# Terms, clauses and constructions in functional grammar

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## Abstract

This article offers a critical evaluation of Functional Grammar (Dik, 1997a,b) by focusing on the main theoretical constructs of the theory, namely clauses, term phrases and complex constructions (clauses, noun phrases and complex sentences, respectively, in standard linguistic terminology). Emphasis is laid on the assessment of the descriptive apparatus of the theory, as well as on its genesis and latest developments, which are oriented towards discourse. Apart from the critical revision of the theory and its partial comparison with other functional models, the main conclusion that is reached is that Functional Grammar should consider—along with constructing and identifying reference—a third category of localizing reference (including spatial reference and temporal reference) that would provide for the generation of referential adverbials.

## 1. Introduction

This article offers a critical evaluation of Functional Grammar (henceforth FG) as presented by Dik (1997a, b). I have not organized this paper in the chapter-by-chapter fashion typical of reviews in the hope that focusing my attention on a number of central aspects of the theory will yield insight into certain subtleties of FG, while clarifying the general structure of the model. Moreover, an exhaustive discussion of every matter dealt with by these two books would be beyond the scope of this article. Consequently, I take up three topics that may provide not only an introduction to the main research lines in this linguistic model but also suitable points of departure for cross-theory reference and comparison: Sections 3, 4, and 5

engage, respectively, with the FG treatment of simple clauses, noun phrases, and complex clauses (clauses, term phrases and complex constructions in FG terminology). The section on the simple clause is the longest because it sketches the layout of the FG descriptive apparatus. An additional reason for organizing this article around term phrases, clauses and complex constructions is that Dik (1997a, b) departs significantly from an earlier version of the theory (Dik, 1978) precisely in the more elaborate treatment of these aspects, along with the discursive concern to which I refer in Section 6. I open the discussion by giving a blueprint of the genesis of FG as well as a brief summary of the early influences on this theoretical model.[1]

## 2. Genesis and early influences

Dik's (1968) PhD dissertation on coordination laid three methodological foundations on which subsequent functional research into the nature, use and acquisition of language has been firmly based: the exclusion of transformations from the generative component of the theory and, consequently, the definition of a single level of semantic–syntactic and pragmatic representation; the rejection of the thesis of the autonomy of syntax, which implies a displacement of the generative heart of the theory towards the semantic component or *lexicon*; and the universal character of the theory. Along with the idea that linguistic description and explanation constitute not only the method but also the result of the study of language, Dik (1968, 1978, 1986) adopted from Anton Reichling the teleological conception of language according to which language serves a communicative purpose (Gebruers, 1987: 103). As Hoekstra (1981: 3) remarks, other early influences on Dik's FG came from various linguistic theories: from Relational Grammar (Perlmutter 1983; Perlmutter and Rosen, 1984) Dik took the idea that cross-linguistic comparison is only possible in respect of formally unconstrained grammatical relations; Dik drew on Case Grammar (Fillmore, 1968) with respect to the need to define semantic functions that guarantee the morphosyntactic derivation of linguistic expressions (this position, in turn, can be traced back to the view of deep structure held by Generative Semantics, in terms of which the most abstract syntactic representation of sentences was ultimately semantic (Fodor, 1977: 70). Gebruers (1987: 115) stresses the incorporation into FG of the Praguian concepts of functional sentence perspective and communicative dynamism (Firbas, 1992).[2] To round off this (rather simplified) discussion of the theoretical context, Dik's FG represents a balanced position between the interlinguistic North American tradition that stems from Boas and Sapir and the European tradition originating in the

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[1] For an up-to-date evaluation of the standards of pragmatic, psychological and typological adequacy of the theory, I refer the reader to Butler et al. (1999). See also Siewierska (1991) for a critical assessment of this linguistic model.

[2] See also Danes (1987). The revision is by no means exhaustive. For points of contact with Systemic Functional Grammar (Halliday, 1985), see Davidse (1987) and Butler (1990). See also Van Valin (1990) for coincidences and differences with Role and Reference Grammar (Van Valin and LaPolla, 1997).

functional-structural approach to language identified with the Prague School of Linguistics.

