12. The Pragmatics of Noun Incorporation in Eastern Cushitic Languages

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1. Introductory Remarks

Eastern Cushitic (EC) is the name given to a group of 20-odd languages spoken in Ethiopia, Djibouti, Somalia, and Kenya. It comprises one of the four branches of the Cushitic language family, itself one of the six branches of the Afroasiatic phylum.[1]

With a few possible exceptions, these languages do not normally form noun+verb compounds in a strict sense.[2] Many EC languages are characterized, however, by a morphosyntactic device that amounts to the same thing, namely, a close-knit combination or fusion of complement+verb into some sort of phonological word, the unity of which is guaranteed by intonation, pausal structure, and the inseparability of the constituent elements. Let us illustrate this with an example from Somali. Focalized verb forms in this language are preceded by a so-called indicator (cf. section 2) *waa*+subject pronouns; thus, it is possible to state that one of the functions of this particle is that of a boundary sign marking the beginning of a verb complex. In addition to the finite verb form, the verb complex normally contains only proclitic object pronouns or preverbs, i.e. the indicator particle marks off the finite verb form from the rest of the sentence:

(1) Ninkii   waa yimi.
    man/DEF VF come/PERF/3sm
    "The man came."

(2) Ninkii   dhagax waa ku^dhuftay.
    man/DEF stone   VF with^hit/PERF/3sm
    "The man hit him with a stone."

(3) Nin walibа soor waa siiyay.
    man every food VF give/PERF/3sm
    "Every man gave him some food."

As is evident from the examples, complements are placed outside the verbal complex marked by *waa*. There are a number of well-defined cases, however, in which nominal complements are allowed to creep into the position between the indicator particle and the finite verb form:

(4) Wuu   lacag^beelay.
    VF/3sm money^cease = to = possess/PERF/3sm
    "He was left with no money at all."

Here the complement *lacag* "money" is constructed as if it were part of the verb stem. Let us call constructions of this sort **noun incorporation** (NI) in a broad sense.

In Somali, the occurrence of this construction seems to be confined to the following cases: (i) when the nominal complement functions as an adverb of space, e.g. *ag^fadhiis-ad-* ("closeness" + "sit") "sit near"; (ii) in combination with a semantically very empty verb such as "have many/much", "not have", etc., as in example (4) above; (iii) in lexicalized (idiomatic) expressions such as *aqal^gal-* "to begin cohabitation with one's bride or bridegroom" ("house" + "enter", thus lit. "enter house"), *fool^dhaq-ad-* "wash one's face" ("face" + "wash"), etc. In any case, it does not act as a syntactic device with a clear grammatical function. There are other languages of this group, however, that make very extensive use of NI constructions for syntactic purposes, and it is the aim of this paper to examine in brief the various semanto-pragmatic functions of these mechanisms. It will appear that both their functional characteristics and their historical development provide valuable insights into the constitution of grammatical relations, particularly that of direct object. The following three EC languages will be considered: Dullay, an isolated dialect cluster spoken in Southern Ethiopia; Dasenech, spoken around the northern shore of Lake Turkana on both sides of the Ethiopian/Kenyan border, and belonging to the Omo-Tana branch of EC whose most familiar member is Somali; and Boni, spoken in Eastern Kenya, likewise a member of the Omo-Tana group and

Somali's closest kin. After discussing the functional background of NI in these three languages (sections 3–6), I will deal with some general theoretical implications in section 7.

2. General Characteristics of EC Syntax

Before examining the details of NI in these three languages, I will briefly introduce a number of morphosyntactic characteristics of EC languages.

First of all, all EC languages with one exception (Yaaku) are verb-final.[3] This is important for the present discussion in so far as in verb-final languages the connection between the pre-final element and the verb is particularly tight (cf. Givón, 1975). Verb-finality therefore seems to be particularly favourable for NI.

Secondly, most EC languages are more or less discourse oriented. By this is meant that "packaging phenomena"—in the sense of Chafe (1976), i.e. topic, focus, information value, definiteness, etc.—exert a much more drastic influence on the general organization of the syntax of these languages than syntactic (i.e. formal) relations. Although in most of the better-known languages of this group a distinction is made between a subject case and an absolutive (= general or neutral) case, grammatical relations (GRs) are not very dominant in the syntactic rule system. Independent of whether or not there is a case system, one may generally distinguish three formal relations of noun phrases to verbs (but note that these are purely formal distinctions not to be confused or identified with universal characterizations of GRs): (a) NPs that trigger agreement of person, number, and gender in the verb form; (b) NPs that do not trigger such agreement but are indicated by preverbs (= prepositional elements prefixed to verbs) or in some cases are marked by postpositions; and (c) NPs that do not trigger agreement and are not indicated by preverbs or marked by postpositions. Using traditional labels we will call these relations (a) subjects (S); (b) oblique objects (OO); and (c) direct objects (DO). Despite their formal identifiability, however, the distinction of these three relations does not figure very prominently in the syntactic rules of most of these languages. They all have causative constructions which change Ss to DOs, but quite a number of them lack a passive rule changing DOs to Ss and use an impersonal passive not involving change of relational status. Most EC languages also lack relation-changing raising rules ("A-raising", "B-raising", and similar processes so typical for GR oriented European languages). Nevertheless, EC Ss, DOs, and OOs are genuine **syntactic**

categories, not just manifestations of "deep cases" or semantic roles such as agent, patient, etc.

A category that plays a more significant role in the morphosyntactic structure of EC is **focus**; with very few exceptions all EC languages possess quite elaborate systems of focus marking. Focus is a pragmatic category whose function is to draw the hearer's attention to a particular constituent of the sentence. The focalized constituent is always a piece of the comment (i.e. is not the topic), which receives, for whatever reason, a higher degree of importance than the rest. All EC languages that have focus-marking devices at their disposal exhibit a basic difference between noun focus (NF) and verb focus (VF). The simplest systems distinguish just these two constellations. In Somali, for instance, a focalized NP is marked by the particle *baa* (+subject pronouns), while a focalized verb is marked by the particle *waa* (+subject pronouns) already referred to above.[4] Similarly, in Rendille and Boni one uses *é* with focalized nouns, and *á* with focalized verbs.[5] Particles of this sort are often called **indicators** or **selectors**.[6] In more elaborate systems there is a threefold distinction between subject focus (SF), complement focus (CF), and VF. In Somali, both SF and CF are indicated by the NF marker *baa*, but the difference is shown elsewhere: while a non-subjectal complement is focalized simply by placing *baa* behind it, a focalized subject is put in the absolutive (= object) case, and the verb appears in a specific subordinative paradigm.

