

## NATURAL CATEGORIZATION AND FUNCTIONAL SENTENCE PERSPECTIVE

ANNA DUSZAK

*University of Warsaw*

In this paper I address the applicability of natural categorization to studies in functional sentence perspective. First (1), I concentrate on the concept of natural category. Next (2), I discuss some work on topics done within the natural, prototype-oriented, paradigm. Finally (3), I advance a feature-weighted model of topic prototypicality in English and Polish.

1. The concept of natural category is an alternative to that of classical category. The contrast between the two is founded on a different understanding of our categorization principles, that is the way in which we perceive the world: the entities and relations obtaining among them. In other words, what is at stake here is the operation of human cognition in general. Accordingly, the scope and weight of the problems concerned far transcends the domain of linguistic explorations. Actually, the appropriateness and applicability of natural categorization to language studies is a matter of derivative considerations. Given the complexity of the issue at hand, the present section will certainly prove allusive and cursory rather than argumentative. Its main purpose, however, is only to point down the fundamentals of natural categorization and their linguistic implications.

The theory of natural categorization questions the basic assumptions of objectivist metaphysics: category membership is determined by objective, necessary and sufficient, conditions, i.e., by way of shared properties; all members of the category have something in common, thus being "equal" to one another; categories have clear, nonfuzzy, boundaries (no degrees of membership are allowed); no external motivation for category inclusion is considered

(e.g. background knowledge or subjective experience). Instead, the theory of natural categorization brings to the fore the role of experiential factors in category inclusion and, among them, human perception, mental imagery, bodily experiences, motor movements, desires and intentions, expectations, personal and social experiences.

Attacks on classical categorization came independently from different cognitive sciences (see esp. Lakoff 1982 a, b). However, the main arguments against the objectivist hypotheses were given by psychologists and, in particular, by Rosch's (1978) empirical studies. Her research can be summarized as follows. Category systems have both a vertical and a horizontal dimension. The vertical dimension concerns the level of inclusiveness of the category — it is the dimension along which the terms like *collie*, *dog*, *mammal* vary. The horizontal dimension concerns the segmentation of categories at the same level of inclusiveness — it is the dimension on which *dog*, *cat*, *car* and *sofa* differ. As for the vertical dimension, Rosch (1978:30) argues that not all possible levels of categorization are "equally good or useful". On the other hand, in order to increase the distinctiveness and flexibility along the horizontal dimension, categories should be defined in terms of prototypes or prototypical instances which contain attributes most representative of items inside, and less representative of items outside, the category. Accordingly, Rosch's findings are often described in terms of (i) basic level results, and (ii) prototype results.

(i) Rosch (p. 32) argues that certain categories are more "basic" than others, which means that they are recognized more rapidly, processed more easily, learned earlier, used more frequently, given shorter names, associated with definite motor activities, etc. These are "basic-level" categories. They locate "in the middle", i.e. between superordinate and subordinate categories; cf. *chair* versus *furniture* and *kitchen-table*, respectively.

(ii) Rosch's prototype results boil down to the following assumption: some members of a category are more representative of it than other members. Thus, e.g., *robins* are more representative of the category BIRD than *chickens*, *penguins* or *ostriches*. The most representative members are called "prototypical". The prototypical-nonprototypical distinction entails the following corollaries. Category membership is determined not by necessary and sufficient conditions but by clusters of attributes that characterize the most representative members. None of the attributes need be necessary or sufficient for category membership. Attributes do not have equal status: normally, some are more important than others for category membership, i.e. they are more heavily "weighted" (in the sense of Bates and MacWhinney 1982:211 — see below). Category boundaries are inexact, i.e. concepts are fuzzy. Category boundaries are, however, conventionally motivated by external, possibly culture-based, factors, that is they associate with "background frames" or "experiential gestalts" (in the sense of Lakoff and Johnson 1980:176f; see also Lakoff

1982a:25). These are the ways of organizing experience into structural, multi-dimensional, wholes.

By and large, the prototype results suggest that in our perception of what categories are we depend not that much on the objects themselves, but rather on our idealized mental models of those objects, i.e. Idealized Cognitive Models (in the sense of Lakoff 1982a). This means that understanding takes place in terms of entire domains of experience and not in terms of isolated concepts. Any theory consistent with the basic-level and the prototype results may be referred to as a theory of natural categorization or prototype theory.

