ON HIGH-LEVEL CONCEPTUAL STRUCTURE AND DISCOURSE*

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ABSTRACT. *The encyclopaedic nature of semantics has been one of the main theoretical postulates of cognitive linguistics, one of its claims being that semantic characterisations are but points of access to a complex network of conceptual relations.This article is an attempt to show how generic or high-level conceptual structure is operative in terms of understanding some aspects of discourse coherence. We focus our attention on 'plans & goals' schemas, which are propositional constructs with a strong metaphoric link in terms of the primary metaphor GOALS ARE DESTINATIONS, and on some generic metaphorical and metonymic mappings, particularly GENERIC IS SPECIFIC and PART OF AN EVENT FOR WHOLE EVENT. We intend to show that these two mappings are present in our high-level processing with a direct application to discourse organization and interpretation.*

KEYWORDS. *Discourse coherence, conceptual structure, cognitive linguistics.*

RESUMEN. *La naturaleza enciclopédica de la semantica ha sido uno de los postulados teóricos principales de la lingüística cognitiva, uno de cuyos postulados es que las caracterizaciones semánticas no son más que puntos de acceso a redes conplejas de relaciones conceptuales. Este artículo intenta mostrar cómo la estructura conceptual genérica o de alto nivel opera en términos de la comprensión de algunos aspectos de la coherencia discursiva. Centramos nuestra atención en los esquemas de "panes y metas", que son constructos proposicionales con un enlace metafórico fuerte en el sentido de la metáfora básica METAS SON DESTINOS y en algunas proyecciones metafóricas y metonímicas genéricas, especialmente GENÉRICO ES ESPECÍFICO y PARTE DE UN SUCESO POR EL SUCESO COMPLETO. Se intenta demostrar que estas dos proyecciones se encuentran en nuestro procesamiento superior y que tiene una aplicación directa a la organización y a la interpretación discursivas.*

PALABRAS CLAVE. *Coherencia discursiva, estructura conceptual, lingüística cognitiva.*

1. INTRODUCTION

Discourse studies have flourished over the last twenty years in a way which, to say the least, simply boggles the mind. It is interesting to note that part of the initial thrust,

as is widely recognised, has much to do with the realisation by some linguists and psychologists (e.g. T. A. van Dijk & Walter Kintsch 1983; Arthur Graesser 1981; and Graesser & Clark 1985) that the encyclopaedic (as would later be postulated by frame semanticists; cf. Fillmore 1985) and relational nature of knowledge (Evens 1988, and the collection in Lehrer & Kittay 1992) is crucial to the understanding of many discourse principles, particularly coherence phenomena[1]. However, in spite of their programmatic interest in the study of coherence, discourse analysts have not made any detailed proposal with respect to the form of encyclopaedic semantics. The proposals, as is well known, come from the world of cognitive linguists following scholars such as Fillmore (1985), Lakoff (1987), and Langacker (1987). But even with this proposals at hand, there have been but few attempts to incorporate the main postulates of cognitive semantics into a theory of discourse. A notable exception is the work of Low (1999), and Steen (1999), but their work is restricted to the field of metaphor.

2. GENERIC LEVEL SCHEMES

The encyclopaedic nature of semantics has been one of the main theoretical postulates of cognitive linguistics. It has been defended vigorously by Langacker (1987), who claims that semantic characterisations are but points of access to a complex network of conceptual relations. It also lies at the heart of Fillmore's frame semantics (Fillmore 1985; Fillmore & Atkins 1994; Lowe, Baker & Fillmore 1997; Fillmore 1998), where a lexical entry is characterised as a schematic complex of frame elements, with their accompanying roles and syntactic realisations. Finally, it is taken for granted in Lakoff and Johnson's experientialist stance on meaning (cf. Lakoff 1987; Lakoff & Johnson 1999), according to which we model our concepts in terms of propositional, image-schematic, metaphorical, and metonymic structure. Classical frames are propositional structures (e.g. our knowledge about restaurants, customers, and waiters); image-schemata (Johnson 1987) are abstract pre-conceptual structures, like spatial orientations (front-back, left-right, up-down) and dimensions (the notions of 'path' and 'container'); conventional metaphor is a mapping (i.e. a set of correspondences) between two different conceptual domains (e.g. people and animals); metonymy is a domain-internal conceptual mapping (e.g. from order to customer in the context of a restaurant).