Not all EC languages mark all focus constellations by indicators/selectors. These are often reserved for VF, focalized nouns being indicated by their absence and a number of morphological changes; for example, in Konso, where three different verb forms are distinguished: VF with indicator *i-toóyé* "he saw", SF without indicator, subject noun marked by lengthened final vowel (*ána-a toóyé* "I am the one who saw"), and CF with change in tone pattern of the verb form and the addition of a CF marker to the preceding focalized complement (*nama-a toóye* "he saw a *person*").

Since in the languages that we will examine here NI is closely bound up with the focus system, it is necessary to discuss a few examples of focus marking in these three languages. The focus-marking system of Dullay (Harso-Dobase dialect) is outlined in Amborn *et al.* (1980: 80–85). The following remarks will suffice for our purpose here. There is no difference between sentences with focalized verbs and neutral descriptions (sentences having no specific focus). In both cases the verb form is provided with a proclitic indicator which, in addition to focus marking, indicates person, number, gender, mood, and, in a few cases, aspect. Compare the following examples:

(5)   Poqolhó u-ókáyí.
      chief   VF/3sm-come/PERF/3sm
      "The chief *came/has come*."

(6)   Poqolcé   i-ókáycí.
      wife=of=chief VF/3sf-come/PERF/3sf
      "The wife of the chief *came/has come*."

(7)   An-ókáyí.
      VF/1s-come/PERF/1s
      "I *came/have come*."

SF is normally indicated by the absence of agreement with the noun and the lack of an indicator:[7]

(8)   Poqolcé   ókáyí.
      wife=of=chief come/PERF/3sm
      "It was the wife of the chief who came."

Focus on some other constituent is indicated by a special indicator series beginning in *k-*:

(9)   Poqolcé   ku-híʔi.
      wife=of=chief CF/3sm-see/PERF/3sm
      "It was the wife of the chief whom he saw."

Dasenech has a similar indicator/selector series which contains subject-indicating components for person/number/gender as well as aspect- and mood-marking elements. Presence and absence of these indicators marks the difference between VF/neutral description vs. NF:

(10) G'iaacú   a-i-ká-yyimeðe.
      my-father VF-3sm-PREVERB-come/IMPF/3sm
      "My father *comes/is coming*."

(11) G'iaacú   ká-yyimeðe.
      my-father PREVERB-come/IMPF/3sm
      "It is my father who comes."

For Boni, details will be given in section 5.

3. NI in Dullay

In Dullay, object+verb compounding is rather frequent. In almost every case it is the direct object which is incorporated so that one would not hesitate to speak of object incorporation proper.

This mechanism serves two purposes. In the first place, OV compounds are met in cases where the semantic range of a verb is limited to a certain specific area defined by the noun: *sipile* "iron" +*cub*- "beat, hit" →*sipile^cub*- "forge". As is typical in such compounds, the meaning of the verb stem is rather unspecific, and the noun denotes one element of a limited set of objects normally involved in the action denoted by the verb; other typical and similarly important areas of applicability of the action denoted by the verb are then characterized by further compounds. Thus, for example, "iron" is one important area where "beating" applies. Similarly, compounded with *maango* "crop", the verb *cub*- means "thresh", and together with *mismaare* "nail" it means "drive in a nail". Here are a few more examples of such OV compounds: *wošo^tayad'*- ("field" +"guard") "be a field-guard", *ʕaypo^šeeg-/tay*- ("thanks" + "have/find") "be thanked", *tiwalle^šoq*- ("flute" +"play") "play the flute" (and similarly with other musical instruments), *poko^teeh*- ("mouth" +"give") "explain", *kuppo^d'oop*- ("jug, pot" +"smear") "be engaged in pottery", *ʕullo^xaš*- ("hide" +"scrape") "be engaged in tannery", and numerous others.

It seems that incorporated objects are mostly, if not always, indefinite or generic. Consequently, as soon as the object comes to denote a particular referent, the compound must be broken up:

(12)   An-wošo^tayad'a.
       VF/1s-field^guard/IMPF/1s

       "I am a field-guard, engaged in field-guarding."

(13)   Wošo an-tayad'a.
       field   VF/1s-guard/IMPF/1s

       "I guard a (particular) field."

Otherwise, the connection of incorporated object +verb is rather tight, and the whole complex is even capable of being nominalized, e.g. *kuppo^d'oop-aampakko* "potter", *sipile^cub'-aampakko* "blacksmith", etc.

While this function of NI is similar to comparable constructions in well-known languages such as German (cf. *Zeitunglesen* "newspaper-reading", *Pfeiferauchen* "pipe-smoking", *Kopfstehen* "head-standing", etc.), which may well have the same restrictions with regard to definiteness, genericity, semantic closeness, etc., it is characteristic of Dullay that NI additionally has an important function in the pragmatic structure of the sentence. This is illustrated by the following examples:

(14)   a.   Šampo-nu talte an-teehi.
            boy-BEN   goat VF/1s-give/PERF/1s

            "I gave the boy a goat." (VF or Neutral Description)

b.   Šampo-nu talte kan-teehi.
     boy-BEN   goat CF/1s-give/PERF/1s

     "It is a goat that I gave to the boy."

c.   Šampo-nu kan-talte^teehi.
     boy-BEN   CF/1s-goat^give/PERF/1s

     "It is the boy to whom I gave a goat."

d.   *Šampo-nu an-talte^teehi.
     boy-BEN   VF/1s-goat^give/PERF/1s

     (= a.)

e.   *Šampo-nu an-talte-n^teehi.
     boy-BEN   VF/1s-goat-DEF^give/PERF/1s

f.   Šampo-nu talte-n   an-teehi.
     boy-BEN   goat-DEF VF/1s-give/PERF/1s

     "I gave the goat to the boy."

g.   *Šampo-nu kan-talte-n^teehi.
     boy-BEN   CF/1s-goat-DEF^give/PERF/1s

h.   Talte-n   šampo-nu kan-teehi.
     goat-DEF boy-BEN   CF/1s-give/PERF/1s

     "It is the boy to whom I gave the goat."

These examples may suffice to demonstrate that the function of NI is to indicate a particular distribution of discourse categories among the noun phrases of a given sentence—or, to state it more explicitly, that it is employed as part of the focus system of the language. The ungrammaticality of (e) and (g) shows that NI is apparently confined to indefinite objects. This fits in well with a similar restriction encountered with the lexicalized OV compounds discussed above. Furthermore, its occurrence in a sentence seems to require the presence of a focalized constituent other than the object itself (cf. (d) vs. (a)); more exactly, it requires that the focalized constituent be a participant of the verb other than the direct object. It is clear that this restriction rules out all sentences that do not contain focalized elements at all, as well as all cases of VF constructions (but see below). Sentence (b) is an example of object focalization; this requires a non-incorporating structure anyhow.