A linguist of the "naturalist" persuasion purports that linguistic categories are natural, i.e. that they have the kind of structure that conceptual categories do. At this point at least the following facts should be noted:

(i) some categories are gradient, e.g. *tall*, i.e. they have inherent degrees of membership;

(ii) some categories have clear boundaries but show prototype effects (see, e.g. Fillmore's discussion of *bachelor* in Lakoff 1982a);

(iii) some categories are radial, i.e. there are central and noncentral members of the category. It is arguable, for instance, that this is the property of syntactic categories. Namely, the categories that are mapped onto surface form have their semanto-pragmatic underpinnings. However, central constructions are basic in that they contain the most systematic semanto-pragmatic pairings; they are the best (=prototypical) examples of the category in question. Noncentral constructions, on the other hand, are departures from the most representative type. A good case at point is the grammatical subject. Bates and MacWhinney (1982:208), (see also Comrie 1981:101) argue that the grammatical subject in English normally combines topichood with agentivity. Nonetheless adult speakers of English can produce, understand and judge as grammatical a variety of sentences containing, say, nonagentive subjects, as in (1) below:

1. The knife cuts,

nontopicalized agents, as in (2):

2. John hit the ball, not Fred,

or abstract "entitylike" nouns, as in (3):

3. John's drinking bothers me.

This, they argue, shows that the semantico-pragmatic heterogeneity of syntactic classes can be captured best in terms of family resemblance and goodness of membership: some subjects are "better" than others. In other words, the prototype-based paradigm should allow us to get a better understanding of how the various meaning-and-structure-related tensions co-exist in the overall system of the language. Admittedly, it is hard to deny today that as yet the applicability of natural categorization principles to linguistics remains



a matter of cautious optimism; prototype-based explications of sentential topics (see sec. 1 and 2 below) are an instance of such tentative endeavours. Notably, it might be noticed at this point that continuum effects in language have been observed also prior to, and outside, the prototype theory (see, e.g. Austin and Lakoff (forthcoming); Bolinger (1961); Enkvist (1984); Wierzbicka (1980)).

In sum, while ascribing the property "natural" to linguistic categories, we also conjecture that language is part of general cognition, i.e. that is "uses" the same kind of categorization as the mind does in general. Accordingly, we question the autonomy of the syntactic component in language. Instead, we hold that syntax is not independent of meaning, where meaning subsumes the semantics and pragmatics of communication. Lastly, we take the view that meaning and communication are the primary functions of language. It is for this reason that the linguist should try to explain as much as possible about the form in language in terms of parameters of meaning and communicative function. The topic-comment system (functional sentence perspective) is an instantiation of such meaning-bearing factors in grammar.

2. Prototype-oriented discussions of sentential topics gained some momentum from work which put the spotlight on different though not unrelated grammatical phenomena. As already noticed (sec. 1), Bates and MacWhinney (1982) proposed a reinterpretation of the grammatical subject as a natural category anasylable through the prototypes of agent and topic. In essence, their hypothesis is reducible to two basic tenets:

- (i) prototypical subjects are both agents and topics,
- (ii) subjects are both meaning-based and a grammaticized category.

Under (i) prototypical instances of sentence subjects can be predicted purely on the basis of meaning, where meaning involves the semantic factors, primarily the case role, and the pragmatic factors such as old information, focus of attention, etc. Under (ii) the inclusion in the category subject is not fully predictable from the properties of agents and topics, but also regulated by language-specific conventions and constraints. By virtue of (i), however, category membership becomes motivated by (even though not predicted from) family resemblance to the most representative members of the category.

Bates and MacWhinney do not see (i) and (ii) as a strong universalist claim though they anticipate that languages should exhibit a general tendency to comply with either of their assumptions (see also Comrie (1981:20, 101)). They emphasize, however, that English "merges agent and topic in most cases, capitalizing on the role of perspective in creating a statistical overlap between these two categories" (op. cit.:204). It is this observation that Van Oosten took a closer look at in her study of subjects, topics and agents in Eng-

lish (1984). Van Oosten's work is — to my knowledge — the first prototype-based attempt to show how the grammatical subject in English is organized in terms of the semantic notion agent and the pragmatic notion topic. Although not centrally concerned with topicalization phenomena, Van Oosten provided an interesting contribution to a new, "unified", view of sentence topics. The present section takes stand to some of her proposals on issues of immediate relevance to my concern here.

For Van Oosten sentential topics associate with the following characteristics (p. 325):

- 4. (i) the prototypical topic is what the speaker is talking about,
- (ii) the prototypical topic is the focus of the speaker's attention,
- (iii) the prototypical topic is also the focus of the hearer's attention,
- (iv) the prototypical topic is the focus of the speaker's interest,
- (v) the speaker takes the perspective of the prototypical topic,
- (vi) the prototypical topic is concrete, visible, and present in the speaker's immediate environment,
- (vii) the prototypical topic is also present in the hearer's immediate environment,
- (viii) the reflex of the prototypical topic in the sentence is referential and definite,
- (ix) the prototypical topic is the primary of the sentence (see below),
- (x) the prototypical topic is a basic-level topic
- (xi) the prototypical topic is a salient participant in a discourse-topic schema or scene, and a human being.

