

Cognitive Linguistics in the Redwoods

The Expansion of a New Paradigm
in Linguistics

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Sequential conceptualization and linear order

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1. Introduction *

Explanations of the meaning of a sentence generally involve some kind of ordering of elements. The conceptualization of a sentence proceeds sequentially: it is split up into parts, and these parts are then related to one another in a particular way and in a particular order. Now different aspects of sentence meaning may require different ways of sequencing. For example, when tracing empathy relations in a certain conceptual content, we would conceivably start with the surface subject (cf. Kuno 1975); when tracing the flow of energy, we would start with the agent, and this is not necessarily the subject.

Thus, different aspects of conceptual content may impose different orderings on interpretation, although in highly unmarked expressions, the interpretive orderings for a number of different aspects may coincide (cf. Langacker 1991: 293). Linguistic justification for particular interpretive orderings may come from agreement in one case, from case-marking in another; languages may differ as to the means they employ in these respects. The question I want to consider in this paper is: How may the order of elements in a sentence itself be related to sequential conceptualizations? In what way may linear order be used in order to justify interpretations of sentences? The answer I want to suggest will consist of two parts. The first is that linear order is not limited to providing indications for one specific aspect of interpretation in particular (like “old” vs. “new” information), not even in one language. The second part is that, although order is not restricted to one particular aspect of interpretation, the nature of the indication it provides is still similar over the different domains it may be related to: the contribution of order to meaning may generally be formulated in terms of the relative conceptual independence of parts of a sentence. My claim will be that whenever two elements in a sentence are distin-

guished as separate, the one that comes first is to be conceptualized independently with respect to the one that follows (whatever aspect of meaning is at order), while the reverse does not hold.

In Verhagen (1986) this idea is elaborated (in a slightly different terminology), with respect to two domains of interpretation: the status of information as “old” or “new”, and the roles of participants (subject, direct object, indirect object) in events that differed in terms of transitivity. In this paper, I want to present a more sophisticated view, partly drawing on work in progress by Pardoën (1993, t.a.), and on work by Daalder (1989). In particular, I want to show the relevance of this approach for the analysis of some phenomena that have little to do with the two areas just mentioned. The first topic concerns objective vs. subjective interpretations of a certain set of verbs, the second the interpretation of extraposed relative clauses.

Briefly, the first issue is the following. A verb like *promise* can be used epistemically (as in *Tomorrow promises to be a fine day*). In subordinate clauses in Dutch, such an epistemic use of the verb requires a particular linear order: instead of being completely to the left of the infinitival complement, as is normal with the non-epistemic use, it occurs to the right of most of the complement, and is located adjacently to the complement verb. How to explain this phenomenon? The answer to this question will involve the sequentiality of subjective conceptualization on the one hand, and the function of linear order on the other.¹

With respect to extraposed relative clauses, perhaps the most intriguing phenomenon is that such clauses, not ordered adjacently to their heads, often function as restrictive rather than non-restrictive modifiers (cf. *A subject must be chosen that will defer the drudgery of actual writing till death*). This means that the interpretations of the head noun and the modifier are to be integrated (the denotation of the combination is a proper subset of the denotation of the head noun by itself), which seems at odds with the fact that they are not linearly adjacent. The solution of this paradox will involve a more detailed investigation of the sequentiality of the conceptualization of such sentences as a whole, and in particular, of their presentative character.

2. *Promise, threaten and refuse*

2.1. *Interpretation structure*

Consider the difference between the interpretations of the sentences in (1) and (2) on the one hand, and those in (3) and (4) on the other:

- (1) *Tomorrow promises to be a fine day.*
- (2) *Het belooft morgen een mooie dag te worden.*
It promises tomorrow a fine day to become
'It promises to be a fine day tomorrow.'
- (3) *He promised to defend the constitution*
- (4) *Hij beloofde de grondwet te zullen verdedigen.*
He promised the constitution to shall defend
'He promised to defend the constitution.'