There is a third use of NI in Dullay, of which I have only a few examples, and its function is, thus, not entirely clear. NI is sometimes employed when the whole complex of object and verb appears to be focalized as in (15).

(15)   Na-   tupure^qaašu-ppa   faru.
       him-DO knot^open/PERF/3sm-and die/PERF/3sm

       "He opened him the knot and then he died."[8]

This is a construction characteristic of "all-contrast" cases such as *"thatch is straw-put and wall is mud-smeared"* ("the house is thatched with straw and its wall is smeared with mud").

To sum up, NI is employed if, and only if, the following conditions are met: (i) the incorporated noun is a direct object; (ii) the incorporated noun is indefinite, unspecific, and non-referential; and (iii) some non-verbal constituent other than the DO or the whole complex of DO+verb must be focalized.

The common pragmatic denominator of the various functions of NI in Dullay lies in the indication of a common information value of direct object and verb, be it higher or lower than some other constituent of the clause.

The question arises of why there is no comparable mechanism for the incorporation of other complements in the presence of focalized direct objects, i.e. something like *talte kan-šampo-nu^teehi*. There is, in fact, something of this sort, but it does not involve incorporation of the noun. Rather, the postposition indicating the case relation of the complement is cut off and appears as a preverb:

(16) Šampo talte kan-nu-teehi.
     boy   goat CF/1s-BEN-give/PERF/1s

The exact functional delimitation of this construction (which is attested for benefactive and locative relations only) vis-à-vis the construction illustrated in (14b) is unclear. Be that as it may, the fact that nouns can be incorporated only if they are DOs is significant. The restriction goes even further: it is noteworthy that direct objects denoting human beings are rarely, if ever, incorporated, even when they are generic or indefinite. In a word, the nexus of a non-individuated DO and the verb is particularly tight. This seems to be due to the fact that, though being a process with a primarily pragmatic function, NI in Dullay operates on a semantic base. When the noun is incorporated an idea of the unity of noun and verb is conveyed; the compound is conceived of as having an unanalysable compact meaning. Only nouns with a certain degree of semantic closeness to, or dependence on, the verb are capable of incorporation, and it seems that the class of non-individuated patients comprises just these. This suggests that, in Dullay, NI is a basically semantic process, which is exploited only secondarily for pragmatic purposes. To put it differently, it is an automatic pragmatic consequence of the semantic amalgamation of the nominal and the verbal concepts (namely, a common information value) which is utilized here as a syntactic device to fulfil a pragmatic function.

4. NI in Dasenech

A very similar situation obtains in Dasenech,[9] the difference being that whereas in Dullay OV compounding is confined to direct objects, in Dasenech all sorts of verbal complements (oblique relations sometimes being indicated by preverbs) may enter into compound-like connections with the verb. The function of this construction is partly a semantic one, viz. to convey the idea of a unitary activity, and partly a pragmatic one, viz. to signal the fact that the object and the verb possess a common information value, especially in the presence of some other focalized constituent. As in Dullay, it is hardly possible to incorporate human objects. Examples of idiomatic noun+verb compounds in Dasenech are: *gono^g'iiða* ("body"+"wash"-REFL) "wash oneself", *tag^nanna* ("work"+"do") "work", *ʔaar^laalla* ("song"+"sing") "sing", *ʔaf^tata* ("mouth"+ "hit") "persuade", *gil^i^g'ab-* ("hand"+"with"+"catch") "catch", *les^u^d'arrama* ("earth"+"on"+"hit") "fall down", and many others.

Syntactically, NI manifests itself only in the presence of indicators (selectors), i.e. in non-subject-focus constructions. As in Dullay, the compound signals both semantic closeness and equality with regard to information value:

(17) A ʔaar^laalla.
     VF song^sing/IMPF/1s
     "I sing (a song)."

If one of the members of a compound possesses a higher information value than the other, it is separated and marked as focalized:

(18) ʔaar a   laalla.
     song VF sing/IMPF/1s
     "I *sing* a song."

In addition to cases similar to those demonstrated for Dullay, Dasenech has a special use of incorporation in situations where more than two elements in a sentence are in contrast:

(19) ʔany tikkid' e-g'oo^muri
     goat one   VF/PERF/3s-throat^cut/PERF/3s
     ʔany tikkid' e-g'or^hiði.
     goat one   VF/PERF/3s-tree^tied/PERF/3s
     "One goat he slaughtered, and one goat he tied to the tree."

The reasons for this are obvious. In Dasenech, a clause may contain no more than two contrastive elements. One contrast always lies in the focus-marked constituent, of which there is only one per clause. The other one may lie in the topic constituent, which can always be interpreted as contrastive without being specifically marked. In the example above, the phrase *ʾany tikkid'* makes up the topics of both clauses; since it is a matter of two different goats, however, both are contrastive topics with different referents. As there remains only one constituent each to be focalized, the compound mechanism serves to fuse the verbs with their adjuncts into units that will then be focalizable as a whole. It may be noted in passing that NI in Dasenech often results in NP NP–V structures of this kind, and a considerable number of underlying relations between constituents of a sentence may be neutralized into a uniform topic-comment structure.

To sum up, NI seems to be more pragmatized in Dasenech than in Dullay; it is perhaps more extensively used and not so closely tied up with semantic verb specification; consequently, definite expressions are not so strictly excluded. It is also important to note that its range of pragmatic functions is wider than it appears to be in Dullay.

5. NI in Boni

Pragmatization of NI is even more advanced in Boni. As I have pointed out elsewhere (Sasse, 1981), Boni is a language whose syntax is by and large pragmatically rather than semantically oriented. It can be expected, therefore, that in incorporation constructions comparable to those of Dullay and Dasenech, discourse categories will play a central role. The Boni clause normally consists of a topic (a predication base), and a comment within which the constituent bearing the highest information value is marked by a focus construction. There are three possible constellations: (a) the verb and one of the non-verbal constituents of the comment (which I will call its specifier) form some sort of compound (NI construction); (b) a nominal constituent of the comment is focalized by the addition of the enclitic particle *é~éené*; or (c) the verbal constituent is focalized by the addition of the proclitic particle *á*. Examples:

(20) a. Hác-idohoo   biyóo^taʾaka.
          SGLT-woman water^drink/IMPF/3sf
          "The woman drinks water."

b. Hác-idohoo   biyóo-é   taʾaka.
    SGLT-woman water-NF drink/IMPF/3sf
    "The woman drinks *water*."

c. Hác-idohoo   biyo á-taʾaka.
    SGLT-woman water VF-drink/IMPF/3sf
    "The woman *drinks* water."

