Functional Grammar Series 18

Editors

A. Machtelt Bolkestein
Casper de Groot
J. Lachlan Mackenzie

Mouton de Gruyter
Berlin · New York

Discourse and Pragmatics in Functional Grammar

edited by

John H. Connolly
Roel M. Vismans
Christopher S. Butler
Richard A. Gatward

Mouton de Gruyter
Berlin · New York 1997

Cohesion in Functional Grammar[1]

Kees Hengeveld

1.1. Introduction

Within Functional Grammar (see Dik 1989) research has so far mainly concentrated on various aspects of the structure of the individual utterance. The formal representations that are used within this theory therefore take the utterance as the highest level of analysis. Yet there is a variety of grammatical phenomena that can only be properly described with reference to structural units larger than the utterance. The existence of these phenomena creates the need for further developing Functional Grammar into a discourse grammar. In this paper I will claim that such a discourse grammar is organized along two axes: (i) the hierarchical axis, and (ii) the relational axis. The hierarchical axis concerns the segmentation of discourse into successively smaller units. The representation of this axis results in a layered description of discourse structure. The relational axis concerns the connections obtaining between layers of one and the same level. The representation of this axis results in a linear description of discourse structure. The complex network resulting from the combined operation of these two axes will then be used as a general framework for the description and classification of cohesion phenomena.

1.2. The hierarchical structure of discourse

1.2.1. Formal reflections of discourse structure

A general principle in Functional Grammar is that no new levels or functions be postulated unless there are grammatical phenomena that could not be described without postulating such additional levels or functions. It is therefore useful to first look at some straightforward cases of the encoding of hierarchical discourse structure. Consider the following Koryak narrative.

Koryak (Chukchi-Kamchatkan, Bógoras 1917: 43-45)

(1) Enña$^{\varepsilon}$'an Amamqu'tinu vañvolai'ke. Amamqu'tinak Kılu'
thus Eme'mqut's-people lived by-Eme'mqut Kılu'

gama'talen, ui'ña akmi'ñika gi'linat.
was-married no childless they-were

Vaᵋ'yuk Ama'mqut notaitiñ ga'lqalin, va'am-eçhe'ti
afterwards Eme'mqut to-the-country went river-up-stream

ga'lilin, *vaᵋ'yuk* ganyinińa'linau i'nalka oya'mtiwilu,
he-followed afterwards appeared-to-him numerous people

ya'nya.eᵋ'en ña'witqatu, li'gan mimtelhiyalai'ke, qla'wulu
partly women even resplendent-with-light men

ampalto'lu, ña'wisqatu ammani'ssalu. Ama'mqut
all-in-jackets-of-broadcloth women all-in-calico Eme'mqut

avi'ut gala'lin, gaqalei'pilin, gañvo'len vinya'tik
in-haste came, fell-in-love began to-help

kaña'tilaᵋk. Avi'ut Yu'qyaña'ut gama'talen. Ña'nyeu
fishing-with-dragnets in-haste Bumblebee-Woman he-married those

qaçi'n Yuqyamtilaᵋ'nu. I'nalka kmi'ñu gaitoi'vilenau.
indeed Bumblebee-Men numerous children she-brought-forth-them

Vaᵋ'yuk Kılu' ña'nyen gapkawñivo'len yayisqa'nñik. Ga'lqalin
afterwards Kılu' that-one could-not sleep she-went

va'amik eçhe'ti, *vaᵋ'yuk* galapitçoñivo'len, a'nke
to-the-river upstream afterwards she-looked-around there

gagetañvo'lenau kaña'tilu. Ama'mqut a'nke o'maka
she-saw the-fishing-people Eme'mqut there together

kaña'tiykin. Gayoᵋ'olen Kılu'nak. Amamqu'tinin ña'witqat
is-fishing she-visited-them by- Kılu' Eme'mqut's woman

gaçañçisqu'lin, ya'qam ai'kipa gapi'wyalin.
she-trampled-her only with-fly-eggs she-scattered-herself-around.

Yuqya'nu ganaᵋ'linau, imiñ kaña'tilu yuqya'nu ganaᵋ'linau.
bumblebees they.became also fishermen bumblebees became

Ama'mqut niyaqñivo'ykin. Gayai'tilen. *Açço'ç.*
Eme'mqut what-had-he-to-do he-went-home that's.all

'Eme'mqut lived with his people. He married Kılu', but they were childless. One time Eme'mqut went into the open country. He followed a river upstream. Then he saw numerous people. Some of them were women. Their bodies were resplendent with the reflection of light. All the men wore jackets of broadcloth, all the women wore calico overcoats. Eme'mqut hurried to them. He fell in love, and began to help those people. They were fishing with dragnets. Very soon he married a Bumblebee-Woman. Those people were Bumblebee people. His new wife brought forth numerous children.

