

## More on categories and interfaces

ANNARITA PUGLIELLI

### *Abstract*

*This paper will focus on two of the many concepts and instruments linguists need to work independently of their theoretical tenets: categories and interfaces. Both would appear fundamental for the understanding of language organization.*

*The paper will argue in favor of a limited number of categories and the necessity of their definition in terms of explicit criteria and well-defined parameters. The study of interfaces, on the other hand, seems to offer a key to understanding the way language works, since the different levels of analysis posited for our descriptions are not independent, working together to make the interaction between sound and meaning possible.*

### **1. Introduction**

In this paper we will try to contribute some additional thoughts to Hagège's discussion of a number of fundamental concepts needed by linguists.

In exploring the relationship between tools such as categories (and therefore the different levels of analysis), rules (i.e., the identification of possible generalizations) and interfaces (i.e., the interconnection between sound and meaning through all the necessary intermediate levels of analysis), Hagège once again focuses on the two different traditional approaches to the study of languages: the descriptive/observative method characterized by an inductive approach and the hypothetic-deductive method, usually termed the "theoretical approach."

Along these lines, it therefore seems possible to establish a strong correlation between the deductive approach and formal theories, while data, and their relevance, would appear to be more closely related to a functional approach, and in general to the work of those linguists more interested in real languages rather than linguistic theory as such.



In linguistics there are undoubtedly still differences between the more theoretical and the more factual approaches. Nonetheless, it can be stated with a fair degree of certainty that, over the last 20 years, data have assumed an undisputed relevance in linguistic research. And this, we believe, is true for all different methodological approaches. Linguists from different schools are facing the challenge of an unprecedented quantity and variety of languages. Even linguists who explicitly subscribe to what might be considered a "theoretical approach" do not construct their theories purely on the basis of abstract criteria and system-internal consistency. They appear increasingly to take into consideration a large amount of data from many, often typologically different languages.

On the other hand, over the last fifty years, research work on language phenomena – for example, at the syntactic level – has been such that it would seem unconceivable nowadays to produce mere descriptions at a level of phenomenological observation. This is so, independent of the theoretical framework of reference adopted.

The state of linguistics research is such that a simple inventory that does not attain a certain level of generalization, whether or not it deals with one or more languages, can only be considered as an initial stage, certainly not a final, conclusive one. There is, of course, more to be said on the difference between "theoretical approaches" and "functional approaches," both in terms of the elements on which the conceptual apparatus of each is founded and of the general methodological approach. However a thorough discussion of these issues would need much more space and detail than afforded by a limited article. Therefore, our objective will be far more restricted and modest. We will try to put forward some thoughts, and possibly a definite perspective, regarding only two of the topics presented in Hagège's paper, namely categories and interfaces.

## 2. Categories

### 2.1. Definition and identifying criteria

The notion of category is defined by Hagège as "referring to the concepts used by linguists as descriptive and analytical tools" (Hagège 2004).

This wide definition allows for the inclusion in the categories of entities and "concepts" that are not homogeneous, ranging from interpretative principles such as analogy and grammaticalization – in a diachronic perspective – to many other phenomena in a synchronic perspective. The phoneme and the syllable are phonological categories, while grammatical and lexical categories are all considered morphosyntactic categories. Universal categories, such as

'noun' and 'verb,' as well as non-universal ones, such as adjectives and classifiers; traditional categories, as well as those of recent identification, such as logophorics (Hagège 1974); formal categories, as well as functional ones, are all considered to be categories.

From a synchronic perspective, we would argue that one should distinguish between the minimal descriptive units/entities used at the traditionally identified linguistic levels of description – for example, phoneme, morpheme, lexeme, word, etc. – and the need for their possible classification into categories on the basis of explicit and well-defined parameters. We shall concentrate on the morphosyntactic level of categorization, trying to focus on two points:

- a. the number and type of categories needed or useful to hypothesize and the criteria for their definition;
- b. whether these categories should be considered as discrete units, or as a continuum

Let us start from the traditional classes of the "parts of speech," as exemplified by the categories 'noun' and 'verb,' on whose universal nature there seems to be a general consensus. In order to classify the words of a language belonging to one or the other of these two categories, we can use different criteria:

- (i) formal-distributional and morphological criteria, and/or
- (ii) functional criteria.<sup>1</sup>

As for (i), a "noun" can be defined on the basis of formal criteria as any word that:

- can co-occur with a determiner (i.e., articles, demonstratives, etc.);
- can co-occur with a relative clause;
- can assume morphological markers of gender, number and case.