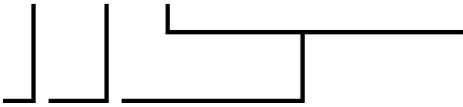
This difference may be described in terms of subjectification (Traugott 1989, Langacker 1990): (1) and (2) do not report the occurrence of an objectively construed act of promising by somebody, but rather some subjectively evaluating expectation by the conceptualizer. Put differently, whereas the locus of the promise in (3) and (4) is the referent of a participant mentioned in the sentence itself, it is the conceptualizer (not mentioned in the sentence) in (1) and (2). Note that this implies a difference between the interpretive relations among the elements in the two sets of sentences, and thus imposes different sequences of conceptualization. In (3) and (4) the element *promise* is interpretively related to the subject directly, in the sense that it immediately provides an answer (perhaps not a final one, but still an answer) to the question what the referent of the subject did. No such immediate relationship holds between *promise* and the subject in (1) and (2). More generally, with the objective sense of *promise* a sentence allows for an interpretation as a series of answers to a series of gradually more specific questions,² with *promise* related to the subject independently of other elements; schematically:

*Questions**Answers*

- | | |
|-------------------------------------|----------------------------|
| - “What/whom are we talking about?” | He |
| - “What did he do?” | promised |
| - “What did he promise?” | to defend the constitution |

We can represent these relations graphically as follows:

(3') *He promised to defend the constitution.*



Such a structure is to be read from left to right; it specifies how the conceptualization is built up sequentially, i.e. by sequential addition of new elements to the interpretation built up “so far”; each bottom line connecting an element to the previous ones in (3') thus has a leftward orientation, and indicates addition of the conceptualization of that element to the integrated conceptualization built up by such additions in previous steps; addition has, of course, a cumulative effect.³ Let us call such a representation the “interpretation structure” of a sentence: it captures the structure that is given with explicating the interpretive relationships between the elements in the sentence, i.e. not some autonomous structure to be interpreted “later”.

Structure (3') thus clearly indicates that *promise* is conceptualized independently of what follows, in the sense relevant to the semantic relation between subject and verb: the verb denotes an act performed by the referent of the subject. Such an interpretation is obviously inadequate with the subjective sense of *promise*: we simply do not interpret (1) and (2) along the following lines:

*Questions**Answers*

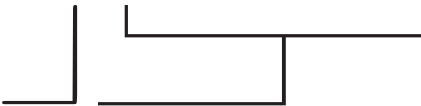
- | | |
|---------------------------------|------------------|
| - “What about?” | Tomorrow |
| - “What does tomorrow do?” | promises |
| - “What does tomorrow promise?” | to be a fine day |

Sentences (1) and (2) do not mean that tomorrow makes a promise, viz. to be a fine day. Rather, the verb *promise* is construed here as an evaluation (on the part of the conceptualizer) of the applicability of the predicate “to be a fine day”. That is, *promise*, in its epistemic use, does not provide any information about the subject independently of the rest of the sentence. Rather, the sequence *promises to be a fine day* as a whole provides a subjective characterization of the referent of the subject. Schematically:

<i>Questions</i>	<i>Answers</i>
- “What about?”	Tomorrow
- “What does tomorrow look like	promises to be a fine day

The interpretation structure may be represented graphically as follows:

(1') *Tomorrow promises to be a fine day.*




2.2. Verb ordering in Dutch subordinate clauses

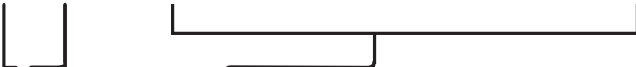
Note that the sequential differences between the two types of conceptualization discussed above do not correlate with differences in the actual order of the elements in the sentences involved: the order does not provide linguistic justification for one interpretation as opposed to another. However, in subordinate clauses in Dutch (which exhibit SOV- ordering), the actual order does provide justification for a particular sequence of conceptualization. Consider (5) and (6), subordinate variants of (2) and (4), respectively.

- (5) *[We gingen naar het strand] omdat het een
[We went to the beach] because it a
mooie dag beloofde te worden.
fine day promised to become
'because it promised to become a fine day.'*
- (6) *[Er klonk applaus] toen hij beloofde de
[There sounded applause] when he promised the
grondwet te zullen verdedigen.
constitution to shall defend
'when he promised to defend the constitution.'*

Note that in (5), *beloofde* follows the predicate nominal and constitutes a verbal cluster (as Dutch grammarians call it) with *worden*. But in (6), *beloofde* precedes all of the complement phrase, and there is no clustering of verbs. Consequently, the order of words in (5) does not allow for conceptualization of *beloofde* independently of the predicate nominal “a fine day”; the relevant interpretation structure is as indicated in (5)’:

- (5’) *omdat het een mooie dag beloofde te worden.*
because it a fine day promised to become
- 

This effectively corresponds to the subjective reading of the verb, and this is indeed the reading we find. Sentence (6), on the other hand, does allow for independent conceptualization of *beloofde*, as indicated in (6)’:

- (6’) *toen hij beloofde de grondwet te zullen verdedigen.*
when he promised the constitution to shall defend
- 

This interpretation structure captures the fact that *beloofde* is interpreted here as immediately and independently providing some infor-

mation about the subject, information which is subsequently specified by the complement. If we construe the subordinate clause in (5) with the order of (6) - as indicated in (7) - the interpretation shifts to objective, and the sentence acquires the hilarious reading that something performed an act of promising the content of which was to be a nice day:

- (7) *omdat het beloofde een mooie dag te worden*
 because it promised a fine day to become

Clearly, the word order here - with *beloofde* formally separated from the complement verb and preceding the entire predicate - forces the verb to be interpreted separately as well, i.e. to be conceptualized independently of what follows. So in subordinate clauses in Dutch, linear order does provide a specific indication for the interpretation of the relation between subject and verb, thus for an objective or subjective construal of the semantic contribution of the verb to the entire sentence. Note that the formulation of the relation between order and type of construal can indeed be given in terms of the notion “independent conceptualization”, as suggested above.

It should be pointed out that the difference between transitive and intransitive predicates, although relevant, is not the crucial factor here. There are “objective” promises with intransitive complements, as in (8), as well as “subjective” promises with transitive complements, as in (9):

- (8) *Zij beloofde haar moeder een goede verpleegster*
 She promised her mother a good nurse
te worden.
 to become

‘She promised her mother to become a good nurse.’

- (9) *De twaalfde Jumping-Amsterdam belooft al*
 The twelfth Jumping-Amsterdam promises all
zijn voorgangers te overtreffen.
 his predecessors to surpass

‘The 12th Jumping-Amsterdam [tournament] promises to surpass all its predecessors.’

What is more important is the question whether the construal of the subject referent allows for objective construal of the promise: only human beings and certain human institutions are conceptualized as capable of actively producing promises.

2.3. *Subjectification and argumentational orientation*

Further consideration of these examples gives rise to some conclusions concerning the nature of the subjectification relation involved (i.e. synchronically). An important goal of a comprehensive analysis of the use of *beloven* in Dutch and *promise* in English is to propose a semantic analysis that allows for both “objective” and “subjective” construal: one does not want the finite verbs in (1)-(2) and those in (3)-(4) to appear as accidental homonyms. The question now is the following: Do we conceive of the subjective reading as replacing a purely objective one (perhaps retaining certain abstract structural semantic features) - or had we better view it as a matter of objectivity being removed from the interpretation, with “only” subjectivity remaining? In the first view, “pure” objective meaning provides the core of the semantics of the lexical items involved, while in the second view, subjectivity is an integral part of the meanings of the words in all of their uses. What I want to show below is that a number of phenomena (one of which involves linear order in Dutch) suggest that the second view is in fact correct.

Note that an objectively construed promise as in (3) and (4) does not only report a certain event, but also has a certain argumentational force; metaphorically speaking, it has both a “backward orientation”, as well as a “forward” one. Consider the dialogue in (10).

- (10) Speaker A: *Do you think John will be coming to the party?*
 Speaker B: *Well - he promised.*

Assuming this exchange to be complete, speaker B has provided an argument for the conclusion that John will be coming to the party - perhaps not a convincing argument, but definitely an argument oriented towards that conclusion:⁴ it allows the conclusion to be inferred. If the speaker does not want the hearer to strengthen her belief that John will be coming to the party, he has to add some information to the contrary, using a contrastive connective like *but* - which precisely indicates that the second utterance in (10) as such has the argumentational force just mentioned: at the point where the second utterance in (10) is completed, the speaker has communicated to the hearer an argument in favor of a conclusion that is or may be formulated as the complement to the verb (and if he says no more, this will also be the final position attributed to him by the hearer).⁵ Let us call this the *inferential orientation* of *promise*.⁶ Furthermore, the speaker indicates that he holds a favorable view of the conclusion suggested by the sentence; let us call this the *evaluative orientation* of *promise*. So quite normally, to report that someone promised X will strengthen the belief or expectation that X will actually occur, as well as indicate that X is favorable (in the speaker's judgement). These two features constitute what I propose to call the *argumentational orientation* of *promise*.