'Then Kılu' became restless, and could not sleep. She came to the river, and followed it up-stream. Then she looked around, and saw those fishermen. Eme'mqut was there with them pulling in the nets. Kılu' approached them. She trampled to death Eme'mqut's new wife, who scattered around a large quantity of fly-eggs. All the eggs became Bumblebees. The fishermen also turned to Bumblebees. Eme'mqut could do nothing, so he went home. That is all.'

After the introduction of the main participants in the first line, the story consists of two main episodes. One starts with Eme'mqut's moving up the river, the second one with Kılu''s moving up the river. Within each episode there is a change of scene, when first Eme'mqut and then Kılu' arrive in the village of the Bumblebee people.

Each of the two main episodes and each of the two changes of scene are introduced by the first linguistic element that is of interest here: the word *vaᵋ'yuk*. This particle-like element is glossed as 'afterwards', but translated in various ways as 'one time' or 'then', and so does not necessarily imply temporal sequencing. This element, which is probably best described as a paragraph marker, introduces thematically coherent parts of the narrative disourse, which might be called "discourse episodes" (see e.g. Wanders 1993) or "moves" (see e.g. Kroon 1995). I will use the latter term in what follows.

The second element that is of interest here is the last word, *açço'ç*, of the story. This particle-like element, which could be glossed as 'that's all' or 'the end', is conventionally used to round off stories, as Bógoras' (1917) collection amply illustrates. Thus, apart from grammatical elements marking the boundaries of individual moves, there are grammatical elements marking the boundaries of entire discourses.

There is a third, less visible, element of the text that is of relevance here: the particles just studied are typical of narrative discourse, but would not be used, or would be used differently, in, for example, discourse types such as dialogues. Thus, in order to account for these rather straightforward facts of Koryak, one should be able to represent three different units: (i) the discourse as a whole, (ii) the component parts of a discourse, i.e. moves, and (iii) the type of discourse involved.

1.2.2. A layered representation of discourse

In Figure 1 a proposal for the representation of the three units identified as relevant in the previous section is made. Figure 1 adds a third level of structure to the existing Functional Grammar utterance model. This level is called the Rhetorical level. It contains variables for the discourse as a whole (D), the type of discourse (T), and the moves (M) constituting the discourse.

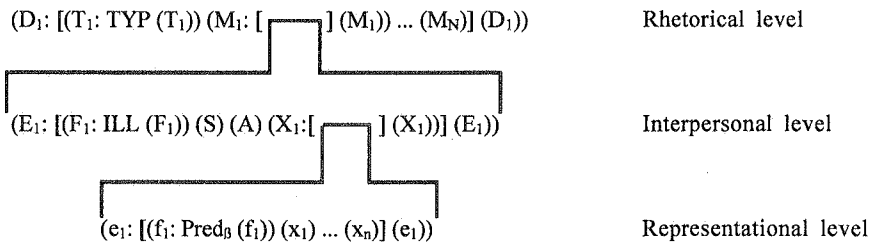

Figure 1. The hierarchical structure of discourse

The internal organization of the rhetorical level is identical to the one used at other levels: the discourse type is represented as a discourse frame, which structures the rhetorical level, i.e. defines the ways in which moves may be combined into a discourse of the type involved. Going up starting at the bottom of Figure 1, the representational level (e) is structured on the basis of a predicate frame (f) which determines the relations between arguments (x); the interpersonal level is structured on the basis of a illocutionary frame (F) which determines the relation between the main participants in a speech act, Speaker (S) and Addressee (A), and the content of that speech act (X); the rhetorical level (D) is structured on the basis of a discourse frame (T) which determines the relations between moves (M).

Each of the layers in Figure 1 can be defined both in terms of its designation and in terms of the unit of underlying representation, as shown in Table 1.

Table 1. Units of discourse structure

Variable	Designation	Underlying unit
Representational level		
x_n	Individual	Term
f_n	Relation or Property	Predicate Frame
e_n	State of Affairs	Predication
Interpersonal level		
X_N	Propositional Content	Proposition
F_N	Illocution	Illocutionary Frame
E_N	Speech Act	Utterance
Rhetorical level		
M_N	Move	Paragraph
T_N	Discourse Type	Discourse Frame
D_N	Discourse	Text

1.2.3. Monologue and dialogue

The example from Koryak presented in section 1.2.1 concerns monological discourse, just as the other examples that will be used in this paper. The question now is whether this formal model would be sufficient to capture dialogical discourse as well. I will leave this question largely open for the moment, but there is at least one element of the existing model that will have to be adapted. This concerns the representation of speaker and addressee.