At the outset, a few words of comment. By positing property (x), Van Oosten assumes that topics could be categorized in a way analogous to the natural categorization of objects proposed by Rosch (1978). Namely, there are superordinate, basic-level and subordinate topics, illustrated by (a, b, c) of (5) respectively:

- 5 a. Let's just forget *the whole thing*
  - b. *Joan* isn't coming
  - c. *My hand* hurts
- (Van Oosten op. cit.:7).

Van Oosten assumes that such a categorization of topics has a natural correlate in the way in which we perceive things and talk about them. Thus, the basic-level topic is a participant part of a broader focus of interest, e.g., a commercial-event schema will normally entail participants such as the buyer, the seller, the goods or the money. On the other hand, it is natural for a basic-level participant to activate its own parts or aspects, e.g., the mentioning of John could entail John's clothes, his body, etc.



Property (v) has to do with syntactic reflexes of topics. More specifically, it involves sentence initial position and subject selection rules which in English serve as a means of perspectivizing. At this point (p. 58) Van Oosten admits that (v) is dependent on the "ecological niche of the subject", i.e., the place the subject occupies in the structure of the language. Nonetheless, she argues (p. 68) that, on the whole, the connection between the grammatical subject, sentence position, and the topic is remarkably consistent across languages even if not universal.

With (viii) and (ix), Van Oosten captures semantic attributes of topics which she likewise interprets in terms of language-independent preferences. It is (ix), however, that may call for a few words of explanation. Van Oosten (p. 10) defines primary as "the NP holding the semantic relation highest on the semantic case role hierarchy in a particular sentence". Cf. (6) below:

- 6 a. The cat is on the mat
- b. Harry arrived
- c. John hit the ball
- d. The farmer killed the duckling for his wife
- e. Harold loves Marsha,

where the primary is a Patient noun (a), an Agent noun (b, c, d), and an Experiencer noun (e), respectively (*ibidem*). Obviously enough, Van Oosten works within a case-grammar framework originally proposed by Fillmore (1968), and consisting in the specification of semantic roles such as Agent, Objective, Instrumental, etc.

The number and type of topic properties specified by Van Oosten invites at least the following observations. The list does justice to the main factors relevant in topic selection. At the same time it shows a strong experiential skewing. More specifically, it tallies well with what people generally describe as the egocentric bias in discourse (see esp. Givon (1976); Kuno (1977); Lyons (1977:510); Mathesius (1975:101-2); Zubin (1979)). Consider the following tendencies:

- (i) humans speak more about humans than about non-humans — human > non-human,
- (ii) they talk more about more involved participants than about less involved participants — ag > dat > acc,
- (iii) the speaker tends to be the universal point of reference, i.e. speakers tend to talk more about themselves — 1st person > 2nd person > 3rd person,
- (iv) the speaker tends to proceed from definiteness — definite > indefinite.

Among Van Oosten's properties the following are most experientially loaded: (ii), (iii), (iv), (vi), (vii), (x), (xi). Regrettably, however, Van Oosten's discussion

lacks arguments that might shed more light on the features in question. She actually does not go beyond the enumeration of those properties, which may be indicative of their derivative character. In anticipation of my own discussion of those phenomena, I assume that the features concerned are either too weak or too restrictive from the point of view of topic prototypicality. Notice, for instance, that (ii) and (iv) are possibly redundant in the presence of (i): what the speaker is talking about should simultaneously be in the focus of his attention and/or interest. Van Oosten (p. 46) views (ii) and (iv) as "natural consequences" of (i). Next, given the cooperative nature of discourse production, the speaker usually chooses to talk about what he assumes to be already in, or easily accessible to, the hearer's consciousness and/or attention (iii). Properties (vi) and (vii) are too restrictive in the face of actual communication: verbal interaction does not involve all that often elements ostensibly present in the interlocutors' environment. Finally, (xi) seems redundant for its dependence on (i), (ii), and (iv): the very fact that the speaker is talking about something proves that the something is salient enough to catch his attention.

This being said, I shall argue for a linguistically (rather than experientially) oriented model of topic prototypicality in English and Polish; thus I fully recognize the relevance of the remaining properties ((i), (v), (viii) and (ix)) on Van Oosten's list. This is not to say that I oppose an experiential account of topic prototypicality. On the contrary, I see the need for more theoretical and practical work along those lines. Today, it is hard to deny that respective factors have a bearing on how topics are established and maintained in discourse.

On the other hand, Van Oosten acknowledges the linguistic determination of the English topic, and namely, its affinity with the grammatical subject; as a matter of course, the subject-topic-agent conflation is her programmatic point of interest. Ultimately, she reformulates Bates and MacWhinney's hypothesis to the following effect: in English "in basic sentences, the prototypical subject is both a prototypical topic and a prototypical primary" (p. 10).<sup>1</sup>

<sup>1</sup> Van Oosten's basic construction is a stricter version of Keenan's (1976:307) basic sentence; (b ii) states the additional constraint proposed by her (p. 10):

"For any language L,

- a. a syntactic structure x is semantically more basic than a syntactic structure y if, and only if, the meaning of y depends on that of x. That is, to understand the meaning of y it is necessary to understand the meaning of x.
- b. a sentence in L is a basic sentence (in L) if, and only if,
  - (i) no (other) complete sentence in L is more basic than it, and
  - (ii) the sentence exhibits the basic case frame of its verb".