Now note that subjectively used *promise* exhibits exactly the same argumentational orientation. Saying *Tomorrow promises to be a fine day* counts as licensing the conclusion that it will be a fine day, and usually also indicates that the speaker holds a favorable view of this conclusion. In fact, one may say that the verb *promise* in its subjective use indicates nothing else than a particular argumentational orientation. So in this way, we can indeed claim that the difference between the two senses precisely consists in the subjective sense lacking an aspect of objectivity besides an argumentational orientation that is in principle present in all uses of the verb. We may then suggest that we can not only explain why subjectification is possible, but also why it actually exists: the reason is the general function of the verbs to help a discourse move "forward" by orienting the reader/ hearer towards particular conclusions - and sometimes a verb does just that, without denoting an act of the referent of the subject.

I note in passing that the evaluative orientation of *promise* is not as strong as the inferential orientation. Consider (11):

- (11) *She promised to make him regret his arrogance for the rest of his life.*

This still counts as an argument strengthening the conclusion expressed by the complement. But it would normally be interpreted as an “ironic” promise, due to the fact that regretting is not normally viewed as something desirable. Parallel examples can be found in subjective uses; e.g. in Dutch:

- (12) [*Er wacht hem een nieuwe taak,*] *die*
 [There awaits him a new task,] which
tijdrovend belooft te zijn.
 time-consuming promises to be
 ‘[A new task awaits him,] which promises to be time-consuming.’

Thus inferential orientation seems to be the most important factor in the argumentational orientation of *promise*. Evaluative orientation is relevant too (in both senses), but it is less stable (again: equally in both senses).

If this explanation of the nature of the subjectification relation involved here is on the right track, it is to be expected that at least some other verbs, to which some argumentational orientation can be attributed, exhibit semantic and syntactic behavior parallel to *promise*. Consider the verbs (Dutch) *dreigen*, (English) *threaten*. These verbs explicitly and necessarily indicate a negative evaluation, but their inferential orientation is the same as that of *beloven* and *promise*, respectively: they also function to strengthen the belief or expectation that may be formulated in the complement. So we may expect these verbs to exhibit objective as well as subjective uses, too. And this is indeed what we find, as is illustrated by (13)-(16), with objective and subjective uses being presented in that order for both English and Dutch:

- (13) *The terrorists threatened to blow up the plane.*
 (14) *The incident threatened to ruin his chances.*

- (15) *De rector dreigde het onderwijs voor*
 The headmaster threatened the instruction for
onbepaalde tijd te staken.
 indefinite time to suspend
 'The headmaster threatened to suspend teaching for an indefinite period of time.'
- (16) *Een vierde orgel dreigde aan hetzelfde*
 A fourth organ threatened to the-same
vandalisme ten offer te vallen.
 vandalism to victim to fall
 'A fourth [church] organ threatened to fall prey to the same vandalism.'

In Dutch, we furthermore find ordering phenomena exactly parallel to those we observed in the case of *beloven*. In (17), with subjective *dreigt*, we have a verbal cluster; putting the finite verb in front of the entire complement would necessitate an objective, and therefore inadequate reading:

- (17) [*Het is een prestige-slag,*] *waarvan vooral de*
 [It is a battle-of-prestige,] where-of for-all the
kleuter het slachtoffer dreigt te worden.
 pre-schooler the victim threatens to become
 '[It's a fight for prestige,] from which especially small children threaten to become victims.'

In other words: with the order of (17) (the one the sentence actually had), the finite verb need¹ not be conceptualized independently of all of the contents of the complement - which is adequate for the subjective interpretation - while the reverse order would require such independent conceptualization, and thus objective construal.

The verbs *threaten* and *promise* share their inferential orientation, but differ in that *threaten* necessitates a negative evaluation. There is also a verb that has exactly the opposite inferential orientation: *refuse* (Dutch: *weigeren*). The use of this verb decreases the strength of a belief or expectation that can be formulated as its complement. And this

verb too exhibits objective as well as subjective uses. Thus in Dutch, we have both examples like (18) and like (19):

- (18) *De president weigerde haar tot premier te benoemen.*
 The president refused her to prime-minister to appoint
 'The president refused to appoint her as prime minister.'

- (19) *De motor weigerde warm te worden.*
 The engine refused warm to become
 'The engine refused to get warm.'