2.1. High-level metaphor and text interpretation

Lakoff & Turner (1989), and Lakoff (1993) postulated the existence of some forms of generic or high-level metaphor. One interesting example of this level of metaphorisation is to be found in what Lakoff & Turner (1989: 162) have labelled the GENERIC IS SPECIFIC metaphor. This metaphor allows us to derive generic structure from a specific situation and apply it to other specific situations. A case in point is the proverb Blind blames the ditch, which is understood not as a remark about blind people but about people who have some incapacity. Imagine the proverb as uttered by someone

as a remark on the situation of a presidential candidate -who has committed some personal impropriety, and whose candidacy has been destroyed by the press reports-blaming the press rather than himself for his own downfall. According to Lakoff & Turner (1989), this situation and the one directly depicted by the proverb about the blind man share the following generic-level information:

- There is a person with an incapacity.
- The person is confronted with a situation in which his incapacity results in a negative consequence.
- The person blames the situation rather than his own incapacity.
- The person should have held himself responsible, not the situation.

This information is a generic-level schema which can be filled in many ways. In the presidential candidate example, it allows us to see the candidate as a person with a personal inadequacy for the position he seeks, on the one hand, and to consider his attitude in blaming the press just as foolish as the attitude of a blind man blaming the ditch rather than his own inability for what has happened to him.

Lakoff & Turner's explanation is only part of a more complex picture. In fact, it may be argued that in *Blind blames the ditch* we also have a strong metonymic component, at two levels of analysis. At one level, the blind person stands for any human being with an incapacity; the situation of the blind person falling into the ditch stands for the person being confronted with the negative consequences of his actions; finally, blaming the ditch stands for the foolish attitude of finding responsibility in the situation rather than in his own inability. At another level, the linguistic expression (taken literally) depicts only part of an event: one in which a person is blaming a ditch. To be interpreted, the conceptual material provided by *Blind blames the ditch* has to be expanded to include all the ingredients of the whole event in which an angry blind man blames the ditch after falling into it. It is this whole situation, not just the partial event, that needs to be called upon for the GENERIC IS SPECIFIC mapping to be effective. The metonymy at this global level of analysis may be labelled PART OF AN EVENT FOR WHOLE EVENT, and it would be a generic or high-level metonymy. This is a pervasive metonymy in English. The reader may want to think of expressions like *They clapped their hands* ('they showed approval by clapping their hands'), *He picked the winning horse* ('He made a successful guess at the winner before the race'), *She drew her neighbour aside* (i.e. so as to speak to her quietly). In fact, these expressions, which are not proverbs, also make use of the metaphor GENERIC IS SPECIFIC. For example, 'clapping hands' is a literal action of approval which may be used as the source of a metaphor in which there is no actual hand clapping. 'Pick the winning horse' may also be taken to apply in a non-literal way to situations in which there is neither a horse nor a race (but just the generic pursue of goals). 'Draw someone aside' does not necessarily involve an actual movement to one side, but only finding a position where the people concerned may speak privately.

The GENERIC IS SPECIFIC metaphor may also be exploited on a higher-level of discourse organisation. Consider any narrative text with such structural elements as (acting) characters, plans, and goals, as the following from Schank & Abelson (1977: 70):

> John knew that his wife's operation would be very expensive.
>
> There was always Uncle Harry ...
>
> He reached for the suburban phone book.

As Schank & Abelson point out, what we need to understand this text is knowledge of a generalised plan that can connect the goal state to a set of possible actions to realise this state. John's goal is to raise money for his wife's operation. The plan is to ask for money on the basis that a surgical operation is a legitimate expense for a person to go into debt. This is one level of analysis, one which we can appropriately call the low level. On another higher-level, however, we have generic knowledge that whenever there is a goal, there is also a plan (a potential set of actions) to achieve the intended goal. The schema based on the generic sequence of plans and goals has the following form:

- People often have goals.
- People want to achieve their goals.
- In order to achieve their goals, people make plans.
- Sometimes there are difficulties to carry out a plan.
- If difficulties are not overcome, goals are not achieved.
- If difficulties are overcome, goals are achieved.
- People generally feel satisfied when they are capable of carrying out their goals as planned. Partial achievement of goals brings about partial satisfaction.

The 'plan & goals' schema is derived from hundreds of observations of specific-level situations in which people make plans in order to satisfy their desires. Through GENERIC IS SPECIFIC it is then applied to the understanding of any novel situation like the one (partially) described by the short narrative text above. Furthermore, texts based upon the 'plan & goals' schema may be metonymic to a certain degree. In Schank & Abelson's text there is a lot of conceptual material which has been left implicit. The action of reaching for the phone book is an indication that a telephone number (Uncle Harry's) is going to be looked up, which is in turn an indication that the protagonist intends to call his uncle to ask him for money for the operation. Note that it would still be possible to leave some more material implicit without any significant loss in meaning:

> John knew that his wife's operation would be very expensive.
>
> There was always Uncle Harry ...

