On subjectivity and ‘long distance Wh-movement’
Verhagen, Arie; Athanasiadou, A; Canakis, C.; Cornille, B.

Citation

Version: Not Applicable (or Unknown)
License: Leiden University Non-exclusive license
Downloaded from: https://hdl.handle.net/1887/14060

Note: To cite this publication please use the final published version (if applicable).
Subjectification
Various Paths to Subjectivity

Edited by
Angeliki Athanasiadou
Costas Canakis
Bert Cornillie

Mouton de Gruyter
Berlin · New York
On subjectivity and 'long distance Wh-movement'

Arie Verhagen

1. Introduction

'Subjectivity' is a complex concept. In particular, the idea has both a dimension in which a conceptualizing subject is opposed to an 'object' of conceptualization, and another one in which one subject's conceptualization is compared to that of another. Adopting a specific variant of the notation for 'grounding' from Langacker (1987, 1990), these two fundamental dimensions can be said to jointly define the basic construal configuration (cf. figure 1).

\[ \text{O: Object of conceptualization:} \]
\[ \text{S: Subject of conceptualization (Ground):} \]

Figure 1. The construal configuration and its basic elements

The Ground of any linguistic usage event comprises two conceptualizers, the first performing the role of being responsible for the utterance, the second that of interpreting it in a particular way. In prototypical face-to-face conversations these roles are fulfilled by the speaker and the addressee,

1. I am grateful to the Netherlands Institute for Advanced Study (NIAS) for providing me with the opportunity, as a Fellow-in-Residence in the academic year 2002–2003, to do the research for this paper.
respectively, but the roles as such are given with anything being taken as an instance of language use, even if no referents for the first and second role are known. These subjects of conceptualization engage in cognitive coordination by means of the utterance, with respect to some object of conceptualization. The relation between the subjects and the object of conceptualization — the vertical one in figure 1 — is, in Langacker's terms, the construal relationship. Some types of construal are, for example, the perception of an object as determined by a particular point of view, its perception at a particular level of granularity, as a figure or a ground, etcetera. The relevant cognitive systems of conceptualizers 1 and 2 include their mutually shared knowledge, including models of each other and of the discourse situation. Thus, in this conception, the Ground is essentially "common ground" (Clark 1996).

One dimension of subjectivity in a linguistic expression thus resides in the construal relationship: a conceptualizer uses the expression to construe the object of conceptualization in a specific way that is not as such determined by properties of the object as conceived. The second dimension of subjectivity is that of cognitive coordination between the subjects of conceptualization themselves — the bottom horizontal line in figure 1. This conceptual structure is also inherent in any linguistic usage event; anything we say is an attempt to influence another person's mind, however minimal. But not all aspects of the construal configuration have to be symbolized, i.e. marked by means of some linguistic unit which, in the language of the community involved, is a conventional way to indicate some feature of the Ground or its relation to the object of conceptualization. Several features of actual construal configurations often remain fully implicit. For conventional, linguistic markers of subjectivity, the same distinction is relevant: while certain meanings operate to impose some construal on the object of conceptualization, others may operate entirely in the dimension of the coordination between subjects of conceptualization. Possible examples of the latter are markers of epistemic stance (probably), evaluative adjuncts (unfortunately) or particles, etcetera. It should be stressed that the conceptual distinction does not always coincide with a distinction between linguistic symbols: one linguistic sign may very well conventionally perform functions in both dimensions, while the relative weight of each may also gradually change over time.
2. Complementation

2.1. Complementation and intersubjectivity

Many instances of complementation constructions serve to assign some aspect of subjectivity (expressed in matrix clauses of the type I think, I hope, etcetera) to a piece of information expressed in the complement clause. In fact, it may be argued that this is not just a feature of a specific subset of complementation constructions, but of complementation in general. In Verhagen (2005), this conclusion is supported by several kinds of arguments from the domains of lexicon, grammar and discourse. Here I will restrict myself to the basic idea, some arguments for it from the domain of discourse, and then apply it specifically to the grammatical phenomenon known as ‘long distance Wh-movement’.

Consider the question A in (1) and the two answers B₁ and B₂, and assume that the conversation takes place at 2 PM, while the interlocutors are traveling in a car, and the distance to their destination – a launch site – is about a mile.

(1) A: Will we be in time for the launch?
   B₁: It was scheduled for 4 PM.
   B₂: I think it was scheduled for 4 PM.

\[
\begin{align*}
\text{O: Object of conceptualization:} & \quad \circ \quad \circ \\
\text{S: Subject of conceptualization (Ground):} & \quad \circ \quad \circ \\
\text{1} & \quad \text{2}
\end{align*}
\]

Figure 2. Construal configuration for non-perspectivized utterance (B₁ in 1)

Both B₁ and B₂ constitute a coherent answer to A’s question. In the given context, each furthermore suggests that the answer is in principle positive (since there is, normally speaking, enough time to travel such a small dis-
tance), i.e. the utterances B₁ and B₂ interact in the same way with background knowledge and assumptions to generate relevant inferences (e.g. “Don’t worry, we’ll make it”). Thus, one does not want to say that the two utterances depict totally different situations (e.g. B₁ one of scheduling, B₂ one of thinking). Rather, we should say that B₁ exemplifies the specific construal configuration in figure 2, and B₂ the one in figure 3.