It should be noted that the situation is slightly more complex here, in that *refuse* as well as *weigeren* may also be construed subjectively when used independently, as in *The engine refused*.⁷ Consequently, the subjective use of *weigeren* is not strictly limited to verbal clustering: both (20) and (21) allow for subjective construal:

- (20) ... *dat de motor warm weigerde te worden*
 ... that the engine warm refused to become

- (21) ... *dat de motor weigerde warm te worden*
 ... that the engine refused warm to become

There might be a subtle difference in the conceptual content of these two sentences, but this is certainly hard to confirm. However, the Eindhoven Corpus⁸ contains some interesting indications for a discourse motivation of the use of one order rather than another, not only for *weigeren*, but also for the other verbs discussed here. We will examine these in the next section.

2.4. Linear order and argumentational orientation

As noted in the ANS (1984: 585), the relation between order and interpretation in the case of *beloven* holds in only one direction: the sub-

jective sense requires clustering, but the objective sense does not disallow it. In other words: an instance of *beloven* preceding the entire infinitival complement is necessarily construed objectively, but one in a verbal cluster is not necessarily construed subjectively. Thus, though (7) is definitely strange, (22) is not:

(7) *omdat het beloofde een mooie dag te worden.*
 because it promised a fine day to become
 ?'because it promised to be a fine day.'

(22) *omdat hij de grondwet beloofde te verdedigen.*
 because he the constitution promised to defend
 'because he promised to defend the constitution.'

Similar observations can be made in the case of *dreigen*. So clustering is typical for subjective use, but it does not seem to be limited to that. Now the hypothesis concerning the reason for subjectification phenomena involving the verbs discussed, in fact suggests a parallel relation at the semantic side: we claimed that all uses of these verbs share a certain argumentational orientation, and that subjective use consists of nothing else than an indication of this orientation. We might now suppose that, for all three verbs discussed, clustering - i.e. the order typical for "indication of nothing else than argumentational orientation" - is most appropriate, even with an apparently objective use of the verb, when the performance of the act denoted by the verb is not really relevant at that particular point in the discourse, and only the strengthening of a belief or expectation is.

The Eindhoven Corpus is not large enough to provide sufficient instances of all verbs in both orders, but the examples found actually do conform to this hypothesis. Consider (23), for example.

(23) *Wanneer de arts van het consultatiebureau de*
 When the doctor of the clinic the
vrouw weigert te helpen, [kan zij zich nog
 woman refuses to help, can she self still
wenden tot de afdeling hulpverlening van het
 turn to the department supporting of the

centraal bureau van de NVSH].
 central bureau of the NVSH

‘When the clinic’s doctor refuses to help the woman, [she may still turn to the support department of the central bureau of the NVSH].’

This occurs in the context of the remark that the help a woman is going to get “depends on the doctor’s attitude”, where “the doctor” is to be taken generically. Then (23), with verbal clustering, states that in cases where the doctor refuses help, a woman may get help elsewhere. Clearly, the point that some doctor performs an act of refusal is not communicatively important here, while the conclusion that a woman might not get help is: that is what the rest of the sentence is about. Thus the lack of independent conceptualization of the verb, as indicated by the verbal clustering, correlates with a lack of independent relevance of the act of refusal in the discourse; only argumentational orientation is relevant. As another example, consider (24):

- (24) *vooral nu Scherpenzeel hier een persoonlijke rel*
 for-all now Scherpenzeel here a personal fight
van dreigt te maken.
 from threatens to make
 ‘especially now that Scherpenzeel threatens to turn this into a personal dispute.’

What is relevant here is, again, the conclusion that a dispute might arise, not so much Scherpenzeel’s acts. The subsequent discourse discusses measures that have been taken to prevent the dispute from arising, and ends with the remark that “things have been settled” - it does not discuss Scherpenzeel’s behavior: that is not what the speakers are concerned with, while the “threat” of a dispute is.

The following is an example without verbal clustering; it is taken from an interview with a woman about the distribution of responsibilities in the home between her and her husband.

- (25) *[Ik moet hem 's morgens drie keer opbellen]*
 I have-to him in-the-morning three times call

omdat hij weigert zijn bed uit te komen en
 because he refuses his bed out to come and
onze twee kinderen naar school te helpen.
 our two children to school to help
 ‘[I have to call him three times each morning,] because he re-
 fuses to come out of bed and help our two children to get to
 school.’

In this case, the conclusions that he does not get out of bed and the children might not get to school are not all that is relevant: they just provide an example of important things that might go wrong. The sentence strongly makes the point that the husband is fully responsible for such behavior and its consequences, because he is being portrayed as performing an act of refusal. And it is this behavior and its consequences that are the topic of discussion in the context.