## 3. The layered structure of the clause

In the descriptive apparatus devised by Dik (1997a, b), underlying predications are built up from the Fund, which contains both predicate frames, comprising verbal predicates with their complementation patterns, and terms, which have referential potential. Underlying predications are expanded into fully specified underlying predications through the addition of grammatical operators and lexical satellites, as well as by means of the assignment of semantic, syntactic, and pragmatic functions. Fully specified underlying predications are finally mapped on to linguistic expressions by means of expression rules that determine the form, order and prosody of the utterance.

Dik (1997a: 50 n.1) acknowledges his debt to Foley and Van Valin (1984) for the concept of the layered structure of the clause, on which the progressive expansion of underlying predications I have just referred to is based. A quotation from these authors sheds light on the Role and Reference Grammar (henceforth RRG) semantic distinctions incorporated into FG:[3]

> This view of the clause takes it to be a layered structure, with the outer layers enclosing the inner layers. Each of these layers has its own set of constituents and (...) its own set of operators. The innermost layer of the clause is the NUCLEUS, which contains the predicate. It is the heart of the clause (...) Surrounding the nucleus is the CORE of the clause, which consists of one or two arguments of the predicate, depending on its valence (...) The outermost layer of the clause is the PERIPHERY, which contains arguments expressing the spatio-temporal setting of the event, as well as secondary participants in the event (Foley and Van Valin, 1984: 77).

As can be gathered from this quotation, the notion of the layered structure of the clause rests on three semantic distinctions: first, the distinction between arguments and adjuncts, which is established on the grounds of the primary or secondary character of the participant in the event; second, the distinction between constituents and operators, which is based on the lexical or grammatical nature of the meaning coded by a lexical item; and third, logically following from the two previous ones, the distinction between inner layers and outer layer, which depends on whether they contain central elements (arguments) or peripheral elements (adjuncts).

The distinctions between arguments and adjuncts (satellites in FG) and between constituents and operators were already present in Dik (1978), although operators were restricted to the term phrase. What was lacking in the 1978 version of FG was

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[3] See Dik (1997a: 54, n. 5) for a more detailed account of the elaboration of the underlying clause structure, with special emphasis on the higher levels.

an overall model of clause structure, which was eventually provided by the analysis of the clause advanced by Foley and Van Valin (1984), to which I have just referred, between inner and outer layers of the clause. Hengeveld (1989), elaborating on Foley and Van Valin (1984), lays the semantic and pragmatic foundations of a layered structure for the clause. The point of departure of Hengeveld's analysis of clause structure is that utterances can be analyzed at the semantic and at the pragmatic level. Hengeveld prefers the terms *representational* (for the semantic level) and *interpersonal* (for the communicative one), both of which have a long tradition in European linguistics, identifiable with Bühler (1934) and Halliday (1973). A state of affairs is rendered at the representational level in such a way that it is endowed with a certain communicative intention at the interpersonal level. This distinction is the basis for the introduction of the concepts of *predication* and *proposition*, which constitute the intermediate layers defined in Hengeveld (1989) between the—prototypically verbal—predicate and the clause. The justification of these layers is that a predication designates a state of affairs at the representational level (this is the predication proper) but it represents the content of a speech act, thus giving rise to a proposition, at the interpersonal level. The whole inventory of layers includes the predicate, the predication, the proposition and the clause.

Dik (1997a) distinguishes between nuclear, core and extended predication. The nuclear predication is extended to a core predication by inserting predicate operators and satellites; and the core predication, in turn, is enlarged to an extended predication through the insertion of predication operators and satellites. Thus, extended predications depict the same state of affairs as core predications, but they have more accurate spatio-temporal parameters. Extended predications can give rise to propositions, which designate possible facts, and propositions can be built into clauses designating an illocutionary act. Within the propositional layer, propositional satellites and operators express the speaker's evaluation of the propositional content; within the clause layer, illocutionary operators and satellites provide the proposition with a certain illocutionary force.