In contrast to the basic sentence, the subject of a special construction (i.e. a non-basic sentence) is paired with a set of nonprototypical topic and/or primary properties. For instance, the subject does not meet the prototypical topic properties in, e.g., existentials or it-clefts, whereas the normal assignment of topic to the primary does not take place in, e.g., Tough constructions or passives. Van Oosten concludes that "most" special constructions in English exist in order to "vary the assignment of topic from primary to something else" (p. 324).

Van Oosten does not leave it unnoticed that in basic sentences in English the prototypicality of the primary is a more central characteristic than the prototypicality of the topic. Cf.:

7. (What happened to the stopsign?) *A car* knocked it over (p. 17),
8. *A secretary* comes by here every morning to get him a cup of coffee (p. 18),

where both subjects convey essentially new information (on rhematic subjects in English see esp. Firbas (1957:87, 1966:248, 1974); Hajičová and Sgall (1982:27); Thompson (1978:26); see also Bates and MacWhinney (1982:204)). This coincidence between newness and subjecthood — not at all infrequent in English — may be explicated within the prototype paradigm as follows: nonprototypical but still acceptable basic sentences are likely to miss one or more of the prototypical properties of topic rather than those of the prototypical agent.<sup>2</sup>

In sum, Van Oosten's may be considered a notational variant of the earlier conceptions:<sup>3</sup> progressions from prototypicality on the part of the topic indicate its *decrease* in givenness (contextual anchoring), i.e., *increase* in communicative dynamism, to use the previous terminology. Consequently, a nonprototypical topic makes a worse hinge with regard to the preceding discourse. In other words, it is not sufficiently "dedynamized". Van Oosten departs from

Accordingly, (1a) and (2a) are basic, whereas (1b—c) and (2b) are not:

- 1 a. John hit the ball
- b. The ball was hit by John
- c. Did John hit the ball?
- 2 a. John drove the car to London
- b. The car drives easily,

where *the car* in (2b) violates the rule that in the basic sentence the prototypical subject is also a prototypical primary, i.e., agent in the sentence in question.

\* Van Oosten adopts Lakoff's (1977) prototype-based account of agentivity.

\* I have in mind, first of all, the Czech school of FSP. See e.g. Daneš (1964, (ed.). 1974); Firbas (1957, 1964a, b, 1966, 1979); Mathesius (1947, 1975); Sgall et al. (1973). See esp. Halliday (1967); Cf. also Chafe (1976); Enkvist (1973).

the previous accounts in how she conceives of the scope of topicality. Her non-prototypical instances of topics subsume cases when the raising to topic is performed in order to achieve a better contextual match (e.g. the passive), as well as cases when topic properties are ascribed to elements which were rhematic under the previous interpretations (e.g. subjects in existential constructions). By and large, the concept of fading prototypicality allows Van Oosten to disguisedly handle an information-dependent explication of sentential topichood. This is so though she never explicitly acknowledges the Given-New dichotomy underlying the topic-comment system in language; in fact she reduces the system to just one variable, and namely that of the topic (for more discussion see Duszak (1987)).

3. In this section I advance a different, though not unrelated, interpretation of sentential topics. To start with, I raise the appropriateness of the prototype theory for analyses of topicalization phenomena in language. Next, I outline a feature-weighted model of topic prototypicality in English and Polish that is linguistically rather than experientially biased. Finally, I tentatively dismember and illustrate my understanding of the idea of "naturalness" in topic selection and identity in the two languages.

The up-to-date research into topicalization phenomena in language (see Note 3) has led, one way or another, to a simple though somewhat disheartening conclusion: sentential topics are determined in terms of as-a-rule-of-thumb association with a number of linguistic and nonlinguistic features, rather than in terms of necessary and sufficient conditions. At least the following dependencies have been pointed out: topics tend to locate in sentence initial position (or in the leftmost part of the sentence), they normally convey old (contextually derivable) information, and associate with the grammatical subject. None of these tendencies, however, holds true on a regular basis. Moreover, they are often a matter of degree, i.e., they may be deflected for structural requirements of different language systems; at this point a sweeping distinction between "pragmatic" and "grammatical word order languages" is sometimes invoked (cf. esp. Firbas (1964b) and Thompson (1978)). It reads as follows: the operation of the pragmatic principle (esp. the initialization of old information) may be eased or else restrained due to the grammatical format of a particular language, as in, e.g., Polish and English, respectively. At the same time, however, it was also shown that word order typologies are a matter of degree rather than yes-or-no choices (see esp. Comrie (1981:43); Enkvist (1984:51)). By and large, contrasts in functional sentence perspective are founded on a complex interaction of a number of factors including our general inferential capacities and knowledge of socio-linguistic conventions in communication.