As for (ii), we can tentatively define a "noun" in functional terms. This involves the exploration of the type of relationships this category can enter into within the logico-semantic structure of the sentence (i.e., its predicate-argument structure). Nouns can certainly have the function of "subjects," "objects," and/or "complements," but these traditional functions usually associated with nominal categories are not the only ones possible: a noun can also function as a predicate or as a nominal modifier.

Therefore, parameters or functional indexes are of very little use in defining the "noun" as a category. The notions of "subject," "object" and "predicate" are themselves functional categories, and as such must be defined with explicit criteria and well-defined, explicit parameters.

1. Lyons (1968:147, 318) discusses these issues. However, our points of view do not overlap completely.



As an example of our assertion, let us consider noun subcategorization in Somali, and, in particular, how the features [ $\pm$ countable], [ $\pm$ abstract], [ $\pm$ animate] and [ $\pm$ collective] relate to the possibility of co-occurrence of plural forms with nouns (cf. Puglielli and Siyaad 1984). Consequently, agreement rules and the possibility of co-occurrence with quantifiers will also be conditioned by these features. The subcategorization of Somali nouns is given in (1):

- ```

graph TD
    COUNTABLE -- "+" --> ANIMATE
    COUNTABLE -- "-" --> ABSTRACT
    ANIMATE --> nin["nin 'man' → niman 'men'"]
    ANIMATE --> libaax["libaax 'lion' → libaaxyo 'lions'"]
    ABSTRACT -- "+" --> run["run 'truth'"]
    ABSTRACT -- "+" --> ceeb["ceeb 'shame'"]
    ABSTRACT -- "-" --> COLLECTIVE["COLLECTIVE (MASS)"]
    COLLECTIVE --> a["a. 'set of X'  
geel 'camels'  
dumar 'women'"]
    COLLECTIVE --> b["b. 'class/type'  
ugaar 'game'  
babaay 'papaya'"]
  
```

(2) *niman way yimadeenχ<sup>2</sup>*  
 men F-3PLCL go.PAST.3PL  
 'The men went.'

2. F stands for *focus*. Somali is a language with obligatory focus marking. This means that a focus marker must be present in each declarative sentence (cf. Andrzejewski 1975, Hetzron 1965, Puglielli 1981).

(5) *ugaarta*      *way*       $\left\{ \begin{array}{l} \textit{dabargoday} \\ \text{extinguish.PRES.3SGF} \end{array} \right.$   
*game.the*      *F.3PLCL*       $\left\{ \begin{array}{l} \textit{dabargodeen} \\ \text{extinguish.PRES.3PL} \end{array} \right.$   
 'The game is being extinguished.'

(9)    *laba koobab ahi waa jabeen*  
       two glass.PL is.NOM F break.PAST.3PL  
       ‘Two glasses broke.’



In (6)–(9) *laba* is a noun and the head of the subject NP (cf. Gebert 1981). The modifier of the head noun, in this case a number, can be a singular countable noun, as shown by the grammaticality of (6), but not a relative clause, as *koob ah* (lit. ‘that is a glass’) shows in (7). The situation is reversed in (8)–(9): in the former the noun that modifies the numeral head of the NP is plural and the sentence is ungrammatical, while in the latter the head noun is modified by a relative clause, where the plural noun *koobab* is the predicate, and the sentence is fully grammatical.

On the basis of the observed behavior, in structures in which the head is a numeral and the modifier a [+collective] noun, we can expect the two subclasses of collective nouns to behave differently. In fact the subclass (a), previously labeled ‘set of x,’ can occur in a relative clause modifier of a numeral head noun, but not as a simple modifier within the NP:

- (10) *konton geel ahi waa baxsadeen*  
 hundred camels is.NOM F escape.PAST.3PL  
 ‘One hundred camels escaped.’

- (11) \**konton geel waa baxsadeen*  
 hundred camels F escape.PAST.3PL

Their behavior, therefore, is parallel to that of plural countable nouns.