In the existing model speaker and addressee are represented at the interpersonal level as in (2), in which one finds absolute, fixed positions (S) and (A) for the main speech act participants:

(2) $(E_1: [(F_1: ILL\ (F_1))\ (S)\ (A)\ (X_1)]\ (E_1))$

In a representation of dialogue one needs to account for the changing roles of speech participants. The representation will have to show which participant is acting in which capacity at any point in time. This can be achieved by adopting the dynamic representation given in (3), where it is indicated that P(articipant)$_1$ is acting as the speaker, P_2 as the addressee, where the roles of speaker and addressee are represented as functions of these participants.

(3) $(E_1: [(F_1: ILL\ (F_1))\ (P_1)_S\ (P_2)_A\ (X_1)]\ (E_1))$

Such a representation helps us account for a number of grammatical facts, only one of which will be illustrated here. Suppose the identities of P_1 and P_2 are stored in some discourse domain as in (4):

(4) P_1 = Juan García
P_2 = María López

Suppose furthermore that P_1 and P_2 engage in the conversation in (5), represented in (6). (For the abbreviations used in the glosses, see the end of the chapter.)

(5) P_1: ¿Está-s enferm-a?
COP-PRES.2.SG ill-F.SG
'Are you ill?'

P_2: No, estoy cansad-a
no COP-PRES.1.SG tired-F.SG
'No, I'm tired'

(6) $(E_I: [(F_I: INT\ (F_I))\ (P_1)_S\ (P_2)_A\ (X_I:$
$[(e_i: [(f_i: enferm\text{-}_A\ (f_i))\ (P_2)_{øSubj}]\ (e_i))]\ (X_I))]\ (E_I))$
'Are you ill?'

$(E_J: [(F_J: DECL\ (F_J))\ (P_2)_S\ (P_1)_A\ (X_J:$
$[(e_j: [(f_j: cansad\text{-}_A\ (f_j))\ (P_2)_{\emptyset Subj}]\ (e_j))]\ (X_J))]\ (E_I))$
'(No,) I'm tired'

In the representations in (6) it is shown that at the representational level in both cases P_2 is the subject. This, together with the information stored in (4), accounts for the fact that the feminine form is used for the adjectival predicates *enferma* 'ill' and *cansada* 'tired'. In (6) it is furthermore shown that in the first line P_2 is the addressee, whereas in the second line she is the speaker. This accounts for the shift in the personal reference of the verb, second person in the first case, first person in the second case. Thus, a dynamic representation helps us account for a number of agreement phenomena.

1.3. The relational structure of discourse

1.3.1. Introduction

As shown in section 1.2, the hierarchical axis of discourse structure involves relations between layers of a certain level and layers of the next higher or lower level. The relational axis concerns relations between layers of equal rank. Two main strategies can be identified here: (i) combining strategies, and (ii) chaining strategies. The main difference between combining strategies and chaining strategies is that in the first case a relation between layers of the same level obtains within the boundaries of the next higher level, whereas in the second case a relation between layers of the same level obtains across the boundaries of one or more next higher levels.

1.3.2. Combining strategies

Within the class of the quite familiar combining strategies two subtypes may be distinguished, as indicated in Figure 2.

$(\alpha_1), (\alpha_2)$	Parataxis
$(\alpha_1: ... (\alpha_2) ... (\alpha_1))$	Hypotaxis

Figure 2. The relational structure of discourse 1: combining strategies

In earlier work on subordination in the context of Functional Grammar (Hengeveld 1989; Bolkestein 1990; Dik—Hengeveld 1991), it has been demonstrated that there may be hypotactic relations up to the level of the speech act. The following sentences illustrate this point:

(7) He went home running
(Predicate (f) combining)

(8) The fuse blew because we had overloaded the circuit
(Predication (e) combining)

(9) If John left London at ten he will be there by noon
(Proposition (X) combining)

(10) Watch out, because there is a bull in the field
(Utterance (E) combining)

In (7) a predicate is subordinated to another one, i.e. two properties or relations are predicated of an argument shared by the two verbs. In (8) one event is described as causing another event, i.e. a predication is subordinated to another one. In (9) one propositional content forms the basis for the inference of another propositional content, i.e. a proposition is subordinated to another one. In (10) one speech act serves to motivate the execution of another speech act, i.e. an utterance is subordinated to another one.