In this edited version of Schank & Abelson's text, we know there is a plan, to ask Uncle Harry for money. What we do not know is how Uncle Harry will be contacted, but this information is not very relevant from the point of view of the 'plans & goals' schema.

2.2. Cognitive approach to discourse coherence

If the view I have just put forward in the previous section is correct, any piece of discourse based upon the 'plans & goals' schema is essentially metaphorical, at least on the highest level of processing. This idea is in keeping with a theoretical proposal made by Lakoff (1990, 1993) some time ago, where it was argued that all abstract reasoning is ultimately image-schematic. Lakoff's main thesis was founded upon the observation that states, changes of state, processes, actions, causes, purposes, and means, are characterised cognitively by means of metaphor in terms of space:

- States are locations (*He's in a state of shock*)
- Changes are movements (*She got out of a coma*)
- Causes are forces (*His speech gave me a headache*)
- Purposes are destinations (*The end is in sight*)
- Action is motion (*We are moving forward*)
- Means are paths to destinations (*She did it the other way*)

More recently it has been suggested (see Grady 1997, 1999; Lakoff & Johnson 1999) that the metaphors in this system (called the "Event Structure"), together with others, are non-complex or primary since they have a direct grounding in sensorimotor experience. From a combination of primary metaphors it is possible to derive more specific ones like LOVE IS A JOURNEY (which combines ACTION IS MOTION with PURPOSES ARE DESTINATIONS), where we see lovers involved in a love relationship as travellers on a journey towards a common destination (Lakoff 1993). The lovers' common goals (their purposes in their love relationship) are seen as the destination at the end of their journey.

The notions of 'motion' and 'destination' cannot be independent of the notion of 'path'. The latter is a topological construct, or an image-schema in Johnson's use of this term. Since purposes are often seen metaphorically as destinations, it should come as no surprise to find that many texts which exploit the 'plans & goals' schema have an image-schematic basis. However, this grounding only takes place at the higher-level of processing. Consider:

She was saddened by the news. She felt she was a standstill.

She was saddened by the news. She felt she was not making any progress.

The protagonist of the two stories is sad because of the (probably bad) news she has received. We further make a causal connection between the bad news and her lack of progress, as indicated by the second clause in the two texts. At the generic level, the two texts work in much the same way: we have a 'cause-consequence' schema in both (she was sad because there was some impediment for her to make the expected progress); we also have a 'plans & goals' schema (thwarted goals suggest the plans did not work out), plus a GENERIC IS SPECIFIC metaphor (lack of progress is an undesirable situation, which

holds true in the case of the two stories). At the specific level, there is a difference since the first text makes use of the primary metaphor (LACK OF) PROGRESS IS (LACK OF) MOVEMENT for the expression 'be at a standstill'. However, at the higher level, this metaphor is implicit for both texts, as is evident from the following extension:

> She was saddened by the news. She felt she was a standstill. Then she decided to go ahead with her plans.

> She was saddened by the news. She felt she was not making any progress. Then she decided to go ahead with her plans.

The fact that it is possible to extend the two texts metaphorically in the same way suggests that the same primary mapping is latent throughout the interpretation process whether we want to express our thoughts propositionally (second text) or metaphorically (first text).

3. METAPHOR AND METONYMY IN DISCOURSE ORGANIZATION

Some cognitive linguists have recently postulated the existence of high-level metonymic mappings (cf. Panther & Thornburg 2000; Ruiz de Mendoza & Pérez 2001). These also have discourse consequences. Some have been noted by the authors. For example, the generic metonymy EFFECT FOR CAUSE explains the semantics of this short exchange:

> A: What's that noise?

> B: It's a burglar (trying to break into the house).

'That noise' (the effect of the burglar's activity) stands for 'the cause of that noise'. This is what speaker A is actually talking about, probably because she suspects that something is going wrong. Note that the anaphoric "it" in B's answer has 'the cause of the noise' as its (conceptual) antecedent, which rules out an answer like:

> B: *That noise is a burglar.

Other discourse consequences of this metonymy are not as evident:

> She could hear a loud bang. She was very upset.

> She could hear a loud bang as he slammed the door in her face. She was very upset.