Layers are defined in terms of the order of the entities that they designate and of the operators and satellites that are at work within each layer. As regards the former aspect, every layer designates an entity of a different order (Lyons, 1977: 442–447): predicates and properties are first-order entities, which can be located in space and can be evaluated in terms of their existence; a state of affairs belongs to the class of second- order entities, which can be located in space and time and can be evaluated in terms of its reality; a propositional content is a third-order entity, which can be located in space but not in time, and can be evaluated in terms of its truth; a speech act is a fouth-order entity, which locates itself in space and time and can be evaluated in terms of felicity, in the sense of Austin (1962). As for operators, the full inventory of operators with reference to the layer in which they are active is listed in Fig. 1:[4] Dik (1997a) provides a full

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[4] The labels in Fig. 1 indicate that the operator is to be understood with reference to the layer at which it is relevant. Thus, *Subjective modality* implies a subjective attitude towards the propositional content of the clause.

| **Layer** | **Operators** |
|---|---|
| Predicate | Aspect |
|  | Negation |
| Predication | Tense |
|  | Aspect |
|  | Modality |
|  | Polarity |
| Proposition | Subjective modality |
|  | Evidential modality |
| Clause | Declarative |
|  | Interrogative |
|  | Imperative |

Fig. 1. Layers and operators.

account of the satellites that are relevant within each layer, while accommodating the assignment of semantic, syntactic and pragmatic functions within the layered structure of the clause more explicitly than Hengeveld (1989) does.[5] Considering

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[5] Hengeveld (1990) reports basically the same model as devised in Hengeveld (1989). The main difference with respect to Dik (1997a) is that Hengeveld (1990) defines illocution operators as those operators that capture the means through which the speaker modifies the force of the basic illocution of his utterance in order to satisfy his communicative needs. The speaker may do so by mitigating the impact of his utterance by reinforcing it. Hengeveld (1990) also calls *illocutionary frames* what is referred to by Dik (1997a) as *illocutionary operators*. It must also be noted that Hengeveld (1990: 12) distinguishes illocution satellites, assigned to the fourth layer, from clause satellites, assigned to the fifth layer, thus defining an additional layer that is motivated textually. Such a distinction is not made in Dik (1997a: 304), who subsumes illocution satellites, like ***Frankly**, I do not like you*, and clause satellites, such as ***If I may speak frankly**, I do not like you*, under the heading of *illocution satellites*. Clause satellites, which have no grammatical counterpart, are discursive, given that their aim is to set the utterance in its context.

| **Layer** | **Satellites** |
|-----------|----------------|
| Predicate | Additional participants |
| | Manner |
| | Spatial orientation |
| Predication | Location |
| | Time |
| | Circumstance |
| | Result |
| Proposition | Speaker´s attitude |
| | Speaker´s opinion |
| Clause | Reason |
| | Condition |
| | Purpose |

Fig. 2. Layers and satellites.

satellites in the first place, Fig. 2 specifies the operators and satellites that FG specifies at each level:[6]

I turn to the question of function assignment as a builder—along with entities, operators and satellites—of the hierarchical structure of the clause. I have already

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[6] The labels in Fig. 2 should be understood in relation to its layer, in such a way that, for example, *Reason* at the level of the clause means reason of the speech act. Dik et al. (1990) compare satellites with Quirk et al.'s (1985) terminology in the following way:

| Quirk et al. (1985) | corresponding satellite type |
|---------------------|------------------------------|
| adjuncts: | representational level |
|    -predication | -predicate satellites |
|    -sentence | -predication satellites |
| disjuncts: | interpersonal level |
|    -attitudinal | -proposition satellites |
|    -style | -illocutionary satellites |

remarked that the functional orientation of FG is the result of considering the communicative purpose of language, but the use of functional relations or *functions* (Dik, 1986, 1997a, b) is also of paramount importance for assessing the functional import of a theory. In his PhD dissertation, Dik (1968: 155) defined both functions and categories as primitives of linguistic description. This conception was kept in the first version of FG (Dik, 1978: 13), but it was eventually abandoned in favour of a more central role of functions (Dik, 1987: 85). In the latest version of the theory, Dik (1997a: 25) states:

> In the fabric of FG pride of place is given to functional relations as opposed to categorial notions (...) Linguistic expressions are complex networks, characterized by functional relations operative at different levels. Functions of different types are a powerful means for capturing these relations. Functions are also needed (alongside categories) because functions and categories do not stand in a one-to-one relation to each other.