At the same time, however, the up-to-date discussions of topicalization phenomena in English and Polish have supplied sufficient evidence that people



tend to approach the concept of topichood with preconceived ideas about the role of: context, semantic structure, intonation and position in the sentence. Arguably, the "better" the topic will be, the more it approximates at a clustering of expectations in respective domains. This is the case even though sentence initial position, old information, semantic primariness (in the sense of Van Oosten 1984) or deaccentuation do not determine topics in an absolute manner. In view of what has been said, I believe that this nondeterministic nature of sentential topics is well suited for accommodation within a prototype-oriented framework. For that purpose I put forward a conception of a feature-weighted model of topic prototypicality, i.e., one that allows the different attributes of topics to be ranked for importance relative to one another as well as with respect to a given language ecology. I shall limit myself here to English and Polish only.

At this point it is essential to realize how the idea of a feature-weighted model relates to our discussions in sections 1 and 2. Indeed, with the adoption of the model in question I subscribe to a weaker version of the prototype theory. Cf. Bates and MacWhinney (1982:211): "As certain features increase in their weight or importance in making categorization decisions, a prototype model may come to resemble a criterial attribute model. Hence we can describe prototype structures and criterial attribute structures as two ends of a continuum with feature-weighted models in between". To my mind, the most heavily weighted property of topics is the notion of sentential "aboutness". This means that topics, understood as *clusters* of properties, are still *definable* in terms of "aboutness": the topic is "what is being talked about", whereas the comment is "what is being said about the topic". At the same time, however, the various attributes of topics (and comments for that matter) may be differently weighted among themselves and in different languages.

By and large, the bottom line of the present understanding of the topic-comment system is that, when using language, speakers have topics, i.e., the sentences they are producing are "about something". Given this, I not only assume that people have intuitions as to what sentences are "about", but also that those intuitions are monitored by a number of clues intercepted in the act of communication. Namely, there seems to exist a conventionalized way of "packaging" information in the sentence which — to a great extent — has to do with the cooperative nature of verbal interaction. In other words, the speaker tends to reinforce the addressee in his attempts to locate the idea that is being communicated to him. The speaker does so by making use as consistently as possible of the same repertory of linguistic markers. Ultimately, the intuitive idea of sentential "aboutness" becomes interpretable through our access to, and recognition of, a number of parameters of form and meaning. More specifically, I assume that the concept of the topic in English and Polish is primarily associable with the following features:

- 9 a.
  - (i) informational status
  - (ii) semantic primariness
- b.
  - (iii) position in the sentence
  - (iv) accentuation pattern,

where (a) have to do with meaning (conceptualization of meaning relations in context) and (b) with the (formal) realization of the topic in the structure of the sentence. Accordingly, topics are "better" if they associate with an element that

10. (i) conveys old information
- (ii) is the primary of the verb
- (iii) locates in sentence initial position, and
- (iv) has a non-nuclear stress.

Incidentally, (iii) brings in the problem of morphological case markings in Polish.

On the other hand, the comment, or its focal part in the case of extended comments, normally combines with an element that

11. (i) conveys essentially new information
- (ii) is a non-primary of the verb
- (iii) locates in sentence final position, and
- (iv) bears sentence stress.

This is not to say that (10) exhausts the considerations pertaining to accessibility to topichood; the list might as well be supplemented or revised. It is to argue though that the criteria specified under (10) above reckon most closely the array of facts indicative of how communicants tend to code, and decode, the concept of sentential aboutness. It is also to imply that the clarity as to what the topic is fades away in sentences in which there is no single element that meets all of these conditions. Accordingly, progressions from prototypicality can be translated into deviations from (i–iv) of (10) on the part of an element eligible for the status of the topic.

The feature-weighted model outlined above spells out only the general prerequisites for the most representative topic in English and Polish. Given, however, a typological disparity between the two languages, we might raise the following assumptions:

- (i) topics in English and Polish weight differently the properties indicative of prototypicality,
- (ii) topics in English and Polish differ at progressions from prototypicality



Both (i) and (ii) hold true for at least the very good reason that the topic-comment system interacts with the case system (in the sense of Zubin 1979), i.e., the overall network of dependencies between the structural options available in a given language and the array of semantic case relations that they service. This could mean that the way "aboutness" is established in the sentence is not independent of how the expression of various participant roles has stabilized in the structure of the language.

In the remainder of this section I shall bring to attention some advantages of a natural, nondeterministic, account of sentential topics. It has been argued that the central (most representative) instantiation of sentential topic-hood in English and Polish involves initialization of "old" grammatical subjects in end-focus sentences. Cf. *she* and *the children* in the English examples below:

12. (Mary went into the room.) She put the keys on the table (and turned on the light)
13. (The girls had been playing store with John for a few hours. Despite the late hour they would not stop the game. In the end,) the children had their toys taken away and were sent to bed.

