THE FUNDAMENTAL SIGNIFICANCE OF INFORMATION STRUCTURE

Eva Hajičová and Petr Sgall

1. REMARKS ON SEMANTICS AND PRAGMATICS

Jacob Mey has contributed most effectively to recognizing the importance of pragmatics. Even a specification of truth conditions (as Carnap’s propositions, or in a situational framework) requires the reference of certain items in the sentence to be determined. Thus, pragmatic factors are fundamental for the procedure of interpretation. This concerns tense and modalities, and also information structure or topic-focus articulation (TFA).

Many linguistic approaches are crucially mistaken, underestimating the fundamental position of TFA, although already Aristotelian notions may be understood as referring to topic (T) and focus (F): τὸ υποκείμενον, ‘the given circumstances’, and τὸ κατηγοροῦμενον, ‘the enounced’. Natural language differs from the calculi of logic or from programming languages due to its interactivity, to the contextual anchoring of utterances (sentence occurrences). The interactivity is reflected even in the structure of a sentence as a type, as a unit of la langue, I-language. The speaker does not just tell someone something, but rather s/he tells the addressee(s) something about something. TFA reflects the ‘given-new’ strategy of communication, but differs from it belonging to individual languages, rather than to the domain of cognition. This follows from the semantic relevance of TFA and from the differences in the means expressing TFA (intonation, word order, morphemics).

The position of TFA in language remains undetermined if a specific level of information structure is postulated or if two relevant dichotomies are distinguished without systematically analyzing the relevance of such a division for the scope of negation and of other focusing operators (focalizers). A comparison of different approaches to information structure would
deserve a specific study. We just recall that in Prague, the interest in TFA has been strong for
decades, especially thanks to V. Mathesius and J. Firbas. Research in the functional generative
description (FGD) has convinced us that TFA is more basic for sentence structure than its
predicate-argument pattern is (be the latter understood as based on constituents or on depen-
dency), although in grammar TFA has been disguised into the opposition of subject and predicate.
We argue in Section 2 that the main requirements on the description of TFA can be met in the
theoretical framework of FGD (see Petkevič, 1995; Hajičová et al., 1998), which

(a) stresses the opposition of unmarked (primary, prototypical) items of all levels as opposed
to their marked (secondary, peripheral) counterparts, which occur under specific contextual or other conditions and

(b) works with dependency, that is, a set of relations between a head word and its depend-
ents; the underlying or tectogrammatical representation (TR) of a sentence is based on
the verb (V) with its valency (obligatory and optional arguments and adjuncts).

Prototypical TRs are dependency trees, that is, rooted trees, the edges of which render
dependency relations, their nodes being linearly ordered. Other relations (co-ordination, appos-
tion) require networks of more than two dimensions. A TR thus comprises three orderings, two
of which are defined on the set of all its nodes: (i) a partial ordering, interpreted as the depend-
ency relations, (ii) a linear ordering, interpreted as the underlying word order (communicative
dynamism), that is, as primarily corresponding to the temporal progression of the utterance,
and (iii) an optional partial ordering defined on individual subparts of the TR, interpreted as
coordination or apposition.

The orientation of a dependency relation may be defined so that in the ‘endocentric’
constructions, for example, go slowly or old man, the head cannot be deleted without losing
well-formedness, and ‘exocentric’ constructions are similarly specified on the level of word
classes: for example, V occurs both in constructions with an object and without it.

2. THE POSITION OF INFORMATION STRUCTURE IN LANGUAGE

Every node of a TR is labelled by a symbol composed of a lexical part, a morphological
index (values of number, tense, modalities, etc.) and a symbol indicating a dependency relation
(arguments – i.e. actor, objective, addressee, origin and effect – and adjuncts such as locative,
temporal and directional relations (DIR), cause, condition and means), and possibly by an index
for a contextually bound (CB) root and another for a contrastive node. The set of TRs can be
specified by a restricted set of very general rules, either

(i) in a declarative way, using unification and checking the conditions specified in the
valency frames of the head words – the presence of each obligatory dependent, the order