Unlike Halliday's (1985) Systemic Functional Grammar, FG does not distinguish syntactic categories like Nominal Group, etc. FG prefers the expansion of nuclear terms by means of grammatical operators and semantic restrictors; and lexical categories are replaced by the inventory of predicates.[7] Furthermore, the typology of predicates is defined functionally (Dik, 1997a: 151): the nominal predicate is prototypically the head of a term phrase; the adjectival predicate qualifies prototypically as attribute, and the verbal predicate performs prototypically the function of the predication.

Following the Praguian tradition of considering the clause a field of relations at several levels (Firbas, 1992), FG functions include semantic, syntactic and pragmatic functions. The progressive expansion of underlying predications consists of the gradual insertion of operators and satellites, as well as the assignment of syntactic and pragmatic functions. Semantic functions are determined by the predicate frame, whereas syntactic and pragmatic functions are assigned to core predications and propositions respectively.[8]

Semantic functions specify the roles played by the participants of the state of affairs and, consequently, are derived from the type of *Aktionsart* of the predication, which, in turn, results from the values assigned to the Vendler (1967)/Dowty (1979) features (dynamism, telicity, momentaneousness) plus control and experience. Semantic functions are primary, in line with the philosophical underpinnings of the theory (Dik, 1986), with respect to syntactic functions: they are the only ones that qualify as compulsory in underlying representations. Syntactic functions, which present the state of affairs from the perspective of a certain participant, are often left

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[7] Predicates are prototypically verbal, but see Hengeveld (1992) on non-verbal predication. Although Dik (1997a: 58) remarks that all lexical items of a language are treated as predicates in FG, mention is made only to the main ones, namely nouns, adjectives and verbs (Dik, 1997a: 194).

[8] For a different, although in some respects compatible, proposal concerning functional relations, see Van Valin (1996).

unspecified because they are not relevant in all languages: Subject is relevant in a language if there is passive and Object is relevant if there is dative shift.

The syntactic functions Subject and Object, as I have just pointed out, are defined according to the semantic notion of perspective: the same state of affairs is presented from the primary perspective of the participant that bears the function Subject in the active version and the function Object in the passive version of the same clause. Conversely, the same state of affairs is presented regardless of whether there is not dative shift and the secondary perspective falls on the Goal, or there is dative shift and the secondary perspective falls on the Recipient. This treatment of syntactic functions has no counterpart in other grammatical theories, and represents one of the most controversial contributions of the theory (Siewierska, 1991: 74). Indeed, morphosyntactic aspects are postponed to the benefit of the semantic notion of perspective, which is coherent with the priority given to semantics over syntax in FG, but problematic in the context of a theory in which no linking algorithm syntax–semantics/semantics–syntax is explicit (in contrast to, for instance, RRG), and in which little effort has been devoted to the development of the expression component, which guarantees the well-formedness of linguistic expression in terms of inflectional and derivational morphology, constituent order and suprasegmental phonology.

The pragmatic functions Topic and Focus provide constituents with informative status within the context and situation of the utterance and are defined on the grounds of the two more general notions of topicality and focality respectively. This definition allows for the existence of semi-focal topics (New Topic is the type of topic borne by new discourse topics) and semi-topical foci (Contrastive Focus is the type of focus borne by focal constituents that provide given information). Conforming with Dik's (1987: 85) statement that *many of the rules and principles of FG (...) are formulated in terms of functional notions*, pragmatic functions constitute the basis for formulating principles of constituent ordering like the one that leaves clause-initial and clause-final positions for pragmatically outstanding consitituents, typically those bearing Topic and Focus.