These three syntactic constructions correspond to (and consequently express) three different distributions of information values. In the NI construction (20a) the verb and its specifier are **equal in information value**. This is the reason why this construction is normally encountered in neutral descriptions. In the *é~éené* (20b) and *á* (20c) constructions, it is the specifier and the verb, respectively, that bear the highest information value. Due to the pragmatic orientation of the syntax, GRs play a minor part in its organization. For instance, even subjects (agents) may easily appear in specifier function:

(21) Míŋ ạwçẹrạ   kawáyd'aadéed'i idohóo^d'isa.
      house Boni/GEN usually   women^build/IMPF/3sm
      "Boni houses are usually built by women."

Note that, in spite of the fact that this sentence is most adequately translated by the passive, in Boni it is not a passive but an active NI construction.

Nevertheless, not all types of nominal expressions occur as specifiers with equal frequency and ease; it can be observed rather that there is a clear preponderance of nominals bearing certain semantic properties. These dominance relations are of particular interest as they are apt to provide information about the probability of clustering of semantic and pragmatic properties in a system in which these properties are not automatically bundled in the form of a strict system of GRs (for more about this see section 7). Without having examined every detail of the properties of specifier noun phrases, I can make the following general statements with a sufficient degree of certainty: generic NPs dominate over specific NPs, object expressions (both DO and OO) dominate over subjects, non-referential NPs dominate over referential NPs, indefinite expressions dominate over definite expressions, inanimate nouns dominate over animate nouns, and expressions that are semantically close to the verb (in the sense of a "wesenhafte Bedeutungsbeziehung" à la Porzig, 1934) dominate over semantically more autonomous and independent expressions. In sum, the relative frequency of nouns occurring in the specifier position constitutes a continuum between the non-individuated, semantically non-autonomous patient with the highest rate of occurrence, and the highly individuated (i.e. definite, specific,

referential, etc.) semantically autonomous agent, which is very unlikely to occur (in the course of nearly five months of full-time field work on Boni I came across one single example). It is significant that exactly the same continuum underlies the rules for the application of NI in Dasenech and in Dullay, with the difference that the latter have a cut-off point which does not allow nouns with a higher degree of individuation to incorporate. This is clearly due to the fact that in these languages the compound must be a **semantic unit** in the first place, while in Boni its pragmatic uniformity has more significance.

As a consequence of the lack of semantic restrictions, NI can be employed in any case where the idea of a pragmatically unitary state of affairs (i.e. a compact piece of information without pragmatic peaks) is to be conveyed. In sentences with topic–comment structure (for more on these notions see section 7) NI indicates the lack of an information peak within the comment (cf. 20a vs. 20b and c, also 21). But it is also common in Boni to use NI when a general lack of informational promi- nence (i.e. lack of both topic and focus) is to be indicated. The most frequent context for this are answers to the question "what happened?" (Boni *maa širii*). In answers to this question, subjects are normally incorporated and, if the clause contains more than one nominal element, the non-incorporated nouns are shifted to the end of the clause in order to avoid interpretation as topics:

(22) Maa širii   — Ạddiɡẹ̣ ̂juudi.
     what exist/IMPF/3p   — father-my^die/PERF/3sm
     "What happened?"   — "My father died."

(23) Maa širii   — Šimaad^ki-šid'a   beeraa.
     what exist/IMPF/3p   — stranger^in-exist/IMPF/3sf field-DEF
     "What happened?"   — "There are strangers in the field."

The information structure of such sentences is best paraphrased in a European language by an existential expression such as "there was dying of my father" or the like.

6. Summary

Before drawing some general conclusions I will try to summarize the phenomenology of NI in the languages examined.

Although the three cases differ from each other both in the morpho- syntactic and in the functional details, they have certain important features in common: there is a tendency for the element most closely

connected with the verb both semantically (as a direct specifier of the verb) and pragmatically (as being of equal information rank) to become part of the verb complex. In all three cases, the most natural candidate for this is the inanimate indefinite direct object. The mechanisms of NI in all three languages serve the tendency towards a clear distinction of discourse prominence. The main difference between the three languages lies in the degree of pragmatization (and hence, desemanticization) of the NI construction.

In Dullay, incorporation is a primarily semantically governed process; it is restricted to complements with a low degree of semantic indepen- dence from the verb. The incorporated noun has to form a semantic unit with the verb, and only cases in which an activity and a patient understood as generic and "regularly conjoined in experience" (Sapir, 1911:264) with the activity are combined seem to fulfil this requirement properly. The few OV compounds that go beyond such cases (as, for example, "goat-give") are due to a generalization of this basically semantic process. The pragmatic function of NI is thus coupled with a semantic function, mediated through the GR of DO: the proper DO is both semantically autonomous and pragmatically prominent, and its incorporated counterpart is both semantically non-autonomous and pragmatically non-prominent. Since DOs normally express patients, the pragmato-semantic noun differentiation is applicable only to patients, so that pragmatic prominence is shown only for patients, and the pragmatic prominence of a patient is shown only in cases where it is also semantically autonomous, and the pragmatic unity of patient and action is shown only in cases where it is also a semantic unity. This functional delimitation explains the diathetic character that NI has in Dullay: since the autonomous DO, due to its inherent pragmatic prominence, is the natural target of focalization, incorporation mechan- isms (including preverb incorporation) can be understood as a method of "objectivalization" of oblique complements in order to prepare them for focalization processes. The pragmatic function of NI is coupled in these cases with a relation-changing process. NI removes a DO from the scene, whereby the valence of the verb which incorporates the noun is reduced by one; a transitive sentence becomes intransitive (*x does y →x y-does*), and a bitransitive sentence becomes transitive (*x does y to z →x y-does z*). It is thus both an object-deleting and an object-creating mechanism, and regulates the indication of pragmatic prominence (a prerequisite for focalization) only in the domain of DOs.

In Dasenech, on the other hand, there seem to be no such restrictions. Hence incorporation is not confined to DOs and is thus more freely employable for pragmatic purposes. It seems that the concept of a

common information value which is conveyed when the noun is incorporated begins to outrank the idea of semantic unity of noun and verb. Yet NI is a matter of GRs: subjects are not allowed to be incorporated. This means that the "feeling" that Ss are normally conceived of as pragmatically prominent (topics) is built into the grammar as a restriction on the application of NI.