The nouns of the subclass (b), semantically considered ‘class’, ‘type’, – that is, as a mass where we cannot identify individuals, each fully characterized with all the properties typical of the class – cannot occur in the relative clause that modifies a head number, for obvious semantic reasons:

- (12) \**laba sigaar ah i keen*  
 two cigarette is me bring.IMP.2SG

However, this can be turned into a grammatical sentence by introducing a countable noun as modifier, plus an additional appositive relative clause:<sup>3</sup>

- (13) *laba xabbo oo sigaar ah i keen*  
 two pieces and cigarette is me bring.IMP.2SG  
 ‘Bring me two cigarettes.’

To sum up, the subclassification of the class of nouns in terms of semantic features is necessary if we are to describe their possible occurrences in sentence structures adequately.

3. Restrictive and appositive relative clauses have different realizations in Somali. In particular, appositive clauses are introduced by the conjunction *oo* (cf. Gebert 1981: 79–91).

We have not looked at the criteria for the definition of the class of verbs and will not deal with their subclassification, but would just like to draw attention to a parallel situation with one single example: The subclassification of verbs according to the [ $\pm$ punctual] feature will be needed to describe the possibility of co-occurrence with aspect markers.

In conclusion, the aim has been to show that the use of semantic criteria should not and, in fact, does not lead to the identification of new categories, but rather to the subclassification of categories to be identified on the basis of formal and distributional criteria.

## 2.2. Categories as discrete units

The type of approach used might, in some way, be defined as pre-theoretical and characteristic of a ‘descriptive’ approach. This would still imply the use of explicit criteria – the ones suggested or others – for the identification of a finite number of categories. These categories can be divided into subclasses related to semantic properties/features.

A brief comment on the finiteness of the number of categories. This concept is strictly related to the general character of these categories, their universality and also their cross-linguistic relevance. In other words, a descriptively adequate approach should not allow the uncontrolled proliferation of categories, even when working on languages never previously described, and it is therefore tempting to think we are confronted with unknown phenomena. If a number of completely new categories is needed, we believe that it would be methodologically correct to hypothesize possible missing ‘generalizations’, and we should keep searching for them.

As for subclassification, there might be some debate on how deeply to delve. If our aim is morpho-syntactic analysis, the level of subclassification will be determined by the correlation between semantic subclasses and morpho-syntactic behavior. This type of approach to the concept of categories leads, on the one hand, to conceiving of them as discrete entities and, on the other, to looking for diagnostics allowing the identification of a limited number of categories. ‘Limited’, in this context, means necessary and sufficient. These categories will be divided into subclasses so that all the different linguistic phenomena from typologically different languages will find their natural collocation. We shall try to illustrate the meaning of our assertions with at least one example.

2.2.1. *Categories as discrete units.* Our position is not necessarily shared by functional linguists. In this particular perspective, we should include Simone’s (2003) proposal of a continuum between noun and verb, illustrated in his article



"Masdar 'ismu al-marati et la frontière verbe-nom". He proposes the following schema:

(14) Continuum between noun and verb (Simone 2003)

|                             | A                                                           | B                                 | C                                        | D                       |
|-----------------------------|-------------------------------------------------------------|-----------------------------------|------------------------------------------|-------------------------|
|                             | -----                                                       |                                   |                                          | Designation             |
|                             | Predication                                                 |                                   |                                          |                         |
| Aspect                      | [-telic]<br>[+process]                                      | [+telic]<br>[+process]            | [+telic]<br>[-process]                   | [-telic]<br>[-process]  |
| Semantic type               | Indefinite<br>process<br>noun<br>(masdar)                   | Definite<br>process<br>noun       | "Just once<br>noun" ('ismu<br>al-marati) | Pure noun               |
| Argument structure          | +                                                           | +                                 | ±                                        | -                       |
| Corresponding<br>word class | Noun +<br>nominalized<br>infinitive                         | Noun                              | Noun                                     | Noun                    |
| Example                     | (il) bere<br>(il) nuotare<br>(l') inseguire<br>inseguimento | bevuta<br>nuotata<br>inseguimento | sorso<br>bracciata                       | gatto<br>folla<br>grano |

On the basis of a series of parameters, he establishes a continuum from predication to designation (i.e., from verb to noun), while under his class specification, "noun" is the only category to appear. What differs is the value of semantic features related to aspect (i.e., [ $\pm$ telic], [ $\pm$ process]). Their possible different combinations produce subclasses of nouns, or rather of words that, according to formal and distributional criteria, can only be classified as nouns.

