel just as we are. Only in this way can we acknowledge the person from their actions.

Bergson focuses again upon free actions which are those he most distances from everyday acts which, he argues, can generally have an associationist and deterministic explication. In exceptional occasions of free acts, often we are unable to recollect the reasons why we made a particular choice or other, at least not as immediately or easily as in ordinary acts. There are two aspects to underline. The first is that there are different kinds of motifs. Once more, Bergson stresses the risk of simplification, stating, for instance, that we cannot identify our reason to open the window with that of marry a man, in that, of course, it will be easier to track the « tangible reasons » we had for standing up and closing the window on a summer day. The second aspect is about change. Bergson says that associationism fixes our Self and its sentiments into abstract entities which never change or are affected by decisions. In this view, that of Bain, we are just ruled by conflicting desires and only their strength determines our choice. But addressing our internal dynamism through language and taking for granted its symbolic representation, we can no longer understand how we and our sentiments may continuously change. Such a mechanism would not permit us to account for decision- making in case we were guessing between two very opposite feelings. In fact, they would produce an eternal and unsolvable tension. So the solution is still the assumption of concrete mental states, those which belong to a determinate person. In this way, there is no need to look for an epiphenomenal personality to add to an impersonal aggregate of artificial mental states.

Free acts are exceptional and, moreover, not absolute since they admit degrees. Bergson defines a « free act » as an autonomous and integral act: « since the self alone will have been the author of it, and since it will express the whole of the self » (DI: 165-6). He acknowledges that there are different selves: a « fundamental self » in whom conscious states completely fuse and interpenetrate one another; a « superficial self » in whom independent suggestions lie separately and sometimes act independently upon consciousness, and a « parassitarian self » which is a collection of sentiments and ideas not really appropriated from the fundamental Self, but still very close and influential. So freedom is a quality of the act. Not every decision we make is free. Rather, some decisions emerge autonomously and integrally from our "fundamental Self" and accordingly are free. Since determinists and libertarians share the same misconception of duration, to defend his qualitative-concrete theory of freedom, Bergson has to reply to their common objections about predetermination (past and future). Putting aside all the linguistic problems, he suggests that we: « attend to what pure consciousness alone shows us about an action that has come to pass or an action which is still to come » (DI: 173). In fact, although there is also a psychological reading of freedom – how the Self can perceive itself determining the action – Bergson sets the two options of determinism and indeterminism in metaphysical terms. Determinists imply that « there is only one possible act corresponding to given antecedents » (DI: 175), while indeterminists would reply that: « the same series could issue in several different acts, equally possible » (*ibidem*). Bergson focuses upon this second assumption about the equal possibility of two contrary actions since he aims at showing the common deceptive assumption shared by determinists and indeterminists, which is the geometrical representation of time. So considering X and Y as the symbolic representations of two opposite actions, or rather of different directions, he stresses the mistake committed by common sense of representing a Self which is not living and changing, but only geometrically conceived. Once such an extensive frame is assumed for the Self, their decisions and directions are reified too and it is possible to think about a Self which indifferently choses one of the two possible opposite directions (OX or OY) after having oscillated between them. Bergson again stresses the fact that we are used to thinking of ourselves in external terms, and that language helps us to crystallize the symbols we use. In his view, common sense prefers to be neat, to overlook at gradations and to remain fundamentally

mechanicist. Now since its view lies at the very bottom of the two different theories of freedom taken into consideration so far, we can see how determinism becomes unavoidable. In fact, holding to a rough symbolism is deceptive in that accepting a fixed and abstract representation of our decision-making processes, and considering how such a process is revealed in our experience – that is to say mixing the spatial representation of our Self and the experiential perception of decision making – we have to admit that there is no neutral point at which we are supposed to take decisions. Of course, there is a process in which our decision is growing and hence in this picture we cannot hold to real contingency of decisions[55]. Rather, we are led to absolute necessity.

But determinists and indeterminists alike accept that an action is preceded by a mechanical oscillation between X and Y just because they share a common postulate. Their points of view on the action are *ex post,* indeed they consider actions as past actions. Their attempt to offer a geometrical representation of freedom is totally deceptive for a figure can only show the action after it has been performed and not while it was being performed. Bergson is clear about this. He argues that they have taken a symbol for an image, since, having already chosen a mechanical explanation of freedom, the one (consciously or unconsciously) linked to a geometrical description of inner life, they have thus substituted that mechanical explanation to the fact itself. Once again, the question which should be seriously addressed is that of whether time is space[56]. When we do not pay attention, we are used to converting our symbols and reasoning into geometrical terms, so that we consider progress a thing and, as to what concerns decision-making, we represent this process as an «oscillation in space» rather than as «progress in time» (DI: 181ff). In this view, what determinists and indeterminists argue are reducible to puerile statements[57], since on a mechanicist basis the issue of freedom cannot even be settled. In fact, Bergson believes that: « freedom must be sought in a certain shade or quality of the action itself and not in the relation of this act to what it is not or to what it might have been» (DI: 182-3).

Another objection against freedom concerns future events. It suggests that, if we know all the antecedents of a future event, it should be possible to predict it. Bergson distinguishes the object of his inquiry, which is the stronger thesis of infallible prevision, from that of those who link the knowledge of antecedents only to probable conclusion. In fact, the latter is just a generally agreed statement about

the relation of future to present, while the first implies that, owing to our imperfect knowledge, contingency is only an appearance. To approach the issue, Bergson returns to a mental experiment, using the very names Pietro and Paolo (cf. James, PPX). Under serious circumstances, Pietro is supposed to take a decision freely. Many years before, knowing all the antecedent conditions of that final act, would it have been possible for Paolo to foresee Pietro's choice? In his analysis, Bergson says that the mental states of another person can be assimilated in two different ways : dynamically, « which consists in experiencing them oneself » (DI: 186); and statically: « which consists in substituting for the consciousness of these states their image or rather their intellectual symbol, their idea » (*ibidem*). Bergson stresses the « living distinction » between these two kinds of knowledge. The first is *experiential and qualitative*. The second is *discursive and quantitative* (cf. James). Actually, in the second case, we do not feel Pietro's mental states and in order to value their force we have to add some quantitative indication of their intensity. Paolo could make such a quantitative evaluation only by considering the role played by a particular mental state in respect to the whole story, that is to say, he should know the end of the story, the final decision taken by Pietro. So if according to the dynamic hypothesis, Paolo ends up living Pietro's life and in the end he takes his own decision (that is to *act* and not to predict), under the same circumstances; on the static hypothesis, Paolo should already know Pietro's final decision and, therefore, in this second case, again we are led to ascertain an act already committed. In conclusion, in such a framework, a dynamic approach leads to naïve indeterminism, while a static one leads to naïve determinism and, indeed, the question of freedom is still left undecided.

Bergson can now extrapolate which are the three fundamental illusions of the reflective consciousness, starting from the most superficial ones and progressing to the deeper one implied, firstly « regarding intensity as a mathematical property of psychic states and not, as we said at the beginning of this essay, as a special quality » (DI: 190), secondly, « substituting for the concrete reality or dynamic progress, which consciousness perceives, the material symbol of this progress when it has already reached its end, that is to say, of the act already accomplished together with the series of its antecedents » (*ibidem*), and thirdly: « you continually confuse the line M O X Y in its tracing with the line M O X Y already traced, that is to say, time with space » (DI: 192). Considering psychic states, we continually confuse our

representation of them through space with our experience of them in time. Such an inveterate misconception is natural and unavoidable, since science is exactly able to determine future events as astrological phenomena and eclipses etc. But whilst the similarity to science is the reason why we pretend to foretell psychological events, Bergson neatly distinguishes a natural phenomenon from an act of free will. He argues that, despite the fact that they can contemporaneously occur, « the future of the material universe » is not analogous to « the future of a conscious being ». Rather, there is a « vital difference » between them (DI: 193). To restate his dualism, Bergson proposes an experiment which recalls the one made by Descartes in his *Meditationes de Prima Philosophia* , that is, a « mischievous genius » ordering the universe to move twice as fast. Since time (*t*) in astronomical equations stands for a relation between unities of time or simultaneities, the simultaneities would still take place in equal number, whereas their duration, or the intervals separating them, would have been foreshortened. Such a diminished duration of the day, for instance, would be perceived as a change in the *ordinary*[58] length of a day, if not immediately in quantitative terms. Indeed, science simply examines current evidence and does not foresee future occurrences. In fact, in their calculations astronomers are interested in spatial hence numerical relations among stars, planets etc. and they procedurally exclude conscious perception of duration from their operations. Finally, they add such a duration to their mathematical results and discuss prediction. Bergson points out that astronomers can only *in abstracto* make future events present, but *in concreto* they cannot make our future perception of those events really present. We have to bear in mind that: « states of consciousness are processes, and not things; that if we denote them each by a single word, it is for the convenience of language; that they are alive and therefore constantly changing; that, in consequence, it is impossible to cut off a moment from them without making them poorer by the loss of some impression, and thus altering their quality » (DI: 196). Two different interpretations of philosophy are on the carpet, since Bergson is saying that philosophy is not merely the Owl of Minerva, observing past events and giving them a rational explication. The question of the possibility of foreseeing future events from their antecedents is deceptive, for it already implies the completely mistaken identification of space with time, or time of science with real duration. As James stated in PP in very similar terms, they both agree that

mental states should end in definite images, in things and that is why, in Bergson's view, things can be reified without mystifying their nature.

Whilst our acknowledgement of past states of consciousness can be compared with the predictions formulated by astronomers, we are still not allowed to grant the same similarity to the acknowledgement of our future states of consciousness. In fact, real duration should be lived through. We cannot anticipate how it will develop since we cannot feel what duration is about standing outside of it; we need to experience the interval to evaluate its influence on the story[59]. There is no other way of living time than being concretely contemporaneous with feelings, that is to say, to be actors and not external spectators since, as human beings, we play a part in knowledge, even that of internal spectators.

In the end such a metaphysical distinction of numerable things from concrete duration relies upon psychological argumentation which aims at re-approaching the variety of qualities that we gain through perception. Bergson explores those psychological areas which, he says, are: « not unperceived, but rather unnoticed » (DI: 169)[60]. Perception plays a very important part in our lives, but it also does not allow only a conceptual apperception of it all. In a nutshell, perception leads to beliefs, not to certainty. However, as there are differences that we can only feel in perception, there are other differences that we can only *state* in abstractions, or add laters. As to our deep-seated psychic states, Bergson writes that: « there is no perceptible difference between foreseeing, seeing, and acting » (DI: 198). We have to stress the continuous tense of these three verbs of perception and general action. Such a statement asserts the concrete indivisibility of our living activities for our deep-seated states of consciousness.

Indeed, Bergson maintains that determinism – and, I would add, common sense – is definitely frightened of *unpredictability*[61]. So far, the French philosopher has tried to show the natural bond that we suppose exists between symbolic representation of phenomena and their predictability. Now he is stating that, because of this necessity, determinists just set aside concrete feelings since they are afraid to discover that psychic states are not really subject to laws. Moving back to a general perspective, they assume that, like every phenomena, feelings have to remain subject to the law of causality (DI: 199)[62]. This assumes from "same antecedents, same consequent", but according to Bergson's distinction between time and duration, he has to make another distinction between physical causality

and psychical causality. In fact, we have the same external object twice, but we cannot have identical psychic conditions twice, since: « duration is something real for the consciousness which preserves the trace of it, and we cannot here speak of identical conditions, because the same moment does not occur twice » (DI: 200). Taking time seriously, that is to say, concretely, Bergson is led to acknowledge the uniqueness of mental states, affirming that, despite the possibility of meeting identical external causes and the misleading fixity of language in this matter: « deep-seated psychic states are radically heterogeneous to each other » (DI: 199-200; cf. James). In consciousness a cause cannot produce the same effect twice because the very same cause is never given twice. Thus, introducing the problem of novelty, Bergson openly comes to face the principle of causality as it underlies all the argumentation of determinism. His aim is to highlight the «ambiguity» of such a fundamental conception and to distinguish causality from the concept of determination in order to overcome the « negative idea of freedom » with which we have been dealing so far.

In Bergson's view, empiricism affirms that: phenomena first perceived can appear in the same shape, and a certain phenomenon appearing after some conditions will recur as soon as the same conditions are present again. According to this view, we observe certain regularities in nature and consider causality to be a subjective association between ideas. But if the principle of causality was derived only from experience, empiricists could not say anything against freedom. Actually, just looking at past phenomena, they would not be able to verify the same regularities in our ever- changing states of consciousness, at least not yet. Hence, to argue against freedom, empiricism has to blend with the perspective of common sense[63] which is characterized by a sort of « prefiguring », since, while we are experiencing a phenomenon (cause), we can perceive its effects as already existing in the first phenomenon. But such an « imperceptible » shifting of meaning is due to philosophical confusion, since we do not distinguish between the meaning of subjective and objective causality and we allow the direct passage from an inner-psychological association to an external-physiological one. This confusion or "ambiguity" about prefiguration, Bergson writes, can be understood in two very different ways, both preserving our freedom : the mathematical type of prefiguring, and the psychological variety (*effort*). In fact, in the realm of pure quantity, if we consider the geometrical properties of a figure: « an unlimited number of theorems

can be said to pre-exist within the definition, although they will be spread out in duration for the mathematician who deduces them » (DI: 204). Such a prefiguring is strict and perfect. As to what concerns physical phenomena, if one wishes to declare them equivalent one to another, avoiding the fact that they have quantitative as well as qualitative features, they can assume: « behind the heterogeneity of our sensations, a homogeneous physical universe » (DI: 205). Descartes in his physics and Spinoza in his metaphysics attempted to purify concrete phenomena from their material and irreducible features in order to consider their magnitudes equivalent and their relations measurable. In other words, they made images of movement and concrete phenomena disappear in algebraic formulas. In this regard, Bergson considers the contemporary theory of Lord Kelvin concerning vortices as the constituent elements of bodies. Atoms, in this view, become movements and phenomena are considered as regular movements taking place within a homogeneous fluid. The point is again to show that in this case movement is not really produced, but mentally pictured, since in the homogeneous fluid no consequences can be realized except for a calculating consciousness. Movement: « is a relation between relations» (DI: 206). Despite the efforts made in previous and contemporary physics to approach the relation of causality to the relation of identity, Bergson underlines the fact that such a convergence is never totally accomplished in nature. The principle of identity is « the absolute law of our consciousness » (DI: 207), it states the present relation of consciousness to its feelings; while the principle of causality cannot be necessary as well since it is supposed to state a relation between future and present events. There is an ontological break between logic and physics, between real duration and simultaneity of geometrical time. Hence we cannot assure the necessity of the regular continuity of reality on logical basis.

> In short, whether we study Cartesian physics, Spinozistic metaphysics, or the scientific theories of our own time, we shall find everywhere the same anxiety to establish a relation of logical necessity between cause and effect, and we shall see that this anxiety shows itself in a tendency to transform relations of succession into relations of inherence, to do away with active duration, and to substitute for apparent causality a fundamental identity (DI: 208-9).

Bergson maintains that common sense unwarily believes in such a mathematical view of nature and it regularly tends to neglect duration. Taking an improper epistemic passage, it goes from having the perception of the necessary relation

between two phenomena (cause-effect) to attributing such a necessary relation to phenomena themselves. A wiser epistemic approach to these issues would bring us to restate an undeniable difference between things as we perceive them and things as they could be beyond our perception, as well as to stress our own difference as changing and enduring beings. However, physical phenomena are not given to us all at once, but they seem to be in succession too. In this sense, whilst common sense neglects duration, it does not neglect it at all. It is not a philosophical position able to formulate a subtle metaphysics and it always retains sensations along with its conceptual beliefs (confusions). That is why, in the end, neither would common sense agree with the complete identification of the principle of causality with that of identity. Moreover, for external phenomena, the more we think about causal relations in terms of necessary mathematical determination, the more we need to distinguish them from ourselves as enduring beings and at last to underline (our belief in) human freedom.

The second interpretation of prefiguring is an imperfect one and it is derived from common sense's representation of the activity of our consciousness. In fact, whilst there is no a neat distinction in the process of acting, the sentiment of effort makes us believe that the relation between an idea and its realization is not necessary, but possible. According to this perspective, *a priori* we could state that: « there will no longer be a relation of necessary determination between the cause and the effect, for the effect will no longer be given in the cause. It will be there only in the state of pure possibility and as a vague idea which perhaps will not be followed by the corresponding action » (DI: 211-12). These two conceptions of causality – mathematical and psychological – are philosophical elaborations of « two half-hearted and confused ideas of common sense » (DI: 214). which, indeed, were originally both meant to preserve human freedom. The first approximate conception of causality is derived from our logical-abstract approach to reality and stating absolute necessity would lead to Spinozistic metaphysics. The second conception comes from psychological instances and analogies. It states pure possibility and it leads to Leibnizian metaphysics (DI: 213).. Bergson eventually attaches these two deterministic metaphysical hypotheses to contradictory images of duration, that is, the mathematical one, striving for the different duration of physical phenomena and their necessity; and the psychological-dynamic one, underlining the effort required in every conscious or natural passage from present to

future events and hence their contingency. However, these two "capital ideas" were respectively supposed to preserve our freedom since either the world was sharply distinguished from our free selves, or it was made contingent as well. Unavoidable difficulties arise when we do not recognize that we are dealing with two different conceptions of causality, and two different ideas of duration, and, just as common sense does, we take the habit to shift from one to the other and back depending upon which interest we are taking into account each time (calculation or imagination). Therefore, freedom is not directly denied from either of these two deterministic theories, they do not address the issue of freedom at all. Indeed, a naïve and intricate mélange of psychological exigencies influences our ways of reasoning – which are not pure – producing ambiguities and, moreover, leading us to mix together these two theories which, used together, deceptively destroy our natural intuition of freedom. Bergson takes common sense to be mainly guided by convenience. In fact, common sense is not concerned with differentiations but rather in useful simplifications. In everyday life it seems to be easier to deal with a unique though contradictory notion of causality for we can work out only one idea of causality and in this way we can use only one and the same word to address different types of relation.

Science already works with such a theoretical distinction between force and necessity, and it is time for psychology to do the same. In fact, the analysis of notions of causality and duration has merely confirmed what Bergson had already stated in his previous careful analysis of the psychological phenomenon, that: « the relation of inner causality is purely dynamic, and has no analogy with the relation of two external phenomena which condition one another » (DI: 219). As James emblematically discovered in his psychology, but immediately on a philosophical level, Bergson arrives at the same conclusion about the uniqueness of « deep-seated psychic states » in consciousness in that he is interested in underlining the ambiguities emerging in philosophy because of differences which remain unnoticed in psychological introspection (phenomenological approach). The question we shall address for James and for Bergson is 'What is psychology?', or rather 'How have these authors considered it?'. In any case, the metaphysical distinction between psychical and mental states of consciousness phenomenally discovered by Bergson enables him to formulate his conception of freedom, discouraging him from any positive definition :

Freedom is the relation of the concrete self to the act which it performs. This relation is indefinable, just because we *are* free. For we can analyse a thing, but not a process; we can break up extensity, but not duration. Or, if we persist in analysing it, we unconsciously transform the process into a thing and duration into extensity. By the very fact of breaking up concrete time we set out its moments in homogeneous space; in place of the doing we put the already done; and, as we have begun by, so to speak, stereotyping the activity of the self, we see spontaneity settle down into inertia and freedom into necessity. Thus, any positive definition of freedom will ensure the victory of determinism (DI:219-20).

II.2.3 La perception du changement (Conférences faites à l'Université d'Oxford les 26 et 27 mai 1911)

In 1911 Bergson gave two lectures at Oxford University. Here he met Bertrand Russell (1872-1970) who had criticized his philosophy. As Arnaud Bouaniche underlines, Bergson considered the Oxford conferences to be integral parts of his philosophical effort to think rigorously «le changement pur». In fact, he considered these lectures integral parts of his oeuvre. The problem of change is « capital » and it is not difficult to consider his philosophy as a « philosophie du changement » (Madelrieux 2011: 62-3)[64].

For Bergson, change is a fact that we can establish around us and in us. Moreover, stating the fact of chance, Bergson regains the origin of his philosophy which moves from awareness of a *durée réel* of consciousness, that is to say, the immediate intuition of our own primitive change. In this work, Bergson stresses once again the problem of intellectualism which he considers to have turned change from a fact into a problem. Many difficulties are created by our intellectual approach to perception. In fact, we acquired the habit of considering ourselves spatially, that is to say, at a distance and through the eye of our mathematical-logical way of reasoning, missing the real temporal nature of change. In these lectures, Bergson aimed to re-establish the real nature of change hence the experienced and living continuity of our knowledge.

Actually, Bergson describes rationalism and pragmatism as two extreme conceptions of the nature of truth. He moves from three ideas shared by philosophers: conceptions are a last resource when something is not given in perception; philosophy is a substitution of concepts to percepts, and the method of philosophy stands against its original aim to extend and complete perception.

Bergson makes clear that every conception moves from any perception since our intelligence is a faculty of connection which depends as to its materials upon the data of sense and consciousness. In this view, he points out that the method of philosophy – abstraction, unification, and systematization – when applied to the qualitative aspects of perception[65], is obliged to make an arbitrary selection of representative perceptions. As an effect, every philosophy overlooks the peculiar difference of each perception and results in reducing multiplicity to a false or partial unity. This is the reason why, according to Bergson, so many pure philosophies

have flourished, each was in fact interested in protecting some important quality from arbitrary reduction by an antagonistic philosophy. Philosophies of this kind are just doomed to otiose claims. The only way to avoid mere logical rivalries is to regain the common roots of our thinking. Yet, paradoxically, his attempt to dip into our perceptions and to recover the perceptual origin of our discourses turns into an omni-comprehensive complete perfect philosophy, in which every aspect of reality is included and every *donné* is considered at its most intense level.

Bergson was convinced both that a widening perception could reconcile every thinker with a unique doctrine, and that such a widening of perception could only be the result of common philosophical effort. The necessity of perceiving our reality in a more intense way seems denied by our natural experience[66]. At this point, Bergson takes the example of art, particularly painting. He argues that painters are able to make us see what we in everyday life miss. Moreover, their vision of things becomes the vision shared by others. This is not a matter of fantasy. It is art and as a matter of fact art shows that an extension of perception within experience is completely possible. Bergson proposes his explanation of how such an intensification of our faculties works. Painters and artists in general are often called idealists, since they seem to overlook material problems, as if they were in « distrait[s]». For Bergson, such a distraction from ordinary life and quotidian preoccupations is the key to their capacity to see more than ordinary men and women. His argument mainly relies upon his conception of « intérêt » which was probably derived from James, also acknowledging its psycho-physiological dimension. According to his view, the classic distinction between active and contemplative life is here concerned with the extent that our practical necessities yield an effective restriction of our field of vision. According to James's critiques, Bergson is here openly contesting the elementary theory of sensations that was at the core of the associationist theory of mental life and should also constitute the obvious presupposition of any mechanical explication of mind. But if another (functional) perspective is taken, mental facts show us the constant effort of functional selection made by our senses and brain. In particular, he sees the brain as an organ of selection. In order to live, we have to reduce the horizon of our *ésprit,* making convenient and economic choices according to material and practical interests (cf. James, PP IX-X). Hence actual knowledge is much more limited compared to virtual or potential knowledge and this difference of extension is

mainly due to practical necessity. As for memory, analysed in the second conference, perception plays an auxiliary role selecting, classing and overlooking things according to our need to deal with them for the sake of action. Such a psycho-physiological framework, which is undoubtedly assumed by James, is necessary for Bergson to introduce the natural possibility of artists having a different perception of things. In particular, their faculties of sense and conscience are more detached from practical life than for others, and this sort of variation – evidently another Jamesian concept – that nature happens to make *de loin en loin,* allows artists to have: « une vision plus directe de la réalité ». Their vision, in fact, is at least more free from practical interests and in this way they have the chance to perceive only: «pour percevoir, – pour rien, pour le plaisir».

Actually, such a natural variation should have become the method of the new philosophy of perception that Bergson imagined. More precisely, his philosophy consisted in turning our attention from practical interests to 'useless' ones and would have as a result a more complete perception of reality. This philosophy might seem to recover the classic Platonic distinction between speculative and active life; according to Plotinus, yet our soul should escape mundane appearances and look at higher realities. But Bergson makes clear that he is neither suggesting escape from our reality nor assuming some different faculty of vision. His metaphysics is immanent and this should make the differentiate him from other classic metaphysicians. We notice that the immanent feature of his philosophy is based upon a renewed analysis of our psyche which was mainly provided to Bergson by James. This seems to be a fundamental passage in order to recover metaphysics by linking it to biological and physiological observations. According to his immanent view, Bergson states the necessity of educating our faculty of attention rather than introducing any transcendent faculty to justify that superior kind of knowledge (ideal). Then, according to the psychological framework assumed, we acknowledge that *education* means to loosen practical habits.

At this point, Bergson's metaphysical recovery cannot avoid the confrontation with Kant and his ultimate sentence on metaphysics. Kant claimed that metaphysics is impossible because it requires a superior faculty, namely an intellectual intuition. In fact, he proved that metaphysics was not logically demonstrable; it is known that any dialectic argumentation on metaphysical issues (Soul, World, God) produces only equally demonstrable antinomies. Bergson reads

this condemnation of metaphysics in a positive way, for Kant admits that metaphysics would be possible by intuition. Except that Kant believes that this superior intuition, which is for Bergson «une *perception* de la réalité métaphysique», could not be possible for any human being.

Again, compared to Plato and Kant, Bergson claims that the peculiarity of his own metaphysics comes from its being immanent according to a different characterization of reality and to a different interpretation of change. Even if these great authors were opposed as to what concerns their conclusions about metaphysics, they set out from very similar convictions about reality. According to the radical distinction between the phenomenal world and reality-in-itself, they supposed that there should be a corresponding break between our faculties of phenomenal-knowledge (senses and consciousness), and those of metaphysical intuition (intellectual intuition). Here we arrive at the ontological point made by Bergson: Plato and Kant believed that a superior faculty was necessary to know reality because they erroneously believed that our ordinary faculties (senses and consciousness) had a direct perception of movement. If we ordinarily perceive change – *dans les choses et en nous* – and according to the data of our senses and consciousness, our speculations lead to insoluble contradictions, reality hence change is, therefore, contradictory. The only possibility of a significant discourse, one which is coherent and true, must be sought in an unchanging reality, a reality out of Time[67].

Bergson wishes to show that there has been a fundamental historical misunderstanding of change and time which is at the core of the supposed impossibility of metaphysics. Zeno and all metaphysicians, in fact, considered what does not move at all to be movement, as well as what does not change at all to be changing. According to a different interpretation of time, which relies upon a different theory of perception and a different metaphysics of time, Bergson argues that these philosophers have taken: «une solidification en vue de la pratique» for «une perception immédiate et complète du mouvement et du changement». According to this view, we can see that the situation is reversed. If our daily perception and reasoning do not deal with real time and real change, in order to avoid relativity we shall go back to original time and change, that is to say, go back to reality – not escape from it. Such a *chemin inverse* has to be performed through the extension and revivification of our faculties of perception; and its goal is *continuity*.

In fact, discovering real change is also the way to regain the real continuity of our knowledge. Thus continuity is not conceptually added to our perception, but it is directly «expérimentée et vécue».

In his second conference, Bergson recalls that irresolvable metaphysical problems arise from our practical habit of thinking and perceiving change as composed of parts. These artificial schemas have become natural to us, so that, to regain a direct relation to real change, we have to make the effort to change our mind by dismissing these filters and considering that our very natural representation of changes and movements is absolutely indivisible. In fact, every real change, like every real movement, is experienced in an *indivisible sentiment*. Even if I first perceive the movement of my hand from point A to a point B, he argues, as an indivisible unity, then for practical concerns we immediately rethink this «traject» in terms of a spatial «trajectory» and crop our indivisible perception of that unique movement of my hand into a series of successive positions.

In order to act, we are not interested in the nature of change but in its apparently immobile parts. Whilst aware that a passage exists between any two positions, we intentionally postpone any direct confrontation with the passage itself until practical needs are satisfied. However: «ce qui favorise ici l'action serait mortel à la spéculation». Bergson makes a very neat and classic distinction between practice and speculation. Methods and ends should go hand- in- hand. Either we *use* reality or we contemplate it, for to look at reality for practical purposes amounts to closing our eyes on the «réalité vraie».

Accordingly, Bergson argues that change and movement are not mere accidents. They do not need any substratum or inert support to be. Or better still, reality is for Bergson the same mobility[68]. In this respect, we suffer the predominance of our sense of sight, which is the "pathfinders" of the sense of touch. In order to help our orientation and dealings with the world, we have taken the habit to see a world made of things. It is easier to imagine real change if we consider other sense perceptions, for instance, the auditory. However, the spatial representation of change characterizes our senses and consciousness by now, the effort is to make abstraction of spatial ideas. Through this effort of attention, we *apperceive*[69] that what we perceive as moving and changing is the true reality. The physical sciences progressively reduce matter to action and they seem to acknowledge that every material support of movement is but a «schéma commode» to our visual habits.

Thus movement is not an accident of fixed things, but things can themselves be reduced to movements. Actually, this ontological conception of reality as mobile is easily demonstrable in our interior life and solves many conceptual difficulties. According to the empiricist representation of the Self as a *theatre* in which many different perceptions happen to perform, different theories of personality have underlined the problematic dichotomy between the many and the one, that is, the succession of invariable mental states and the Self as their invariable substratum, as well as the difficulty of drawing change and movement from enduring parts. For the purpose of dissolving the contradictory results of these theories, Bergson rejects their assumption. In a very beautiful sentence, he states that what is real is indeed : «la mélodie continue de notre vie intérieure, – mélodie qui se poursuit et se poursuivra, indivisible, du commencement à la fin de notre existence consciente. Notre personnalité est cela même» (PM: 92; cf. Peirce CP8.294).

He underlines again that change is an indivisible continuity and that this is true duration. Replying to critiques against his notion of duration, he only suggests that his *durée réelle* is not a mysterious conception. It is time perceived as indivisible. Bergson agrees that time implies succession, but he does not agree that succession is immediately given to us as a juxtaposition of parts. In other words, succession is directly perceived by our consciousness in its real and indivisible continuity (cf. James). Its parts are the result of a *mediated-interested* relation pursuing ordinary practical ends. Our senses have taken the habit of perceiving succession according to the *spatial-conceptual* reconstruction that is convenient for us to make[70]. The misuse of this functional use of perception ends up hiding the real nature of time, the real nature of reality as temporal. Reality is not spatial but temporal.

Bergson then draws our attention to our habitual way of seeing the past. Philosophy and language convey the natural representation of the past as something non-existent[71]. This error is again of the same kind. We consider the present as the only real time existing by itself and, according to this idea, the function of memory seems to be to retain those parts of the past which can be usefully used in the present. The past is conceived in relation to our present interests. Bergson hints at the analysis of this existing present according to a mathematical interpretation of time that reduces the present to a juxtaposition of «present instants». Such a present instant would be a pure abstraction and as such – assuming its existence – it would not be distinguishable from any other precedent

point of time. For consciousness, rather, our present is a floating interval of time which amounts to the extension of our field of attention. Actually, since there are no *cuts* within this flow, our attention can be enlarged or limited according to our efforts. Thus Bergson claims that the very distinction between past and present is again a matter of interest, and indeed it is an arbitrary choice. In fact, the moment that some part of our present becomes past is exactly when we cease to consider the present as of interest for our actual purposes. This relative definition of the boundaries of time corroborates the hypothesis of a high-power attention. In particular, sufficiently detached from practical interests, our attention to life would cover the entire course of our conscious life. This is a point which James would not have accepted so easily. Even if Bergson cautiously discusses a vague sufficient detachment from practical interests, according to James there is no real practical detachment from life. Moreover, James does not really distinguish between aesthetic and practical attitudes, even if he consider 'things' as particular groups of sensible qualities that draw our attention for *aesthetic or practical reasons* (PP: 274)[72].

This attention would be as continuously present and moving as an undivided flowing melody. Bergson makes clear that his «perpétuel présent» is an enduring present and as such it has nothing to do with immutability[73]. There are many cases of individuals experiencing a suddenly *conversion* of their attention (cf. James VRE and Bergson DS), a fact that Bergson explains as a change of orientation of our consciousness which turns itself away from action and regains memories lost in time. According to the continuity of our interior life and its indivisibility, past and present are the same continuous change and, in this view, we justify our lapses rather than our memories. At this point, Bergson attacks contemporary psychological and physiological theories which consider our brain as an organ of conservation. As we know, James sent Bergson his lecture on *Human Immortality* (1898), in which he advances the hypothesis that the brain has a transmissive function (ERM: 75-101, see in particular p. 86ff). These theories, in fact, are embedded [imprégnées] in a precise metaphysical doctrine which is the most natural to us, even though problematic. Bergson illustrates only some of the main difficulties of these theories owing to the space and organization of retention, the modality of retention and mental illness corresponding to local lesions of the brain. He claims that our brain does not have such a function of conservation but, according to his conception of enduring time, the brain is an *organ of selection*. It

selects from the past – which does not really pass – what is useful to our present activity. The conservation of the past does not depend upon our brain. The past is conserved within the present indivisibility of change[74].

Bergson is convinced that this recovered vision of reality as real continuous change is able to dissolve those great metaphysical difficulties which have resulted in the sentence that 'substance' is unknowable[75]. Moreover, very important problems could be solved in the light of duration. In particular, Bergson exhibits once more his intention to guarantee our *free will*. If time is a really concrete enduring present, then the notion of necessary determination loses any significance. In fact 'past' and 'present' work together and are creative. The relation between subject and object is compared to that between two trains moving in the same direction at the same speed. Bergson argues that the apparent effect of immobility is due to a certain: «réglage de la mobilité sur la mobilité». In fact, passengers in the first train have the impression that everything – namely, they and the passengers seen through the window in the other train– is stable, because both trains are moving. Immobility is an appearance, it is the effect of a particular relation which can find its place within a universal vision of reality as moving. Apart from art, a philosophy which acknowledges this vision of the universe- as- becoming can assist not only pure speculation but also everyday life. The philanthropic and pedagogic vocation of philosophy is here taken into account. Bergson seems to consider art more elitist and superficial than philosophy. He suggests that, while the former enlarges our perception in width, the latter leads to a deeper enriching of life. Philosophy, in fact, provides a more *intense* relationship to reality[76] because it is able to keep together past and present perceptions and foresees future ones.

> La réalité n'apparaît plus alors à l'état statique, dans sa manière d'être ; elle s'affirme dynamiquement, dans la continuité et la variabilité de sa tendance. Ce qu'il y avait d'immobile et de glacé dans notre perception se réchauffe et se met en mouvement. Tout s'anime autour de nous, tout se revivifie en nous. Un grand élan emporte les êtres et les choses. Par lui nous nous sentons soulevés, entraînés, portés (PM: 97).

We should definitely overcome the fictive image of reality as something immobile yielded by our thinking. This image is nothing other than a convenient translation for practical ends which turns out to be a deceptive notion for any substantial understanding of life. Accordingly, for Bergson, regaining our original awareness of reality *sub specie durationis*, perception and reality again energized will show that we

already share eternity, since eternity is neither immutable nor ideal but: «une éternité de vie».

II.2.3 La durée réelle in Matière et Mémoire and L'Évolution Créatrice

Each of these two masterpieces deserve a dedicated work given its importance in the contemporary history of philosophy. Bergson's philosophy is developed through these two fundamental steps, taken, respectively in 1896, in which Bergson approaches the issue of the past, and in 1907, drawing the main consequences. I shall not attempt a complete or systematic analysis of these oeuvres. Indeed, I will approach these texts in order to detect some other clarifications of Bergson's view of duration. Following the reading of some scholars of Bergson, I wish to understand and verify the points where his philosophy takes (or not) the greater distance from James's philosophy. From the very beginning, many of them[77], in fact, pointed out that the most striking resemblance between James and Bergson deals with their respective notions of stream of consciousness and *durée réelle*, despite Bergson's remonstrance. Moreover, such a close comparison is mainly interesting for I believe that James's psychological analysis of the continuity of thought is the very turning point in understanding the original outlook of his later « pluralist synechistic » philosophy.

As is known, James discovered the continuity of the flow of consciousness considering the psychological relatedness of mental states. According to his psycho-physiological view, he denied that the same states of consciousness could ever appear in consciousness twice. In particular, M. Capek (1950) and M. Teixeira (2011) suggest that James anticipates in PP what will be established later in the philosophies of Bergson and Whitehead as the irreversibility of time. According to them, the similarities between these two philosophers are appreciable considering the evolution of their reflections. This historical approach would reveal the strong similarities between their theories and important influences. In particular, Teixeira suggests that all these authors produced 'epochal' theories of time. In this view, the main difference between James and Bergson concerns the metaphysical «status of the past» which, according to Capek, is also addressed under the aspect of the question of sub-consciousness. However, it seems that: «from the very beginning, the idea of an ontological past is implicit to James's philosophy in so far as he

emphasizes the introduction of novelty in his temporal stream of consciousness» (Teixeira 2011: 132). More or less consciously, their common attempt was to elaborate a notion of continuous time that, whilst preserving concrete distinguishable units of consciousness, also integrated them without generating any real breach of continuity.

Even if Bergson clearly underlined his distance from James on this point in a letter of 1903, and given the fact that James was not sure that he understood Bergson's philosophy still in 1907 (CWJ 11: 377-378)[78], as an ulterior proof of the development of James's position, these authors attribute great value to what James wrote in 1909 to James Ward, confessing that: «Bergson's synechism has shown me another way of saving novelty and keeping all the concrete facts of law-in-change» (CWJ12: 279)[79]. However, our considerations of the peculiar characters of James's *synechism* will be extensively treated in Chapter III, for now, we need only notice that his acknowledgement of Bergson's influence is not a final proof that their synechisms were effectively the same. In fact, despite undeniable similarities exist between Bergson and James's views – especially if we focus upon the development of their views, according to Capek and Teixeira's line of interpretation – there are also unavoidable differences as to what concerns the ontological framework of their account of continuity, which is respectively consistent with Bergson's spiritualism and James's natural realism.

In the 1903 letter to William James, Bergson tries to make clear his position criticizing the distinction within consciousness between resting places and flights, arguing that he considered immobility only an appearance summoned through an effort of attention. Again, in a letter to Horace M. Kallen (1915), Bergson wrote that it was psychology that led James to his stream of consciousness, and in fact this origin explains the psychological explicative function of his notion. *Durée réelle*, rather, resulted from Bergson's critique of mathematical and physical ideas of time compared to reality. Hence the reason why his notion shows an epistemological or metaphysical «puissance d'explication». Many years later, in another letter written to Floris Delattre (1923), he stresses again the «fundamental difference» of his notion from James's theory of the stream of consciousness. Here Bergson claims that in his *durée réelle* there is no flight and no rest. There are no static places within real duration since only transition is real. Moreover, reality is the substance, since continuity and indivisibility of change is not an accident. Nevertheless, we should

acknowledge that James had in mind a concrete distinction which structured the temporal continuity of thought. In fact, by resting places and flights, he suggested that thought is internally distinguishable, according to the quality of its contents, into 'image-thoughts' and 'imageless-thoughts'. These two groups would also correspond very closely to the distinction between two aspects of the Self that Bergson formulated in DI : «the one clear and precise, but impersonal; the other confused, ever changing and inexpressible, because language cannot get hold of it without arresting its mobility or fit it into its commonplace forms without making it into public property» (Capek 1950: 337). Hence, for Capek and Teixeira (2011), James and Bergson consider the time of consciousness to be continuous, and its continuity flows through a discrete structure.

Bergson would have misunderstood James's description of the stream of consciousness. The American philosopher was obviously aware that there is no real immobility in consciousness, but flights and rests are only 'comparative' moments, that is to say, relative one to the other. James's substantial parts of consciousness have a «natural breath» (Capek, 1950). They are not like the abstract instants of mathematics, they are more easily connected to objects than transitive parts. Yet Teixeira believes that James's evaluation already changed in his introduction to the French translation of *Pragmatism* (Teixeira 2011: 133). However, if on the one hand Bergson misunderstood James's metaphor of the flux, on the other hand, his insistence upon *c*ontinuity turned out to be misleading as well. As to James, in fact, it was clear that his continuity rested upon a «real differentiated structure of consciousness», while for Bergson it seemed to be produced by an effort of attention on a: «homogeneous, undifferentiated, even-flowing current» (Capek, 1950: 334). Of course, this was not the case. Bergson insisted upon the difference between the concept of mathematical continuity and that of dynamic continuity. In particular, in EC he clearly argues that the former kind of continuity is a form of endlessly repeated or tautological discontinuity, according to the succession of identical « infinitely thin instants ». He also discusses the mathematical instant in terms of something: «qui meurt et renaît indéfiniment». Moreover, considering Zeno's paradoxes in 1907, Bergson again distinguishes real movement from motionless trajectory along its course, which can be drawn after the movement is done. Motion is whole and indivisible. It takes time and flows uninterruptedly. The line of its

trajectory is a mere spatial post-representation of a durational reality. Duration is in fact the primordial fact characterizing reality[80].

Actually, the 'fundamental difference' for Bergson between his view and James's had to do with the deeper meaning of his research. Bergson was interested in the nature of time in general, not only as regards the time of consciousness. As Capek explains, the mathematical background of Bergson's exploration of time soon led him to contest the basis of classic physics and to produce a different theory of matter much closer to contemporary physics (cf. MM: §IV). In this view, the total continuity of the *durée réelle* implied a very different conception of the past, and in the end it relies upon a different ontological dimension.

Capek (1962) suggests that *Matière et Mémoire* can be seen as an extension and systematization of James's critique of the theory of psychological parallelism, which Bergson shall reject again in *Le paralogisme psycho-physiologique* (1904)[81] later published as *Le cerveau et la pensée : une illusion philosophique* (*L' énergie spirituelle*, Paris, 1919). As to what concerns *L'évolution créatrice*, Bergson explains that this work is an application of his « durée réelle », considered from a psychological point of view in his DI, to life in general. He maintains that *durée réelle* means : «à la fois continuité indivisée et création». EC would open a second phase of the relationship between James and Bergson, in which the philosophy of the French professor had a greater influence on James than vice-versa[82]. In fact, as James wrote in a famous enthusiastic letter to the «magician» (13 June 1907) following the publication of his book, he rejoiced in the profound congruence between their contemporary works. – in fact, along with this letter James sent his *Pragmatism* (1907) to Bergson, –and praised the importance of Bergson's arguments for his own philosophy[83]. Bergson wounded intellectualism, thus becoming a fundamental character of James's PU, where the sixth chapter is dedicated to his revolutionary philosophy. At last, according to Capek, James's later "bergsonism" would also resonate in his posthumous work SPP.

However, in the preface to the seventh edition of MM (1939), Bergson claims that his book rests upon a substantial dualism of *ésprit* and *matière* and his attempt is to clarify their relation by memory. Indeed, the issue discussed in this 1896 book was exactly the mind-body relation. Bergson was convinced that the difficulties deriving from either realistic or idealistic conceptions of matter might be overcome through his redefinition of matter as an aggregate of images, that is to say,

something existing halfway between things and representations. Bergson considers this notion of matter belongs to common sense, lying apart from any conceptual distinction (existence-appearance) added by philosophical reflection. In the history of modern philosophy, Descartes puts matter too far from us and Berkeley too close. Indeed, Berkeley made it one with our mind. Kant's criticism became necessary to restore the reason of mathematical order, only explicable by Berkeley as mere accident, as well as to give back a solid foundation to physics. Bergson remarks that Kant's criticism also went too far. In fact, according to common sense, there is no reason to limit our faculty of perception and to save physics rather than metaphysics. In fact, the necessity of limiting the mind was due to the extreme conceptions of matter provided by rationalism and empiricism. Hence Bergson's notion of matter as an aggregate of images is in line with his attempt to solve the issue of mind-body relations. This is a pivotal theme in philosophy which, for Bergson, has been very little studied. There are only a few theories which consider the psycho-physical relation, that is the epiphenomenalism hypothesis and parallelism. The conclusions of both of these theories are practically the same. Even if they move from different considerations of mind and brain, Bergson claims that, for them, either a complete knowledge of the brain or a complete knowledge of psycho-physiology would reveal the secret of the corresponding consciousness. More generally, Bergson acknowledges that both men of science and philosophers share the same reductionist conviction. Here we are at the point at which metaphysical biases strongly influence our examination of facts. As James had already claimed a in PP, the correspondence between states of consciousness and physiological activities is not at stake, but certain necessary conclusions drawn from the connection. Bergson takes the example of a coat hanging on a nail. The question is why are we led to infer *parallelism* from *correspondence*? Indeed, there is a vicious interaction between science and philosophy. On the one hand, philosophy claims that parallelism is verified by the results of positive science; and on the other hand, science interprets the facts of correspondence in terms of parallelism, which is a theory, owing to its tendency to consider this philosophical reason as the most probable and scientifically consistent.

But according to his view, Bergson suggests that memory has a privileged position in the attempt to explain psycho-physical relations[84]. For experimental psychology, it is the very crossing point between anatomy, physiology, and

psychology. Out of a strictly reductionist point of view, Bergson considers the physical state as much wider than the cerebral state and claims that the classical problem of mind and body can be resolved through the analysis of memory and particularly the memory of words. He argues that the cerebral state corresponds only to a part of the mental state, specifically the part which can be translated into movements of locomotion. Accordingly, even if one could have the opportunity to look inside our brain, this – i.e. the tendency to spatial movements – would be the only correspondence that one could simply and constantly ever identify between brain and consciousness (cf. James). At best, the brain could only explain that part of our psychic life which is most concerned with or translatable in action. In this 1939 preface, the dualistic outcome of Bergson's philosophy is evident. He discusses «des tons différents de vie mentale», as if we can have higher or lower moments of consciousness according to the degree of our attention to life. In this view, greater complexity of mental states is considered to be a greater dilatation of our personality, and mental states concerned with practical life are restrictions of this field. We see here the deep influence of Pierre Janet studies of hysteria on Bergson, as well as the VRE of William James. There, James considers the experience of conversion as made possible by an extension of the boundaries of the ego. Supernatural experiences are indeed enabled by a physiological weakness of personality. Here, Bergson recalls these cases, arguing that mental disorders of certain kinds are due to the weakening of attention to reality, that is to say, a breaking or loosening of our relation toward practical and active life, in brief a sort of metaphysical experience[85].

As independent sciences, psychology and metaphysics[86] should be in constant confrontation, although they must bear in mind their fundamental distinction. Indeed, both study the human mind, but on different levels. The proper object of psychology is the human mind working for practical utility, whereas the proper object of metaphysics is: «ce même esprit humain faisant effort pour s'affranchir des conditions de l'action utile et pour se ressaisir comme pure énergie créatrice» (MM: 9).

Bergson confesses that, along the way, he discovered the real connection between the analysis of memory and the realistic-idealistic quarrel around the existence or essence of matter. This corroborates his idea of the fruitful collaboration between sciences as well as introducing in this manner the progressive

resolution of speculative problems. Bergson acknowledges that his argument is not that easy, according to the *real* complexity of the subject, and he recalls the two fundamental principles which lead all his discourse. First, «l'analyse psychologique doit se repérer sans cesse sur le caractère utilitaire de nos fonctions mentales, essentiellement tournées vers l'action»; and second : «les habitudes contractées dans l'action, remontant dans la sphère de la spéculation, y créent des problèmes factices, et que la métaphysique doit commencer par dissiper ces obscurités artificielles» (*ibidem*).

According to the functional and selective psychological description of our brain, Bergson acknowledges an indestructible past and recognizes its ontological character. Indeed, memory is by its very essence duration and so he contests its complete reduction to the physiological level, as well as any effort to localize it in the space of our brain. Bergson considers that, under particular circumstances, we can recall our past in its wholeness as a present experience. Teixeira points out that this peculiar manifestation has a psychological nature, although the past itself is ontological. The flow of consciousness carries all the indestructible past that is present to the novel present that flows by. Hence this status of past allows for the emergence of novelty, since the emergence of novelty is only possible because temporality is duration.

In a first phase, at least, James could accept only a physiologically oriented distinction between recent past for consciousness and remote past preserved as a material modification of the brain[87]. Indeed, James did not believe that the past could really survive or subsist *but* as a present fading sensation, as a «feeling of the past». According to his «Heraclitean view», the stream of consciousness is perpetually perishing and all the past preceding our sensible present is continuously lost, since we can acknowledge its existence only *symbolically* in the modifications of our brain. Out of a «next-to-next» relation between successive instants of consciousness, and after an interval of more than 12 seconds[88], no relationship persist between pulses of thought; and, even if it is not easy to recognize the moment when our past dies in our memories, this really happens. The elaboration of the stream of consciousness within a traditionally static framework caused serious conceptual difficulties for James (Capek 1950: 340). The *durée réelle* is characterized by inseparability and heterogeneity. «Different states of consciousness endure in such a way that their particular way of enduring characterizes and

differentiates them absolutely. They draw on the indestructible past for their coming into being; and the ontological past necessitates the emergence of the novel for it reinvents itself as the flow of consciousness is enriched by the novel states of consciousness. This heterogeneous flow is thus epochal; different states of consciousness are identifiable although they are not clear-cut and separate» (Teixeira 2011: 134).

Indeed, already in PM, Bergson discusses the necessary interpenetration of memory and consciousness[89]. The point is that arguing for the retention of the past is a way of introducing real novelty. In fact, in this light it seems to be possible to admit that the present moment is richer in respect to the past one. Capek claims that novelty and retention of the past are two aspects of a «single dynamic fact», that is, «the progress of time». Again, he underlines the problem of deriving aspects of reality from the conceptualization of movement, since in concrete experience these aspects simply merge together and are not contradictory, they are but two names for one single process.

In this view, that of epochal theories of time, both authors have also recognized the similarity with Whitehead, particularly as to what concerns the different *rhythms* of duration described by Bergson in MM : «In reality there is no one rhythm of duration; it is possible to imagine many different rhythms which, slower or faster, measure the degree of tension or relaxation of different kinds of consciousness, and thereby fix their respective places in the scale of being» (Teixeira 2011: 139). Teixeira acknowledges that Bergson's philosophy displays peculiar compatibility with Whitehead's attempt to express the notion that matter, as well as life, have duration. As philosophers of process, they believed that reality endures, and that all duration has thickness. Duration involves perception. It is a qualitative trait, and real time is as it is lived by some percipient. Actually, they draw a vibratory description of matter and, in this respect, Whitehead's conception of 'prehension'[90] would be very close to Bergson's application of the notion of consciousness to the material world[91]. Capek clearly states that when: «ten years later A. N. Whitehead, a philosopher-physicist, reached the conclusion about "the creative advance of nature," punctuation he pursued the path discovered by Bergson and James» (1950: 352-3).

Indeed, Capek draws attention to a series of important reciprocal influences and different times of reception. According to him, Bergson would have: «grasped

fundamental truth about the *paradoxical structure of duration*; but, unlike James, he did not fail to understand fully its general meaning, valid for any duration, not only for the stream of mental states» (1950: 351). Already in PP, and particularly in his elaboration of the stream of thought, James had all the premises needed to infer a philosophical conception of continuity as a concrete growing temporal synechism producing real novelty. In particular, he argues that in Chapter XII (Conception) James provides such a concrete synthesis of his philosophical references, even though he does not recognize the wider horizon of his formulation. This is an important confirmation of our attempt to focus upon continuity in James and particularly on continuity of consciousness for the development of his later «synechistic pluralism». In any case, he acknowledges that: «Just as Bergson's "true duration," originally purely psychological, became finally a "creative evolution" on the cosmical scale, James's final affirmation of "the everlasting coming of novelty into being" was but an extended vision of his "stream of consciousness"» (1950: 352).

However, we should not forget that, in James's own words, pronounced while defending his communication on *La notion de la conscience* in the *V International Congress of Psychology* held in Rome (April 27-30, 1905), he considered himself to be neither a materialist nor an idealist but a *natural realist* in as much as he denied any ontological dualism[92]. In this view, whilst Bergson also attempts to avoid both materialism and idealism (cf. MM Preface and § IV), we cannot forget its undeniably dualistic outcome[93], as one of his best scholars has well acknowledged. G. Deleuze states: «A la distinction de deux mondes, Bergson a donc substitué la distinction de deux mouvements, l'esprit et la matière, de deux temps dans la même durée, le passé et le présent, qu'il a su concevoir comme coexistant […]» (1956: 31). F. Worms rightly describes Bergson's philosophy as an effort to find metaphysics within experience : «à travers la différence entre les deux sens de la vie» (Worms, 2004: 12). He attempts to make metaphysics immanent to our reality according to his metaphysical empiricism (S. Madelrieux)[94].