**Figure 3. Construal configuration for first person perspective (B₂ in 1)**

The bold lines indicate aspects of the construal configuration which are explicitly marked, because of the conventional meaning of some linguistic material. B₁ provides a (relatively) straightforward presentation of the object of conceptualization. In contrast, some of the linguistic material in B₂ – an instance of complementation – explicitly evokes a particular relationship between the object of conceptualization and a participant of the Ground. The so-called matrix clause *I think* indicates the speaker’s epistemic stance. This phrase typically has the effect of making the utterance sound somewhat less certain; the explicit marking of one participant’s cognitive state in principle evokes it being distinct from others, and thus allows the addressee to consider other possibilities more easily than the straightforward presentation of B₁. It is precisely in this sense that the matrix clause in B₂ operates on the intersubjective relationship, between the two subjects of conceptualization. Thus I do not think it is useful to say

---

2. Of course, an element such as tense is also a grounding predication, i.e. it characterizes the relation between Ground and object of conceptualization in a particular way. But as the utterances do not differ in this respect, I leave that out of the discussion and the notation for the purpose of clarity.
that in a case like B₂ the Ground and the construal relationship are being included in the object of conceptualization. Rather, it makes sense to distinguish between 'being put onstage', in the sense of being symbolized, and being an object of conceptualization. In this view, the speaker is not a part of the object of conceptualization in B₂, but she is onstage: part of the Ground is symbolized explicitly. This way of looking at these utterances seems to me to be a natural way of accounting for the fact that what is being communicated by means of B₁ and of B₂ is essentially the same, as indicated above, and as has been demonstrated for conversation by Thompson (2002), and in the context of early language acquisition by Diessel and Tomasello (2001).

What about a complement construction with a third-person, past tense matrix clause, as in B₃ of (1)?

(1) B₃: Someone/Peter said that it was scheduled for 4 PM.

There is a long tradition in linguistics and in philosophy to consider such constructs as belonging to another type, another category of utterances. This tradition goes back at least until Benveniste's seminal paper (1966 [1958]) on subjectivity, and, in the philosophy of language, to Austin's (1962) distinction between performative and constative (or descriptive) use of verbs of communication. For Benveniste, only first person utterances such as that of B₂ in (1) count as marking of subjectivity, while both B₁ and B₃ in his view produce objective utterances. And as is well known, only first person, present tense use of illocutionary verbs counts as performative in Austin's analysis, while other forms count as constative, just like utterances that lack such matrix clauses entirely.⁴ In cognitive linguistics, Langacker (1990: 11–12) has invoked a similar distinction in the context of an analysis of subjectification. However, I want to propose that such cases basically do not belong to another functional type of expressions as first person (present tense) complementation constructs, but that they should equally count as linguistic manifestations of subjectivity, differing only from first person cases in their force (in a sense to be explained below). This is a generalization and to some extent an elaboration and adaptation of

---

³. Interestingly, Austin limited his discussion to speech act verbs, but others, noticing the parallels in use and structure of expressions like I say and I think, have extended it (e.g. Diessel and Tomasello 2001: 103–104), thus in effect reproducing Benveniste's view.
some suggestions and partial ideas that are present in (other) work by Langacker (1991: 494–498, 2004), in Achard (1998), as well as in Verhagen (1995, 2001). In the perspective that I am adopting, an important reason for classifying these different constructs in this way, lies in the specific contributions of matrix and complement clauses to the structure of discourse. Consider the text in (2), which is characterized by a relatively high ‘density’ of complementation constructions.

(2) Eerder vertelde ik dat het al gelukt is om klonen van zoogdierembryo’s te kweken. Uit het bovenstaande valt nu af te leiden dat het binnenkort mogelijk wordt om ook met het DNA van volwassen dieren nieuwe embryo’s te maken. De directeur van GenTech verwacht zelfs dat dit reeds volgend jaar zal gebeuren. Anderen zijn van mening dat het misschien wat langer zal duren, maar niemand twijfelt eraan dat het klonen van een volwassen schaap of paard binnen 10 jaar een feit is.

‘I have already reported before that there has been success in breeding clones of mammalian embryo’s. From the above it may now be concluded that it will become possible in the near future to make new embryo’s with the DNA of full-grown animals as well. The director of GenTech even expects that this will already happen next year. Others believe that it may take somewhat longer, but nobody doubts that the cloning of a full-grown sheep or horse will be a reality within ten years.’

In (2), the left column lists the contents of the matrix clauses from this text, and the right column the contents of the complement clauses.