These examples clearly suggest that the approach outlined before is not only conceptually satisfactory, but also has interesting empirical consequences in the domain of the relation between syntax, semantics, and discourse.

If this idea is fundamentally correct, it points to at least two more general conclusions. First: subjectivity, in the sense of orientation towards certain conclusions, is “always there” in the use of these verbs, even when they denote acts of refusing and threatening. Second: an adequate analysis requires both consideration of conceptual content and discourse goals, since without one we cannot explain the differences, and without the other, we cannot explain the similarities.

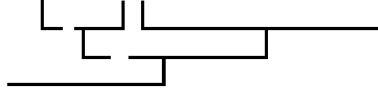
Finally, the notion of independent conceptualization has proven useful, in that it provided us with a “bridge” to connect the word order phenomena to the phenomena of subjectification, and to argumentational structure in discourse.

3. Extraposed relative clauses

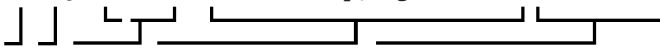
The purpose of this section⁹ is to demonstrate that in the area of relative clause extraposition, the semantics of which is not at all related directly to that of verbal clustering, the relation between linear order-

ing and interpretation may again profitably be formulated in terms of independent conceptualization. First consider examples (26)-(28), taken from Daalder (1989).

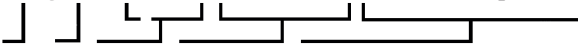
(26) *We disliked the clerk who copied the letter.*



(27) *We left the clerk, who was copying the letter, at his desk.*



(28) *He gave the letter to the clerk, who then copied it.*



Sentence (26) contains a restrictive relative clause, which means that *the clerk* is not conceptualized independently of the contents of the relative clause; the interpretation structure indicates this: the conceptualizations of *the clerk* and the relative clause are joined before the integrated conceptualization is added to the partial interpretation built up so far. In (27), with a non-restrictive relative clause, *the clerk* is conceptualized independently of the contents of the relative clause: in the interpretation structure, the conceptualization of *the clerk* is added to previous elements independently of the relative clause. The latter therefore does not have a distinguishing or identifying role, but is in a sense somewhat adverbial, here providing the motivation for leaving the clerk, for example (Daalder 1989: 202). In (28) we also have a non-restrictive relative clause, but a rather special one. This is related to the fact that it is at the very end of the sentence: the fact that the preceding part can in itself be conceptualized independently as a complete event, allows for a relative clause in this position to have a continuative interpretation, i.e. to describe an event not as a part of the preceding sentential conceptualization, but already as something following it (Daalder 1989: 203).

In German and Dutch, exhibiting SOV word order in certain contexts, such continuative relative clauses are (in the relevant contexts) separated from their antecedents by a verb, so that they are called

“extraposed”; (29) and (30) are examples of this kind, taken from Shannon (1992).

- (29) [*.. aber auch Hanna hat nicht ahnen können,*]
 but also Hanna has not suspect be-able-to
daß Sabeth auf dieser Reise gerade ihrem Vater
 that Sabeth on this trip precisely her father
begegnet, der alles zerstört.
 meet, who all destroys
 ‘[... but even Hanna couldn’t have suspected] that Sabeth would meet, of all people, her father on this trip, who would destroy everything.’

- (30) *Es würde sich eine Eisschicht bilden, die sich*
 It would [refl] a layer-of-ice build, which [refl]
dann langsam im Vakuum verflüchtigte.
 then slowly in-the vacuum evaporated
 ‘There would form a layer of ice, which would then slowly evaporate into the vacuum.’

However, more extraposed relative clauses in such contexts are in fact restrictive, rather than continuative, which is not what one might expect at first sight. How are we to understand this then? What I propose is the following. If an extraposed relative clause is a restrictive one, the conceptualization of the head noun is not only dependent on the relative clause, but necessarily also on the verb, precisely because it intervenes. Consider (31).

- (31) [*Es erscheint bemerkenswert, daß die einzig*
 [It seems remarkable that the only
brauchbare Antwort 10] von einem
 usable answer 10] from a
Abiturienten stammt, der nur
 high-school-graduate stems, who only
die Note ‘befriedigend’ im Abitur hatte.
 the grade ‘satisfactory’ in-the exam had

- (32) ...*diese Freiwilligen werden die besten Männer sein, die wir haben*
 ...these volunteers will the best men be, whom we have
-
- ‘these volunteers will be the best men we have’

So here too, it makes sense that the verb *sein* intervenes between the head and the relative clause: the entire phrase ‘be the best men we have’ is to function as a unit denoting (or rather: predicting) a property of the volunteers, as is indicated in the interpretation structure. The order here prevents an interpretation in which ‘the best men’ would be taken as indicating independent participants.