In Boni, finally, pragmatization of NI has been carried through rather completely. Pragmatic prominence is not associated in any way with the relational status of a noun. Anything may form a predicative comment phrase in relation to a topic. Incorporation is largely a pragmatic mechanism indicating a predicate phrase composed of elements with equally high information value. It is to some extent sensitive to semantic criteria (semantic closeness to the verb), but this sensitivity has nothing to do with objecthood. (Witness the fact that generic non-referential Ss are of equally high occurrence in specifier noun position as generic non-referential DOs, so that the semantic criterion here is genericity rather than semantic role.) Whereas in Dullay the semantic restrictions of NI are clearly relationally based (i.e. are related to the semantic ingredients of DOs, on which see below), they are pragmatically based in Boni and merely reflect universal properties of discourse.

7. Theoretical Implications

The data presented in this paper are of general importance with respect to a number of questions concerning syntactic organization. I will restrict myself to three central points: the problem of clustering of semantic and pragmatic features and its immediate consequences for the constitution of syntactic relations, the problem of embedding the NI construction and its functional characteristics within the general typological habit of these languages, and, finally, a number of possible generalizations concerning NI languages in general.

Let us take the problem of clustering first. In the course of the discussion of NI phenomena in EC, we found ourselves repeatedly faced with the fact that the pragmatic function of NI was coupled with the grammatical status of the noun in question or that semantic factors played a role in the rules for its application. We have seen that in Dullay, for example, the GR of DO, as defined morphosyntactically in section 2, cannot simply be regarded as a case function indicating a certain number of "deep cases" or semantic roles ("patient" or the like), but is clearly involved in the pragmatic structure of the sentence in that,

among other things, non-autonomous DOs are more liable to NI and autonomous DOs are more susceptible to focalization than any other NP in the sentence. On the other hand, we have a language like Boni, where syntactic operations do not take care of combinations of semantic and pragmatic factors, but here certain "natural" tendencies seem to exist which regulate the frequency of coincidences. What is the reason for all this? Before we go about answering this question, it is necessary to consider the functional background of syntactic relations from a more theoretical point of view.

Human utterances are of two basic types, being either compact, simple, conveying an information all of a piece, where all elements are of equal importance, or bipartite, double, with a split between an element that sets a base for a predication and the predication itself. The selection of one or the other type of utterance may be optional for the speaker in a number of cases, but normally it is dictated by discourse requirements.[10] All these things are very well known and seem to require no further explanation. Using terminology invented by Marty, we will call the compact type of utterance "**thetic judgement**" and the bipartite type of utterance "**categorical judgement**".[11]

Let us leave aside for the moment the thetic judgement (we will return to it later in the discussion) and consider only bipartite types of utterance. Following traditional terminology, we call the predication base (= "the entity spoken about") **topic** and the predication made about it **comment**, and refer to these relations as **pragmatic relations**. The existence of pragmatic relations is the source for a certain pragmatic dynamics (in terms of a progression from less to more importance) in the categorical judgement that is absent from a thetic judgement. The difference between the two types of utterances may also be seen as one of dimension: the topic–comment relation adds a third dimension in that the topic functions as a scenic background against which the action is set off.

How the speaker organizes his utterance, whether with a compact or with a bipartite information structure, is in principle independent of the propositional meaning of the sentence. Thus, in the examples given in note 10 the propositional meaning is the same, yet the information structure is different. There are a number of trivial correlations, though: for instance, an "impersonal" clause, i.e. a statement about a pure state of affairs (Latin *itur* "one goes"), can only be uttered as a thetic judgement on account of its semantic compactness. But normally the semantic structure of a sentence is such that there is one element indicating a certain state of affairs (usually encoded as a verb), and one or more elements that indicate participants in this state of affairs. There is a

strong correlation between the type of judgement and the number of participants: the more participants there are, the less probable is the application of the form of the thetic judgement. In a categorical judgement based on the pragmatic relations of topic and comment, one participant is selected as topic, and the rest will constitute the comment. Which participant is selected as topic is a matter of the specific circumstances under which a sentence is uttered. However, and this is the crucial point, these circumstances are determined by the subjects about which humans normally communicate. Topic selection thus reflects the interest of the speaking person in certain specific entities, and, by implication, entities bearing certain semantic roles are more susceptible of occurring as topics than others. It seems that the highest interest the speaker has is in himself so that the best candidate for a topic is the speaker himself (first person!) or a subject having the highest possible number of speaker characteristics, such as a definite, highly individualized agentive human.[12] This is the reason for the high degree of correlation between agency and topicality in many languages of the world' which has been observed so frequently.[13]

On the basis of these considerations we may view a system of GRs as an economic device with the purpose of distinguishing both semantic roles and pragmatic relations by making use of **unmarked combinations of semantic and pragmatic features**. This distinction becomes most relevant in the **transitive sentence** with its opposite semantic roles of agent and patient, on the one hand, and its two NPs having the opposite pragmatic functions of topic NP and comment NP, on the other. As soon as the unmarked association of agency with topicality is grammaticalized as a syntactic relation of "subject", the semantically polar opposite of the agent, the patient, automatically becomes the prototypical "comment NP": due to the combination of semantic and pragmatic functions semantic polarity implies pragmatic polarity. It is thus the nature of a transitive clause not only to express a transition of an action from an agent to a patient, but also a progression from low to high information value within the domain of the NPs of the sentence; in other words, the transitive comment contains a nominal pragmatic peak opposed to the topic. It is (universally) the prime pragmatic function of the DO as a secondary grammatical relation to identify this pragmatic peak normally associated with the semantic role of patient. I would claim, then, that a system of GRs is established once the semantic roles of agent and patient are systematically correlated with the pragmatic functions of topical NP and polar opposite commental NP via syntactic functions of "subject" (primary GR) and "direct object" (secondary GR) in the transitive sentence. Both relations distinguish themselves by

their pragmatic prominence which raises them above the level of pragmatic prominence contained in the verb. As a consequence of the connection of semantic roles and pragmatic prominence, the transitive clause receives a pragmatic structure quite different from that of the intransitive clause. While the intransitive clause simply reflects a bipartite topic–comment division, the transitive clause is a bipolar structure with the predicate as a linker between a "starting-point" and an "end-point":

intransitive:	NP = subject		V = predicate	
	topic		comment	
transitive:	NP = subject	V = predicate	NP = direct object	
	"starting-point"	"linker"	"end-point"	
	topic		comment	