It is quite obvious from this overview that the actual content of the text is not at all represented by the alleged ‘main’ clauses, but rather by the ‘subordinate’ ones. The right hand column, i.e. the series of complement clauses, represents subsequent objects of conceptualization, i.e. the stages through which the text develops at level O of the construal configuration. On the other hand, the matrix clauses represent the development of the text at level S; with each matrix clause, the reader is invited to construe the object of conceptualization from a particular perspective, in a particular way, indicated by the lexical content of that clause. The writer is responsible for all aspects of this presentation, but the force with which the explicit construal may be attributed to the actual writer is greater when the grammatical subject is first person and the tense is simple present, than when
the subject is third person and/or the tense is not simple present. In the former kind of expressions, the distance between the onstage conceptualizer and the Ground is minimal, and the force with which the explicit construal may be attributed to the actual speaker/writer is maximal. But these are differences of degree: In complementation constructions, speaker/hearer-subjectivity is in principle aligned with character-subjectivity (Verhagen 2000) – they have the same orientation.

<table>
<thead>
<tr>
<th>(2)'</th>
<th><strong>‘Main’ clauses</strong></th>
<th><strong>‘Subordinate’ clauses</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>I have already reported before that</td>
<td>there has been success in breeding clones of mammalian embryo’s</td>
<td></td>
</tr>
<tr>
<td>From the above it may now be concluded that</td>
<td>it will become possible in the near future to make new embryo’s with the DNA of full-grown animals as well</td>
<td></td>
</tr>
<tr>
<td>The director of GenTech even expects that</td>
<td>this will already happen next year</td>
<td></td>
</tr>
<tr>
<td>Others believe that</td>
<td>it may take somewhat longer</td>
<td></td>
</tr>
<tr>
<td>But nobody doubts that</td>
<td>the cloning of a full-grown sheep or horse will be a reality within ten years</td>
<td></td>
</tr>
</tbody>
</table>

The basic function of all complementation constructions is thus to invoke the Ground, and invite the hearer to adopt a particular subjective perspec-

---

4. In some instances this force also depends on the lexical meaning of the verb. For example, one cannot perform the act of threatening by saying *I threaten...* (cf. Verhagen 2000 and references cited there).

5. Cf. Langacker (2004: 553): “a finite clause describes the proposition it expresses from the vantage point of the speaker, even when it represents the proposition entertained by another conceptualizer.” Langacker demonstrates the point especially in terms of deictic elements such as tense, while I focus on discourse relations here. In general, Langacker’s analysis and the one developed here and in Verhagen (2005) are to a very large extent compatible, though there may be some differences as well. Langacker (2004: 546) still views the matrix clause as itself expressing an event or situation that functions as an object of conceptualization toward which the speaker adopts an epistemic stance – in ef-
tive on the object of conceptualization, albeit with differences in strength. Notice that $B_3$ in (1) basically also counts as a positive answer to question A, just like $B_1$ and $B_2$, but with even less force than $B_2$. This is what is figure 4 is intended to represent.

\begin{figure}
\centering
\begin{tikzpicture}
\node (O) at (0,0) {O: Object of conceptualization:} ;
\node (S) at (2,0) {S: Subject of conceptualization (Ground):} ;
\draw (O) -- (S) ;
\node (1) at (0,-1) {$1\leftrightarrow 3$} ;
\node (2) at (2,-1) {2} ;
\node (think) at (1,0) {think} ;
\end{tikzpicture}
\caption{Construal configuration for third person perspective ($B_3$ in 1)}
\end{figure}

The matrix clause operates in the dimension of intersubjective coordination, but the onstage conceptualizer — whose perspective the addressee is invited to adopt — is not a speech act participant, so that the force with which the addressee is so invited is not maximal. As a consequence, there is at least a possibility of a difference between the explicit, onstage mental space and the Ground. This makes inferences defeasible. Consider the exchange in (3).

(3) \textit{A: Can I be in Amsterdam before the match starts?}  
\begin{align*}
B_1: & \text{I promise that I'll have the car up in front at 2 o'clock.} \\
B_2: & \text{John promised that he'll have the car up in front at 2 o'clock.}
\end{align*}

The point is that both B-utterances count as a positive answer to A's question. Traditionally, the utterance of $B_1$ is considered to be displaying subjectivity (Benveniste), or as a performative utterance (Austin), while the utterance by $B_2$ is considered as descriptive (in the present terminology: express the position of Benveniste – while, as explained in the text, I take it as expressing the (subjective) perspective that the addressee is invited to adopt.
On subjectivity and 'long distance Wh-movement' 331

depicting only an object of conceptualization). However, in the present analysis, the speaker in both cases invites the addressee to construe the object of conceptualization as a promise. And (3) shows that in connected discourse, both utterances in fact count as arguments for the same kind of conclusions. But because of the third person and the past tense in B_2, indicating that the onstage conceptualizer is distinct from conceptualizer 1, the force of the argument of B_2 is not maximal; it may therefore be annulled, unlike the utterance of B_1. The use of the contrastive conjunction but in (4) confirms that the orientation of the entire utterance is positive, but the fact that this constitutes a coherent discourse also shows that the inference is defeasible, and that the force of the argument is not maximal. The incoherence of (5), on the other hand, shows that the force of the argument of B_1 is maximal.

