

## RELEVANCE IN TEXT AND CONTEXT

### DISCUSSION OF JOSEPH E. GRIMES' PREPRINT "CONTEXT STRUCTURE PATTERNS"

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#### 1. Introductory remark

Discourse has the important property that it may show what information is 'important', 'prominent' or 'relevant'. This relevance may be 'internal' or 'external', the first being defined in semantic terms, the second in pragmatic, cognitive or socio-cultural terms. In other words, information may be relevant with respect to other information within the text itself, or relevant with respect to various contextual parameters, such as speaker and hearer and their respective cognitive 'sets', the goals of verbal interaction, or more general properties of the social context.

Joseph Grimes' paper "Context Structure Patterns" deals with this, much neglected, aspect of discourse and communication. Using a theatrical metaphor, he tries to account for textual and contextual relevance by introducing the notion of 'staging'. In my discussion of his paper, I will try to show that Grimes discusses an important problem in the field of discourse studies, but that his approach, in my opinion, is inadequate on many points. On the whole, I think that his formulation and argumentation is too vague and metaphorical, that he fails to make important distinctions, and that he confuses or ignores various sub-theories which are necessary in a full-fledged account of the phenomena under discussion. Although my critical remarks require an analysis of the problem from my own perspective, it will be obvious that on the one hand this discussion is too short to elaborate on details, whereas on the other hand there are many aspects of the problem which are still obscure and ill-understood. To keep this paper within the required limits, I will therefore freely refer to other work I have done on the various aspects of this topic, as well as to work by others which may back up my arguments.

## 2. The notion of 'staging'

As I suggested in my introductory remark, the notion of 'staging' used by Grimes has something to do with 'importance', 'prominence' or 'relevance' in discourse:

- (1) "By staging I mean that component of a text which reflects the prominence for the speaker of the different things he is talking about. It includes the way he communicates their relative importance as he sees it, and even the spatial viewpoint from which he chooses to present them. In this I see staging as different from the content of language, which concerns the propositions expressed.... "(p. 2).

From this passage in the beginning of his paper we may read what kind of notions seem to be involved in an account of 'staging', but certainly not yet what a kind of phenomenon staging is and on what levels or within what domains of the study of language it should be made explicit. Apparently, staging is a "component of a text", which seems to suggest that it coincides with a structural unit, e.g. a word, a phrase, a sentence or a sequence of sentences, and not a structural property of such units. Then, the notion of 'prominence' does not apply to the 'staged' part of the text itself, but rather to some denoted objects (in the possible world with respect to which the text is interpreted). In other words, staging is a textual manifestation or representation of relative importance of denotata. Correctly, Grimes adds that this importance may be relative to the speaker. Another confusing point of his initial characterization of staging is however that not only importance is involved, but also (spatial) point of view. Although point of view, or perspective, and importance are certainly related, they are quite different notions, which have different linguistic manifestations. The concept of 'staging' thus becomes very global and vague, meaning something like: 'the way a speaker presents or represents the facts he is talking about'.

Importance and perspective in discourse, however, do not seem to belong to the realm of semantics for Grimes,

as we might conclude from the last sentence of the quoted paragraph. Or at least, it is not part of an intensional (meaning) semantics. Since reference and denotation are involved, we must conclude that the notion belongs to the domain of extensional semantics, although Grimes' formulation rather seems to point to a stylistic phenomenon. Yet, as some of his own examples later seem to indicate, 'content' or 'meaning' may also be involved. Someone may simply say: "The most important thing is...", or "Crucially, ...". Such examples show that also the propositional content of sentences in a text may be involved in the (re-)presentation of importance. In brief, the initial characterization of the concept of staging needs further definition. Grimes is honest enough to concede that his idea about staging is still rather vague, but available distinctions between levels of grammatical and textual analysis would have allowed him to be somewhat more precise anyway. Let us now see what else is involved in the account of staging.