In order to illustrate the interaction of layers, operators and the assignment of functions, let us consider the expansion from an unspecified predication to a fully specified underlying linguistic expression of a sentence like *The wind broke the fence*. Such an expansion starts from a predicate frame that specifies the form (*break*), the category (*verb*) and the argument structure of the predicate (prototypically, Agent and Goal, but Force is the semantic function of the first argument of the example), as can be seen in (1a):

(1)
a.  $break$ [V] $(x_1)_{Ag}$ $(x_2)_{Go}$
b.  DECL $E_i$: [$X_i$: Past $e_i$: [$break$ [V]
    $(d1x_i$: $wind$ [N]$)_{ForceSubj}$ $(d1x_j$: $fence$ [N]$)_{GoObj}$]

In (1b) the state of affairs of the wind breaking the fence is depicted by the nuclear predication [break window fence], represented by $e_i$. The nuclear predication is

located in the past by the predication operator Past and is perspectivized by means of the assignment of the syntactic function Subject to the Force argument and through the assignment of Object to the Goal argument, thus qualifying as an extended predication. Given that the extended predication is not further modified by satellites or operators, the structure resulting from syntactic function assignment defines a propositional content represented by $X_i$, which is not further modified either; this propositional content gives rise to the speech act $E_i$, which the clause operator DECL marks as declarative. If one supplies a context like *What did the wind do?*, the assignment of pragmatic functions is as follows: the Subject participant bears the pragmatic function Topic whereas the remainder of the utterance falls under the scope of Focus (predicate focus).

As a conclusion to this section, the predication formation component endows underlying predications with all relevant semantic features, and, in this respect, it turns out the appropriate input to the expression component, which cares for formal aspects only. From a different angle, the treatment of syntactic constituency in FG is split between the predication formation component, which deals with dependency and hierarchy (in terms of argument structure and term heads and restrictors, respectively); and the expression component, which sees to linearization.

## 4. Term phrases

Term theory represents the FG equivalent of phrase theory in descriptive grammars. For the sake of comparison with such grammars, determiners are incorporated into the term phrase as operators, while modifiers and qualifiers enter the term phrase as restrictors.[9]

Terms are instruments for referring to entities in some world, either real or fictional (Dik, 1997a: 129). Along with predicates, terms are stored in the Fund. As is also the case with predicates, terms fall into two categories: basic and derived terms. Basic terms are proper names and personal pronouns (Dik, 1997a: 61). Consequently, the vast majority of term structures are derived by means of productive rules of term formation. This contributes to the dynamicization of the Fund, which accounts for the productive aspects of lexical structure formation, including the recursive properties of term and predicate derivation.

FG distinguishes between lexical items with grammatical meaning (operators) and with full lexical meaning (predicates). Predicates, which serve the functions of arguments and satellites in predications, have referential potential, but do not actually

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[9] I am using the label *term head* rather freely here. Properly speaking, terms do not have heads: properties and operators are assigned to a term variable, which ranges from a first to a fourth-order entity. Thus, the underlying term structure corresponding to the linguistic expression *the blue house* is paraphrased as definite singular first-order entity *x* such that the property ''house'' applies to *x* and such that the property ''blue'' applies to *x* (Dik, 1997a: 132).

make reference until they are inserted into term phrase structures like (2), which specify the term head, the operators, and the restrictors of the term. Let us consider the underlying term structure of the complex noun phrase *the cat that bit the red dog*:

(2)    (d1 $x_i$: *cat* [N]: DECL $E_i$: [$X_i$: Past $e_i$: [*bite* [V] $(x_i)_{Ag}$ (d1 $x_j$: *dog* [N]: *red* [A])]$_{Go}$])

The complexity of the noun phrase *the cat that bit the red dog* is the product of the recursiveness at term phrase level: the term head *cat* undergoes restriction through the relative clause (verbal restrictor in FG terminology) *that bit the red dog*, which contains, in turn, another term, *the red dog* in the function of Goal with respect to the Agent *cat*. *Red* is an adjectival, as opposed to verbal, restrictor. Both term heads are singular (represented by means of 1, which stands for the number operator) and definite [represented by means of d, which stands for the definiteness operator in the formalization in (2)]. Terms, like *the cat* in (2), are fully referential, unlike predications, such as *the cat bit the red dog* in (2), which assign a given property or establish a certain relation of the referent. Predications are formed by inserting term phrases into the argument and satellite slots of predicate frames.