(4) John promised that he'll have the car up in front at 2 o'clock. 
   But he might have forgotten the route to your new home.
(5) #I promise that I'll have the car up in front at 2 o'clock. But I 
   might forget the route to your new home.

The intuition that first person expressions are 'more subjective' than third person ones should thus not be interpreted as implying that the latter are 'more objective'. Rather, we should say that third person expressions display 'less speaker/hearer-subjectivity' (or 'more character-subjectivity'), in the sense that the force with which the speaker orient the addressee to the relevant conclusions is not maximal.

2.2. ‘Long distance Wh-movement’

This analysis is elaborated in more detail in Verhagen (2005, ch. 3). In the remainder of this paper, I want to turn to a specific issue in the syntax of complementation, the phenomenon known as long distance Wh-movement. This has been a continuous topic of central concern in syntax since early days of generative grammar, especially since Chomsky’s seminal paper from 1977 on the topic. Some examples given by Chomsky are (6) and (7).

6. These are examples (32) and (10) in Chomsky (1977), respectively.
The theoretical interest of such examples lies in the fact that the question phrases (‘Wh-elements’) appear to occupy a position in a clause that does not determine their syntactic role. In (6), *Who* is the first element of the matrix clause (‘Mary said that...’), while the verb to which it bears the relation of direct object is not *said* but *kissed*, in the subordinate clause; thus it seems to be moved from a position in ‘its own clause’, indicated by *t* (for ‘trace’), to one outside it (hence the name for the phenomenon). In (7), the preposed *Wh*-element even seems to have originated more than one clause ‘down’. Normally, a constituent can only receive a role from an element (typically the verb) in the same clause, so these phenomena are intriguing. Precisely because they appear to violate the normal structural integrity and autonomy of clauses, they offer a unique opportunity for identifying the factors that cause clauses to behave syntactically in the way they do.

When the phenomenon is described in this way, the only difference between the clauses that is considered relevant is their hierarchical relationship: the clause in which the *Wh*-element plays a syntactic role is properly contained (‘embedded’) in the one where the element is actually positioned. Otherwise, they are both just clauses, each viewed as an abstract structural unit characterized by the presence of a verb and its participant noun phrases. In the previous section, however, I have argued that matrix clauses differ systematically from complements in that the former evoke the intersubjective dimension of the construal configuration. One might thus expect that this difference also has consequences for the phenomenon of long distance *Wh*-movement, and this is what I will explore in the next section.

3. ‘Long distance *Wh*-movement’ in actual language use

3.1. A corpus based analysis

At the end of section 2.1, I mentioned the fact that in first-person matrix clauses, the distinctness of the onstage conceptualizer (the referent of the grammatical subject) from the Ground is minimal, while there may be a
larger degree of distinctness between these two with third person (and/or non-present tenses). What I will argue now is that precisely the notion of minimal vs. non-minimal distinctness of the onstage mental space and the Ground is crucial for understanding what is going on in instances of 'long distance Wh-movement' as it occurs in actual language use. More specifically, any additional special machinery, whether formal or functional, to constrain the 'displacement' of question phrases, turns out not to be needed.

To start, notice that the distance between an onstage conceptualizer and the actual Ground is minimal when the onstage one is first person in case the utterance is a statement. When it is a question, this distance can only be minimal if the onstage conceptualizer is a second person, basically the second person pronoun (you), since the question probes the addressee's mind, not the speaker's. Consider example (8).

(8) Do you think we will be in time for the launch?

This is the utterance with an explicit conceptualizer that is minimally different from the question Will we be in time for the launch?, not the utterance I ask you if we will be in time for the launch, let alone Do I think... or I don't know if we will be in time for the launch. So what is marked in the intersubjective dimension in (8) is, as indicated in figure 5, the mirror image of what is marked in I think we will be in time for the launch, i.e. B₂'s declarative utterance in (1) (cf. figure 3).

Figure 5. Construal configuration for second person perspective in question
Now consider the following examples, from two electronic corpora of Dutch and English. The examples in (9) are 4 of the 7 instances of long distance Wh-movement in the Dutch ‘Eindhoven Corpus’, those in (10) are 8 of the 11 instances in the English ‘Brown Corpus’.

(9) a. *Hoe denkt u dat de AKV-gedachten in de gemeenten zullen landen?*  
   How think you that the AKV-thoughts in the communities will land  
   ‘How do you think the local councils will react to the ideas of the AKV?’

b. *En wat denk je dat ie zei, die prins?*  
   And what think you that he said that prince  
   ‘And what do you think this prince said?’

c. *Wie denk je dat je voorhebt, om me zo te tekenen?*  
   Who think you that you have-in-front-of for me thus to draw  
   ‘Who do you think I am, drawing a picture of me like that?’

d. *Waarom dacht je dat dit geslacht tot nu toe alleen maar vrouwen voortbracht? Voor de lol?*  
   Why thought you that this lineage till now to only PART women produced For the fun  
   ‘Why do you think this family has produced so many women up to now? As a joke?’