This series of examples may now be expanded by considering hypotactic relations between the higher layers of structure introduced in section 1.2.2, i.e. move (M) and discourse (D).

In the text fragment in (11) there are some examples of hypotactic relations between paragraphs. There are two embedded paragraphs, where embedding is shown by indentation: one introduced by *but*, another introduced by *'cause*.

Dutch (Translated fragment from a Dutch television talk show, Redeker 1993)

(11)
a. but we had a seamstress
b. and we were calling her Mietje.
c. *But* I think we were calling everyone Mietje back then
d. you know, I don't know why,
e. but anyway,
f. so that was also a Mietje.
g. And uh — she was from Belgium.
h. And there were — she was a Belgian refugee,
i. *'cause* during during the war, during the First World War
j. all those refugees were coming from Belgium,
k. and they were coming to Zealand
l. and they were looking for work there.
m. And so SHE was our seamstress, (...)
(Paragraph (M) combining)

At the level of discourse, too, there may be hypotactic relations, as when one (fragment of) discourse is reproduced within another via a quotative construction. Some examples of this type of embedding will show up in section 1.5.5.4.

A similar set of examples might be given for paratactic relations. Here it may suffice to refer to recent work on coordination in Functional Grammar in which it has been shown that paratactic relations apply up to the level of the speech act (Bakker

1994; van Werkgem 1994), and to example (1) from Koryak, which illustrates the expression of paratactic relations between paragraphs via the paragraph marker *va$^{\varepsilon}$'yuk*.

1.3.3. Chaining strategies

The main difference between combining strategies and chaining strategies is that in the first case a relation between layers of like rank obtains within the boundaries of the next higher level, whereas in the second case there is a relation between layers of like rank that obtains across the boundaries of one or more higher levels. For an example, consider the fragment in (11) again. Here one finds relations obtaining between units of the lowest, referential, level obtaining across the boundaries of the individual utterances, but within the boundaries of the main or embedded paragraphs, in the form of topic chains. Within the main paragraph the participant *a seamstress* is introduced in line a, which opens up a topic chain realized by *her* in line b, *that* in line f, *she* in line g, *she* in line h, and *SHE* in line m. In the second embedded paragraph *those refugees* in line j opens up a second topic chain, realized by *they* in line k and *they* in line l.

In a similar way, the chaining of events within a discourse as reflected in temporal and aspectual choices may be described in terms of relations obtaining between units of like rank across the boundaries of higher level units. A general representation for this type of relation is given in Figure 3, in which "α" represents a layer of any level, "|" represents a boundary of one or more next higher levels, and dots represent a potential relation obtaining between layers.

$$|(\alpha_1) \ldots (\alpha_{n-1})| \ldots\ldots |(\alpha_{z-n}) \ldots (\alpha_z)|$$

Figure 3. The relational structure of discourse 2: chaining strategies

1.4. Integration

In the preceding sections two axes of discourse organization have been described: (i) the hierarchical axis, along which an entire discourse is segmented into successively smaller units, and (ii) a relational axis, along which linear relations, both within and across hierarchical boundaries, are accounted for. These two axes may now be combined as in Figure 4, in which the hierarchical axis is represented vertically, and the relational axis horizontally. Solid lines represent a hierarchical connection, dotted lines a relational one.

For reasons of presentation, Figure 4 is simplified in two respects: (i) speech act participants are not represented, (ii) combining strategies are not represented, but may apply at all levels. Furthermore, the representation in Figure 4 will have to be supplemented by a discourse domain (see e.g. Kamp—Reyle 1993 and, in the context of Functional Grammar, Vet 1986) with a separate cell for each of the levels distinguished. The information contained within this discourse domain is necessary

for keeping track of the various types of relations, particularly those of the chaining type, that may obtain within a discourse.

1.5. Cohesion

1.5.1. Introduction

The two-dimensional model given in Figure 4, allows one to give a detailed classification of cohesion phenomena along four different classificatory parameters, which are listed in (12):

(12) *Classificatory parameters*
- (i) Expression of cohesive relation
- (ii) Level of cohesive relation
- (iii) Nature of cohesive relation
- (iv) Domain of cohesive relation

These parameters will be studied separately in the following sections.