Any critical assessment of FG term theory should underline the fact that the treatment of term structures is formally unconstrained and categorially restrictive. Regarding the lack of formal constrains, term structures are non-configurational. In Dik's (1997a: 62) words:

> The order imposed on term structures (...) is not supposed to reflect the actual surface order, which may be rather different across languages, but the "semantic" order in which the various operators and restrictors make their contribution to the definition of the intended referent (...) The actual surface order will be determined by the expression rules.

Although term structures do not include linearization information, they do contain information on other constituency facets, namely hierarchy and dependency: terms have heads on which non-heads depend semantically and syntactically. The non-configurational character of term structures is imposed by the requisites of typological adequacy: a semantic description of term phrases enjoys higher cross-linguistic validity than a structural one, because it is applicable both to head-marking and dependent-marking languages, in the terminology of Nichols (1986).

As regards the categorially restricted nature of term structures, this choice follows from the central role of functions in the theory, with the associated secondary importance of categories, including the syntactic categories or phrases of descriptive grammars. Term theory is limited to nominal (and pronominal) terms. The operators that have been put forward (Dik, 1997a: 162, following Rijkhoff, 1992) have scope over the noun phrase and the types of reference that Dik (1997a: 130) distinguishes, definite and indefinite, keep reference within the bounds of nominal term phrases. Apparently, adjectival and adverbial phrases would be built on the

predicate frames of adjectives and adverbs, which are listed in the lexicon. For instance, the complementation of an adjective like *easy* would consist of a predication taking up the postpositional position of the adjective in expressions like *This is easy to do*. As regards adverbs, adverbial intensifiers and mitigators of adjectival and adverbial phrases like *very* or *quite* respectively resemble functionally quantifying term operators. Another interesting question raised by adverbs in this respect is that an adverb of, for example, manner, like *noisily*, does not have referential characteristics and, in consequence, cannot be generated as a term, but as a predicate that is inserted into a satellite slot of the predication. But place adverbs like *here* or *upstairs* and time adverbs *yesterday* or *tomorrow* are also referential, even though they do not fit the types of reference advanced by Dik (1997a: 130). It might not be out of place, therefore, to consider—along with constructing and identifying reference—a third category of *localizing* reference (including spatial reference and temporal reference) that would justify the generation of adverbials like *here* or *today* as terms, thus acknowledging their ability to refer to mental constructs.[10]

A final word in the section dealing with terms should concern syntagmatic generalization. From classical Generative Grammar onwards there have been several proposals for unifying the treatment of phrases and sentences in such a way that cross-category generalizations were possible. FG has followed this spirit, albeit on a more semantic basis: Rijhoff (1990, 1992) has advanced a classification of term operators that comprises qualifying, quantifying and localizing terms operators. Qualifying term operators coincide with sortal classifiers; quantifying term operators determine the size of the ensemble of entities to which reference is made; and localizing term operators indicate the position of the ensemble of entities to which reference is made. Rijkhoff goes on to propose that predicate operators could be called *qualifying operators*, while predication operators could be divided into quantifying and localizing operators, thus distinguishing a separate layer for quantification between the predicate and the predication. Such a proposal, however, is not fully adopted by Dik (1997a: 219) on the grounds that more research is needed in this area before a new layer is added to the underlying structure of the clause.[11]

## 5. Complex and derived constructions

This section bears on complex and derived constructions, the former being the result of the presence of a verbal (or deverbal) predicate in a term phrase or of more than one verbal predicate in a certain clause; the latter being the product of formal or semantic adjustment.

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[10] Place adverbs like *there* and time adverbs like *yesterday* could also be said to be deictic. The position that I adopt here, however, is to restrict deixis to pointing at entities physically available in the nearabouts of the speaker and listener or recoverable from the context, rather than constructs that are available mentally, as is the case with spatio-temporal parameters. See Hengeveld (1997) for an FG analysis of adverbs. Compare Mackenzie (1992), who introduces the variable *p* for places.