Bergson always stressed the metaphysical origin of his inquiry and the difference from physiology and psychology, the locus where James's reflection arise. It is undeniable that both of them, at different times, considered consciousness as a paradigm of the duration of reality. But it is as if they looked at the same object with very different intentions. And this is the reason why James seems to have

stumbled in the connection of mind-world continuity, whereas Bergson was looking for it from the very beginning. We are not, of course, arguing for James's naïveté, but the fact that James moved from psychology and Bergson from mathematics makes a great difference. Such difference of 'origin' and 'speed' cannot be so easily overlooked or completely reconciled in the end. The risk inherent in this attempt is to lose the different framework of their speculations as well as the main peculiarities of their discourse. In this regard, we pragmatically consider James's reflection as more original and contemporary than that of Bergson owing to the very different conclusions that they came to. Paradoxically, Bergson's practical look upon reality is direct towards speculation. James's empiricism, rather, kept him from jumping to theoretical conclusions. To pass from concrete to general, required a series of gradual passages in order to remain loyal to concrete experience insofar as possible. Accordingly, all the time that James spent elaborating his relational conception of reality, beyond the continuity of consciousness, is probably due to the fact that he was well aware of the risk of idealism implied in this vision. Indeed, he was looking for a way of integrating continuity – which he first discovered as the synthetic unity of consciousness – still remaining loyal to his natural realism.

II.2.4 On William James's Pragmatism. Truth and Reality

In 1911 the French edition of *Pragmatism* was edited by Flammarion (Paris), and Bergson wrote an essay entitled *Sur le Pragmatisme de William James. Verité et Réalité* by way of introduction. This brief text is very interesting and it helps to frame many replies which, at the time, Bergson gave to those scholars who were unsuccessfully trying to establish the relation between the philosophy of the French professor and that of James. Bergson writes about the pragmatism of James for he acknowledges that, despite their clarity, James's words were frequently altered, diminished, or distorted by European and American interpreters. Therefore, his attempt is to disambiguate some core Jamesian expressions offering French readers analytic means for widening their perspective and better appraising what James was saying in 1907[954]. In particular, his effort is to convey what was behind James's pragmatism, that is to say, his metaphysics and epistemology, for Bergson believed that James had so often been misunderstood because his critics did not get the interconnection between his notions of reality and truth.

Thus *la réalité en général*, for James, is redundant *and* overabundant. Like nature, it is always excessive and it always gives more than what is needed. Our intellectual representations of reality, like pièces de théâtre, rely upon our habits of economy, so that scenes and distinctions are neat and clean, the *dénouement*[96] of plots leads to a happy or tragic end and so on. But, on the contrary, our lives are full of useless words, things and acts [*gestes*]; situations are hardly neat or simple, cause-effect proportions are not strict, there are no absolutely definitive acts, no starts or ends completely developed. In Bergson's view, James derived his general notion of reality from human experience. He also observed that experience is not incoherent, since it presents us things and facts and it shows connections [*parentés*] between things and relationships [*rapports*] between facts. According to James, these relations are directly observable and *real* just as things are themselves. Thence we have to point out that reality is not fixed for James. Relations fluctuate and things are fluid. Pluralism is the form assumed by such a universe, in that these relations are not between elements neatly distinguished and totally connectable by reason. Resting upon experience, there are real conjunctions of parts of experience with other parts of experience, not all together, as well as real disconnections. Reality is not exhaustively conceivable on a logical level. To understand it all, our intellect has to abstract its contents and represent its nature. In fact, in history different rational exigencies have guided our formulation of hypotheses about the world. If ancient philosophers needed to discern the hypothesis of a closed universe, modern philosophers supposed the universe to be infinite. James's «point of view», writes Bergson, is that of «pure experience or radical empiricism» and from such a perspective reality appears to him to be neither finite nor infinite, but 'indefinite'. The idea of a purely intellectual reason would not feel comfortable in James's universe, whilst a reason much more integrated with will and sensibility would feel at home. Bergson stresses the change of signification endured by our ways of thinking about which is the more proper use of reason. Since human beings are naturally supposed to be limited in space and time, reason is a means of prolonging their perceptions in order to obtain generalizations. But, a neglecting attitude towards the *solid* tissue of reality reported by sensibility accompanied the modern preference for the hypothetical character of human reason. James seems to Bergson to be claiming an urgent reconsideration of such a deranged relation between men and reality (mind-world) on the ground of an historical reconsideration of

contemporary needs as well. As Bergson carefully reports, speaking of experience, James maintains the exigency for us *to* accept experience integrally, that is to say, everything which is part of it : sentiments, perceptions and of course 'things'. In the following passages of the introduction, Bergson stresses the human dimension of the world that James recovers from G. Fechner and he also shares his consideration of facts and events as parts of ourselves, intending ourselves, he adds, to be «all that we are conscious of being, all that we experience» (CM: 212). In this view, stressing the fact that both psychological and physical forces are real, Bergson writes of an atmosphere traversing *de grands courants spirituels* on which he places James's psychological work on religious sentiments [VRE].

This point is worth taking into account, since in Chapter 3 we will return to the metaphysical and epistemological importance of that inquiry, particularly commenting upon the recent book by David Lambert (2008). However, from a reported conversation with his friend and scholar Jacques Chevalier, Bergson remembered perfectly well the first time that he met William James and the question which James addressed to him : « Comment envisagez-vous le problème religieux ? » (Madelrieux 2011: 150). Such a memory is very interesting for us and we may imagine that it was crucial for Bergson too. S. Madelrieux notes that the maître de conférence would be deeply influenced by James's psychological study of religion (VRE) many years later, when he produced his first work on religion – *Les deux sources de la morale et de la religion* (1932). The novelty of James's narrative approach to these issues was pioneering and inimitable and Bergson was especially taken with his portraits of mystics and saints as individuals who incarnated those personal and living [vécu] characters of dynamic religion (Madelrieux 2011: 115ff).

Bergson affirms that VRE should be considered as the very origin of James's pragmatism. Indeed, he can say so because he reads this work as a metaphysical reflection upon peculiar emotions, such as those connected to religious beliefs. Hence, dissociating himself from other current interpretations of VRE, he does not consider it, or, consequently, pragmatism, as a work based on the psychological efficacy of religious beliefs. Rather, he considers it a work resting on a metaphysical position, which is a form of radical realism and, according to this view, he considers mystical emotions to be real. James himself discussed personal

experiences as a work of psychology, that is to say, a scientific work on a terrain which had been explored almost only by theology.

Bergson attempts to portray James's general theory of reality and he now derives from the latter a Jamesian general 'theory of truth' which is strictly connected to his metaphysical interpretation of religious emotions in VRE. Bergson considers what constitutes a true judgment for James. Against representational theories of truth, suggesting the mirroring relation of our affirmations (as copies) of the original reality, James seems to look for a more particular and applied kind of agreement. In fact, classical philosophy had been searching for an agreement with eternal truths, even bringing them down-earth. Modern philosophy, instead, retained such a vision of reality as a: «perfectly coherent and systematized whole sustained by a logical armature». Bergson points out that such a different conception of truth relies upon a different *théorie de la réalité*. In fact, confining himself to experience[97], James encounters the flux of phenomena and he considers true those affirmations related to one of them which enable us to master or foresee its phenomenal consequences. In brief: «Reality flows; we flow with it; and we call true any affirmation which, in guiding us through moving reality, gives us a grip upon it and places us under more favorable conditions for acting» (CM: 215).

As regards the traditional conception of truth as an agreement with any pre-existent reality, Bergson underlines James's future- oriented interpretation of truth. It is not a matter of faithful reproduction or *découverte*, but invention. We invent new truths, Bergson explains, to make use of reality. James's words obviously risk being misunderstood as a form of absolute relativism, but Bergson immediately clarifies that, from such a theory, the complete arbitrariness of truth does not follow. As for mechanical inventions, in fact, to be true, an affirmation should prove itself to be a useful device to ameliorate our dealing with reality. Indeed, on the one side, the existential value of every human being finds here a very important acknowledgment since, if truths[98] do not already exist, the road of history is not completely traced in advance and we are endowed with the possibility of creating something unique – as every one of us is supposed to be – and able to change our world. On the other side, even if new truths or new instruments are actually invented by someone and did not exist before, every « viable » truth should be rooted in the same reality as flowers in the earth. According to this metaphor,

Bergson also discusses the wind which brings some seeds or other to the earth, influencing the look of nature.

Therefore, our truths are invented little by little in the course of time, and, according to this temporal view, Bergson emphasizes the value of singular individual existence. In fact, different men having existed, we might have had a very different course of history and above all different «corps des vérités». Scientific truths, as well as ordinary hypotheses, are those functional paths [routes] that we have become used to walk in reality. In this sense, Bergson claims that «pragmatism continues Kantism». As Kant maintains that truth depends upon the general structure of the human mind [ésprit], James would add that the free initiative of certain men shapes certain features of the structure of the human mind. In other words, there are different paths. In fact, some truths more than others depend upon our attention as to the sense of their direction. Some other truths – called by Bergson «courants des réalité» -- are more independent of our preferences. In this regard, no one of these currents is created by us. Accordingly, pragmatism upsets the order that we have traditionally given to different species of truths. James considers the truths of feeling as those most deeply rooted in reality and claims that scientific truths are only different artificial human inventions. The relationship between the former and the latter can be described as the relationship between a *bateau à voiles* and a *bateau à vapeur*.

In conclusion, Bergson claims the metaphysical profundity of James's definition of truth. His theory of truth has been too superficially reduced to a mean form of utilitarianism because it has not been properly connected to his conception of reality. For Bergson, James considered reality as *multiple and mobile* and in this respect he traces a viable ontological alternative to Parmenides's image of it as a logical fixed unity. Paradoxically, within James's theory of reality, Bergson seems to turn the accusation of superficiality against intellectualist truths. Since all truths are useful human inventions, he infers that conceptual truths seem to utilize reality not to penetrate it. Here we find ourselves with the description of the two different aspects of knowledge depicted by James, according to different aims and genealogical times. This point is very subtle, since its interpretation can also be indicative of the difference between Bergson and James's views. In fact, James concedes a certain priority to 'acquainted knowledge' respect to 'discursive knowledge'[99] but it is important to notice that such a difference is never grounded

on any ontological rupture. Bergson's reading of James is therefore revealing of his noticeable inclination to consider epistemology as deeply rooted in ontology, and, moreover, to disregard any methodological reading of James's pragmatism (cf. Madelrieux 2011: 117, n.13; Lamberth 2008).

Bergson's conclusive portrait of James is very similar to the one offered by Peirce (CP6.182-184)[100]. His love of truth was quite acknowledged as well as the existential roots of his philosophical inquiry. In this view, Bergson believes that, if his critics had known James personally, many of them would not have misunderstood his theories, –at least, not in the worst moral sense of submitting the search for truth to material utility. To Bergson, who had this lucky opportunity, James's words sounded original, elevated, and profound.

II.3 Mach on Continuity

II.3.1 Mach and James

In 1903 Ernst Mach (1838–1916) dedicated the third edition of his *Popular Scientific Lectures* (1896) to William James. In the preface to the first edition, Mach confesses his desire to convey «the *charm* and the *poetry* of research», as well as his conviction as to: «the substantial sameness of scientific and every-day thought» (PSL: v)[101]. In this view, he suggests the importance of resolving scientific problems for everyday life and wishes for a deeper exchange between the world of physics and society. The third edition was enlarged by the addition of a new lecture, *On Some Phenomena Attending the Flight of Projectiles*. As reported in their correspondence, the dedication of this edition to James reads: "Dedicated to Professor William James with Sympathy and Respect from the Author" [102]. This dedication came as a surprise to James who did not expect his fragmentary philosophy to be deemed significant by such a leading author. Indeed, James met Mach in Prague in 1882 where the American professor attended a lecture by the older Austrian colleague and, the day after he had a memorable four hours walking with him (CWJ5: 285-8). On the same occasion, James also met Ewald Hering[103] and Carl Stumpf. Stumpf began an assiduous correspondence with James, whereas that between James and Mach was never so intense, even if it lasted from 1884 to 1909. As usual, they sent each other their main books and reciprocally expressed positive comments on the lines of research respectively pursued.

Mach preferred not to be called a 'philosopher', despite the fact that his ideas were concerned with the history of science and its critical reading. In this respect, his empirical approach - 'phenomenism' - was to have much influence in the field of physics, and for a long time it was set against the atomistic theory of Boltzmann. In particular, Mach sustained the descriptive role of physics and rejected the atomistic theories derived from the traditional view of Newtonian mechanics. In fact, he considered atoms to be: «idealized, indivisible things in themselves incapable of interaction with the outside world» (Banks 2010). In this respect, his analysis of space is very interesting and reveals his physiological background.

In particular, his critical revision of the classical concepts of absolute space and time came from concrete consideration of dynamic interactions between phenomena. His concrete redefinition of physical concepts has been considered a fundamental prelude to Einstein's elaboration of the theory of General Relativity (Gargani 1982). Erik C. Banks suggests that: «Mach worked in a climate of revolt against the seventeenth-century mechanical view of nature (Einstein, 1949) and the object-property ontology lurking in its background» (2010: 174). Banks claims that Mach's ideal was to replace the object-property ontology with a power-ontology. In his dynamic world, he distinguished fundamental empirical elements as the basic structure of nature –more fundamental than atoms and conceptual distinctions – functionally related to each other.

Actually, Aldo Gargani (1982) discusses Mach's "utilitaristic romanticism"[104]. According to his naturalistic philosophical view of human beings, Mach considered science as an affair providing men and women with the economic advantages of natural truth. Gargani's intense reading of Mach, introducing the Italian translation of *Erkenntnis und Irrtum* (1905; it. Tr.1982), a volume that James read and noted in the original version[105], is helpful in identifying the main points of interest for our reading of Mach's relationship with James. In particular are Mach's personal hostility against metaphysics as an authoritarian imposition, his conception of scientific thinking as continuous with common thinking, his conception of reality as a field of fluid and continuous experience, his epistemological critique of the sciences. According to his naturalistic evolutionist view, Mach considered scientific thought to be an economic result of practical interests. Our need to control a wider number of phenomena and to produce rules of expectation, emerges from our own everyday thinking. Science is a complex of theories having an historical origin. They are not fixed and invariable forms. According to this view, Mach addresses as 'metaphysical' all those concepts which are no longer traceable to their mundane origins. In other words, the functional roots of these concepts have been forgotten. Moreover, scientific theories are just functional arrangements of empirical phenomena according to mathematical methods and a 'legiform' principle of continuity. In this view, physics as a natural science should only describe phenomena. It does not determine the supposed essential structure of reality. In this regard, it is interesting to recall that Mach considered the relation between the empirical world and our systems of theory not as a one-to-one correspondence, in

as much as concepts cannot be logically deduced from experience. This amounts to saying that the deepest bond with reality is not logical but experiential (sympathy), since the correspondence between reality and logic is not necessary. A very brilliant consequence, identified by Gargani, is that Mach seems to anticipate Einstein's distinction between constructive theories and theories of principles (1982: xvii). Moreover, this vision accounts for Mach's stressing the fact of human interest. Without any logical structure of reality, in fact, contingency is really ruled by history, hence by functional selection of scientific explications. This acknowledgment is also very close to James's conception of what is 'satisfactory'. There are no rigidly fixed criteria of what is required to make us consider what is satisfactory an explication in general, although criteria take a precise form according to contingency.

Mach's concrete considerations of the physical conditions of phenomena permit him to re-elaborate classical physical concepts in dynamic terms. According to this view, the definition of phenomena is the description of concrete active relations (i.e. mass). His general view is already described in the first article selected for this work. He saw reality as fluid mass, a homogeneous perfect continuity of sensations. Such a current of empirical data, which resembles James's stream of consciousness, except, arguably, for its homogeneity, are the basis for our intellectual operations. Agreeing with James, according to more or less contingent biological and economic interests, we carve out concepts such as 'body', 'mind', 'ego' etc. that are simply relatively stable connections of the unity of experience called *elementa*. These are empirical data of continuous experience which come before any conceptual distinctions. Here we are at Mach's «neutral monism», which is an anti-dualistic metaphysical doctrine. In this respect, Banks (2012) writes of the "umbrella theory of science", both for Mach's 'neutral monism' and for James's 'pure experience'. This interesting reading will be discussed in Chapter 3, but here it is sufficient to say that this vision consists in considering these theories to be «general schema[s] or pattern[s] for designing more specific theories which must be discovered and verified empirically» (Banks 2012: 21), diminishing their metaphysical import.

Moreover, theories of science are active constructions of data. Even data of immediate observation are theory-laden. Indeed, theory and observation are not neatly distinguishable. Science considers empirical data according to paradigms that are influenced by theoretical bias, interests of research, practical ends. This

point has been further investigated by contemporary epistemology (cf. P. Feyerabend). According to Mach, sensation is the beginning and the very end of every intellectual research. This position is very close to James's view of truth as well as his instrumental conception of concepts. Since knowledge begins as a casualty and as instinctive connections between experiential elements. Concepts are useful tools to organize and ameliorate the functionality of instinctive human practices.

Despite the fact that similarities between Mach and James were soon acknowledged by Stumpf and Flournoy, Michael McNulty (1982) claims that James's pragmatic methodology made all the difference. According to him, such a difference overcome the solipsistic critique eventually addressed to Mach's epistemology and to James's. In this respect, Mach's phenomenalism would not be similar to James's pure experience since the latter is not intentionally neutral as the former is supposed to be. This crucial difference would allow James to define himself as an epistemological realist while leaving Mach at least vulnerable to the critique of idealism (1982: 251)[106]. We should acknowledge that Einstein clearly rejected such an easy critique of Mach's view and Robert S. Cohen recently claimed that Mach simply ruled solipsism *a priori* out of his view. Moreover, Banks (2012) clearly talks about Mach and James's «realistic empiricism», claiming that their realistic commitment has not so far been clearly established.

However, I will analyse some articles by Mach which appeared in «The Monist». In particular, James acknowledges Mach's influence for his elaboration of sensations and space. The relation between Mach and Paul Carus[107], the editor of this review, was deep and Mach hoped that his works would be read by American scholars (Holton 1988). Indeed, many authors in the Vienna Circle who were influenced by Mach wrote articles in «The Monist» in the following years, most of them were concerned with similar methodological and epistemological issues in the field of science[108].

II.3.2 Mach on Sensations

In his article *The Analysis of the Sensations. Antimetaphysical* (1890) in «The Monist», Mach complains about the overabundance of physical methods of inquiry in every domain of knowledge. Indeed, such methods are limited and created for certain

purposes. In an anti-metaphysical fashion, Mach tries to illustrate the relation between the physiology of senses and physic*s,* claiming that the former can continue its special development and assist in the development of the physical sciences. According to his empiricist view, bodies are relatively permanent complexes of properties connected in time and space. Mach claims that the substance of a thing is a 'quantity of permanency' which amounts to that relative continuity which allows us to recognize our friend or our coat in situations where we have to attribute to them new qualities which they present and deduce those which may be absent.

Since the activity of thought works economically and owing to our intimacy with permanence – and our lack of attention to change – we are apt to give a name, indeed a *single* name, to things that we once perceptually represented in our mind. Thus a particular human body is joined with a: «complex of memories, moods and feelings […] which is denominated the 'I' or 'Ego'» (1890: 49). This is the case because the body and the ego is only relatively permanent and its permanency is mainly due to the fact of the continuity of the ego and to the slow velocity of its changes. Mach is clear about this point. He maintains that the life of a person can be seen as a succession of many relatively different egos and that, for instance, to join our present ego to the ego represented by letters written during our adolescence, we should make an effort of partial reconstruction of our past ego.

These complexes appear to be composed of «common constituent elements», (i.e. the visible is composed of colour and form), but our linguistic habit of denominating each complex with a single name and our lack of attention to each singular occurrence of the same complexes in considering its changes lead to: «the monstrous idea of a *thing in itself* ». Indeed, bodies and egos exist only as complexes of their 'phenomenal' characteristics. Mach is talking about a methodological, or better, a procedural difficulty which is at the root of such a philosophical illusion. In fact, extensive comprehension (unity) and accurate separation (multiplicity), he argues, should not be employed simultaneously since they pursue different aims. These two approaches are conscious expression of different points of view (macro or micro), but they are also connected with the supposed higher reality or more enduring permanence of the sense of touch according to the mechanical description of space and time. Here we are at the point at which some pseudo-problems can be

easily resolved considering the context of the inquiry and, moreover, taking into account the physiology of senses

As we will see in other articles from 1901-1903, Mach considers space and time as sensations and is against their description as absolute realities given by Newton. It is interesting to notice that Mach and James paid much attention to the analysis of space (cf. PP XX) and that Einstein was deeply influenced by Mach's critique of classic mechanics when elaborating his theory of general relativity.

Mach gives a demostration of his phenomenalist empiricism. In fact, he gives different names to different complexes of properties, namely, 'ABC' to bodies, 'KLM' to the human body, and 'α β γ' to the complex of volition, memory etc. Actually, ABC is generally supposed to be the world of substance, sometimes together with KLM. But Mach claims that, on closer examination of a die, for instance, it is not possible to say exactly where is: «this *same* body that phenomenally appears so *different*» (1890: 54)[109]. In his view, absolutely independent nuclei of things do not exist. The world is only made of sensations which we can experience and know. Moreover, he considers such a perspective as an integral form of realism against other immature philosophical criticisms, and, indeed, Einstein agreed with him, maintaining that only those who had not read Mach could describe him as an idealist.

Accordingly, Mach makes clear his monistic view that there is no a neat point of division between the *ego* and the *world*, since: «"body" and "ego" are only make-shifts for a provisional survey and for certain practical ends» (1890: 56). Hence metaphysical conflicts are due only to different points of view. As he has shown, we must deal with homogeneous elements, or better, with the connection and relation of the elements. But such an anti-dichotomist position is at stake when we try to inquire after the sensations of other bodies, or in James's terms, how two minds can know the same thing. Apart from the possibility of adding sensations in thought to these other bodies, Mach points out another way of reasoning. He proposes considering ABC as sensations belonging to the ego – so avoiding the gap between material and spiritual worlds – and to see all these elements ABC and KLM as a unique coherent mass undergoing, with different features, the same actions. The picture suggested is that of: «a viscous mass, at certain places (as in the ego) more firmly coherent than at others.» Such a change of perspective can help us to assess other possible scientific solutions to the perennial issue of the mind-body

relationship. Mach is convinced that such a problem exists only within a certain: «common stereotyped method of observation». Indeed, it is only the direction of our investigation that makes a colour appear a physical object or a psychological one (a sensation). As for attributing sensations to other bodies, Mach claims that we must complete our observations *by* analogy and that such a work seems to be easier when it relates physical processes. In this regard, we can recognize quite well the characters – i.e. vividness – of groups of elements belonging to different spheres, and this means that these elements are connected with «divers other elements» (cf. ERE: 3ff). This is to say, that the elements of reality are homogeneous. Only the character of their unions is different. At this point, Mach claims that pleasure *and* pain are also sensations. This suggestion easily recalls the Question asked by Peirce of James's PP which was published in 1890, the same year as Mach's article (cf. CP8.72ff). Even if pleasures and pains are less familiar to us than sensory sensations, Mach states that every sensation can gradually pass into pleasure and pain, and he adds that sensations of pleasure and pain are the real content of feelings. In this view, perceptions, ideas, volition, and feelings become composed of a small number of homologous *elements* (or sensations) which are connected by different relations[110].

Therefore, the [ego] is a mental construction or «an ideal mental-economical unity» that is useful to surviving ends. Out of practical concerns, the primary facts are not such complexes as the 'ego' and the 'body', but sensations. Since such compositions do not exist as real indivisible unities, they are not rigorously defined either by their changeable limits or by peculiar characters. But Mach claims that: «Continuity alone is important» (1890: 62). The relational continuity of sensations-contents of the 'ego' is not itself important, but it is a means of disposing and assuring its elements. Mach disregards the excessive value which has been attributed to individual or personal characters. At this point, it seems to be closer to the scientific view of Peirce than to that of James when he condemns the over-estimation of «insignificant, valueless, personal memories or reminiscences» in order to corroborate a wider and over-individual perspective. Indeed, since everything is constantly changing and there is no absolute permanence, despite our fear of renouncing our illusory real individuality, sooner or later, science shall acknowledge such a psychological result.

Only if we renounce the actual unity of the ego[111], which leads us either to unrecognizable mysterious substances or to idealistic outcomes, and begin to regard it as a *practical* unity «composed for purposes of provisional survey» -- characterized by a peculiarly strong connection compared to the relation of the ego to other groups of elements (cf. PP; ERE: 23ff)[112] – we will not incur in similar pseudo-problems again. The idea of a multiplex interconnected content of consciousness, which is conceivable as easily as the multiple inter connection of the world, can replace the unity of consciousness.

What is interesting, and conforms to James's view, is Mach's attempt to reconsider the distinction between real and perceived as a matter of perspective and to do this from a scientific point of view, that is to say, as an internal critique. Probably it is also in this light that he emphasizes that he is not a philosopher but a man of science[113], according to his vision of scientific thought as being in deep continuity with common natural thinking. From an empirical view, he suggests that the world is made up of ultimate recognizable elements, sensations, that we instrumentally connect, creating mental complexes such as mind and body that are but: «thought-symbols for complexes of sensation (complexes of elements)» (1890: 65). According to an evolutionist naturalism, no philosophy and no point of view has an absolute permanent validity and the development of experience also enables the development of new forms of thinking that are more apt to deal with reality. Actually, considering the very limited perspective of each scientist's point of view and, as a physicist, looking after the unification of the fields of science, it is not difficult to see the practical end of Mach's basal notion of sensations. His change of mind aimed at a change of paradigm which can at present:

> be adhered to with respect to all provinces of experience ; it is consequently the one that accommodates itself with the least expenditure, that is, more economically than any other, to the present temporary state of collective science. Moreover, in the consciousness of its purely economical office, this basal notion acts with most perfect tolerance (1890: 67-8).

Despite the influence of the *Prolegomena* of Kant on his young mind, years later Mach was struck by another vision of a fluid and dynamic mass and he attempted to give it theoretical form, dedicating himself to studying physics and the physiology of the senses and by historico-physical investigations[114]. It is interesting

that, among the most influential thinkers, he quotes Hering, Popper, Preye, and Riehl.

In a brief article *Some Questions of Psycho-Physics. Sensations and the Elements of Reality* («The Monist» 1891, 1 (3): 393-400), Paul Carus publishes Mach's criticisms of his article *Feeling and Motion* (The Open Court, Nos. 153 and 154). There, the Editor uses the expression 'elements of feeling' as the subjective aspect of what appears as motion (as Clifford), and believes that feeling and motion are aspects of the same reality, according to Fechner and a great number of psycho-physicists. Mach praises the common monistic tendency spreading worldwide, and for the sake of clarity offers some interesting specifications of his position. In particular, owing to his descriptive intent, he discusses elements, not sensations or motions. He does not aim to formulate a psychological, physiological, or physical theory. For the moment, it is enough for him to state that $\alpha\,\beta\,\gamma$ differ from ABC as the latter do from one another. On the one hand, the everyday individual does not care for psychological and physiological implications. On the other, the man of science is concerned with the relations between these complexes and he takes the latter too as constituents parts of the world. Actually, if we close our eyes, ABC disappears. This is why we can also consider them as our sensations. Therefore, Mach claims that ABC, indeed «*the same* ABC», is both an element of the outer *world* and an element of feeling. They are simply one and the same thing.

In order to make his view more clear, Mach focuses his attention upon the idea of motion in order to disregard the juxtaposition of motion and feeling. First, he distinguishes between a perceptible motion, that of a chair displaced in a room, and the hypothetical motion, that of the movement of atoms. In the first case, we are dealing with the particular relation between ABC. In the second, rather we deal with either so long as such a hypothesis does not become perceptible or in case it can never be perceived. Mach states that we are dealing with a *noumenon*, which is a «thing of thought», an artificial tool which represents certain relations. Again, these mental complexes are added to the original elements (ABC) for the specific theoretical purposes of the scientist, and Mach contests that such annexes or artificial expedients are as real as the green of a tree, that is to say, mediate elements should be put on the same plane (category) and in fact be coordinated with those which are given *immediately* to us. Only these latter are: «the very gist of the affair».

Like James, Mach distinguishes between *sensory facts* and mental adjunctions and claims the priority of perceptual elements over mental constructions (cf. James, MT). Moreover, in a very Jamesian fashion, he points out that the role of science is to make us more familiar (cf. acquainting) with the relations between these facts. In particular, it is important to keep methodological distinctions in physics. General discussions should not be obscured by the means offered by specific branches of science – in this case, the motion of classic mechanics – which are only special intermediaries that help to make us familiar with relations between general elements. In other words: «What should we say of a cosmology from a pharmaceutical point of view ? » (1891: 397).

According to his monistic conception of material processes and feelings as the same element considered in different relations, Mach has no clear idea about the relation between percepts and sensations. He supposes these feelings to be: «as a species of sensation (co-ordinate with sensations)». About the relation between representative percepts of imagination and memory and sensations, he has no structured opinion. Even if the "first step" toward a monistic theory is accomplished considering ABC as the same elements, the clarification of the relationship between $\alpha\ \beta\ \gamma$ and ABC is an unavoidable second passage that should be undertaken, and Mach believes that further psycho-physiological analysis will offer a solution. Except that he is concerned to reject the wrong assimilation of his point of view to Berkeley's. This is an important point, since the accusation of an idealistic outcome of monistic-empiricist requirements could easily be martialed against James too. In fact, Mach invites us to consider $\alpha\ \beta\ \gamma$ as representative percepts and not sensations, so that he only maintains that: «the same ABC,.., play, according to circumstances, now the role of physical elements, now the role of *sensations*. I call ABC. . ., therefore, elements, pure and simple» (*ibidem*). Hence it is important to bear in mind this discrimination between ABC as sensations and $\alpha\ \beta\ \gamma$ as representative percepts, which would not be sensations.

In this context, Clifford's theory of 'mind-stuff' is not acceptable at all. It is very near Berkeley's position and in fact also James analysed and rejected this theory in the sixth chapter of PP, probably the more 'metaphysical' chapter of his book.

Mach searched for a broader and vaguer point of view for scientific investigation, closer to the features of reality. His attempt is to gain a wider space for physical discussion out of its artificial margins. In fact, Mach considers special conceptions

as elucidating theories, not as general ontologies or descriptions of reality, indeed, they are not of the same order of reality. All non-monistic points of view are, according to this perception, 'artificial construction' due to an overestimation either of psychological or physical special conceptions. Thus spiritualistic or materialistic systems are, respectively, the natural outcomes of limited perspectives. As for the confusion about 'motion', Mach distinguishes between ultimate explication and special means of thought used to approach certain department of science. In any case, he looks for 'palpable or demonstrable answers' since science, and, particularly, physics, has: «to proceed from the sensory and to return to the sensory». An unverifiable hypothesis, such as that of the motion of atoms, are in Mach's words: «provisorily tolerated intermediaries of thoughts». The risk that Mach foresees in *noumena* is that of creating pseudo-problems and pseudo-realities and hiding: «the real point of attack in the investigation of reality» (1891: 399).

In conclusion, even if Mach considers Clifford's notion of 'eject' as interesting although not yet clear, again he criticizes Clifford for having come in the end to a «*psychological* notion», the 'mind-stuff' as «comprehensive of the world» and also makes a brief reference to Peirce's article *The Architecture of Theories*, which appeared on the previous number of «The Monist» (1891). Mach simply wishes to criticize Peirce's evolutionary view of laws of nature as not innovative and, moreover, he warns against any serious attempt to psychologize these laws. At last, he disagrees with Peirce's idea that the entire world has feelings.

II.3.3 Mach on Space Perception

Again in «The Monist», between 1901 and 1903, Mach published a group of articles on the nature of space. Particularly in the last - *Space and Geometry from the point of view of the physical inquiry* (1903) - Mach considers Riemann's attempt to answer the question of the nature of space. In particular, Riemann reflected upon the: «empirically hypothetical character of certain of the fundamental assumptions of geometry». Space is a special case of a «multiply-extended 'magnitude'», since: « 'the propositions of geometry cannot be deduced from general conceptions of magnitude, but that the peculiar properties by which space is distinguished from other conceivable triply-extended magnitudes can be derived from experience only... .These facts, like all facts, are in no wise necessary, but possess empirical

certitude only, they are hypotheses'» (1903: 3). In this view, Mach considers the fundamental assumptions of the sciences and of geometry as «idealizations of experience».

Such a physical conception of geometry animates his first article *On Physiological, as Distinguished from Geometrical, Space* (1901), in which against the Kantian *a priori* intuition of space, Mach tries to formulate a physiological explication of our conception of space. In fact, geometrical space is a concept that, according to Mach, can be inferred by abstraction from physiological space and is particularly [offered]? by touch . Mach underlines how geometrical space has kept alive only the dimension of external visual relations (our body with other bodies), losing the original and primitive aspects' link to 'proprioception'. This deceptive occurrence (or lack of proper observation) seems to be at the root of our difficulty with regaining the physiological origins of some properties of geometrical space, namely, uniformity and inexhaustibility. Hence the basis of our *noumenical* suppositions. Space is a concept derived from experience.

Mach began to define the important distinction between physiological space and geometrical space. The space of Euclidean geometry is: «everywhere and in all directions constituted alike; it is unbounded and it is infinite in extent». On the other hand: «the "visual space" is found to be neither constituted everywhere and in all directions alike, nor infinite in extent, nor unbounded» (1901: 321). Accordingly, "upness" and "downness," as well as "nearness" and "farness" rely upon different feelings. Moreover, when objects in visual space are moved about they undergo expansion and contraction, even if it is proved that such modifications decrease with the augmentation of distance. Thus there are but few properties that the space of sight has in common with geometric space. Because of their «threefold manifoldedness», to every point of geometrical space corresponds a point of visual space. Accordingly, Mach points out that, to a continuous movement of a point within geometrical space can also correspond a point moving continuously in visual space. But such continuity is only a «convenient fiction» and there is no need, either in geometrical space or in visual space, for such a continuity to be actual.

The other properties of visual space are adapted to biological conditions. Again, visual space is finite since an endless system of sensations does not exist. Every spatial relation should be identifiable by a specific feeling for surviving needs and not only by relation with other points, and the perceptual modification of the

magnitude of objects is also a natural index of their value (next-vital/distant-less vital). At this point, Mach presents the case of a frog whose skin is irritated by drops of acid to state that the frog reacts with a specific movement to each irritation which is connected to a different spot of its skin. Since the quality of the sensations is the same, they are all skin irritations due to drops of acid, Mach follows Hering's suggestion that, in the sensation, lies its differentiation and it is probably due to: «the specific character of the elementary organ or spot irritated, or, as Hering would say, to the locality of the attention» (1901: 323). Accordingly, Mach figures out a general teleological consideration generally accepted for optical, tactile, and organic sensations: «*The mutual biological adaptation of large groups of connected elementary organs is thus very distinctly expressed in the perception of space*» (1901: 324).

Mach underlines that William James's theory of the *voluminous* character of every sensation (cf. PP XX), derives from such a «natural and ingenuous» consideration, and in fact James often refers to Hering's researches. Mach also claims that the physiological spaces of different senses (touch, sight etc.) extend to physical domains which are partial and only partially coincident. Thus the different space-sensations connected to different senses are loosely connected and their systematic association help to provides the necessary information every time. If we adopt a biological point of view of sensation in general, it is much more intelligible to consider space-sensations of the different senses as specific, even if related to each other. In fact, sensation is not an isolated phenomenon. There are sensory fields producing certain movements in reaction. These fields may also have a common memory and a specific spatial order. Mach defines «physiological spaces» as: «*multiple manifoldnesses of sensation*». Actually, similar multiple manifoldnesses is probably due to the original proximity of their elements. Indeed, systems of elementary organs develop in similar fashion embryologically and is fair to suppose that the space-sensations produced by organs lying together are similar in their dimensions. Therefore, Mach argues that: «*sensible space* consists of a *system of feelings evoked by the sensory organs*, which, while they would not exist without the sense-impressions arising from these organs, yet when aroused by the latter *constitute a sort of scale in which our sense impressions are registered*» (1901: 326).

Assuming the system of space-sensation is an evolutionary trait that is shared by animals and man in different proportions, at this point Mach suggests that their three cardinal directions may be assumed to be the: «physiological basis for our

familiarity with the three dimensions of geometric space». But even if visual space is the most distinguished and broader system of space-sensations, Mach claims the biological priority of tactual space, that is to say, the priority of the space of touch – and particularly of 'proprioception' in respect to outward visual-relational perceptions – and the possibility of deriving from the sensory field of touch those ideal characters of uniformity and inexhaustibility of geometrical space.

Indeed, the visual and the tactile domains are intimately linked, but nevertheless the two systems of space sensations cannot be identical since the reactions induced by irritation of parts of the brain are different though contiguous, that is, looking and grasping. Mach indicates a distinction between simple reactions, such as the feeling of space and organized reactions, which produce automatic movements. Moreover, he acknowledges that the stimulus to «extensive locomotion and change of orientation» can proceed either from optical excitation or from chemical, thermal, acoustic, and galvanic excitation. for instance, in the case of blind animals. Accordingly, if sight is only a way of determining the sensation of space, it is possible to suppose that animals with sight, like animals without sight, determine analogously their sensations of space.

Through the example of looking at the movement of a millipede, Mach throws light upon our idea of a mechanical continuous correlation between different organs. Indeed, considering analogous cases of ear-eye correlation in human beings, as well as the capacity of organisms to adapt to regular frequencies of excitation (cf. Plateau and Oppel's experiments)[115], Mach was led to assume that a special sensitive process corresponded to the stimulus-time rate of alteration. In his view, the rate of motion is directly felt. It is a specific sensation and, physiologically, the : «original impulse for the formation of the idea» (1901: 330)[116]. Moreover, as for the uniform movement of a millipede, the fact that when perceiving a line we feel a succession of points together with a certain direction and curvature reveals the fact that there should be a cooperating relation between different elementary organs. The unifying hypothesis of an organ consciously (by will and attention) disengaging different movements and assuring the need for the organism to feel the effect of locomotion is illustrated – for the sake of clarity – in the field of visual space.

According to a teleological explication[117] of the perception of space, as a biological need, Mach considers our visual capacity of discrimination as an

economic device. In fact, it is necessary to move our eyes in order to respond to changes of attention, and we also have to neglect other movements of attention induced by objects at rest. Actually, it is a biological necessity for our eye while at rest to perceive moving objects; but, if our eyes are moving under involuntary circumstances (i.e. a tic or external pressures), the perception of resting objects in not relevant. This becomes more clear according to Mach's general assumption that: «the displacement of the image on the retina of the eye in voluntary movement is offset as to spatial value by the volitional character of the movement» (1901: 331). As a consequence, the tendency to movement can influence the displacement of objects at rest in the visual space. Moreover, in the case of external pressures, the organism is not obliged to «accomplish [...] its adaptation» (1901: 332).

Here is Mach's major point, that is, his objection to absolute space. Indeed, he contests the actual possibility of having any sensation of movement in absolute space and, recurring to the physiological account of such a «paradoxical exception», he aims at regaining the physical signification of this impression, that of: «a natural result of the adaptation of the organism, by which the animal perceives the motion of its own body when external objects at rest remain stationary» (1901: 333)[118]. Mach claims that we have a sort of physiological unconscious predisposition to acquire and adapt our senses to the direction of unnoticed perceived moving tendencies; and that only through a voluntary effort to pay attention to displaced resting objects in our visual field are we able to become: «aware of the displacement in the direction of its [our eye's] tendency to motion» (1901: 332).

In the case of an observer on a bridge, Mach underlines that, even when we fix our eye on the bridge and become aware that we are not really moving with the water, we have a second impression of moving in an opposite direction from the water. Again, this is only another apparent movement to counterbalance through another willing effort upon our senses. However, the important fact is this peculiar tendency to movement from a biological point of view, for it shows: «an important function in the case of progressive motion or locomotion» (1901: 333)[119]. How much these reflections could have influenced Einstein's formulation of his theories of relativity is easy to imagine and, of course, we can only make reference to the extended bibliography concerning this interesting relationship[120].

The important discovery for Mach, and indeed for James, is the: « *Fluent* spatial values of certain objects, instead of stable, that make their appearance in the

domain of the visual as well as of the tactile sense». Moreover, apart from his examples in the fields of visual and tactile sensation, Mach claims the spontaneous and unmistakable production of a different type of sensation of space, namely, the sensation of motion.

According to Mach, the sensation of movement shows those characteristics of uniformity and inexhaustibility that are inexplicable from a physical point of view. He distinguishes primary sensations of space from secondary sensations (of movement) and explains that only animals that are free to move about seem to share the secondary type of sensation. These are a natural result of evolutionary adaptation coming about together with the ability to move freely which also brings: «an infinite physiological space». In particular, these sensations can continuously be produced anew and: «progressive motion and the possibility of orientation in any direction together render space identically constituted at all places and in all directions» (1901: 334).

The interaction of elementary 'organs' living together and in need of co-operation can explain «physiological space» as an adaptive result of these internal body relations. In fact, Mach points out that, from a physiological point of view, these internal body relations between elementary organs are of the greatest importance for animals. The relation with other bodies comes only as an afterthought and it always concerns the concrete relation of outward bodies with some organ of the animal. On the contrary, Mach observes that «geometrical space» only considers the physical external relations between bodies[121].

According to his empirical approach, Mach has so far made it clear that our space perception depends upon sensations, and that sensations are the only elements of consciousness of which we are aware. Mach has tried to show that, while an elementary organ is affected we can distinguish our feeling into sense-impressions and space-sensations; the former part of the feeling depending upon the quality of the irritation, the latter on the 'individuality' of the organ and its ontogenetic relationship. In this way, Mach is open to a phylogenetic and ontogenetic understanding of spatial perception.

The very last part of this long and complicated article is dedicated to a direct confrontation with the Kantian point of view concerning space. As we have seen, Mach represents the view of modern researchers considering space as a concept derived from experience, against Kant’s priority of space as a pure intuition. The

point, for Peirce and for James, is to consider intuition as not possible for human beings, or better, not useful. Intuition seems to be a consequence of the immature state of science and, indeed, owing to a lack of observation or lack of intelligible explications. In particular, Mach talks about our inclination to overlook what we do, for instance, when we disregard the importance of sensations for our perception of space.

Indeed, physiological space is the origin of geometrical space, even if in the latter the relation to our body is not recognized. Physiological properties influence and sometimes determine our dealings with geometrical space. Cartesian geometry was dedicated precisely to liberating geometry from this dependence. Nevertheless, such: «historical influences of physiological space on the development of the concepts of geometric space are, of course, not to be eliminated» (1901: 338).

II.4 Considerations

Peirce, Bergson, and Mach are all great authors, and their general views are much more peculiar and complex than I could reproduce in this work. However, they were all contemporary interlocutors of James and from the selection of texts made here I believe that certain fundamental similarities can be observed. Moreover, even where there are more evident differences between the two of them, there are aspects of similarity with others. For instance, concerning the metaphysical conception of the past, James seems to be distant from Bergson, whereas Peirce and Bergson seem to be closer on this point, granting temporal profundity to consciousness. Peirce's metaphor of consciousness as a 'bottomless lake' in particular goes in the direction of subconscious retention. Also, Mach's anti-metaphysical epistemology is far from Bergson's. But there are very important connections with James's middle position. Actually, the most striking similarities among them deal with their common critical-epistemological work. Even if in different fields, and according to different cultural traditions they all recovered an empiricist methodology enriched by the dynamic framework provided by evolutionist theories. They all collaborate on the reconstruction of the cultural and scientific paradigm of the beginning of the 20th century. In particular, either owing to philosophical aims or personal traits of the characters, they were concerned with the problem of *freedom* which had been misconceived and profoundly disregarded by positive mechanicist philosophy. Their vigorous effort was in fact to disentangle the confounding mix of beliefs and conceptual dogmas that ruled scientific research and in contemporary philosophy. A critical historical-methodological-genealogical reflection on their times was an unavoidable in order to be open to new interpretations of the data of science. Classic mechanics, like classic metaphysics, was to be reformulated. Actually, their common attempt to make room for real novelty without inclining to degenerated forms of relativism had different features. More specifically, James and Bergson were fighting the same battle for the real possibility of personal freedom. Their work was indeed a claim for freedom and for democracy. Such an existential exigency was both a pressing reason and a result of this critical deconstruction of classic static and dichotomist paradigms.

In his introduction to the 1924's French translation of James's correspondence (Madelrieux 2011: 38-43), Bergson relates the conversation that he had with James about those philosophers who do not believe in freedom. James seems to state that freedom is an experience only. Sometimes we make it difficult to be free owing to distraction or because we are lazy. Indeed, freedom reveals our existential precariousness and profundity. It claims for radicalism and integrality in our present life and choices. It shows that change is real. According to this view, philosophy does not protect us from life. No conceptual systematization of reality can precede some experience of reality. The great originality of William James, according to Bergson, was his artistic tendency. His sensibility to life and attention to its varieties were always the starting point and the comparison of all his philosophy. He just wanted to take reality as it was. He did not want to cut or simplify its features according to any systematic need. This search for clear and simple unification, which is the effort that philosophy makes, was not satisfying to James. He preferred perfectibility to perfection and Bergson believes that he made a vigorous effort to grasp [étreindre] reality. This was the most profound agreement between James and Bergson. Their philosophies move from real doubt, particularly from felt existential doubt and, in this view, both can be considered strenuous defenders of real personal freedom.

As regards the epistemological level, it seems rather as if James arrives at intensity or intimacy by extensity, while, as Capek (1950) claims, Bergson makes a strenuous effort to avoid the visualization of time. As the vision of natural variation is the source of James's view, immanent eternity is the intuition pursued by Bergson. Indeed, both of their philosophies deal with vitalism and reality, but in a certain sense in very different ways. Probably James's contemplation is in the end more original and less defined than that proposed by Bergson. In this sense, they also deal with time, moving from very different points of departure which could not ever be reconciled. According to Capek: «Bergson's mind […] remained definitely Cartesian, while James was always faithful to the empirical English tradition» (1950: 341). Moreover, Horace M. Kallen (1915) emphasizes that: « in all this Bergson is still at the position in psychology that James has abandoned, and where James strikes out toward a neutralistic pluralism and radical empiricism, Bergson erects the methodological assumptions of psychophysics into the ontological dualism of spirit and matter of the philosophic tradition, subdued by the shadow of

a Plotinian monism» (1915: 151-2). A. Menard (1910) also notices that the Bergsonian assumption of unconscious mental states is theoretically derived from the notion of irreversible duration rather than based upon concrete experience. To him, studies in the physiological and psychological sciences only confirm his metaphysical intuitions. R. B. Perry (1934) has underlined important conceptual distinctions such as those between real time and felt relations; feeling and intuition. According to him, Bergson reads pragmatism as a theory of truth suitable to a metaphysics implying a notion of reality as 'redundant and superabundant' and participated in by man. Reality is revealed only when we take part of it (religious experiences).

Bergson carries on also a philosophical critique of society. As a teacher, he grew concerned with the increasing intrusiveness of social-normative mechanisms which led people to a superficial and extraneous way of living. Addressing the crucial problem of freedom from a psychological and metaphysical perspective, he testified the necessity of a new philosophical appropriation of these very abused themes. These terms lack a serious inquiry and are just 'flagged' either in case of claiming (for or against) the truth of some metaphysical hypothesis, or rather some deeper psychological exigency of security. Indeed, freedom is not a comfortable awareness (neither for determinists, nor for indeterminists) and of course it is deeply misunderstood. It inexorably calls on our personality. We are continually challenged to dig deeper into things, to confront and change our view, or just reconsider its corollaries.

Bergson was also as pervasively critical of language . To define is a way to make a conceptual effort of simplification and selective reduction of reality according to practical ends. There are aspects of our lives, the more authentic dimensions, that should be preserved from this attempt. We cannot avoid the effort of qualifying our affirmations in different context. We cannot just state something forever as language wishes. Bergson's critique of common sense is a sort of inquiry into ordinary mistakes, a critique of our representative psychological mechanisms and of the confusions we make since we are unaware of how our psychology works.

These are all important issues for Bergson and James. Whereas the only way to search for further compatibility between Bergson’s theory of pure perception and James’s radical empiricism is, according to Bergson in the letter to Pitkin (1910), to insist on a reformulation of our conception of experience. In his view, life

transcends our intelligence, but it does not transcend experience. Our intuition of life is « en fait » incomplete, but it can be indefinitely completed.

According to Bergson, the « current of reality » was first elaborated by James in psychology, while Bergson's starting point was epistemic and metaphysical. Some critics suggest that Bergson's influence was fundamental to James, but I believe that James had already foreseen the metaphysical outcomes of his view, only Bergson corroborated his philosophical critiques. Nevertheless, Bergson's strategy is misleading, and when he approaches the issue of consciousness it is not easy to recognize the ontological ground of his distinction (mind/spirit), for instance, when he talks about 'deep-seated' conscious states. Focusing upon the same objects of study, Bergson's personal metaphysics seems compatible in certain aspects with James's natural realism, but in the end they are quite different. Even when they talk about religious issues, James's interest is still in *feelings* while Bergson foresees in personal experiences the possibility of arguing for *personal metaphysics*. Bergson, for his part, adopted the method of empiricism to lead the ontological dualism of classic Metaphysics to the level of immanence (cf. Madelrieux 2011b). In the end, James is much more concerned with the *present* than Bergson, who tries to recover *pure past*, which is a past not selected by the present interests of individuals.

However, reading Bergson's letters to Kallen, Pitkin, and others, it is evident how often James's words undergo voluntary and vicious mystification. Bergson attempts to introduce the American author to French readers, continualsly qualifying his affirmations, preventing his words from captious objections. In a famous letter to Kallen, there is an interesting passage in which Bergson corrects Kallen's political interpretation of James as an anarchist and of himself as a monarchist. Bergson argues for a middle road between monolithic unity and absolute discontinuity. In fact, James's preference for multiplicity still remains continuously bounded.

The priority of sight leads to a spatial manner of thinking. Indeed, it is a functional scheme of thinking that we can apply to anything. In this essay he already presupposes that consciousness is independent of the brain, since, proposing the mental experiment of universal acceleration, he believes that consciousness does not undergo acceleration since it conserves the ability to feel the difference. Even if his spiritualism is already in the background, there are two points which seem interesting about this argument. First, the capacity of

consciousness to perceive qualitative difference (cf. Spencer, James, Mead 1932). Second, the correlation means-ends, in that he maintains that there are two orders of methods-schemes of thinking which consistently lead to different ends. There is a method convenient to a certain end. In fact, 'spatialization' is a useful way to gain empirical-practical ends – in particular, scientific prediction and social interaction. But there is another manner of thinking that we can adopt with effort that allows us to know reality. This means that we can switch from one way of thinking to another and, in this view, Bergson seems to be stating that Kant's claim about our logical seeming approach to reality is not essential but only contingent. We can change our habits of thinking, we can withdraw from practical bearings and regain immediate data of consciousness independently of any spatial form of thinking and, consequently, independently of any socio-communicative goal. Bergson proposes a theory of pure perception. In this view, time- as- duration is not only a form of thinking, as space was, but the being of consciousness. So we can know our experiences in themselves, not only as phenomena but as immediately given to consciousness. Of course, such superior knowledge is not possible for every experience, but only for personal experiences. In this view, Bergson believes that a metaphysical science is possible. The critique that he would make of Kantian transcendentalism seems to be pursued through a methodological psychologization of our forms of thinking, and here he seems to find the terrain to found his metaphysics of experience. Indeed, Kant's argument were structured upon logic, not upon psychology.

In *The Law of Mind,* Peirce suggests that he: «begun by showing that tychism must give birth to an evolutionary cosmology, in which all the regularities of nature and of mind are regarded as products of growth, and to a Schelling-fashioned idealism which holds matter to be mere specialized and partially deadened mind» (CP6.102). Peirce then concludes that: «what we call matter is not completely dead, but is merely mind hide-bound with habits. It still retains the element of diversification; and in that diversification there is life» (CP6.158).

Consciousness retains the past in its present. In fact, past and present should be contemporaneous for consciousness to be continuous and for it to last through time. Otherwise, if they were external one to the other, past and present would again be spatialized and analysed in the scientific manner of thinking. Thus consciousness is memory and everything lasting should have consciousness in a certain degree. On

this point, Peirce and Bergson seem to agree since both regard consciousness as continuous and in the end as the everlasting matter or energy. The profundity of time is acknowledged in the metaphor of consciousness as a bottomless lake. In *The Law of Mind* Peirce already points out that matter is really mind and mind is continuous. Since Lamarckian evolutionism, considered as an evolution by habit, coincides with the general description of the action of love, Peirce was thus looking for those Lamarckian aspects that can be applied to consciousness.