With the use of such topics the speaker attains a chain effect, and thus easily signals his (communicative) focus of attention. Arguably, the formal realization of the topic plays here a role in our understanding of topic continuity: namely, it has to do with the ease of text processing. It has been shown, for instance, that the maintenance of a given coreferential identity over a stretch of text is an indication of the relative importance of the concept in the sequence: the sequence is "about" the concept (for some discussion see, e.g., Clements (1979); Givon (1983); Kieras (1981)). Incidentally, in Polish prominence of this kind is often obtained through topical compression: the topic is marked then only on the form of the verb. Cf. (12')

- 12'. (Maria weszła do pokoju). Położyła klucze na stole (i zapaliła światło)  
— Mary<sub>nom</sub> went into room. Put<sub>she</sub> keys<sub>acc</sub> on table and turned-on<sub>she</sub> light<sub>acc</sub> —

At the same time, this nondeterministic approach to topicalization allows us to account for cases when the participant-continuity in discourse is achieved outside the subject-based paradigm. Cf. (14) and (15) in English:

14. (We certainly expected more boys to join in. Eventually,) there were only five of *them*
15. (I stretched my legs and looked around.) Beside *me* was sitting a young man with a red moustache,

where *them* (they) and *me* (I) function as topics, respectively. These are instances of oblique and sentence noninitial (though contextually derivable) topics in English.

As regards English, the prototype model does justice to the natural disposition of the topic to conflate with the grammatical subject. Accordingly, it acknowledges the fact that the subject has earned a considerable pragmatic stability. At the same time, however, it affords enough flexibility to free topicalization from its dependence on subjectivization. This is done by admitting the existence of non-subject topics. By and large, taking for granted that topics have a share in how relevance and coherence are established and maintained in discourse, it is paramount to investigate into the pragmatic appeal and grammatical determination of such noncentral realizations of the category in question.

Next, it is a natural consequence of the feature-weighted model above that old information is not a necessary or sufficient condition for topics: an element conveying essentially new information may nonetheless be chosen as the topic of the sentence.<sup>4</sup> In other words, the bottom line of the assumption that speakers (and sentences for that matter) have topics is that in search for the topic we examine sentence elements for goodness of membership in the category; topic selection is then, in part, an eliminatory procedure. With the lack of "good" candidates, i.e., those bearing the old information property, we all the same construe topics with partial pattern matching: the topic conveying new information is a case at point. Cf. *bus*, *doctors* and *girl of twelve* in (16–18), respectively:

16. (...) Here comes the bus
17. (She felt reassured and almost comfortable.) Doctors make mistakes though. (She mustn't think about it now.)
18. (You'd better take a company.) A girl of twelve is missing.  
(It is not safe here anymore)

As already mentioned, the character and weight of individual topic parameters varies depending on the type of the language. This means that the structural format of a given language constrains the ultimate model of topic prototypicality. It also has a bearing on the type and scope of topical markedness, i.e., progressions from prototypicality. Alternatively, we may say that for the speaker of a language the idea of sentential aboutness is not con-

<sup>4</sup> I shall not deliberate here on what is old and what is new information. Suffice it to say here that my own understanding of the informational status of an element resides in two general assumptions. First, every sentence conveys some new information. Second, the communicants are able to pinpoint the new information in, or abstract it from, the message that is being conveyed. Thus conceived newness involves clearly the speaker's communicative intent rather than an objective estimate of what is contextually derivable. In other words, rather than associate newness with some "surprise" factors, we look in the sentence for what constitutes its informational core and thus justifies the occurrence of this sentence within a given communicative set-up.



strued independently of how the expression of meaning relations (esp. semantic case roles) has stabilized in the structure of the sentence.

With reference to English and Polish, at least the following facts should be borne in mind. It goes without saying that the pervasiveness of the grammatical subject in English has an essential impact on the overall organization and operation of the topic-comment system. In effect, the grammatical subject stands out as a most salient element in the structure of the sentence. Polish, on the other hand, is not governed by the same degree of grammatical discipline. This has to do, first of all, with the theoretical feasibility and actual pervasiveness of the subjectless sentence. These are constructions with no (nominative) subject-verb concord. The sentence type in question is relativized to receptive/experiential participants coded in the dative (or accusative) morphological case. Cf. the Polish equivalent of *children* in (13') below:

13'. (...) *dzieciom* zabrano zabawki i ....

— children<sub>dat</sub> taken<sub>was</sub> toys<sub>acc</sub> and —

Cf. also *me* in (19) and (20) below:

19. (Czuję się fatalnie.) *Słabo mi*

(I feel awful.) — weak<sub>adv</sub> me<sub>dat</sub> —

I feel faint

20. (Przestańmy.) *W tych butach źle mi się tańczy*

(Let's stop it.) — in these shoes badly me<sub>dat</sub> itself (it) dances —

I cannot dance in these shoes.