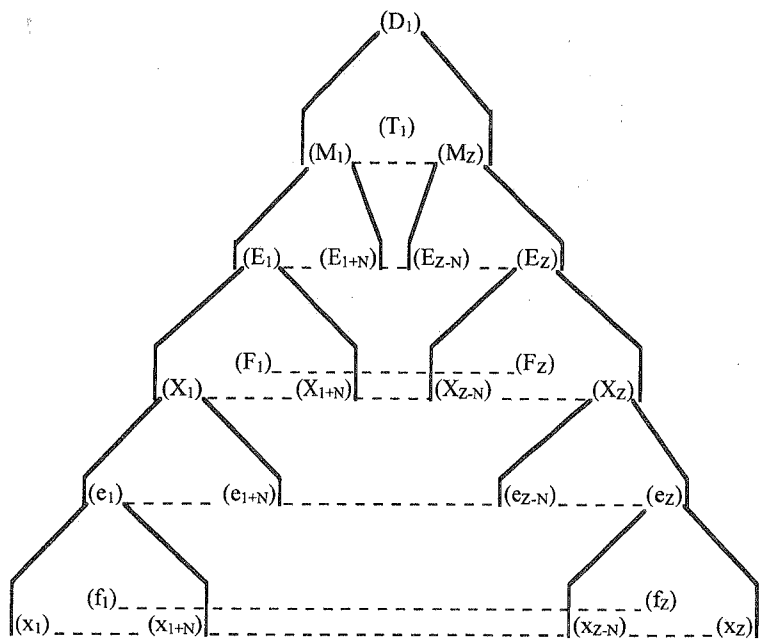

Figure 4. The hierarchical and linear structure of discourse

1.5.2. Expression of cohesive relation

The most straightforward parameter concerns the expression of the cohesive relation. Cohesive relations may be described in terms of the linguistic means that are used to express them, such as e.g. lexical means, anaphora, gapping, verbal morphology, and the like. In fact, this is the basic parameter used for the description of cohesive relations in Systemic Functional Grammar (see e.g. Halliday 1985).

1.5.3. Level of cohesive relation

The model arrived at furthermore allows one to locate cohesive relations at each of the different hierarchical levels recognized. I will go briefly through Figure 4 again. At the term (x) level, phenomena such as topic chaining are accounted for; at the predicate (f) level, phenomena such as lexical cohesion are dealt with; at the predicational (e) level one is primarily interested in phenomena such as the temporal chaining of events, and the foregrounding and backgrounding of events; at the propositional (X) level the expression of, for instance, argumentative relations is studied, as in the case of argumentative chains, in which a series of propositions leads up to a conclusion, formally marked by an inferential verb form; at the illocutionary (F) level one is interested in the sequencing of illocutionary acts, as when an answer fills the needs created by a question; at the utterance (E) level one may study, for instance, the ways in which one speech act motivates another; and at the level of the paragraph (M) one is interested in phenomena such as tail-head linkage. All these examples illustrate that a combined hierarchical-relational approach allows one to properly classify cohesion phenomena of a relational nature at the various hierarchical levels. From this observation it follows, as already suggested above, that the discourse representation model used should contain compartments for each of the hierarchical levels distinguished.

1.5.4. Nature of cohesive relation

The nature of the cohesive relation concerns the question whether the cohesive relation expressed is of the combining or the chaining type, as has been explained in section 2.

1.5.5. Domain of cohesive relation

1.5.5.1. Introduction

The last classificatory parameter is one that most clearly demonstrates the need for a combined hierarchical-relational approach to the structure of discourse. This parameter concerns the domain of application of a cohesive relation. To explain the nature of this parameter, let me start with an example familiar from sentence grammar. Grammatical phenomena such as reflexivization, negative raising or clitic raising have a restricted domain of application. Depending on the language involved, these domains may be defined as the predication, the proposition, or the single utterance. That is, the domain of application of the rules of reflexivization and negative raising can be defined in terms of hierarchical notions and the presence of a higher-level boundary within the underlying structure will thus block the application of these rules.

In a similar way, the expression of cohesive relations may be restricted to application within a hierarchical unit of a certain level. This will be illustrated here by means of an analysis of so-called narrative verb forms. It is important to note before going into a detailed analysis that all of the constructions studied below are of the same type from the perspective of the three classificatory parameters discussed above: (i) in all cases the expression of the cohesive relation is via verbal morphology, (ii) in all cases the level of the cohesive relation is the predication, and (iii) in all cases the nature of the cohesive relation is of the chaining type.