Indeed, it seems that there is an important difference between James and his colleagues concerning the attempt made by Bergson and by Peirce. For Peirce, at least in the writings that we have selected concerning his elaboration of continuity to re-establish metaphysics as a science. In an anti-Kantian fashion, in fact, both Peirce and Bergson received the lesson of the German philosopher, but contested its *noumenical* outcome. In particular, in the 1890s Peirce intended to recover metaphysics as an observational science relying upon logic and mathematics. More specifically, Peirce reconnects the world of logic and the natural universe within the same process of the evolution of their forms and he attempts to develops a scientific metaphysics by working on its methodology. In these years, Peirce considered the method of logic as the most valuable and stressed the special connection of logic with mathematics; in particular, as to the analysis of continuity, his studies relied upon Geometric Topic. His discourse addresses every possible universe, and our universe is only a branch of one of them and, moreover, its existence is only a stage of its evolution. However, we notice that like James, Peirce was concerned with the analysis of the category of possibility, better yet, real possibility. As he stated, in fact, potentiality is essentially general. Hence continuity, as the higher form of generality, is a relational generality. In his view, continuity is general and, as such, it pertains to potentiality which is itself essentially general. In this regard, as we have seen, Peirce attributes individuality to the second category of experience[122], to reactions, not to feelings. In his categorical repartition – feeling, reaction, thought -- feeling is a *firstness* and, in this respect, it is mostly general. This was a difficult point, since James's classification was not that of Peirce and he did not clearly distinguish feelings from the act of feeling. Except he was not interested in the abstract classification of experiences. To be a feeling, there should be someone, or at least something, which is feeling. Actually, the recognition of that feeling was also for James a secondary moment. As Putnam has clearly stated, the fact of

cognition does not mean infallibility (1999), even if this was of course true for Peirce as well. Our knowledge naturally grows by proof and error. Perhaps, as with Bergson, we could say that Peirce and James moved from very different interests. Again, on the one side, mathematics and metaphysics, on the other side, physiology and experimental psychology.

In this respect, Mach and James probably shared the more similar dynamic interpretation of reality. Even if they also moved from different fields of inquiry, physiology was indeed an area where their interests easily met. Moreover, like Mach, James was very interested in the epistemology of psychology and in its relationship, as a natural science, with metaphysics. At least in the beginning, James's assumptions display a very anti-metaphysical scientific bent. In this respect, both Mach and James adhere to Kant's view of science, which had clearly stated that metaphysical options were not dialectically soluble. However, Kant also considered metaphysics to be an unavoidable natural human tendency. So we can say, arguably, that James has also defended this important suggestion and he has understood it in the sense that, even if metaphysical views do not have demonstrable scientific value, they still remain in the end existential options and as such, in the grip of moral choices, they convey important existential values.

According to his scholars, Mach's *phenomenism* is not a form of idealism. As for James, his methodological empiricism had to be stressed in its sensational declension in order to avoid any idealistic or materialistic outcomes. According to this view, Banks believes that Mach's and James's views had a robust realistic commitment, despite their inclination towards sensation. As Madelrieux has underlined also in regard to James, this necessity was due to his attempt to save empiricism from its idealistic outcomes. Actually, for Mach, an empirical fact results from the intellectual interests that lead and influence our research. In this respect, knowledge cannot assume rigid forms. It comes from the relationship between parts of the same experience since it is such relation that makes knowledge possible. James sees knowledge as a *leading function*. It should help us to move within experience and to connect our data in the most functional way. According to this view, they also have a similar dynamic and functional conception of knowledge.

There is a general contestation of the appropriateness of observation, moving from the unsatisfactory theoretical conclusions drawn in different fields of research.

The mistakes of evaluation are probably due to unraveled bias that influence the direction of the theoretical interpretation of data. The myth of data acknowledged by contemporary epistemology was here evidently formulated for the first time.

Notes

1. «By the theory of cognition is usually meant an explanation of the possibility of knowledge drawn from principles of psychology. [...] it is indeed a vicious circle to make logic rest upon a theory of cognition so understood» (CP: 3.432).

2. Review of William James's *The Principles of Psychology*, 2 vols., 53 (2 July 1891) 15 and 53 (9 July 1891) 32-33. (CP8.55-71; CP8.72-90).

3. «May the manual you will squeeze out of your 2 big volumes be worth a real income to you as a textbook. Àpropos of which the main thing, counting out Baldwin, that has lately happened to Alice, appears to have been the disgust & indignation experienced by her over the idiotic review of your Psychology in the Nation.3 I don't know what to make of the way the Nation treats, & has mainly always treated us—& it alienates me from Godkin.» (CWJ, William e Henry James, vol. 2, 31 July 1891, p. 182); « My psychology seems to be a great success so-far, and I am quite sure that the "briefer course" will practically be the book used in the colleges. I am much amused at your and Alice's indignation over the Nation's review, which was a simply excentric production, probably read by no one. The second instalment was utterly unintelligible. I know that Garrison took pains to get it worthily reviewed and sent it to some old fogy whom he considered an authority. It shows how at the mercy of accidental reputation these editors are who try to get "experts" to do their reviewing, men who "do not ordinarily write for the newspapers" as the Nation's advertisement says. I did n't care a single straw for the matter one way or the other, not even enough to find out who wrote it.» (CWJ, *William e Henry James*, vol. 2, 20 August 1891, pp. 185-6).

4. «It is his métier to subject to severe investigation any doctrine whatever which smells of intelligibility» (CP 8.58).

5. In his review Peirce honestly included the precise quotation of James's *Preface* for an easier evaluation of his own interpretation : «Every natural science assumes certain data uncritically, and declines to challenge the elements between which its own 'laws' obtain, and from which its deductions are carried on».

6. Peirce distinguishes the English materialistic explanation of cognitive processes from the German more idealistic tendency of ultimately conceiving these processes (monist school).

7. When they refer to unconscious inferences, psycho-physiologists do not point to the nature of the first premise but to the subjection to logical self-control. Most interestingly, Peirce develops here in a nutshell the distinction between controlled and non- controlled operations of the mind. (Girel 2003:176).

8. «[…] in "Some Consequences of Four Incapacities", where Peirce describes a sensation as "a simple predicate taken in place of a complex predicate; in other words, it fulfills the function of an hypothesis" (5.291, 1868). Hypotheses can be made about hypotheses, and can simplify them to some extent,' even if we never grasp a first predicate that would not be an hypothesis.» (Girel 2003: 176).

9. «They do not hold sensation to be inferential, and consequently do not suppose a regressus ad infinitum. But even if they did, there would be no reductio ad absurdum, since it is well known to mathematicians that any finite interval contains an infinite number of finite intervals; so that supposing there is no finite limit to the shortness of time required for an intellectual process, an infinite number of them, each occupying a finite time, may be crowded into any time, however short» (CP 8.69).

10. «The association of ideas is said to proceed according to three principles – those of resemblance, of contiguity, and of causality. But it would be equally true to say that signs denote what they do on the three principles of resemblance, contiguity, and causality. There can be no question that anything is a sign of whatever is associated with it by resemblance, by contiguity, or by

causality: nor can there be any doubt that any sign recalls the thing signified. So, then, the association of ideas consists in this, that a judgment occasions another judgment, of which it is the sign. Now this is nothing less nor more than inference» (W2:237).

11. This manuscript presents indices of later acquaintance, since questions 41-42 are datable in 1894, and question 28, having an expression about the will to believe could be written around 1896-7. Moreover, since the publication of this manuscript was decided after the 11 volume of Peirce's Writings, it is possible that Peirce made more redactions of the text in different years (cf. Girel 2003: 196).

12. Peirce wrote two questions number 40, so that there are 45questions.

13. Questions on James' The Principles of Psychology (CP 8.72-90): Qu.3 PP I, chapter II The Functions of the Brain (Man's Consciousness Limited to the Hemispheres), p. 66 (74). Qu.5 PP I, ch. II or III (On Some General Conditions of Brain-Activity), p. 80 (maybe 88). Qu.12 PP I, ch. V The Automaton-Theory (Reasons for the Theory), p. 137 (141). Qu.14 PP I, ch. V The Automaton-Theory (Reasons Against the Theory), p. 144 (146). Qu.21, 22, 23 PP I, ch. VIII The Relations of Minds to Other Things (Relations of Consciousness to Space), p. 215 (211-212). Qu.29, 30 PP I, ch. VIII The Relations of Minds to Other Things (The Relations of Minds to Other Objects), p. 222 (218). Qu.31, 32 PP I, ch. IX The Stream of Consciousness (1) Thought Tends to Personal Form), p. 226 (221). Qu.33 ch. IX The Stream of Consciousness (2) Thought Is in Constant Change), p. 231 (225). Qu.36 ch. IX The Stream of Consciousness (2) Thought Is in Constant Change), p. 235 (maybe 230). Qu.41, 42 ch. IX The Stream of Consciousness (3) Within each personal consciousness, thought is sensibly continuous), p. 243 (236) and p. 244 (236-237).

14. I have to thank Mathias Girel for having provided me the unpublished questions of Peirce to James's PP that he had the opportunity to hand-copy from the manuscript R1099.

15. PP is a very long, chronologically stratified and complex text, especially it is an experimental one. There are many points at which James seems to be strict about a conclusion, other where he just seems to support the very opposite outcome. My opinion is that one should look at this oeuvre as a whole. Actually, from this general point of view, James is much closer to Peirce's views than he wanted to accept. About Psychology, many of Peirce's critiques seem used as an excuse to remake – more accurately maybe – a work at least already started, and of course pointing at a common goal (though inside this general common framework, there were of course great specific distinctions). In fact, because of his work of criticism (pars destruens) James served to Peirce a good terrain where he could graft his remarks and introduce his logical and metaphysical suggestions.

16. The four kinds of confusion that Peirce detected in James's PP are between First and Second; Second and Third; Third and First and then between different aspects of the same category and their hypostatization as different categories.

17. «Finite minds, however, can be judged in a different way, because the psychologist himself can go bail for the independent reality of the objects of which they think. He knows these to exist outside as well as inside the minds in question ; he thus knows whether the minds think and know, or only think ; and though his knowledge is of course that of a fallible mortal, there is nothing in the conditions that should make it more likely to be wrong in this case than in any other» (PP: 217).

18. Peirce talks about an *ethic* of terminology (cf. CP8 "pure experience").

19. «There is nothing in your psychology which serves my purposes better than your distinction between substantive and transitive parts of the train of thought. I had been forced to emphacize a precisely corresponding distinction in logic, where one of the most important & difficult operations is to catch the transitive on the wing & nail it down in substantive form. But the word "transitive" has been used for other purposes. For one thing in the logic of relatives (by De Morgan & me)2 by another in the closely related theory of Substitutions & now you propose to add to the confusion & render your own thought hard to get at by using this same word. Why is this word better than "transient" for your purpose?» (CWJ 7: 481-2).

20. «My reasons for not liking relational are two: 1st that word should be preserved to mean "dealing with relations," and cant be spared. 2nd When you shoot one of your "transitive" thoughts on the wing, transfix it and make it "substantive," then you have the idea of a relation; and until the

thought ceases to be transitive it has no consciousness of the relation. While it is transitive, it is in a certain sense what you might call relative but it is not relational. Homer speaks of winged and unwinged words to denote two different kinds or grades of attention. That is, that is what seems to be meant, if anything is meant. Words are always winged in the Iliad, I believe, and unwinged in the Oddyssey. Shall we say pteroent and apteroent?» (CWJ 7: 487).

21. «One branch of deductive logic, of which from the nature of things ordinary logic could give no satisfactory account, relates to the vitally important matter of abstraction. Indeed, the student of ordinary logic naturally regards abstraction, or the passage from "the rose smells sweet" to "the rose has perfume," to be a quasi-grammatical matter, calling for little or no notice from the logician. The fact is, however, that almost every great step in mathematical reasoning derives its importance from the fact that it involves an abstraction. For by means of abstraction the transitory elements of thought, the {epea pteroenta}, are made substantive elements, as James terms them, {epea apteroenta}.†1 It thus becomes possible to study their relations and to apply to these relations discoveries already made respecting analogous relations. In this way, for example, operations become themselves the subjects of operations» (CP3.642).

22. In the editorial note we read that: (Ed.) Paragraphs 164-166 and 167 (in part) are from the review of James Mark Baldwin's Dictionary of Philosophy and Psychology, Vol. II (Macmillan, 1902, 892 pp.), The Nation 76 (11 June 1903)482. Paragraphs 167 (in part) and 168-170 are from an alternative draft, Widener IV, dated c.1903 on the basis of the dates of the book and of the published review.

23. A Dictionary of Philosophy and Psychology. Vol. I by James Mark Baldwin Review by: William Romaine Newbold in Annals of the American Academy of Political and Social Science, Vol. 19, Commerce and Transportation (Jan., 1902), pp. 132-134.

24. Cf. Great Men, Great Thoughts and the Environment; On the importance of Individuals (WB).

25. Bergson's discussion about the psychological background of physical determinism will be focused in next section *Bergson and Continuity*.

26. Only few pages before, Peirce used a very interesting expression: «the inexhaustible multitudinous variety of the world» (334). This expression sounds very close to James's way of talking about variety, particularly in the correspondence to his brother Henry Jr. James (CWJ 1: 9). The visual impression of the inexhaustible variety of the natural forms and colours during his journey to Brazil in 1865 is probably one of the experiences at the core of James's pluralistic claim.

27. Peirce distinguishes instants from moments: the former are points of time, while the latter are used to mean the infinitesimal duration.

28. Peirce points out that such an energy is infinite in immediate sensation, but finite and relative in the recency of the past.

29. «But if the idea of an impenetrable atom is illogical, that of an impenetrable molecule is almost absurd. For the kinetical theory of matter teaches us that a molecule is like a solar system or star-cluster in miniature. Unless we suppose that in all heating of gases and vapors internal work is performed upon the molecules, implying that their atoms are at considerable distances, the whole kinetical theory of gases falls to the ground» (CP6.243).

30. Peirce provides the example of the "river bed" to say that these kinds of sensible motions are deceptive since according to the law of energy states of rest are but instable situations, not definitive or stable ones. The very same example is used by James and Wittgenstein on different occasions. For further readind see Boncompagni, A. (2012).

31. We propose the entire passage of this quotation of James: «Plasticity, then, in the wide sense of the word, means the possession of a structure weak enough to yield to an influence, but strong enough not to yield all at once. Each relatively stable phase of equilibrium in such a structure is marked by what we may call a new set of habits. Organic matter, especially nervous tissue, seems endowed with a very extraordinary degree of plasticity of this sort; so that we may without hesitation lay down as our first proposition the following, that the phenomena of habit in living beings are due to the plasticity1 of the organic materials of which their bodies are composed» (PBC: 126).

32. See R. Rorty, *Philosophy and the Mirror of Nature*, Princeton University Press, 1979, pp. 42-45; Joan Richardson, *Pragmatism and American Experience: An Introduction*, New York: Cambridge University Press, 2014, pp. 167-168.

33. «You are teeming with ideas—and the lectures need not by any means form a continuous whole. Separate topics of a vitally important character would do perfectly well. There would be sure, you lecturing, to be enough unity involuntarily there. What I should like is anti-nominalism, Categories, Attraction of Ideas, hypothesis, tychism & synechism» (CWJ 8: 326).

34. According to Comte's method of classification of sciences upon the abstractness of their object, Peirce considers Mathematics as the first and more abstract science, then he set is Philosophy (Logic and Metaphysics) and then the two branches of particular sciences (Physical Sciences and Psychical Sciences) each one is internally classified in Nomological Sciences, Classificatory Sciences and Descriptive Sciences. Finally Physical and Psychical Sciences comes to be rejoined in the Applicative Sciences or arts.

35. «Between reality and negation there is a continuity of possible realities and of possible smaller perceptions. Every color, as for instance red, has a degree which, however small it may be, is never the smallest; and so with heat, the moment of gravity, etc.» (CRV A169/B211).

36. Peirce states that Topics is concerned with the modes of connection between parts of continua.

37. Peirce excludes that is possible to distinguish individuals by means of distinctive qualities, since if every individual would have a distinct quality, he states, «these qualities would form a collection too multitudinous for them to remain distinct» (CP6.188).

38. «Those who express the idea to themselves by saying that the Divine Creator determined so and so may be incautiously clothing the idea in a garb that is open to criticism, but it is, after all, substantially the only philosophical answer to the problem. Namely, they represent the ideas as springing into a preliminary stage of being by their own inherent firstness. But so springing up, they do not spring up isolated; for if they did, nothing could unite them. They spring up in reaction upon one another, and thus into a kind of existence. This reaction and this existence these persons call the mind of God» (CP6.199).

39. «The new curve, although it is new in its distinctive character, yet derives its continuity from the continuity of the blackboard itself. The original potentiality is the Aristotelian matter or indeterminacy from which the universe is formed. The straight lines as they multiply themselves under the habit of being tangent to the envelope gradually tend to lose their individuality. They become in a measure more and more obliterated and sink into mere adjuncts to the new cosmos in which they are individuals» (CP6.206).

40. «There is, therefore, every reason in logic why this here universe should be replete with accidental characters, for each of which, in its particularity, there is no other reason than that it is one of the ways in which the original vague potentiality has happened to get differentiated» (CP6.209).

41. I have to thank Mathias Girel for suggesting me to read this very interesting passage about consciousness in Peirce.

42. «Let me now resume the argument. To begin with, it is to be remarked that I use the word "experience" in a much broader sense than it carries in the special sciences. For those sciences, experience is that which their special means of observation directly bring to light, and it is contrasted with the interpretations of those observations which are effected by connecting these experiences with what we otherwise know. But for philosophy, which is the science which sets in order those observations which lie open to every man every day and hour, experience can only mean the total cognitive result of living, and includes interpretations quite as truly as it does the matter of sense. Even more truly, since this matter of sense is a hypothetical something which we never can seize as such, free from all interpretative working over». (CP7.538).

43. «Thirdly, a reaction has an individuality. It happens only once. If it is repeated, the repetition is another occurrence, no matter how like the first it may be. It is anti-general. A quality, on the other hand, has no individuality. Two qualities are different only so far as they are unlike. Individuality is an aggressive unity, arising from an absolute refusal to be in any degree responsible

for anything else. This a quality cannot have since it is too utterly irrespective of anything else even to deny it. A reaction, on the other hand, is an opposition, or pairedness of objects that are existentially correlative, neither existing except by virtue of this opposition».(CP7.538).

44. «There are no other forms of consciousness except the three that have been mentioned, Feeling, Altersense, and Medisense. They form a sort of system. Feeling is the momentarily present contents of consciousness taken in its pristine simplicity, apart from anything else. It is consciousness in its first state, and might be called primisense. Altersense is the consciousness of a directly present other or second, withstanding us. Medisense is the consciousness of a thirdness, or medium between primisense and altersense, leading from the former to the latter. It is the consciousness of a process of bringing to mind. Feeling, or primisense, is the consciousness of firstness; altersense is consciousness of otherness or secondness; medisense is the consciousness of means or thirdness. Of primisense there is but one fundamental mode. Altersense has two modes, Sensation and Will. Medisense has three modes, Abstraction, Suggestion, Association» (CP7.551).

45. For further reading about the distinction between *quale-consciousness* and *vividness* see CP8.222ff.

46. «There are such vast numbers of ideas in consciousness of low degrees of vividness, that I think it may be true, — and at any rate is roughly true, as a necessary consequence of my experiments, — that our whole past experience is continually in our consciousness, though most of it sunk to a great depth of dimness. I think of consciousness as a bottomless lake, whose waters seem transparent, yet into which we can clearly see but a little way. But in this water there are countless objects at different depths; and certain influences will give certain kinds of those objects an upward impulse which may be intense enough and continue long enough to bring them into the upper visible layer. After the impulse ceases they commence to sink downwards» (CP7.547).

47. There are interesting references to mellonization and real pragmatistic idealism.

48. Peirce's moral contempt for the misuse of terms is due to his desire that philosophy became a science.

49. «First, "Qualisense," which means that element of Feeling which consists in consciousness of the Quality of the Feeling, but omitting the element of Vividness, which does not alter the Quality (thus a faint memory of a highly luminous, and chromatic vermillion does not appear less luminous or less high colored, for all its dimness) and omitting all other concomitants of present feeling that are absent from a correct recollection of the same Quality. Second Heading: what I call Molition, which is volition minus all desire and purpose, the mere consciousness of exertion of any kind. Third Heading: the recognition of Habit of any kind in consciousness» (CP8.303).

50. H. Bergson, *Sur le pragmatisme de William James*, PUF 2011, p. 20.

51. DI ing.

52. «Hence, this idea must have tinged with a certain particular colouring the mental image of the intended movement and the position taken up, and this colouring, without doubt, would not have been the same if the end to be attained had been different. Nevertheless language would have still expressed the movement and the position in the same way; and associationism would have distinguished the two cases by saying that with the idea of the same movement there was associated this time the idea of a new end: as if the mere newness of the end to be attained did not alter in some degree the idea of the movement to be performed, even though the movement itself remained the same!» (DI: 160-1).

53. Multiplicity of fusion and multiplicity of juxtaposition (DI: 162).

54. In Bergson's view, there is no need to say everything [who really needs that? Not our feelings, maybe the psychologist's approach]. His is a kind of respect for what we cannot at least immediately express in general words. Feelings do not ask to be conveyed in words, but to be mis en act. Such an intrusive omnipresence of language is a straining interpretation of the use of language, and eventually a delirium of omnipotence of our intelligence: we can give a name to everything, we can understand everything, we can use everything, we can dominate everything and everyone. [The possible accuse of irrationalism follows the same logic of exaggeration that James very well describes in PU, it makes you believe there is no way in between rationality and irrationality. Bergson talks about this tendency as one of being puerile.]

55. Il punto è che se si accetta una rappresentazione meccanicistica del processo di scelta e a questa si fa poi accompagnare la percezione che se ne ha nell'esperienza, risulta che la decisione era già collegata alla precedente evoluzione del sé e che dunque non esiste un punto zero in cui l'io si trova a scegliere in modo neutro tra due possibili azioni. In questo modo il determinismo non può che avere la meglio.

56. On the exigency of «taking time seriously», I think that a cf. with Mead and Whitehead could be interesting.

57. « The act, once performed, is performed » and « The act, before being performed, was not yet performed.» (DI: 182).

58. Coscienza percepisce la differenza, la variazione qualitativa.

59. Cf. development - Essays in Logic of Dewey.

60. «Hence in the depths of the self, below this most reasonable pondering over most reasonable pieces of advice, something else was going on – a gradual heating and a sudden boiling over of feelings and ideas, not unperceived, but rather unnoticed (DI: 169).

61. Cf. Appendix C PU, James exactly talks about the legitimacy of probability. The problem is also linked to our inclination to think in absolute terms – all or nothing!

62. «Now, determinists would object that even if we cannon preview future mental states, because of their different nature-quality, every future state of consciousness cannot escape the law of» (DI: 199).

63. Senso comune viene visto da Bergson sempre come una forma di ignoranza, di ingenuità e in questo mi sembra differisca da James, cf. DI: 203.

64. Letter of Bergson to A. Lovejoy, 19 May 1911, in PUF, pp. 62-63.

65. Bergson in fact suggests that science has taken the quantitative aspects, which are the most common.

66. Bergson needs to argue about the conceptual difficulty of his suggestion of seeing more than what we see and he excludes that something more can be added from our perceptual activities. Attention, for instance, can only focus or clarify what is given to our sight, we can never create something new.

67. «La métaphysique est née, en effet, des arguments de Zénon d'Élée relatifs au changement et au mouvement. C'est Zénon qui, en attirant l'attention sur l'absurdité de ce qu'il appelait mouvement et changement, amena les philosophes – Platon tout le premier – à chercher la réalité cohérente et vraie dans ce qui ne change pas. Et c'est parce que Kant crut que nos sens et notre conscience s'exercent effectivement dans un Temps véritable, je veux dire dans un Temps qui change sans cesse, dans une durée qui dure, c'est parce que, d'autre part, il se rendait compte de la relativité des données usuelles de nos sens et de notre conscience (arrêtée d'ailleurs par lui bien avant le terme transcendant de son effort) qu'il jugea la métaphysique impossible sans une vision tout autre que celle des sens et de la conscience, – vision dont il ne trouvait d'ailleurs aucune trace chez l'homme» (PM : 87).

68. «Ainsi, qu'il s'agisse du dedans ou du dehors, de nous ou des choses, la réalité est la mobilité même. C'est ce que j'exprimais en disant qu'il y a du changement, mais qu'il n'y a pas de choses qui changent» (PM : 92).

69. Again Bergson seems to consider the passage from perception to apperception as a natural switch resulting by an effort of attention. This attentive focus is indeed the consequence of a switch of intention toward reality : from practical to speculative knowledge.

70. The spatial reconstruction of our sense's data is mostly interested in neat distinctions and external relations between bodies (Cf. Mach).

71. As for reality and duration Bergson says : «Ils estiment que si tout passe, rien n'existe ; et que si la réalité est mobilité, elle n'est déjà plus au moment où on la pense, elle échappe à la pensée. […] Sa solidité est infiniment supérieure à celle d'une fixité qui n'est qu'un arrangement éphémère entre des mobilités » (PM : 92).

72. «But what are things? Nothing, as we shall abundantly see, but special groups of sensible qualities, which happen practically or æsthetically to interest us, to which we therefore give

substantive names, and which we exalt to this exclusive status of independence and dignity» (PP: 274).

73. «mais comme du continuellement présent qui serait aussi du continuellement mouvant : telle, je le répète, la mélodie qu'on perçoit indivisible, et qui constitue d'un bout à l'autre, si l'on veut étendre le sens du mot, un perpétuel présent, quoique cette perpétuité n'ait rien de commun avec l'immutabilité, ni cette indivisibilité avec l'instantanéité. Il s'agit d'un présent qui dure» (PM : 94).

74. «Il suffit de s'être convaincu une fois pour toutes que la réalité est changement, que le changement est indivisible, et que, dans un changement indivisible, le passé fait corps avec le présent» (PM : 95).

75. «Faisons effort, au contraire, pour apercevoir le changement tel qu'il est, dans son indivisibilité naturelle : nous voyons qu'il est la substance même des choses, et ni le mouvement ne nous apparaît plus sous la forme évanouissante qui le rendait insaisissable à la pensée, ni la substance avec l'immutabilité qui la rendait inaccessible à notre expérience. L'instabilité radicale, et l'immutabilité absolue ne sont alors que des vues abstraites, prises du dehors, sur la continuité du changement réel, abstractions que l'esprit hypostasie ensuite en états multiples, d'un côté, en chose ou substance, de l'autre. Les difficultés soulevées par les anciens autour de la question du mouvement et par les modernes autour de la question de la substance s'évanouissent, celles-ci parce que la substance est mouvement et changement, celles-là parce que le mouvement et le changement sont substantiels» (PM : 96).

76. It would be interesting to investigate the notions of *intensity* and *intimacy* in Bergson and James. The subtle difference in the meaning of these two words might be indicative of the difference between the philosophical views of these great authors.

77. Bergson’s scholars are

78. «I feel very much in the dark still about the relations of the progressive to the regressive movement, and this great precipitate of nature subject to static categories. With a frank pluralism of beings endowed with vital impulses you can get oppositions and compromises easily enough, and a stagnant deposit; but after my one reading I don't exactly 'catch on' to the way in which the continuum of reality resists itself so as to have to act etc. etc. The only part of the work which I felt like positively criticizing was the discussion of the idea of nonentity, which seemed to me somewhat over-elaborated, and yet didn't leave me with a sense that the last word had been said on the subject. But all these things must be very slowly digested by me. I can see that when the tide turns in your favor, many previous tendencies in philosophy will start up, crying "this is nothing but what we have contended for all along." Schopenhauer's blind will, Hartmann's unconscious, Fichte's aboriginal freedom (reedited at Harvard in the most "unreal" possible way by Münsterberg) will all be claimants for priority. But no matter—all the better if you are in some ancient lines of tendency. Mysticism also must make claims and doubtless just ones. I say nothing more now—this is just my first reaction; but I am so enthusiastic as to have said only two days ago "I thank heaven that I have lived to this date—that I have witnessed the Russo-Japanese war, and seen Bergson's new book appear—the two great modern turning points, of history and of thought! "» (CWJ 11: 377-378).

79. «Only one word zur Einverständigung about "tychism". I think the centre of my whole anschauung, since years ago I read Renouvier, has been the belief that something is doing in the Universe, & that novelty is real. But so long as I was held by the intellectualist logic of identity, the only form I could give to novelty was tychistic, i.e. I thought that a world in which discrete el[e]ments were annihilated, and others created in their place, was the best descriptive account we could give of things, and that if the elements were but minute enough, "scientific determinism" could be kept as approximating the appearances sufficiently for practical error to be avoided in our dealings with nature's "laws." This sticks in the human crop—none of my students became good tychists! Nor am I one any longer, since Bergson's synechism has shown me another way of saving novelty and keeping all the concrete facts of law-in-change. Giving up the logic of identity as the means of understanding the essences of concrete things, we justify the hegelian tendency, without H.'s own abominations, we put the world of concepts in its definite & indispensable place, we allow novelty to be, and join hands again with life. Not tychism then, but synechism (if we must talk greek) is the solution!» (CWJ 12 : 278-279).

80. « Au fond, l'illusion vient de ce que le mouvement, une fois effectué, a déposé le long de son trajet une trajectoire immobile sur laquelle on peut compter autant d'immobilités qu'on voudra. De là on conclut que le mouvement, s'effectuant, déposa à chaque instant au-dessous de lui une position avec laquelle il coïncidait. On ne voit pas que la trajectoire se crée tout d'un coup, encore qu'il lui faille pour cela un certain temps, et que si l'on peut diviser a volonté la trajectoire une fois créée, on ne saurait diviser sa création, qui est un acte en progrès et non pas une chose. » (EC: 181).

81. Note read at the Congres de philosophie of Genève in 1904 and then published in the «Revue de métaphysique et de morale». It was published again in 1919 as the chapter VII of ES.

82. M. Capek claims that three different periods characterize the reciprocal influence between James and Bergson, the last one being after James's death. According to him, neither of them passively suffered the influence of the other, but they were for each other a source of different reflection and a stimulus to produce original ideas. See M. Capek (1950; 1962).

83. «I feel that at bottom we are fighting the same fight, you a commander, I in the ranks. The position we are rescuing is "tychism" and a really growing world. But whereas I have hitherto found no better way of defending tychism than by affirming the spontaneous addition of discrete elements of being (or their subtraction), thereby playing the game with intellectualist weapons, you set things straight at a single stroke by your fundamental conception of the continuously creative nature of reality. I think that one of your happiest strokes is your reduction of "finality," as usually taken, to its status alongside of efficient causality, as the twin-daughters of intellectualism. But this vaguer & truer finality restored to its rights will be a difficult thing to give content to. Altogether your reality lurks so in the background, in this book, that I am wondering whether you couldn't give it any more development in concreto here, or whether you perhaps were holding back developments, already in your possession, for a future volume» (CWJ 11: 377).

84. A part from the theory of the union of mind and body as an inexplicable fact and those considering the body as an instrument of the soul: Bergson does not take into account these theories for their lack of cogent argumentations.

85. Some great scholars have argued for James's metaphysical conception of experience, according to a certain interpretation of his reading of religious experiences in VRE. See D. Lambert (2008).

86. Bergson argues that they both have the right to make themselves into independent sciences.

87. «The most extreme representative of the tendency to reduce all reality to a "knife-edged present" was probably H. Taine, who considered even the shortest sensation as only "apparently simple," being truly composed of an enormous number of successive, almost instantaneous sub-sensations. At this particular point the difference between him and James was only a gradual one, because even for James "the feeling of past time is a present feeling," even if the Jamesian present is much thicker than that of Taine. Bergson's words apply to both of them: "If we make recollection a weakened perception, we misunderstand the essential difference between the past and the present"» (MM: 72.)

88. Capek analyzes chapter XV of PP, in particular the section in which James discusses recent experiments on the accuracy of our estimate of short durations (PP: 611-19). See also. Franzese Sergio,« On se rappelle ce que l'on n'a pas oublié ou la signification vitale de la mémoire chez W. James », *Cliniques méditerranéennes*, 2003/1 no 67, p. 211-221.

89. « Pourtant il n'y a pas d'état d'âme, si simple soit-il, qui ne change à tout instant, puisqu'il n'y a pas de conscience sans mémoire, pas de continuation d'un état sans l'addition, au sentiment présent, du souvenir des moments passés. En cela consiste la durée. » (PM: 110).

90. The concept of *prehension* in Whitehead can be compared with Mead and James, for further reading Victor Lowe. "William James and Whitehead's Doctrine of Prehension," «Journal of Philosophy» 38 (1941), 113-26.

91. «Consciousness is the Bergsonian paradigm for duration of all entities. This analogy should not be misunderstood; neither should it be taken in a literal sense. […] Matter endures in a much quicker rhythm than the rhythm of our consciousness. Our perception of the world involves the contraction of these material vibrations and thus reconciles the different modes of enduring. Every

creature endures and has, therefore, an elementary level of memory […] This ontology of matter precludes the instantaneous and establishes reality as undeniably epochal» (Teixeira 2011: 139).

92. William James: The discussion has shown how difficult it is to treat these highly abstract questions briefly. They need patience and length of time. The audience will therefore excuse me from entering into the objections in detail. I will only say one thing to defend myself against misconception. I am neither a materialist nor an idealist. I am rather a natural realist, in as much as the dualism which I deny is an ontological dualism; and I not only accept the functional dualism of consciousness and content, but I try to show exactly in what it consists. I maintain that certain parts of an originally neutral « pure experience » assume the rôle of inner, and other parts that of outer facts, in consequence of the different contexts and relations in which they find themselves thrown. I explain knowledge as a relation that arises inside of experience, between certain of its faits. The ordinary dualism treats the black words « ego », « subject », « object », as principles of explanation. I try to show exactly what practical facts these words cover and mean. So far from denying their difference, I explicate it, and give it a most positive content (Atti V Convegno Internazionale di Psicologia: 155).

93. A special thanks to Stéphane Madelrieux for all his suggestions and insights both on Bergson and James. Most of them are collected in his precious works on Bergson and James ( ) and many others I received attending his courses on James, Bergson and Dewey.

94. In particular, Capek is convinced that on the one hand Bergson and James moved from a similar adherence to an experientially concrete (temporal) point of view according to which they carried on a sharp critique against any static representation of reality; on the other hand, James's critique of monistic pantheism was more pronounced (cf. Capek 1962: 312).

95. In ERE James affirms that pragmatism as a method of inquiry should not be necessarily linked to his doctrine radical empiricism, the two hypothesis are independent one another. His opinion confirms us Bergson's approach towards the philosophy of his colleague, for – as S. Madelrieux underlines – he particularly evaluated those chapters of Pragmatism (V-VII) which concern James's genetic theory of truth and are influenced more by Schiller than Peirce (cf. Madelrieux 2011: 117).

96. Dewey's description of the «temporal development of experience» is very clear, see Introduction to *Essays in Experimental Logic*

97. Bergson suggests the interesting etymological work of interpretation of the English verb «to experience» made by M. Émile Botroux (1910). This term suggests a kind of felt constatation, in particular Boutroux talks about «éprouver, sentir en soi, vivre soi-même telle ou telle manière d'être» (S. Madelrieux 2011: 6).

98. Here we can consider Peirce's critique to James's *nominalism*. At first sight, this view seems to give real transformative power to individuals only, disregarding the import of the reality of generals. But right after Bergson makes reference to the historical contribute to the edification of truth by all men. Actually, tradition is not the reality of ideas.

99. Editing *The Feeling of Cognition* (1884) for publication, in 1909, James comments that now he does not think the difference between percepts and concepts to be so wide anymore.

100. «No man could be closer to the antipode of their model than America's and the world's highest respected and closest beloved philosophic soul, William James. Nobody has a better right to testify to the morality of his attitude toward his own thoughts than I, who knew and loved him for forty-nine or fifty years. But owing to his almost unexampled incapacity for mathematical thought, combined with intense hatred for logic — probably for its pedantry, its insistence on minute exactitude — the *gêne* of its barbarous formulations, etc. rendered him an easy victim to Zeno and the Achilles; and he had, I fear, a right to be offended at the contemptuous language that I thought it my duty to use when talking of this paradox to the young men; though if he did feel offended, he never showed it to me. In what I have said here on the subject, I have endeavoured to substitute serious and courteous remonstrance for the tone I used at Harvard. Although he is now gone from us, I thoroughly believe he is looking over my shoulder this minute as I write; and I hope he will be able to guide my pen to greater delicacy than I am capable of. He thought that the Achilles disproved Dedekind's theory of continuity, which I take to be generally believed by mathematicians,

though it is beyond the jurisdiction of Pure Mathematics, which deals exclusively with the consequences deducible from hypotheses arbitrarily posited» (CP6.182); «In speaking, then, of William James as I do, I am saying the most that I could of any man's intellectual morality; and with him this was but one of a whole diadem of virtues. Though it is entirely out of place in this connexion, and I must beg the reader's pardon for so wandering from the point under consideration, I really lack the self-command to repress my reflexions when I have once set down his name. Though his lectures were delightful, they not at all exhibited the man at his best. It was his unstudied common behaviour that did so by the perfection of his manners, in their perfect freedom from expressing flattery or anything else false or inappropriate to the occasion. He did not express himself very easily, because rhetoric was his antipathy and logic an inconvenience to him. One always felt that the pencil, not the pen, was the lever with which he ought to have moved the world; and yet no! it was not the externals of things but their souls he could have pictured. His comprehension of men to the very core was most wonderful. Who, for example, could be of a nature so different from his as I? He so concrete, so living; I a mere table of contents, so abstract, a very snarl of twine. Yet in all my life I found scarce any soul that seemed to comprehend, naturally, [not] my concepts, but the mainspring of my life better than he did. He was even greater [in the] practice than in the theory of psychology» (CP6.184).

101. «Furthermore, such lectures can exercise a favorable influence by showing the substantial sameness of scientific and every-day thought. The public, in this way, loses its shyness towards scientific questions, and acquires an interest in scientific work which is a great help to the inquirer. The latter, in his turn, is brought to understand that his work is a small part only of the universal process of life, and that the results of his labors must redound to the benefit not only of himself and a few of his associates, but to that of the collective whole. I sincerely hope that these lectures, in the present excellent translation, will be productive of good in the direction indicated» (*Preface* to PSL, Dec. 1894).

102. CWJ 10: 71-72, in note: Ernst Mach, Populär-Wissenschaftliche Vorlesungen, 3d ed. (Leipzig: Barth, 1903) (WJ 753.13.8). The dedication reads: "Hernn Professor William James | in Sympathie und Hochachtung Gewidmet | vom Verfasser."

103. On Mach and Hering's reciprocal influence for their physiological researches during the Prague period, see Jan Janko, *Mach and Hering's Physiology of the Senses*, in *Essay in the History of the Physiological Sciences*, Claude Debru (ed.), Radopi: Amsterdam-Atlanta 1995, pp. 89-96.

104. «E in questo senso, vorrei dire che Mach ha tratteggiato la teoria fisica nei termini di una sorta di "romanticismo utilitaristico" che colloca la stessa operazione scientifica nell'ambito di un universo di fenomeni naturali che persegue criteri di risparmio e di economia» (A. Gargani, Introduzione a E. Mach, *Conoscenza ed Errore*, Einaudi, Torino 1982: ix).

105. In 1906 James notes to have finished reading Mach's «heavy book» *Erkenntnis und Irrtum* (1905) (cf. WJ 753.13.2; CWJ11: 139). Moreover, Houghton volume of Mach from James's library has some notes in James's hand: certain passages of page 41, 10, 11, 114 are initialized with WJ. According to his scholars, this notes apparently imply James's agreement with the views presented by Mach.

106. «Pure experience, far from being neutral, is presented as a net of relations which give meaning to our perceptions. Clearly this can only mean that the pre-reflective world is already meaningful to a knower, and thereby not in need of subsequent analysis into subject and object of knowledge. The seemingly neutral description of pure experience of a few pages earlier is here amplified, and its intentional character made clear. The knower is neither a transcendental ego nor an accidental bundle of perceptions, but is rather defined relationally with respect to a world already there. The knower is understood in terms of a body which is the locus of a point of view on the world, a body that shares both physical and mental predicates and that is present as a concomitant in all experience» (T. Michael McNulty 1982: 251).

107. In the preface to his Popular Scientific Lectures, Mach thanks Paul Carus since some article published in the book first appeared in «The Monist».

108. Banks claims that the influence of Mach on logical positivists (Moritz Schlick, Rudolf Carnap, and Hans Reichenbach) is not so strict. According to him, Mach's position would have

been much more realistic and not as concerned as they were with «second-order questions about logico-linguistic frameworks, analytic truths, and the role of a priori knowledge. Mach's realistic project to reform physics directly instead of rationally reconstructing it (as Paul Feyerabend sharply pointed out in his 1970, 1984)» (Banks 2003: 9-16).

109. Mach refers to an essay of his where he wrote: «The expressions "sense-deception" and "illusion of the senses " prove, that we are not yet fully conscious, or at least that we have not yet found it necessary to incorporate this consciousness into our ordinary terminology, that the senses represent things neither wrongly nor correctly. All that can be truly said of the sensory organs is, that, under different circumstances they produce different sensations and perceptions. Since these " circumstances " are of so extremely manifold a character, being partly external (inherent in the objects), partly internal (inherent in the sensory organs), and partly interior (having the seat of their activity in the central organs), it would naturally seem, especially when attention is paid only to external circumstances, that an organ acts differently under like conditions. And it is customary to call the unusual effects, deceptions or illusions » (in the Vierteljahrsschrift für Psychiatrie, Leipsic and Neuwied, 1868 : Weder die Abhängigkeit der Netzhaut stellen voneinander).

110. This seems to me to be the background of James's ideas about feelings. Indeed, he already put together feelings and thoughts in PP. There, the methodological dualism was not fitting such a monistic attitude.

111. Mach's conclusion – indeed similar to Peirce's ones – will help to justify our reading of James's pure experience as a «local ontology» supposed to be a working hypothesis assuring the advancement of science research. But, even if such a position creates some difficulties about James's resistance to any dualistic outlines even in the division of sciences (as also Peirce noticed), I believe that the existential implications of such a wider monistic metaphysical claim were not acceptable and maybe that is why James pursued on the metaphysical side a pluralistic view.

112. Cf. James on different grades of intimacy in relations (PP and ERE).

113. «I make no pretensions to the title of philosopher. I only wish to adopt in physics a point of view that need not be instantly changed the moment our glance is carried into the domain of another science ; since indeed, ultimately, all must form one whole» (Mach 1891: 66).

114. «On a bright summer day under the open heavens the world together with my ego all at once appeared to me as one coherent mass of sensations, but in the ego more strongly coherent. Although the actual working out of this thought did not occur until a later time, yet this moment became decisive for my whole view» (Mach 1891: 66).

115. «Analogous phenomena cannot be wanting in the higher animals, and as a matter of fact do exist there. We have an analogous case during active or passive rotation about the vertical axis, when the irritation induced in the labyrinth disengages the well-known nystagmic movements of the eyes» (Mach 1901: 330).

116. «Thus, rate of motion, within the limits within which the perceiving organ can adapt itself, is felt directly ; it is therefore not only an abstract idea, as is the speed of the hand of a clock or of a projectile, but it is also a specific sensation, and furnished the original impulse to the formation of the idea. Thus, a person feels in the case of a line not only a succession of points varying in position, but also the direction and the curvature of the line. If the intensity of illumination of a surface is given by u=/{x, y), then not only u but also and -r-^-, find their expression in dx dy dx2 dy2 sensation, a circumstance which points to a complicated relationship between the elementary organs » (Mach 1901: 330-331).

117. «Paradoxical as the conditions here involved may appear, and far removed as we may still be from a causal comprehension of them, they are nevertheless easily under stood when thus viewed teleologically as a connected whole» (1901: 332).

118. «An excitation is produced in the labyrinthine canals of the internal ear, and this excitation disengages, independently of consciousness, a reflex rotary movement of the eyes in a direction opposite to that of the motion,8 by which the retinal images of all objects resting against the body are displaced exactly as if they were rotating in the direction of the motion. Fixing the eyes intentionally upon some such object, the rotation does not, as might be supposed, disappear. The eye's tendency to motion is then exactly counterbalanced by the introduction of a factor extrinsic to

consciousness. We have here the case mentioned above, where the eye, held externally at rest, becomes aware of a displacement in the direction of its tendency to motion» (Mach 1901: 332).

119. «To the property of the visual apparatus just discussed is due the fact that an animal in progressive motion sees itself moving and the stationary objects in its environment at rest. Anomalies of this character, where a body appears to be in motion without moving from the spot which it occupies, where a body contracts without really growing smaller, which we are in the habit of calling illusions on the few rare occasions when we notice them, have accordingly their important normal and common function» (Mach 1901: 333).

120. For further reading on the influence of Mach on Einstein see

121. «Geometric space embraces only the relations of physical bodies to one another, and leaves the animal body in this connexion altogether out of account» (Mach 1901: 335).

122. «Thirdly, a reaction has an individuality. It happens only once. If it is repeated, the repetition is another occurrence, no matter how like the first it may be. It is anti-general. A quality, on the other hand, has no individuality. Two qualities are different only so far as they are unlike. Individuality is an aggressive unity, arising from an absolute refusal to be in any degree responsible for anything else. This a quality cannot have since it is too utterly irrespective of anything else even to deny it. A reaction, on the other hand, is an opposition, or pairedness of objects that are existentially correlative, neither existing except by virtue of this opposition» (CP7.538).

III

EPISTEMOLOGY AND ONTOLOGY OF CONTINUITY

Introduction

> Pluralism in this sense is indistinguishable from „radical empiricism", which thus forms the main theme of the book. Radical empiricism consists essentially in converting to the uses of metaphysics that „stream of consciousness" which was designed originally for psychology" (R. B. Perry, *The Thought and Character of William James*, 1934: 586).

In this chapter James's long reflection on continuity will be focused upon from both the epistemological and the metaphysical point of view. As we have seen, James's work has been commonly opposed to Peirce's and, in this view, his genuine interest for individuality has been separated from his broader epistemology of experience, arguably having been overemphasized. But the richness of James's view is not comprehensible if we read his oeuvre in such a dichotomous way, or in Bergson's words not «*intégralement*» (Madelrieux 2011: 94). To appreciate James's philosophical approach to continuity, and given the existential urgency of his claim, it was important to start with his psychology in order to point out the peculiar suggestions that he gleaned from his major studies. Following James's elaboration of continuity, it is important to bear on mind both the issues that have been taken into special consideration in the first chapter – i.e. the continuity of the perception of time, space, and consciousness – and the most important suggestions and critiques that James received from his direct interlocutors – Peirce, Bergson and Mach – as shown in the second chapter.

The analysis of continuity in James's main works will start with his latest labour, which was published after James's death in 1911. Note that one of the aims of this work is to show to what extent the issue of continuity is interconnected and multifaceted, also reflecting James's continuous and intense manner of thinking. The original echo of the naturalistic ontology and the sensible-perceptual connotation of continuity traced in the first chapter were the basis of his epistemology of radical empiricism, humanism, and pluralism. The boundaries of methodology, epistemology, and metaphysics should be ascertained each time. They are all expressions of James's effort to deny idealistic abstraction and absolutism any definitive claim to scientific credibility. So I will continue along the lines of an analytic approach to his texts –

particularly exegetic as to SPP – stressing those features and correspondences which are most interesting for continuity.

After reading James's metaphysical works, namely *Some Problems of Philosophy* (1911) and *A Pluralistic Universe* (1909), I will return to a central, and most fruitful, group of works: *Pragmatism. A New Name for Some Old Ways of Thinking* (1907), *The Meaning of Truth. A Sequel to Pragmatism* (1909), and *Essays in Radical Empiricism* (1912). Other important works are *The Varieties of Religious Experience* (1902) and *The Will to Believe and Other Essays in Popular Philosophy* (1897). These shall remain in the background of our analysis. In fact, some important aspects of WB have been directly addressed in the first chapter, while as to what concerns VRE, I will make some ad hoc reference. This beautiful and rather peculiar book confirms James's interest in the variegated phenomenology of human experience, and from an epistemological point of view it remains loyal to radical empiricism. David C. Lamberth (2008) has particularly focused upon this book to corroborate his interpretation of the: «systematic metaphysical underpinning of James's epistemology» (2008: 208). In particular, he clarifies James's endorsement of a pluralistic panpsychistic version of radical empiricism in his interpretation of religious experience. His marked philosophical reading of these lectures focuses upon the aspects of James's view of religion that are consistent with his 'radical empiricism' and 'pure experience'. In this view, Lamberth shows that: «James does in fact construct his model of religious experience (conversion and mystical experience in particular) in line with the radically empirical 'field theory' of consciousness from 1895» (2008: 6).

The issue of the 'field theory' which is developed in these lectures was outlined in 1895 and refined again in ERE and PU. Despite the precious insights of VRE, this text does not modify my interpretation. Rather, on the one hand it confirms our reading of James's psychological and philosophical view as a whole along the lines of McDermott and other scholars, and on the other, shows both the impossibility of tracing neat limits between epistemology and metaphysics and the ontological engagement of James's radical empiricism. In fact, what makes Lamberth's interpretation different is that I prefer to stress the epistemological side of James's intertwined view of epistemology and metaphysics in his psychological texts. The reason for this choice is my conviction that James's pluralism and continuity are related to a psycho-physiological-epistemological-ontological view more than to a pan-psychic metaphysical claim. In this view, Lamberth's observation that James's

knowledge goes in the direction of intimacy means a physiological-sensible intimacy. According to Dewey's connotation of the term 'ontology' in Baldwin's *Dictionary,* it is clear that at the beginning of the 19th century C. Wolff's traditional distinction between special metaphysics (Soul, God, World) and general metaphysics (ontology) underwent an important shift of meaning in Anglo-American culture. These terms meant the distinction between: «the theory of the known reality as distinct from the theory of the process of knowing». In this view, it is evident that, after Kant: «the excess of emphasis upon the theory of knowing, as distinct from the theory of being, led, however, to skepticism and subjectivism, and so to a new conception of ontology as the science of the real, so far as that shall be determined through the process of knowledge: in other words, the question of the possibility of ontology is the question of the validity of knowledge» (Baldwin's Dictionary, vol. II: 203-4).

Therefore, I guess that ontology, in this new sense of 'the possibility of known reality' for the validity of epistemology is the part of metaphysics that pragmatism was addressing the most in the attempt to formulate, in particular, James's claim of 'direct realism'. Moreover, even if I agree that James seems to be more confused if one begins reading *Pragmatism* and his theory of truth without first having considered the metaphysical complexity of radical empiricism as a system, I see these theories of James's philosophical effort as essays in radical humanism in which he attempts to elaborate a new and inter-disciplinary epistemology according to his continuity between percepts and concepts, facts and values. The framework of pure experience is, on the scientific side, a sort of workable 'local ontology' which substitutes the limited applicability of scientific dualism on the side of experience. Rather, it stands for the indivisibility of ontology and epistemology as to both the genealogy and our concrete way of experiencing the world. In particular, I offer an extensive reading of SPP because this text shows James's attempt to rehabilitate in the fields of ordinary and scientific experience this epistemological sense of metaphysics. Pure experience shows that in our experience a certain amount of ontology is indivisible from any possible human epistemology.

James's empiricism is radical and inclusive. His methodology tends to enlarge the idealistic neat limits of the field of science to all the new forms of 'unclassified residuum', such as religious experiences. Moving from concrete sensations that show and reevaluate the abundance of human features, he draws the conclusion that science

must have a large-scale effort in order to conform to human varieties of experience intimately.

Despite the fact that in some letters[1] James declares his debt of gratitude towards Bergson's version of philosophical continuity, I believe that their conceptions of continuity are not the same, as the peculiarity of James's own elaboration of continuity proves. What he acquired from Bergson was, rather, an important philosophical legitimation which was mainly due to Bergson's autonomous philosophical elaboration of the *pars destruens* of James's arguments. Moreover, James's passion for philosophy made him complain about the lack of proper philosophical formation.

As mentioned, in *The Notion of Reality as Changing* [Appendix C - *A Pluralistic Universe* (1909)], James associates his philosophical view to those of Bergson and Peirce and puts them all under the heading of «pluralistic synechisms». The main features of James's philosophy were, accordingly, pluralism and synechism or continuity. As we know, pluralism is not only a metaphysical view, but, first and foremost, a methodological and epistemological claim which means that: «The trail of the human serpent is thus over everything» (P: 37). The philosophical controversy over «pluralism or humanism» (PU: 7) seems to be inaugurated by a 're-pluming' English empiricism which has renovated its foundations. The philosophical anti-intellectualist urgency which traverses James's elaboration has grown increasingly technical over the years, even if all its ingredients were already on the carpet of his first philosophical collection, *The Will to Believe* (1897).

In his last works, on the one side, James is critical of the nihilistic results of certain positivistic methodology, and on the other, he contests the misanthropic outcomes of orthodox theism. Moreover, he suggests that 'neutral' premises of philosophy of mind are often very ingenuous in respect of psycho-physiological activities, leading to fallacious conclusions. The intellectualist exigency to keep what is logical and rational neatly distinguished from what is illogical and irrational, for instance, is a conventional separation which follows the tendency of our mind to underline contrasts. Dualism is one possible description of our image of the world, not the richest or most useful anymore. For the sake of immediate clarity and distinction, in fact, it excludes important aspects of human nature from philosophical investigation. What is rejected as most confounding is the omnipresence of interests or, as he

initially put it, «the omnipresence of cognition» in our mental states (PP), which James considers to be a sort of «natural a priori» (Franzese 2007; 2009).

