The representation of nominal predicates in the fund
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The representation of nominal predicates in the fund:
a new proposal

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1. Reference and Predication

Functional Grammar (henceforth FG) is centrally concerned with the notions of reference and predication and their interdependence. This reflects the insight, which originated with Searle (1969), that the competent language-user seeks to achieve his communicative goals by performing complex illocutionary acts which include, *inter alia*, propositional acts, the latter being characterized by an interplay of acts of reference and acts of predication. This interplay of reference and predication in FG is particularly clearly manifested in the prototypical use of the nominal predicate as the head of a term: such a predicate not only predicates but also contributes significantly to the role of the term as a referring expression. The purpose of this paper is to consider possible consequences of this aspect of FG for the representation of nominal predicates in the lexicon.

Dik (1978) presents reference as taking place 'within a pattern of verbal interaction', i.e. as involving minimally a Speaker and an Addressee. The Speaker performs an act of reference by uttering a term, 'any expression which can be used to refer to an entity or set of entities in some world'. Given the -- ultimately unbridgeable -- subjectivity of interlocutors, formalized in FG as differences in their 'pragmatic information', the act of reference can be nothing more than an attempt; at best, the Speaker 'intends to guide his Addressee toward some entity' [my emphases, JLM] (all quotations from Dik 1978: 55).

The act is assessed, by the Speaker in his self-monitoring and by the Addressee in his attempt at interpretation, in terms of its (apparent) success. As Lyons has pointed out (1977: 181–182), 'successful reference does not depend upon the truth of the description contained in the referring expression. The speaker (and perhaps also the hearer) may mistakenly believe that some person is the postman, when he is in fact the professor of linguistics, and incorrectly, though successfully [my emphases, JLM] refer to him by means of the expression "the postman". It is not even necessary that the speaker should believe that the description is true of the referent. He may be ironically employing a description he knows to be false or diplomatically accepting as correct a false description which his hearer believes to be true of the referent; and there are yet other possibilities.'

This pragmatic approach to reference, oriented towards
success rather than correctness, is also reflected in the application of Grice's (1975: 45) Maxim of Quantity ('make your contribution as informative as is required for the current purposes of the exchange; do not make your contribution more informative than is required') to the construction of terms. In Dik's proposals for term-formation, the information presented is offered in the form of recursively stacked 'restrictors', each of which is an open predication, i.e. a predication with at least one free-variable argument. The purpose of restrictors is successively to 'narrow down the class of potential referents of the term used'; in keeping with the Gricean maxim, 'the Speaker will give neither more nor less descriptive information about the intended referents than is necessary for the Addressee to arrive at the required identification ... The amount of descriptive information to be given in a term is thus dependent upon the Speaker's estimate of the Addressee's antecedent capacities for identifying the intended referent. If the intended referent is some entity about which the Speaker and Addressee have been talking for some time, a minimum of descriptive information will be sufficient. If, on the other hand, the intended referent is quite new within the particular ongoing discourse, the Speaker will have to provide more descriptive information in order for the Addressee to be able to arrive at the required identification' (all quotes from Dik 1978: 55-56). This descriptive information will be offered in hierarchically organized acts of predication, i.e. the utterance of nouns, adjectives, relative clauses, etc. The utterance of a term may consequently consist in either a simple act of reference or in a combination of an act of reference and one or more acts of predication.

Whereas reference has from the inception of FG been treated as a matter of pragmatics, predication, in practice if not in principle, has been regarded as falling more under semantics. Yet, at the very least, the functionalist orientation of FG suggests the possibility of conceiving of predication, too, as 'pragmatic, cooperative action'. Given the inevitable interplay of reference and predication within the term, but also at predication level, where terms appear in slots generated by predication, such a pragmaticization of predicating can only lead to greater conceptual unity. And work by Steen (1985) strongly suggests that, if FG is adequately to account for the ubiquitous phenomena of metaphor and metonymy, this will require that both referring and predicating be taken as 'action within the pattern
of verbal interaction'.

