

## ON THE GENERAL SEMANTIC STRUCTURE OF MODALITY

It has been proposed by G. Lakoff<sup>1</sup>, J. D. McCawley<sup>2</sup> and other representatives of the "generative semantics" school to give semantic representations of words in phrase-markers and thus put an end to the questionable distinction between deep structure and surface structure. Before I try to explain my standpoint within the general framework of this theoretical innovation over the "Aspects Theory" I would like to direct your attention to some of its objectionable features.

Firstly, each lexical insertion is connected with some kind of semantic presupposition (cf. Morgan)<sup>3</sup> which, however unimportant for the proper semantic function of the utterance, must be realized unless the lexical insertion itself is to be blocked. It seems that a stratificational approach with several levels of insertion is needed in which the syntactic structures derived in a usually proposed way are in definite sequences of derivation (corresponding to the respective levels) supplied "on each step" of the derivation with the adequate type of information from some additional structure of presuppositional meaning, given also in phrase-markers.

At second, the difference between the two types of meaning ("usual" and presuppositional) may be described by means of a particular operator (the explicitness indicator E.I.), having in its structural effect and its connection with the FSP much in common with indication of CD (Firbas).<sup>4</sup> Then the structure of the "usual meaning" is the structure where the explicitness indicator operates determining the level of explicitness of a construct, and the presuppositional meaning, by itself practically insensible to the FSP and consequently to the E.I. value of its own meaning is made explicit or implicit according to that level (e.g. if a verbal meaning in some Indo-European language is rhematic enough so that a predicative form is generated a tense suffix is added whatever the explicitness value of its own tense meaning may be).

At third, going to say that the differences between individual languages may be given in the stratificationally organized component of the derivation (including insertions) and possibly in some differences in the presuppositional

<sup>1</sup> G. Lakoff, *On Generative Semantics* (in: *Semantics...* by Steinberg and Jakobovits, London, Cambr. U.P. 1969).

<sup>2</sup> J. D. McCawley, *Semantic Representation* (to appear in *Cognition*, New York, ed. by P. Garvin).

<sup>3</sup> J. L. Morgan, *On the Treatment of Presupposition in Transformational Grammar* (in: *Binnick's Papers...*, Un. of Chicago, 1969).

<sup>4</sup> J. Firbas, *Some Aspects of the Czechoslovak Approach to Problems of the FSP* (the Symp. on the FSP, Mariánské Lázně 1971).

structure it seems quite reasonable to argue that there is an underlying semantic structure preceding the separate derivational processes for individual languages, i.e. a universal semantic structure.<sup>5</sup>

The question that may be expected on this point is whether it is possible at all to discover anything from the universal semantic structure without thorough grammatical analysis of a large number of languages. I suppose that we had better start from the observations of the functional structural semantics, admitting that the functional commutation between any two members of a same paradigm set occurs only if there is a regular simultaneous change in both expression and content (Hjelmslev).<sup>6</sup> The "content" may be easily deprived of its vague meaning if investigated in context of the social function of language and tested empirically within a suitable social group (e.g. on the principle of a simple game as done in 12). Having given a practical definition for a semantic category, formed adequately to our purpose, I made an attempt for what I dare call "direct observation" of the underlying modal structure". My attempt was done on the Japanese language material with regular references to corresponding facts in unrelated languages.<sup>7</sup>

I propose to describe all modal media by way of performative verbs occurring in the underlying structure and supplied there with some usual supplements such as tense suffix, subject (cf. Bally's "sujet modal"), object (the dictum) and casually another object preceding the dictum and supplying it with the function of an "object-complement". But instead of a concrete verbal stem there is an abstract symbol of modal verb or a phrase structure containing such abstract modal verb symbols, and casually also abstract conjuncts similar to those of symbolic logic ("and", "or" excl. "or" incl.) and verbs functioning analogically as logical functors (e.g. "imply", "be equivalent to", "be part of"). Only six nominal elements have been observed, mostly shifters (circumstances, general order-*o*; speaker-*e*; dictal subject if different from the preceding-*s*; participants or any participant of the speech event-*ps*; participants or any participant of the narrated event if different from the preceding-*pn*; a generalized individual person or persons-*g*).<sup>8</sup>

The proper meaning of modality is condensed in the abstract verbal symbols, modality being defined here as the linguistically relevant value of the modal subject's interest in the validity of the dictum.