There is no doubt that the proposed classification includes some regularities in the description of the meaning of the words under examination. In other words, it highlights the semantic features relating to the lexical meaning proper, but this does not impact the basic classification of these words. Furthermore, those on the left hand side of the scale are still to be classified as nouns.

The nouns examined include simple nouns, derived ones and also infinitives that, despite traditionally being considered verb forms, can be seen as nouns when viewed from a distributional or functional perspective.

From a structural point of view, what seems to make the difference between a lexical verb and a noun – as opposed to a derived noun and a verb – is the presence versus absence of argument structure:

- (15) VERB → NOUN  
 [+ARG structure] [+ARG structure]  
 Italian: *bere vino* Italian: *il bere vino*  
 English: *to drink wine* English: *drinking wine*
- (16) NOUN → VERB  
 [-ARG structure] [+ARG structure]  
 Italian: *burro* 'butter' Italian *imburrare un panino*  
 'to butter toast'  
 Somali: *moofa* 'oven' Somali: *moofays* 'to roast something'

A lexical verb shows an argument structure that is maintained in the derived noun or nouns even if it can be modified, whereas a lexical noun does not have an argument structure, but generates one if it becomes a verb.<sup>4</sup>

In conclusion, we think there is firm reason to maintain the distinction between the two categories – noun and verb – and that we can identify properties and criteria allowing their definition. Such categories then need further sub-classification according to *semantic* features and properties relating to different morphosyntactic behavior and language use.

2.2.2. *A finite number of categories* Our second point was the need to have a *finite* number of categories. In this respect we will consider the category "logophoric," introduced by Hagège in 1974 and used since then both by functional linguists and generativists.

The aim of this work [Hagège 1974] was to bridge a gap in the personal and possessive pronoun paradigm, by assigning a specific status and giving a specific name to those pronouns in a dependent clause that refer to a speaker or to someone expressing a thought, generally, the subject of the main clause. (Hagège 2004)

Since 1974, the presence of this class of pronouns has been noticed in many languages of the world, and an exhaustive typology of this phenomenon can be

4. One apparent counter-example might be the possibility of forming sentences such as:

- (i) *La lettera di Gianni a Maria.*  
 the letter of Gianni to Maria
- (ii) *Il muro dei romani contro i barbari.*  
 The wall of the Romans against the Barbarians

However, the PPs following the head noun should not be considered as arguments, but rather as appositions of the relevant noun, which is itself the argument of a verb that is tacitly understood.



found in Huang (2000). Our aim here is not that of giving a detailed description, but rather to try and establish, on the basis of some data and their behavior, whether we need to set up a new category or rather consider them a subclass of an existing one.

Logophorics can be classified as a subclass of pronouns such as reflexives and reciprocals, and their possibility of occurrence is limited to more restricted contexts. In other words, we consider pronouns as a category defined by formal criteria (i.e., they substitute for full NPs in their functional roles of subject, object, and so on), and subclassified according to semantic features concerning referentiality. Pronouns can be subclassified into personal pronouns, reflexives, reciprocals and logophorics, and this distinction is connected with the way they select their co-referents in the linguistic and/or the extralinguistic context. So, for example, a pronoun is reflexive insofar as it gets its reference by an antecedent that must be found within the same simple sentence.

The data from African languages such as Telefal, Igbo, and Gokana show that a logophoric refers to another nominal or pronominal element. It is pronominal itself in that it can be interpreted in the same way as reflexives and reciprocals. Its possibility of occurrence<sup>5</sup> is even limited to co-occurrence with speech predicates, psychological predicates, knowledge predicates, and perceptive predicates. At least in Gokana, the verb tense/aspect has to be past/perfective and the logophoric needs a noun whose referent is identified as an antecedent.

To sum up, a logophoric is a pronominal form that can occur only in the presence of certain predicates<sup>6</sup>. But this is not enough for a complete description of logophorics. Let us consider the following examples (from Hyman and Comrie 1981: 21):

- (17) *m̀m kó né lébàrè ko aè dO*  
I said give Lebare that he fell  
'I said to Lebare<sub>i</sub> that he<sub>ij</sub> fell.'
- (18) \**m̀m kó né lébàrè ko aè dO-è*  
I said give Lebare that he fell-LOG  
'I said to Lebare<sub>i</sub> that he<sub>ij</sub> fell.'