How pragmatic prominence is to be defined operationally is a problem in itself. It certainly has something to do with information value (low for topical, high for commental prominence), as well as with notions such as given and new (or rather, previously mentioned or not), though it seems that more factors than these are involved. It is clear that we have to do with two types of pragmatic prominence, the "starting-point" prominence and the "end-point" prominence. It seems reasonable to distinguish these in terms of background and foreground: the "starting-point" constitutes the background against which the "end-point" stands out as the foreground. The grammatical means by which this is achieved in a system of GRs is markedness: the unmarked feature combination of individuation (referentiality, definiteness, specificity) and agency characterizes the background, whereas the marked feature combination of individuation and patiency constitutes the foreground. The unmarked combination of non-individuation and patiency is pragmatically irrelevant; its pragmatic relevance is indeed so low that its status as a participant of the predicate tends to become effaced by incorporation. This clearly shows that only individuated items are candidates for GRs due to their **inherent** pragmatic prominence. This inherent prominence, however, is nothing but a matter of topicworthiness which, in its basic form, constitutes a hierarchy of three grades: (i) highest topicworthiness, entity suitable as topic for the whole utterance; (ii) next-to-highest topicworthiness, entity suitable as pragmatic peak of the comment; and (iii) lowest topicworthiness, entity not suitable as pragmatic peak at all. In view of the semantic features normally associated with these three degrees of topicworthiness, a connection with the three entities characteristically involved in the speech situation suggests itself: the speaker, his communication partner, and anything else. The speaker views himself as the background and

starting-point *kat'exochen*; consequently the most suitable topic candidate is an item bearing the semantic features of the speaker. The second position is occupied by the communication partner who is viewed as individuated but non-agentive.[14]

To sum up, we may explain the pragmatic nature of the DO as some sort of secondary or lower-order topic. The transitive sentence is a double categorical judgement whose comment contains in itself an embryonic topic-comment structure. Higher-order and lower-order topic are associated with the semantic features of agency and patiency, respectively. Due to the pragmatic foundation of this association in the speech situation, topicworthiness can be bestowed only on entities that are individuated, i.e. bear the semantic characteristics of the speech partners. The association of semantic and pragmatic features leads to a system of grammatical relations and grammatical valence as summarized in Fig. 1.
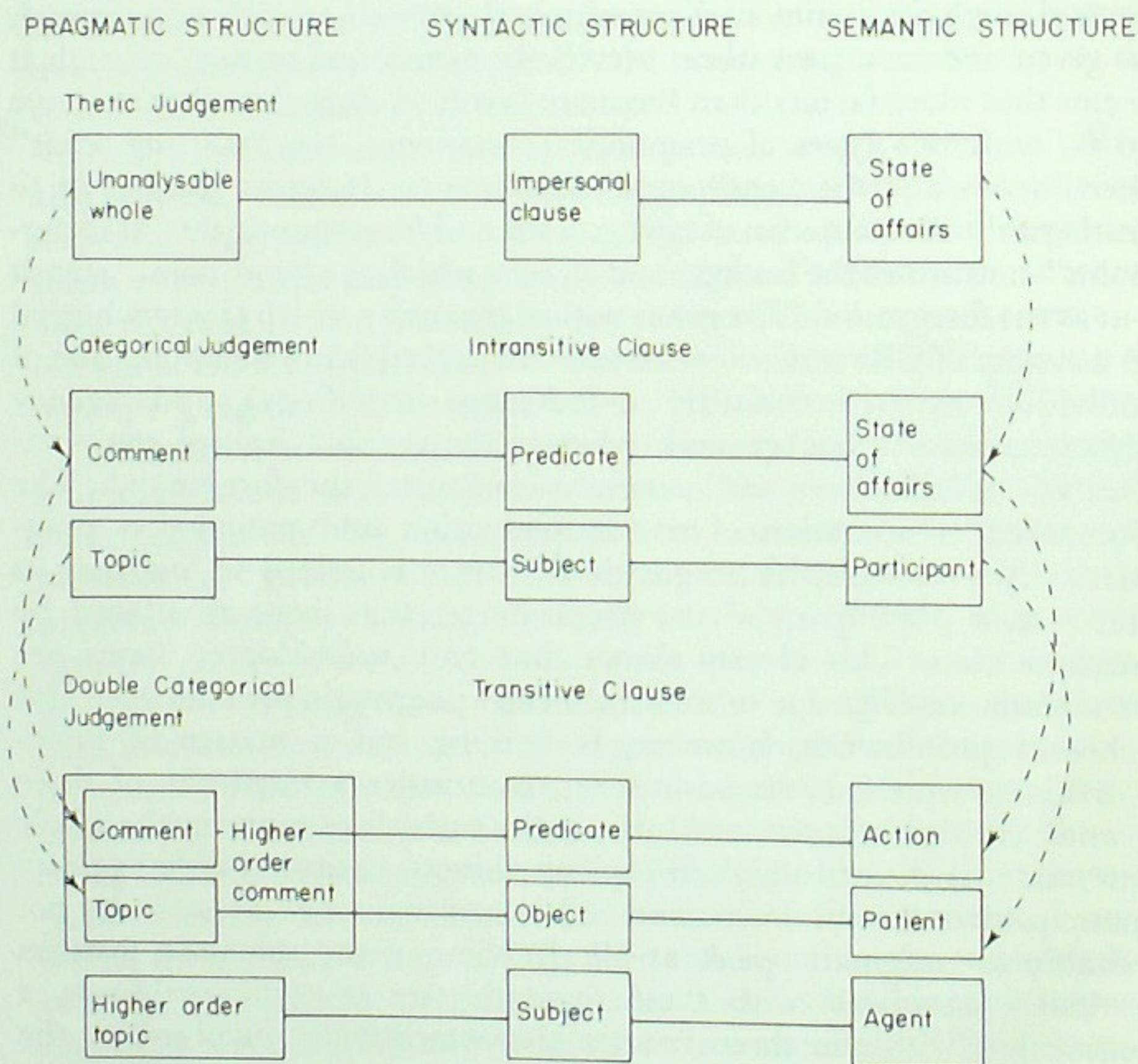

Fig. 1. Grammatical relations and valence resulting from the association of semantic and pragmatic structures.