1.5.5.2. Narrative converbs in Turkish

Turkish has a narrative converb in *-Ip*, which is used to signal that the verb form carrying this ending is to be interpreted as if it were carrying the same inflectional endings as the next finite verb. Consider examples (13)-(14):

Turkish (Altaic, Ersen-Rasch 1980: 107)

(13) Reçete-yi *al-ïp* eczane-ye gid-eyim
prescription-ACC take-NARR chemist's-DAT go-ADH.1.SG
'Let me take the prescription and go to the chemist's'

(14) Televizyon-u teyze-m-ler-e *götür-üp* bïrak-ïnïz
tv.set-ACC aunt-1.SG.POSS-PL-DAT take-NARR leave-IMP.2.PL
'Take the TV-set to my aunt's family and leave it there'

In (13) the verb form *al-ïp* 'take-NARR' is to be interpreted as an adhortative verb form with a first person singular subject, and in (14) the verb form is to be interpreted as an imperative verb form with a second person plural subject. In this construction type the two events which enter into the chaining relation should be temporally sequential, which explains the use of the term "narrative converb" for the verb form involved. The use of narrative converbs in Turkish is restricted: (i) in general it is just one converb that combines with a finite verb, (ii) the narrative converb necessarily shares its subject with the finite verb, unlike the construction types discussed below, (iii) the two events should be logically connected. From these facts one may conclude that the domain of application of narrative verb forms in Turkish is the hierarchical unit *utterance*.

1.5.5.3. Medial verb forms in Tauya

Tauya has a set of medial verb forms, which are used in all but the final clause in a series. The final clause itself is realized as a fully inflected finite verb. The two medial verb forms which are of interest here are those that are labelled "coordinate".

These may be subdivided into same-subject medial verbs (the forms ending in *-pa* in the example below), which signal coreferentiality of the subject of the medial clause with the subject of the following clause, and different-subject medial verbs (the forms ending in *-te* in the example below), which signal that the subject of the medial clause is non-coreferential with the subject of the following clause. The fragment in (15) illustrates the use of these forms.

Tauya (Indo-Pacific, McDonald 1990: 218)

(15) Nono ø-imai-te-*pa* mai mene-a-*te* pai a?ate-*pa*
child 3.SG-carry-get-SS come.up stay-3.SG-DS pig hit-SS

nono wi nen-fe-*pa* yene wawi wi nen-fe-*pa* mene-*pa*
child show 3.PL-TR-SS sacred flute show 3.PL-TR-SS stay-SS

pai a?ate-ti tefe-*pa* ?e?eri-pa toto-i-?a.
pig hit-CONJ put-SS dance-SS cut-3.PL-IND

'She carried the child and came up and stayed; and they hit [=killed] the pigs and showed them to the children, and they showed them the sacred flutes and stayed, and they hit [=killed] the pigs and put them, and they danced and cut [the pigs].'

All of the verb forms except for the last one are medial. Via the use of same- or different-subject forms maintenance and change of perspective is established. In this way, long chains of clauses may be formed which together constitute episodes within a larger narrative. Thus, the domain of application of medial verb forms in Tauya is the hierarchical unit *paragraph*.[2]

1.5.5.4. The narrative construction in Krongo

Krongo has a narrative construction, illustrated in the text fragment in (16), which consists of an inflected form of the copula and an infinitival lexical verb. In narrative texts, only the verb in the first clause is realized as a non-narrative finite verb form. The remaining clauses use the narrative construction. The fragment in (16) shows only part of a narrative, but the narrative construction is used throughout the story. It may thus be concluded that the domain of application of the narrative construction is the hierarchical unit *text*.

Krongo (Kordofanian, Reh 1985:376) (C=Connective)

(16) M-àtúnà ìttóŋ àttúmántàará ŋ-ánkwàŋ án-úudà.
F-PRF.find.TR rabbit hyena C.M-IMPF.go-TR INSTR-meat.

M-áa *árà-ànà.* *M-áa* *árà-ànà*
C.F-COP INF.ask-DTR C.F-COP INF.ask-DTR

nk-áttúmántàará. *ŋ-áa* àttúmántàará *t-íkkì* àní áŋ
ABL-hyena. C.M-COP hyena INF-say QUOT NEG

n-ákká à?àŋ k-áadá-ŋ ù?ùŋ é. *M-áaŋ* ìttóŋ
1/2-FUT 1.SG LOC-INF.give-TR DAT.2.SG NEG C.F-COP rabbit

t-íkkì àní dá-ŋ á?àŋ ŋ-àtténá.
INF-say QUOT IMP.SG.give-TR 1.SG C.M-IMPF.small

ŋ-áa àttúmántàará *ánú.* *M-áaŋ* ìttóŋ *t-íisò.*
C.M-COP hyena INF.refuse C.F-COP rabbit INF-walk