### 3. Topics

As a very brief review, Grimes mentions some of the work which has been done on such notions as 'topic', 'theme', 'focus', and 'comment'. 'Without giving any arguments and without making the necessary distinctions between the many directions taken in the account of such notions, he correctly observes that there is a lot of terminological confusion. Indeed, one should distinguish between 'topics' or 'themes' of sentences and those of whole texts (or fragments of a text). Then, it makes sense to distinguish between a semantic account of topic functions in meaning representations and a 'surface' (syntactic, phonological) analysis of the ways this semantic topic is expressed-in sentence structure. Also, a cognitive approach seems relevant as soon as knowledge, attention or 'points of departure' of speakers and hearers are involved. As we will see below, these notions have only very indirect relationships with textual topics or themes: these denote the (most important) upshot of texts --and are therefore connected to the notion of staging as introduced before.

In an explication of 'staging' we therefore should distinguish between local or sentential properties of (re-)presentation, and global or textual ones. The first have to do with the distribution of information in discourse and with the ways sentences are connected, whereas the second pertain to the, hierarchical semantic structures of a text as a whole as we know it from the intuitive notion of 'theme' or 'topic of conversation'(for details, see van Dijk, 1977a,b, 1979a, 1980 ). Thus, although Grimes observes much confusion here, he does not clear it up. On the contrary, he contributes to it, also in the rest of his paper.

#### 4. Context spaces

From an interesting paper by Rachel Reichman (1978) Grimes adopts the notion of 'context space' in order to account for the intuition that a 'span' of discourse may be about the same 'central' persons, and that there are differences between the centrality of the persons spoken about. Reichman shows that central persons may be referred to by pronouns and less central persons by full noun phrases even if pronominalization rules of sentences and discourse would be applicable. The notion of context space can be taken in rather abstract semantic terms (just like the notion of 'possible world') or be approached from a cognitive point of view: the referential context focused upon by a speaker. Not only does Grimes fail to make this distinction, but even takes context spaces as 'units' of the text itself, that is as an explication of his intuitive notion of 'span':

- (2) "I propose that from the staging point of view we regard a text as having a structure whose basic units are context spaces. These spaces are often larger than a sentence, sometimes smaller. Within each space a small number of referents, usually including time and space, retain their continuity, or else change in some well-mannered way, for example by progression of time or by motion through space" (p. 8).

It is rather astonishing that Grimes, after correctly having observed that reference plays such an important role in dis-

course relations between sentences, now seems to localize context spaces, including referents, time and space, within the text itself. This is highly confusing, especially if we realize that both in logical and cognitive semantics, the 'context' is a theoretical construct necessary to interpret meaningful expressions of discourse, lying 'outside' the (representation of the)text itself. So, if a 'context 'space' is a segment of a possible world, say, then we need another notion to account for its correlate within the text itself (indeed, something like a paragraph, a chapter or an 'act' of a play). In other words, 'referents' are not par, of a text, only expressions which denote such referents. Hence, it makes no sense to say that referents may be 'continuous', but at most that individuals referred to are identical and hence that reference is 'continuous' if that identity condition is satisfied.

Leaning on a cognitive motivation for his notion (speakers and hearers must be able to identify referents in a context space in order to be able to communicate), Grimes then tries to specify the concept of referential core, being a "subset of the things referred to in each context space" (p.8). It is not completely clear what this means. If all expressions of a sentence or text may denote 'things', then the notion of context space seems identical with that of 'referential core'. If not, why should some expressions have referents, and not others --especially if referent identification is a condition for mutual understanding? Moreover, that expressions may have referents has little to do, as Grimes suggests (p. 8, last paragraph), with assertion. We also refer to objects and events in other possible (e.g. wished, future, counterfactual) worlds, as we see in questions ("Is that a circle?") or in commands ("Draw a circle:").

Grimes` referential core is not an arbitrary part or subset of the context space of a text, but is identified with those referents 'in' the beginning of a text. This implies that the notion of 'referential core' is not well-defined:

throughout the whole text referents may be introduced with respect to 'previous' referents, and those 'previous' referents are not only, or not even necessarily, introduced in the 'beginning' of a text. Hence, the notions of context space and referential core collapse. It does make sense, both in a logical and a cognitive model of discourse reference, to distinguish between the set of referents which have, at some point in the text, been referred to before, and those which have not yet been referred to. This difference obtains, for instance, in the distinction between definite and indefinite expressions.