The Dullay data discussed above seem to support this hypothesis fairly well. By virtue of its being the pragmatic peak of the comment phrase, the GR of DO is the unmarked target of focalization in the transitive sentence. Those objects that do not qualify as pragmatic peaks of the comment tend to be incorporated. Non-qualification for pragmatic prominence is clearly due to semantic factors, however, and it is here that the semantic ingredients of DOs come into play. As pointed out by Hopper and Thompson (1980:253), these are situated along a scale of individuation which refers both to the distinctness of the patient from the agent and "to its distinctness from its own background". For Dullay, at least, the complex of semantic and pragmatic factors involved may be summarized as follows:

Autonomous Direct Object	*Incorporated Direct Object*
specific	generic
referential	non-referential
definite	indefinite
animate/human	inanimate/non-human
semantically independent	semantically dependent
pragmatically prominent	pragmatically non-prominent

As long as the NI mechanism is restricted to the GR of DO, it seems only normal that its application should be guided by the semantic ingredients of DOs. These are responsible for the pragmatic status of the noun in question: the more individuated a direct object is, the more suitable it becomes as a candidate for the pragmatic peak of the comment. In the case of Boni, on the other hand, we find a language entirely free of such restrictions. Individuation may play a role in the relative frequency of incorporation, but it is not a condition imposed on the application of the syntactic rule of NI. As discussed in section 5, it is quite normal to have a sentence with an incorporated specific and definite subject (as in example 22). The reason for this must be sought in the difference between Boni and Dullay with regard to the influence of semantic factors: in Boni the process is independent of semantic factors; NI simply signals informational equivalence of noun and verb regardless of the semantic status of the noun in question. In other words, incorporation of an NP in Boni converts a categorical judgement into a thetic judgement, and a double categorical judgement into a simple categorical judgement. That this has nothing to do with subjects, objects, and transitivity (as in Dullay), is simply due to the fact that Boni uses NI as a purely pragmatic process. This supports our claim that GRs are syntactic devices to combine

semantic and pragmatic functions: syntactic operations with pragmatic functions are significantly more dependent on semantic factors in languages with GRs than in languages without GRs.

From the viewpoint of ideal typology, then, we may distinguish between two types of languages: those in which there are syntactic relations and operations with a combined semantic and pragmatic function ("GR oriented languages"), and those in which syntactic devices with pragmatic and semantic functions are kept apart. The latter can again be subdivided into those in which syntactic relations and operations are predominantly pragmatically or discourse based ("pragmatically oriented languages"), and those in which syntactic relations and operations have primarily semantic functions ("semantically oriented languages").[15]

This leads us to the question of how the structural features described in sections 2–5 can be linked to the overall typological pattern of the languages under consideration. The first important thing to note in this connection is that all three languages (as EC in general, cf. section 2) are to a certain extent characterized by a pragmatically oriented syntax. I have argued elsewhere (Sasse, 1981) that the widespread and popular label "topic-prominence" does not seem to fit very well, but in order to give an impression of the syntactic type of these languages it may suffice here to say that it comes rather close to what has been described under that label (Li and Thompson, 1976). What is more important, however, is the fact that the three languages examined exhibit three different stages between discourse-oriented and GR-oriented syntax, and that the functions of NI can be directly correlated with these differences. Boni is almost exclusively discourse oriented; it shows NP + VP structure, but not at all in the same sense as English: the basic split is a topic–comment split rather than a subject–predicate split. Consequently, compounding phenomena in the VP are only sensitive to discourse functions and entirely independent of GRs and/or semantic roles. Dasenech shows much more rigidification; here the independence of the topic–comment organization of GRs is not nearly as spectacular; hence, semantic dependence on the verb and relational status are much more important for the applicability of NI than in Boni. Dullay comes closest to the situation in strictly GR-oriented languages (like the European ones); here the association of DO, pragmatic prominence in the comment, and degree of semantic dependence plays a dominant role.

There is no doubt that the development of EC syntax represents a drift from GR-oriented syntax to more pragmatically oriented syntax.[16] Different languages have reached different stages in this development,

and the functions of NI processes neatly reflect this. The affinity of semantic and pragmatic closeness of an NP to the verb is situated along the scale of topicworthiness ranging from a generic or indefinite, inanimate patient to a specific, definite, animate agent. The separation of pragmatic and semantic functions as a historical process (in other words, the development away from a system of GRs) follows exactly this scale. In the early stages of the development only non-individuated patients can be incorporated, because these are the elements with the lowest semantic and pragmatic independence. Later on, the clustering of semantic and pragmatic closeness to the verb is gradually severed, beginning with a slight expansion from generic to specific but indefinite objects, from inanimate to animate objects, and so forth. As the importance of GRs for the organization of the syntax of these languages decreases, the pragmatic subfunction of the DO is set free, as it were, and is increasingly replaced by a pragmatically oriented "comment NP". A syntactic mechanism of differentiating between individuated and non-individuated DOs has now become a general device of differentiating between pragmatically prominent and pragmatically non-prominent NPs.

Let us close with some speculations about NI in general. What is known from more typical NI languages,[17] along with the observations on EC languages presented in this paper, leads one to assume that (other things being equal) the process of NI always serves a pragmatic purpose, be it primarily or secondarily. This insight can already be gained from the reading of Sapir (1911), and is also apparent in some recent works dealing with the phenomenon of NI, even if the exact pragmatic function of the process is not explicitly discussed (Mardirussian, 1975; Hopper and Thompson, 1980). NI often figures prominently in syntactic operations which refer to discourse categories (cf. Hopper and Thompson 1980; Woodbury, 1974 and 1975). Its pragmatic purpose can be described, in most general terms, as the removal of a complement lacking pragmatic prominence of its own. Lack of independent pragmatic prominence automatically links this complement to the verb as the predicative centre of the utterance, and the most effective way to perform this syntactically is of course the fusion of the two elements into one. The number of verb complements is thus reduced by one, whereby intransitive clauses become impersonal and so categorical judgements become thetic judgements; transitive clauses become intransitive and so double categorical judgements become simple categorical judgements; bitransitive clauses become transitive and so elements with a low status in the hierarchy of topicworthiness are allowed to move up the hierarchy.

Leaving aside for the moment the fact that some NI languages allow incorporation of locative, instrumental, etc. complements (pace Postal and Perlmutter, 1974), it can generally be observed that NI centres round the complement indicating the semantic role of patient. The complement that is normally affected by NI is the direct object (and occasionally the intransitive subject) in languages of the accusative type, and the absolutive (comprising the patient phrase of the transitive sentence and the intransitive subject) in languages of the ergative type. Incorporation of DOs stresses the pragmatic unit of DO and verb, with the effect that the two basic parts of the sentence will be represented by two compact phonological units (NP = topic, V = comment). Similarly, incorporation of intransitive subjects forms a monolithic complex particularly well suited for the expression of pragmatically unstructured thetic judgements.[18]

This apparent connection of pragmatic functions with semantic roles points to the existence in NI languages of a system of GRs in the sense described above, i.e. a bipolar structure constituted by two syntactic relations indicating unmarked combinations of the semantic roles of agent and patient with the pragmatic functions of topical and commental peaks, and an "accessibility hierarchy" based on the topicworthiness of an NP in a sentence. All the better-known cases of NI show it as a diathetic mechanism with relation-changing properties. In accusative languages it has two effects on direct objects: it will deprive an unsuitable DO (unsuitable by virtue of its semantic features) of its independent relational status and it will serve (on occasion) to convert some other NP into a DO. In languages whose syntax is based on an ergative relational system (and a good many NI languages are of this type) NI often changes the relational status of some NP to absolutive (see Mardirussian, 1975:385) with the effect of retopicalization (see Sasse, 1978). These diathetic functions of NI make sense only in the context of a system of GRs with its fundamental property of combining the semantic roles of agent and patient with the pragmatic functions of topical and commental information peaks (or vice versa as in some ergative languages): because of its lack of inherent pragmatic prominence the non-individuated patient is unsuitable as an information peak and is, therefore, deprived of its grammatical individuality by being incorporated.