M-áa *c-áatúná* bárákóorà. *M-áa* *ótó-ŋ* àníŋ
C.F.-COP go-DIR.H jackal C.F.-COP INF.say-TR 3.SG.DAT

àní àttúmántàará ŋ-ákká ŋ-állà úudà.
QUOT hyena C.M-IMPF.go C.M-IMPF-carry meat

K-ádúkwà àŋŋá nó ? *ŋ-áa* bárákóorà *ótó-ŋ*
PL-take 1.PL.INCL how C.M-COP jackal INF.say-TR

ìttóŋ àní òttyó n-áalá à?àŋ t-íiní fúuni.
rabbit.DAT QUOT a.little 1/2-CONT 1.SG INF-make way

ŋ-áa bárákóora *órúnò.* *ŋ-áa* *cáaw* *òyò*
C.M-COP jackal INF.leave C.M-COP INF.go INF.lay.down

k-àttúmántàará kétá. *ŋ-áa* àttúmántàará *cáaw.*
LOC-hyena before C.M-COP hyena INF.go

ŋ-áa *átúná* bárákóorà *ŋ-áa* *óyò,*
C.M.COP INF.find.TR jackal C.M-COP INF.lay.down

ŋ-áa *t-áayá,* *ŋ-áa* ócírò-ŋ ìkìnì. *ŋ-áa*
C.M-COP INF-die C.M-COP INF.look-TR teeth C.M-COP

t-íkkì àní bílíŋ ŋ-àayá. *ŋ-áa* *ácélà-ŋ* ì?ìŋ.
INF-say QUOT maybe C.M-die. C.M-COP INF.touch-TR 3.SG

'A rabbit meets a hyena, who goes around with meat. (The rabbit) asks for it. He asks the hyena. The hyena says: "I won't give it to you." The rabbit says: "Give me some." The hyena refuses. The rabbit walks to the jackal. He says to him: "The hyena goes around with meat. How are we going to take it?" The jackal says to the rabbit: "Just a moment, I'll make a plan." He walks away and lays himself down before the hyena. The hyena arrives. She finds the dead jackal with his mouth open. She says:

"He seems to be dead." She touches him with her foot.'

As (16) illustrates, the chain of narrative verb forms is interrupted in the case of embedding of discourse within the narrative, in which case the reporting verb itself, which forms part of the main story line, uses the narrative construction, whereas within the quote, which is clearly separated from the main text by a quotative particle, non-narrative verb forms are used. Thus, Krongo also provides an example of the grammatical effects of the embedding of a discourse within another discourse (see 1.3.2).

1.5.5.5. Summary

In the preceding sections I have shown that a combined hierarchical-relational approach to the structure of discourse allows one to define the varying domains of application of similar construction types, in this case narrative constructions, across languages. Within the representational system sketched in Figure 4 these domains of application can now be defined in terms of the variables representing them. Thus, the narrative construction in Turkish obtains within the boundaries of (E), the one in Tauya within the boundaries of (M), and the one in Krongo within the boundaries of (D).

1.6. Conclusion

In this paper I have tried to show (i) that there are grammatical phenomena which require a further elaboration of Functional Grammar into a Functional Discourse Grammar, (ii) that such an extended grammatical model is organized along two axes of linguistic organization: the hierarchical axis and the relational axis, and (iii) that such a combined approach allows for a detailed classification of cohesion phenomena.

Notes

1. This paper has profited considerably from the insight presented in Kroon (1995).
2. The chains created by means of medial verb forms are labelled "sentential paragraph" in De Vries (1993).

Abbreviations used in glosses

1	First Person	IMPF	Imperfective
2	Second Person	INCL	Inclusive
3	Third Person	IND	Indicative
ABL	Ablative	INF	Infinitive
ACC	Accusative	INSTR	Instrument
ADH	Adhortative	LOC	Locative
C	Connective	M	Masculine
CONJ	Conjunction	NARR	Narrative
CONT	Continuative	NEG	Negative
COP	Copula	PL	Plural
DAT	Dative	POSS	Possessive
DIR	Direction	PRES	Present
DS	Different Subject	PRF	Perfective
DTR	Detransitivizer	QUOT	Quotative
F	Feminine	SG	Singular
FUT	Future	SS	Same Subject
H	High Tone	TR	Transitivizer
IMP	Imperative		

References

Bakker, Dik
1994 *Formal and computational aspects of Functional Grammar and language typology* (*Studies in language and language use*). Amsterdam: IFOTT.