Examples (17) and (18) show that the subject of the subordinate clause (*aè*) can be interpreted as logophoric, whereas *è*, which is its morphological marker on

5. Our description is based on Gokana data from Hyman and Comrie (1981) and is not intended to be exhaustive regarding all the phenomena described in relation to all the different languages in which logophorics are present.

6. In some languages at least, the verb must have perfective aspect. This correlates with other facts in other languages: In Somali the anaphoric definite article *-kii* can only occur in sentences with the verb in the past tense (perfective).

the verb, cannot be realized. This means that for the logophoric morpheme to be present on the verb, some structural condition must be realized in the sentence, and that that particular condition is not present in (18). This condition is that the antecedent must be higher in the sentential structure and must have scope over the sentence where the logophoric occurs.

This structural condition is present in sentences (19)–(20) where the subject of the main clause can be co-referential or not with the object of the subordinate clause. It is only in the first case that the logophoric morpheme appears on the verb:

- (19) *lébàrè ko oo div ee*  
Lebare said you hit him  
'Lebare<sub>i</sub> said that you hit him<sub>j</sub>.'
- (20) *lébàrè ko oo div-èè e*  
Lebare said you hit.LOG him  
'Lebare<sub>i</sub> said that you hit him<sub>j</sub>.'

There is a second structural condition for the occurrence of logophorics: their nominal antecedents must be either arguments or elements within the structure of an argument of the main verb. This can be deduced by comparing (21) and (22a–b). In Gokana the indirect object does not seem to function as an argument, hence in (21) *lébàrè*, being the subject, can be co-referential both with the subject and with the object of the subordinate clause and can determine the presence of the logophoric element. In (22), on the other hand, *lébàrè* is the indirect object and cannot determine the presence of the logophoric morpheme even though the relevant co-reference is possible from a semantic point of view (as shown in (22a)):

- (21) *lébàrè ko aè div-èè e*  
Lebare said he hit.LOG him  
'Lebare<sub>i</sub> said he<sub>i</sub> hit him<sub>j</sub>.'  
'Lebare<sub>i</sub> said he<sub>j</sub> hit him<sub>j</sub>.'
- (22) a. *m̀m kó né lébàrè ko oo div ee*  
I said give Lebare that you hit him  
'I said to Lebare<sub>i</sub> that you hit him<sub>ij</sub>.'
- b. \**m̀m kó né lébàrè ko oo div-èè e*  
I said give Lebare that you hit.LOG him

To sum up, logophorics – independently from their realization as independent pronouns or as forms that incorporate into the verb – can be considered as reflexives and reciprocals, a subcategory of pronouns rather than a separate



independent category. Their possibility of occurrence is governed by a number of semantic and structural conditions.

In conclusion, we would like to emphasize the following points:

- The difference between “research work on languages” and “research work on theory” is essentially a matter of emphasis: one cannot work on languages without the appropriate analytic tools organized in a coherent ensemble. Furthermore, in no way can we justify the overproduction of “descriptive entities.” If we do so, we lose what is considered the main purpose of linguistic research, that is to say, the identification of generalizations that reach at least the level of descriptive adequacy.
- The aim of a theoretical approach does not coincide only with the theory in itself, but rather with the theory as an instrument for the explanation of “languages” as such. In this respect, all theories have to be tested against an enormous amount of data. More and more, these data are comparative in nature (i.e., they are taken from typologically different languages).
- Finally, a more restricted theoretical apparatus with stronger “hypotheses” can be more easily falsified. With reference to the subject categories and functions, I believe that Minimalism offers a model worth exploring, with its differentiation on the one hand between formal and semantic features and, on the other, between lexical and functional heads and the attempt to define their reciprocal roles:

Lexical heads provide the descriptive content and the basic argumental (thematic) structure; functional heads determine the configurational geometry and provide such grammatical specification as tense, mood, definiteness, etc. thus contributing to the determination of the interpretation as well as the form of linguistic expression. (Belletti and Rizzi 1997)

### 3. Interfaces

Hagège talks about interfaces as “meeting points between linguistic domains, from phonology to pragmatics” (Hagège 2004) and at the same time as “relationships between concrete linguistic phenomena rather than as abstract correspondences.”