(10) a. *‘Fools’, he bayed, ‘what do you think you are doing?’*  

b. *What does he think a remark like this ‘lousy’ one does to our prestige and morale?*  

c. *What conclusions do you think he might come to?*  

d. *What you think I care about that?*  

e. *What did she think he could do?*  

f. *What the hell do you think baseball is?*  

g. *Who do you think pays the rent?*  

h. *And what would you say he wants to do?*  

Two properties clearly stand out in all instances in these corpora: the dominance of the verbs *denken* in Dutch and *think* in English, and the dominance of second person pronouns as subjects of the matrix clauses. Among the English instances there is only one case with another verb than
think, viz. say in (10)h, in the Dutch set there is none. As these corpora are relatively small, I extended the search with the 1995 volume of the Dutch newspaper de Volkskrant (available on cd-rom). This resulted in a collection of 43 instances, which is certainly sufficient to draw general conclusions. This larger corpus indeed contained examples with other verbs than *denken* ‘think’, e.g. *zeggen* ‘say’ in (11), *vinden* ‘find’, ‘feel’ in (12), and *wollen* ‘want to’ in (13).

(11) *En wat zei je nou dat die Cornell had bereikt?*  
And what did you say now that this Cornell had achieved  
‘And what did you say now that this Cornell had achieved?’

(12) *Hoe vind je dat Kok het in de laatste verkiezingen heeft gedaan?*  
How do you feel Kok performed in the latest election?  
‘How do you feel Kok performed in the latest election?’

(13) *Waar wil je dan dat ik het over heb?*  
Where do you want me to talk about then?  
‘What do you want me to talk about then?’

Also, other subjects than second person pronouns could be found, such as a lexical noun phrase in (14), and a proper noun in (15).

(14) *Wat denken Ben W dat onze burgers*  
What think Mayor and Aldermen that our citizens

7. The advantage of the smaller corpora is that they have grammatical tagging, while the Volkskrant corpus does not. The search in the latter corpus was thus rather complicated, essentially consisting of a series of searches for a lexically specified complement taking verb, preceded by a Wh-element, followed by *dat*. The latter helps narrowing the search, and does not lead to loss of data as this element is obligatory in Dutch. The series of searches started with the most frequent complement taking verbs (independently established), and proceeded with less frequent ones. Therefore, it is theoretically possible that there are one or two more instances in the corpus which I did not notice, viz. with a low frequency complement taking verb. But this is not very likely, and it would not change the conclusions anyway.
zullen denken van zo'n dure buitenlandse reis?
will think of such-a expensive foreign trip
'What do Mayor and Aldermen think that our citizens will feel about such an expensive trip abroad?'

(15) Hoe denkt Oudkerk dat dit in zijn werk is gegaan?
How thinks Oudkerk that this in its work is gone
'How does Oudkerk think this was done?'

However, these cases are quite exceptional. Consider the numbers in tables 1 and 2, listing the different complement taking verbs ('CT-verbs') and matrix subjects found in the larger corpus.

Table 1. CT-verbs used with 'long distance Wh-movement' in de Volkskrant (1995)

<table>
<thead>
<tr>
<th>Tokens/verb</th>
<th>Verbs (types)</th>
<th># Tokens:</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>denken ‘think’</td>
<td>34</td>
</tr>
<tr>
<td>5</td>
<td>willen ‘want to’</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>zeggen ‘say’, vinden ‘feel’, ‘think’</td>
<td>4</td>
</tr>
</tbody>
</table>

# Types: 4

Table 2. Matrix subjects used with 'long distance Wh-movement' in de Volkskrant (1995)

<table>
<thead>
<tr>
<th>Tokens/subject</th>
<th>Subject types</th>
<th>#Tokens:</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>2nd person pronoun (je: 25, u: 10, jij: 1)</td>
<td>36</td>
</tr>
<tr>
<td>3</td>
<td>3rd person pronoun (ze: 2, zij: 1)</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>definite noun phrase with lexical head</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>1st person pronoun (ex. (18) below)</td>
<td>1</td>
</tr>
</tbody>
</table>

Of the 43 instances, as much as 34 have denken as their matrix verb, and 36 a second person pronoun as the matrix subject; 28 cases have both. This
provides strong evidence for the entrenchment of a rather specific pattern, which may be represented as in (16).