There are linguistic media general enough to express the general modal meaning M (as in *Veniat*, Latin; *To není možné*, Czech; *kakubeshi*<sup>9</sup>, Japanese; *I would come*, English).

In other cases the opposition between individual and social interest occurs giving rise to desiderative modal meaning D (as seen in negative forms *Ne veniat*, Latin, *kakubekarazu*<sup>10</sup>, Japanese and in the forms *Neni*

<sup>5</sup> This may be perfectly true only for some hypersyntactic structure, as the 'sentence' is possibly not a quite universally definable term but we do not know much about the more suitable structure.

<sup>6</sup> L. Hjelmslev, *Dans quelle mesure les significations des mots peuvent-elles être considérées comme formant une structure* (Proceedings of the 8th International Linguistic Congress, Oslo 1958, 636).

<sup>7</sup> Mostly European and Chinese.

<sup>8</sup> These symbols apply often also to the modal subject.

<sup>9</sup> 'he should write, he ought to write; maybe he writes'

<sup>10</sup> 'he must not write' (modal verb neg.)

možné, aby tak pracovali, Czech; He should come, English) and to declarative modality (or reality) R (as in *Non veniat*, Latin; *Není možné, že pracují*, Czech; *kakazubeši*<sup>11</sup>, Japanese; He would come, English). In the latter case (R) the above-mentioned interest results from the social responsibility of the (denote  $\times$  of) modal subject for the validity of the dictum to the other participants of the speech event.

Another differentiation is possible within the D between volition V (as in I wish) and utility U (as in "I cannot go without" in the meaning compatible with "...although I do not like it"). Although the U in English has no unambiguous personal expression there are constructions like "It is useful for me", "It would serve me" etc. The U is selected if there is a causal relation discoverable between the "utile" dictum and a consequent "volitioned" event proved by the possibility to mark the dictum supplied with a marker of utility simultaneously as unvolitioned (as in "useful but rather unpleasant").

The quantitative value of the interest may be either relative (potential) P in which case it may be further specified (e.g. "I want — a little, very much" for the D or "he is — probably, possibly, certainly" etc. for the R), or it may be absolute (necessity). N (given unmarked as in "he is" or marked in "he necessarily is" following the FSP). Thus combinations arise (MN, MP, DN, DP etc.), some of which have particularly many explicit media (RP as "perhaps", "may", "certainly", MN as "need", "anyway" etc.).

A particular type of modal verbs that I call causative modal means C serve to transfer the "modal" interest from the modal subject to the subject of the dictum. These are the abstract verbs represented in the underlying structure as performative verbs with two objects, the second of which is identical with the subject of the object clause in the second position, having the D symbol as predicative and the dictum as object. This specification concerns the verbs of request and command (e.g. "I command you to work" is represented as "I make you (you want / you work).") i.e. CP s (s DP) "the dictum" // (because I stipulate a kind of social "punishment" [damage] for the person addressed unless he or she obey). This is also the underlying structure of imperative sentences (for certain values of the E.I.) and helps reconstruct interrogative structures as containing the imperative (see R. Zimek's report) in the underlying structure.

Some other meaning may be reconstructed as modal, e.g. evaluation (be good R and D, be bad R and D-, be pleasant R and V, be desirable D) or potential disposition (s is able to do x (s DN x) implies (RN x). I believe all sentence modality may be reconstructed analytically, in accordance with the principle of preferring economy in elements to economy in structure.

On the other hand some formally similar phenomena as quotation, sensual or logical evidence, experience and emotionality cannot be tested on the ground of the given definition as modal.

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<sup>11</sup> 'he cannot write (it is impossible that he writes)' (dictal neg.)

<sup>12</sup> As I have really done in K. Fiala, *Postpredikativní modifikátory v současné japonštině* (The Postpredicative Modifiers in Contemporary Japanese), Prague 1971 (Fac. of Arts). Anyway, it must be recognized that it is perhaps a method adoptable to the semantic category in question only.