Another confusing aspect of Grimes' characterization of the core is his assumption that also whole propositions thematic propositions (my macro-propositions) can belong to the core. This would mean that the core is not simply a segment of a possible world referred to, but also involves 'meanings' of a text. To get this straight, we would at least have to say that the 'referents' of these sentences or propositions, e.g. 'global events', such as an accident or a robbery, are part of the core --taken as that part of the context space which has been identified or introduced before.

Next, Grimes assumes that the core can be described in terms of presuppositions (p. 10) and that it can be operationally assessed by intermediate questions, such as "What happened?", "Who is Jones?", etc. This device has also been used in the topic-comment discussion, and is absolutely inadequate to yield either topic--comment articulations or 'cores' in discourse. The presuppositions of these questions are simply identical with (parts of) the semantic representations of 'previous' sentences in a text. In a more general theory of discourse, such a device is not only vague and intuitive, but even superfluous. And what is worse for his argumentation, we now have gotten rather far from the more specific notion of 'staging' which as we saw has to do with prominence or

importance. What Grimes tries to account for here are simply the mechanism of textual reference and coherence, thereby confusing meaning and reference, and local and global coherence.

Global coherence or theme (or 'point'), e.g. of a conversation, is involved when Grimes refers to a 'functional' account in terms of speakers' goals. But again this is confusing. We indeed have goals when we speak, but these may also be hierarchical: we have 'main' goals, and more subordinate or auxiliary goals. And the main topic of a conversation will indeed often be linked with main goals. So, we should distinguish between semantic hierarchies in (the interpretation of) the text on the one hand, and hierarchies in the pragmatic or interactional functions of the text. Note by the way that two notions, of 'functional' play a role here: first the 'function' of a part of the text with respect to other parts (e.g. an asserted proposition and an 'explication' or 'specification' of it; see van Dijk, (1979b) and on the other hand the function of a text or part of it with respect to the context (e.g. the goals of the speaker). The first kind of functions have been discussed also in Grimes' book on discourse (Grimes, 1975) and in experimental work by Bonnie Meyer (1975) based on this notion.

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Besides the notion of core, Grimes also introduces the notion of cell. Cells are again defined as "segments of a text within which the major referents... are uniform" (p. 13). Cells within a more complex context space are said to share the same referential core. But still, there may also be changes and so the conditions on being a cell are so vague that it is impossible to understand what is meant by the notion, and why again it is different from a referential core. Is a cell part of a text (syntax, semantics?) or is it, as seems to be said also, part of a context space, and hence part of a possible world? The identity of a 'cast'

is hardly a sound criterion to identify such cells. On the one hand a change of referent does not necessarily imply a change of 'orientation' (as Grimes calls it), whereas identity of referents may very well accompany changes of orientation, perspective or coherence. In the latter case a change of a 'kind of activity' is said to be sufficient, but that criterion is not made explicit: each sentence will usually exhibit a different predicate. Consider for instance the following simple examples:

- (3) Mary was late. John didn't want to wait any longer. So he went to the movies alone.
- (4) John didn't want to wait any longer. Mary often came late. So, he decided to go to the movies alone.
- (5) John went to the movies alone that night. The next day he called Mary and asked why she didn't show up in time.

Intuitively speaking, all these examples are 'about' John; the perspective of description is that of John, even if only Mary is mentioned in some of the sentences. So, do we have one cell or two in (3), and does the second sentence involve (mean?, refer to?) an interrupted cell? And finally, although there is identity of reference in subsequent sentences in (3) do we intuitively have the same cell after the use of 'the next day'? Simple shift of time is not sufficient, to be sure, because it is also playing a role in (3) and (4). In brief, if Grimes wants to formulate a number of intuitions about text structure, notions like 'core', 'cell' or 'context space' seem to be descriptively inadequate, let alone theoretically explicit.