The first of these two examples can be said to have an underlying EFFECT FOR CAUSE metonymy (i.e. she heard a bang, the kind of short, sudden noise which are made when people slam a door or a similar object). The metonymy facilitates the conceptual connection (of the 'cause-consequence' type) between the two clauses in the example: probably, she was not upset by the noise but rather by the other person's rather rude action of slamming the door. All this implicit conceptual material has been made explicit in the

second example. The conceptual connection is the same. This analysis strongly suggests that the EFFECT FOR CAUSE metonymy has consequences not only in terms of discourse cohesion (i.e. anaphoric reference) but also in terms of discourse coherence. This is so because the cause-effect relationship has a strong situational component. High-level metonymies which do not have this component are relevant from the point of view of grammatical organisation. Ruiz de Mendoza & Pérez (2001) supply a fine-grained analysis of the impact on grammar of such metonymies. Here are some examples:

> AGENT FOR ACTION, as in *author* a book, which converts an entity into a process in which the entity has the most prominent role.

> OBJECT FOR ACTION, as in *blanket* a bed, where the object involved in an action stands for the action itself.

> ACTION FOR RESULT, as in a deep *cut*, where a whole action schema is compacted into a relevant part of it, i.e. the result of the action. It may be observed in this connection that all the elements of the action schema are implicit in the semantics of the nominalisation. This may be seen in a sentence such as *He had a deep cut in his knee that he accidentally made with his pocket knife.* In it the agentive and instrumental roles, which belong to the action schema, are made explicit. This is a discourse possibility which may be exploited conversationally:

Another high-level metonymy which has close ties with discourse coherence is PART OF AN EVENT FOR WHOLE EVENT. We have already examined how it works on a local (intra-sentential) level. It remains to be seen what kind of impact it may have on the organisation of larger stretches of discourse. An edited version of a short text by Hoey will serve our purposes. First let us briefly discuss the original text in Hoey (1994: 28):

> I was on sentry duty. I saw the enemy approaching. I opened fire. I beat off the enemy attack.

Hoey offers an analysis of this text in terms of the 'problem-solution' structure as follows:

> Situation   I was on sentry duty
>
> Problem   I saw the enemy approaching
>
> Response   I opened fire
>
> Evaluation   I beat off the enemy attack

Now take this reported version of the text:

> The sentry was able to beat off the enemy attack.

This sentence encapsulates much of the information explicitly provided in the original text. This is so in spite of the fact that the sentence only focuses on part of the whole event. But the rest of the information is recoverable on the basis of the co-

operation between the high-level metonymy PART OF AN EVENT FOR WHOLE EVENT and our low-level knowledge about sentries and their duties. For example, we know that, if he repelled the attackers, then the sentry must have been on duty, and that he must have used fire force rather than any other strategy, as implied by "beat off".

Additionally, it must be noted that a substantial part of Hoey's text and all of our edited version respond to the requirements of the 'plans & goals' schema: opening fire is the strategy used by the sentry to carry out his duty, and the sentry's goal is to repel the attack. So ultimately, at the highest level of processing, we have the GENERIC IS SPECIFIC metaphor at work. This metaphor maps relevant generic structure drawn from specific situations where people act in certain ways to achieve their goals onto the specific low-level situation described in the text.

Sometimes events are not goal-oriented, as in:

A strong wind swept across the fields and destroyed the crops.

In cases like this, there is need to postulate a higher-level metaphor or a high-level metonymy. In fact, unlike in examples based upon the 'plans & goals' schema, just mentioning part of the event does not allow us to retrieve the whole event. This is evident from a consideration of the two sentences below in isolation. Neither of them calls up the other, although the two may be combined into one:

A strong wind swept across the fields.

The crops were destroyed.

The reason for this is very likely related to the activity of the GENERIC IS SPECIFIC metaphor. If we have the metaphor, as is the case with goal-oriented events, we have generic structure available to be mapped onto the specific event we want to interpret. We interpret some goals in terms of other goals, some plans in terms of other plans, and some actions in terms of other actions. This is possible because all specific actions, plans, and goals have easily identifiable conceptual structure in common. Events which do not participate in the 'plans & goals' schema may share part of their conceptual structures, but there is no such a common core for all of them as there is for goal-oriented events. Here, an interesting theoretical possibility to explore in relation to the existence of a universal conceptual core in common across goal-oriented events may be related to the existence, in turn, of underlying primary metaphors like ACTIONS ARE MOTIONS and GOALS ARE DESTINATIONS. Remember that the primary nature of these mappings is based upon their direct grounding in experience. This common grounding is what may ultimately allow us to naturally cluster together actions, plans, and goals within the same schema.

4. PRAGMATIC BASIS OF THE ROLE OF METAPHOR IN TEXT ORGANIZATION

On a final note, high-level conceptualisation may lie at the basis of pragmatic implication. Panther & Thornburg (1998) have made the interesting claim that illocutionary knowledge is organised in terms of "speech acts scenarios" (in my view, a form of high-

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