First in the new field of psychology and then in philosophy, James shows that too rigorous methodological definitions are always a failure. In this view, his main effort is to qualify our meanings in respect to living concerns and practical-historical context. An epistemology which deals with the concrete phenomenology of experience is engaged in a work of continuous qualification, which is also an exercise of freedom, listening, and solidarity. Accepting «personal reasons» in the field of science takes into account the complexity of our nature as well as reconsiders the ends of our efforts. In this view, I guess that James's argument of utility and satisfaction, apart from too easy misconception, is a claim to the reinstatement of *personal interests* and, therefore, persons, in the elaboration of theories. More clearly, as in his initial quarrel with sociology, he wonders what should be the motive of our research and investigations in any field of knowledge if no personal interests move it, and no personal utility is pursued. In this view, what is personal is not idiosyncratic in all, and idiosyncrasies are not special possessions. The neutral scientific view, rather, hides an ultra-absolutist, materialistic or spiritualistic metaphysics, and in both cases is the outcome of the negative or positive absolute centrality of human beings. Paying attention to the contradictions that are part of our lives, at least in so far as they are expressions of some belief that is existentially important for us, tells us that there are no preferences and truths *aliunde*

Of course, James is aware that the risk associated with his anti-dogmatic claim is a superficial relativistic reading, which is an opposite absolutist view. The problem is precisely our natural tendency to 'absolutize' not only our immediate impressions but our knowledge as well. Paradoxically, this psychological attitude to put our discourses at the centre of life produces a sort of alienation which results in the practical fatalistic oblivion of human potential.

III.1 Ontology of Continuity: James's Synechistic Pluralism

Three appendices were added to the Oxford Lectures for publication: *The Thing and its Relations*, reprinted from the *Journal of Philosophy, Psychology, and Scientific Methods* vol. II, 1905, *The Experience of Activity*, which was James's President's Address before the American Psychological Association in Philadelphia, December 1904, reprinted in the *Psychological Review* vol. XII, 1905 and included in the posthumous collection *Essays in Radical Empiricism* (1912), and the important Appendix C, *On the Notion of Reality as Changing*. As noted in the previous chapter, this brief and final text is very interesting since James explicitly claims his philosophical commitment to continuity and pluralism as the most relevant affinity with the philosophies of Bergson and Peirce.

Therefore, we will start from this text of *A Pluralistic Universe* (1909) in order to reconstruct James's philosophical development from the point of view of psychological and ontological continuity. In the second volume of his PP, James called the «axiom of skipped intermediaries and transferred relations» that serial principle of which *de dictum de omni et nullo* is the most familiar instance. According to James, other examples of this axiom are: "the more than the more is more than the less"; "equals of equals are equal"; "the cause of a cause is the cause of its effects". This foundational principle of logic applies «infallibly and without restrictions» throughout some abstract series of pure concepts (e.g. causes, sames etc.), but the same axiom cannot be applied: «offhand to concrete objects with numerous properties and relations» (PU: 151). For James, in the practical world the principle of skipped intermediaries does not hold good. Concrete objects have so many aspects that only in a very limited sense is it possible to trace any: «strict line of sameness, causation or whatever may be» (*ibidem*). Moreover, the recognition of sameness and the reconstruction of causal relations, being fruits of practical inquiry, are affected by change and interest. Every inquiry begins by following a line of inquiry, but it is highly probable that it might swerve very soon into «some 'respect' where the relation, as pursued originally, no longer holds», so as to realize that we are going after: «new kinds of sameness and types of causation». Old and new terms cannot be completely interchangeable, and old relations cannot be transferred into new situations. A significant qualitative shift of meaning or temporal distance (remoteness) between real

terms interrupt their practical relation of sameness or causality, whereas eternal and pure abstract objects show no affect of this kind.

The distinction between concrete and abstract terms deals with the distinction between meaning and definition, in so far as changing objects are not amenable to fixed and solid definitions. The real terms of series change over time, together with their associates and environment, and the inquirer changes as well as the meaning of the terms. Experiential continuity makes us consider new kinds of sameness and new types of causation because even causation and sameness are first and foremost matters of interest. Our concrete experience continuously develops over time, opening new directions of inquiry towards interesting new properties. New relevant aspects continuously come to our attention just as old ones become insignificant. According to James, the introduction of principles of causation and sameness into experience violates the real «spontaneous development» of our inquiry, the latter's direction being represented not by a straight line, but more appropriately by a zigzag. The point is the insufficiency of logical principles as full descriptions or adequate translations of reality in the practical world. According to a particular individual's interest, there can even be found straight lines of identity or causality, but only as: «partial members of a vast natural network» (PU: 152).

According to James, Bergson's Heraclitean «dévenir reel» affirms that logical axioms should go through qualification to apply to the actual world. Moreover, Bergson would consider both terms and relations as changing. In the world of real operations, we find that «there *is* no literal or ideal sameness among numerical differents», and that: «remote effects are seldom aimed at by causal intentions, that no one kind of causal activity continues indefinitely» (PU: 153). James asserts that Peirce's philosophical view is congruous with Bergson's. More specifically, he points out that Peirce's «tychism» is practically synonymous with Bergson's «dévenir réel». James believes that Peirce and Bergson have complementary points of view regarding the common notion of real novelty. In fact, in so far as both philosophers considered novelty as a genuine feature of things, to an external observer, novelty appears as 'chance', whereas to one who is a part of its generating causes, novelty emerges from 'free creative activity' (cf. ERE: 93)[2].

As is known, such a conception of real novelty, coming into reality *ex nihilo*, involves the problem of the «world's rational continuity», for if something brand new can enter into the world abruptly, its relational continuity is swept away and the world

would not be ruled by rational laws. This is the reason why Peirce formulated a higher synthetic view called «Agapasticism», which is a combination of *tychism* and his 'express' doctrine of *synechism* or continuity. Again, James observes that Peirce's «Agapasticism» and Bergson's «évolution créatrice» means exactly the same thing. As James has shown so far, from an empirical point of view, novelty «leaks in insensibly» in our experience over time. There are no sharp distinctions to our experience. Rather, adjacent data are always fused and: «even numerical distinctness being realized effectively only after a concrete interval has passed» (*ibidem*). In fact, any inquiry is realized over time, and time allows continuous deflection from our original direction.

James argues that the movement of a curve never follows the same direction. This collation of different pieces of reality is a secondary order and thus confounds representation. He considers Peirce's «'infinitesimal' tendency to diversification» as a mathematical notion which contains the: «whole paradox of the same and yet the nascent other, of an identity that won't *keep* except so far as it keeps *failing,* that won't *transfer,* any more than the serial relations in question transfer, when you apply them to reality instead of applying them to concepts alone» (PU: 154).

In conclusion, James focuses upon the very question addressed in this text, namely, the metaphysical hypothesis which underlies methodological discussions about how to make inquiries 'scientific', particularly those in human sciences. As we have seen, the direct application of abstract principles to concrete situations results in the: «impossibility of tracing the same line through reality» (*ibidem*). But there is another deeper misunderstanding, that such factual impossibility is not impossible in principle, being due only to inaccuracy. More specifically, the obstinate positivistic conviction that reality is a closed rigid causal universe emerges at last, claiming that more complete and meticulous descriptions would enable us: «to define the actual state of things at any future date we please». To James, it is evident that «the essential unreality of such a conception of 'history' as this», it is almost foolish to believe reality is simple and predictable. Moreover, if Bergson's, Peirce's, and James's: «synechistic pluralism […] be what really exists, every phenomenon of development, even the simplest, would prove equally rebellious to our science should the latter pretend to give us literally accurate instead of approximate, or statistically generalized, pictures of the development of reality» (*ibidem*).

Here James makes clear that logic is only a way of thinking. There are different ways of reasoning (the formal and the concrete), and each have different objects, or

better, each operate upon reality according to different practical and aesthetic interests. His view is consistent with what he stated in 1890, that there is no thinking out of any personal consciousness (PP IX). The passage from the simplified eternal realm of logical objects to the concrete features of temporal realities of thinking is thus, for James, a passage through (and to) more and different qualifications. As we shall see in SPP, James considers the conceptual order of reality as an abstraction from the perceptual order of experience and here he shows that any concrete shift from strictly formal logical operations back to concrete perceptual applications cannot avoid moving from an impersonal (unqualified) to a personal (qualified) mode of reasoning, on account of the way in which our thinking concretely develops.

III.2 Some Problems of Philosophy : the Interconnection of Epistemology and Ontology

When he died, James was working on a book of metaphysics which was originally supposed to outline his philosophical system. Apart from his initial intention, his last wish was to «Say it is fragmentary and unrevised», and in a memorandum he noted: «Call it "A beginning of an introduction to philosophy". Say that I hoped by it to round out my system, which now is too much like an arch built only on one side» (SPP: 228). Since there were different versions of some parts of the manuscript, Horace M. Kallen was in charge of preparing the book for publication, with the advice of Ralph Barton Perry. According to James's wishes, the book was finally published in 1911 with the title *Some Problems of Philosophy. A Beginning of an Introduction to Philosophy*. Kallen was not aware of a second manuscript written by James and, as a matter of fact, selecting the final version of some passages – those which James had revised – James's disciple and friend made personal choices of taste. He did not make a clear editorial choice and largely intervened in the structure of the book, for instance, rearranging chapter divisions and headings. James's original intention has been restored in the critical edition of the book edited by F. H. Burkhardt in 1979.

The book was dedicated to Renouvier's memory, as one of the «greatest of philosophic *characters*» and: «a masterly advocacy of pluralism» (SPP: 4). Actually, this is considered the very last and most metaphysical book by James, and it covers important issues, illustrating James's lifelong interest in continuity. In particular, I would like to consider the three main topics that James analysed more carefully: novelty, continuity, and causality.

The critical edition of SPP is divided into nine chapters. Before directly addressing the problems of novelty and continuity in the last four chapters (VI-IX), James presents the general view of his work and introduces some arguments which should be considered the background of his speculation. Most of his "preliminary conceptions" had already been investigated in previous works, in particular in PU, P and ERE. According to his unchanged interpretation of the Darwinian theory of evolution (WB: 163-195), here James considers philosophers to be peculiar individuals produced in every generation as a sort of deviation from the average. These men are particularly interested in theory, they wonder at obvious situations, they have a vivid imagination, and are generally recognized as sages. In fact, the community having a good consideration of this class of mind, and sharing sentiments of admiration and respect towards them, selects philosophy as a «race heritage». To study philosophy means to have very broad interests. However, special sciences have been excluded over time from the mass of learning usually referred to as philosophy. James believed, therefore, that philosophy has gradually been defined as: «the knowledge of things in general by their ultimate causes, so far as natural reason can attain to such knowledge» (SPP: 10). Quoting Dewey's article for Baldwin's *Dictionary*, James agrees with his colleague about the common tendency of contemporary philosophies to express: «a certain attitude, purpose and temper of conjoined intellect and will rather than a discipline». Actually, comprehensive explanation rather than detailed description is considered the appropriate aim of philosophical discourse, which therefore looks for ultimate principles for its justification. James considers these vague «sweeping view[s] of the world» as mainstream philosophies. These are what philosophy is commonly supposed to be. In his view, this general tendency is reducible to a particular *Weltanshauung* which conveys a sort of: «intellectualized attitude towards life» (*ibidem*). Speaking as a teacher, James sharply criticizes the limited educational liberality of his country. He seems here to be attacking the «dry dogmatic ways» of teaching in America both as a general method and as a peculiar way of approaching the history of philosophy. In this particular case, he claims that intellectualist or rationalist philosophy is not the only way to approach the matter. For centuries, philosophers and, more generally, thinkers have developed different views of what philosophy is. The same liberal spirit is ascribed to the word 'philosophy' and college. There seem to be two different methods of teaching, according to different interpretations of

philosophy. It is quite easy to imagine that the two great contrasting perspectives are dogmatism and liberalism.

Despite the interpretation of philosophy which James has shown so far, he was convinced that philosophy can only agree with a liberal spirit of thinking. These initial passages already help to clarify the pluralistic vein of James's book. In fact, he makes a neat distinction between those people who were dogmatically cultivated and those who received a kind of liberal education. The point is that philosophy *should* provide a philosophical spirit of thinking too, not a dogmatic one. Our native tendency is to delimit dogmatically our views in order to preserve our certainties and prejudices. In other words, we used to prefer certainty to freedom. A liberal philosophy can change our minds, adding precious traits of liberty to every kind of instruction. James considers the flexibility of thinking, the capacity to think differently from what we see, the possibility of enriching our imagination and changing mental perspectives or apprising people of new perspectives as specific results of a real philosophical training.

Moreover, the history of philosophy shows that it has flourished because of the fertile interaction of four different human interests, namely, science, poetry, religion, and logic. This fertile exchange had the advantage of avoiding opposite and "incommunicable" outcomes. That is to say, either a too literary or too technical discourse. The natural character of philosophy is to widen men's ways of thinking, to procure possible mental background, and to renew social communication on a different basis[3].

The present situation of philosophy is threatened by some characteristic misunderstandings, in particular, James replies to three typical objections raised against philosophy: 1) unlike science, philosophy makes no theoretical progress and shows no practical applications; 2) philosophy is dogmatic, and 3) philosophy is out of touch with real life. According to James, there cannot be real opposition between the sciences and philosophy since the former are branches of philosophy. Except that, despite the fact that the sciences and philosophy share the same questions, while every science looks for specific answers, the residuum of unanswered questions seems to remain the only domain of philosophy. The original connotation of philosophy as a very broad and general matter methodologically working with *a priori* principles was not the only one in the history of philosophy. James remarks that even the 'new philosophy' of Descartes preserved the encyclopedic character of ancient and medieval philosophy, and the philosopher of *cogito, ergo sum* was perceived much more as a

cosmic evolutionist than as a metaphysician. It was Hume who brought philosophy more exclusively to the problem of knowledge, when philosophy became critical and the universal tendency of philosophy was largely abandoned in favour of a subjectivist declension of its arguments. In this view, it is by the time of Kant that philosophy began to be considered 'philosophy of the human mind' rather than natural philosophy.

Nevertheless, James believed that the original naturalistic interest of philosophy was still a matter of importance for the majority of men and women, and that philosophy should also take into consideration the actual constitution of reality, which is provided by the sciences, addressing at the same time the conditions that make knowledge possible. Referring to Paulsen's book *Introduction to Philosophy* (1895), which is an important source for all James's metaphysical discussions in SPP, he hints at the recent return to «the more objective tradition» remarked by Paulsen. This sentence is probably indicative of James's tone while he was writing his own introduction to philosophy. However, James has to make clear what he means by "philosophy", and it is evident that his definition is an attempt to recover the *full* sense of this word and, arguably, the methodological similarity of every kind of human intellectual activity.

> Philosophy in the full sense is only *man thinking,* thinking about generalities rather than about particulars. But whether about generalities or particulars, man thinks always by the same methods. He observes, discriminates, generalizes, classifies, looks for causes, traces analogies, and makes hypotheses. Philosophy, taken as something distinct from science or from practical affairs, follows no method peculiar to itself. All our thinking to-day has evolved gradually out of primitive human thought, and the only really important changes that have come over its manner (as distinguished from the matters in which it believes) are a greater hesitancy in asserting its convictions, and the habit of seeking verification[4]for them whenever it can. It will be instructive to trace very briefly the origins of our present habits of thought (SPP: 14).

James traces the history of our contemporary «habits of thought», which he considers to be a result of the history of human thought. Over time, thought gradually developed into a more 'positive' methodology and in part according to Comte's classification of the three forms that our thought has assumed over time, James remarks upon our present disposition to pay attention to regularities and common elements in phenomena, rather than special and characteristic ones. This attitude is a consequence of the application of mathematics to the study of natural phenomena, a new methodology pursued by genial minds such as Galileo, Pascal, Boyle, etc. It

turned out to be a revolutionary idea, and the success of its outcomes was unpredictable. Nobody could suppose in advance how much the application of mathematics to science would have been fruitful and how fast it would have changed our mental approach to reality in a 'positive' way. Thus returning to the first objection, James argues that, as it was for science, even philosophy – in the sense of a series of still unsolved problems – could suddenly evolve and quickly generate plausible answers. Moreover, he believes that, from the extraordinary progress of science and due to the use of mathematical reasoning, it does not follow that philosophy should be mathematized too. Here we get to the pluralistic core of James's vision, when he claims: «the extreme diversity of aspects under which reality undoubtedly exists» (SPP: 18). He speaks of «proper avenues» that are compatible with the different aspects or orders of questions about reality. However, as to what concerns theory and general conceptions, philosophy has made more progress than science. In fact, all the critical and idealistic attitudes of contemporary philosophy would sound new to Aristotle or Descartes. Whereas the mainstream theories forming the background of scientific research – those about elements of reality, the conservation of energy, and universal determinism – would sound over-familiar.

The second and third objections that James takes into consideration in his introduction to philosophy have historical validity too. It is true that at a certain time philosophy was identified with *a priori* reasons and dogmatism, and that science dealt instead with hypothesis and methods of verification. Such an unfair polarization led to the opposition between dogmatism and concrete experience. Indeed, James believes that philosophy should take advantage of the methods of empirical science, that is to say, it should incorporate *fallibilism* and it should work with hypothetical ideas, submitting them to a certain kind of verification[4]. This is not necessarily an argument for any complete methodological identification of philosophy and science, but rather for the empirical democratization of all knowledge. In particular, philosophy could use whatever method it deems fit in order to match the goal of thinking things in: «the most comprehensive possible way» (SPP: 19).

Philosophy seems also to deal only with abstractions. The history of philosophy and its most witty critics generally remark how far philosophy can go from concrete facts, variety, complexity, pain. According to James, this is not a definitive sentence. Philosophy is not condemned to remain the same. Moreover: «thin and noble abstractions may give way to more solid and real constructions» (*ibidem*). This possible

change depends upon the ascertaining of materials and methods of philosophy. As literature[5], philosophy can assume a realistic and concretely immediate way of dealing with life.

James concludes that there are at least two meanings of philosophy; a broader and a narrower one. The first sense of philosophy is that of the «completest knowledge of the universe», as it was in ancient times and as has recently been recovered by Herbert Spencer's attempt to work out a system of completely unified knowledge. The second and modern sense of philosophy is metaphysics, according to a conventional partition of matters into science, metaphysics, and religion. Even if James believed that the first sense is the best and wishes that, sooner or later, philosophy re-assumes that broader meaning, he claims that philosophy, science, and religion could assist one another in looking after truth, providing that «sciences get more available for co-ordination» and that, according to the Aristotelian principle: «the conditions for finding truth in different kinds of questions get more methodologically defined» (SPP: 20). Such a work of clarification seems to be necessary to avoid the risk of restoring that old single body of knowledge of conceptual confusion, or at worst, an unfortunate methodological battle for supremacy. So maybe we can interpret his decision to «take philosophy in the narrow sense of metaphysics», leaving aside both religion and science, as James's partial contribution to recovering philosophy, that is, setting out «conditions for finding the truth» in order that it may be ready to deal productively with science and religion as soon these are ready too.

As we have seen, James claims that the best way to frame the meaning of the word 'metaphysics' is to provide examples of metaphysical questions. He refutes Christian Wolff's classic definition of metaphysics as «the science of what is possible», distinguishing it from other sciences that deal with what is actual. In fact, for James, metaphysics deals with actual facts and its questions inquire into universal principles – entities, logical laws, or generalized facts – of all things. Because of the backward state of metaphysics as a unified science, for James, the best work possible is to consider separate single questions of metaphysics. Again, to clarify some pivotal questions would assist the construction of metaphysics as a science (cf. Peirce CP.6). James proposes to discuss some real problems of metaphysics, that is to say, problems which are not due to any terminological inaccuracy, and he chooses particularly those problems that have challenged his own philosophical reflection. Since most metaphysical questions are still unanswered, a great part of the work of

metaphysicians who wish to restore metaphysics as a science should be to classify and discuss every problem, as well as all the valuable hypothesis which have been produced over time.

III.2.1 Rationalists and Empiricists

According to James's view, even the history of metaphysics shows that there are two general classes of mind; 'rationalists' and 'empiricists' (cf. WB, P, PU). There are «men of principles» and «men of facts» or, as he also wrote in PU, there are men (rationalists) whose way of thinking proceeds from wholes to parts (deduction), whereas empiricist reasoning goes from parts to wholes (induction). He respectively attributes to them two different moods of looking at reality - a contemplative and optimistic mood to rationalists, and a scientific and skeptical attitude to empiricists. They have different conceptions of truth, the former stating that it is eternal while the latter consider time as an unavoidable aspect of truth. But the distinction between rationalists and empiricists becomes more comprehensible from James's point of view if we look at the visceral question that he believes establishes the basic difference between these two ideal types of metaphysician: «Is thought for the sake of life? or is life for the sake of thought? Empiricism inclines to the former, rationalism to the latter branch of the alternative» (SPP: 24). The primacy of life, which James depicted as various, fragmentary, and real, seems in fact to characterize the empiricist's view. To his mind, Democritus and Protagoras, together with Socrates, Lock, Berkeley, Hume, Mills, Lange, Dewey, Schiller, and Bergson, are examples of empirical minds. Meanwhile, Aristotle, Plato, the Scholastics, Descartes, Spinoza, Leibnitz, and Hegel would be pure rationalists. James confesses his «strong leaning towards empiricism» and begins his analysis of some metaphysical problems by facing the «worst problem possible», that is, the ontological problem.

The problem of being rises from wondering at our own existence. As Schopenhauer remarked in his Appendix 17[6], such wonder is the mother of metaphysics for we acknowledge that the non-existence of this world is as possible as its existence, and philosophy is not able to find any logical bridge which reasonably explains this passage from nothing to being. James claims that the original estrangement is either made redundant by familiarity with existence, or just put aside unsolved as a metaphysical problem. Some authors have tried to reduce the general problem of being

to a primordial counter-position (being/non-being) which is typical of particular beings. Apart from this attempt, many authors believe that the whole being – whatever it is – should be primal and eternal. This conception must always face the same problem of how and when something passed from nothing to being. In fact, if we either suppose an absolute first or prefer to imagine that the past eternity of being regresses *ad infinitum*, since it has now come to a witnessed end, in any case we think about the moment when and the reason why it began to exist.

James considers other metaphysical hypotheses as attempts to exorcise the dilemma of being, in particular, he recalls that of Parmenides and Zeno who claimed that only being is and is necessary, and that of those authors considering the idea of non-entity as a non-real idea or, even more abruptly, the same consider being as a sort of diseased question. However, rationalists and empiricists have tried to account for the origin of Being in different ways. In brief, rationalistic minds have generally considered that what came first should be the "maximum" of being, for it should introduce all at once the perfection of being[7]. Whereas empiricists share the conviction that the fact of being is a matter of chance, a contingent event which has gradually grown out of nothing. The logical problem of how, intellectually, something can come to exist, still remains unsolved. Taken seriously, the hypothesis of a growing being implies that the real quantity of being is not always the same and, apart from its appearances, such a quantity can increase or decrease over time. Broadly speaking, this is a very unusual or even unorthodox view for philosophers. At bottom, the greater part prefer to distinguish what is real and unchanging from what is apparent and changing. However, James underlines that our experiences testify to the fact of change: «phenomena come and go. There are novelties; there are losses. The world seems, on the concrete and proximate level at least, to grow» (SPP: 29). At least in this view, the question of how (i.e. by inertia, perpetual creation etc.) these «finite experiences» come into being is worth consideration. Facts are something given to us and in a certain way they oblige us to ask what they are.

The chapters following the introductory part of the critical edition of SPP[8] can be considered as a more systematic collection of some of James's most enduring themes of reflection. The fourth chapter is dedicated to *Percept and Concept*, the fifth chapter to the *One and the Many*, the sixth chapter introduces the *Problem of Novelty,* and in the last three chapters (VII-IX) James is committed to the most relevant "Sub-Problems" of Novelty, namely, *The Continuum and the Infinite*, *Cause and Effect* and *Causation*. Yet

from this general overview we can easily imagine how much this book is important for the present work on continuity. Moreover, being a work in which James originally intended to offer a system of his general views, the manner in which James organizes his materials to conduct his discourse remains pertinent to the current work.

III.2.2 Percepts and Concepts

The fourth chapter of the book is the longest, and James largely comments upon many aspects connected to the percepts and concepts issue. We should infer from James's intention to deal with singular metaphysical questions that such a long and accurate analysis shall explore various metaphysical matters and it is probably paradigmatic of the way in which his critical speculation develops. Although percepts and concepts are intertwined in our ordinary experience, James distinguishes more neatly their semantic areas for the sake of analysis. Terms such as 'idea', 'thought' and 'intellection' are used as synonyms for 'concept' and what is mediate, while 'percept' stands for what is immediate or simply perceived and it is alternatively expressed with expressions such as 'sensible experience', 'immediate flux' or by terms such as 'sensation', 'feeling', and 'intuition'. James asserts that percepts are continuous and concepts are discrete, and that continuity or discontinuity are, respectively, the aspects which most characterize their meaning. More specifically, a concept is discrete for it means what it means and nothing else, a percept rather is continuous, meaning nothing but being many things at once and presenting no contradiction in its «much-at-onceness». It is interesting to pay attention also to the terms that James uses to describe the perceptual flux. Such terms as «duration, intensity, complexity or simplicity, interestingness, excitingness, pleasantness or their opponents» (SPP: 32) are all features shown by the flux. Introducing ideal cuts, conceptions isolate and define the immediate sensible life which is: «a big blooming buzzing confusion»[9]. In fact, at the very moment we are dealing with perceptions, the surprising variety and overabundance of life presents no neat boundaries but continuous mutual interfusion and becomes diffused into its neighbours. James claims that the unity of this flux is unbroken for its limits are themselves parts of the same flux, and there are no other boundaries intervening from outside.

According to James, our intellectual life should be considered as a systematic substitution of the perceptual order of experience with abstract orders of concepts. In

fact, concepts are ideal and eternal identifications of those objects that our attention has functionally carved out of perceptual abundance. We are used to cutting parts of the sensible continuum out of time, as it were, and giving them names. In so doing, we also give to perceptual experience a different order in respect to the original way in which we encountered it. James agrees with Aristotle that we need both percepts and concepts to know the reality of facts completely: «as we need both our legs – he adds – to walk with». Of course, he is aware that, when they become adults, men are able to generate more and more sophisticated «conceptual trains», and that such a capacity to get higher and higher by abstraction may have no limits. Nevertheless, he remains convinced that all these universes of thought (i.e. the world of common-sense 'things', the mathematical world of pure forms, the world of music) have a long-forgotten perceptual origin and, moreover, in every actual situation, we continuously mix them with our present or future perceptions, for it is: «By those *whats* that we apperceive all our *thises*» (SPP: 34). Before addressing the consequences of the mechanism of substitution, James has something more to say about the two paradigmatic interpretations of conceptual knowledge respectively given by rationalists and empiricists.

In this regard, in note number 3 James clearly argues that his conception of immediate flux directly contradicts Kant's account. According to his own «actual experience», the reader could decide which is the most convincing view. In particular, the sensible flux of experience is essentially characterized by discontinuity for Kant, whereas it is continuous for James. The agency of the transcendental ego provides the logical condition of any possible connection, and this means that any togetherness is a matter of comprehension and understanding. Definite connections require the use of synthesizing categories[10].

About the conventional distinction sustained by James between the rationalist and the empiricist views, we acknowledge that, despite the origin (what) of concepts, the very question is about their «functional use and value». Even from this point of view, James observes that conceptual knowledge is a «self-sufficing revelation», completely considered apart from perception by rationalists, and they show no interest in knowing how such a knowledge can grow. On the other hand, James points out that empiricists claim that: «the *significance* of concepts consists always in their relation to perceptual particulars» (SPP: 36).

In this book James intends to follow the middle way between ultra-rationalism and what he elsewhere calls 'radical' empiricism. In fact, it is possible both to agree with rationalists that conceptual knowledge can live autonomously and to believe that empiricists are right to claim that the full value of knowledge is achieved when concepts deal again with perceptual reality. At this point, since he is considering the nature of concepts, he points out the distinction between the function and the content of concepts, introducing his contested version of the pragmatic rule. James explains that the significance of a concept, for instance that of 'man' (or 'cause'), consists in the *word* 'man', and in the image that such a word suggests to us, and again in its functional value. Actually, the first two aspects of the significance of concepts are substantial parts of it. The last, rather, is a functional part which takes into account the tendency towards which the concept leads us in a discourse.

This way of talking about the functional value of concepts is deeply connected to James's discussion about the meaning of truth. Particularly in MT, replying to Strong, James discusses the interpretation of his theory of truth as «ambulatory», apparently against the «saltatory» view of Green and the majority of epistemologists (cf. MT: 79ff)[11]. Broadly speaking, for James, knowing is a concrete natural process, and as such we can describe its results also in static or saltatory terms. As we shall see, this discussion opens with a very interesting reference to James's conception of space relations which he clearly acknowledges as an important psychological key to his ambulatory interpretation of truth. F. Bordogna (2010), introducing the Italian translation of MT, suggests that ideomotor theory was the basis of James's ambulatory theory of truth (2010: xxi). James O'Shea (2014) has recently underlined the tension that is evident in James between the functional definition of meaning, which he considers akin to the contemporary neo-pragmatist inferentialist or functionalist conception of meaning and to the 'conceptual content' of Rorty and Brandom, and his attempt to ultimately ground it in feelings of direction and perceptual images. More specifically, O'Shea claims that «the tension between meaning as felt experience and meaning as function persists in one form or another throughout his works», whilst in his last works, and particularly in SPP, he points out that: «James moves toward two views characteristic of the general pragmatist or 'functionalist' conceptions of meaning and conceptual content […] : first, the idea that what is essential to thought is not any occurrent or introspectible character of consciousness but rather the relational whence's and whither's of perception, action, and inference; and second, that the

nature of intentionality has more to do with where thought actually or potentially 'leads', with respect to further thought and action, than it does with any inchoate *feeling* of thought's destiny» (2014: 49).

However, James argues that there are different types of concepts depending upon the proportion in which their value lies in static (word, image) or functional aspects. At first it seems that those concepts – such as 'God', 'cause' or 'soul' – suggesting no definite images of their meaning would have more of a functional significance than others, but then he makes clear that in any case the practical meaning of a concept remains the most important part of it. The substantive content of a concept is for contemplation, whereas its functional value is for action. It leads to consequences, more precisely: «either in the way of making us think, or in the way of making us act» (SPP: 37). Therefore, James does not deny the substantive value of concepts, but puts it aside, paying attention only to the function of meanings. We could say that he provides a different scale of values in which practical considerations are praised and, consequently, the pragmatic method of interpreting the meaning of concepts resides in its place. Actually, the question which arises is what 'practical' and 'important' mean for James? Such a question, along with the complex discussion about the differences between Peirce and James's version of pragmatism should be postponed to the following section. Nevertheless, these lines are worth further attention since James is particularly clear about his relational interpretation of meaning and at last he claims that: «particular consequences are the only criterion of a concept's meaning, and the only test of its truth» (SPP: 38). He has just suggested that, according to the pragmatic rule, both the meaning of a concept and its importance could be inferred from the answer that we give to the question: «What sensible difference to anybody will its [of a concept] truth make?». Overall, this is a plea for supplying readers with clear definitions of the philosophical words, but the pragmatic method can also apply to every kind of idea when we have accepted that we should neglect its substantive content and consider only its functional definition. James offers some very indicative examples of functional meanings. For instance, his striking definition of freedom as "no feeling of sensible restraint" or again "Infinite" as "you can count as many units in a part as you can in the whole"[12], or that of God as: "you can dismiss certain kinds of fear". It is evident that such definitions are psychological ways of considering the effect of certain ideas, or rather how these ideas influence the direction of our behaviour. In

this view, his interpretation of the pragmatic rule as a method of making meanings clear shows original features.

We acknowledge that James speaks of our processes of comprehension from an empirical point of view, assessing psychological ways of concretely accounting for ideas. As a matter of fact, when we need to understand something abstract, we represent its practical consequences to ourselves, or better, the consequences that such a conception might let us encounter in our ordinary experience. More specifically, James considers the consequences for our personal-psychological life. In brief, before getting back to the general question on «the whole import of the world of concepts», within the 'compatibilist' or moderate theoretical frame of the book, James points out the functional part of the value of a concept as an unavoidable one for any concrete application of ideas and *a fortiori* for any 'internalization' of moral questions concerning our conduct[13].

In accordance with his psychology (PP XXII), James sustains a naturalist view in which thought originally had «an exclusively practical use» and more specifically he claims that concepts were classifications of sensations which should substitute the latter in order to extend our provisional capacity. The outcome of such a conceptual use of sensations is to turn immediate percepts directly into «bare signs» of the probable (or certain) consequences suggested by the relevant class of concepts. At this primary stage of conception, the «perceptual immediate *flow* » is actively substituted by «a whole conceptual *order*» (SPP: 39)[14] which helps us handle reality. James is clear about the adaptive utility of our conceptual faculty because both enlarge our environment in respect to the animals and shows how active our intellectual faculty is. The conceptual substitution enables us to drive and organize perceptual experience according to our practical and esthetic interests. Not only do we receive successive moments of experience, but: «we go in quest of the absent, meet the remote, actively turn this way or that, bend our experience, and make it tell us whither it is bound» (*ibidem*). In other words, James does not deem that the flow of experience is chaotic or that it does not show any order of succession. Rather, he argues that, as human beings have this primary form of intelligence, we can change the order of perceptions according to our aims. We can intervene[15] in the continuity of the experiential flux rather than going along it and enlarging our area of knowledge, foreseeing what is coming according to a 'next to next' contiguity.

Actually, since we have discovered that the conceptual substitution for immediate perceptions has a practical utility and enables us to handle perceptions better, James speculates as to whether it also helps us to understand perceptual reality better. In fact, apart from a primary practical use of concepts, James introduces a second function of conceptualization, that is, the theoretical use of concepts. We should underline that in both cases James considers utility to be the original motive for the development of our conceiving faculty. Moreover, he suggests that different levels of conceiving are due to different kinds of functional utility. However, bearing in mind that understanding something pragmatically means being able to tell about it, James suggests again that any translation of percept into concept (what) carries along with it the whole conceptual system of relations linked to that concept. In this view, we are able to tell so much more about that same substituted perception. His discourse is very interesting in so far as he describes this second or higher use of conceptual substitution as a «topographic system». James links the meaning of understanding something to that of gaining its scientific explication and then suggests that, since Aristotle, the majority of ancient and contemporary scientific thinkers seem to agree with the causal explication of phenomena, according to which: «we do not understand a thing until we know it by its causes» (SPP: 40).

A common way of explaining new facts, such as the a broken cup or gas-elasticity, is to hypothetically imagine a necessary agent whose existence is probable for the contexts in which the fact has happened and whose nature is compatible with the effects that it is supposed to produce. In other words, James argues that, for the most part, any scientific praxis of inquiry works theoretically. Starting from perceptions, we immediately substitute any 'that' perceived by the 'what' conceived and then we only consider «harmoniously conceptual connections» to the point of imagining possible thats or perceptions which do not interrupt our train of concepts. To use concepts theoretically, and to consider the causes of things, helps to adapt to wider environments.

According to James, in scientific explanations these harmonic connections which are discovered among concepts are soon seen to mean something more than practical advantage. The point is that «rational relations» seem to show a deeper level of reality at which relations between concepts are intuitively found and overall remain static and constant, thus are considered less illusory than flowing sensations. James recalls that, already in his PP (X: xviii) he had tried to explain that: «rational relations are all

products of our faculty of comparison and of our sense of 'more'» (SPP: 40). Nevertheless, here he makes it clear that there is a previous passage which we should read carefully. Indeed, first and foremost, we assimilate each concrete fact of experience to a definite concept and then we assume that the relations found between concepts, at this rational level of identification, were also real for the facts that we considered initially. Our terms are fixed abstractions made by human beings, the order both between concepts and between their relations are established by comparison and reveals a rigid and 'eternal' appearance. James claims that *a priori* sciences, like mathematics and logic, work with a limited series of relations, namely, those of *comparison* as difference or sameness, congruity or contradiction, inclusion or exclusion. It is a work of analysis which cannot bring us to something different or new. Once they have defined their conceptual elements, they can express relations among them according to our natural perception of likeness and unlikeness. This is to say that Logic, which he defines as 'the substitution of similar', produces fixed orders for it only makes abstract comparisons through our power of perceiving certain relations among the nature of its objects.

As we shall see, the power of conceptualization and its greatest problems deal with some of the conceivable possible consequences of this original act of identification. More specifically, we may say that it is a matter of substitution rather than representation (or interpretation). James points out that explanation means «a one to one» coordination of perceptual thises to ideal whats according to adaptive aims. But he also suggests that such a translation of the perceptual order in which we perceive reality into the conceptual order – out of the awareness of its practical use for adaptation – opens up a very dangerous substitution of «interpretants» (cf. Peirce CP8.171ff) of sensations and a rationalization of every sensible aspect of reality.

Before focusing upon the inadequacies of concepts in a more accurate way, James stresses a third positive aspect to explain why we hold our faculty of conceptualization in high regard. This merit consists in revaluing life. It is interesting how he compares the relation between percepts and concepts to that between the senses of touch and sight. Through vision, we prepare ourselves to get in touch with things. Nevertheless, the world of sight can also enrich our lives as something autonomous from touching. In the same way, concepts can help to organize perceptions but they can also be a separate world of ideas which, in so far as we possess it, remains as a superior and inspirational good, reinvigorating our daily concrete situations.

James suggests that concepts and percepts play different roles in human life, and according to different aims, they respectively have a higher or lower value. However, recalling the metaphor of the topographic system, James asserts that only when there is a present perception, can we conceive the whole map of its conceptual relations as like and unlike, past and future, etc. The alternative between the two absolute of living or knowing life is immediately rejected. James is clear that such a decision is fictitious since living and knowing are not really separable, and no absolutes really exist. The point is rather: «to hold percepts fast – in James's words – if our conceptual powers are to mean anything distinct» (SPP: 44).

As we have anticipated, concepts also have defects. In fact, the opposite of wideness and abstractness is superficiality, and in so far as they are discrete portions of reality, they are false. James is particularly precise in this passage - «Conceptual knowledge is forever inadequate to the fullness of the reality to be known» - and his thesis of «the insuperability of sensation» relies upon his pluralistic conviction according to which:

> Reality consists of existential particulars as well as of essences and universals and class-names, and of existential particulars we become aware only in the perceptual flux. The flux can never be superseded, we must carry it with us to the bitter end of our cognitive business, keeping it in the midst of the translation even when the latter proves illuminating, and falling back on it alone when the translation gives out (SPP: 45).

Actually, the rationalistic view which James rejects is here depicted as the platonic tendency to consider knowledge apart from sensation. That is to say that rationalist philosophers consider sensation to be the worst illusory aspect of reality, while deeming concepts: «the more essential thing in knowledge». Therefore, far from interpreting sensations through concepts, they aim at completely substituting concepts for percepts and losing any original relationship of knowledge to concrete bits of sensible experience. In this view, it seems as if knowledge were not a human practice and had nothing to do with human interests, either at the beginning or at its end. On the contrary, James firmly believes that the real illusion is exactly that of an intellectualistic approach to life. Sensation is the only regulative empirical criterion that we have to control the rightness of our inquiries, and any translation of our perceptual flux into intelligible terms should remain associated with it, he adds: «to the bitter end of our cognitive business». Of course, James does not mean to say that our perceptions[16] are not fallible, but to state that sensation is not avoidable in order to say something that makes sense[17] about ourselves and our world. As Stéphane Madelrieux

states in his recent book *William James, l'attitude empiriste* (2008), James's empiricism relies upon sensationalism in order to re-balance the contemporary tendency of philosophers to indulge in ultra-rationalistic views. In fact, James himself is clear about his rejection of any absolute identification of knowledge «absolutely or exclusively» with perception or conception. Rather, he claims that, while conceptions give extension to our knowledge, perception is the undeniable source of its intensity (SPP: 47).

However, here James seems to be claiming something more than balance, for to prove his thesis of the «insuperability of sensation» he wishes to show, first, that concepts are inadequate and second, that they falsify perceptual experience. The first point is that conception is a secondary process in respect to perception in so far as lower creatures live without it[18]. The second point is that an extreme conceptual treatment of perceptual reality makes the latter seem a mere illusion, despite the fact that in our experience perception always comes before conception. James offers a very interesting explanation of conceptual understanding as perceptual meaning. More specifically, he claims that to understand any concept – such as "color", "resistance", "motion", or "bright", "loud", "illation", "proportion" – we have to know what does that concept mean, and meaning always comes from some previous perception (*this*) or some abstract portion of it. Our first knowing experience is made by: «acquaintance in the perceptual world, or else some grouping of such abstract portions» (SPP: 46). The deep and inextricable interweaving between living and knowing is particularly evident when James states that every content of concepts is taken from our sensible relation with the world: «to know what "color" means you must have *seen* red, or blue, or green» (*ibidem*). In this way, James also illustrates the correspondent deep relationship which exists between ethics and epistemology, according to a very broad consideration of ethics as the ensemble of everything that is of value to human beings.

Therefore, concepts turn out to be inadequate because, as James has already explained, the substitution of concepts for percepts implies the substitution of conceptual relations, which are of static comparison only, for dynamic relations. Such a substitution is impossible and thus forever inadequate. Moreover, the translation of the continuous sensible flux of experience in corresponding schemes made of discontinuous terms can only attempt to replace point-by-point the flux, but is not able to reproduce it completely. This second argument is particularly worthy of attention since it illustrates James's approach to the analysis of continuity. He is proposing two

pivotal theories treated in PP respectively about the transitive and substantive parts of the «stream of consciousness» and the voluminousness of spatial sensations. In brief, we may say that, for James, the greatest distinction between concepts and percepts concerns movement (cf. PP IX) as a relational quality of being (cf. PP XX). More specifically, James underlines that the intrinsic nature of conceptions is stationary, whereas, originally, sensations change. We should notice that James soon suggests that reality is pragmatically made both by concepts and percepts. He is well aware that: «we cannot live a moment without taking account of them [concepts]» (SPP: 56). Nevertheless, he distinguishes the 'eternal' kind of being enjoyed by concepts from the 'temporal kind' of perception and finally he explicitly considers all the conceptual or ideal systems as inferior to perceptual reality, and indeed «involved and contained» in the latter. According to James, there are «many realms of reality which mutually interpenetrate» and philosophy should recognize them all. As we shall see in PU, MT and ERE, it is a matter of relations. In fact, apart from the more general and stronger distinction between static and changing relations, James suggests that each 'eternal' realm of reality (mathematics, logic, aesthetics, ethics) are: «strung upon some peculiar form of relation» (*ibidem*).

Re-echoing his attempt to reply to an objection brought against Bergson (PU: 122-3), James makes it clear that concepts of qualities and relations, as well as those of happenings and actions, do not act themselves but only designate activities. There is no way for conceptual order to change its schematic and static relations. In this respect, James rejects name Hibben's critical position. Taking the example of the calculus, in a recent article, Hibben writes that: «the peculiar function of thought is to represent the continuous» (SPP: 47). James's reply is very indicative of the view that he has delineated so far, and that he now states as the fact of: «non-reproducible parts of reality». According to James, the calculus is again a substitution of different things, perceptual continuities for symbols of thought. Such a translation is appropriate for practical ends, as different brain paths lead to the same final object (cf. PP VIII, XV). But James explicitly contends that something conceived is different from something felt, or rather that percepts and concepts are not sensible equivalents[19]. His argument specifically addresses a certain tendency that he wittily discerns in philosophers such as Hibbert and the 'logicists' who ultimately maintain a sort of 'intellectualist absolutism/reductionism'. In other words, finally they claim that universals

«adequately attained to» are able to adequately deal with particulars, that is to say that concepts are all-sufficing.

If we consider change, it is a continuous process and, according to James, continuity can be perceived but it cannot be perfectly or completely reproduced intellectually. As he has already contended in PU, this conviction of the ability of percepts to be replaced by concepts is the origin of philosophical intellectualism. More specifically, here he traces the origin of intellectualism in an: «uncriticized habit» to *define* what everything is and then to define our definitions too, «added to the intrinsic charm of the conceptual form» (SPP: 48). In brief, perceptions are changing *and* continuous, whereas concepts are fixed and static and, according to this former distinction, James rejects the reductionist identification of knowledge only with concepts, contesting every conviction of the conceptual exhaustion of reality. As to what concerns motion and change, for instance, he points out that any conceived summation of parts *ad infinitum* would not exhaust motion, just as any translation of a perceptually given continuum in punctual terms would not return the continuum. In the same way, the incomprehensibility of activity and causation, the impossibility of knowledge, the conceptual impossibility of personal identity, the contempt for the immediate features of life and the ascription of conceptual limits to the whole reality are all matters introduced by the conceptual translation and evidence of its inadequacy[20]. James makes it clear that this is not the position of Kant and all rationalists. In fact, even if they consider the perceptual world mainly as a «mere apparitional birthplace for concepts», they also suggest that reality is never completely gained by the world of concepts. Kant claims the noumenic nature of reality and speaks of 'things in themselves'. Bradley maintains that there is an Absolute beyond perception and other thinkers such as Green, the Cairds, and Royce imagine a transcendent Mind. Nevertheless, it is true that, for rationalists, concepts would be more similar to reality because both concepts and reality are supposed to be static.

However, James's examples have shown how our concepts turn out to be misleading when we try to reconvert the conceptual analysis of reality in the original perceptual continuum. As he states, «Continuity is impossible in the conceptual world» (SPP: 50), hence: «the manyness-in-oneness that perception offers is impossible to construe intellectually» (SPP: 51). Bradley and Bergson have indulged in these dialectical puzzles in their search for a solution to most of them. James feels very close to Bergson's view, which he depicts as a middle way in which Bergson, while

recognizing a certain superiority of perception, is convinced that our experience needs both these forms of knowledge for different goals. Nevertheless, James also points out that there is a very important similarity between his own position and that of Bradley. In James's reading, Bradley would recognize a certain inferiority of the conceptual form to the perceptual form of thinking as well, for he would claim that we encounter reality in its wholeness in immediate feeling. But he also argues that such a wholeness is fragmentary, given to us in perception, since our perspective is limited[21], and we can extend and complete these fragments of reality only by resorting to concepts. James has in mind his conception that, whatever feeling is, it is not a psychical zero, as he has magisterially stated in *The Feeling of Cognition* (MT). According to this view, feelings give us the intensity of reality, whereas conceptions help us to extend and complete our perceptions.

The passage from *The Principles of Logic* (1883) quoted by James is very eloquent. There Bradley makes clear that any direct perception of the real is a unique appearance by which we should neither deduce that: «the "this" we take is all the real, or that nothing is real beyond the "this"» (*The Principles of Logic*, I: 70). According to Bradley, the completeness of the real should not be sought in the series of phenomena. Such an attempt is doomed because «a completed series in time or space can not possibly exist», that is to say, because of the: 'phantasm of the spurious infinite'. The real is not identical with the content of perceptual appearance. The real itself transcends such presentation and invites us to go beyond that given. In Bradley's view, the problem becomes how to refer any content to the real, if the real is not as directly perceived. The relation between content and real should be an indirect reference of the former to the latter, that is to say, there is no direct attribution of the content to the given (as real). But the given becomes the medium term between the content and the real so that the content is attributed: «to the real which appears *in* that given». In conclusion, Bradley claims that any ideal extension of perception (inference) relies upon the logical principle of identity. Therefore, the quality of the immediate feeling is the means of connection through which the ideal world catches the actual world, in so far as: «the continuity of content is taken to show the identity of element» (Bradley 1883, vol. I: 70).

James considers Bradley an unorthodox intellectualist because of his critical position on feeling, which remains «a revealer of the inner oneness of reality» (SPP: 52), but he is an intellectualist anyway. In fact, out of their adjectival relation to what

is beyond, feelings themselves do not have any stability, nor individuality[22], and as such they cannot be a matter of philosophy. This obstinate anti-sensationalism seems to James to be a prejudice preventing philosophers from understanding reality as it is. For him, we can read both a plea for methodological pluralism and for radical empiricism, when he respectively wishes that philosophers use concepts or drop them according to intelligibility, and that: «the whole of immediate perceptual experience be the subject-matter of philosophy» (SPP: 53).

James has claimed so far that reality is various, overabundant, rich, and it displays different features, which become incomprehensible when indifferently approached from a methodological point of view. In this view, percepts and concepts have different functions in knowledge. Immediate perceptual experience grasps the deeper and thicker features of reality, while, as thinner representations of sensation, concepts help us to widen and ideally complete that content. Since our perceptual perspectives are always limited in space and time, the 'method of conceptual translation' provides more extended opportunities for us to deal with reality, according to some partial purpose or aspect. However, it is only through perception that we are acquainted with: «continuity, or the immersion of one thing in another, […] with self, with substance, with qualities, with activity […], with time, with cause, with change, with novelty, with tendency, with freedom» (SPP: 54). Despite the interesting order in which James has recalled several perceptual acquaintances, starting from continuity and concluding with freedom, his very attempt seems to be that of reconciling philosophy with reality. More specifically, James exhorts on behalf of philosophy as a human effort to comprehend all reality, to consider: «the whole of immediate perceptual experience […] for only in such experience is reality intimately and concretely found» (SPP: 53). This seems to be a kind of redirecting of philosophy towards – or rather, according it to – a different conception of reality (cf. fifth corollary, SPP: 59-60), which also implies a dynamic reformulation of the meaning of knowing.

III.2.2.1 Some corollaries to the percept-concept distinction

As he argues in the first corollary to the fourth chapter, stating that philosophical empiricism seems to be confirmed from his analysis, rationalist philosophers aim at a conceptual clarification of all of reality, or at: «a rounded-in view of the whole of things» (SPP: 55). On the contrary, empiricists programmatically renounce: «the

pretension to an all-inclusive vision» (*ibidem*). James presents his image of reality as an ever-flowing and ever-changing stream of its parts, which are percepts in human experience. As with our states of mind, following their passage, percepts never return exactly the same and such a temporal singularity of perceptions is what brings elements of concrete novelty in our experience. On the contrary, according to his naturalistic and evolutionist view: «concepts are abstracted from experiences already seen or given». Therefore, concepts are always late respect to the continuous growing of reality. Within an evolutionist perspective in which «reality is created temporally day by day», the world is 'in the making', as it were, and not 'already made'. Therefore, any conceptual representation of reality is valuable for retrospective considerations, but «can give only a bare abstract outline or approximate sketch» of the universe to come.

Hence the priority of perception over conceptualization is the means by which we remain loyal to reality and have a satisfactory relationship with our world. Indeed, James attributes to empiricism an overflowing, exceeding, and altering image of reality, as well as a humble attitude towards it. In this regard, he traces an exemplary distinction between the leading and attributive disposition of rationalists towards reality and the observant approach of empiricists. The latter approach shows the profound affinity between science and philosophy that James has already noticed and that he wishes to recover. He borrows from Belfort Bax another expression for stating the empirical claim: «the 'alogical' enters into philosophy on an equal footing with the 'logical'». As we shall see in PU, James states that reality is not logical in its constitution in the sense that it is 'a-logical', or not yet logical. In fact, here he suggests that «actual novelty» is not predictable from concepts, even though it become comprehensible *ex post* and piecemeal.

As we have anticipated, the second corollary corrects the wrong impression that James's words may have given of the unreality of concepts. He suggests that our systems of concepts are distinct realms of reality which are contained in the broader perceptual reality.

The third corollary is very interesting. James avoids the classic accusation of nominalism and surprisingly declares that this book is eccentric: «in its attempt to combine logical realism with an otherwise empirical mode of thought» (SPP: 58). The point is the 'self-sameness' of conceptual objects, which is generally disregarded by nominalist authors such as James Mill, who claims that two objects can only possess

the same name. The main question is what does the concept 'same' pragmatically mean, while the consequences it leads to are that there is no difference between the two objects when compared, and that substituting one object for the other in certain operations means we obtain the same result. Nominalists impose the problem of the physical impossibility of two things being identical to the world of conceptions by saying that ideal meanings too can never be exactly the same twice. The other perspective is that they do not take account of the *difference* of a certain element of the 'white'-quality from other colour qualities which is not physically but mentally fixable. James's example of 'white' paper and 'white' snow shows that concepts are mind creations and as such should be considered apart from all the possible physical modifications of them as perceptual objects. Most useful concepts, indeed, are problematic in respect to physical requirements. Nevertheless, the concept of 'white' has been conventionally fixed as a self-same object, therefore the nominalist claim turns out to be nonsense. Moreover, James confesses that he is sustaining the Platonic doctrine recently known as *logical realism* according to which: «concepts are singulars, […] concept-stuff is inalterable, and […] physical realities are constituted by the various concept-stuff of which they 'partake'» (SPP: 58). His position is peculiar since rationalists support logical realism, whereas James clearly states his empiricist view that: «concrete percepts are primordial and concepts as of secondary origin» (*ibidem*).

In the fourth corollary, James recollects his general view and confirms the indispensable interweaving between: «the universal and the particular parts of experience». Concepts and percepts are consubstantial. They are made of the same 'stuff' and when we handle them they melt into each other. These passages are very dense and the selection of words as always is very indicative, or rather evocative, of James's descriptive intention. To disentangle percepts and concepts is practically impossible, unless it is a matter of theoretical retrospection, for while we are living there are no neat distinctions to draw and their interpenetration is deep[23].