(16) **Prototypical ‘long distance Wh-movement’ (Dutch):**

\[ Wh...-\text{denk} - \text{pron}_2\text{nd} \text{ dat}... \]

It is interesting to note that the frequency of the exact combination ‘\text{Wh-denk}\text{-2ndPerson - dat}...’ in \textit{de Volkskrant} (viz. 28) is of the same order of magnitude, both in relative and absolute numbers, as that of other combinations that are well entrenched, such as the default case of the Dutch way construction, with the unique verb \textit{banen} (Verhagen 2002: 412). Furthermore, the high frequency of \textit{think} and of second person pronouns cannot be attributed to the general frequency of these elements: in this newspaper corpus, other CT-verbs – especially \textit{zeggen} (‘say’) and \textit{vinden} (‘feel/be of the opinion’) – are considerably more frequent than \textit{denken}, and lexical nouns and third person pronouns are much more frequent than second person pronouns (for details see Verhagen 2005: ch. 3).

The well-entrenched pattern in (16), being quite specific, must be said to occupy a relatively low position in the hierarchy of complementation constructions, as indicated in figure 6 below.

In the usage based view of grammatical structure, the token frequency of similar usage events (represented by rounded boxes) forms the basis for the entrenchment of several specific patterns, such as \textit{Ik denk dat}... (English \textit{I think}...; cf. Thompson 2002; Diessel and Tomasello 2001), \textit{Denk je dat}... (English \textit{Do you think}...; not included in figure 6), and also \textit{Wh-denk-2ndPersonPronoun-dat}... (English \textit{Wh-do-you-think}...). Similarities among these form the basis for the abstraction of a more general pattern, such as the ‘complement taking verb’ \textit{denken} (‘think’), but precisely because it is an abstraction, not all properties of the more specific patterns ‘percolate’ to the more general node in the network. On the other hand, a high type frequency (large number of different lexical verbs occurring in a similar environment) constitutes the basis for the abstraction of a general, productive pattern for complementation constructions, indicated at the top of figure 6.\(^8\)

\(^8\) Cf. Bybee (1995) for the basic idea about the connection between type and token frequency, entrenchment, and productivity. See Croft and Cruse (2004: ch. 11) for an extension to the domain of syntax.
An important implication of this perspective is that the properties of ‘long distance Wh-movement’ do not follow from general properties of complementation, and thus also should not be accounted for in such general terms. The template licensing such constructs constitutes a relatively concrete, low-level pattern, which has some properties that do not percolate upwards in the network to the level of productive rules. In other words: the fact that sentences seem to exhibit ‘displaced’ constituents of this kind is no evidence that such displacement follows from any general property of complementation, as they instantiate such a low-level template. Instances that do not fully conform to it, can be seen as analogical extensions from this prototype; only if the degree of deviation from the prototypical pattern would frequently be large, a situation might arise in which the displacement could generalize to a more abstract level. However, the actually occurring extensions in the present corpus never deviate from (16) in more than one respect. When the matrix verb is not denken (‘think’), the subject is always second person (cf. examples 11–13), and when the subject is not second person, the matrix verb is denken (cf. examples 14–15). That is, cases like Chomsky’s (6) and (7) are not instantiated in this material. Example (6) deviates the least from the prototype, as it can be constructed out of features of actually occurring instances (‘blending’ a third person subject with another verb than think), so that it constitutes a rather easy analogical extension. The construction of an example like (7) requires blending it with another template (for embedding complements), a feature
not instantiated in actual usage for this phenomenon at all, and it thus appears highly artificial.

Pursuing this line of reasoning, we may hypothesize that invented sentences exhibiting ‘long distance Wh-movement’ will be worse, the more they deviate from the prototype. Consider the series of sentences in (17).

(17) a. What did you say that the workers had done?
   b. What did he say that the workers had done?
   c. What did the trade union leader say that the workers had done?
   d. What had the trade union leader said that the workers had done?
   e. What did the trade union leader concede that the workers had done?
   f. What did the trade union leader concede to a journalist after the press conference that the workers had done?
   g. What had the trade union leader conceded to a journalist after the press conference that the workers had done?

Of course, there is no problem with (17)a. Sentences b and c are both a mixture of features that can be found in actual instances, so also fully acceptable. However, some speakers start having reservations with sentences d and e; these exhibit, besides the non-prototypical lexical subject, an ‘abnormal’ tense (perfect rather than simple past in d), and an ‘abnormal’ CT-verb (concede), respectively. The addition of an addressee and a temporal adjunct in f makes this case less acceptable for more speakers, and hardly anyone finds g, which combines all these ‘abnormal’ features, acceptable at all.9 Purely structurally, however, these sentences are all of the same kind, so that the cline in acceptability confirms the hypothesis that the special properties of long distance Wh-movement do not in fact reflect general properties of complementation constructions.