Arguably, in the absence of the nominative the dative/accusative morphology has stabilized in the expression of the "experiencing ego". This, in turned, has contributed to some erosion of the pragmatic position of the subject in general (see my discussion of the dative and nominative modes of pragmatic perspectivizing in Polish in Duszak (1987). In essence, topic prototypicality in Polish is monitored by structural factors to the effect that it depends on whether the sentence belongs to the nominative-subject or the subjectless sentence type.

Finally, a natural explication of the topic-comment system leaves room for some "experiential" considerations while analysing our decisions as to how the communicative accents are distributed in the sentence. Notice, for instance, that topic and comment are in fact comparable and therefore competitive with respect to each other. The reason is that they constitute two pragmatically prominent choices in clause-level communication, that is salience separates both of them from the rest of the material in the sentence. The scope of the problem varies with the amount of topic specification. In the event of "low specificity" or "default" topicalization (both terms attributed to Bates and MacWhinney 1979:181-2), the trade-off between the topic and the comment in accessibility to salience is a matter of lesser conflict.

This is what happens when the topic is lexicalized pronominally: by their very nature, pronominal elements are topical yet also too "weak" to challenge prominence inherent to commentization. The problem becomes particularly acute when a new subject in sentence initial position is followed by some topical material (demotion of pronominal elements is then quite frequent). Cf.:

21. (He may be gone by then) A *jób* was offered to him in Richmond

22. (The thing does not work.) Some *jérk* must have fiddled with it.

(The flap is broken.)

The sentences in question include elements with a strong topical potential *him* (he) and *it*, respectively. The points that are being made in these sentences are paraphrasable as (21') and (22') below, where topics have been singled out:

21'. He — he was offered a job in Richmond

22'. It — it must have been fiddled with by some one. That  
some one was a jerk.

Alternatively, a different solution is feasible from the communicative point of view. "Aboutness" could be delegated to the fronted nominal. This could get support from the fact that the nominative subject, especially under primary stress, could assume priority for the "focus of attention" status (also in Polish). My own position at this point is that the presence of an explicitly focal subject in sentence initial position does not subdue the topical disposition of, e.g., a pronominal or definite expression especially if this disposition is motivated by the element's context continuity and/or its perspective-taking capacity. This amounts to saying that "badness" of topics is a function of disrupted clarity in the distribution of the two categories: topic and comment; it happens, for instance, when there are mixed signals as to where to draw (linguistically and/or cognitively) the demarcating line between what is being talked about and what is being said about that something.

Most importantly, however, problems of this kind raise the relevance of discourse strategies in the organization of the topic-comment system in language. Namely, there seem to exist discourse types which are founded on focus (comment) elevation. This often leads to topic "suppression": the topic need not be pragmatically highlighted so it is subdued. In English, this may result in its desubjectivization and de-initialization.

To conclude, in this paper I discussed the applicability of natural categorization to studies in functional sentence perspective in general, and to analyses of sentential topics in particular. I argued that this approach accommodates well the non-deterministic nature of the phenomena in question. It also leaves room for language specific variation in their realization in the sentence.