In fact we think of interfaces as the interrelationships among the different levels of analysis we hypothesize to connect sound to meaning in language in general and in specific languages in particular. In other words, we are exploring the mechanism that makes the interpretation of a speech act possible by attributing corresponding given meanings to given sounds. This does not happen with a series of bi-univocal relations between the hypothesized levels of analysis, but rather by means of a series of highly complex relationships that often involve simultaneously more than one level of analysis. The intersection

among different levels can differ from one language to the other, but even so we expect to find cross linguistic regularities and possible generalizations. One possible example of a bi-univocal relationship is given by the relation between syntax and morphology. The information relative to tense, aspect, mood and agreement features is lexicalized on the verbs in a universal order in which agreement is the most external on the lexical basis, and tense the most internal. This relative order is more transparent in agglutinative languages and less so in flexional languages.

An example of a highly complex relation through different levels is that between pragmatics and morphology. We are thinking about those languages in which pragmatic notions such as theme and rheme, or focus and topic are signaled by the presence of a specific morpheme (i.e., a focus marker). There are obvious reasons for claiming that in this case more than just pragmatics and morphology is involved. Indeed, the presence of a focus marker, let us say on a noun phrase, on the one hand gives it the pragmatic value of rhematic information – and consequently that of given thematic information to the rest of the sentence – but, on the other, very often produces a different relative order of the other constituents of the sentence. This is the case of languages such as Wolof, cited by Hagège, and of Somali.

In Somali, in fact, the presence of a focus marker on a noun phrase or on the verb phrase in a sentence, interrelates with a complex system of presence vs. absence of clitic subject pronouns, which is conditioned by the relative order of constituents in the sentence, as well as phenomena of clitic object incorporation on the verb (see Puglielli, 1981b). We have, therefore, a somewhat complex system of interconnections between different levels of organization of the language – pragmatics, morphology and syntax.<sup>7</sup> Consider, for instance, sentences such as the following. (SCL = subject clitic, OCL = object clitic. Focus is capitalized, as in standard use).

- (23)
- |    |                 |                 |                 |              |              |  |
|----|-----------------|-----------------|-----------------|--------------|--------------|--|
| a. | <i>Cali</i>     | <i>adiga</i>    | <i>buu/*baa</i> | <i>ku</i>    | <i>dilay</i> |  |
|    | Cali            | you             | F.he(SCL)/F     | you(OCL)     | beated       |  |
|    | 'Ali beat YOU.' |                 |                 |              |              |  |
| b. | <i>adiga</i>    | <i>buu/*baa</i> | <i>ku</i>       | <i>dilay</i> | <i>Cali</i>  |  |
|    | you             | F.he(SCL)/F     | you(OCL)        | beated       | Cali         |  |
|    | 'Ali beat YOU.' |                 |                 |              |              |  |
| c. | <i>adiga</i>    | <i>buu/baa</i>  | <i>Cali</i>     | <i>ku</i>    | <i>dilay</i> |  |
|    | you             | F.he(SCL)/F     | Cali            | you(OCL)     | beated       |  |
|    | 'Ali beat YOU.' |                 |                 |              |              |  |

7. We still have to investigate whether phonology has a role in this picture, and if so, which.



As we can see, the focused constituent is the object NP *adiga*, which occurs to the left of the focus marker *baa*. *Baa* must co-occur with the subject clitic pronoun when the subject (*Cali*) precedes the (focused) object or when it is realized (as a Topic) at the end of the sentence. On the other hand, when the order is OSV, the subject clitic can be omitted (see (23c) and Puglielli 1981b). Also notice that the 2nd person object pronoun *ku* is obligatory and incorporated with the verb (see Svolacchia and Puglielli 1999).

Consider now the following, where the focused NP is the subject of the relevant sentence:

- (24) *Cali baa/\*buu adiga ku dilay*  
 Cali F/F.he(SCL) you you(OCL) beat  
 'ALI beat you.'

As is shown, in this case the clitic subject pronoun cannot be found on the focus marker, and this occurs even when the relative order of the subject and the object changes:

- (25) *adiga Cali baa/\*buu ku dilay*  
 you Cali F/F.he(SCL) you(OCL) beat  
 'ALI beat you.'