In the fifth corollary, James recalls that concepts are a secondary formation at the point of their genesis in respect to percepts and concludes that: «what is given [in immediate perception] is absolutely real» (SPP: 59). A consequence of rationalism was the de-realization of «the passing pulses of our life» which James feels has finally recovered[24]. However, there is a last specious objection, which he anticipates from rationalists, that his argument of the superior authority of percepts over concepts is self-contradictory. For his critics, James uses concepts in order to state that concepts in

general are second order realities; that is to say that, whilst disregarding the capacity of concepts to give insight into truth, he was still to use concepts to state the reality of percepts. The impossibility of "get[ting] out of language" to state whatever truth we happen to prefer should show that the character of reality chiefly and primarily belongs to concepts. James's reply is very concise, but also very accurate since he has already tried in PU to prevent the position of his friend Bergson from the same objection (cf. PU: 122-3). Particularly in a very long note to the sixth lecture, *Bergson and his Critique of Intellectualism*, James makes clear that, for Bergson: «concepts have a practical but not a theoretical use». In fact, according to James, Bergson uses concepts only to 'orient' us towards a practical relation with reality, and it is such a practical turn that can give us a more complete insight into reality. In the same way, in this last corollary, James replies to the objection, maintaining that concepts are only designative and that «the concept 'reality'» given back to immediate perception is: «no new conceptual creation, but only a kind of practical relation to our Will, *perceptively experienced*» (SPP: 60; cf. PP XXI). His attempt to recover a broader realm of reality is not to deny that concepts are themselves real. On the contrary, it is to enlarge reality to perceptions and feelings. In this regard, it would be contradictory for a meliorist to disregard the reality of concepts and the efficacy of their contribution in the scientific and social construction of our world. The point is exactly the reality of reasoning that can prevent us from «naturally cordial relations with sensible experience» (PU: 122), or rather that our conceptions practically affect our conduct. Moreover, according to a practical use of concepts, it is not self-contradictory to use concepts to undermine general conceptions. In fact, rationalism has also shown that conception is not able to work over certain limits, it only ends up in dialectic contradiction.

III.2.3 The One and The Many

The long discussion on percepts *and* concepts leads to the alternative between *the one and the many*, or rather between monism and pluralism, which James considers to be the most «pregnant» of all dilemmas of metaphysics owing to the consequences that follow from these alternative options. What James has contended so far is that no conceptual system can be a full equivalent of reality and that in point of genesis percepts are primary[25] formations in respect to concepts. Now James believed that «the full nature» of reality is only given in the perceptual flux. Surprisingly, the problem is

immediately focused upon the continuity of the experiential flux between non-adjacent portions of it. As with the stream of consciousness, the stream of experience also seems to be continuous from next to next, and it apparently shows cases of separation between its parts which happen to be interrupted by other parts working a positive disconnection. He is thinking about cases of unlikeness, forgetfulness, and physical incompatibility between two parts of the same interrupted experience[40]. According to monism, reality exists collectively in an absolute way and disconnections are mere appearances, whereas pluralism assumes that the form of reality is distributive in so far as it is not completely reducible to some ultimate principle of unity. In the history of philosophy many attempts have been made to identify this last principle, most of which were vague and mystical. The conception of substance, the principle of individuality, and that of the essence of things are examples of this same attempt, even though James is particularly clear in saying that Spinoza was the first philosopher to stress the rigorous necessity of the unity of substance[26]. Locke and, especially, Hume criticize the idea of substance as something distinct from a «collection of particular qualities», already using the pragmatic rule. In a similar empirical fashion, but systematically applying the pragmatic method, James suggests inquiring into the concept of oneness not as a principle, but as a descriptive name for «certain *specific and verifiable connexions*» that we can concretely find in experience.

This issue was more punctually developed in the fourth chapter of *Pragmatism*, also entitled *The One and the Many* . Here we find the interesting connection between James's consideration of the practical differences that derive from considering the world as one (or many), and the different kinds of conjunctive relations that he describes in the *Essays in Radical Empiricism* according to different grades of intimacy (cf. ERE: 23ff)[27]. Here we shall only note that, according to Peirce, James denies any perceptual or intellectual faculty of intuition to human beings. Moreover, he claims that abstract designation cannot be real unification, not even sufficient a connection to form one "universe of discourse". James yakes the extreme example of «unlike and incommensurable» existing universes which are forever unperceived by us and wonders whether the fact that we can conceive absolute diversity and gather it under a collective name is to be considered a kind of real knowledge, and overall a valuable proof of the world's oneness or not. The noetic unity is asserted in so far as «we are able to mean the whole of it at once» and this remains incomprehensible to James. The hypothesis that chaos or the world should be comprehensible just because we can

conceive them is very different from «the concrete noetic unification [that would be] wrought by an all-knower», which is supposed to be «an individual witness of the total frame of things» and as such capable of an «undivided act of omniscience» (SPP: 68).

The pragmatic meaning of 'oneness' applied to our world is, rather, the: «innumerable modes of union among its parts, some obtaining on a larger, some on a smaller scale» (SPP: 67). James offers different examples of specific systems of connection that we «concretely» mean by saying that the world is One. Apparently, the greatest system of unification experienced which recalls monistic unity is gravitation, but the parts of our world show several physical connections (mechanical, chemical, thermic etc.). Such a practical difference is what enables us to call our world one and at the same time keeps us from stating its absolute unity. No absolute oneness or absolute many are verified from the physical point of view. For instance, some parts are chemically conjoined with each other and disjoined from (or chemically inert to) still other parts; and indeed, modes of connection and disconnection seem to be: «co-ordinate features of the natural world» (*ibidem*). Then James refers only to some other practical differences, out of the eight that he has listed in *Pragmatism*, such as spatio-temporal continuity and generic oneness, to corroborate noetic pluralism as a verifiable hypothesis, against the unverifiable monistic theory. He claims that our world is made of partial systems of concatenation which: 1) do not necessarily imply mutual (or one-to-one) correspondence; and in which 2) the same thing or part of the world can belong to many systems. Accordingly:

> everything in the world might be known by somebody, yet not everything by the same knower, or in one single cognitive act—much as all mankind is knit in one network of acquaintance, A knowing B, B knowing C . . . Y knowing Z, and Z possibly knowing A again, without the possibility of any one knowing everybody at once. This concatenated knowing, going from next to next, is altogether different from the consolidated knowing supposed to be exercised by the absolute mind. It makes a coherent type of universe, yet a universe in which the widest knower that exists may yet remain ignorant of much that is known to others.
>
> […] Some of these systems involve others, some do not. You can't have a telephone system without air and copper connexions but you can have air and copper connexions without telephones. You can't have love without acquaintance, but you can have acquaintance without love, etc. The same thing, moreover, can belong to many systems, as when a man is connected with other objects by heat, by gravitation, by love, and by knowledge (SPP: 68-69).

The difference between monism and pluralism could be dismissed as a matter of observation, once we specify the respects under which our world is one and those under which it is many. However, James knows that such an easy conclusion can be reached only by considering the world's unity in the 'cash-value' of its empirical

realizations. If we consider, rather, oneness and many from an intellectual point of view, further essential consequences, particularly those dealing with emotional value and rationality, should be taken into account. The pregnancy of this metaphysical dilemma is due to the deeply intertwined orders of these doctrines' implications. James tries to disentangle the essential theoretical and practical differences that we should respectively assume together with our preference for the monistic or the pluralistic view. We have to make clear that the paradigmatic distinction between pluralism and monism is not perfectly correspondent to that between empiricism and rationalism, as may seem the case. In fact, James believes that both rationalism and empiricism are forms of monism, even though empiricism remains more curious about the various aspects of reality.

According to monists, the 'oneness' of the world is a predication endowed with a certain dignity, and the absolute feature of such a unity of being is the logical presupposition of the world's rationality. Since all things necessarily derive from the essence of God, relations are essentially given and each part is determined by the whole, that is to say, no exception is possible, no absence is conceivable because everything that is, should be present in everything else. Stressing its allegiance to Spinoza, James attempts to indicate the fundamental traits of the monistic doctrine. Nevertheless, the monist philosophy that flourished the most in the late 19th century was 'absolute idealism', for which, as James recalls, the world exists as: «the object of an infinitely knowing mind» (SPP: 71). As in PP, James asserts that the logical noetic and monistic function of the superior witness of idealists is analogous to the finite witnesses that we are in respect to the variety of connections and disjunctions faced by our finite fields of consciousness. However, the positive mark of the monistic doctrine is identified with its affinity with a religious faith. It provides us with an optimistic spirit due to a sense of certainty about the future which is not rationally based. But like every doctrine uncritically pursued, noetic monism introduces several theoretical problems. The hypothesis of an Absolute Mind seems to be unable to account for possibility, which seems to be both a category of human thinking and an experienced property of its objects. In fact, since everything that exists is supposed to exist as known by the Absolute Mind, James stresses the inconsistency of our finite consciousness which is both the object of the Absolute Mind's knowledge and the subject of a different kind of knowledge. In the same way, he wonders how evil can come from perfection. The problem is noetic again since we should wonder how the

perfect world as known by the Mind can also be known as imperfect. More generally, the contradiction is between our perceptual experience of change, novelties, time etc., and the Absolute's unchanging and eternal representation of the world. James underlines the fact that it is impossible for us to apprehend the world as known by the Absolute Mind. Moreover, he wonders why should there be something else. If absolute knowledge is an appropriate representation of reality, how would we have the possibility of knowing things otherwise? This question illustrates James's functional approach even to logic, in the sense that he subordinates conceptions to perceptions to keep as much reality as possible. Meanwhile, a correct translation of reality in logical terms should not present categories or entia which do not have any functional justification. However, the idealists' common reply to the accusation of inconsistency is that all the contradictions between absolute knowledge and our perceptual experience are due to our fallible world of senses which is a source of illusion. But developing the content of such a pretension, James suggests, is a matter of categories, for if the world is a «Unit of fact», then: «whatever *is* is necessary, and aught else is impossible» (SPP: 72). In other words, he makes clear that the hypothesis of an Absolute Mind has the consequence that the world of the Absolute is beyond our «apprehension or appreciation», since human beings are not provided with intellectual intuition, and, more importantly it *de facto* ends up denying the category of possibility. This reading of monism is consonant with James's epistemological position. Since concepts are second order realities at the point of their genesis, the category of possibility is derivative of perception for it comes from our immediate sensible relation with the world, or at least it is a natural or functional *a priori*. At the moment when intellectualism begins to consider this second order arrangement of reality as its most real nature, little by little it loses the capacity to think the relational category of possibility. We might say that, in particular, the intellectual category of possibility is indivisible from experience and indeed linked to a real 'additive' constitution of the universe, which remains ambiguous as to what concerns the shape that it is going to assume. According to James, our sense of freedom relies upon the possibility of thinking the present as really actual, a present where genuine novelty can happen since the future is not necessary completely implicated in the past. We cannot deduce something that is really new from something closed, already done, or essentially determined.

James also tries to explain the implications of pluralism, and then its main advantages[28]. The «face-value» given to perceptual experience differs from monism in so far as, according to experience, no absolutes are concretely observable. In this view, pluralism only means that even monism is liable to the «Ever not *quite*» warning and that is why James prefers to use the expression 'pluralistic universe' rather than the term 'multiverse'. He does not intend pluralism to be another absolutist/determinist doctrine, but rather a call to experience. Pluralism only accepts that the world can be different things at once according to our perception of reality, and that there are at least some infinitesimal parts of it that are not reducible to their wholes. Such an acquisition is but a matter of experience. James claims that we are not able to: «*explain* conceptually *how* genuine novelties can come» (SPP: 73). Nevertheless, in a very similar manner to Mead and Whitehead (cf. Bella, 2015), James maintains that: «but if one [novelty] did come we could experience *that* it came» (*ibidem*). In other words, James contends that real novelty cannot be conceptually disclosed in advance, even though it can be perceptually experienced.

> We do in fact experience perceptual novelties all the while. Our perceptual experience overlaps our conceptual reason: the *that* transcends the *why*. So the common-sense view of life, as something really dramatic, with work done, and things decided here and now, is acceptable to pluralism. 'Free-will' means nothing but real novelty; so pluralism accepts the notion of free-will (SPP: 73).

This passage is fundamental to understand James's preference for perceptual experience, as well as the seed of his naturalistic realism. Finally, James's greatest difficulty is to consider the continuity of the stream of consciousness not only as a mental category, but also as a real feature of reality. According to his view, in fact, the risk implied in considering reality continuous is that of turning it again into a conception, that is to say, falling back into an idealistic view. We all know how this outcome is contrary to James's intentions, and how soon he realized that intellectualism becomes a destiny where no proper distinctions are made. The key point of James's argument is that, although we do not know why some things happen, we cannot deny knowing that they are still happening. Perception transcends conception, and James argues that the superiority or, better, the priority of perception can be part of a pluralistic view. The great distinction between pluralism and monism can be summed up in the alternative ideas that the world has « doors and windows open to possibilities uncontrollable in advance», or that it is an: «absolutely closed-in

world» (*ibidem*). This can be also stated as a matter of real or apparent/unreal absence, or rather, real or apparent novelty.

III.2.4 Monism or Pluralism: Unreal or Real Novelty?

The metaphysical problem of novelty is analysed in chapters four and five. The difference between the two metaphysical views traced so far pragmatically deals with the question: is novelty real or unreal? In fact, if novelty is real, we should talk about *chance*, that is to say, accept that something new is added to the past. Whereas if it is unreal, it is just an appearance: «virtually one therewith [the old being], or implicitly contained therein». As we have seen in Chapter II, novelty as chance was a pivotal problem particularly for Peirce, who considered tychism the characteristic trait of his cosmology before reconsidering his general view as synechistic in the 1890s. James also considers the relation of novelty and continuity.

James argues that the metaphysical problem of being illustrates our conceptual impotence when attempting to explain it. Focusing upon the ontological problem of novelty, James suggests using the empiricist methodological approach to consider the parts rather than the wholes and imagining that we deal with them perceptually. Accordingly, novelty is taken as a concrete perceptual experience, that of a: «perceptible amount of new phenomenal being» (SPP: 76). In this view, no concrete bit of experience ever returns twice save as something different thus novelty seems to be real. The point is consequently epistemological and ontological in the sense that James pragmatically claims that different epistemologies are rooted in different ontologies. Moreover, ontology is (practically) a second order problem emerging when our scientific instruments of explanation lose their power or are confronted with other powerful explanations. In particular, he refers to the everlasting conflict between two modes of explanation, that is, the atomistic philosophy of Democritus and the biological view of the world of Aristotle.

However, according to the methodological/epistemological preference for the conceptual or the perceptual method/faculty, James seems to be citing using functional mechanisms the reasons for different ontological outcomes. More specifically, the conceptual faculty, or rationalizing intellect, being a second formation, is able to explain present facts only by past reflections. It is mainly a function of comparison rooted in the logical principle of identity. Therefore, the

perceptual flux should be treated as a mere phenomenal illusion hiding deeper identical elements which are supposed to be the only real beings. When these eternal elements are intellectually grasped, the appearance of change is explained as a matter of redistribution of identical atoms of reality which can assume infinitely diversified configurations. At least in the natural sciences, such a scientific explanation has shown to be largely successful. James underlines the ontological implications – as well as the theories cling to a certain declension of atomism – which have been streamly accepted as necessary consequences. He seems to stress the importance and 'depth' of the theoretical threads that have been uncritically acquired, together with (and because of) the epistemic utility of this kind of explanation (cf. Duhem and Quine's holism).

The greatest difficulty for the conceptual method is to extend the «absolute conceptual foundation» of the apparent perceptual variety to human lives. Despite the imaginative difficulty of assessing our experiences as molecular arrangements, James points out that a more important epistemological problem arises when, from material fact, we come to consider subjective experiences or feelings. As he had punctually explained it in 1885 in that pivotal article *On The Function of Cognition*, James argues that the only nature of feeling is to be felt. Hence there is no reason to say that a feeling: «is not *as* it is felt»[29]. Moreover, and again from a psychological point of view, James observes that our experiences resist their reduction to concepts and that even when they are supposed to result from any arrangement of elementary molecules, such an awareness does not change the impression that we have of them. Human lives, as a specific object of inquiry, or simply as personally lived, seems to be unclassifiable. Each life has the concrete form of a biography[30] and, taken in its «full individuality», each biography is itself and produces novelties. It is not resolvable in ancient elements or completely fitted to older kinds.

As we have seen, James compares the conceptual and the «*live* or perceptual» orders of knowledge with the psychological or functional point of view. Such a functional analysis of different modes of explication carries with it different ontological descriptions of reality. Since conceptualism is considered as a work of deduction of identity from identity, in a rationalized world novelty should be considered unreal, or only apparently new. There is no way for conceptualism to satisfactorily represent in static terms novelty, change, and growth, and the exercise of such an incapacity – the incapacity to name things as they are – produces what James calls a 'contradiction' in so far as, while affirming their power on reality, concepts deny: «the indestructible

sense of life within us» (SPP: 79). This passage is very dense. James argues that we have a sense of life (as new, changing, and growing) which has rational features since it can be contradicted, but is more original and even stronger since it resists any conceptual appropriation.

III.2.5 Novelty and Continuity

James now considers the relation between the possibility of novelty and *continuity*. Novelty is generally considered to be a violation of continuity, according to a mathematical concept of continuity which consists in an «'infinitely' shaded gradation». James explains that, since infinity deals with numbers and numbers with facts, («for they have to be numbered»), the non-existence of an infinite number suggests that facts should also have a finite constitution, therefore new facts have a discontinuous genesis. They come into being by discrete increments of novelty.

Evidently, James takes time, space, and change to be perceptual data in order to state that reality grows by «finite buds or drops». This theory of the discontinuous or discrete constitution of reality agrees with our perceptual experience in so far as our acquaintance with reality grows by sensible minimal (structured) amounts of perception. Psychologically, – he adds, we are ruled by the «law of the 'threshold'» (SPP: 80), which means that what is below a certain threshold of sensibility does not exist. On the contrary, the discontinuous theory of reality seems to be incompatible with time, space, and change taken as concepts. James argues that, if concepts *are* not percepts, then even the infinite sum of them could never produce the minimum duration or extension. If instead concepts are percepts, then they cannot be treated as «real minima», for as concepts their constitution would be continuous, not numerically finite and so divisible *ad infinitum*. In brief, the metaphysical hypothesis of the continuous or relational constitution of reality poses the problem of the infinite.

Zeno was the first to put the problem of the infinite, and, according to James, his famous examples of the flying arrow and Achilles and the tortoise were meant to show that motion could not be real as discretely constituted. In the first case, the spatio-temporal (relational) definition of movement lets the motion become a sum of 'points of rest', for the arrow neither exists out of points, nor really moves in points. Again, assuming the infinite divisibility of space, Zeno sustained that it was mathematically impossible for Achilles to overtake the tortoise, which started to move an inch ahead.

James considers Zeno an exponent of the Eleatic monistic doctrine, according to which the real being was «entire or continuous». Whereas the units of reality as perceived remained divisible *ad infinitum* thus false.

Like Peirce, James considers the most interesting definitions of continuum which have been given, and in particular he refers to Kant, Renouvier, Cantor, and Russell's definitions. He claims that, in the *Critique of Pure Reason*, Kant suggested a sort of ontological axiom according to which: «real or objective existence must be *determinate* existence» (SPP: 82). This is to say that, apart from our subjective capacities, taken in themselves realities are numerically determinate, that is, countable. However, his definition of infinity is: «'that which can never be completely measured by the successive additions of units'» (SPP: 83). According to Kant, infinity is not definitely numerable. Moreover, Kant states that, for any given existent reality, there must equally be given the whole of its conditions of existence. In this net of definitions, James points out that the parts of space, time, and causes form infinitely regressive series and cannot constitute any real whole. These series are indefinite in number. Whereas to be real they should undergo the principle of numerical determination. James points out that the evident contradiction between «the infinity of the *form* of conditions, and the numerical determinateness implied in the *fact* of them» (*ibidem*) was ascribed by Kant to the 'antinomic' form of our experience and solved through his transcendental idealism. Since the form of conditions is indefinite, it cannot be real in itself, but only for us. As distinguished from actual phenomena existing in finite amount, their infinite forms can have a phenomenal existence for they mean only the never-ending possibility of being able: «to go on perceiving, conceiving and imagining». In this sense, our possibility of representation should not correspond to, or necessary imply that, realities be already there. Accordingly, James points out that idealism cuts experience into «a phenomenal given part which is finite» (*gegeben* part) and: «a conditioning infinite part which is not given, but only possible to experience hereafter» (*aufgegeben* part).

James's critique of Kant's transcendental solution to infinity, and to conditions of possibility in so far as their form is infinite, is made on the ground of the logical implications of his statements. James remains within Kant's axiological framework, and observes that the expression «the absolute totality of the synthesis» of conditions can be interpreted either as if these conditions should be given in the form of a whole sum, or as if no one of the conditions should be lacking. This latter interpretation of

Kant's logical requirement can be both collectively ("all") and distributively ("each" or "any") fulfilled since it is equally right to choose in another way to satisfy Kant's requirement, James suggests opting for the distributive form because it can be applied equally to both finite and endless series. Moreover, James argues that using the collective form "all" as implying «a sum harvested and gathered-in, and represented by a number», is indeed to stretch the meaning of the word and to introduce puzzling requirements: «uncalled for by the logic of the situation» (SPP: 84).

If Kant's idealistic position on infinity is considered 'violent' by James, that of Renouvier is recognized as a form of 'radical pluralism'. James is critical of Renouvier, but confesses the decisive impression that this philosopher made on his young spirit. As Hume awaken Kant from his dogmatic slumber, Renouvier awakens James from the «monistic superstition» and James's conversion to pluralism is probably due to his influence[31]. As for infinity, Renouvier also moved from the principle of the numerical definiteness of reality and believed that an infinite series of numbers leads to no final infinite number. But he ended by considering reality existing in limited amounts. This extreme solution shows all the advantages and disadvantages of accepting the arbitrariness of fact for the real, considering conceptual explanation unsatisfactory. In this way, he avoided contradictory attempts to rationalize our world and, since reality must be begged piecemeal, he legitimized our beliefs in freedom, absolute novelty and acts of faith.

According to James, Kant and Renouvier respectively deduce real novelty and the idealistic constitution of experience, which would be matters of fact, from conceptual considerations, and more specifically from the logical impossibility that the infinite number of conditions are complete or finite. To James, it seems to be very hard to infer that the fact of change is «inadmissible» from the conceptual inconsistency of real existence using any numerically infinite description. James suggests that, from inconsistency, we rather infer that certain conceptual hypotheses about the fact of change are not satisfactory and thus should be replaced by other hypotheses suggested by, and more in contact with, perceptual experience.

Nevertheless, pursuing the same method of deducing factual matters from conceptions, James's strategy is to qualify the specific context of logical assumptions in order to claim that different logical requirements are implied by different logical situations. First of all, the class of infinitely conditioned things can be subdivided into the class of things conceived as standing and those conceived as growing. In the

standing sub-class, that of space, the past, and existing beings, James observes that a distributive treatment of their infinite forms offers no logical difficulty. Logical problems arise from confusion, when we unconsciously agree to our psychological tendency to slip, for instance, from the distributive to the collective meaning of words. James sees this as a linguistic or communicative problem as happens in instances of word of mouth. While talking (or thinking), we are used to accidentally changing the original meaning of ambiguous words according to their functional interpretation. Thus the sentence «If each condition be there», easily becomes «all are there» and as such it is meant not only to say that «not one is absent», rather «a bounded total». Being attentive only to these psychological mechanisms, we can control their influence on our logical reasoning and avoid the logical difficulties generated by conceptual confusions. The class of 'standing things' contains each star, atom, past date etc. but these do not necessary imply any 'bulk' or finite numerical determination. Such a «standing infinity» seems to be a useless and stupid hypothesis. Indeed, we can better appreciate finite hypothesis.

The growing sub-class of beings (motion, change, activity) is that of continuously growing realities. Continuity implies infinite divisibility, and for growing realities we cannot count their terms by successive addition. James stresses that the end in time (standing class) and change (growing class) cannot be reached by the same process because of the difference of order in which they come. In the former case, in fact, we move from the end since the order of our reconstruction of the infinite past is inverse to the order of time; in the latter case, instead, the end can only be a task since the order of succession in which change comes is the same order in which our conceptual activity proceeds. But as Zeno and Kant stated, infinite continuity is not enumerable in this order, therefore the scholastics warning *infinitum in actu pertransiri nequit* holds good and James specifies that: «every continuous quantum to be gradually traversed is conceived as such an infinite» (SPP: 88).

James suggests that the quickest way to avoid these old and classic antinomies would be to give up the idea that processes of change are continuous and happen by infinite steps, accepting the «radically pluralist, empiricist, or perceptualist position» according to which change comes all at once in finite buds or drops, as suggested by our perceptual experience. But prior to this, James has to face two possible objections to the pluralistic account of change proposed by the supporters of a general tendency towards the: «arithmetization of all quantity». In particular, he discusses the

hypothesis of the «number-continuum» and that of the «new infinite». We know that James treated the perception of space in the twentieth chapter of PP, which is why he is particularly sensitive to the opinion of «philosophical mathematicians» who try to translate certain *quanta*, even those which were supposed to be immediate data of sensibility or intuition, such as the grade of intensity and, most importantly, the difference of space, into conceptual equivalents. The parallel with James's PP is unavoidable since James precisely takes the example of the extent of a line in space. The hypothesis of the 'number-continuum' not only shows that the line can be cut using rational numbers, and these cuts can be numbered, but also that, between rational cuts, the: «interpolation of cuts numbered 'irrationally' is still possible *ad infinitum,* and that with these the line gets at last filled *full,* its continuity now being wholly translated into these numbered cuts, and their number being infinite» (SPP: 89). Quoting Henri Poincaré, James corroborates his point that, like every conceptual translation, the arithmetization of continuity allows only the multiplicity to subsist, but makes the unity disappear. More importantly, he claims that «the original sensible intuition of the line's extent» is merely considered as an un-analysed prejudice or a kind of religious dogma by authors such as Russell and Cantor.

James shows how some contemporary mathematicians distinguish the class of finite and infinite objects according to the paradoxical properties of an infinitely growing class. In fact, many paradoxes emerge when we consider the class of indefinitely growing numbers collectively or distributively, and are used as reductions *ad absurdum* of the same class of indefinitely growing numbers (*in act*). The supporters of the new infinite, rather, define as infinite (or finite) that class whose parts are numerically similar (or dissimilar) to itself. Taking this class in its entirety and comparing it with its parts (the series of even, prime, or square numbers), we have to face the paradox that the whole is collectively not equal to any of its parts, yet each part is distributively similar to the whole. In the latter case, the whole and its parts are numerically the same class, since there can obtain a one-to-one relationship between several elements of even number, for instance, and each and every element of the whole. Moreover, they have, by definition, created 'transfinite numbers', like Cantor's Omega, which consists in the number postulated as coming after each and all of the numbers formed by infinite addition. This is a limit, or boundary, of the class of infinitely distributive growing class. In this way, Cantor can take the number-continuum, obtained by infinitely repeated subdivision, and limit to Omega the number of possible

subdivisions. Thus James argues: «is a growing continuity is assimilated to a standing multitude; thus is a number that is variable practically equated (by the process of passing to the limit) with one that is fixed; thus do we circumvent the law of in definite addition or division, which previously was the only way in which infinity was constructable, and reach a constant infinite at a bound. This infinite number may now be substituted for any continuous finite quantum, however small the latter may perceptually appear to be» (SPP:91).

James describes as 'mystification' the attempt of certain mathematicians to give the meaning of the identity to that which is numerically similar and, most importantly, in such a point-wise perspective, to disregard the different amount of «different quanta» as a negligible fact from a scientific point of view. It is quite clear how James can be skeptical towards the scientific possibility of defining what is a significant fact and what is not out of consideration for values and ends. However, this is not a criticism of the mathematical method of treating mathematical objects. Rather, James is remarking upon the difference between the mathematical and the physical world in order to check their boundaries illegal or surreptitious exchanges. The pluralistic empiricist opinion should no longer be blocked by the new infinite mathematical definition. In order to apply one mathematical proof to the physical world, further qualifications must be given or a physical remedial hypothesis. Therefore, James attempts to consider the metaphysical implications that such a point-wise methodological approach may have and also to make clear the metaphysical presuppositions in which it is rooted and that emerge when applied to Achilles and the tortoise. In fact, it amounts the same ancient conclusion that change is unreal. The conceptual method seems to have unavoidable metaphysical monistic premises and outcomes.

In particular, James analyses Russell's treatment of the classic paradox to show what different concerns he and Russell have in mind. Indeed, Russell focuses upon the problem of making the paths of Achilles and the tortoise numerically comparable after the race has been run. Whereas James contends that the real difficulty of the physical process of formation of the paths is? As time-points are the medium of measurement, Russell wonders how different lengths can have the same time-measure and concludes that since each path is an infinite multitude (of time or position) points, the one-to-one correspondence of any one of these three sets of points (Achilles's path, the tortoise's path, and the common scale of time) with the others is assured and the numerical

similarity should solve the paradox. According to James, moving from the end of the race, Russell avoids the problem of infinitely growing realities, turning them into standing varieties of infinity. Moreover, he claims that considering the two paths can be misleading, since the fact that a quantum can be produced in different ways, or that a goal be reached in various ways is not itself a metaphysical problem, but rather a methodological one (conceptualism works by comparison). The real metaphysical problem, according to James, is that of an infinitely growing continuum. Hence the actual possibility for Achilles or the tortoise: «of touching a goal when an interval needing to be traversed first keeps permanently reproducing itself and getting in your way» (SPP: 92). Apart from intellectual intuitions, such as the divine single act of creation or that of defining conceptual realities, James argues that, if we are to consider closely the case of infinitely growing continuous realities in their physical or better actual existence, we should acknowledge that the proper method of analysis is the enumeration of its infinitesimal steps, since in these specific processes the remainder of the qualitative differences (like the difference of the starting point of the two paths) is not negligible as it was from the numerical perspective. In fact, the actual possibility of traversing a real infinite growing continuum – not only as a conceptual retrospection, that is to say, according to mathematical possibility and translating growing into standing realities (past time) – cannot be retrospectively verified. But its actual ascertainment should proceed point after point: «in its due order of succession» (*ibidem*).

In conclusion, James proves that most of the criticisms he levels at mathematicians concern the conditions of the standing sort of realities and are thus irrelevant to facts. The criticisms of Kant, rather, apply to all cases of continuous growing realities. James states that the conditions have to be fulfilled *seriatim* and their limit could not be reached. To avoid logical contradiction, it seems easier to consider what is suggested by our concrete experience: change or novelty comes in drops or does not come at all. The point is that mathematical continuous growth, like every conceptual translation of perceptual experience, is much more confounding. James argues that if novelty, coming by addition of finite quantities of being, seems to be an incomprehensible hypothesis, then that of thinking novelty as «the consummation of an endless chain of units (such as 'points') no one of which contains any amount whatever of the being (such as 'space') expected to result» (SPP: 94) is rather absurd[32].

The last two chapters of SPP are dedicated to the analysis of the principle of causality for the pluralistic hypothesis of radical novelty. James's strategy is very similar to Mach's. It is an historical and epistemological analysis of the meaning assumed by the concept of causation. His intention is to consider the facts of causation as they have been translated from a conceptual or a perceptual point of view in order to state that idealism and empiricism are just different methods of dealing with reality which rely upon different preferences (attention), moreover, the conceptual view, brought back into perspective and in its claim to any preferential relation to reality, puts more and arbitrary obstacles in the way of scientific research. In this view, we may say that James keeps the relationship between epistemology and ontology and at the same time, according to a functionalist view of human nature and its faculties, he contests that there can be any absolutely preferential approach to reality.

The conceptual translation of the facts of causality began again with Aristotle and his four causes (material, formal, efficient, and final cause). In particular, the efficient cause is what common sense means by 'cause', and also what scholasticism defined as that which: «*produces something else by a real activity proceeding from itself*» (SPP: 97). James attempts to make clear the three main sub-principles or logical implications of the scholastic definition of efficient cause. Most importantly, he shows that we shift the meaning of definitions, adding or avoiding considering some of its words, according to our view[33]. The original concept of the definition that no effect can come into being without a cause can be «taken in the sense of *nothing* can happen without a cause» and such a "principle of causality" joined with the other two logical implications of the original definition – that the effect is proportionate to the cause and vice versa and that what is the effect *aliquo modo* (formally, virtually or eminently) should be in its cause – produce the logical exclusion of the possibility of real novelty as an unfaithful impression of our senses. According to James, the history of philosophy seems to be the story of the slow and inexorable: «overthrow of perception by conception» (SPP: 98). It is interesting to note here that James underlines how common sense and scholasticism, as an articulated form of common sense, maintained in the definition of causality the expression 'aliquo modo' to mean the possibility of a certain vague difference between cause and effect. The intellectualist reading of causation, rather, tends to translate differences into identities in order to have the same logical consequences follow from the same logical reasons. This rationalizing trend begun with Descartes's 'occasionalism', then proceeded with

Leibnitz's pre-established harmony and was sealed by Hume's philosophy. Indeed, James explains that Hume denied any impression or idea of necessary connection. As we know, he could not find any positive impression of 'power' connecting a cause with its effect, and showed that our pseudo-idea of connection derives from our habit of experiencing the same sequence of events and forming from sentiment or impression the idea of necessary connection. But Hume was a «half-hearted» empiricist. In fact, James depicts the philosopher as a radical pluralist who considered events to be absolutely disconnected, and a rationalist, for he underlined that the sequences which we experience (among disconnected events) are absolutely uniform and on this basis he had to refute real novelty. James introduces the content of the last chapter, stating that from a perceptual or concrete point of view, causation is the name we give to: «the manner in which some fields of consciousness introduce other fields» (SPP: 100). This passage is very important because James is explicitly linking the stream of consciousness to the issue of continuity and causality. Moreover, he claims that the sensible continuity of our thoughts is just: «one of the forms in which experience appears as a continuous flow» (*ibidem*). But there is another variety of form which is named by prepositions *and* conjunctions, making sure of our capacity to discriminate within our stream of consciousness. In another way, James suggests again the empiricist's mistake of considering our sensations elementary, finally rooting his view in a conceptualist notion of sensation and meaning. In this view, James argues that Hume has followed the conceptualist rule according to which a word is meaningful if there is a fact to which it corresponds. The empiricist preference for facts does not prevent Hume from dismissing an entire class of facts just because these facts do not have the same separate form in their wording. James makes plain that the elements of facts and the meanings of our words do not have the same discrete form that words have, and any conceptual approach to them cannot help us to individuate them. In a very Aristotelian way, James seems to be stating that there should be a correspondence between words and facts for the words mean something, but such a correspondence should be verified by a method which is in accordance with the object inquired after. In other words, Hume was not able to find an impression corresponding to causality because he was looking for some discrete element of sensation, some standing impression of it. Whereas James claims that facts originally come in the form of: «perceptual *durcheinander*, holding terms as well as relations in solution, or interfused and cemented» (SPP: 100-1)[34]. Owing to Hume's assumption that the immediately

given is a disconnected manifold, and reality is separable, he could not avoid concluding that relations cannot be real and, as James quotes, he admits that events seem conjoined but never connected. The intellectualist method does not successfully apply to perceptual realities, in an apocalyptic tone, James comments that such a method: «pulverizes perception and triumph over life» (SPP: 101).

Regarding causality, Kant agreed with Hume on the multiplicity of perceptual immediacy, but tried to recover it introducing the transcendental ego and its synthetic categories. James considers the Humean notion of 'habit' very close to that of 'rule' proposed by Kant and at last suggests that both philosophers went against the common-sense view and translated causation into time-succession. But while time-succession was looser and subjectively uniform for Hume, it was objective for Kant in so far as our sensibility is ruled by reason. Nevertheless, the category of causality, dismissing dynamic causation, does not offer but an external description of sequences. James observes that, like many laws of nature, Kant's causality only states co-existences and successions. It inductively generalizes sequences of facts but does not connect them intimately. More generally, science seems to James to reply to the 'why' questions with temporal descriptions or inductively referring narrower laws to more general ones. Looking for a more intimate relation within this time-successive framework, James hints at the contemporary tendency to deduce facts from earlier facts by logic. This method would be an intellectualist interpretation of the scholastic principle of the proportionality between causes and effects, and in a monistic fashion it would still deny real novelty.

In any case, the conceptual approach to causation comes to deny real novelty, thus remaining unsatisfactory and confused. According to James, it is difficult to rely upon the identity view, and the logicians of science in particular prefer to investigate functionalist ways of explain causality, which are, however, difficult to believe as a metaphysical picture. Quoting a passage from Wilhelm Jerusalem's *Einleitung in die Philosophie* (1906), in which he talks about the possibility of making use of the concept of function to describe quantitative and qualitative relations, James stresses how this suggestion contradicts our instinct and common sense, presenting a world where change happens but there are neither reasons nor agencies, but in Bradley's words only an: «unearthly ballet of bloodless categories» (SPP: 104; cf. VRE: 87).

At this point, James shows that the principle of causality as treated by rationalism implies a complete dismissing of real activity and real novelty. He agrees with the first

part of their argument, since, as the functionalist critical view of causality shows, we commit many errors in our instinctive perception of causal activity. More specifically, James sustains the views that bring into discussion the direct link which we suppose to exist because of our immediate perception of the effects that seem to be immediately produced by our activity. For instance, there is the unperceived activity of our brain cells between our will and our bodily movements[35]. Whilst accepting the premises of the conceptualist view, he refutes their skeptical conclusion as incongruous. As with many other parts of experience, we cannot deduce from perceptual errors that movement does not exist at all. This would be a fallacious argument used as an excuse to dismiss movement. The problem is rather that of qualification (or contextualization). In fact, from the fact that in a certain perceptual situation there is no real movement, we rightly conclude that it exists elsewhere, not that it does not exist at all and that causation is only a matter of real «consecutions and juxtapositions» (SPP: 106).

James argues that, since causation is not a concept, in so far as in a conceptualist view it does not even exist, its origin should be in a perceptual experience of: «the kind of thing that we mean by causation». Then, according to James, we locate such an original experience in different places, and we are sometimes wrong. The original place in which we derived the typical experience of causality is, for James, our personal activities or the correspondence between the succession of our fields of consciousness and our personal mental and corporeal activity. Here we are at a core point of all James's reflection, which from the very beginning of his psychological research has questioned the kind of description he offers of the continuity of consciousness and its activity. He has wondered whether this effective continuity of consciousness, which is the functional equivalent of logical possibility, was only a category of our thinking or an ontological feature of reality. An activity-situation, for example, is that of James while he was writing a page of this book. The meaning of causation is the concrete living perceptual experience of the efficacy and activity of our fields of consciousness and our bodily responses.

> The way in which we feel that our successive 'fields' continue each other in these cases is evidently what the orthodox doctrine means when it vaguely says that 'in some way' the cause 'contains' the effect. It contains it by proposing it as the end pursued. Since the desire of that end is the efficient cause, we see that in the total fact of personal activity final and efficient causes coalesce. Yet the effect is oftenest contained *aliquo modo* only, and seldom explicitly foreseen. The activity sets up more effects than it proposes literally. The end is defined beforehand in most cases only as a general direction, along which all sorts of novelties and surprises lie in wait. These words I write even now surprise me; yet I adopt

> them as effects of my scriptorial causality. Their being 'contained' means only their harmony and continuity with my general aim. They 'fill the bill' and I accept them, but the exact shape of them seems determined by something outside of my explicit will (SPP: 107).

James is claiming the original «dramatic shape» of the meaning of our concepts. It is only through these original experiences that we can get the meaning of what are the *qualia* of life. He also states that in these situations the *percipi* is the *esse*, there is no other hidden element that can be called a causal agency. However, following the perceptual view, that is to say, taking perception at face-value, we are led to this 'vague vision' according to which men and women's will and desire are real causes in nature. In fact, perception of our creative power makes quite difficult to consider our *will* within the closed scientific paradigm of causality. Our will can be an unconditioned cause, in the sense of being an indispensable cause but not a closed one. The direct continuity that our perception suggests to us in our activity-experiences is not easily proved at the physiological level of analysis. Our will is not causally continuous with its apparent effects. In the middle are many causal successions (neural, muscular, and instrumental intermediaries) which remain completely unknown to our perception. At this point, James provisionally ceases his historical-theoretical analysis of conceptual and perceptual experiences of causality. In fact, willing to sustain the perceptual view further, James would be committed to face other great difficulties. On the microscopic side, the problems connected to the physiological discontinuity of will-acts (the mind-body problem). On the macroscopic side, if actual causation is our activity-experience, James had to be ready to extend such an inwardly experiential nature to physical cases of causation (*pan-psychic* philosophy)[36]. For the moment, he has shown the main contrasting aspects and outcomes of the conceptualist and perceptual treatment of causality. In brief, he has underlined that, on the one hand, the intellectualist treatment of causality: «as a separable link, has failed historically, and has led to the denial of efficient causation, and to the substitution for it of the bare descriptive notion of uniform sequence among events» (SPP: 109). On the other hand, in the concrete continuity of our own activity-experiences, he finds another example of causal agency. The feeling of causality-at-work can be a real comprehensible alternative of causation which preserves our sense of life as continuous (made of real relations) and generating real novelties. Intellectualism has to sacrifice the perceptual comprehensibility of life to the altar of Cartesian clear and distinct ideas of intelligibility. The perceptual view, rather, is perfectly comprehensible to us even if it has to remain vague. It is not

conceptually separable and fixable, but it allows us to perceptually understand the transitive causation that seems to take place, yielding both growing continuity and real novelty.

III.2.6 Faith and the Right to Believe

The only appendix to SPP is called *Faith and the Right to Believe*. There James suggests that intellectualism deals with a world already given, but makes clear that intellectualism is sustained by two parties: the rational and the empiricist intellectualists. He claims that, according to both these parties: «no argument from what *ought to be* to what it *is*, is valid» (SPP: 111). No faith but purely intellectual evidence is required to believe what the actual world is. This common denial of personal preferences in our conclusions rests upon two main postulates that James points out as the duty of escaping error, and the idea that the world is already finished in every respect. These are, moreover, connected to other postulates about knowledge gained by a «passively receptive mind» (which is exactly what James has dismissed in PP), that evidence is able to impose itself upon the mind over time and to neutralize ill-will, and that our acts and beliefs are external parts of the world, necessary but finally insignificant. James observes that these postulates are compatible with most of situations of daily life. Only at the moment when we have to act urgently do we act on the most probable hypothesis, that is, the one that we believe to be true. In certain situations, according to James, not to act in order to avoid the error corresponds to acting on the opposite belief. A purely passive action, as intellectualists assume, does not exist. Since philosophy and religion have to interpret the total character of the world, in this respect there is no evidence that intellectualist postulates prevail on other postulates, such as religious ones. The point is that tendencies towards faith, on which we may act although their evidence is incomplete, are important psychological forces exceeding evidence and moving us towards certain forms of result that we believe to be good. There are different «ladders of faith», emanating from the verification of non-contradiction of a certain «good-will» to the unquestionable assumption of them, at least for our own life. James argues that, to assume that our beliefs are obstacles to gaining truth is itself an act of faith and, as regards the ladder metaphor, the most arbitrary one. Intellectualism seems to James to be self-contradictory as to its veto on different ways to pursue the truth. According to James, our minds have the inalienable

birthright to believe, of course, in a practical and not a dogmatic attitude. Faith may be a «formative factor» of the character of our world, but it has to deal tolerantly with: «other faiths, with the search for the most probable, and with the full consciousness of responsibilities and risks» (SPP: 113).

In emergencies we act on probability, which is a 'grounded' possibility because we already know some of its conditions. If conditions are too numerous and confusing, James argues, we consider which case is most probable considering the frequency of the kind of situation we are dealing with. The worst case is when the probability is one to two, that is to say, when we have «to act wholly for one or the other horn of the dilemma» and assume all the risks connected to the possibility that our choice belies our faith. Metaphysical and religious alternatives are of this kind. We have only this life in which to choose which attitude we will make, and we have to assume all the risks to be mistaken. Moreover, a certain wholeness seems to be required, since even change of mind and inaction have consequences. The very last paragraph of the book moves from the hypothesis that the melioristic universe be real and as such it requires our beliefs and activities. James represents this universe using the social analogy of a pluralism of independent powers. Our universe has the ability to ameliorate in proportion to collaboration towards this common end. In the words of logic, the character of an unfinished world can be expressed only by hypothetical propositions (a lot of ifs) and only the empiricist party which believes in possibilities will agree to describe his universe hypothetically and not categorically. In this pluralistic view, the result is a combination of all the factors in the game and James argues that every one of us should decide upon one out of the four possible attitudes towards the other independent powers. One could wait for intellectualist evidence, or mistrust other power and let the melioristic world fail. Or trust the other powers and do our best, or unsystematically flounder from one resolution to another. The only wise way seems to James to be that of doing our best and hoping that all (or the greater part of) the other does the same. This is a hypothetical proposition which relies upon a series of independent thus independent variables. Such a perfected world cannot be a logical conclusion, and this eventually possible thought of a world growing better can only have «*the power to challenge our will to produce the premise of fact required*» (SPP: 116) to make this world really happen. We have to supply the premise of fact. We can create the conclusion, according to James. The 'faith-circle' is neither inconsistent nor vicious, it is rather «so congruous with human nature» that it can be perceived as a

concrete offence by intellectualists. The point is that such concrete possibilities of offence are indeed concrete possibilities of faith hence of personal freedom and personal contribution to the world, thus they are to be at first accepted on empiricist grounds. The 'long run' of science should not preclude us from intellectualism at the beginning, according to arbitrary beliefs and assumptions. The course of experience and the verification of faiths within experience will reveal which faiths were foolish and which were wise, but to posit initial rigorous stakes is to make impossible the genuine amelioration of our universe, or at least to suppress the greater possibilities that our pluralistic efforts might generate.

III.3 A Pluralistic Universe[37]

In *A Pluralistic Universe* (1909), James argues against absolute monism and explains his promotion of monistic pluralism, astutely orchestrating the rhythm of *pars destruens* and *pars construens in* his discourse. His strategy is to convince his reader of the insufficiency of idealism by giving concrete consistency to his pluralistic alternative. He notices that the idealistic *Weltanschauung* cannot fully satisfy our need to feel 'at home' in the world, and this is necessary to justify James's attempt to support and encourage other possible choices. In fact, whilst empiricism *and* rationalism have, in a pantheistic sense, a common spiritualistic vision, there is a fundamental discordance between these two philosophical and temperamental portraits. The former is, indeed, defined by James as «the habit of explaining wholes by parts», and the latter as the: «habit of explaining parts by wholes». As is well known, the text moves from the assumption that our ways of looking at the world are built upon aesthetic and practical interests and that we attribute to the consequences of our preferences a *necessitatis ratione*. James maintains that we are all led by beliefs that we try to support and justify in order to maintain them. In this process, he writes, a certain finality always appears to be prior to other reasons, since our 'will to believe' is strictly connected to our interested human nature.

The book is based upon a series of lectures that James gave at Oxford University in 1908. In his recent edition, H. G. Callaway (2008) focuses attention upon the continuity between James and Ralph Waldo Emerson, both of whom played a key role in exporting American philosophy in England. The editor also offers an important account of the historical framework of the Hibbert Lectures, considering the political and cultural context of the United States before the First World War. At that time, British imperialism and European nationalism were at their peak, and European countries contended one with another the alliance of US naval army. At the first conference, James recollected America and England's common cultural backgrounds and hoped that they would return to their common philosophical roots, that is, classical empiricism, identifying their common enemy in the pedantic and over-technical academic German way of philosophizing. There is a political theme running through the text focusing upon the famous and ambiguous similarity proposed by James, which argues that the pluralistic world is: « more like a federal republic than like an empire or a kingdom» (PU: 145).

The philosophical critique of absolute monism is, however, the book's very guideline. James attacks such a theory both as it was acknowledged by idealists at the end of the 19th century, and as it was sustained by Hegel. In *On Some Hegelisms* (1882; WB: 196-221), James already expressed some objections to idealism and his ongoing questions seemed to be whether ideal identity or concrete variety is the basis of our vision of the universe. He now attempts to show that pluralism is a viable view contra rationalist metaphysics and its main implications (determinism and perfectionism).

James is mainly concerned with the nature of relations. He wants to state the possibility of external relations, which were completely excluded from monistic idealism. Absolute idealists did not believe a universe made up of «collective or addicted form» is real, but they believed there could only be what James called a «block-universe». This refers to a reality thoroughly and systematically predetermined in its parts by the all. In his discussion, James is, of course, chiefly referring to metaphysical quarrels about the nature of universals. But sociopolitical concerns can also be detected in his arguments. Callaway attempts to follow these two, theoretical and political, lines of analysis of the book separately, beginning with a critical inquiry into the implications concerning identity which emerge from James's pluralism on theoretical and social levels. According to pluralism:

> there may ultimately never be an all-form at all, that the substance of reality may never get totally collected, […] and that a distributive form of reality, the each-form, is logically as acceptable and empirically as probable as the all-form commonly acquiesced in as so obviously the self-evident thing. The contrast between these two forms of a reality which we agree to suppose substantially spiritual is the topic of this course of lectures (PU: 20).

James's pluralistic view contests that an absolute logical union of reality could be «actually experienced or realized in that shape at all», and he makes clear his denial of the possibility of exclusive 'internal relations', which means relations only internal to their terms. Conceptual identity can never fully grasp reality in all of its variety. Such a view can be also considered the core of James's nominalist temptation. As Callaway sustains, nominalism is in accordance with classical pragmatist fallibilism, which is a methodological and theoretical view through which our theories and scientific laws should always leave margins for growth and revision. There is nothing in our universe that can be considered *a priori*, definitive, neither in our scientific knowledge nor in our social bonds or identitarian relations. The pluralist suggests that reality is not a complete unity, all connected and perfect, but that there is always something that exceeds our knowledge: something «not yet considered». Pragmatism, anti-

essentialism, and humanism are important to corroborate the conviction that such a prior nature of the world does not exist, something *ready-made* and absolute. It is time to formulate another image of human relations in which ideas do not fall from above, but human beings are 'real causes in nature' (Callaway 2008).

Of all his psychological and philosophical thought, according to one of James's most persistent and original claims, potentialities of human agency should be considered the centre of our natural dimension. In this regard, Callaway offers an interesting analysis of James's critique of what is called «vicious intellectualism», as it is variously formulate from absolute monists. By the words 'vicious intellectualism', James means: «The treating of a name as excluding from the fact named what the name's definition fails positively to include, is what I call 'vicious intellectualism'» (PU: 32). In MT James offers another formulation of vicious intellectualism's fallacy as an active denial – rather than a passive and convenient ignoring – of experiential intermediaries. Such a positive account of reality would be abstract and one-sided, as an empty or false universal[38]. Such 'radical rationalism' is at odds with James's radical empiricism. Hence the priority he gives perception compared with the conceptual dimension. James took into account many idealist authors and bitterly criticized their fallacies. They all go from one extreme to another, suggesting false dilemmas, thus reducing *ad absurdum* the thesis they disagree with. For instance, they mean only absolute independence by the word 'accident', so that if relations have to be accidental, these authors can easily understand that it is impossible to connect parts with one each other. By contrast, assuming that relations can only be 'essential', they say that the absolute union of all things is necessary.

In particular, James analyses Lotze's, Royce's, and Bradley's arguments. Lotze attempted to develop a spiritualistic conception of reality, hinting at Leibniz's monadism and pluralism. But, in the end he grew so concerned to avoid the same pluralist outcomes of his own theory that he attempted to recover the unity of all beings and processes through his analysis of the empirical nature of interaction[39]. James retains Lotze's concept of interaction among independent elements as a pure verbal operation. It is a vain attempt to introduce the logical level of reasoning to avoid contradicting himself. James did not believe such an abstract and speculative approach was required. For him, reality is already coherent and he wonders why we should look for a noumenic identity to fund and explain phenomenic *continuity*.

As we have seen, James's comparison with Hegel's theories mounted in his 1882 article was first published in «Mind» and later included in *The Will to Believe* (1897), and it is the true background of James's thought about pluralism. As we shall see, in WB James was already arguing that radical empiricism and pluralism are better ways to deal with reality. In this third chapter of PU, James definitively refuses to assume that knowledge is total and complete, insofar as it negates everything which is not positively included in the conceptual knowledge of something. In James's view, this kind of double negation activates the Hegelian dialectic process:

> Now Hegel himself, in building up his method of double negation, offers the most possible vivid example of this vice of intellectualism. Every idea of a finite thing is of course a concept of that thing and not a concept of anything else. But Hegel treats this not being a concept of any-thing else as if it were equivalent to the concept of anything else not being, or in other words as if it were a denial or negation of everything else. Then, as the other things, thus implicitly contradicted by the thing first conceived, also by the same law contradict it, the pulse of dialectic commences to beat and the famous triads begin to grind out the cosmos (PU: 52).