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Finally, Grimes briefly uses the well-known concept of a script as elaborated by Schank and Abelson (1977). Such a script however is not, as he maintains, a linguistic, but a cognitive representation of some stereotypical sequence of actions, such as 'eating in a restaurant' or 'giving a party'. Scripts are organizations of our knowledge of the

world, and are necessary in our comprehension of natural episodes or our stories about them. Each event in the script, according to Grimes, should be taken as a new context space --which is rather surprising because a context space was earlier used in a much wider sense (the set of referents). Events 'departing' from the script introduce a new context space, he then maintains (p. 14), although in most discourses the events being described are precisely not the events of the script --because they are by definition known by the speaker and the hearer of the same culture. Again, another notion is borrowed from other authors, but its role and relevance is not made explicit. The idea of staging, of importance and relevance indications in discourse, seems completely forgotten at this point of the paper.

##### 5. Functional relations in discourse

In a next section Grimes says some more about 'context structures', thereby meaning --as far as I can see-- simply 'text structures: Now, relations between cells are discussed, such as 'development', 'support', and so on. These relations are the textual functional relations mentioned above. They hold between sentences or propositions, and it seems pointless to use the notion of cell here, whatever it may mean: the functional relations also hold between sentences or propositions which belong to one cell. Intuitively, functional relations involve hierarchies: one or more propositions may be 'subordinate' to another, e.g. as specifications, definitions, support or backing of others. At the moment, we have little insight into the precise properties of such functional relations. Some of them can be characterized in semantic terms, e.g. on the basis of entailment. Others, holding not between sentences or propositions but between speech acts, require pragmatic definition, for instance in terms of main actions (speech acts) and preparatory, auxiliary or component-actions. Grimes account though is merely metaphorical ("interruption of context spaces", 'return to original context', etc.) and does not try to use the available

tools of semantics, pragmatics or conversation and (inter-) action theories. And even in metaphorical terms the analysis does not seem correct: subordinating functional relations and coordinating ones are independent of interruption and return to a once established 'context space'. Also in coordinating functions we may change the 'cast' of characters or the nature of their activities, whereas subordinating relations (e.g. an explanation) may well operate within one context space (or cell?).

We are back with the original theme (sic!) of the paper, as soon as the notion of 'nuclearity' comes up again: one item (I use this vague and neutral word in order to avoid choosing between the notions used by Grimes) of a discourse may 'stand out' whereas the others 'support it'. Although the notion of 'support' is not defined, this seems intuitively OK. Yet, the examples given show that the attention again shifts from local or linear functional relations between items (sentences, propositions, speech acts) to global, macrostructural ones: the climax of a story or the conclusion of an argument cannot simply be defined at the sequential level 4 semantic or pragmatic relations between items. First, they may pertain to whole sequences of sentences and relations among such sequences, as accounted for in terms of derived macrostructures (cf. van Dijk, 1977a, 1980). Secondly, the climax of a story and the conclusion of an argument are not simply global meanings, but conventional, schematic categories, which may have varying (global) 'content'. This confusion between semantic global meanings (macrostructures) and schematic global categories (superstructures) has often been made, also in the theory of narrative and the actual developments in psychology and artificial intelligence on story comprehension (van Dijk, ed. 1980).

After what has been said above about the various notions introduced by Grimes, it is not surprising that the "model" he sketches at the end of his paper can hardly be explicit. The graph structure, its categories, structural relations and contents can only be intuitive and ad hoc. The categories and levels are simply not defined and too heterogeneous. It is not even clear, of what the graph is a structural representation. Local and global information appear in the same graph and the same holds for textual and scriptal information.

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Concluding my discussion of Crimes paper' I may summarize my objections as follows:

- (i) the paper intends to discuss the notion of 'staging' but most of it is not or only indirectly related to this concept;
- (ii) the notion of staging remains very vague and broad, and pertains to staging within sentence and within whole texts; local and global structures are mixed up;
- (iii) no systematic distinctions are made between meaning and reference;
- (iv) the discussion of and reference to other papers is not critical, nor are important results of others used in the argumentation;
- (v) central notions in the paper, such as 'context space' 'referential core' or 'cell' remain very confused, overlapping, and partly belong to the textual structures, the structures of reference and cognitive representations;
- (vi) the resulting model is far from explicit, too heterogeneous and unclear about what it represents.

So, although notions such as 'what is important or relevant in a text' for a reader are crucial in a theory of discourse, the present paper does not provide us with further insight into these notions. On the contrary, clarifications which could be given on the basis of extant work in this area have been either confused or omitted.