[11] Compare Vet (1986).

Complex term phrases either contain a verbal restrictor (a headed or headless relative clause in standard linguistic terminology) or comprise a term that refers to a higher-order entity. Prototypically, terms refer to first-order entities in the terminology of Lyons (1977), that is to say, entities that can be located in space and can be evaluated in respect of their existence. Terms may also be used to refer to higher-order entities such as states of affairs, like *the construction of the bridge*, possible facts, like *Jim locked the gate*, or speech acts, like someone's question *what they should do*. Such complex terms encapsulate, respectively, embedded predications, embedded propositions and embedded speech acts. It follows that the general idea that underlies the treatment of complex constructions is that the layers of the hierarchical structure of the clause can become arguments or satellites of higher predicates (Hengeveld, 1990). Very little is said about complex satellites (adverbial clauses) in Dik (1997b), but considerable attention is paid to complex arguments, including first arguments like *That Ricky failed was predictable*, second arguments like *Joan thinks that the party was rather boring*, and third arguments like *My experience taught me that I was wrong*. Formally, embedded constructions, either consisting of complex predicates or satellites, vary along the following parameters (Dik, 1997b: 125): the position of the embedded construction in the matrix clause; subordinator markers; constituent ordering of the embedded construction; finite and non-finite verbal form of the embedded predicate; and mood of the embedded verbal predicate.

Some complex constructions are explained as focal in FG (Dik, 1997b: 291). In general, there are several devices for showing Focus, including prosodic prominence, structural position, special morphology and special constructions. Special Focus constructions include cleft constructions, both prototypical (or *identifying*), such as *What the students need is a break* or *It was the manager that my mother complained to*; and non-prototypical (or property-assigning), like *It was with his siter that Jim repaired the roof*. The difference between the former and the latter type of cleft constructions is not only semantic, but also syntactic: the *that*-clause is relative in prototypical clefts whereas it qualifies as a *that*-subordinate in non-prototypical clefts. The degree of prototypicality also distinguishes term and predicate focus: prototypically, terms in argument or satellite positions bear Focus; less prototypically, Focus is assigned to the verbal predicate.

FG distinguishes two types of adjustment of derived constructions: formal and semantic. Among the derived constructions that are explained in terms of formal adjustment, nominalizations are worth looking at because the discussion of this grammatical area has led to the kind of cross-category syntagmatic generalizations I have mentioned in the previous section. The idea is that derived constructions are under pressure to adjust their formal expression to the prototypical expression model of the non-derived expression (Dik, 1997b: 158). In the case of nominalizations, the derived verbal term is pressed into the expression model of the non-derived nominal term, in such a way that the predicate of the embedded construction often appears as a deverbal noun (*The company demolished the bridge > The company's demolition of the bridge*); the first argument of the embedded construction often appears in the genitive (*The company's demolition of the bridge*); the first

argument of the embedded construction often appears as an adjectival predicate (*The regiment withdrew > The regimental withdrawal*); the second argument of the embedded construction often appears in the genitive (*The construction of the building*); the second argument of the embedded construction often appears as an adjectival predicate (*The council selected parents > The parental selection*); satellites of the embedded construction often appear as adjectival predicates (*The enemy suddenly attacked the city > The enemy's sudden attack on the city*); the embedded construction often acquires a determiner (*The demolition of the bridge by the company*); and the embedded construction often loses its capacity to add operators (*The committee disapproved of the director's buying of new technology/*The committee disapproved of the director's having bought of new technology*). Apart from formal adjustment, the contribution to the study of nominalizations on the part of FG is to be found in the other two ways of describing a nominalization (Dik, 1997b: 167): the predicate frame of the nominalization is derived by means of productive predicate formation from the corresponding verbal predicate; and the predicate frame underlying the nominalization is listed separately in the lexicon. Both solutions stress the central character of the lexical Fund while underlining the dynamic status of derived predication formation. As for semantic adjustment, it accounts for valency changes, including variation of the qualitative valency, as in pairs like *I sprayed paint on the wall/I sprayed the wall with paint*, and extension and reduction of the quantitative valency of the predicate, as in, respectively, *The captain marched the company to the barracks / The captain marched the company to the barracks, The assistants are selling books/These books sell*. A remarkable innovation of Dik (1997b) is that formal and semantic adjustment is primarily a semantic operation, thus being carried out by the lexical Fund through predicate formation rules. As I have already remarked, this contributes to the dynamicization of the Fund in that it consists mainly of a set of lexical rules that turn out derived predicates rather than a finished set of lexical items.