James uses the expression «vicious intellectualism» to explain this general defect of absolutist reasoning. He believes the Hegelian system to be based upon the principle of identity of contradictories and on the principle of totality. This second principle states that, to know one part, it is necessary to know the totality of that part. Already in 1882, James underlines the 'abstractness' and logical fallacies of Hegelian definitions which the famous philosopher adopted to reach his conclusions. James was particularly upset by the fact that Hegel did not distinguish the respect under which he used terms. The interesting aspect is that James stressed how great rationalist philosophers, indeed great logicians, felt entitled to fallaciously use logical principles in order to achieve a more satisfactory description of reality. The point was possibly to change the method, or to consider that too strict logic would not be able to reproduce reality, probably because this was not its function. According to James, concepts have a practical use, and to disregard such evidence has brought philosophers to radicalize their function in the vain attempt to obtain a conceptual clarification of all reality.

In regard to this critique, Callaway points out pivotal passages in which James's nominalist drift is undeniable. He is also interested in stressing James's nominalist inclination to observe a great distinction between the view of the American philosopher and his famous colleague, Emerson.

III.3.1 The compounding of consciousness (or The Synthetic Unity of Consciousness)

In lecture V of PU, James again discusses the Fechnerian assumption that: «states of consciousness, so-called, can separate and combine themselves freely, and keep their own identity unchanged while forming parts of simultaneous fields of experience of wider scope» (PU: 711)[39]. After so many years, it is quite significant that James was challenged to reconsider the hypothesis that he made in PP (VI). All the more since the Hibbert Lectures are his most metaphysical conferences. His confrontation is with Royce, who was in the forefront of considering empirically some content to explain the notion of the relation between finite minds and the absolute mind. Commenting upon passages from *The World and the Individual* (1901), James finds out the identification of *will* (and attention) and *interest,* as well as the opposite interrelation between *inattention – ignorance – privacy.* In Royce's view our private will is fragmentary and, being finite, our interest is limited too, so that we cannot be attentive to everything surrounding us. We are not able to perceive the communitarian relations in which we are embedded.

In this central lecture, James focuses particularly upon the conception of compounding of consciousness that he took from Fechner, since he believes it to be: «perhaps the vital knot of the present philosophic situation» (PU: 712). He takes his task of discussing this core hypothesis seriously since he believes that here lies the possibility of introducing change-relations in reality. That is why he goes back to the initial position he had adopted in psychology against the self-compounding of higher-complex mental states from lower-simpler ones, and in this fashion he recollects all the objections he could not avoid addressing to his opponents. As we saw in the first chapter of this work, James found himself obliged to notice that an act of collective consciousness «affects surrounding bodies differently» (PU: 714). As he stated in the famous example of the alphabet letters, the awareness of each of the twenty-six letters is different from the awareness of them all together, since the latter is a twenty-seventh brand new psychic creation evoked by the combined action of discrete-lower mental states. Feelings or lower mental states affecting ourselves and mental compounds, James argued, are our higher though simple way to react to these inputs. Logically and practically, we are not allowed to maintain that a collective state of mind and distributive states of mind are one and the same mental fact. In PU James still underlines the difference for higher mental states between being the same as lower states of mind and knowing the same things that they know. At least we can say that, for a great amount of higher thoughts, they know the same alphabet letters but in a

novel way. They do not contain other mental states since they are new: «psychic units, not compounds» (PU: 715).

The position that James rigorously held in psychology also influenced his opinion on the metaphysical relation of the absolute mind to our finite minds, rejecting the idea that they could stand in a relation of identity. From a transcendentalist point of view, the *logos*, often described in metaphor as an entire sentence, in the order of being comes before its parts, which are words, syllables, and letters. Once we got the meaning of the entire sentence, we get the sense of every word, syllable, and letter. Moreover, linguistic scholars have discovered that in producing speeches we act exactly in this order. First we produce synthetic utterances and little by little we are able to form a stereotype of these sentences and to chop them into grammatical pieces. We can easily verify this metaphor in everyday life and so we are led to accept the law that the whole is the precondition of its parts. On this basis, James explains the point of view of an absolute idealist, who sees the absolute mind as the witness to the whole of the wholes hence as: «the one sole ground of being of every partial fact, the fact of our existence included» (PU: 716). In James's argumentation, we have to observe his continuous shift from a logical to an existential level of inquiry (words-sentence, raindrop-shower, feather-bird). The following chapters analyse such a phenomenological approach to philosophical issues since it was common both to James and Peirce's reflections. In this regard, we have to bear in mind that, in April 1905 when James took part in the *V Convegno Internazionale di Psicologia* held in Rome, presenting his essay *La Notion de Conscience*, he received many bitter critiques, in particular from those German philosophers who accused him of not making neat distinctions between psychology and theory of knowledge. At that time, James replied that he was neither a materialist, nor an idealist rather a «natural realist»[64]. As we shall see, his conception of naturalism is close to pragmatism (ERE: 49; P: 128).

Despite his critique of absolute identity, he aimed at finding a way of defending the identity of the collective and distributive experiences against those logical objections that for a long time James himself found unavoidable. Despite his critique to the absolute identity, he aimed at finding a way to defend the identity of the collective and distributive experiences against those logical objections that for a long time he himself found unavoidable. In psychology, he could not accept the identification of our particulars fields of consciousness with an absolute one since on a more accurate analysis many difficulties arose. 1) The difficulty he has already registered in the mind-

dust theory. If we are made by being known, we should exist just *as* the absolute knows us. But since each one of us is experienced (=exists for idealism) collectively and makes the experience of himself in ignorance and division (curiosity, doubt, sin, trouble), it follows that we exist (=are experienced) in different ways and therefore that our relation to the absolute experience is not that of identity. 2) The peculiarity of our experiences is at odds with « our being only the absolute's mental objects » (PU: 717). There cannot be *perseity* in objects of thought, as in a novel the characters cannot exist *per se*, since they are *for* their author and just *as* he thinks them. 3) In the physical world, "wholes" are not realities, they are just *names* for groups of "parts" which are in fact real. At least in the scientific view, the whole is only experienced from the consciousness of an onlooker. In the mental world, "wholes" are not identified with their parts, since they are the «integral reaction on those parts of an independent higher witness, such as the theistic God is supposed to be » (PU: 718). Because of these difficulties, James could not accept neither the self-compounding in the mind-dust theory, nor in metaphysics and he felt logically obliged to consider the *absolute* as not possible.

As for what concerns the philosophical side of this issue, James was deeply perplexed by the numerous contradictions he could detect in the arguments of idealistic monists. They used to make a *fallacious use of pure rationality*, in that they did not accept the very same logic that they have used to state their theories when it was adopted to remark their internal contradictions. In this view, James claimed that if they attribute to everything existing an experiential or mental character, they cannot sustain the numerical identity of higher and lower entities in the universe at the same time. In fact, they generally accept what Berkeley maintains of *mental* existence that « its *esse* is *sentiri* or *experiri* » (PU: 719). So talking about *feelings* James explains that if one feels pain, he would pretend that feeling of pain not only to appear like pain but simply to be a feeling of pain. It is a *feeling* of pain though it will have a different quality, for in Berkeley's terms *to be* a mental experience *is* only to appear to someone. In James's view, if they have to avoid fallacious statements, idealists should either reject the identification of *appearance* and *to be*, or admit a *distinct agent* of synthesis that would know all minds existing in the universe without being one and the same thing with them, but something else. Actually, transcendental idealism as physiological psychology is unfriendly to active principles (souls) and the Kantian "transcendental ego of apperception" is considered only as an all-witness, James says, that it is an *all-*

form constituted by the *each*-forms, pointing out that their *matter* is the same. The very point at issue is the *logic of identity* as it is declined by monistic idealists. In fact, they cannot logically keep together identity and difference in a *monistic* view, or in other words they cannot identify different appearances and reality and keep stating their identity. Even if their solution is to propose different orders of witnessing for the transcendental ego – which is supposed to know the relation of the each-forms pooled together – and for the empirical egos – which would be aware only of their own "content" – the two orders of witnessing which come out from this hypothesis are, in James's words, «palpably not-identical» (PU: 720). Exactly as James had stated in his Psychology, *pluralism* seems to be an unavoidable acknowledgement for idealists too, if their making distinctions between different perspectives or ways of taking things, for instance *qua* absolute and *qua* relative, or the eternal and the temporal *points of view*, has to make sense. Since the content of reality is *unchanging* for idealists, for reality to appear differently it is to be considered from different witnesses or from their different perspectives. No outside witnesses, no different appearances. Though idealists still formally insist on the intrinsic unity of reality, the latter ends up with being internally broken out in different witnesses or selves, since it appears differently to the all-witness and to its each-ones. Therefore, the problem posed by James is «how can what is *actually* one be *effectively* so many» (PU: 721), that is to say, if we rely on the idealistic relation between *witnessing and being*, indeed they have to admit that having different witnesses of a very unique fact leads to the conclusion that what is witnessed [reality] is different.

James makes clear that his main strategic objective is not the *absolute*, rather it is just a prominent example for his Oxford listeners to get his urgency to defend the *identity of collective and distributive parts of experience* (i.e. the identity of the absolute for Oxford thinkers) from a particular kind of logic. In fact, within a rationalistic logic, the one which states that «They form different concepts» (PU: 722), many <u>logical</u> difficulties arise from any attempt <u>to treat</u> *a* collective experience as identical with *many* distributive experiences. Such a logical kind of rationality makes the universe *discontinuous* and it is not loyal to every other kind of rationality, besides producing an *intolerable* situation in philosophy. As to what concerned his position in psychology, in PP James sustained that complex mental states were separate psychic entities *succeeding upon* other mental states, erroneously called their parts, and *superseding* them in function even if they were not literally composed by these parts. In the name of the

logic of self-identity, he supposed different fields of consciousness replacing each other though having the same cognitive function, in ever-widening contexts. The *continuous* and *punctual* succession of their functional activity – *being* different entities – was not easy to assure, since it was not even assumable relying on the identity of their object, which was to appear differently to different witnesses or fields of consciousness. As the supposed continuity of subjects was piecemealed, that of objects was replaced by irrationality too. James confesses his long-lasting personal trouble about the *compounding of consciousness* and his situation of *impasse*. He could see three possible solutions: forswear his psychological and Kantian education, recurring to spiritual agents (scholasticism and common sense), or confess that no solution was possible and then either give up the logic of identity, adopting another form of rationality or recognizing the fact that reality is irrational. Because of his post-humian and post-kantian education, James prefers to put aside any discourse about "souls" since, he says, no pragmatic significance of the term has been found at least by now. Hence, he goes on considering only the two horns of the residual dilemma : «Can we, on the one hand, give up the logic of identity? – can we, on the other, believe human experience to be fundamentally irrational?» (PU: 725).

> Well, what must we do in this tragic predicament? For my own part, I have finally found myself compelled to *give up the logic,* fairly, squarely, and irrevocably. It has an imperishable use in human life, but that use is not to make us theoretically acquainted with the essential nature of reality—just what it is I can perhaps suggest to you a little later. Reality, life, experience, concreteness, immediacy, use what word you will, exceeds our logic, overflows and surrounds it. If you like to employ words eulogistically, as most men do, and so encourage confusion, you may say that reality obeys a higher logic, or enjoys a higher rationality. But I think that even eulogistic words should be used rather to distinguish than to commingle meanings, so I prefer bluntly to call reality if not irrational then at least non-rational in its constitution—and by reality here I mean reality where things *happen,* all temporal reality without exception. I myself find no good warrant for even suspecting the existence of any reality of a higher denomination than that distributed and strung-along and flowing sort of reality which we finite beings swim in. That is the sort of reality given us, and that is the sort with which logic is so incommensurable. If there be any higher sort of reality—the 'absolute,' for example—that sort, by the confession of those who believe in it, is still less amenable to ordinary logic; it transcends logic and is therefore still less rational in the intellectualist sense, so it cannot help us to save our logic as an adequate definer and confiner of existence.

At last, James ascribes to Bergson's authority his liberating change of mind as well as the confidence he took in diffusing his own personal views. In his opinion, Bergson killed intellectualism definitively, he defeated it «in its ancient platonizing rôle of claiming to be the most authentic, intimate and exhaustive definer of the nature of reality» (PU: 727). Whereas Kant precluded an intellectualistic definition of reality *an sich*, but still sustained the possibility of intellectualism to legislate human experience,

Bergson radically denies the adequacy of its method to concrete human experience. In the passage quoted above, James is aware of the *imperishable use* of logic in human life, but he longs for asserting that such a use is not that of *theoretical acquaintance* of reality. The solution is not to state higher logical orders of reality, eulogistically, but to face the fact that *logic* and *reality* are incommensurable. The latter is always exceeding any attempt of definition; reality comes first and foremost for it remains the inexhaustible source even of logic.

In James's view, the greatest misunderstanding which has been pursued in the history of philosophy is linked to the wrong place assigned to intellectualistic logic, since logic is not *an adequate definer and confiner of existence.* James is to explain better what he means by *intellectualism* since this passage is very important to get how he distinguishes a virtuous intellectualism from its vicious form. Moreover, it is an appropriate introduction to the following lecture VI on Bergson's critique against intellectualism. The source of intellectualism, James says, is in our *intellect* which is «the faculty which gives us our chief superiority to the brutes, our power, namely, of translating the crude flux of our merely feeling-experience into a conceptual order» (PU: 727). Our relation with things in the world is an immediate experience which carries a question about *what* we have been undergoing. Here we can see our capacity to class and name what we have experienced as an activity of translation at work. Using concepts and abstract names we come to organize the world in particular *kinds* of things and there seems to be a correspondence between our rules of classifications or our conceptual power of framing the world and things existing in the world. Thanks to such a correspondence we can verify certain laws for every class of experiences and derive *endless theoretical and practical advantages*. However, concepts still remain «only man-made extracts from the temporal flux» (PU: 728) and we are not allowed to create a dichotomy into reality treating them as superior types of beings, as many ancient thinkers did. This remark refers to Socrates and Plato, which are in James's view the original fathers of *vicious intellectualism*. They taught us that «what a thing really is, is told us by its *definition*» (PU: 728). Socrates supposed reality to consist of essences, which we can know by logical-conceptual definition.

Once we have identified a thing with its concept we can look for its definition and thus we know what that reality is or the truth about that thing. Indeed, the problem is the *misuse of concepts* as it begun from the habit of using them «privatively as well as positively» (PU: 728). Sometimes logics cannot extract a property of a thing from its

definition and they are tempted to deny that very *concrete* property the thing presented to them in order to make the definition works. As in Hegel's method, whereas a definition cannot produce a property as its consequence, it has to negate that property. James affirms that it is the story of a *useful practice* that first became a *method*, then a *habit* and at last a *tyranny* that does not work anymore *but* against the end it was used for. The critique that James is addressing in these lines is worth to be analyzed in depth, since it is the propulsive core of his metaphysical position as well as the point of real proximity with Bergson's works (pars destruens). James relieves a psychological inclination towards the formation of mental habits and on this general functional account he traces the historical development of his original theoretical hypothesis. From ancient times till the philosophy of Hegel, he maintains, several logical systems created to interpret nature and to explain our being in the world have been substantialized by a successful tradition. Since these systems have proved to work quite well, there was no need to change them. Moreover, it is so difficult to modify any cognitive rules, mainly because of our exigency to fix *invariably* what we can expect from the world[81]. The very point at issue, in James's view, is that such a certainty is not ever really fixable, talking about knowledge we can never unhook our bound to reality and just keep going on by ourselves. Exactly moving from our living relation with reality, we are constantly obliged to rethink what we believed to be sure of.

Every human product is not an absolute itself. Knowledge belongs to the domain of human capacity and so it takes the same hypothetical nature which human beings show. Our ideas have a genealogy which is always socio-political, economic and personal (we would say they have an ontogenesis and a phylogenesis) and in this view we can see how an absolutistic supremacy of a visual-logical-discursive approach to reality has been connected to the human exigency to state something durable. These two different levels of discourse have found a point of connection which is the inveterate psychological need and the consequent philosophical attempt to deny *changes* in reality, to arrest the possibility of pure novelty. Such a conceptual stratification of reality enters in the world and modify its development, but the question arises looking at its gaps, observing that these systems do not work well enough anymore, rather that are dangerously narrowing our ethical and imaginative perspectives on the future. Every form of sureness implies some amount of closeness.

Ethically the problem concerns our capacity to choice and this capacity does not directly derives from any restriction of the field of possibilities.

Even if concepts sometimes end up with making things unintelligible we continue to stake at their validity. Indeed, here we face the difficulty (psychological or philosophical?) for human beings to rethink their first pronunciations about the world. As an extreme example of such an absolutistic fashion (una volta per tutte), James says that once we have sustained, for instance, "independence" for a certain concept of a thing, though in a second time we may experience the connection of this thing with something else, we are not going to accept/notice that "new" property just because it does not fit the previous definition – taken in a strict/absolute way – of independence. The discussion is mainly focused on the *one and many* issue, which has assumed always more clearly a very important role in James's reflection[82] since it definitely entangles the possibility of change. Definitions do not change and because of their fixity even concrete things, once that they have been defined, are not allowed to change into something else (or to be different?). The consequence of this kind of intellectualism is a sort of *verbalism*, in James's view, which does not permit to Bradley to *see* (or to state?) how sugar can be sweet, since sugar and sweet are different concepts and in order to be connected they need a third element of connection, which on its part will need other more elementary traits of connection to be linked to other concepts and so on *ad infinitum*[83]. Now, such a philosophical perspective cannot avoid to deny the existence of real change and « the branding of the world of change as unreal »[84], just as an impression.

In a Kantian framework, the epistemological question is where to put secondary properties: sweetness for sugar claims someone experiencing sugar, for out of this relation we can never know if sugar is sweet *in itself* or not. But, James is claiming exactly the epistemological priority of perception and on this basis he radically attacks the classic Kantian distinction of phenomenon/noumenon as a form of absolutism/intellectualism itself (tout court o se usato male questo tipo di ragionamento?) and every form of radicalization of this kind of reasoning. At this point it is fundamental to understand what Putnam points out in his quite recent conferences on James's pragmatism[85], that for James to assume the priority of perception in knowledge does not mean to state its *irrevocability*. Logic is a tool fitting reality or is it a level of reality? And thus, to what extent is logic able to transform reality? In fact, on several occasions James clearly remarks that he is «neither a

materialist nor an idealist. I am rather a natural realist, in as much as the dualism which I deny is an *ontological* dualism; and I not only accept the *functional* dualism of consciousness and content, but I try to show exactly in what it consists»[86]. Therefore, the problem is brought back to the original psychological impasse to show that it was in an *unintelligible intellectualist framework* as such that James could not understand how two different experiences defined as not conscious of each other – i.e. an experience of *mine* and an experience of *yours* –at the same time could be members of a *world*-experience, which is an experience that for definition contains parts co-conscious of each other, or which anyway knows them together. For James it was *absurd*, sharing such a point of view, to see two things having contradictory definitions be hold together (be united). This kind of intellectualism, he concludes, just makes «nature look irrational and seem impossible »[87].

III.2 Pragmatism (1907), The Meaning of Truth (1909) and Essays in Radical Empiricism (1912)

The Lowell Lectures that James hold in 1906 and then replied in 1907 at the Columbia University are probably his most famous work. At least, we can say that *Pragmatism* (1907) was the book that consecrated James as an international philosopher and, as Sergio Franzese underlines in his brilliant introduction to the recent translation of this oeuvre, the colloquial style of these lectures do not undermine the complexity of this work, which is an important collection and a synthesis of the main lines of inquiry pursued by James. *The Meaning of Truth. A Sequel to Pragmatism* (1909) was edited by James a couple of years later in order to reply to the objections that his account of the relation called 'truth' received after the publication of Pragmatism. This 1909 work is another collection of pivotal essays the greatest part of which James had singularly published in reviews since 1885. As we shall see, his arguments are particularly focused on the issue of *meaning*, and his functional analysis of the meaning of feelings and of the knowledge of things together also forerun his later doctrine of radical empiricism. The collection of *Essays in Radical Empiricism* will be published posthumously, only in 1912, even if according to John McDermott also a great part of this collection of essays had been produced by James between 1904-5 and give us the measure of how long it took his philosophical

reflection and how problematic under several respects was his attempt to supply a radical reconstruction of empiricism.

For the sake of our argumentation on *continuity* which is the key that we are considering as a pivotal to take together James's various insights, and to understand the features of his philosophical perspective, we are going to focus first and foremost on James's *epistemological arguments* in order to make a comparison of his thesis on selected issues in these books and to reconstruct James's general view. The issue of continuity is deeply intertwined with James's radical reconstruction of empiricism, indeed experiential continuity is the new endorsement of his philosophical elaboration. Particularly *continuity* and not unity. John McDermott refers that at the time Max Fisch read his introduction to the Virginia Press Edition of ERE, the Peircean scholar contended that a striking similarity exists between the relationship of *radical empiricism* and *pragmatism* in the thought of James and the relation of *synechism* and *pragmatism* in the thought of C. S. Peirce. This authoritative opinion corroborates James's claim in the Appendix C of PU, which is the very source of our reading of James's work through the lens of continuity. We may say that James's radical empiricism is a doctrine of experiential continuity which relies of the *actual experience* of the experience of continuity. Moreover, in this view is supported the deep bound existing among James's main conceptions: pragmatism, humanism, radical empiricism, pluralism, pure experience. They all are expressions of the real experience of continuity and possibility of human experience. In this regard, the Aristotelian distinction between *act* and *habit* is interesting to underline the potential declination of James's pragmatism.

In the previous section about SPP and PU we have given attention to James's *metaphysical pluralistic* outcome and following his mature analysis of singular metaphysical problems we have seen how according to him different *methodologies* descend from different tendencies towards different *psychological types* of thinking and are connected with corresponding *theories of knowledge* and *metaphysical hypothesis*. Such a recollection of human being's intellectual productions under the umbrella of pragmatism was recognized as *humanism or pluralism*, and this broader view of pragmatism was particularly due to James's cognitive theory of the meaning of truth. Pragmatism is the humanistic way to reconcile our intellectual with our sensible faculties, against the perverse and illusory outcomes of an absolutistic *use* of our intellect. In this sense, absolutistic means *disinterested*, and James contends that all our

thinking is led by interests, it is just a function for our adaptation to the world. Out of this naturalistic picture, what should be an *instrument* to serve life becomes its dangerous enemy, a tyrannical obstacle to life. Particularly James's explanation of pragmatism's conception of truth can be considered as an authentic exhortation to live the present, being aware of its potentialities. The perspective of pragmatism is rooted in the concreteness of the present experience and open to the future and offers in the concrete experience of the present The streaming structure of consciousness is analogous to and indeed the means of feeling the stream of experience. Thus continuity is the practical – ambulative transcendence of meaning/significant, in the sense that as affectible and fallible human beings we are the vectors of continuous processes of changing. James's reasoning works with inductive generalization of psychological processes and with analogical connections. The analogical connections seem to fasten pragmatism's generalization to the level of approximate generalization. This constitutional imperfection is characteristic of the most empirical scientific view of that time and indefinition is the feature of the living present. To be in rebus, in the making, is to undergo and act continuous changing processes in which there is no so much free play. Indeed, as to what concerns out process of thinking, *coherence* hold us to past and future, there does not really exist absolute arbitrariness (nor absolute determinism). James reveals the world of provisional meanings and plural truths, which is the world that we streamly live without being aware. Under the same consolidated labels different changing meanings goes on continuously. The intense work of *demystification* of the meaning of words asking their *cash-value* is also a great political work. As known, James's addresses pragmatic knowledge as more democratic, since in principle there is nothing which is yet definitive or unchanging, and pluralism is for James much more as a federal republic than as a reign. James tries to free human potentialities from ideal*isms* and their *idola tribus*, which are perverted ways of thinking which have lost their continuity with the growing, broader and more radical sense of human life. Comprehension is part of life, not the reverse. He thus aims at showing the unavoidable practical-living genealogy of ideas, he makes clear their human reasons and motives, and thus the *powers* which always work in background of our abstractions, in order to encourage a more conscious and powerful personal *full engagement* in life and social living. To James rationalism is ingenuous on the active and selective ways in which our mind works.

His naturalistic description of human beings' «practical interests or personal reasons» (P: 110) is the very source of his effort to put our faculties back at *work* to realize the possibility of moral-practical engagement for a melioristic orientation of the future.

III.4.1 Rationalism, Empiricism and Pragmatism

In the first lecture of *Pragmatism* (1907) on the present dilemma in philosophy, James confesses to consider philosophy not a technical fact but «the dumb sense of what life honestly and deeply means»[88]. Every men and women have a philosophy, in so far as he or she is led to attribute a meaning to life as a whole, a meaning which is drawn from our individual ways of seeing and feeling our own existence. The fact that life comes to us first as something to deal with and then to receive a meaningful sense, is the practical-existential premise that we should consider before any technical philosophical treatment can be started. This premise has yet an evident perceptual connotation, and it is propaedeutic to James's next assumption of the temperamental interpretation of *rationalism and empiricism* as two paradigmatic philosophical attitudes. James contrasts the limits and aspirations of these tendencies in order to open the way to pragmatism. The introductory picture of his physiological-psychological and anthropological view of thinking allows James to link rationalism and empiricism to different mind-structures which he respectively calls the *tender-minded* and the *tough-minded*. These labels identify two *types of thinking* which can be discovered in every field of human knowledge, with slightly different features. As to what concerns philosophy, in *A Pluralistic Universe* (1909) James reduces the meaning of this general distinction to a pregnant difference of *habits*, respectively that of «explaining parts by wholes» (rationalism) and the other way round of «explaining wholes by parts» (empiricism). This concrete intertwinement of psychological, epistemological and metaphysical assumptions is due to a certain reception of the Darwin's theory of evolution and to the analysis of the activity of mind offered by the experimental psychology. The integration of these two historical-scientific lines of thought, that we have tried to show in the first chapter, are the conceptual frameworks to keep on the background of all James's works. Both for their limits and possibilities, these discoveries remain the most significant conceptual starting points for James's orientation towards the *empirically radical* reassessment/enlargement of his

philosophical vision. We may say that James gave his personal contribution in extracting the still unexpressed descriptive and applicative potentialities of these "new" discoveries and taking account of their exigencies he tried to supply an integrated view.

By the way, John McDermott makes clear that James felt caught between *idealism* and *associationism*, since both these philosophies violated the *actual* way in which we have our experience. On the one side, idealism provided a principle of unity and an apodictic source of intelligibility, but it could not account for particularity; on the other side, the associationist position remained loyal to particularity, but could not provide a principle of *continuity*, much less unity. As we shall see, James's radical empiricism will provide the scientific mentality with *continuity* in that he will try to explain the experience of "the continuity of experience."

However, James's most interesting reflections will spread out from his accurate phenomenology of the most *significant* (efficacious) empirical characters of human beings, more and more these reflections took the defined form of a *epistemology of concrete human experience*. To prove the importance of this premise, it is sufficient to notice that many of his books (*The Will of Believe*, *Pragmatism*, *A Pluralistic Universe* and *Some Problems of Philosophy*) are opened by some essays in which James, according to his concrete picture of mind – showing the variegated phenomenology of feelings, thoughts and emotions which work as a selective and cognitive agency – insists on the limited picture of human beings which is offered by existing epistemological theories, from a methodological point of view. Recovering the methodological value of these theories and reveling their unavoidable connection with psychologically *natural interests* and *preferences* of their authors (as human beings)[89], James can offer a more scientific and broader alternative view which moves from the concrete description of the phenomenology of our mind. Being aware of the ways in which our mind psychologically works, he is able to offer methodological tools to take account of our "personal reasons" and thus to resist the *natural dogmatist tendency* of our thinking.

James's effort is programmatically stated in his 1896's preface to WB, as the attempt «to light up with a certain dramatic reality the attitude itself, and make it visible alongside of the higher and lower dogmatisms between which in the pages of philosophic history it has generally remained eclipsed from sight». To this extent, a pragmatist methodological attention to the unsatisfactory consequences of our theories is necessary, all the forms of expression of human beings, as s*cience, philosophy and*

religion should be taken into account to give the most wide, lively and concrete image of men and women; and such a radically empirical *pluralistic* outcome should become the *methodological, epistemological and metaphysical instrument* to guarantee personal freedom and responsibility[90], avoiding any fixed, ideal and easily instrumentally usable idea of living human beings.

We shall notice that according to James there is no method by which a man can «steer safely between the opposite dangers of believing too little or of believing too much», as the common audience or the professional philosophers, this is probably the reason of James's insistence on pragmatism as a method. He claims that from a logical point of view, his pragmatism – though compatible – is not necessary connectable only with his doctrine of radical empiricism. The famous metaphor of pragmatism as a *corridor* adopted by James[91] is important to corroborate his profound existential commitment to freedom (and truth) which was translated into offering instruments to think freely both from *instinctive invisible constriction* and from the consequent empowered/largely shared *dogmatic convictions*[92]. However, considering James's mature philosophy, we agree with John McDermott's conviction that «the acceptance of a radically empirical doctrine of relations is necessary if the pragmatic method is to prevail» (ERE: xxxvii).

James proposes in WB (1897) the distinction between *empiricism and absolutism* as the two paradigmatic psychological tendencies working on the background of our philosophical theories. In P (1907) he uses the *tender minded - tough minded* description and he still reprises these contrasting and insufficient attitudes in PU, ERE and SPP. His ideal pictures will undergo modifications, or complementary qualifications, according to the continuous development and deepening of his philosophical theories. Therefore it is interesting to consider the evolving features of his descriptive analysis. In *Pragmatism* James offers a schematic distinction between *tender minded* and *tough minded* having the clear and declared task to provide his audience with a handling conceptual tool that can help to focus on two ideally different contemporary tendencies of philosophers (or two ideally types of mentality) having extremely contrasting, coherent and conventional views of life.

The Tender-minded	**The Tough-minded**
Rationalistic (going by 'principles'),	Empiricist (going by 'facts'),
Intellectualistic,	Sensationalistic,
Idealistic,	Materialistic,
Optimistic,	Pessimistic,
Religious,	Irreligious,
Free-willist,	Fatalistic,
Monistic,	Pluralistic,
Dogmatical.	Sceptical.

As common thinkers, we adopt a middle position which is a sort of *monistic pluralism*, taking what seems to be good from each one of the two positions. But philosophers should be more coherent and should not accept inconsistent convictions. James observes that the *empiricist tendency* is at the present moment the most diffused mentality; nonetheless he notices that the scientific preference for facts has assumed a *religious fashion*. This means for James that in 1906 there was no kind of philosophy able to meet both these different needs. The rising of the naturalistic or positivistic sentiment offers a materialistic view of the world, but to escape from it is to fall into the line of tender minded, with their absolutely vacuous abstractions and far out from life. At that time, James was distinguishing the Anglo-American scenery into a radical and aggressive *transcendental idealism* (that of Green, Card, Bosanquet and Royce) and another moderate and compromising *theism* deriving from the Scottish philosophical school (that of Martineau, Bowne and Ladd).

James confesses that even his description is arbitrary, at least in part, since it is specifically *useful for* the sake of introducing his view of *pragmatism* as that philosophy that can «satisfy both kinds of demand. It can remain religious like the rationalisms, but at the same time, like the empiricisms, it can preserve the richest intimacy with facts» (P: 23). In other words, his conceptual distinction, as every conception, is a tool which is useful for something. It is not the only possible one, but the most interesting with regards to James's argumentative ends. Though limited, his view of a rationalist and a sensualist tendencies is reasonable and the most *useful* in order to explain (and also to make the audience comprehend) his philosophical outcome. On this account of the unavoidable contribution of temperamental or personal desires and refutes of philosophers respect to their philosophies, on the one hand, James can criticize

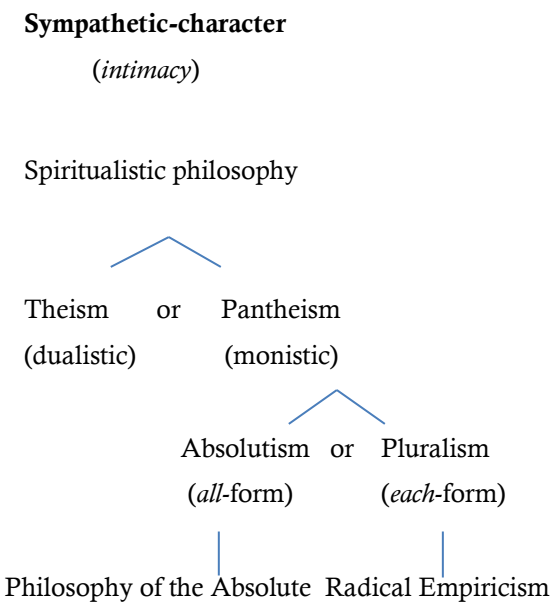
absolutists philosophies in their claim of being universally true (as false universals), and on the other hand, to rehab the legitimacy and the sanity of our perceptual sentiment of accordance or discordance between any philosophy and reality. In conclusion, James claims that philosophy should remain hang to living life, and therefore that what his contemporary fellows need is an intermediate way of thinking which embraces their various exigencies and avoids the two too crippling idealistic alternative outcomes of *materialism* and *spiritualism*.

James believes that the greater fact for a man is his *vision*. In P this is clear from the assumption that a part from the «definiteness of our summarizing reactions, by the immediate perceptive epithet» of experts of philosophy, «almost everyone has his own peculiar sense of a certain total character in the universe, and of the inadequacy fully to match it of the peculiar systems that he knows. They don't just cover *his* world» (P: 25). This continuity between common thinking and scientific thinking is rooted in his preordination of perception, which is also an aspect of very close resemblance between James and E. Mach. However, in PU James states that philosophy is the expression of the intimate character of man. There is a phenomenology of human characters and a corresponding phenomenology of instinctive reactions towards life. These reactions become philosophies when are deliberately adopted by men. James agrees with Hegel's claim that the aim of knowledge is «to divest the objective world of its strangeness, and to make us more at home in it», and adds that for a philosopher the difference is that he has to *give reasons* of his spontaneous way to feel *more truly* at home with a certain vision of the universe. Truth in fact can be gained even by guesswork or by revelation, but the truth of philosophy is a matter of reasons: they cannot accept uncritically their own inherited beliefs. The philosophical work can be distinguished in two parts: its *final outlook* or belief, and *the reasoning* by which a certain attitude has been reached.

Therefore, on the one hand, reasoning is at least a common frame for philosopher, and on the other hand, beliefs are an unavoidable feature of human beings. The preferences for empiricism or rationalism are ultimately a matter of «small aesthetic discords» respect to this broader connection with «the open air of human nature», which for philosophy would be fatal to interrupt. James is outlining the risk of the dissolution of the meaning of philosophy by the supremeness of over-technicality, which represents only one of the two parts of the philosophical work. The peculiar kind of philosophical reflection has to take care and to preserve her connection with

the most profound and concrete existential needs of human beings. Despite the fact that over centuries our reasoned attempts to define the universe have produced different «shop-traditions», these worked on account of different preferences or «propensities to emphasize differently». The first effort to make is to recognize that we are all human beings and the new generations of students should not forgive such an originally solidary situation and even look after to regain «the same deep concern in its [of the universe] destiny» (PU:).

James claims that philosophy as «a general attitude towards the world as a whole» was born at a certain stage of human being's development, when the power of intellect to *generalize*, *simplify* and *subordinate* our experiences awoke. According to this genetic reconstruction, which moves from James's definition of the philosophical thinking in physiological terms, the history of philosophy can be reduced to a few different *types of systems* which correspond to «so many visions, modes of feeling the whole push, and seeing the whole drift of life, forced on one by one's total character and experience, and on the whole *preferred* – there is no other truthful word – as one's best working attitude» (PU:). This passage is very beautiful and very clear about James' passionate claim for concreteness. As in Pragmatism, his arguments are based on a conceptual scheme which is not explicitly presented as in his 1907's book. For the sake of clarity we have reconstructed this scheme from his words. This time, James begins with a first very general distinction of the *sympathetic* and the *cynical* characters, from which would frequently *result* rival general attitudes or philosophies.



In the first lecture of *A Pluralistic Universe*, James is not taking into account the materialistic philosophy deriving from the cynical attitude. His choice is interesting for us under two different respects: first, James's distinction between *cynism and skepticism* is an interesting aspect to focus in the relation between empiricism and pragmatism; and second, compared to this scheme, the one provided by James in Pragmatism seems to show a slightly different classification of the materialistic philosophy and its relations to pragmatism. John McDermott points out that James was trying to avoid cynicism and agnosticism in religious, scientific, ethical, and psychological areas of inquiry. James is particularly clear about the historical rising of the materialistic philosophy, which is the result of a naturalistic or positivistic sentiment. Pragmatism rejects both subjectivism and skepticism.

However, *spiritualism and materialism* are different ways of thinking about our place as human beings within the world. According to materialism, there is no real place for our soul except as an «outside passenger or an alien»; whereas spiritualism tries to show that human beings have a more intimate relation with brute facts. The first type of philosophy looks for traits of foreignness against the spiritualistic philosophy which shows a sought-for intimacy of view. On the basis of this criterion of different grades of intimacy, James distinguished the spiritualistic type of thinking into two species: *theism* which is the dualistic species, a less intimate view, and *pantheism* which is the monistic species of spiritualism and a more intimate one. James has in mind the old orthodox scholastic theism of theology – as distinguished from the softener theism of religion – which professes that God and his creatures are *toto genere* distinct and that our relation is not strictly a social relation, in the sense that there is no reciprocal affection between God and creatures. James observes that nowadays the place of the divine in the world is supposed to be much more *organic and intimate* respect to the old monarchical society. Among the ultimate epochal changes that have influenced our imagination towards such a new possibility, James recollects those produced by scientific evolutionism and by the diffusion of social democratic ideals.

As known, the Hibbert Lectures were addressed to Oxford's students, which were for the most part supporters of the *absolute idealism* which James refers both to neo-kantism and Rorty, and in the English case to the philosophy begun by T. H. Green. This is the contextual reason for which James decides not to discuss further neither materialism nor theism, he just does not need to do a work of deconstruction of these

two types of thinking. The work that he has to do is much more subtle, since as we have seen according to him both absolutism and radical empiricism are conducible to a pantheistic way of thinking. What he contests, therefore, is that absolutism be the more successful way to reach the intimacy view of the universe which both absolutists and pluralists try to pursue. At this point James suggests that the difference between living as a materialist or a spiritualist *pragmatically means* what «one might call it a social difference» in so far as according to one or the other philosophy we would respectively show either a general habit of *wariness* or a general habit of *trust* towards the common *socius* which for James is «the great universe whose children we are» (PU:). This pragmatist translation of the meaning of James's types of characters prepares his confession that even the contrast traced so far is only one limited point of view, and as in *Pragmatism* it is a convenient view/mean for the sake of further distinctions and contrasts that James aims at discussing (to James's ends). This amounts to say that reasons are found in order to give reasons of our synthetic views of the world, we appeal to conceptual tools in order to broaden our experiences and let our fellows *see* and *comprehend* the way in which (*why-how*) we have deliberately adopted certain beliefs.

Therefore James is interested in discussing the sympathetic party alone, and to show where its sub-species contrasting philosophies, this time named pluralism and absolutism, agree and where else they dissent one with another. James points out that they agree upon the *spiritual substance of reality*, claiming an intimate identification of the human substance with the divine substance; but they disagree upon the *form of reality*, respectively claiming that reality has a collective (*all*-form) or a distributive (*each*-)form. According to James's classification, both empiricism and absolutism are subspecies of pantheism and as such should consider philosophy as an intimate part of the universe. But at a more accurate analysis, focusing on the relation of the philosopher with his description of the universe, he shows that the monistic and the pluralistic subclasses in the end lead to contrasting representation of the «status of the human thinker».

James contends that the two subclasses of pantheism, the monistic philosophy of the absolute and the pluralistic radical empiricism offer radically distinct form of experience, the all-form falling back into a sort of dualistic theism, while the each-form affording the higher degree of intimacy. In brief, the view that James wishes to defend is that pluralism is the more successful philosophy for who looks for intimacy with the

world allowing that «the absolute sum-total of things may never be actually experienced or realized in that shape at all, and that a disseminated, distributed, or incompletely unified appearance is the only form that reality may yet have achieved» (PU: 25). The core criticism that James advances against the idealistic versant of monism concerns the efficacy of such a unity of knowledge. The absolute mind would be nothing but the knowledge of its object, and it makes them being in so far as they are as known by the absolute mind. *Gedanke and Gedachtes* would be different names for *one and the same material fact* considered under different (subjective or objective) respects. James argues that at a formal analysis of this factual unity some pluralistic breaks come out. More specifically, he shows that there cannot be perfect correspondence between the *eternal knowledge of the absolute* and the *temporal knowledge of its parts*. Indeed, if a thing can *be only once* there is no use that it *be taken twice over* and, he adds, if from the supposed unity of thought descend *practical difference* this means that even in the idealistic unity there are distinctions to make (*qua*) between the finite point of view and knowledge (or ignorance) of the parts, and the eternal and all-knowing point of view of the whole. The temporal perspective is unavoidably affected by *succession* and this is but an incommensurable distance between the known as known by the Knower and as it knows to be known.

In WB James already distinguished his "radical empiricism" as a philosophical attitude from the «half-way empiricism that is stream under the name of positivism or agnosticism or scientific naturalism» (WB: 5); and in the III conference of *Pragmatism* James counterposes *materialism* as a derive of contemporary naturalism and theism which is the derive of spiritualism. The opposite risk of materialism or theism seem to be due to an *exclusive* attitude, they do not accept the pluralistic form of empirical experience:

> These two systems are what you have to choose between if you turn to the tender-minded school. And if you are the lovers of facts I have supposed you to be, you find the trail of the serpent of rationalism, of intellectualism, over everything that lies on that side of the line. You escape indeed the **materialism** that goes with the reigning empiricism; but you pay for your escape by losing contact with the concrete parts of life. The more absolutistic philosophers dwell on so high a level of abstraction that they never even try to come down. The absolute mind which they offer us, the mind that makes our universe by thinking it, might, for aught they show us to the contrary, have made any one of a million other universes just as well as this. (P: 16-17).

James's solution begins to appear between empiricism and rationalism, as a middle way. But before addressing the meaning of James's pragmatism, let me point out that

still in his *Essays in Radical Empiricism* he concludes his brief essay *Absolutism and Empiricism* with this very sincere passage, in which he claims the fight of empiricism is against the absolutistic *exclusion* of «the personal and aesthetic factor in the construction of philosophy» (ERE: 143). Empiricism, and overall radical empiricism, is an inclusive epistemology, open to novelties and reality. Even if some awareness of our biological and psychological constitution seems a very banal claim, empiricism aims at downsizing absolutism to the common ground that «all philosophies are hypotheses, to which all our faculties, emotional as well as logical, help us, and the truest of which will at the final integration of things be found in possession of the men whose faculties on the whole had the best divining power» (ERE: 143).

III.4.2 What Pragmatism Means

In the second and fundamental lecture of *Pragmatism* James tries to explain that «all our theories are *instrumental,* are mental modes of *adaptation* to reality» (P: 94). He recalls the metaphysical dispute arose among some of his friends about a human witness and a squirrel turning around the same tree. This situation was to him revelatory of the importance of the pragmatic method to dissolve metaphysical disputes. He claims that on account of the scholastic adagio «whenever you meet a contradiction you must make a distinction», on that occasion he singled out two possible *practical meanings* that his intellectual friends *had given* to the common expression "going around" the squirrel, being led to draw different conclusions. James could thus verify how useful is the *pragmatic method* in solving metaphysical pseudo problems: the two parties were both right or wrong «according as you conceive the verb 'to go round' in one practical fashion or the other» (P: 28).

We have to notice that in MT, pointing out that the pragmatic method implies that truths had *practical* consequences, James makes clear that he uses «practical in the sense of *particular,* of course, not in the sense that the consequences may not be *mental* as well as physical» (MT: 38). Moreover, recalling the same example of the squirrel on this occasion, he only talks about *meaning*, omitting the adjective practical[93]. Therefore we can generally say that pragmatism deals with *meaning*, and meaning deals with *practical or particular* consequences, that is to say with concrete contexts, time, interests and personal preferences.

As known, James reconstructs the origin of the term pragmatism from the Greek word *πράγμα*, which means action, and from which our words 'practice' and 'practical' derive. He immediately declares that this method was introduced into philosophy by Charles S. Peirce in his 1878 article entitled *How to Make Our Ideas Clear*. James underlines that there Peirce maintained that «our beliefs are really rules for action», and then argued that «to develope a thought's meaning, we need only determine what conduct it is fitted to produce: that conduct is for us its sole significance» (P: 29). To James, all our thought-distinctions consist in possible difference of practice, and hence the whole positive significance of our conception of an object is all the conceivable effects – immediate or remote – of a practical kind the object may involve. James stresses the concrete actualization of Peirce's pragmatic maxim talking about the «test of tracing a concrete consequence» and notoriously claiming that :

> There can *be* no difference anywhere that doesn't *make* a difference elsewhere—no difference in abstract truth that doesn't express itself in a difference in concrete fact and in conduct consequent upon that fact, imposed on somebody, somehow, somewhere and somewhen. The whole function of philosophy ought to be to find out what definite difference it will make to you and me, at definite instants of our life, if this world formula or that world-formula be the true one (P: 30).

As Socrates, Aristotle, Locke, Berkeley, Hume in the past, Ostwald and others philosophers of science streamly *use* the principle of pragmatism which is not at all a brand new principle. Nonetheless, what is new in James's pragmatism is the *conscious*, *radical* and *less objectionable* form of its recovering the familiar *empirical attitude* in philosophy. This new name for some old ways of thinking means the supremacy of the empirical mentality over the rationalistic one. Pragmatism thus means «the empiricist temper regnant, and the rationalist temper sincerely given up. It means the open air and possibilities of nature, as against dogma, artificiality and the pretence of finality in truth» (P: 31).

The "triumph" of the pragmatic method, which goes together with the radicalization of the empirical temperament in philosophy, would produce the general defeat of *ultra-rationalistic mentality* and consequently the reconciliation of *science* and *metaphysics*. As a method, in fact, pragmatism is not interested in *particular* results or «conclusions but those which our minds and our experiences work out together». Thus respect to the methods of empiricism and rationalism, pragmatism tries to avoid *a priori* prejudices [different from preferences] which are obstacles on the road of any serious research. The pragmatist should turn definitely away from certain *habits* (or vicious) of professional philosophers, such as «abstraction and insufficiency, from

verbal solutions, from bad *a priori* reasons, from fixed principles, closed systems, and pretended absolutes and origins. He turns towards concreteness and adequacy, towards facts, towards action, and towards power» (P: 31).

Of course prejudices as closed systems of judgments, which are founded on some interpretation of previous experiences and more importantly on temperamental assumptions, are at odds with really open directions of research. So although pragmatism shares the empirical devotion to facts, on the one side, it does not accept the possible «materialistic bias as ordinary empiricism labors under»; on the other side, pragmatism does not programmatically rejects «the realizing of abstractions, so long as you get about among particulars with their aid and they actually carry you somewhere» (P: 40). This is to say that pragmatism aims at being a more *powerful method of research* than the rationalist method is and thus to remain as much as possible open to all number and species of human experiences. Therefore, it does not work on *a priori or prejudicial* exclusion, but on *controlled or qualified* inclusion. The selection is made *in rebus* by the criterion of the *cash-value* of theories: «Rationalism sticks to logic and the empyrean. Empiricism sticks to the external senses. Pragmatism is willing to take anything, to follow either logic or the senses, and to count the humblest and most personal experiences. She will count mystical experiences if they have practical consequences» (P: 44).

Accordingly, pragmatism does not agree with a contemplative, but with an active, progressive and working image of research. Names and words are not considered sufficient definitive answers to our concrete and changing questions. The mere static possession of essential logical principles of reality is not the very end of research. Indeed, human beings' living tension to research is inexhaustible, and the pragmatic method expresses that human empirical exigency to set his ideas continuously at work within the stream of experience. Pragmatism is not a solution, rather a working program and an indication of the ways in which we can change realities. According to James, «Pragmatism unstiffens all our theories, limbers them up and sets each one at work» (P: 32). Reality is not an enigma that we should solve finding essential and eternal answers to be satisfied. James believes that reality is to be lived and that living is something that we have to learn in the making, in medias res. We may say that realities are living things[94], they develops through time, they continuously change, concrete realities are different one from the other and no full conceptual simplification or standardization is possible, no one for all solution. Therefore our theories should be

verified every time again, they should be set at work to see if they still work well enough. The relation of human beings with reality is much more pervasive, variegated and practical than we can conceptually imagine. The continuous-progressive advancement of research goes after the continuous-growing development of reality and human beings. There are new aspects that attract our interest and new discoveries to take into account. The framework of this discourse is evidently the Darwinian anti-foundationalism.

However, pragmatism is against «rationalism as a pretension and as a method» and thus compatible with all *anti-intellectualism* tendencies such as *nominalism*, *utilitarism* and *positivism*, under different respects. In the beautiful metaphor suggested by Giovanni Papini, pragmatism «lies in the midst of our theories, like a corridor in a hotel». Pragmatism is thus «a practicable way of getting into or out of their respective rooms» (P: 32). In this view, the *meaning* of the pragmatic method is an *orientative attitude*, not yet a particular result, and this attitude consists in «*looking away from first things, principles, 'categories' supposed necessities; and of looking towards last things, fruits, consequences, facts*» (P: 32).

The meaning of pragmatism has been recently declined in two ways : a *pragmatic method* and a *genetic theory of what it is meant by truth*. The latter is the general conception of truth reached by Dewey and Schiller. James claims that following the method of geologists, biologists and philologists in establishing new sciences, they have just singled out a simple process, observable in operation, and then they have generalize it. More specifically they have focused on the *individual settling into new opinions*. James believes that Schiller and Dewey are leading that front of contemporary philosophers cultivated in *inductive logic*. Philosophers and scientists such as Sigwart, Mach, Ostwald, Pearson, Milhaud, Poincaré, Duhem, Ruyssen have been studying the conditions under which our sciences have evolved, and in this historical view they have reconsidered the *meaning* of the laws of nature formulated by mathematicians, physicists or chemists. The recent development of sciences has shown that «laws have grown so numerous that there is no counting them; and so many rival formulations are proposed in all the branches of science» (P: 33). James claims elsewhere that the real turning point is to acquire an *inductive mentality* which is at odds with absolutistic hopes (MT:). Scientific logic led these investigators to consider laws not anymore as literal reconstruction of the divine *necessity*, rather as human arbitrary *approximations*. Since theories are not absolute transcriptions of reality, they can be

useful from different points of view. Their general function is to synthetize old experiences to lead to new ones. To James they are «man-made languages» or «conceptual shortcomings», in which human beings can write their reports of nature in different dialects.

However, Dewey and Schiller maintain that the *meaning of truth* is the same in science and in our ideas and beliefs:

> ['truth' means] *that ideas* (*which themselves are but parts of our experience) become true just in so far as they help us to get into satisfactory relation with other parts of our experience,* to summarize them and get about among them by conceptual short-cuts instead of following the interminable succession of particular phenomena. Any idea upon which we can ride, so to speak; any idea that will carry us prosperously from any one part of our experience to any other part, linking things satisfactorily, working securely, simplifying, saving labor; is true for just so much, true in so far forth, true *instrumentally.* This is the 'instrumental' view of truth taught so successfully at Chicago, the view that truth in our ideas means their power to 'work,' promulgated so brilliantly at Oxford (P: 34).

The psychological process of the settling of new opinions is introductory and interweaving with the process of truth's growing. Concrete individuals always have a stock of old opinions and sometimes they meet a new experience that is not immediately compatible with their previous ones. This new experience can come in different ways, someone can contradict our opinions, or reflecting we can discover a lying contradiction, or there can happen facts that are not compatible with our view, or even desires which remain unsatisfied. As in Peirce's description of the *living doubt* ( ), we try to solve this inner trouble modifying our previous mass of opinion. James notices that in this process men and women are all extreme *conservatives*, we are neither disposed to change a great part of our beliefs, nor all at once. Therefore, the new idea should mediate between old opinions and the new fact according to the rule of «the maximum of continuity and a minimum of jolt». In this concrete view, we realize that new theories are accepted and considered *true* in proportion to their success in solving this 'problem of maxima and minima', that is to say respect to a human mechanism of satisfaction. James claims that truth is *what we say about* new contents, and this is a matter of *approximation* and *satisfaction*. True ideas solve the original contradiction "on the whole" more satisfactorily than the previous theory. Every solution is thus conditioned form previous beliefs, and it is temporary or provisional in so far as «To a certain degree, therefore, – James says – everything here is *plastic* ».

James claims that much of criticisms against pragmatism come from disregarding the great part played in this process by older truths. They have an absolutely *controlling influence*, since no increasing process may be started without professing to be loyal to

them. In fact, we should deal with a double urgency, that of conserving our preconceptions and that of finding new and more inclusive assessment of it. Accordingly, a new idea is «truest» only in so far as it «performs most felicitously its function of satisfying this double urgency». In other words, ideas are called true for human reasons and as well old truths grow by new truth's addition because of subjective reasons. There are plenty of new phenomena that we prefer to ignored or disregard as they would require a too serious rearrangement of our previous conceptions. Therefore, the growing process of truth follows a very precarious and plastic psychological development that goes through those different instances that James in PP calls Me and Self (as Mead will do later). A way for truth's growing is to be found in the midst of internal reasons and desires which tend to gratification. So, a new opinion counts «as 'true' just in proportion as it gratifies the individual's desire to assimilate the novel in his experience to his beliefs in stock. It must both lean on old truth and grasp new fact; and its success (as I said a moment ago) in doing this, is a matter for the individual's appreciation. When old truth grows, then, by new truth's addition, it is for subjective reasons. We are in the process and obey the reasons» (P: 36).