## 6. Some aspects of relevance

In the few pages I have left I can merely sum up sketchily some of the main aspects which, in my opinion, are involved in an account of 'importance', 'prominence', 'salience' or similar concepts relating to text structure and discourse comprehension processes. I will use the term 'relevance' here to cover these various notions (for detail, see e.g. van Dijk, 1979a--referred to, but not used by Grimes-- and the other references given there and earlier in this discussion). I will not, or only indirectly, discuss the many other aspects of discourse structures, mentioned by Grimes, which do not specifically relate to what I mean by 'importance' or 'relevance', such as local and global coherence, both semantic and pragmatic, and their cognitive basis. The same holds for sentential topic-comment functions.

### a. Local vs. global relevance

One of the most important distinctions which should be made is that between so-called 'local' vs. 'global' relevance. In intuitive terms: both structurally (abstractly) and in a model of cognitive discourse processing, it makes sense to distinguish what is important or prominent at a particular 'point' of the text or conversation, and what is relevant for a larger part or the discourse as a whole. Local relevance, then, should be accounted for in terms of sentence structures and immediate sentence relations, and global relevance in terms of macrostructures which are derived from the local structures.(van Dijk, 1977a, 1980).

### b. Semantic and pragmatic relevance

Both local and global relevance operate at the semantic and pragmatic levels of discourse description. Thus, also between speech acts it makes sense to distinguish between what is important for the speech acts now being performed, and the more global speech acts which can be derived from them. Semantic macrostructures specify the 'theme', 'up-shot' or global meaning of a text, and hence define what meaning or content is (structurally) most important for the

text as a whole. Both semantically and pragmatically, macro-rules define the hierarchies which indicate the respective levels of relevance.

Also as an opposition this distinction may have relevance implications: the pragmatic function of a discourse may be more relevant in a certain context than the semantic content (being ordered around, being congratulated, etc. may be more important than the actual content of the utterance).

#### c. Intensional vs. extensional semantics

The semantics of discourse should be specified both in intensional (meaning) and in extensional (reference) terms. When a story is mainly about the same person, say John, then relevance is obviously referential. But if it is more important which meanings are used to denote this individual, then relevance is rather intensional. In many cases this distinction may be neutralized. Moreover, theoretically, the distinction is not without problems since expressions like John, he, traitor, my brother are not only used to identify an individual, but also 'refer to' certain properties of the individual.

More important, though, is the observation that 'relevance' or 'prominence' cannot be a property of the denoted facts (persons, events, etc.) themselves. It is the text, or rather its interpretation, which assigns this relevance structure to reality.

#### d. Relevance vs. expression of relevance

All kinds of relevance discussed above and below should be distinguished from the ways relevance differences are expressed in the text or in paratextual structures: stress, pitch, intonation, gestures, syntactic structures, lexical selection, and other 'indicators' or 'signals' do not themselves have relevance properties, at least not in the sense of 'relevance' intended here. Only in specific contexts and for specific discourse types could such 'surface structure' relevance be analysed in its own right (e.g. in rhyme, alliteration, word play).

e. Semantic vs. schematic relevance

Discourse not only has global semantic structures but also global schematic structures (so-called 'superstructures'), such as the structure of a narrative, an argumentation, a newspaper article or a conversation. The categories involved in these structures are conventional for each culture and only indirectly related to the specific contents of the text (a story may remain a story even if it is about a completely different set of events). Schematic structures are also organized hierarchically. This means that certain categories are more important, for the story structure (say: the plot) than others. Thus, a Complication in a story, a Conclusion in an argumentation, may be more relevant than lower level Evaluations or Backings of argument-premises.

f. Differential relevance

Most of the other kinds of textual relevance mentioned above can be accounted for in terms of different levels or domains of discourse analysis, or in terms of hierarchical relations at the same level (e.g. local vs. global; subordinate vs. superordinate functional relations between sentences or speech acts). Differential relevance, however, although as yet not quite understood, may require characterization in other terms, such as opposition, contrast, or incoherence at the semantic level, and unexpectedness and inappropriateness on the pragmatic level. Similarly, we may have a distinction between foreground and background which is not yet captured in the other notions used above, such as being a category in a macrostructure proposition (a property of 'main characters' in a story). To be sure, part of the explanation to be given should be formulated in cognitive terms, such as (un-) expectedness, predictability, pattern perception and their conditions (such as memory limitations, processing strategies).