NI in Dullay and in Dasenech operates according to similar parameters as in "more typical" NI languages.[19] Only Boni is exceptional due to its lack of reference to semantic criteria; yet this case is of particular interest as it appears to show the pragmatic base of NI in the purest possible way.

Notes

[1] With one minor modification ("Western Cushitic" became an independent branch of Afroasiatic) this is the classification of Greenberg (1963), which is widely accepted by scholars working in the field. Except for the Somali material all data on Cushitic languages used in this paper are from my own collections made during various field trips supported by the Deutsche Forschungsgemeinschaft (German Research Society). Transcription: for Somali, the official orthography is used. Note that *dh* is retroflex [ɖ], and *c* and *x* represent pharyngeals (I.P.A. [ʕ] and [h], respectively). The transcription symbols used for the other languages have approximately their I.P.A. values, except for *y* which is a palatal semi-vowel, *š* which is I.P.A. [ʃ], and length is indicated by doubling both for consonants and for vowels. A cedilla under a vowel in Boni means tenseness. I use the symbol "-" for morpheme boundaries and "^" for boundaries between two elements of a compound. In addition to those that will be explained in the text, the following abbreviations are used: DEF = definite, IMPF = imperfective aspect, PERF = perfective aspect, GEN = genitive, SGLT = singulative, BEN = benefactive, REFL = reflexive. Inflection for person is indicated by numbers, followed by the letters "s" for singular, "p" for plural, "m" for masculine, "f" for feminine; e.g. "3sf" third person singular feminine.

[2] As Mardirussian (1975:383) defines it, "noun incorporation is a process whereby a full NP argument of a predicate is physically incorporated into the predicate". Sapir (1911) regards it as a derivational process. If we accept this, noun incorporation in EC is atypical in that it is mainly a syntactic rather than a derivational operation.

[3] Cf. Heine (1976:44), and specifically on Yaaku, Heine (1974).

[4] For a detailed analysis of the focus particles in Somali the reader is referred to Andrzejewski (1975). Aspects of the syntax and semantics of these particles are also dealt with in Hetzron (1965) and Žolkovskij (1966). The most recent treatments are Antinucci (1980) and Antinucci and Puglielli (1980).

[5] A detailed analysis of focus marking in Rendille is presented in Oomen (1978). For Boni cf. Sasse (1981).

[6] The term "indicator" was introduced by Bell (1953) and is generally accepted for Somali. The term "selector" is due to Whiteley (1958); it has been used by several authors in connection with Dasenech, Konso-Gidole, Dullay, and other languages.

[7] Historically, SF constructions have developed from cleft sentences with antecedent deletion. This explains the absence of agreement in most languages, and also the fact that in some EC languages a focalized subject appears in the absolutive (= predicate) case.

[8] This refers to a ritual called the "tying of the soul" which is performed by a seer: if he makes a knot in the clothes of a person, this person is bound to die as soon as the knot is opened; cf. Amborn *et al.* (1980:140).

[9] There is as yet no detailed study of this language. Grammatical sketches are presented in Sasse (1974) and (1976).

[10] Suppose that a field guard, having discovered some intruders in his field and shooting at them, is asked by his friend: *What's the matter?* His answer may be something like *There are strangers in the field* (= Boni example 23). Now let's imagine a quite different situation. Suppose some strangers who are visiting you in order to buy your

field go out for a walk to inspect it. Your friend who finds your house empty looks at you requiring an explanation; in this case the equivalent of (23) is inappropriate, and your answer will probably be *The strangers are in the field*. In the first case we have to do with a compact piece of information which characterizes a situation as a whole; all parts of the utterance are of equal importance (a paraphrase using a nominalized construction is quite suggestive: "there is being-in-the-field of the strangers"). In the second case we have to do with a statement **about** something, namely the strangers, who are set as a base for the predication "be in the field".

[11] Cf. Kuroda (1973). We will follow here Kuroda's broader use of the terms.

[12] One may speculate about an "egocentric world-view" which is reflected in this, but this is outside the scope of the present paper.

[13] This has repeatedly been attributed to a hierarchy of agentivity. For a number of arguments modifying this hypothesis cf. Sasse (1982).

[14] Cf. for a similar suggestion Bechert (1977).

[15] With varying terminology these typological distinctions (which are necessarily much rougher than reality) have been repeatedly discussed in recent years, cf. among others Li and Thompson (1976), Van Valin and Foley (1980), Sasse (1982).

[16] One motivation for the development of such an elaborate focus-marking system may perhaps be seen in the fact that, in the course of the history of EC languages, there has been a considerable increase in the distinctive functions of pitch differences (tone). This may have given rise to the avoidance of intonational means of pragmatic marking and their replacement by morphosyntactic means.

[17] The literature on NI is still scanty. Some valuable material is found in Sapir (1911), Woodbury (1974) and (1975), Mardirussian (1975), Bonvillain (1974) and Hopper and Thompson (1980).

[18] Expressions such as Onondaga *kahɛtatéhta?* "the field lies spread out", *kahsahe?tahíhwi* "beans are spilled" are apparently used to signal the absence of topical, focal or contrastively stressed elements, i.e. generally speaking the absence of elements bearing pragmatic prominence, cf. Woodbury (1974) and (1975) for further examples. Sapir (1911:266) states that, in Paiute, intransitive verbs with incorporated noun subject "seem to have reference particularly to natural phenomena and states". Expressions referring to natural phenomena are typical instances of thetic judgements.

[19] Cf. the parallelism of the description given above for NI in Dullay and Dasenech and a description given by Sapir (1911:275) for Oneida (Iroquois) which he regards as the most thorough-going instance of NI: "Inanimate nouns are regularly incorporated into the verb complex when used as subject or object, apparently also at times when predicate subjective (or objective) in force. The animate noun does not seem to be as often incorporated as the inanimate noun; the animate subject, according to Dr Boas, is in fact never incorporated."

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