## REFERENCES

- Bach, E. and Harms, R. (eds). 1968. *Universals in linguistic theory*. New York: Holt Rinehart and Winston Inc.
- Bates, E. and MacWhinney, B. 1979. "A functionalist approach to the acquisition of grammar". In Ochs, E. and Schieffelin, B. (eds). 1979. 167-211.
- Bates, B. and MacWhinney, B. 1982. "Functionalist approaches to grammar". In Wanner, E. and Gleitman, L. (eds). 1982. 173-218.
- Bolinger, D. 1961. *Generality, gradience and the all- or none*. *Janua Linguarum* 14. The Hague: Mouton.
- Chafe, W. 1976. "Givenness, contrastiveness, definiteness, subjects, topics and point of view". In Li, Ch. (ed.). 1976. 25-65.
- Clements, P. 1979. "The effects of staging on recall from prose". In OFreedle, R. (ed.). 1979. 281-330.
- Comrie, B. 1981. *Language universals and linguistic typology*. Chicago: University of Chicago Press.
- Daneš, F. 1964. "A 3-level approach to syntax". *Travaux Linguistiques de Prague* 1. 225-40.
- Daneš, F. (ed.). 1974. *Papers on functional sentence perspective*. Praha: Akademia.
- Duszak, A. 1987. *The dynamics of topics in English and Polish*. Warszawa: Wyd. Uniwersytetu Warszawskiego.
- Enkvist, N. 1973. "Theme dynamics' and style". *SAP* 5. 127-35.
- Enkvist, N. 1984. "Contrastive linguistics and text linguistics" In Fisiak, J. (ed.). 1984. 54-67.
- Fillmore, Ch. 1968. "The case for case". In Bach, E. and Harms, R. (eds). 1968. 1-88.
- Firbas, J. 1957. "Some thoughts on the function of word order in Old English and Modern English". *Sborník Prací Filosofické Fakulty Brněnské University A* 5. 72-100.
- Firbas, J. 1964a. "On defining the theme in functional sentence perspective". *Travaux Linguistiques de Prague* 1. 267-80.
- Firbas, J. 1964b. "From comparative word order studies". *Brno Studies in English* 4. 111-26.
- Firbas, J. 1966. "Non-thematic subjects in contemporary English". *Travaux Linguistiques de Prague* 2. 239-56.
- Firbas, J. 1974. "O pojęciu dynamiczności wypowiedzeniowej w teorii funkcjonalnej perspektywy zdania" (On communicative dynamism in the theory of FSP). In Mayenowa, R. (ed.). 1974. 9-22.
- Fisiak, J. (ed.). 1984. *Contrastive linguistics. Prospects and problems*. Amsterdam: Mouton.
- Givon, T. 1976. "Topic, pronoun and grammatical agreement". In Li, Ch. (ed.). 1976. 149-88.
- Givon, T. (ed.). 1979. *Discourse and syntax. Syntax and semantics* 12. New York: Academic Press.
- Givon, T. (ed.). 1983. *Topic continuity in discourse: a quantitative cross-linguistic study*. Amsterdam: John Benjamins.
- Hajičová, E. and Sgall, P. 1982. "Functional sentence perspective in the Slavonic languages and in English". *Juznoslovenskij Filolog* 38. 19-34.
- Halliday, M. 1967. "Notes on transitivity and theme in English". Part II. *Journal of Linguistics* 3. 199-244.
- Keenan, E. 1976. "Towards a universal definition of 'subject'". In Li, Ch. (ed.). 1976. 303-33.
- Kieras, D. 1981. "The role of major referents and sentence topics in the construction of passage macrostructures". In OFreedle, R. (ed.). 1981. 1-15.
- Kuno, S. 1977. "Empathy and syntax". *Linguistic Inquiry* 8. 726-72.
- Lakoff, G. 1977. "Linguistic gestalts". *CLS* 13. 236-87.
- Lakoff, G. 1982a. *Categories and cognitive models*. Berkeley Cognitive Science Program Report 2. Berkeley: University of California.
- Lakoff, G. 1982b. "Experiential factors in linguistics". In Simon, T. and Scholes, R. (eds.). 1982. 145-56.
- Lakoff, G. (Forthcoming). *Women, fire and dangerous things*. Chicago: Chicago University Press.
- Lakoff, G. and Johnson, M. 1980. *Metaphors we live by*. Chicago: University of Chicago Press.
- Li, Ch. (ed.). 1976. *Subject and topic*. New York: Academic Press.
- Lyons, J. 1977. *Semantics*. Cambridge: Cambridge University Press.
- Mathesius, V. 1947. *Čestina a obecný jazykozpyt*. Praha: Melantrich.
- Mathesius, V. 1975. *A functional analysis of present-day English on a general linguistic basis*. Praha: Akademia.
- Mayenowa, R. (ed.). 1974. *Tekst i język* (Text and language) Warszawa: Ossolineum.
- Ochs, E. and Schieffelin, B. (eds.). 1979. *Developmental pragmatics*. New York: Academic Press.
- OFreedle, R. (ed.). 1979. *New Directions in discourse processing*. Norwood: Ablex.
- OFreedle, R. (ed.). 1981. *Discourse processes. Vol. 4*. Norwood: Ablex.
- Rosch, E. 1978. "Principles of categorization". In Rosch, E. (ed.). 1978. 27-48.
- Rosch, E. (ed.). 1978. *Cognition and categorization*. Hillsdale: Lawrence Erlbaum Associates.
- Sgall, P., Hajičová, E. and Benešová, E. 1973. *Topic, focus and generative semantics*. Kronberg Taunus: Scriptor Verlag.
- Simon, T. and Scholes, R. (eds.). 1982. *Language, mind and brain*. Hillsdale: Lawrence Erlbaum Associates.
- Thompson, S. 1978. "Modern English from a typological point of view: some implications of the function of word order". *Linguistische Berichte* 54. 19-35.
- Van Oosten, J. 1984. *The nature of subjects, topics and agents: a cognitive explanation*. Unpublished PhD dissertation, University of California, Berkeley.
- Wanner, E. and Gleitman, L. (eds.) 1982. *Language acquisition: the state of the art*. Cambridge: Cambridge University Press.
- Wierzbicka, A. 1980. *'Lingua Mentalis'. The semantics of natural language*. Sydney: Academic Press.
- Zubin, D. 1979. "Discourse function of morphology: the focus system in German". In Givon, T. (ed.). 1979. 469-504.