Finally, notice that the clitic object pronoun is always present.

Let us consider now some additional evidence, from Italian, a less "exotic" language:

- (26) *mia sorella l'ha incontrata ieri Luigi*  
 my sister her.has met yesterday Luigi  
 'My sister, Luigi met her yesterday.' (colloquial register)

This is a sentence where the topic (i.e., the thematic element, *mia sorella*), object of the sentence, occurs as the first constituent and is doubled by the clitic pronoun *la*. The clitic pronoun could not occur if the co-referent noun phrase were the focus of the sentence. The subject, *Luigi*, occurs at the end of the sentence, post-verbally rather than in its canonical preverbal position, since it is given information used as an "afterthought" (and, as such, completely destressed).<sup>8</sup> Finally, the intonation pattern of this sentence may mark the emarginated object with a pause and a certain contour. We can therefore conclude that the particular distribution of information in this sentence, its syntactic structure, and its intonation together contribute to its interpretation. In

8. The subject in preverbal position is also possible, though this would determine a prosodically marked structure.

other words, all the levels of analysis we have previously mentioned interact in order to realize the necessary connections between sound and meaning.

#### 4. Conclusions

The topics examined in this paper have shown that even basic concepts such as categories still require further investigation in order to reach a satisfactory level of explanatory adequacy. We think that this objective can be reached only by reducing rather than multiplying the number of notions and formal devices that constitute our formal apparatus.

In this respect, there is sound evidence to face that an interface approach is crucial to a better understanding of language. This means that language phenomena are to be analyzed not as made up of unrelated layers corresponding to the different traditional levels of analysis, but rather in their complex connections between formal, semantic and prosodic properties.

Università degli Studi Roma Tre

#### References

- Andrzejewski, B.W. (1975). The role of indicator particles in Somali. *Afroasiatic Linguistics* 1 (6): 1-69.
- Belletti, Adriana and Luigi Rizzi (1997). Introduction. In *Parameters and Functional Heads*, Adriana Belletti and Luigi Rizzi (eds.), 3-10. Oxford: Oxford University Press.
- Gebert, Lucyna (1981). Il sintagma nominale. In *Studi Somali 2: Sintassi della Lingua Somala*. Annarita Puglielli (ed.), 47-136. Roma: Ministero degli AA.EE.
- Hagège, Claude (1974). Les pronoms logophoriques. *Bulletin de la Société de Linguistique de Paris* 69: 287-310.
- (2004). On categories, rules and interfaces in linguistics. *The Linguistic Review* 21: 257-276.
- Hetzron, Robert (1965). The particle *baa* in Northern Somali. *Journal of African Languages* 4 (2): 118-130.
- Huang, Yan (2000). *Anaphora. A Cross-linguistic Approach*. Oxford: Oxford University Press.
- Hyman, Larry and Bernard Comrie (1981). Logophoric Reference in Gokana. *Journal of African Languages and Linguistics* 3: 19-37.
- Lyons, John (1968). *Introduction to Theoretical Linguistics*. Cambridge: Cambridge University Press.
- (1977). *Semantics, Vol 2*. Cambridge: Cambridge University Press.
- Puglielli, Annarita (ed.) (1981a). *Studi Somali 2: Sintassi della Lingua Somala*. Roma: Ministero degli AA.EE.
- (1981b). La struttura della frase semplice. In *Studi Somali 2: Sintassi della Lingua Somala*, Annarita Puglielli (ed.), 1-40. Roma: Ministero degli AA.EE.
- Puglielli, Annarita and Ciise Mohamed Siyaad (1984). La flessione del nome. In *Studi Somali 5: Aspetti morfologici, lessicali e della focalizzazione*, Annarita Puglielli (ed.), 53-112. Roma: Ministero AA EE.



- Simone, Raffaele (2003). Masdar, 'ismu al-marrati et la frontière verbe/nom. In *Estudios Ofrecidos al prof. José Jesus de Bustos Tovar*, 901–918. Madrid: Universidad Complutense.
- Svolacchia, Marco and Annarita Puglielli (1999). Somali as a polysynthetic language. In *The boundaries of Morphology*, Lunella Mereu (ed.), 97–120. Amsterdam/Philadelphia: Benjamins.