Finally, the head noun may also be a subject, as in (33):

- (33) *Es wird doch niemand mehr da sein, der es liest.*
 It will though nobody anymore there be, who it reads
-
- ‘But there won’t be anybody left to read it.’

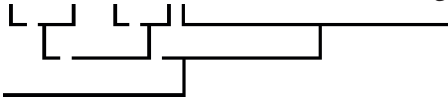
But even though it is a subject, there is conceptual integration of the NP, the verb, and the relative clause: the idea of “there being no reader left” is introduced into the discourse as a whole, one part not being introduced independently of the other.

So these interpretations are in fact “presentative”: an entity (denoted by a noun) and a process or state (denoted by a verb) are conceptualized as a unit with respect to the context, or, in the words of Keijsper (1985: 320), the hearer or reader “becomes aware” of the conceptualizations of noun and verb simultaneously, irrespective of the grammatical role of the noun (subject, predicate nominal, object, etc.). Thus, extraposition of a restrictive relative clause is an effective way of guaranteeing or confirming a presentative interpretation.

Formulated more generally, in the structure NP-V-RC, where RC is an extraposed relative clause (so at the end of the sentence), the interpretation structure is either as in (34a) (“continuative”), or as in (34b) (“presentative”):

- (34) a NP V RC

- b NP V RC


Note that this characterization also applies to Relative Clause Extraposition in English, as exemplified by (35), clearly a presentative sentence:

- (35) *A man came in who had been drinking.*


Given the strict SVO-character of English, the NP in a sequence NP-V(-RC) will not be an object; i.e. relevant English examples will not involve objects but only subjects. But within that domain, the interpretive relations exactly parallel those in German (and Dutch); (36) contains a continuative relative clause, while (35) and (37)¹⁰ exemplify the presentative construction:

- (36) *Several successful experiments followed, which permitted the construction of the crucial test described in section 2.*
- (37) *... and a subject must be chosen that will defer the drudgery of actual writing till death.*

It is interesting to note that most of the presentative cases in the LOB-corpus (cf. note 10) show some kind of fronting; i.e. most instances have a structure like (38) and (39):

- (38) *From these a selection of designs are included which show the use of the individual stitches.*
- (39) *As spring was turning into summer, an incident occurred which momentarily brought the inner and the outer world together.*

The relatively high frequency of fronting is understandable, for it creates a linguistic expression for the context to which the sequence NP-V-RC is to be related as a conceptual unit. Note now that in Dutch and German, the verb-second character of main clauses would result in such structures having the subject following the finite verb. It seems now that this structure has been generalized for presentative constructions in main clauses. That is: presentative main clauses always have another constituent than the subject in first position, and the finite verb in second position. So in Dutch, one uses the generalized local adverbial *er* to say things like (40), the translation of the English (35), and one does not say things like (41), which has the “English” linear order:

(40) *Er kwam een man binnen die gedronken had.*
 There came a man inside who drunk had
 ‘A man came in who had been drinking.’

(41) *??Een man kwam binnen die gedronken had.*
 A man came inside who drunk had.

In other words: since Dutch (as well as German) has a construction for “presenting” a subject (viz. *er* + finite verb), and since extraposition of a restrictive relative clause creates a presentative interpretation structure, the consistent way of speaking is as in (40) and not as in (41).

The verb-second phenomenon in Dutch and German may be said to provide a linguistic indication of a non-canonical status of the subject in the conceptualization of a clause, and thus to have a particular “functional import”. The order NP_{subject}-V_{finite} is not optimally coherent with an interpretation in which the conceptualization of the subject is dependent on that of the predicate, given that it is both easy and common to have the order reversed. So the position of the finite verb in main clauses in these languages is a “regular” indication of the starting point of a complex, integrated conceptual unit, viz. in all cases in which the verb does not specify a process (activity) emanating from the referent of the phrase preceding it immediately.

Thus it is clear that the notion of independent conceptualization is also highly relevant in areas involving the order of verbs with respect

to other phrases, especially (parts of) arguments - both at the end of clauses (witness the interpretation of extraposed relative clauses), and at the front (witness the specific case of extraposition from subject in verb-second languages like German and Dutch).