This view is corroborated, in a surprising way, by evidence from language acquisition presented by Dąbrowska (2004: 196–200). Although the phenomenon is not very frequent in children’s speech, young children do understand and produce constructs of this kind. Understandably, their ap-

---

9. The tendencies reported here have been obtained from judgments delivered on the Dutch analogues of the sentences in (17) by first and second year college students who had not yet taken a syntax course. The results parallel those of the more sophisticated judgment elicitation test conducted by Dąbrowska (2004: 198–199).
appearance follows that of simpler 'matrix clauses' of the type *I think*, as well as that of simpler *Wh*-questions. But the interesting point in the present context is that such utterances occur around age four, while children have not even mastered the full generality of the network of complementation constructions at age five; in fact, Diessel and Tomasello (2001: 134) claim that by that age children have only learned the templates at the bottom of the network. This implies that they cannot have constructed their (understanding of) apparent 'long distance *Wh*-movement' utterances on the basis of general rules; and as Dąbrowska observes, these utterances are highly formulaic. The fact that they are also highly formulaic in adult language use, as shown in the present study, strongly suggests that, while adults do develop knowledge of general templates for complementation constructions, the 'long distance *Wh*-movement' template (16) remains a kind of 'island' (cf. Verhagen 2002: 414-415) in the ultimate network of constructions, with specific properties that do not 'percolate' upwards. In the next section, I will argue that there are in fact good reasons for this restriction.

3.2. Usage and subjectivity

The fact that 'long distance *Wh*-movement' is not to be explained in terms of the properties of complementation constructions in general does not imply that it is 'just lexical', i.e. that it would only be governed by some arbitrary lexical items (a few verbs and a few pronouns). It is no coincidence that actual instances of the phenomenon look similar in different languages. Nor is it a coincidence that the matrix clauses have the kind of content that they actually have. Recall that I started section 3 by pointing out that, for questions, a matrix clause like *Do you think*... creates the kind of utterance in which the distinction between the onstage conceptualizer and the Ground is minimal, as it is the addressee's mind that is being probed by the question. This kind of clause is the interrogative variant of *I think* in the case of declaratives, and thus it is intimately connected to the specific, well entrenched 'complementation' patterns that are acquired early, and used frequently in conversation to mark speaker's epistemic stance (Thompson 2002). They belong to a set of prototypical patterns for

---

10. They are also highly formulaic in the adult input speech in Dąbrowska's material.
explicitly signaling aspects of the intersubjective dimension of the con­strual configuration. So even though they are located at a 'low' level in the network of complementation constructions, the region that they occupy is a central one. We have here a particularly revealing example of what Bybee and Hopper (2001:3) noticed about the relationship between subjectivity and frequency, which I quote in reverse order here:

2. The frequency with which certain items and strings of items are used has a profound influence on the way language is broken up into chunks in memory storage, the way such chunks are related to other stored material and the ease with which they are accessed.

1. The distribution and frequency of the units of language are governed by the content of people's interactions, which consist of a preponderance of subjective, evaluative statements ...

Frequency has a profound effect on the storage and processing of linguistic units, but this frequency is in turn, in the terminology used in this paper, determined by the fact that language use is always a matter of intersubjective coordination.

Given this analysis, we can also assign a functional interpretation to the cline of acceptability in (17) in the previous section. The use of a third person subject and the addition of an addressee and/or a temporal adjunct, make the onstage situation increasingly different from the Ground; the more elements are introduced that are not present in the Ground, the more the suggestion is evoked that conceptualizer 1 is not just inviting the addressee to adopt a particular perspective on the content of the complement, but to draw his attention to the participants, time frame, and other features of another situation than the one in the complement, viz. the one depicted in the matrix clause. To the extent that a reader or hearer of, for example, (17)f is able to still construe it as an extension of the pattern in (16), he may find it interpretable and acceptable, but if that fails, the only way to construe it is as a description of two independent, albeit connected situations; in that case (subordination in the traditional sense, so to speak), no ‘displacement’ of participants is possible.

Another implication, related to the previous one, is that the extensions from the prototype that actually do occur, should be clearly linked to it, i.e. recognizable as relating to the actual Ground. In fact, this is strikingly confirmed when we take a somewhat closer look at these actual extensions, in particular the cases with third person subjects. The other verbs than think are relatively unproblematic, as these (want to, say, feel, see table 1) are
minimal specifications of the manner in which a conceptualizer entertains a thought, which is immediately relevant to the intersubjective coordination in the Ground. Another subject than second person, on the other hand, at first sight does seem to suggest a substantial difference between the Ground and the onstage conceptualizer. So what we should expect is that it must be easy for the addressee of the question to identify with the onstage subject of conceptualization; put differently: that it must be easy to interpret the onstage conceptualizer as the actual addressee of the question, for in such cases the conceptual distance between the onstage perspective and the Ground would still be minimal. In fact, in the majority of the 6 third person instances in the present material, it is quite clear from the context that this is precisely what is going on. An example is (14), the translation of which is repeated here:

(14) *What do Mayor and Aldermen think that our citizens will think of such an expensive trip abroad?*

As it turns out, this is a representation, in direct speech, of an utterance by a member of the city council, addressed to the Mayor and Aldermen, in a public session of the council.