## 6. New perspectives

Along with the emphasis on term theory, layered clause structure and complex constructions, the version of FG rendered in Dik (1997a) develops the 1978 version in other respects, including the structure and function of the Fund, the assignment of functions, the operation of expression rules and the organization of the phonological component. All in all, the orientation of the theory remains clausal, which has led scholars like Butler (1991: 514) to criticise the lack of an explicit discursive orientation in FG. Although Hengeveld (1990: 12) is the first to devise the fifth clausal layer, which is motivated textually, Dik (1997b) takes a crucial step towards building up the discursive dimension of the theory. In Dik's (1997b: 409) words,

The theory of FG, if it is to live up to its self-imposed standards of adequacy, should in the long run account for the functional grammar of discourse. In other words, it should show how clauses can be combined into coherent stretches

of talk, conversation, or written text. At the same time, it is evident that this is a very high aim for a theory of grammat to strive for, and that we have only the bare outlines of what a theory of discourse should look like.

Although the 1997 version of FG is not a discourse-oriented theory, considerable attention is paid to supra-clausal matters, such as embedding, negation, coordination, anaphora, illocution, clefting, focus constructions, accessibility and extra-clausal constituents. Moreover, the structure of discourse and its motivation are focussed on: discourse is conceived of as a hierarchical layered structure, which qualifies as coherent in terms of iconic ordering, topical continuity, focality, tail-head linking, and the use of connectors.

Taking the same discursive line as Dik (1997b), Hengeveld (in preparation) argues for a complete re-organization of the descriptive machinery of FG, so that it is able to parse and generate not only clauses but also units larger and smaller than the clause, as well as connectors and other cohesive devices. The justification for such a move is that the theory will attain a higher level of psychological adequacy if speech production is described as running from communicative intention to linguistic articulation (Levelt, 1989 in Hengeveld, in preparation). Consequently, *Functional Discourse Grammar* (hereafter FDG) is no longer syntagmatic (or *bottom-up*, proceeding from smaller to larger units) but paradigmatic (or *top-down*, proceeding from larger to smaller units), in such a way that *decisions at higer levels and layers of analysis determine and restrict the possibilities at lower levels and layers of analysis* (Hengeveld, in preparation). Three levels or *modules* are distinguished in FDG: the interpersonal level, the representational level and the expression level; layering applies independenlty at each level. It should be borne in mind that in Dik (1997b) discoursive aspects result from a final stage of the derivation which applies at the outermost layer; as in the other layers, the levels that are recognized are the representational and the interpersonal level. Although Hengeveld (in preparation) admits the necessity of combining a modular approach with a layered one, the theory of FDG entails a modular—rather than layered—view of discourse production and comprehension. As I see it, the emphasis in Hengeveld's programmatic paper is on the interactions between the modules rather than on the variables and operators that define layers in the 1997 model.

Preliminary though it is, the proposal of FG as a grammar of discourse constitutes a promising research venue, not only because it goes beyond the boundaries of the clause but also because the conception of discourse held in Dik (1997b) and Hengeveld (in preparation) contributes to the simplicity and generalization power of the theory: descriptive procedures used for term phrases and clauses (layering, embedding, syntagmatic correspondences) are also applied to discourse analysis. And, even more importantly, the theory of grammar finds its way to a theory of pragmatics through the anchoring of discourse production in the more general setting of pragmatic information exchange.[12]

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[12] See Dik (1996) on recent developments and applications of FG.

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