4. Conclusions

This paper has tried to demonstrate that linear order may be related in an interesting way to different aspects of meaning, and that the notions entering into such relationships can be construed similarly, in terms of independent conceptualization. Secondly, it has proven very fruitful to take both conceptual content and discourse into account, especially parallels between the two, in order to arrive at a comprehensive view of a number of phenomena related to linear order. Finally, as a more programmatic point, it should be noted that the present study shows that the study of order can contribute much to our understanding of phenomena that are central to cognitive linguistics (such as subjectification), as well as make phenomena available for cognitive linguistic research - such as the syntax of infinitival complements¹¹, or extraposition phenomena - that have so far mainly been left to other approaches.

Notes

- * Most of the work reported here was conducted while I was a visiting scholar at the Linguistics Department of the University of California, San Diego in 1990/1991. It was supported by the Netherlands Organization for Scientific Research (NWO), grant S 30-317. I want to thank Elizabeth Traugott, an anonymous reviewer, and the participants both in the San Diego Working Group on Cognitive Linguistics, as well as at the Santa Cruz conference, for comments and discussion.
- 1. The issues discussed in section 2 are elaborated further in Verhagen (t.a.); in particular, that paper explores more thoroughly the relation between syntax and the concepts of argumentation and discourse coherence and its consequences for linguistic analysis. It also addresses, in terms of argumentation in discourse, some related issues, such as the (synchronic) relation between epistemic

- and other non-illocutionary uses of the verb, as well as the performative use (itself constituting a speech act of promising).
2. Cf. Winter (1982) for a general approach to the structure of sentence interpretation in these terms.
 3. The “internal” sequential conceptualization of the phrase *to defend the constitution* is not specified in (3’), since it is not relevant to the present discussion; a particular feature of such a specification would be that the element *to* has no leftward orientation itself, but rather starts a complex element. Throughout this paper, I will only specify those details of interpretation structures that are relevant to the discussion, in order to keep things manageable.
 4. This is to be interpreted with respect to the incremental interpretation of discourse; cf. Verhagen (t.a.) for some further discussion of this view, and of the role of operators like *well* and *sure*, and of connectives like *so* and *but*.
 5. These observations allow for theoretical interpretation in a number of frameworks, such as Relevance Theory (Sperber & Wilson 1986), Text Perspective Theory as developed by a number of scholars at Tilburg University in the Netherlands (cf. Spooren 1989), or Linguistic Argumentation Theory developed by Anscombe & Ducrot in France (cf. Anscombe & Ducrot 1989). The compatibility between each of these frameworks and my observations here suggests that comparative examination of these approaches is interesting, but I will not pursue that issue here (but cf. Verhagen, t.a.). Suffice it to say that they all put much emphasis on the importance of the forward orientation of natural language expressions for a cognitively adequate approach to actual language use.
 6. Note that the addition of an indirect object (i.e. a promisee) into the clause may cause the evaluative orientation to shift. In uttering, for example, *He promised his mother to come home for Christmas*, a speaker may just as easily be taken to evaluate this fact negatively. This suggests a particular analysis of the role of the indirect object (in such clauses) with respect to the speaker’s point of view or empathy. I will not pursue that issue here, because the main point of my argument here concerns the inferential orientation of *promise*, and this does not depend on the presence of an indirect object (though the *strength* of this orientation might).
 7. In standard Dutch, *beloven* can be used in that way in very limited contexts, in effect constituting fixed complex predicates: *Dat beloofst (heel) wat* (lit.: That promises (quite) something, ‘That looks (very) promising’). In certain dialects, e.g. in Belgium, the possi-

- bilities in this respect seem to be somewhat greater (René Dirven, p.c.).
8. Cf. Uit den Boogaart 1975. The more complicated examples in this paper are taken from this corpus.
 9. The issues discussed in this section are treated more fully in Verhagen (1992).
 10. I wish to thank Eric Akkerman for providing me with some relevant examples from the LOB-corpus; (37) is directly taken from that corpus, while (36) is inspired by it.
 11. As another example, consider the consequences of the analysis of analytic causative constructions in Kemmer & Verhagen (1994); an analytic causal predicate is defined there as “conceptually dependent” on the effected predicate, since it “necessarily evoke[s] the idea of another action or state”. Consequently, the causal predicates *doen* and *laten* in Dutch (which satisfy this definition) should exhibit verbal clustering with the effected predicate in SOV-contexts, and not be separated from it linearly. This is precisely what is the case.

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