Particularly revealing is the single example of a *first* person onstage conceptualizer, which I have not discussed so far:

(18) *Waarom denk ik dat die twee elke avond rondhangen in het hotel?*  
Why do I think these two hang around in the hotel every night?'

When considered out of context, this is simply a case of *local Wh*-fron­ting, not a ‘long distance’ case. That is, it is not a question about the reason for ‘these two’ to hang around in the hotel, but a self-addressed question about the reason for my thinking that they are. However, the context (in a story from a reporter about meeting some peculiar Libyan man in Tripoli) is of a very special kind; cf. (19):

On subjectivity and 'long distance Wh-movement' 343

'I may call him Eunice . . . Does something in hotels, something with a bank – and I’d better keep an eye on those two women over there. Moroccan. Why do I think these two hang around in the hotel every night? Right. Libyan women don’t do that.'

This is ‘free indirect speech’ (Banfield 1982; Sanders 1994), in which the writer/journalist functions as the deictic center (‘I’), but the sentences represent not the writer’s thoughts, but a character’s – in this case the man named Eunice. Thus the question is Eunice’s, and the word ik (‘I’) actually denotes the addressee of this question. In other words, the addressee of the question (conceptualizer 2 in the Ground) and the onstage conceptualizer (‘I’) are the same, the distance between these two mental spaces is minimal, the matrix clause is interpreted as explicitly marking the perspective of the addressee, and the entire question is interpreted as concerning the reason for the situation mentioned in the ‘complement’ clause, making it appear as a case of ‘long distance Wh-movement’. The fact that this free indirect speech character is necessary and sufficient to produce this reading provides striking confirmation of the hypothesis that ‘long distance Wh-movement’ sentences are in fact licensed by a specific template that has a specific meaning, with the part ‘do you think’ functioning in the dimension of intersubjectivity, to put the addressee’s perspective onstage.

4. Conclusion

A crucial aspect of this approach is that it does not so much provide an explanation in terms of function rather than structure, but invokes differences of both structure and function at different levels of specificity of grammatical templates. In this respect, the present analysis is both different from, and superior to, previous formal accounts of ‘long distance Wh-movement’, as well as semantic/pragmatic ones. The best elaborated example of the latter, employing notions of information structure, can be traced back to Erteschik-Shir (1973). In terms of Erteschik-Shir (1997): ‘islands [i.e. configurations out of which elements cannot be ‘moved’] are environments which cannot provide the main focus of the sentence’ (Erteschik-Shir 1997: 225). However, the strong correlations between ‘long distance Wh-movement’ on the one hand, and the verb think and second person subject on the other, neither have a purely structural explanation nor one in terms of ‘focus-structure’. From the point of view of the present
analysis, both types of approaches suffer from the idea that the explanation must be sought at some relatively abstract level of structure or function.

Diessel and Tomasello (2001) and Thompson (2002) claim that elementary ‘complementation constructions’ are actually mono-clausal (not one clause embedded in another), with the part traditionally considered the ‘main clause’ actually being a marker of epistemic stance. In their view, a minority of complementation constructions used by adults actually describe two situations, one construed as part of the other, and these are acquired in later stages of language acquisition, as a more comprehensive network of complementation constructions develops, hand in hand with cognitive development as children come to understand that different people may differ in their beliefs about the same state of affairs (Diessel and Tomasello 2001: 133-136). In this paper, I have generalized one aspect of this analysis to all complementation constructions, claiming that matrix clauses in all of them relate to the intersubjective dimension of the construal configuration, inviting the addressee to adopt a particular perspective on the object of conceptualization represented in the complement clause. On the other hand, I have analyzed the functional and structural difference between elementary complementation constructions and more elaborate ones as a matter of degree; the force with which conceptualizer 1 invites conceptualizer 2 in the construal configuration to adopt the perspective presented in the matrix clause is maximal only when the conceptual distance between the Ground and the relevant onstage conceptualizer is minimal. The more the function of the matrix part in such a construct conforms to this prototypical intersubjective usage, the easier it is to interpret a proposed Wh-element as questioning a conceptual element of the complement part only, and this exhausts the principles needed to understand the phenomenon and its limits. At the same time, this testifies to the usefulness of construing the construal configuration as I have proposed here and elsewhere.

References

Achard, Michel
Austin, John L.

Banfield, Ann

Benveniste, Émile

Bybee, Joan

Bybee, Joan and Paul Hopper (eds.)

Chomsky, Noam

Clark, Herbert H.

Croft, William and D. Alan Cruse

Dąbrowska, Ewa

Diessel, Holger and Michael Tomasello

Erteschik-Silber, Nomi

1997 The Dynamics of Focus Structure. Cambridge: Cambridge University Press.

Langacker, Ronald W.

Verhagen, Arie


Sanders, José


Stein, Dieter and Susan Wright (eds.)


Thompson, Sandra A.


Verhagen, Arie

1995 Subjectification, syntax, and communication. In Stein and Wright (eds.), 103–128.