According to James, Dewey and Schiller have generalized this psychological analysis of the individual growing of truth and applied to ancient parts of truth, claiming that all truths once were plastic, were called true for human reasons. Our history develops for human reasons, and functionally our species memory preserves only the results and not the processes that have brought to them. The concrete individual psychological process can be assumed as an analogy and a method to approach the whole social process of truth's growing. Truth is but the function of marrying previous parts of experience with newer parts for the sake of human satisfaction. This mechanism is activated by the desire of gratification, knowledge produces gratification in so far as it helps to preserve and ameliorate human life, and therefore truth develops always within the boundaries of satisfaction. This argument is very shifting. The physiological mechanisms of activity have been avoided by philosophy as not exhaustive or representative of human beings. We should recall that James is not a materialist, he does not aim at any forced reduction of living creatures to any elementary rigid physical order of explanation. Rather, James is claiming that humans are interested creatures, that the omnipresence of cognition is the very essence

of mental states, and that if we desire to work out a philosophy for human beings we have to take account of our nature bravely and without prejudices.

> Purely objective truth, truth in whose establishment the function of giving human satisfaction in marrying previous parts of experience with newer parts played no rôle whatever, is nowhere to be found. The reasons why we call things true is the reason why they *are* true, for 'to be true' *means* only to perform this marriage-function. The trail of the human serpent is thus over everything (P: 37).

As we will consider in depth, James's conception of truth is the turning point where pragmatism can be read as a humanism. Even if in MT James will distinguish his interpretation from those of Schiller and Dewey, to avoid further or general misunderstandings, they all considered truth not as something lying there to be discovered, but something which is developing together with us. Only to the rationalistic mentality, which is a deductive way of reasoning, truth is *incorrigible*, whereas to the pragmatist or to an inductive mentality we should talk about truths and consider that they have a history too. What old truth *means* is just «the dead heart of the living tree, and its being there means only that truth also has its paleontology and its 'prescription,' and may grow stiff with years of veteran service and petrified in men's regard by sheer antiquity». Nonetheless, even the old truths and apparently immutable change their meaning according to the evolution of our sciences. Logical and mathematical ideas, as well as physical theories are continuously reinterpreted under a new light, respect to different interests or in view of further advantages. The meaning of truth is plastic, changing and assuming different connotations according to evolving different contexts. This is not immediately visible, some processes takes time, but then new meanings, new interpretations of the *words* enter in the common sense language. This argument recalls what Kuhn said about the change of the structure of scientific paradigms[95]. James suggests that often ancient theories or formulas in physics turn out to be «special expressions of much wider principles, principles that our ancestors never got a glimpse of in their present shape and formulation».

The objection moved to James's pragmatic discourse is to confound *psychology* with *logic*. There should be no interferences between these two kind of analysis, psychology dealing with «the conditioned ways in which we *do* think», logic instead with «what we *ought* to think, unconditionally». The point is that no neat distinctions can be made from the outside and moreover our ways of thinking are not so neatly distinguishable. The functional or procedural mechanisms of thinking and overall the greater and complex phenomenology of mental states *do* influence even our *ought to be* reasoning.

To James, reality is not an abstraction and in the same way our thinking cannot be completely unconditioned. Pragmatism prefers the concrete «rich thicket of reality» to the ultra-rationalist's pale, spectral and skinny outline of it. To the intellectualist mind, the pluralistic description of truth, its utility and satisfactoriness, is scandalous; he considers these qualifications as mere subjective tests of truth. According to him, truth «must be an absolute correspondence of our thoughts with an equally absolute reality» (P: 38).

Pragmatism tries to remain loyal to facts and concreteness, bringing old and new harmoniously together. As James has shown for Dewey and Schiller, pragmatists pursue the way that points to facts, assuring the possibility to go down into the world of particulars. They apply their inductive mentality in following the scientific method of interpreting *the unobserved by the observed*. They observe truth actually at work in particular cases and then generalize, so that truth «becomes a class-name for all sorts of definite working-values in experience» (P: 38). In this way, James makes clear that pragmatism enters in the matter of *relations* and tries to provide a concrete content to abstract notions. As he develops also in SPP and in ERE, «the static relation of correspondence between our minds and reality» is pragmatically *converted* «into a rich and active commerce […] between particular thoughts of ours, and the great universe of other experiences in which they play their parts and have their uses» (P: 39).

Accordingly, the central point of the pragmatist doctrine of truth is that «truth is *one species of good,* and not, as is usually supposed, a category distinct from good, and co-ordinate with it. *The true is the name of whatever proves itself to be good in the way of belief, and good, too, for definite, assignable reasons*» (P: 42). The notion of truth has developed into a dogma because it is important for our life to know what is true for us. James maintains that true ideas should preserve what is *good* for life from a human point of view. To deny the relation *true-good* is very difficult in a psycho-physiological perspective, since we should prove that to know true ideas be disadvantageous for our life. The fact that men and women *generally* search for truth, instead of *shun or escape* it, means that true provides living advantages. However, at an observing description, it is not correct to connote what is good as something pleasant in its mere sensualistic sense. Actually, to James what is *good* is not necessary identified with (nor distinguished from) what is *agreeable*, as we can see in common medical cases. There we can observe that, for instance, certain foods are disagreeable to our taste (senses) but good for our organs. The same situation happens to certain ideas which are

disagreeable to our thought but «helpful in life's practical struggles». In this similitude, James surprisingly compares our *senses* to our *thought*, and our *organs* to our *practical life*. In his view, organs and practical life have the priority over senses and thinking in deciding what is really *good* or *better* for us. The value of true ideas lies in their 'power' to *lead* us to «any life that it is really better we should lead», accordingly ideas are reckon true respect to their practical-leading help to lead a good life[96]. Pragmatism concretely reconciles the notion of what is better for us with the notion of what is true for us, since truth is a marriage/leading-function and as such it should connect some parts of experience to be significant at all : «'What would be better for us to believe'! This sounds very like a definition of truth. It comes very near to saying 'what we *ought* to believe': and in *that* definition none of you would find any oddity» (P: 42).

In the IV lecture, *The One and the Many*, James points out the specific kinds of union that can be embraced in the universe. He claims that both spiritualists and empiricists share a monistic mentality and the philosophical preference for unity over variety. Nonetheless, the empiricist remains more curious about facts whereas the spiritualist has a more pronounced mystical tendency. Thus, granting the existence of unity, James put this notion through the pragmatist treatment and wonders «what facts will be different in consequence? What will the unity be known-as? The world is one—yes, but *how* one? What is the practical value of the oneness for *us*?» (P: 65-66). This lecture will be considered in the section about the *Essays in Radical Empiricism*[97], since there James will focuses on the problem of conjunctive and disjunctive relations, stressing his attention on conjunctive relations as the real difference between radical and classic empiricism. However we can observe here that James is showing the hypothesis of *absolute monism* and *pluralism* respectively as the metaphysical outcomes of *noetic monism* and *noetic pluralism* [theories of knowledge].

In the V lecture of Pragmatism, *Pragmatism and Common Sense* (1907), James pragmatically focuses on common sense in order to introduce his pragmatic-functional conception of the different ways of thinking in order to frame and take up again in the VI lecture his pragmatic conception of truth. The peculiarity of pragmatism is its tension «to *unstiffen* all our theories», this is the reason why it should turn its back on *dogmatic rigorist temper of monism* and follow the *path of more empirical pluralism*. While monism is unavoidably an absolutistic mentality, pluralism is content with granting « *some* separation among things, some tremor of independence, some free play of parts on one another, some real novelty or chance» (P: 78), and also leaves the amount of

real unity to be decided empirically. The method of pragmatism thus shows a preference for the *pluralistic* view in so far as it This pluralistic disposition towards empirical inquiry should be sustained as more open, reasonable and fruitful than temperamental abstract dogmatism professing an *all or nothing* way of reasoning (closed). The possibility to introduce degrees and qualification is more convenient for any pragmatic research of truth (open).

Therefore, the pluralistic doctrine of an *additive* constitution of the world is also worth to be considered a valuable hypothesis together with the alternative one of an eternally determined world. According to James, pragmatism has to credit the more empirical pluralistic view, while «pending the final empirical ascertainment of just what the balance of union and disunion among things»[98].

However, the additive conception of reality implies the further hypothesis that in this very moment the world can be eternally incomplete (instead of eternally complete), that is continuously showing new additions and losses. James observes that: «The very fact that we debate this question shows that *our knowledge* is incomplete at present and subject to addition. In respect of the knowledge it contains the world does genuinely change and grow» (P: 82). Hence, from a *noetic* point of view, the world seems to be actually incomplete (ignorance), and to be really changing and growing. In fact, at least as to what concerns the actual world, and in so far as knowledge is an aspect of the world, it really changes and grows in as much as knowledge goes on completing itself. As claimed for Dewey and Schiller's development of their conception of truth, also James is following the sister-sciences' inductive method to generalize his concrete analysis of *the observable process of thinking.*

In fact, before addressing the issue of common sense, James offers exactly a brief description of the process of knowledge's growing. He argues that «our knowledge grows *in spots*» and points out the controlling and influencing relation between old and new ideas. This premise in important to understand James's effort to instill doubt that common sense be only a system of successful hypothesis. In fact, his thesis is that «that *our fundamental ways of thinking about things are discoveries of exceedingly remote ancestors, which have been able to preserve themselves throughout the experience of all subsequent* time. They form one great stage of equilibrium in the human mind's development, the stage of *common sense*» (P: 83). We have to notice that his analysis of common sense is made from a philosophical point of view, since he is addressing the philosophical *meaning* of common sense as the «use of certain intellectual forms or categories of

thought» (P: 84). More generally, James argues that experience at first does not come already «ticketed and labeled», it is a Kantian *rhapsodie der wahrnehmungen*, and that common sense is the «natural mother-tongue of thought» (P: 88). In fact, all our conceptions are *denkmittel* to handle facts. According to James, we properly *understand* some impressions when we succeed to refer each one to some place in our system of concepts. This work of rationalization of experience can be unfold by various conceptual systems, since each system is conceptually articulated according to some classification of concepts, or intellectual connection. In this view, common sense is one and old way of rationalize impressions – to find one-to-one relations – by a set of concepts such as «Thing; The same or different; Kinds; Minds; Bodies; One Time; One Space; Subjects and attributes; Causal influences; The fancied; The real» (P: 85). As stated in PP, James claims that perceptions are never exactly the same, only we are used to classify them within identical conceptual containers because of *practical interests*. So thinking has a practical meaning. The common sense's categorical distinction of experience is an historical structure, a phylogenetic and social outcome. James offers a genealogical reconstruction of the process of formation and diffusion of common sense's concepts on the basis of the inductive method, that is to say «assuming the vast and remote to conform to the laws of formation that we can observe at work in the small and near». These categories have been progressively *discovered* by some genius mind, then they have verified by immediate facts of experience and progressively *diffused* thanks to their practical reliability. Common sense is thus as a «definite stage in our understanding of things, a stage that satisfies in an extraordinarily successful way the purposes for which we think» (P: 89). Language is mostly interwoven with such conceptual classification, we naturally think in common sense's terms. The historical formation of common sense's categories is proved by the fact that it suffices for «all utilitarian practical purposes», which are the very original exigencies of living beings, but after showed important applicative limits.

James presents the two successive stages in the history of human understanding: *science* and *critical philosophy*. Actually, the scientific classification of experiences has ceased *naïf* realism since only primary qualities remained, and secondary qualities became unreal. This intellectual way of thinking was surprisingly fruitful as to its practical-applicative outcomes. Through the scientific mentality we gained a more powerful practical control of nature respect to the control grounded on common sense. The stage of critical philosophy, instead, has been much more intolerant to common

sense's categories – which did not represent «anything in the way of being» – than scientific thinking, but then turned out to be less fertile as to its practical outcomes. Indeed it offers intellectual satisfactions, but no new range of practical power. Thus *common sense*, *science* and *critical philosophy* are the three main stages of the historical evolution of human understanding, three different ways of thinking which have developed in different times and according to different and increasing needs. James has offered this genealogical reconstruction to show that these levels of thinking are continuous, they did not come *abruptly*, but each one bursting the limits of previous classification have offered a new systematization of experience according to different exigencies. Only in this anti-essentialist framework, James can justify the historical growing of knowledge. If some of these systems were the truest – in the sense of granting a fully correspondence with reality – why new systematization should ever come. The fact that *different and contrasting* systems of concepts exist oblige us to reconsider our meaning of truth. Following Mach[99], Ostwald and other scientific logics, James insists that theories are but *functional* descriptions of reality, they are conceptual shortcomings leading us from some parts of experience to other parts of experience. There is no *ringing* conclusion possible, no absolute point of view offering *absolute criteria* (e.g. solidity, august) to decide which type of thinking is the more absolutely *true*. All that we can state is that each conceptual system shows to be more *functional* in a different sphere of life, but no one is completely sufficient under different respects. They can be compared in relation to their *use*, not to any static idea of truth as a «simple duplication by the mind of a ready-made and given reality» (P: 93).

III.4.3 The Cognitive Meaning of truth

In the VI lecture, James explains *Pragmatism's Conception of Truth*. He shares Dewey and Schiller's view about truth and tries to defend it from vicious attacks and stream misunderstandings. By the way, in the *Preface* to MT James will claim that :

> What misleads so many of them is possibly also the fact that the universes of discourse of Schiller, Dewey, and myself are panoramas of different extent, and that what the one postulates explicitly the other provisionally leaves only in a state of implication, […] Schiller's universe is the smallest, being essentially a psychological one. […] My universe is more essentially epistemological. I start with two things, the objective facts and the claims, and indicate which claims, the facts being there, will work successfully as the latter's substitutes and which will not (MT: 9-10).

However, James begins his lecture offering a very general definition of truth, accepted both from rationalists and pragmatists, according to which truth is a property of certain of our ideas. True ideas means their *agreement* with *reality*, as false ideas means their *disagreement* with it. Contrasts between the two philosophical parties start only at a closer analysis of the *meaning* of the terms *agreement* and *reality*. James focuses his criticism on two aspects: on one side, he underlines the shallowness of intellectualists' reflection, which comes from their lean spirit of observation; on the other side, he points out the fundamental prejudice supporting the rationalists' view and limiting the advancement of any empirical inquiry in truth. The analogy with common experience suggests the popular "copy-view" that true ideas are copies of their realities. Actually some cases would need a closer treatment of the meaning of *agreement* in so far as we perceive that certain ideas cannot «definitely» copy their objects. In particular, James will point out that our ideas can only be symbols for streaming realities such as time, and others. At the moment the pragmatist begins his treatment of the *cash-value* (meaning) of truth, the rationalist mind stops any further discussion. The latter is satisfied with the *stable* epistemological equilibrium gained at this contemplative level of conceptual systematization of reality. For the rationalist to *know* is just to possess true ideas, whereas for the pragmatist *knowing* is a continuous activity. The rationalist's attitude rests on the assumption that «truth means essentially an inert static relation» and, in fact, it works as an obstacle to any pragmatic discussion of truth in terms of concrete experience. Pragmatism, instead, looks for practical consequences, and contends that the meaning of truth is what we *know-as* truth, what can conceivably affect our reality.

The moment pragmatism asks this question, it sees the answer: *True ideas are those that we can assimilate, validate, corroborate and verify. False ideas are those that we cannot.* That is the practical difference it makes to us to have true ideas; that, therefore, is the meaning of truth, for it is all that truth is known-as. This thesis is what I have to defend. The truth of an idea is not a stagnant property inherent in it. Truth *happens* to an idea. It *becomes* true, is *made* true by events. Its verity *is* in fact an event, a process: the process namely of its verifying itself, its veri-*fication.* Its validity is the process of its valid-*ation* (P: 97).

The quarrel thus concerns first and foremost different conceptions of the *process (and the scope?) of knowing*, either as *definite-essential* or *indefinite-accidental* relation with reality (epistemology); and then, following the analogy of the processes formation, also the definite-complete or indefinite-growing general view of reality (ontology). From his analysis of truth is clear that James cannot disentangle epistemology from ontology, following the inductive methodology of empirical sciences. He thus moves from the observable *mental growing process* to generalize approximately the unobservable *world growing processes*.

Truth as the continuous process of verification and validation of ideas means their practical consequences. Actually James talks about truth as a sort of «function of agreeable leading agreement». He was reconsidering the general agreement-formula of truth in terms of practical consequences leading us «through the acts and other ideas which they instigate, into or up to, or towards, other parts of experience with which we feel all the while—such feeling being among our potentialities—that the original ideas remain in agreement. The connexions and transitions come to us from point to point as being progressive, harmonious, satisfactory» (P: 97).

This conception will be explained more clearly in MT. There James talks about truth as an «ambulatory through and through» function against the *saltatory* conception of truth. The puzzle will be reconstructed in that collection around his doctrine of *radical empiricism* which relies on the anti-intellectualistic/sensible existence of conjunctive relations. Therefore the possession of truth is not the arrival point, in so far as a knowledge is primarily a practical function of pointing *through and through* to vital satisfactions. Knowing is a growing and conditioned cognitive process leading us continuously through experience to useful experiential objects. James talks about the *workableness* of true ideas, that is to say about truths as conditioned and relational functions (no absolute truths exist).

For the moment, we acknowledge that according to James's naturalistic view «the possession of true thoughts means everywhere the possession of invaluable instruments of action», and our *duty* to gain true can be best accounted on *practical reasons*. As in the example of a man lost in woods (Cf. PP and ERE Memorial Hall), the possession of the true thought that there could be a cow-path is the process of verification that that path as every cow-paths leads to human habitations. More generally, the true thought is useful in particular situations in so far as it leads us to a particular useful object. The latter, in turn, is not important in itself or absolutely but *relevant* for the situation. Therefore, the *practical relevance* of an idea activates the process of its verification[100]. «True is the name for whatever idea starts the verification-process, useful is the name for its completed function in experience» (P: 98). In cases like this, the presence (advent) of the object verifies the significance of our thought and truth means just the *eventual verification* of our idea (verifiability). James believes that the *originals and prototypes* of the truth-process are such *simply and fully verified leadings* which in the end should connect us with a perceptive object.

James makes clear that it is not necessary nor even possible for each of us to verify every idea. We live in a «credit system»[101] of truths founded on ideas which have been fully verified somewhere by someone (else) and pointing to further face-to-face verifications. To a certain degree, the financial structure works on indirect verifications, these are satisfactory in so far as the system is indirectly controlled by the *workability* or the flowing streaming among these trade of truths. In fact, the general agreement between our idea and the system of truths is the indirect verification of its truth. This indirect verification is continuously made *using* some idea as a bank-note to «circulate» within the social net of knowledge without incurring in obstacles or contradictions. Our true idea *fits* everything it meets, and gets no refutation. In this view, James states that «*Indirectly or only potentially verifying processes may thus be true as well as full verification-processes»* (P: 100).

Moreover, James points out that to him realities mean 1) concrete facts or abstract kinds of things, 2) relations perceived intuitively between them, and 3) the whole body of other truths already in our possession. Therefore he claims that truth is an affair of *leading* even in the realm of mental relations. Indeed, the metaphor of financial system applies both to *matters of fact* and to *mental ideas* in so far as he is talking about «relations». He is aware that relations among facts are conditioned and those among purely mental ideas are absolute or unconditional, but he underlines that the systems

of connection follow from the same *structure of our thinking*. In a very naturalistic fashion, James claims that his account of the relation of truth is made from the point of view of the working processes of our mental structure. In this sense, in 1909 he will be explaining the difference between pragmatists and anti-pragmatists meaning of truth in terms of *workableness* : «when the pragmatists speak of truth, they mean exclusively something about the ideas, namely their workableness; whereas when anti-pragmatists speak of truth they seem most often to mean something about the objects» (MT: 6). To establish the pragmatist theory of truth is for James a step forward in making his philosophical doctrine of radical empiricism prevail.[102] Therefore, the radically empirical (or anti-foundationalist) feature of his theory of truth relies on the analysis of the processes of thinking as natural formation concretely conditioned and conditioning which is the matrix of our *ready-made ideal framework* for all sorts of possible objects (abstract or concrete realities).

> To 'agree' in the widest sense with a reality, *can only mean to be guided either straight up to it or into its surroundings, or to be put into such working touch with it as to handle either it or something connected with it better than if we disagreed.* Better either intellectually or practically! […] Any idea that helps us to *deal,* whether practically or intellectually, with either the reality or its belongings, that doesn't entangle our progress in frustrations, that *fits,* in fact, and adapts our life to the reality's whole setting, will agree sufficiently to meet the requirement. It will hold true of that reality (P: 102).

According to James, pragmatists interpret the word agreement as the process of being guided and treat it altogether practically. Such a «large loose way» applies to realities such as past time, energy, power, spontaneity that our ideas cannot fully reproduce in copy, but just represent as symbols. Against rationalists, the copy-view is only one way to agree with reality. Within this broader practical framework, thus «*names* are just as 'true' or 'false' as definite mental pictures are. They set up similar verification-processes, and lead to fully equivalent practical results». James is claiming that as it was for the common sense practical level, the universe of mental ideas shows a very similar system of social relations.

> All human thinking gets discursified; we exchange ideas; we lend and borrow verifications, get them from one another by means of social intercourse. All truth thus gets verbally built out, stored up, and made available for everyone. Hence, we must *talk* consistently just as we must *think* consistently: for both in talk and thought we deal with kinds. Names are arbitrary, but once understood they must be kept to. We mustn't now call Abel 'Cain' or Cain 'Abel.' If we do, we ungear ourselves from the whole book of Genesis, and from all its connexions with the universe of speech and fact down to the present time. We throw ourselves out of whatever truth that entire system of speech and fact may embody. (P: 102-103).

Again indirect verification works for the majority of our ideas, in so far as the majority of our true ideas cannot be directly verified. For instance our ideas of the past are guarantee by the coherence of their prolongations or effects in the experience-able present. James contends that even if theories are «man-made formulas» there is little loose play for any hypothesis. «Our theories are wedged and controlled as nothing else» and no capricious arbitrariness is possible. To find a theory that *works* is a very difficult task, since it should *consistently* mediate between common sense and previous belief and the new experience, and it must also lead to some sensible terminus or other that can be verified exactly. Even if there are some cases when alternative theoretic formulas are equally compatible with all the truths we know, and then we choose between them for subjective reasons or preferences, James is clear about the supremacy of *consistency*, just as Clerk Maxwell claimed for scientific truths «consistency both with previous truth and with novel fact is always the most imperious claimant» (P: 104) .

The pragmatist account of truth leads to an important philosophical alternative.

Our account of truth is an account of truths in the plural, of processes of leading, realized *in rebus,* and having only this quality in common, that they *pay.* They pay by guiding us into or towards some part of a system that dips at numerous points into sense-percepts, which we may copy mentally or not, but with which at any rate we are now in the kind of commerce vaguely designated as verification. Truth for us is simply a collective name for verification-processes, just as health, wealth, strength, etc., are names for other processes connected with life, and also pursued because it pays to pursue them. Truth is *made,* just as health, wealth and strength are made, in the course of experience (P: 104).

Thus the pragmatist's pluralist account of truths makes room for *practical interests and personal reasons* in the world of epistemology. The rationalist does not accept that truth be a process made through experience and temporally placed. Truth is always the same, its relation to reality is timeless, like all essences and natures. The «bare quality of standing in that transcendent relation is what makes any thought true that possesses it, whether or not there be verification». This is the core *epistemological* point, the quarrel between *foundationalism* against *anti-foundationalism.* The rationalist looks for foundation in the past, whereas pragmatism look for it in the future. This *radical difference of outlook* has for James tremendous pregnancy in the way of consequences for life: it leads either to intellectualistic philosophy or to humanistic outcomes. James

thinks that the rationalistic view is the consequence of a tricky treatment of concepts as principles as "oracular solution". Identity/similarity regularities He does not denies that our world abounds in things of similar kinds and similarly associated, so that one verification serves for others of its kind. This one great use of the function of knowing things is to be led not so much to them as to their associates. Nonetheless, truth ante rem means only eventual verification, that is to say that in our world indirect process of verification works better, in the sense that are more useful for practical ends, than actual or full verifications. This is very different from the ancestral fashion of solving epistemological difficulties just treating «the *name* of a concrete phenomenal reality as an independent prior entity, and placing it behind the reality as its explanation». As health, wealth and strength, truth is just a name for concrete processes and human beings play their part in these processes. Truths does not really exist *ante rem* but they live *in rebus*.

The scholastic distinction between *habit* and *act* is very interesting in this regard. The etymological derivation of habit from *potentiality* is very appropriate to account for James's description of the credit system of truths. Truths are rooted in activities or verification-processes of our ideas. In the intervals between their face-to-face verification these ideas sink to status of habits and as such circulate in the intervals[103].

> *'The true,' to put it very briefly, is only the expedient in the way of our thinking, just as 'the right' is only the expedient in the way of our behaving.* Expedient in almost any fashion; and expedient in the long run and on the whole of course; for what meets expediently all the experience in sight won't necessarily meet all farther experiences equally satisfactorily. Experience, as we know, has ways of *boiling over,* and making us correct our present formulas (P: 106).

Pragmatists do not deny in principle that in the long run a possible *absolute* truth – which means a truth not alterable by further experiences – will be reached. At the end of times all our temporary experiences may converge in a completed truth which retrospectively would change our interpretations of other conventions, as it was for scientific discoveries. But James carefully explains that there are different ways – rationalistic or pragmatistic ways – to understand this eventuality. Indeed, to him no absolute truth lies *ready-made* in the past or in the future, because «like the half-truths, the absolute truth will have to be *made,* made as a relation incidental to the growth of a mass of verification-experience, to which the half-true ideas are all along contributing their quota». James is thus claiming that as to what concerns truth, the real work of foundation is a continuous human construction, which integers different co-factors. No essentialist or absolute foundation is ever possible in the matter of experience. We

do not have absolute and definitive certainties, rather provisional and fallible hypothesis. All our beliefs are *continuously* and *provisory* founded on previous experiences, which in turn become experiential matter for further funding operations. Day after day we *use* our beliefs and our theories *as if* they were true and we experiment their *workability* through direct or indirect verification-processes. James claims that «reality means experience-able reality, both it and the truths men gain about it are everlastingly in process of mutation». Our systems of beliefs – here James talks almost indifferently about *truths and beliefs* – are funded other beliefs according to our working ways of processing reality. As in the example of a snowball's growth in the hands of a boy, James claims that there are factors co-determining each other incessantly in the concrete making of truth[104]. This is the greatest difference between rationalism and pragmatism, and even between James and Bergson. As Bergson wrote in a letter to James, he could accept that *reality* changed, not *truth*. Here James makes clear that «Experience is in mutation, and our psychological ascertainments of truth are in mutation -so much rationalism will allow; but never that either reality itself or truth itself is mutable» (P:). According to rationalists, reality would stand complete and ready-made from all eternity and the agreement of our ideas would be a *relation of static comparison*. Truth is an intrinsic virtue which has nothing to do with experience, it does not add anything to the content of experience and it makes no difference to reality. The rationalist seems to distinguish neatly the *epistemological dimension* from the *ontological dimension*. In this dualistic view, truth is just a «supervenient, inert, static, a reflexion merely», which does not exists together with facts or fact-relations.

At this point, the rationalistic justification of the rationality of the universe appears almost irrational as to the logical bounds connecting truth and reality. They insist that there is no *practical* obligation to recognize truth, in fact, no practical advantages follow from truth because it is a purely logical and epistemological dimension. Rationalists neatly distinguish logic from psychology and thus believe in absolute, impersonal and unconditional reasons. Truth *ought* to be ascertained and recognized even if «neither man nor God should ever ascertain truth» (P: 109). Truth-reality logical connections are necessary and therefore they do not depend on empirical recognition, not even influence the accidental world of experiences. James considers this outcome as a mechanism of sublimation and consequent negation of concreteness. The rationalist's argument is like the *sentimentalist's fallacy* : «an idea abstracted from the concretes of experience and then used to oppose and negate what it was abstracted

from». Instead, reality is experience-able, and experience is made by «muddy particulars». All our intellectual operations of extraction and purification of qualities should be considered as a conditional work. It is never placed out of present space and time context and a functional scope. The risk of neglecting the practical-living bounds of our intellective operations is to end up with upsetting the orders of reality. To put conceptualization before perception leads to miss to recognize concepts as real products of our faculty, and soon to be thinking that reality is first and foremost a purely and intellectual affair. This is to James a *perversion* of the function of our intellect which is very dangerous for our good-life. The dominium of living is not coextensive with that of knowing, not at least with its intellectualistic declination. Reality is not a production of our intellect, at least not its first order is (Cf. SPP).

James is stating that abstracted pure qualities seem to contrast with their nature of muddy instances as an opposite and higher nature, as well as the muddy nature of truths is to be validated, verified. Moreover, he contends that epistemology is a human affair in which *practical interests* and *personal reasons* play their part. James has shown our general obligation to *do* what *pays*. This is also the logic of our processes of thinking and «It is quite evident that our obligation to acknowledge truth, so far from being unconditional, is tremendously conditioned». This claim becomes more clear if we leave aside «Truth with a big T, and in the singular» and consider concrete truths in the plural. We shall see that these plural truths need to be recognized only when their recognition is *expedient*. «A truth must always be preferred to a falsehood when both relate to the situation; but when neither does, truth is as little of a duty as falsehood». The abstract imperative to agree with reality as a claim or obligation is not a sufficient explanation for all situations. Indeed, out of a specific particular context of meaning we are not able to distinguish between truth or false ideas, since our duty to agree with reality is grounded in a perfect jungle of concrete expediencies. Why should we look for truth but for practical advantages, and as well why should we shun or avoid error but for practical – living disadvantages. To deny *practical and aesthetical interests* as co-factors in the making of truth is to think a world almost *irrational*, where no other motives are found.

However, the interesting claim is that to separate completely *logic from psychology* is a pure abstraction. The operational-functional mechanisms of our mind as a natural structure integrated in the world should be acknowledged as influencing our meaning of truth. In this view, the pragmatic treatment of truth is quite far from a forms of

impudent relativism. Nowhere capricious arbitrariness or moral vacancy are concretely shown. It takes rather a serious and integer engagement of human beings to deal with their present *biological and social* concreteness. Pragmatism claims that there are no abstract obligations, but very concrete coercions. No essential and general *a priori* indications, but particular biological and social structures continuously and strictly regulate and control our epistemological processes *in rebus* : «the whole body of funded truths squeezed from the past and the coercions of the world of sense about him, who so well as he feels the immense pressure of objective control under which our minds perform their operations?» (P: 111-112). In conclusion, the rationalist conception of truth seems to be a *meaningless* abstraction, and moreover «in this field of truth it is the pragmatists and not the rationalists who are the more genuine defenders of the universe's rationality» (P: 113)[105].

In the *preface* to *The Meaning of Truth. A Sequel to Pragmatism* (1909), James explains this statement, arguing that respect to rationalism, pragmatism was a more integer view which took into account and satisfied vital human needs. He contends that the pragmatic test of the meaning of concepts showed the concept of the absolute to *mean* nothing but the «holiday giver», the «banisher of cosmic fear». After all the attacks that his conception of truth has received from antipragmatists and particularly that of «making the truth of our religious beliefs consist in their 'feeling good' to us, and nothing else» (MT: 5), James can only accept that his absolutistic critics failed to see *the workings of their own minds* and thence they were not able to get the legitimation that James was giving to absolutism *as* a tendency of our minds. More specifically, according to his humanistic view, James was honestly trying to save every «tendency in one's emotional life», he respected absolutism as a natural tendency of human beings which is also a valuable belief for someone. This legitimation of *absolutists*' beliefs has now to be rejected in order to make clear that on a philosophical and epistemological level *absolutism* in no ways exist.

> The pragmatist view, on the contrary, of the truth-relation is that it has a definite content, and that everything in it is experienceable. Its whole nature can be told in positive terms. The 'workableness' which ideas must have, in order to be true, means *particular* workings, physical or intellectual, actual or possible, which they may set up from next to next inside of concrete experience. Were this pragmatic contention admitted, one great point in the victory of radical empiricism would also be scored, for the relation between an object and the idea that truly knows it, is held by rationalists to be nothing of this describable sort, but to stand outside of all possible temporal experience; and on the relation, so interpreted, rationalism is wonted to make its last most obdurate rally (MT: 7) .

This preface is very important because James is drawing here his experienceable conception of truth-relation and more generally he is explicitly connecting this work of demystification with his doctrine of *radical empiricism.* As we shall see, in ERE he claims the experienceability of all relations according to a sensualistic declination of British empiricism[106] which James began to make his case in the physiological field of research. James is maintaining that «relations are matters of direct particular experience», they are *not transcendent* mysterious connections. Therefore, «the truth of an idea will then mean only its workings, or that in it which by ordinary psychological laws sets up those workings» (MT: 8).

In *A Word More About Truth* James confirms that his conception of truth, which Strong recently addressed as «the James –Miller theory of cognition»[107], is but «that earlier statement more completely set forth». Particularly as to what concerns James's account of truth, it seems to be inadequate to his critics in so far as it would «leave the gist of real cognition out». James begun to consider the cognitive meaning of truth first in his 1885 article, *The Function of Cognition*[108] and then in his presidential address on *The knowing of things together* in 1895. These two essays open his later collection *The Meaning of Truth* (1909). It is not a case that to reply to the sharp criticisms that his account of the truth-relation received, James offers his most epistemological essay. He is thus showing his conviction that *epistemology* and *ontology* are effectively bridged within experience.

By the way, James's discourse is propaedeutic to understand his pragmatic account of the truth-function is not a renounce to objectivity, as S. Levine (2014) has recently confirmed. This scholar has recently argued against Misak's view that it is easy to misunderstand James's considerations about "interest or preference" cutting his statements out of his broader view, which includes his physiological studies on human mind and his very young Darwinian *imprimatur*. In the first chapter of this work we have focused exactly on James's reception of Darwinism, and we have insisted on his anti-Spencerian about mind which is to James a *selective and cognitive* agency. The "omnipresence of cognition" was the very mental life's essence and remains the background of all James's later philosophical speculation, particularly as to what concerns the concrete extension to aspirations, desires and expectation of theoretical utility.

However, in his 1885 article, James wanted his inquiry on «'what it is' of cognition» to be nothing more than a chapter of descriptive psychology. The metaphysical

problem connected to the mind-body relation is left aside, he assumes that «cognition *is* produced, somehow», and decides to limit his inquiry to asking «what elements it contains, what factors it implies» (MT: 13). Cognition, being a function of consciousness, implies a state of consciousness, that is to say the existence of a *feeling*. In this essay "feeling" «designates generically all states of consciousness considered subjectively, or without respect to their possible function». As in PP (VII), James retains valuable alternative to the term feeling either the word "idea", in the Lockian sense, the expression "state of consciousness" or the world "thought". According to common sense, there are *cognitive feelings* and simple *subjective feelings*. Through an accurate psychological description of the cognitive process, James aims at focusing the distinctive marks of cognitive feelings that common sense uses to attribute them an *actual* function of self-transcendence.

Surprisingly, James proposes to develop his psychological inquiry through an effort of mental abstraction. To avoid the problem of the genesis, in fact, the reader is asked to suppose the feeling studied as «attached to no matter, nor localized at any point in space, but left swinging *in vacuo,* as it were, by the direct creative *fiat* of a god» (MT: 14). Moreover, to escape the difficulties about the physical or psychical nature of the feeling's object, James assumes it under the abstract name of a «feeling of *q*». Only the feeling should be supposed to have an infinitesimal duration, to avoid the possible objection that *semper idem sentire ac non sentire.* In this neutral setting, James wants to verify the function of cognition of the *feeling of q*, but for it to *know* there should be something to be *known*. In this respect, *q* can be considered both as the feeling's *content* and as a *quality* of the feeling. According to common usage, James means for *knowledge* «the cognition of realities», and for *realities* he means «things existing independently of the feeling through which cognition occurs» (MT: 15). Self-transcendence is the specific trait of knowledge, otherwise q would be considered a subjective aspect of the feeling or a dream. Only if there is a reality that resemble the feeling's quality q, thus «the feeling may be held by us *to be cognizant of that reality*».

By the way, James underlines the *fallibilistic* premises of every serious study of the function of cognition, in so far as we are obliged to study this function by means of our same function. Therefore, as the notion of reality is the warrant for calling a feeling cognitive, we should acknowledge that the inquirer's *faith* (or beliefs), at the moment in which he is pursuing such inquiry, is the warrant for calling something reality or not. James is well aware that every science should make some assumptions, but our

peculiar situation should also suggest to take our assumptions about reality in a *relative* and *provisional way*. Accordingly, to defend his «doctrine» from absolutistic objections, James claims that a general agreement on «what are to be held as realities» -- or we may say a shared *metaphysical view* – is the optimal pre-condition to «agree to the reality of our doctrine of the way in which they are known», that is to say to share also the same theory of knowledge.

The quality "q" of the feeling allows to avoid the problem of *resemblance* between an inner state and an outer reality, because everyone is free to postulate whatever thing (even another feeling) as the reality. But a stronger objection come from Prof. Green and all those philosophers who going after Kant and Hegel consider that perceptions being out of relation are simply nothing. James replies that our *feeling of q* «whatever it may be, from the cognitive point of view, whether a bit of knowledge or a dream, is certainly no psychical zero» (MT: 17). In the *Exploratio Philosophica* of John Grote (London, 1865), James has found the epistemological distinction that allows him to affirm that even a *mute* feeling is not a psychical zero. According to Grote, *language* following human being's logical instinct offers an interesting distinction between two applications of the notion of knowledge, which we should be careful not to overlap in our arguments : «the one being *γνῶναι*, noscere, kennen, connaître, the other being *Εἰδέναι,* scire, wissen, savoir» (MT: 18). There is a *knowledge of acquaintance* or familiarity with what is known, and a more *conceptual knowledge*, expressed in judgments or propositions. According to the English philosopher, the former notion deals with «phenomenal bodily communication, it is less intellectual than the other and is the kind of knowledge that we have of things by presentation to senses or representation in picture or type, a 'vorstellung'». As to what concerns the *knowledge about*, this is «embodied in 'begriffe' or concepts without any necessary imaginative representation, is in its origin the more *intellectual* notion of knowledge» (MT: 18).

The epistemological distinction of two kinds of knowledge will remain pivotal in James, and as known the same distinction will be recovered by B. Russell (1910). On this basis, James claims that «the entire industry of Hegelian school», disregarding the distinction between two complementary notions of knowledge, has concluded by the "speechlessness" of sensation – the inability of sensation to *know about* itself or something else – that sensation is but meaningless. In fact, they have considered «significance» as the only function of mental states, and moreover they have taken significance in the literal sense of «standing as the sign of other mental states». The

point at issue, for James, is exactly this continuous slipping of *direct acquaintance* into *knowledge about* which ends up in the depart of all significance from the situation. It is an easy step to go from the only recognition of conceptual knowledge to worst and worst contemning of the feeling as meaningless, senseless, vacuous, absurd and inadmissible; but then, can this perfect intellectual knowledge keep the distance from «some acquaintance with *what* things all this knowledge is about?» (MT: 19).

Against idealists, James is contending that the *knowledge about*, that is to say the knowledge of the relations of our *feeling of q* with other feelings or its context, is a secondary order knowledge, and overall he is contesting the assumption that such a conceptual knowledge be a necessary precondition to any other knowing cognition. The logical distinction between *denotation* and *connotation* of significance may help to get the point. To notice that our *feeling of q* does not know anything about its *context* is not an objection to its cognitive function *tout court*. On the contrary, James is arguing that the *acquaintance knowledge* given by our feeling of q is the preliminary experiential encounter with reality and the original *text*ure of our knowledge. Direct experience is yet a form of knowledge, giving the *text*, the *reference*, the *what* of cognition; the knowledge *about* it is just this preliminary direct acquaintance with a *con*text added.

However, even adopting the distinction of *knowledge by acquaintance* and *knowledge about* in the line of British empiricism, and thus vindicating the cognitive function of the first feeling, James has to face another serious objection which arises with the fact that the notion of real cognition implies an unmediated dualism of the knower and the known. We can be sure that our feeling is cognitive in the specific sense of knowledge, only when we discover that the *q* felt exists elsewhere than in our *feeling of q*, and is not a mere dream.

> A feeling feels as a gun shoots. If there be nothing to be felt or hit, they discharge themselves *ins blaue hinein.* If, however, something starts up opposite them, they no longer simply shoot or feel, they hit and know (MT: 20).

According to James, the function of cognition of our feeling is *accidental*, *synthetic* and *falls outside its being*, the feeling itself cannot make the discovery of its specific cognitive function. James is contending that the self-transcendent function of cognition in no way alters the nature of our *feeling of q* (known), rather it is a higher function exercised by the knower. This epistemological dualism or gulf between the knower and the known, the knower having the *extensive* view and the known having the *intensive* view, becomes problematic as soon as we have to accord the two parts.

The criterion of *resemblance* between the *real q* and the *feeling of q* is not sufficiently cogent in the hypothetic situation of «a number of real *q*'s in the field», where our feeling of q *indifferently* resembles a number of real q. James insightfully observes that our feeling of q *declares no intention* in this respect, and no *knowledge* can be drawn relying on mere external resemblance, «resembling, *per se,* is not necessarily representing or standing-for at all» (MT: 21).

James observes that in regard to *abstract qualities*, such as the q quality of our feeling, resemblance is the only grade of connection that we can verify between our feeling of q and several existing real q. The point is that we can verify the *meaning* of our feeling, more specifically a) the peculiar real q that it resembles, and 2) its specific intention to represent that real q (and not only to resemble it), only on *practical* ground. The bare quality, instead, «being without context or environment or *principium individuationis*, a quiddity with no hæcceity, a platonic idea» can only be resembled by our feeling and hence there is no way to verify a) nor b). Indeed, even in a «genuine pluralism of editions to the quality q», each one provided of a specific context, all that our feeling can do is to resemble a specific real quality and its context, or better duplicate it. However, the skeptical doubt is not overcome, as for resemblance, again we may wonder: «duplication and coincidence, are they knowledge?» (MT: 21). More generally, why should we not accept resemblance as an «exhaustive» description of our cognition of reality?

At this point James claims that «every actual feeling *does* show us, quite as flagrantly as the gun, which *q* it points to; and practically in concrete cases the matter is decided by an element we have hitherto left out» (MT: 22). In a different metaphysical frame, that of a richer world, James leaves abstractions aside and focuses on possible instances, to show what we *means* for cognitive function. Actually, taking the concrete example of «a dream of the death of a certain man» (feeling) and the simultaneous real death of the man (reality), James shows the practical way in which we decide the nature of this *feeling-reality* relation, whether and why we consider it a *cognition* or a mere *resembling coincidence*. According to James, men and women's criteria to decide between coincidence or knowledge are «*The falling of the dream's practical consequences* into the real world, and the *extent* of the resemblance between the two worlds» (MT: 22-23)[109]. In this way, James turns the burden of proof on critics or skeptics. According to the accidental evolutionistic disposition of nature, he states that «All feeling is for the sake of action, all feeling results in action». This means that self-

transcendence, which is the *sign* of knowledge, has been brought back in the practical world and that its transcendentalist logical foundation has been dethroned by social and inter-subjective considerations. The epistemologist or our higher function of knowledge attributes *real cognition* to a feeling on the basis of its *practical self-transcendence*. To *meaning* the same world should results in *pointing to* the same world, and this is a matter of *affection*. The fact that another human being *acts* as I would act if I had an headache, or that he is affected from my headache as if he had had the same feeling, is the *sign* on which I can *think* that we (or our feelings) are *meaning* the same world. Practical effects is the self-transcendence of feeling, that is to say another human being knows my world in as much as he *affects* my world as I would much of it; and before I can be sure you mean it *as I do,* you must affect it *just as I should* if I were in your place. Then I, your critic, will gladly believe that we are thinking, not only of the same reality, but that we are thinking it *alike*, and thinking of much of its extent.

The metaphysical dilemma of the condition of possibility of knowledge is not at issue. However, the metaphysical and the practical-psychological point of view are the opposite extremes as to what concerns the *method*. As shown, from the practical point of view, we can only *infer* the existence of other human being's feelings from the *influence* of their feelings on our world. Practically we infer that men and women have the *notion of fire* in general because we observe that they *act* towards the fire *as we would act* towards it. As a matter of fact, first we become aware of the reality meant by our feeling and then we look for resemblance; while as critics or from a speculative point of view, we move inversely from resemblance to gain the meaning of our feelings. Our practical inference of the *meaning* of other's feeling is never perfectly determined nor theoretically sure, it is a reconstruction but for James it is practically sufficient for us «to hope and trust that all of our several feelings resemble the reality and each other» (MT: 24)[110]. In brief, a universe made of solipsistic worlds is unbelievable on practical grounds.

The term of our inferences is the *mind* of other human beings. Even in the case of *poetry and fiction* we can say that the world of Ivanhoe, for instance, is a little common world for all the minds *indirectly* affected by or affecting it. Because of this evidence, James states that: «*The feeling of q knows whatever reality it resembles, and either directly or indirectly operates on.* If it resemble without operating, it is a dream; if it operate without resembling, it is an error» (MT: 26).

At the end of the article, James confesses to have treated *percepts* «as the only realm of reality» in this article, and he adds that «I now treat concepts as a co-ordinate realm» (MT: 32). The co-ordination of the realms of percepts and concepts is focused in SPP and ERE. James was aware that his discourse seemed to address only perceptions and to elude symbolic or conceptual thinking. Indeed, his point is that the symbolic development of thought to be really cognitive should terminate in a perceptual objects as well, it should show the power of leading us practically or logically to a sensation or an image in the mind.

> *A percept knows whatever reality it directly or indirectly operates on and resembles; a conceptual feeling, or thought, knows*[9] *a reality, whenever it actually or potentially terminates in a percept that operates on or resembles that reality, or is otherwise connected with it or with its context.* The latter percept may be either sensation or sensorial idea; and when I say the thought must *terminate* in such a percept, I mean that it must ultimately be capable of leading up thereto—by the way of practical experience, if the terminal feeling be a sensation; by the way of logical or habitual suggestion, if it be only an image in the mind (MT: 27-28).

The most important sign is the *perceptive* terminus, but James shows that also the *perceptible method-process* that the thinker follows while developing his thinking can meet the reality of the critic. For instance, the critic or epistemologist could be *lenient* towards James's vague and inadequate consciousness of a sentence read in a book, in so far as he recognizes that James's thought makes him act on the senses of the critic «much as he might himself act on them, were he pursuing the consequences of a perception of his own. […] the pivot and fulcrum and support of his mental persuasion, is the sensible operation which my thought leads me, or may lead, to effect—the bringing of Paley's book, of Newton's portrait, etc., before his very eyes» (MT: 29).

This long and complex article reveals important aspects of James's *theory of truth*: 1) the inferential perceptive-affective reconstruction and verification of our faith in a common world, 2) the pragmatic conception of meaning as possible difference of practice[111], 3) the leading or "methodological" description/function of truth.

In the conclusive notes to this text, for the new publication, James underlines again that the *truth-function* developed in Pragmatism was already there. Among the most interesting comments, he appreciates his description of «the experienceable environment, as the vehicle or medium connecting knower with known, and yielding the cognitive *relation*», «the notion of *pointing,* through this medium, to the reality, as one condition of our being said to know it» and «the elimination of the

'epistemological gulf,' so that the whole truth-relation falls inside of the continuities of concrete experience» (MT: 32).

The following extract *The Tigers in India* is part of another article *The Knowing of Things Together* published in the «Psychological Review» in 1895. This article addresses the problem of the synthetic unity of consciousness in psychology. James moves from the fact that we *know things together* as we taste lemon and sugar at once drinking a glass of lemonade. Actually, he pragmatically investigates what do we *mean* by the terms involved in this inquiry, namely "things" and "know". According to Berkeley and his ultimate scholars, as S. Hodgson, «things have no other nature than thoughts have, and we know of no things that are not given to somebody's experience» (EPH: 72). In this regard, the distinction between concept and percept that was stressed in *The Function of Cognition*, was already smoothed ten years later, and his conception of co-ordinate realms of reality was already there in his words : a thing «whatever it be, the stuff of which it is made is thought-stuff, and whenever we speak of a thing that is out of our own mind, we either mean nothing; or we mean a thing that was or will be in our own mind on another occasion; or, finally, we mean a thing in the mind of some other possible receiver of experiences like ours». As to what concerns knowing, given the epistemological distinction between «knowing them [things] immediately or intuitively, and knowing them conceptually or representatively», James focuses here on the problem of conceptual or symbolic things, as the tigers that are now in India. More specifically, this example show the problematic issue on those things that we know *only* conceptually or representatively. James claims that what is generally *meant* by knowing here and now the tigers in India is the peculiar situation of presence in absence, that is to say a thing absent in body becomes present to our thought, or our thought being present to it.

The scholastic philosophy, which James considers «common sense grow pedantic», would explain it as an *intentional existence* of the tigers in India, whereas people would mean by knowing the tigers in India the mental activity of *pointing* towards them. In this case the epistemological answer to what this pointing is known-as is that «The pointing of our thought to the tigers is known simply and solely as a procession of mental associates and motor consequences that follow on the thought, and that would lead harmoniously, if followed out, into some ideal or real context, or even into the immediate presence, of the tigers» (EPH: 74). The core point of this definition is that there is «no self-transcendency in our mental images *taken by themselves*. They are one

physical fact; the tigers are another; and their pointing to the tigers is a perfectly commonplace physical relation, *if you once grant a connecting world to be there*» (MT: 34). James is clearly stating that things are separate, namely ideas and tigers, and that *pointing* means a natural operation of external and adventitious connection. To know *here and now* an absent object, such as the tigers in India is an «anticipatory name for a further associative and terminative process that may occur». Actually, the processes of knowing are just natural processes (Cf. MT: 84) *leading* us through a context supplied by the world to know an object. In this view, the representative knowledge should also be described only as «an outer chain of physical or mental intermediaries connecting thought and thing».

At this point, James considers objects that are present to our direct perception. The case is the immediate acquaintance with the white paper before our eyes. There is no context or chain of intermediaries to distinguish the *thought-stuff* and the *thing-stuff*, they are just the same. This face to face knowledge is what we would have also after being led by our conceptual knowledge to the tigers in India. In the case of the paper, our thought surrounds the object so that we should find a different way to explain what we mean by knowing the paper in this situation. James observes that our belief in the paper rests on its ultimate properties, such as whiteness, smoothness, or squareness and that for the moment he is not interested into investigating if these properties be the truly ultimate aspects of the paper. He wants to show what does it means that such a mental state of direct acquaintance knows that present object. Leaving aside the concrete cases of knowledge, that is to say the possibility that the same object enters into different experiences, and that its apparent properties could be revealed only by future experiences, and taking «the private vision of the paper in abstraction from every other event, as if it constituted by itself the universe» then James claims that :

> the paper seen and the seeing of it are only two names for one indivisible fact which, properly named, is *the datum, the phenomenon, or the experience*. The paper is in the mind and the mind is around the paper, because paper and mind are only two names that are given later to the one experience, when, taken in a larger world of which it forms a part, its connections are traced in different directions. *To know immediately, then, or intuitively, is for mental content and object to be identical.* (MT: 75).

This definition of the knowledge by acquaintance is very different from the definition of the representative or conceptual knowledge, which is the passing smoothly towards them through the intermediary context that the world supplies. Moreover, James knows that his definitions are framed into a naïf realism or common sense's point of view, no hints are med to possible idealistic objections.

Nonetheless, the point is deflate the evocative power of the notion of self-transcendency of mental states, giving a natural-operational description of the two functions of knowledge. As we shall see in ERE, James means that « *the datum, the phenomenon, or the experience*» can be referred to different associative systems, mainly that of «the experiencer's mental history, or that of the experiences facts of the world». James tries to represent the possible lines of interaction of the same object in the mental history of different persons, it becomes so far a public thing, its outer history is represented by the horizontal line. The object that appears in all the vertical and horizontal lines represent the same *stuff* and this drawing is very simple, according to James the lines of its outer history should be «looped and wandering».

Many years later, in *A Word More About Truth* (MT), James will come to explain the cognitive meaning of truth assuming Ch. A. Strong's paradigmatic distinction between «ambulatory» and «saltatory» relations. In the first section of the article he explicitly depicts the two different epistemologies respectively framing the conception of knowing-relations either as ambulatory or as saltatory. In this view, James claims that the main reason why his account of knowing is considered so unsatisfactory is «the vulgar fallacy of opposing abstractions to the concretes from which they are abstracted» (MT: 82). In the second section, instead, he tries to address again the stream misunderstanding of his criteria of satisfaction in order to establish the objectivity of the pragmatist epistemology. James's word more about truth is that there is «no *room* for any grade or sort of truth outside of the framework of the pragmatic system, outside of that jungle of empirical workings and leadings, and their nearer or ulterior terminations» (MT: 89).