#### g. Textual vs. contextual relevance

In general it seems to make sense to distinguish between textual relevance and contextual relevance. The first is assigned to properties of the text itself, including its semantic and pragmatic interpretation. In other words, this relevance must in principle be formulated in terms of grammar, stylistics, rhetorics or narrative theory. Contextual relevance on the other hand does not abstract from situational factors: it is the relevance assigned to (some property of) the text relative to the many contextual parameters mentioned below.

#### h. Linguistic vs. cognitive semantics

In natural contexts of language use, relevance will be assigned to a text in a process of understanding by a hearer or reader. Hence, all the distinctions made above require further analysis in terms of a cognitive model. Although a reader in principle should follow the obviously intended meaning(s) of the text and the relevance signals expressing its underlying relevance configuration (e.g. when the text itself, e.g. in titles or conclusions, mentions its own theme), there are many cognitive factors which will interact with the 'ideal' interpretation, such as:

- (i) knowledge of the world (scripts, historical facts, etc.)
- (ii) knowledge of the context (speaker, purpose of interaction)
- (iii) goal, tasks, interests of the hearing/reading process
- (iv) opinions, attitudes, norms, values.

Against the background of these cognitive structures (schemata) the personal relevance assigned to certain parts of the text may be different than the intended one. (cf. Kintsch & van Dijk 1978; Kintsch & Greene, 1978, and the papers in Freedle, ed. , 1979).

### i. Cognitive vs. social relevance

The last distinctions one could make are based on the differences between a proper cognitive analysis and a social or cultural analysis of discourse. Of course, social and cultural knowledge are also represented cognitively and their influence on discourse interpretation and functioning therefore ultimately go 'via' a cognitive model. The same, however, holds for the 'linguistic' analysis which also is an abstraction from cognitive understanding of discourse.

Among the many different kinds of factors involved here, only two will be mentioned: the interactional and the cultural ones. Thus, a discourse as a whole or parts of it may be assigned different degrees of relevance with respect to its functions and effects in the interactional sequence. In general, for instance, a macro-speech act, that is the 'point' of a conversation, will be more relevant, socially, but this need not be the case in more specific contexts: the greeting, style, or politeness may be more relevant for the success of the interaction sequence than the theme or the pragmatic point. Culturally, we have general schemata which determine what is important, relevant, interesting, crucial, etc. in a given discourse. Newspapers in a given country, thus, will have an implicit 'interest list', which is hierarchical; the same for history books, school text books, conversations and stories. Besides the notion of personal relevance mentioned above, this is perhaps the notion which comes closest to our everyday understanding of what relevance is.

### Conclusion

We have briefly reviewed a number of the dimensions along which in my opinion the notion of relevance should be studied. Some of these can at the moment be formulated in rather precise terms, such as the semantic and pragmatic ones. A beginning has been made with cognitive models of

relevance assignment in discourse comprehension, although especially notions such as goals, interests, opinions, or attitudes still require explicit description of their representation and their interaction with the processes of comprehension. Socio-cultural models of relevance need be further analyzed in sociology (see Schutz, 1967, and applications in Nix & Schwartz, 1979).

The various dimensions are of course not exclusive: they combine in highly complex ways. In discourse processing this means that at each point of comprehension a relevance hierarchy is constructed, such that local and/or global, semantic and/or pragmatic, semantic and/or schematic, cognitive and/or socio-cultural relevance is assigned to the text. At the same time a representation in episodic memory is constructed which globally 'summarizes' the respective local relevance assignments. These assignments as we saw, will be different from person to person, and from, context to context. Both in production and in comprehension language users will apply strategies to convey and represent effectively which kinds of relevance and which degrees of each kind should be given attention. Needless to say, both the linguistic and the cognitive intricacies of such a model of relevance assignment require still much further research. And this is just one fragment of an interdisciplinary study of discourse.

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