Bógoras, Waldemar
1917 *Koryak texts* (*Publications of the American Ethnological Society* V). Leyden: Brill.

Bolkestein, A. Machtelt
1990 "Sentential complements in Functional Grammar: Embedded predications, propositions, utterances in Latin", in: Jan Nuyts—A. Machtelt Bolkestein—Co Vet (eds.), *Layers and levels of representation in language theory: A functional view*. Amsterdam: Benjamins. 71-100.

Dik, Simon C.
1989 *The theory of Functional Grammar, part 1: The structure of the clause*. Dordrecht: Foris.

Dik, Simon C.—Hengeveld, Kees
1991 "The hierarchical structure of the clause and the typology of perception verb complements", *Linguistics* 29.2: 231-259.

Ersen-Rasch, Margarete I.
1980 *Türkisch für Sie; Grammatik*. München: Max Hueber.

Halliday, M.A.K.
1985 *An introduction to Functional Grammar*. London: Edward Arnold.
Hengeveld, Kees
1989 "Layers and operators in Functional Grammar", *Journal of Linguistics* 25.1: 127-157.
Kamp, Hans—Reyle, Uwe
1993 *From disourse to logic: Introduction to model theoretic semantics of natural language, formal logic and Discourse Representation Theory*. 2 Volumes. Dordrecht: Reidel.
Kroon, Caroline
1995 *Discourse particles in Latin* (*Amsterdam Studies in Classical Philology* 4). Amsterdam: Gieben.
McDonald, Lorna
1990 *A grammar of Tauya* (*Mouton Grammar Library* 6). Berlin: Mouton de Gruyter.
Redeker, Gisela
1993 Discourse markers as attentional cues to discourse structure. [Paper presented at the Research workshop "Burning Issues in Discourse", Maratea, Italy, April 1993.]
Reh, Mechthild
1985 *Die Krongo-Sprache (nìino mó-dì)*. Berlin: Dietrich Reimer.
Vet, Co
1986 "A pragmatic approach to tense in Functional Grammar", *Working Papers in Functional Grammar* 16.
Vries, Lourens de
1993 "Clause combining in oral Trans-New Guinea languages", *Text* 13.4: 481-502.
Wanders, Gerry
1993 ¿Cómo actuar adverbialmente? [MA Thesis, Deparment of Spanish, University of Amsterdam.]
Werkgem, Fienie G.
1994 *Dubbel Nederlands: 23 opstellen voor Simon C. Dik*. Amsterdam: IFOTT.

Discourse markers, discourse structure and Functional Grammar

Caroline Kroon

2.1. Introduction [1]

One of the more recent trends in Functional Grammar research concerns attempts to transform the current, sentence-oriented FG model into a more discourse-oriented model, or even into a full-fledged formal FG model of discourse (cf. Hengeveld, this volume). The necessity of such an undertaking emerges from the existence of a considerable number of linguistic phenomena that cannot be adequately accounted for in a model that restricts itself to the grammatical sentence. One of these phenomena is formed by the category of expressions that is usually referred to by the name of discourse markers.

The label "discourse markers" applies to a heterogeneous group of expressions (for the greater part, particles), which have in common that they indicate, in one way or other, how a unit of text is integrated into the verbal or non-verbal discourse context. They signal, for instance, how the speaker or author intends a message to relate to the foregoing or following discourse, or to (a particular aspect of) the communicative situation. As such, discourse markers may form a useful starting point for attempts to gain more insight into the various types of structures that in general underlie coherent discourse. Examples of discourse markers in English are, for instance, *well, y'know, because, but* and *so*.

In the present paper I will give an account of discourse structure as it emerges from an elaborate study of the functions of a number of Latin discourse markers. For details of this study I refer to Kroon (1995). I will first give an overview of the various concepts that are, in my opinion, relevant to the issue of discourse structure (at least as far as the functions of Latin discourse markers are concerned), and then briefly discuss them in the light of the question whether and how they can be integrated into the current FG model, or at least made compatible with it. As to the latter point, it will appear of crucial importance whether or not the concept of discourse act (i.e. the smallest unit of discourse structure) can be equated with the highest level identified in the FG layered clause structure (i.e. the speech act, in the underlying representation indicated by E, cf. Dik 1989 and Hengeveld 1990). I will finally adduce the Latin discourse marker *at* (which is a partial equivalent of English *but*) to illustrate the kind of problems FG might be confronted with in its development from sentence grammar to discourse grammar.