However, James defines his view of knowledge as *ambulatory* in so far as it «describes knowing as it exists concretely, while the other view [the saltatory view of knowledge] only describes its results abstractly taken» (MT: 80). In this article he is making clear the distinction between his pragmatist epistemology and what he defines as *erkenntnisstheorien.* For the moment he postpones the ontological problem as a second order discussion. In fact, his analysis is focused on the knowing-relation, while the "sensible" or "ideal" real constitution of our objects of knowledge is not matter of investigation here. Indeed, the cognitive function of ideas is to lead us through intermediaries towards *its* object. James is interested in showing that the essential feature of knowing-ideas is their power to bring us in the ideal or practical neighborhood of their object, so that we can deal with them practically or

conceptually. The function of ideas is thus *instrumental*, they enable us «the better to *have to do* with the object and to act about it». The core argument is already his *radical empiricism*, since James is claiming that ideas and objects are «bits of the general sheet and tissue of reality at large» and therefore the leading process is not a sort of *transcendent* relation. This idea-motor ambulation through experience is what improves our position – in terms of acquaintance and conduct – respect to the object, and that help us to know it *better* or *more truly*.

> My thesis is that the knowing here is *made* by the ambulation through the intervening experiences. If the idea led us nowhere, or *from* that object instead of towards it, could we talk at all of its having any cognitive quality? Surely not, for it is only when taken in conjunction with the intermediate experiences that it gets related to *that particular object* rather than to any other part of nature. Those intermediaries determine what particular knowing function it exerts. The terminus they guide us to tells us what object it 'means,' the results they enrich us with 'verify' or 'refute' it. Intervening experiences are thus as indispensable foundations for a concrete relation of cognition as intervening space is for a relation of distance. (MT: 80-81).

The concrete description of cognitive processes, as natural processes, falls entirely within experience and there is no need to use other categories to describe them. To James concrete cognition «means determinate 'ambulation,' through intermediaries, from a *terminus a quo* to, or towards, a *terminus ad quem*». As James has carefully shown in the *Function of Cognition*, the particular feeling is speechless but not a psychical zero. This mute particular vehicle guide us through accidental conjunctions which bring us to the particular object meant. The intervening experiences are thus indispensable. The cognitive relation is particular and when we abstract particulars from the vehicle of conjunction we incur in the risk of considering «the resultant self-contradiction as an achievement of dialectical profundity». Again, James claims that no mortal leap and no gap exist in our experience, but that interval was filled with some ideational or sensational material. This empirical restoration of the «modicum of reality» is important to give the frame of a serious discussion in which we «escape entanglement with special cases without at the same time falling into gratuitous paradoxes». In this light, we can also describe the general features of cognition without forgetting that the abstract treatment is genuinely useful. The *epistemological chasm* is thus the result of an intellectualistic treatment of our concrete experience of knowing relations. The second-hand conceptual ordination of reality is then taken as original in point of time and essentially detached from its authentic functional use.

As in PP, James distinguishes the reflective level of analysis on our cognitive processes (*post rem*), from any real moment of knowing (*in rebus*). The fallacy to be

avoided is what James calls *vicious intellectualism* (Cf. PU), which consists in a positive mistake of abstractness and onesidedness.

The essence of the matter for me is that altho knowing can be both abstractly and concretely described, and altho the abstract descriptions are often useful enough, yet they are all sucked up and absorbed without residuum into the concreter ones, and contain nothing of any essentially other or higher nature, which the concrete descriptions can be justly accused of leaving behind. Knowing is just a natural process like any other. There is no ambulatory process whatsoever, the results of which we may not describe, if we prefer to, in saltatory terms, or represent in static formulation.

As to what constitutes generals descriptions James is not claiming any psycho-physical strict reductionism, rather his intention is to avoid neat oppositions. The real present experience offers no such dualisms, but more or less completer descriptions of facts according to different conveniences. As in the case of his room being above the aboveness *ante rem* is for James a *post rem* extract from the aboveness *in rebus.* The *static essences* live embedded in *moving processes*, We may indeed talk, for certain conveniences, as if the abstract scheme preceded

But this should not debar us on other occasions from using completer forms of description. A concrete matter of fact always remains identical under any form of description, as when we say of a line, now that it runs from left to right, and now that it runs from right to left. These are but names of one and the same fact, one more expedient to use at one time, one at another. The *full* facts of cognition, whatever be the way in which we talk about them, even when we talk most abstractly, stand inalterably given in the actualities and possibilities of the experience-continuum.[7] But my critics treat my own more concrete talk as if *it* were the kind that sinned by its inadequacy, and as if the full continuum left something out. A favorite way of opposing the more abstract to the more concrete account is to accuse those who favor the latter of 'confounding psychology with logic.' Our critics say that when we are asked what truth *means,* we reply by telling only how it is *arrived-at.*

> But since a meaning is a logical relation, static, independent of time, how can it possibly be identified, they say, with any concrete man's experience, perishing as this does at the instant of its production? This, indeed, sounds profound, but I challenge the profundity. I defy anyone to show any difference between logic and psychology here. The logical relation stands to the psychological relation between idea and object only as saltatory abstractness stands to ambulatory concreteness. Both relations need a psychological vehicle; and the 'logical' one is simply the 'psychological' one disemboweled of its fulness, and reduced to a bare abstractional scheme. (MT: 86).

In the *preface* to MT James claims that antipragmatists criticism are weapons for the rationalists argument in so far as they try to show *truth-relation* – as every knowing relation – to be transcendent. Rationalists indeed deny that the psychological *workings* that go with truth also constitute it. To resist the pragmatist account of truth they have to look for «*something* numerically additional and prior to the workings is involved in the truth of an idea» and they use the *object*. More specifically, rationalists accuse pragmatists to deny the truth's object and this accuse is often misunderstood as if pragmatist would deny the existence of reality. James reaffirms that «the existence of the object, whenever the idea asserts it 'truly,' is the only reason, in innumerable cases, why the idea does work successfully» (MT:). Moreover, James underlines that to transfer the word truth from the *idea* to the *object*'s existence is an «abuse of language» -- or we may say a movement that introduces arbitrariness in language – as the same object's existence, instead of the workability of ideas respect to the object, should explain both truth and falsehood of ideas.

As to what concerns the critique to James's notion of objectivity, it is interesting to consider very briefly the *Fourth misunderstanding: No pragmatist can be a realist in his epistemology* in *The Pragmatist Account of Truth and its Misunderstanders* (MT). This is supposed to follow from his statement that the truth of our beliefs consists in general in their giving satisfaction. Of course satisfaction *per se* is a subjective condition; so the conclusion is drawn that truth falls wholly inside of the subject, who then may manufacture it at his pleasure. True beliefs become thus wayward affections, severed from all responsibility to other parts of experience. It is difficult to excuse such a parody of the pragmatist's opinion, ignoring as it does every element but one of his universe of discourse. The terms of which that universe consists positively forbid any non-realistic interpretation of the function of knowledge defined there. The pragmatizing epistemologist posits there a reality and a mind with ideas. What, now, he asks, can make those ideas true of that reality? Ordinary epistemology contents itself with the vague statement that the ideas must 'correspond' or 'agree'; the pragmatist insists on being more concrete, and asks what such 'agreement' may mean in detail. He finds first that the ideas must point to or lead towards *that* reality and no other, and then that the pointings and leadings must yield satisfaction as their result. So far the pragmatist is hardly less abstract than the ordinary slouchy epistemologist; but as he defines himself farther, he grows more concrete. The entire quarrel of the

intellectualist with him is over his concreteness, intellectualism contending that the vaguer and more abstract account is here the more profound.

III.4.4 Psycho-logical (experiential) continuity as Radical Empiricism

> Pluralism in this sense is indistinguishable from „radical empiricism", which thus forms the main theme of the book. Radical empiricism consists essentially in converting to the uses of metaphysics that „stream of consciousness" which was designed originally for psychology" (Perry, R. B., *The Thought and Character of William James*, cit., vol. II, p. 586) .

The collection of *Essays in Radical Empiricism* appeared in 1912, posthumously edited by Ralph B. Perry. We know that this book is not exactly representative of James's intentions[111]. James talks about *radical empiricism* for the first time in the 1896's *preface* to *The Will to Believe and Other Essays in Popular Philosophy*[113]. Again in the 1909's *preface* to *The Meaning of Truth* he gives another seminal definition of his doctrine[114]. As mentioned, James explains that his interest in the problem of truth is mainly due to the logical connection between that pragmatic conception of relations and his doctrine of radical empiricism. This statement is important to understand John McDermott's claim that «James's writings on the "Will to believe," *The Varieties of Religious Experience, Pragmatism, A Pluralistic Universe,* and "psychical research" are rootless and subject to misunderstanding unless they are examined in the light of the considerations and claims of radical empiricism» (ERE: xii).

In the first chapter, I have showed that James's radical empiricism was first elaborated in the field of psychology. There he incurred in philosophical dilemmas generated by the new psychology of the late 19th century and he started to think about possible solutions. Actually, both the long, interdisciplinary and difficult gestation of radical empiricism and its implications for his subsequent thought are not taken into account in this posthumous collection. Moreover, *The Function of Cognition* (1885) and *The Knowing of Things Together* (1895) were originally intended by James to be part of a future publication on radical empiricism. According to McDermott's reading *Some Omissions of Introspective Psychology* and the two essays just quoted above respectively contained in nuce the three main features of James's radical empiricism: his radically empirical *doctrine of relations*, his integrated *epistemology of* "*pure experience*" and his novel *doctrine of consciousness*.

In the first essay *Does 'Consciousness' Exist ?* James claims that consciousness does not exist as an entity, it is just a mere echo «left behind the disappearing 'soul' upon

the air of philosophy» (ERE: 4). Many authors seemed to be on the point of abandoning the notion of consciousness in favor of that of absolute experience, but James observes that they were not radical enough in their negations. The common sense dualistic framework has been opposing *thoughts* and *things* under different labels (spirit and matter, soul and body) as equipollent substances. The Kantian introduction of the transcendental ego in place of the soul altered this balanced relation. As shown, James has tried to give the pragmatic equivalent of consciousness in realities of experience and now he is ready to delete consciousness from the list of first principles. More specifically, James is denying the ontological dualism which is in the background of empirical (common sense and scientific method) and rationalist epistemologies. The word consciousness does not stand for an entity, but it does stands for the function of *knowing*. James proposes his monistic hypothesis of one primal stuff or material in the world to call *pure experience*. In his view, if everything is composed of the same stuff, consciousness or the function of knowing can be explained as «a particular sort of relation towards one another into which portions of pure experience may enter. The relation itself is a part of pure experience; one of its 'terms' becomes the subject or bearer of the knowledge, the knower, the other becomes the object known» (ERE: 4-5).

James believes that his monistic hypothesis goes in the direction of many other contemporary philosophical and scientific tendencies. Actually, the radicalism of his empiricist view seems to be provable by facing neo-Kantism's alternative view. Indeed, previous forms of dualism have been already overcome by neo-kantists, and now these authors maintain that consciousness signalizes the fact that the *structure* of experience is dualistic. The very minimum of any actual experience is thus constituted by subject-plus-object. This subject-object distinction is very different respect to classic dualisms, in so far as consciousness is admitted as an *epistemological necessity*. James explains that Kant's successors consider consciousness as «the logical correlative of 'content' in an Experience of which the peculiarity is that *fact comes to light* in it, that *awareness of content* takes place». This is to say that consciousness is an impersonal and atemporal witness of empirical contents, such as the self and its activities. We know that James in PP had to confront his theory of the stream of consciousness with the alternative Kantian view of knowledge. There he tried to show that no knower other than the passing thought was required to a first *acquaintance knowledge*. There he preferred to talk about consciousness as a not originally witnessed *stream of sciousness*. But

according to Kantists no knowledge exists without being witnessed, and moreover they argue that we have an immediate consciousness of consciousness itself, which can be brought out by analysis even if there is no direct evidence that consciousness be something else respect to its content. As in the case of a paint, for neo-kantians experience has a dual constitution involving a *menstruum* and a *mass of content* which can be distinguished by physical subtraction, «we get the *pure* menstruum by letting the pigment settle, and the *pure* pigment by pouring off the size or oil». In the same way, by mental subtraction we can separate the two factors of experience. They are not purely or entirely isolable but we seem to be able to distinguish them enough to know that they are two. On the contrary, James's pragmatist epistemology claims that experience has «*no such inner duplicity; and the separation into consciousness and content comes, not by way of subtraction, but by way of addition* — the addition, to a given concrete piece of it, of other sets of experiences, in connection with which severally its use or function may be of two different kinds. » (ERE: 6-7). Again James offers another example with colors, suggesting that a paint can be a saleable matter in a paint-shop or a feature in a picture on a canvas. Accordingly, any undivided portion of experience can play different parts – the knower or the known, consciousness or content – taken in different contexts of associates. James contends that since "paint" can figure in both groups simultaneously we can speak of it as subjective and objective both at once. As we have seen in MT, James translates the different versions of epistemological dualism into an affair of *relations*, according to pragmatism the epistemological division «falls outside, not inside, the single experience considered, and can always be particularized and defined». The two accounts of experience can be compared in so far as both of them accept double-barrelled terms like 'experience,' 'phenomenon,' 'datum,' '*Vorfindung*.' These terms connote and preserve a certain experiential dualism in philosophy, which was first fashioned by Locke and Berkeley[115]. Their conceptions of the word 'idea' standing indifferently for thing and thought, and that realities are to common sense what ideas are to philosophy were recovered by James. He believes to be just carrying out consistently the 'pragmatic' method which Locke and Berkeley were the first to use, and on this ground he could confront his *concrete and verifiable* interpretation of dualism with the *mysterious and elusive* dualistic description of experience offered by transcendentalist thinkers.

At this point, he tries to explain the case of *perceptual and conceptual experience* in the light of his epistemology of *pure experience* (See also MT). James claims that

philosophy of perception from the time of Democritus was dealing with the paradox that «what is evidently one reality should be in two places at once, both in outer space and in a person's mind». As known, the 'Representative' theories of perception avoid the logical paradox, but James observes that they also violate the reader's sense of life, his sense of direct and immediate perception of physical realities.

The puzzle of how the one identical room can be in two places is at bottom just the puzzle of how one identical point can be on two lines. It can, if it be situated at their intersection; and similarly, if the 'pure experience' of the room were a place of intersection of two processes, which connected it with different groups of associates respectively, it could be counted twice over, as belonging to either group, and spoken of loosely as existing in two places, although it would remain all the time a numerically single thing (ERE: 8).

As James has already shown in MT, he is suggesting that experience can be a member of different *processes*, and just as a point at the intersection of two lines, it can proceed on entirely different lines or systems of associates. For instance the one self-identical "room-experience" can simultaneously enter in different systems of association, which to James are the processes of the *reader's personal biography* and the *history of the house*. Taking the *room-seen*, that is the present perceptual presentation of the room-experience, it is a mere *that* which is, the *last term* and the *first term* of a series of *mental and physical* operations forming incompatible groups. All previous operations end in the actual experience of the room and all future operations move from it, but if we take it in a certain relational context it is our "field of consciousness", if we take it, instead, in as part of the physical context and consider its external relations, it is "the room in which you sit". In other word, the same experience can be treated as belonging to different systems of relations and according to different aims, we can follow the room-experience *only* in the mental direction of its relations or *only* in the physical direction.

In the case of *concepts* we are more biased, but James believes that the *same law of association* holds good in so far as we keep «the immediate, primary, naïf, or practical way of taking our thought-of world». In this view, concepts are taken as bits of pure experience ignoring their relation to possible perceptual experiences. The world of concepts taken in this first intention (not as representative of perceptions) is a world thought-of and not directly felt or seen which come to us – exactly as the world of percepts – at first as a chaos to order. James is trying to dismantle the ontological

dualism deeply rooted in our mentality in order to make room for an epistemological dualism. He keeps the perceptual and the conceptual orders of reality as distinguishable *natural processes*, and in this view he can show that «the doubling-up of the experience has in both cases similar grounds».

James makes clear his intention at the *V Convegno Internazionale di Psicologia* held in Rome in 1905. There he presented a French version of this essay, called *La notion de la Conscience* and at the end of the discussion which followed his lecture he exactly explained his effort to give a most positive content to the *functional dualism* that he accepted.[116]

> **William James**: The discussion has shown how difficult it is to treat these highly abstract questions briefly. They need patience and length of time. The audience will therefore excuse me from entering into the objections in detail. I will only say one thing to defend myself against misconception. I am neither a materialist nor an idealist. I am rather a natural realist, in as much as the dualism which I deny is an *ontological* dualism; and I not only accept the *functional* dualism of consciousness and content, but I try to show exactly in what it consists. I maintain that certain parts of an originally neutral « pure experience » assume the *rôle* of inner, and other parts that of outer facts, in consequence of the different contexts and relations in which they find themselves thrown. I explain knowledge as a relation that arises *inside* of experience, between certain of its faits. The ordinary dualism treats the black words « ego », « subject », « object », as principles of explanation. I try to show exactly what *practical facts* these words cover and mean. So far from denying their difference, I *explicate* it, and give it a most positive content.

In point of reality the parallelism between *presently felt* and *remotely thought* experiences is complete. All mental stuff is not only subjective, but both subjectivity and objectivity lies in *non-perceptual experiences* themselves as well as in *perceptual experiences*. In its pure state, or when isolated, there is no self-splitting of it into consciousness and what the consciousness is 'of.' Its subjectivity and objectivity are functional attributes solely, realized only when the experience is 'taken,' *i.e.,* talked-of, twice, considered along with its two differing contexts respectively, by a new retrospective experience, of which that whole past complication now forms the fresh content. The realization of subjectivity and objectivity is a matter of *relations*, it falls outside the stuff of experience which is itself a pure *that* in its original intention. Subjectivity and objectivity are *functional attributes* of pure experience. In SPP James calls «logical empiricism»[117] his view of concepts as a coordinated realm of reality and also declares that his book is *excentric* «in its attempt to combine logical realism with an otherwise empirical mode of thought» (SPP: 58). Therefore, making abstraction from its function of representation of perceptual objects, each non-perceptual experience «tends to get counted twice over [...] figuring in one context as an object or field of objects, in another as a state of mind» (ERE: 10). James remarks that the experience is

all consciousness or *all* content according to the context in which we take it, no internal self-disjunction is there in its own part.

Taking the *room thought-of*, a conceptual experience, we can distinguish the same bit of experience according to its associative relations. Either grouped with the system of external realities or with the stream of our internal thinking it cohere with the context and tends to return to its associates when we try to loosen it. Indeed, the system of external realities show a stronger relations – the stubbornness of facts – whereas the stream of our thought shows the fluidity of fancy. As evident, James is not taking into account the *system of ideal realities* here. In fact, relations of comparison, classification, order of values etc. also are stubborn, and would assign a definite place to the *room thought-of*. However, James is showing that the conceptual experience of the room, as well as the perceptual experience, gets counted twice over: it plays the role of being *Gedanke* and *Gedachtes,* the thought-of-an-object, and the object-thought-of, both in one; and this duplicity can be explained without paradox or mystery, that is to say without appealing to self-transcendency of the idea nor to representative theories.

> The instant field of the present is at all times what I call the 'pure' experience. It is only virtually or potentially either object or subject as yet. For the time being, it is plain, unqualified actuality or existence, a simple *that.* In this *naïf* immediacy it is of course *valid;* it is *there,* we *act* upon it; and the doubling of it in retrospection into a state of mind and a reality intended thereby, is just one of the acts. The 'state of mind,' first treated explicitly as such in retrospection, will stand corrected or confirmed, and the retrospective experience in its turn will get a similar treatment; but the immediate experience in its passing is always 'truth,' practical truth, *something to act on,* at its own movement. If the world were then and there to go out like a candle, it would remain truth absolute and objective, for it would be 'the last word,' would have no critic, and no one would ever oppose the thought in it to the reality intended (ERE: 13).

Therefore, no ontological dualism is ever in the bits of experience, but only retrospectively or when we have to consider our experience we can talk about it in dualistic terms. A very similar view of consciousness is that of R. B. Perry. In a note, James observes that his last article in the *Psychological Review* shows how Perry's position is close to James's view. According to his friend and colleague, every field of experience is a 'fact', which «becomes 'opinion' or 'thought' only in retrospection, when a fresh experience, thinking the same object, alters and corrects it. But the corrective experience becomes itself in turn corrected, and thus experience as a whole is a process in which what is objective originally forever turns subjective, turns into our apprehension of the object» (Perry, 1904a). The interesting aspect of their explications is the through and through or processing correction of truth by experience. Such is the anti-Cartesian thesis of James, consciousness is not a special stuff as the *res cogitans*

was, rather consciousness connotes a kind of external relation. Therefore, he claims that: «*The peculiarity of our experiences, that they not only are, but are known, which their 'conscious' quality is invoked to explain, is better explained by their relations—these relations themselves being experiences—to one another* » (ERE: 14).

Here James explicitly avoids to explain the knowing of perceptual by conceptual experiences, as he has partially done in his 1885 and 1895 articles. As we have seen, the notion of consciousness was not necessary to define what the *knowing* actually and practically amounts to. There he described knowing as the function of leading-towards and terminating-in percepts, which developed through a series of transitional experiences supplied by the world. He prefers, instead, to reply to objections possibly moved against his theory as exposed in this 1904 article. Actually the first objection may address the nature of pure experience, *what* does it consist of? James replies that his talking about a unique stuff of pure experience should not lead to misconception. The bits of pure experience are just made of *that*, that is to say they are made of what appears (space, intensity, flatness, brownness, heaviness) or what not[118]. James makes clear that there is no *general* stuff of which experience is made, rather «there are as many stuffs as there are 'natures' in the things experienced». In this pluralistic view, things do not seem to be made of any universal element[119], experience is only a *collective name* for all sensible natures.

The second and stronger objection contests the logical possibility of a *functional dualism*, which does not rely on any ontological dualism. The point is *how* could radically different attributes adhere to the same experience. As a reply, James maintains that things and thought are not radically heterogeneous.

James's concern for the "feeling of relation," which he holds to be the major omission of introspective psychology. James opposes Spencer's attempt to reduce the number of relations among things to a minimum, at times limited to likeness and unlikeness, or to coexistence in space and sequence in time. While James sees the admission of even these limited relations as a step beyond the relation of simple "contiguity" or "resemblance," both characteristic of the earlier associationistic position, he nonetheless finds Spencer's view stingy and bereft of the relational thickness with which our experience concretely comes. Couched as a response to Spencer, this critique actually provides the basis from which proceeds, in subsequent writings, James's doctrine of the stream of consciousness, the importance of

experience at the fringe of consciousness, the meaning of knowledge by acquaintance, and, finally, radical empiricism.

Actually the radicalization of empiricism means that empirical roots are knocked in "The instant field of the present" (ERE, p. 13). The actual processes of experience are the unavoidable conditions of our thinking and, as natural beings, we are part of natural reality. Profundity may supply what extension can give us only representatively. This is not a call for extremism, not in any absolutistic sense. Rather James claims that particular and concrete experience is the matrix of all our higher conceptual construction, and we are bound to this broader level of perceptual partiality, fallibleness, prove and errors growing of knowledge, either as individuals and as societies. The precariousness of our life and the uncertainty of our knowledge are recomposed in this humanistic view, which reestablish the priority of living respect to knowing (particularly conceptual knowing) enlarging the image of human beings and approaching it through a more scientific methodology. As Peirce, also James deals with methodological concerns since he immediately grasped that one of the most pregnant omission of introspective psychology were *felt relations*. Actually, James focuses the stiffing of common sense metaphysical view in ordinary language and the intellectualistic interpretation of this limit as a positive connotation of reality. The logical structure of reality would thus result both from a *psychological omission* and from a jointly responsible/corresponding lack of *socio-logical space* for novelties. As evident, such a structural rigidity was considered by James as the great obstacle to radical empiricism. More specifically, he framed the situations in terms of mental habits, he observes in the contemporary mind is already rooted the rationalist belief that experience as immediately given is all disjunction and no conjunction, and that to make one world out of this separateness, a higher unifying agency must be there. The *nature of relation* became his study-case to exemplify the radical distinction between the different epistemologies, and indeed different mentalities.

What is brand new is not logically determinable a priori, first it emerges and then it reassess the social setting. The situation was very difficult, too rigid schemas were produced because of a too rigid and absolutistic mentality. To James absolutism is first and foremost a fallacy which is promoted by out mentality in order to obtain the practical consequence of certainty. James's arguments shift from the aesthetic, to the epistemological and the metaphysical level of discourse. His attempt to humanize philosophy is rooted in the radical contingency of human life, which he approaches by

an empirical methodology and a radical attention to particulars. The drama of possibility[120], as it has been recently called, is the dramatic situation of human beings actively dealing with precariousness and experiential continuity. As we shall see in the conclusions, the continuity of experience is the turning point of James's life-long reflection, which started through the analysis of the felt continuity of the stream of thought. This doctrine of continuity was the very source of all his later development of radical empiricism, pragmatism and pluralism.

To the readers of *Pragmatism,* the term "cash-value" is over-familiar. It should not go unnoticed that its use here in "A World of Pure Experience" comes in a section devoted to "Objective Reference," in which he invokes the pragmatic method and illustrates the interdependence of radical empiricism and pragmatism. Indeed, if James had anticipated the misunderstandings of the criticisms that greeted the publication of *Pragmatism,* he might very well have offered the following words from the conclusion of "A World of Pure Experience" as its preface:

> These relations of continuous transition experienced are what make our experiences cognitive. In the simplest and completest cases the experiences are cognitive of one another. When one of them terminates a previous series of them with a sense of fulfilment, it, we say, is what those other experiences 'had in view.' The knowledge, in such a case, is verified; the truth is 'salted down'» (*ERE,* pp. 42–43).

The Thing and Its Relations and *The Experience of Activity* were both published in 1905, respectively in the «Journal of Philosophy, Psychology, and Scientific Methods» and in the «Psychological Review». These essays appear as appendices in PU and were later collected in ERE. They present interesting points to focus, and several connections with James's previous works to underline before heading for conclusions. The first one is a sort of a sequel to *A World of Pure Experience*. In the latter, in fact, James sketched a first and probably too naïf solution to the problem of relations on which he is now to expand. The general view is that «the immediately experienced conjunctive relations are as real as anything else». The opposition between rationalists and naturalists (or pragmatists – cf. ERE:) concerns the ground of cognition, since the former maintain that it is logically absurd that one and the same world be cognized by two minds. The dialectic reason is that one object cannot stand in two relations at once. In fact, the world taken in the second relation cannot be the same term taken in the first relation. As evident, this position is at odds with radical empiricism: the immediate experience L—M—N would be logically constituted by two different and unbridgeable finite experiences L—M and M—N. James is focusing upon the 6th

section of A World of Pure Experience, where he confronts his theory with Bradley's. However, as in Principles, this dialectic seems to rely upon the Humean notion that «distinct perceptions are distinct existences» and that «our mind never perceives any real connection among distinct existences» (ERE:). Moreover, the origin of this argument is found in language and its reason seems to be merely verbal. The fact that we use two sentences to describe different relations, and therefore that the term M compares twice, or in other words the confusion between constitution of language and that of reality is the only reason that James can imagine for the absolutists' claim of the doubleness of the world. He calls such a mistake a "fallacy of composition". According to James's interpretation of meaning as a leading natural process ending in sensible perception, he argues that what is *double* in our analysis is the *same* in our experience since we use concepts as substitutions of experiences. Here James confesses that he is obliged to stress the conjunctive features of the experience-continuum to balance the absolutists' view.

II.4 Considerations

> I find this abuse prevailing among my most accomplished adversaries. But once establish the proper verbal custom, let the word 'truth' represent a property of the idea, cease to make it something mysteriously connected with the object known, and the path opens fair and wide, as I believe, to the discussion of radical empiricism on its merits. The truth of an idea will then mean only its workings, or that in it which by ordinary psychological laws sets up those workings; it will mean neither the idea's object, nor anything 'saltatory' inside the idea, that terms drawn from experience cannot describe. (MT: 8).

In these works James is carrying on a great work of decategorization of concrete individual or depowerment of philosophical categories. The structures of language conveys a certain metaphysics, atomism, His main adversary is intellectual*ism*, not much as a philosophy, but as psychological tendency or mentality to create absolutes and jump from one to another without seriously considering the passages. Not to consider concrete transitions is to avoid qualifications and thus to accept "pure" realities: pure relations and pure objects. More specifically, James contests these philosophical derives (materialism or absolutism) as lying on apparently uncritical or too naïve description of our mental activities and processes which are convenient to support their preconceptions. As human beings we look for certainties, our intellectual faculty works with categories, selecting what something is and what it is not (e.g. the brick in PP). The theoretical way of thinking is *useful* for our practical life, we need to conceptualize the world in order to manage it more easily (conceptual shortcomings). Categories are human's fruits which should be used, but human beings and things *are* not themselves categories. The power of man is not a power of real creation in the sense of being the absolute creator of reality. Human beings live in a context which is not a creation of their own, nor their body is. They have the power of modification of reality and of creation of new from what is yet there. The social and environmental relational condition of human beings is unavoidable and moreover precious. Reality is not an idea, it is not a category in point of genesis and therefore realities are not categories. We categorize the world because it is advantageous, but if this usefulness loses its teleological term which is human beings (that is useful *to* human beings) than we are defeated and enslave from our own faculties. Life or death.

Prejudices are judgments made on preferences, but foundation is not possible a priori, only a posteriori. The empirical inductive methodology moves from the analysis of actual concreteness. There is an inextricable mixture of experienceable functions and objects which is assumed to be reality. The attention to immediate aspects of reality shows its variegate and inexhaustible forms and such a broader and more accurate analysis supports an anti-foundationalist and fallibilistic philosophical view. Between 1800 and 1900 the great epochal passage from absolutes to particulars was going on in the cultural and political panorama. James works for a more human science and for a more scientific humanity. A more human science comes from a more careful drawing of human beings. Science should become able to consider all men and women's experienceable universes of meanings and values, almost uncritically. No ascetic acts, no cuts are admitted preliminarily. Experienceability is the criterion of our limits and possibility of knowledge, and the its categories should be drawn from experience. The great distinction between rationalists and pragmatists is on the methodological level. The former work with deduction, giving a logical primacy to concepts, the latter work with inductive hypothesis and consider percepts as first formations in point of genesis. The full description of reality is given through concrete descriptions, concepts are functional simplifications of reality. The *full* nature of reality is not reproducible conceptually. The integration of physiological studies in the philosophical discourse and the claim for philosophical treatment of scientific issues are complementary requirements. In this view, the methodological reconstruction that was happening in the scientific field according to recent discoveries, and particularly as a consequence of the profound reconsideration of the meaning of scientific truth in the last decennials, was both a paradigm and a means for opening the way to the transparency of procedures and powers in our societies, thus for a more democratic humanity.

The exclusion of temperamental tendencies from our philosophical discussions, that is to say the fact that our psychological expectations, desires, emotions and the like are not considered as influential factors in the construction of our theories and speculations about truth, let «arises thus a certain insincerity in our philosophic discussions: the potentest of all our premises is never mentioned» (P: 11). According to a certain limited and ideal image of human beings -- and correspondent ideal and fixed ideas of his rationality and of truth -- we are led to

unsatisfactory conclusions. Our premises are insufficient because of our obstinate omission of important and powerful aspects that work in our mind and keeps affecting undisturbed our theoretical discourses. James wonders why should we not conceive a philosophy which is more adequate to the new physiological and psychological variegated and growing constitution that has been recently acknowledged. According to the new image of men emerging from the 1800 and 1900 discoveries we need that even our philosophies be adequate to the new anthropologies that contemporary sciences are helping to depict. This means humanism or pluralism.

The history of philosophy is to a great extent that of a certain clash of human temperaments. Undignified as such a treatment may seem to some of my colleagues, I shall have to take account of this clash and explain a good many of the divergencies of philosophers by it. Of whatever temperament a professional philosopher is, he tries when philosophizing to sink the fact of his temperament. Temperament is no conventionally recognized reason, so he urges impersonal reasons only for his conclusions. Yet his temperament really gives him a stronger bias than any of his more strictly objective premises. It loads the evidence for him one way or the other, making for a more sentimental or a more hard-hearted view of the universe, just as this fact or that principle would. He *trusts* his temperament. Wanting a universe that suits it, he believes in any representation of the universe that does suit it. He feels men of opposite temper to be out of key with the world's character, and in his heart considers them incompetent and 'not in it,' in the philosophic business, even tho they may far excel him in dialectical ability. (P: 11).

> But the rationalists who talk of claim and obligation *expressly say that they have nothing to do with our* ***practical interests*** *or* ***personal reasons.*** Our reasons for agreeing are psychological facts, they say, relative to each thinker, and to the accidents of his life. They are his evidence merely, they are no part of the life of truth itself. That life transacts itself in a purely logical or epistemological, as distinguished from a psychological, dimension, and its claims antedate and exceed all personal motivations whatsoever. Tho neither man nor God should ever ascertain truth, the word would still have to be defined as that which *ought* to be ascertained and recognized.(P: 109).

James claims that such a more and more detaching way to deal with reality is an improper source of knowledge. The methodological result of his view shall be the regulative advise that at every step our definitions should go back to perceptual experience to be verified. James's "critique of the empirical reason" is an attempt to pursue a very profound reconstruction of the limits and possibility of knowledge,

according to an anti-Kantian paradigm[121]. His work is mainly an *epistemological one*[122], but all his epistemology is centered on the *perception* (not the conception) of empirical experience. We may talk for James of an "epistemology of experience" provided that we do not interpret "experience" according to a traditional subjectivist declination of this term (cf. Franzese, *a priori naturali*).

Real knowledge should not be supposed to be an all conceiving power on reality, in the sense of possession of reality. Knowledge enables us to deal with reality and to gain practical ends. Intimacy. The priority of perception in James's psychology can be linked, through this passage, to a certain priority of continuity (growing).

Relations. The importance of Bergsonism is due to the radical manner of critique this intellectualist interpretation of knowledge. Indeed, Bergson and James share very similar critiques towards a certain mathematician /neo-Kantian[123] approach to reality, they both are critical of Kant's results and evermore of the usage which some scholars made of his transcendental philosophy. But, as to what concerns the constructive parts of their philosophies, as we have already explained in the previous chapter, they took two very different venues. In fact, Bergson recalled a form of radical ontological *dualism* (*mind/esprit*) whilst James accepted just a form of functional dualism, but on the ontological level he looked for a form of radical *continuity*. Because of the very different outputs of their destruens reflections, we should inquiry a bit in deepen if their critiques had some points of difference and, at last, if they had different opposite interlocutors.

Notes

1. James acknowledges his change of heart in a letter to James Ward on June 27, 1909: «I think the center of my whole Anschauung since years ago I read Renouvier, has been the belief that something is doing in the universe and that novelty is real. But so long as I was held by the intellectualist logic of identity, the only form I could give to novelty was tychistic, i.e., I thought that the world in which discrete elements are annihilated and others created in their place, was the best descriptive account we could give of things; and if the elements were but minute enough, 'scientific determinism' could be kept, as approximating the appearances sufficiently for practical error to be avoided in our dealings with nature's 'laws'. This sticks in the human crop-none of my students became good tychists! Nor am I any longer, since Bergson's synechism has shown me another way of saving novelty and keeping all the concrete facts of law-in-change» (CWJ12: 278-9).

2. In *The Experience of Activity* (1904), replying to the accusation of «being the assertor of a metaphysical principle of activity», James claims that «As a matter of plain history the only 'free will' I have ever thought of defending is the character of novelty in fresh activity-situations. If an activity-process is the form of a whole 'field of consciousness,' and if each field of consciousness is not only in its totality unique (as is now commonly admitted) but has its elements unique (since in that situation they are all dyed in the total) then novelty is perpetually entering the world and what happens there is not pure repetition, as the dogma of the literal uniformity of nature requires. Activity-situations come, in short, each with an original touch. A 'principle' of free will if there were one, would doubtless manifest itself in such phenomena, but I never saw, nor do I now see, what the principle could do except rehearse the phenomenon beforehand, or why it ever should be invoked» (PU: 93).

3. James vs Analytics.

4. This is a very important question, since every theory as general can never be fully verified by singular hypothesis, nor for sure by singular special experiments. There always is a sort of detachment – generally filled by faith or views of reality – between scientific research and theoretical frameworks. To demonstrate a theory through a series of experiments would be a logical fallacy. Never there is perfect logical correspondence between these two aspects of research (cf. Mach). That is why what is meant for verification, results (significant results) or workability is a very subtle point and worth of further reflection.

5. As is known, the writer Henry Jr. James was the brother of William and as a matter of fact they influenced each other. Their correspondence, in fact, is full of interesting comments and philosophical views. For selected reading: Hardwick, Elizabeth, *The Selected Letters of William James*, New York, Farrar, Strauss and Cudahy, 1955; James, William, *The Letters of William James*, Edited by James, Henry III, Atlantic Monthly Press, Boston, 1920 H. James, *Letters*, Leon Edel (ed.), Harvard University Press, Cambridge, 1974; *The Letters of Henry James*, Selected and Edited by Percy Lubbock, Charles Scribner's Sons, New York, 1920. The first three volumes of James's Correspondence (Virginia University Press) are subtitled *William and Henry* (CWJ 1-3).

6. [AN] The World as Will and Representation: Appendix 17, 'On the metaphysical need of man,' abridged.

7. Indeed, as James remarks, Hegel had a quite different rationalistic conception of being. According to his Logic, the category of being is the poorest one, and as so being does not mean anything in particular. James argues that such a logical de-potentiation of the meaning of being has been deemed as a way to look for the logical mediation between being and non-being.

8. The first edition of SPP (1911) edited by H. M. Kallen presented a quite different table of contents starting from the IV chapter on. See SPP: vi-vii, or for a quick check our Appendix A.

9. James has already made a psychological use of this evocative expression «big blooming buzzing confusion»: «The baby, assailed by eyes, ears, nose, skin, and entrails at once, feels it all as

one great blooming, buzzing confusion; and to the very end of life, our location of all things in one space is due to the fact that the original extents or bignesses of all the sensations which came to our notice at once, coalesced together into one and the same space. There is no other reason than this why "the hand I touch and see coincides spatially with the hand I immediately feel"», PP, p.462; «The Object which the numerous inpouring streams of the baby bring to his consciousness is one big blooming buzzing Confusion. That Confusion is the baby's universe; and the universe of all of us is still to a great extent such a Confusion, potentially resolvable, and demanding to be resolved, but not yet actually resolved, into parts», PBC, p. 21). Ralph Barton Perry in a note to the first edition of ERE remarks that «Baldwin claims that one of the "generally accepted" results of recent discussion is that "consciousness, in its earliest experiences, does not have the distinction between the 'inner' and the 'outer,' the self and the world. Its experience is what I shall call in a figure 'protoplasmic'; it is in Ward's phrase 'a continuum,' or in James' phrase 'a buzzing confusion' " (p. 226)».

10. «That is Mr. Schiller's belief about the sensible core of reality. We 'encounter' it (in Mr. Bradley's words) but don't possess it. Superficially this sounds like Kant's view; but between categories fulminated before nature began, and categories gradually forming themselves in nature's presence, the whole chasm between rationalism and empiricism yawns. To the genuine 'Kantianer' Schiller will always be to Kant as a satyr to Hyperion» (P: 120).

11. «Are there not some general distinctions which it may help us to agree about in advance? Professor Strong distinguishes between what he calls 'saltatory' and what he calls ' ambulatory ' relations. 'Difference,' for example, is saltatory, jumping as it were immediately from one term to another, but 'distance' in time or space is made out of intervening parts of experience through which we ambulate in succession. Years ago, when T. H. Green's ideas were most influential, I was much troubled by his criticisms of english sensationalism. One of his disciples in particular would always say to me, "Yes! terms may indeed be possibly sensational in origin; but relations, what are they but pure acts of the intellect coming upon the sensations from above, and of a higher nature?" I well remember the sudden relief it gave me to perceive one day that space-relations at any rate were homogeneous with the terms between which they mediated. The terms were spaces, and the relations were other intervening spaces.5 For the Greenites space-relations had been saltatory, for me they became thenceforward ambulatory. Now the most general way of contrasting my view of knowledge with the popular view (which is also the view of most epistemologists) is to call my view ambulatory, and the other view saltatory; and the most general way of characterizing the two views is by saying that my view describes knowing as it exists concretely, while the other view only describes its results abstractly taken. (5See my Principles of Psychology, vol. ii, pp. 148–153)» (MT: 79-80).

12. More precisely, James writes: «'Incommensurable' means that 'you are always confronted with a remainder.' 'Infinite' means either that, or that 'you can count as many units in a part as you can in the whole'» (SPP: 38).

13. La comprensione ha un medium psicologico, per capire qualcosa di generale me ne rappresento le conseguenze sul piano psicologico-personale. Ora, questo significato funzionale è una parte del significato di un concetto, che però costituisce un passaggio ineludibile in vista dell'applicazione pratica e delle domande etiche che la possibilità di agire in modi differenti ci pone in quanto esseri umani. Satisfactory?

14. [italics mine]. James also underlines that our substitution introduces a new system, in fact he underlines that we use «concepts and their connections» instead of percepts.

15. James uses several expressions containing verbs of movement to convey our conceptual activity in handling percepts. In particular, he uses: run backwards, bring together, separate, jump about, string on.

16. James talks about sensations and perceptions almost indifferently (cf. PP XV, XVII). We have to make clear that he believes that even the primordial level of perception is conscious, since it shows a certain activity; nonetheless, there are different grades of consciousness the higher of which are connected to the previous ones and often pursue different aims.

17. Cf. Aristotle Metaphysics

18. More precisely, according to James, only perception is self-sufficing. In fact, lower creatures possess only reflex adaptation as form of conscious life. This example evidently relies on an evolutional view of human life.

19. It is not possible to reproduce our sensible experience intellectually. The substitution of concepts for sensations can produce practical but not sensible equivalents. The point is that we cannot know by revelation what we do not have felt before. As human beings we are not provided with any intellectual intuition, as Peirce had clearly stated in 1868 (CP5.213ff).

20. In note, James also considers scientific conceptual puzzles dealing with terms such as "matter", "mass", "atom" etc. and he refers for instance to Stallo, Mach, Ostwald, Pearson, Duhem, Le Roy, Poincaré for similar critiques.

21. James quotes Bradley's expression from *The Principles of Logic*, Book I, chapter II (*The Categorical and the Hypothetical Forms of Judgment*), §§ 29-32. In § 29 we can read: «We saw that the real, which appears in perception, is not identical with the real just as it appears there. If the real must be "this," must encounter us directly, we can neither conclude that the "this" we take is all the real, or that nothing is real beyond the "this." It is impossible, perhaps, to get directly at reality, except in the content of one presentation : we may never see it, so to speak, but through a hole. But what we see of it may make us certain that, beyond this hole, it exists indefinitely. If by "this" we understand unique appearance, then, as "this" was not any part of the content, so neither is it any quality of the real, in such a sense as to shut up the real within that quality. It would belong to metaphysics to discuss this further, and we must here be content with a crude result. The real is what appears to me. The appearance is not generic but unique. But the real itself is not unique, in the sense in which its appearance is so» (Bradley 1883: 70).

22. A closer analysis of feelings would be very interesting. Peirce considers feelings to be first and therefore general, and Bradley claims as well that they are unique (quality) but not individual.

23. «The two mental functions thus play into each other's hands. Perception awakens thought, and thought in turn enriches perception. The more we see, the more we think; while the more we think, the more we see in our immediate experiences, and the greater grows the detail, and the more significant the articulateness of our perception» (SPP: 59).

24. «It is no small service on empiricism's part to have exorcised rationalism's veto, and reflectively justified our instinctive feeling about immediate experience» (SPP: 59).

25. [AN] 34 Compare F. C. S. Schiller: 'Thought and Immediacy,' in the Journal of Philosophy, vol. iii, p. 234.—The interpenetration goes so deep that we may even act as if experience consisted of nothing but the different kinds of concept-stuff into which we are enabled to analyze it. Such concept-stuff may often be treated, for purposes of action and even of discussion, as if it were a full equivalent for reality. But it is needless to repeat, after what precedes, that no amount of it can be a full equivalent, and that in point of genesis it remains a secondary formation.

26. «It [the notion of substance] was then identified with the 'principle of individuality' in things, and with their 'essence,' and divided into various types, for example into first and second, simple and compound, complete and incomplete, specific and individual, material and spiritual substances. God on this view is a substance, for he exists per se, as well as a se', but of secondary beings, he is the creator, not the substance, for once created, they also exist per se tho not a se. Thus, for scholasticism, the notion of substance is only a partial unifier, and in its totality the universe forms a pluralism from the substance-point-of-view.[4] Spinosa broke away from the scholastic doctrine. He began his Ethics by demonstrating that only one substance is possible, and that that substance can only be the infinite and necessary God» (SPP: 64).

27. Cf. « *II. Conjunctive Relations.* Relations are of different degrees of intimacy. Merely to be 'with' one another in a universe of discourse is the most external relation that terms can have, and seems to involve nothing whatever as to farther consequences. Simultaneity and time-interval come next, and then space-adjacency and distance. After them, similarity and difference, carrying the possibility of many inferences. Then relations of activity, tying terms into series involving change, tendency, resistance, and the causal order generally. Finally, the relation experienced between terms that form states of mind, and are immediately conscious of continuing each other. The organization of the self as a system of memories, purposes, strivings, fulfilments or disappointments, is incidental

to this most intimate of all relations, the terms of which seem in many cases actually to compenetrate and suffuse each other's being. Philosophy has always turned on grammatical particles. With, near, next, like, from, towards, against, because, for, through, my— these words designate types of conjunctive relation arranged in a roughly ascending order of intimacy and inclusiveness. A priori, we can imagine a universe of withness but no nextness; or one of nextness but no likeness, or of likeness with no activity, or of activity with no purpose, or of purpose with no ego. These would be universes, each with its own grade of unity. The universe of human experience is, by one or another of its parts, of each and all these grades. Whether or not it possibly enjoys some still more absolute grade of union does not appear upon the surface. Taken as it does appear, our universe is to a large extent chaotic. No one single type of connexion runs through all the experiences that compose it. If we take space-relations, they fail to connect minds into any regular system. Causes and purposes obtain only among special series of facts. The self-relation seems extremely limited and does not link two different selves together. Prima facie, if you should liken the universe of absolute idealism to an aquarium, a crystal globe in which goldfish are swimming, you would have to compare the empiricist universe to something more like one of those dried human heads with which the Dyaks of Borneo deck their lodges. The skull forms a solid nucleus; but innumerable feathers, leaves, strings, beads, and loose appendices of every description float and dangle from it, and save that they terminate in it, seem to have nothing to do with one another. Even so my experiences and yours float and dangle, terminating, it is true, in a nucleus of common perception, but for the most part out of sight and irrelevant and unimaginable to one another. This imperfect intimacy, this bare relation of withness between some parts of the sum total of experience and other parts, is the fact that ordinary empiricism over-emphasizes against rationalism, the latter always tending to ignore it unduly. Radical empiricism, on the contrary, is fair to both the unity and the disconnexion. It finds no reason for treating either as illusory. It allots to each its definite sphere of description, and agrees that there appear to be actual forces at work which tend, as time goes on, to make the unity greater» (ERE: 23-4).

28. «It is obvious that pluralism has three great advantages: —It is more 'scientific,' in that it insists that when oneness is predicated, it shall mean definitely ascertainable conjunctive forms. With these the disjunctions ascertainable among things are exactly on a par. The two are co-ordinate aspects of reality. To make the conjunctions more vital and primordial than the separations, monism has to abandon verifiable experience and proclaim a unity that is indescribable. It agrees more with the moral and dramatic expressiveness of life. It is not obliged to stand for any particular amount of plurality, for it triumphs over monism if the least morsel of disconnectedness is once found undeniably to exist. 'Ever not quite' is all it says to monism; while monism is obliged to prove that what pluralism asserts can in no amount whatever possibly be true—an infinitely harder task» (SPP: 74).

29. Perceptible comprehension neither means full understanding, nor right placement of that piece of knowledge in a larger context. The same feeling may be interpreted as a prove of opposite ideas according to different contextual frames. Nevertheless, it is the same feeling.

30. «Biography is the concrete form in which all that is is immediately given; the perceptual flux is the authentic stuff of each of our biographies, and yields a perfect effervescence of novelty all the time» (SPP: 78).

31. The book *Some Problems of Philosophy* is dedicated to the memory of Renouvier: «'. . . he [Charles Renouvier] was one of the greatest of philosophic *characters,* and but for the decisive impression made on me in the 'seventies by his masterly advocacy of pluralism, I might never have got free from the monistic superstition under which I had grown up. The present volume, in short, might never have been written. This is why, feeling endlessly thankful as I do, I dedicate this text-book to the great Renouvier's memory'» (SPP: 3).

32. «The substitution of 'arithmetization' for intuition (p. 88) thus seems, if taken as a description of reality, to be only a partial success. Better accept, as Renouvier says, the opaquely given data of perception than concepts inwardly absurd. So much for the 'problem of the infinite,' and for the interpretation of continuous change by the new definition of infinity. We find that the picture of a reality changing by steps finite in number and discrete remains quite as acceptable to our

understanding and as congenial to our imagination as before; so, after this dry and barren chapter, we take up our main topic of inquiry just where we laid it down. Does reality grow by abrupt increments of novelty, or not? The contrast between discontinuity and continuity now confronts us in another form. The mathematical definition of continuous quantity as 'that between any two elements or terms of which there is another term,' is directly opposed to the more empirical or perceptual notion that anything is continuous when its parts appear as immediate next neighbors, with absolutely nothing between. Our business lies hereafter with the perceptual account, but before we settle definitively to its discussion, another classic problem of philosophy 'the problem of causality' had better be got out of the way» (SPP: 94-5).

33. Or even that such conscious or unconscious mystification of the wordy definition become a further corroboration of our unverified (and time after time unverifiable) assumptions.

34. «Our reflective mind abstracts divers aspects in the muchness, as a man by looking through a tube may limit his attention to one part after another of a landscape. But abstraction is not insulation; and it no more breaks reality than the tube breaks the landscape. Concepts are notes, views taken on reality,5 not pieces of it, as bricks are of a house. Causal activity, in short, may play its part in growing fact, even tho no substantive 'impression' of it should stand out by itself. Hume's assumption that any factor of reality must be separable, leads to his preposterous view that no relation can be real. "All events," he writes, "seem entirely loose and separate. One event follows another; but we never can observe any tye between them. They seem conjoined, but never connected." Nothing, in short, belongs with anything else. Thus does the intellectualist method pulverize perception and triumph over life. Kant and his successors all espoused Hume's opinion that the immediately given is a disconnected 'manifold.' But unwilling simply to accept the manifold, as Hume did, they invoked a superior agent in the shape of what Kant called the 'transcendental ego of apperception' to patch its bits together by synthetic 'categories.' Among these categories Kant inscribes that of 'causality,' and in many quarters he passes for a repairer of the havoc that Hume made» (SPP: 101).

35. J. Mill and Venn talk about causes respectively as unconditional and close antecedents, but in nature many links are hidden and sometimes causes fit one another for producing an effect.

36. «Perception has given us a positive idea of causal agency, but it remains to be ascertained whether what first appears as such is really such, whether aught else is really such , or finally whether nothing really such exists. Since with this we are led immediately into the mind-brain relation, and since that is such a complicated topic, we had better interrupt our study of causation provisionally at the present point, meaning to complete it when the problem of the mind's relation to the body comes up for review » (SPP: 109).

37. A

38. B

39. «In my psychology I contended that each field of consciousness is entitatively a unit, and that its parts are only different cognitive relations which it may possess with different contexts. But in my doctrine that the same "pen" may be known by two knowers I seem to imply that an identical part can help constitute two fields. Bode and Miller both pick up the contradiction. The fields are not then entitative units. They are decomposable into "parts," one of which at least is common to both, and my whole tirade against "composition" in the psychology is belied by my own subsequent doctrine!» (MEN 65). For further reading on Bode-and Miller's objections see Mark Moller (2001),

APPENDIX A

Some Problems of Philosophy

ACLS edition		*The edition of 1911*	
Chapter I	Philosophy and Its Critics		Same
Chapter II	The Problems of Metaphysics		Same
Chapter III	The Problem of Being		Same
Chapter IV	Percept and Concept	Chapter IV	Percept and Concept—The Import of Concepts
		Chapter V	Percept and Concept—The Abuse of Concepts
		Chapter VI	Percept and Concept—Some Corollaries
Chapter V	The One and the Many	Chapter VII	The One and the Many
		Chapter VIII	The One and the Many (*continued*)—Values and Defects
Chapter VI	The Problem of Novelty	Chapter IX	The Problem of Novelty
Chapter VII	First Sub-Problem The Continuum and the Infinite	Chapter X	Novelty and the Infinite—The Conceptual View
		Chapter XI	Novelty and the Infinite—The Perceptual View
Chapter VIII	Second Sub-Problem Cause and Effect: The Conceptual View	Chapter XII	Novelty and Causation—The Conceptual View
Chapter IX	[Second Sub-Problem Continued] Causation: The Perceptual View	Chapter XIII	Novelty and Causation—The Perceptual View

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