An act of predication will, just like an act of reference, here be regarded as an attempt on the part of the Speaker: he is attempting to evoke a state of affairs with the linguistic means at his disposal. That this is no more than an attempt is particularly clear in the fumbling communications of language-learners or in the verbal behaviour of children: for lack of knowledge of the linguistic conventions, the learners/children inventively fit their provisional competence as best as they can to what they need to convey. Whether the many resulting 'deviant' utterances are classified as 'errors' or not is dependent upon the analyst's purposes, but they are all manifestations of the learners'/children's creativity in the face of a limited command of language that does not do justice to the multitude of new states of affairs that arise and need to be talked about. The situation of the adult native-speaker does not differ in any essential aspect. It is surely illusory to suppose that the communicative competence of the mature human being is adequate to every situation he encounters. Rather, the use of language involves a creative quest for the words which provide the receiver of the message with the best clues, in the given setting, to the meaning the Speaker wishes to communicate. It is in this light that I wish to suggest that FG should adopt a unified approach to reference and predication, one in which attention is fixed on the degree of success, rather than correctness, that is achieved in the interplay of referential and predicational acts.

It may be objected that the proposal to model success rather than correctness in linguistic interaction is excessively inspired by the standpoint of the speaker, who has, it might be felt, a greater stake in success (getting his message 'across') than the hearer, who has more to gain from correctness. This objection fails, in my view, to grasp the essential cooperative nature of verbal interaction, in which the hearer is above all concerned to discern the speaker's intentions, as interpreted in the light of his own interests, and is prepared to tolerate incorrect or insufficient reference and predication as a mutually accepted and inevitable 'cost' of speedy and efficient oral interaction. Should it become apparent that communication is collapsing, or threatening to do so, conversational interaction allows various forms of 'repair' sequence whereby the attempt can be made to improve understanding: unimpaired transmission of information can however never be guaranteed.
2. Nominal and verbal predicates

It is in the fund that the language-user finds the primary tools with which to carry out acts of predication. These tools take the form of predicate frames, either basic (= listed in the lexicon) or derived. Predicate frames are held to designate sets of States of Affairs (SoA's), i.e. generalized mental representations of perceived real-world constellations (cf. Dik 1986). In communicating, however, the language-user will very often not be interested in evoking a potentially infinite number of SoA's all covered by the same predicate frame (e.g. all the SoA's in any possible world designatable as acts of giving), but rather in describing one particular SoA or a restricted number of such SoA's. This is achieved by such means as introducing predicate operators of Tense, spelling out Locative and Temporal implied satellites and above all by performing acts of reference to specific spatiotemporally locatable entities. This is a further aspect of the interplay between an act of predication (here, the choice of predicate frame) and one or more acts of reference. [2]

The fund provides three major categories of predicate frame: nominal, verbal and adjectival. For the purposes of this paper we may concentrate on the largest categories, the nominal and the verbal. How a particular predicate is categorized is, at the very least, of great importance for its syntactic behaviour. Given increasing acceptance of the notion that nouns and verbs have prototypically distinct functions in discourse (cf. especially Hopper and Thompson 1984), we may also expect that the corresponding predicate frames will differ in their semantic properties in a way that may be brought into correspondence with their prototypical discourse function. For verbal predicate frames, this poses no serious problem since, as was stated above, predicate frames in general are held to designate SoA's, and this is clearly true of verbal predicate frames. This lines up in an obvious fashion with the prototypical use of verbs as being, in Hopper & Thompson's words (1984: 708), to 'assert the occurrence of an event of the discourse'. As for nominal predicate frames, the established FG position is that they also designate SoA's. These SoA's are typically States involving the assignment of a property to a variable; with the smaller class of relational nominal predicates, any other kind of SoA (e.g. Action, Position or Process) may also be designated. This, I wish to point out,
is less easily squared with the prototypical discourse function of nouns, namely to 'introduce participants and "props"' (Hopper & Thompson 1984: 710). Given the orientation of FG towards the use of language in discourse, it is worth considering an alternative approach that brings 'the semantics closer to the pragmatics'.

It may be deduced from the prototypical function of verbs, 'to assert the occurrence of an event of the discourse', and the fact that events usually involve a number of participants and props, that verbal predicate frames will normally be characterized by non-null valency, i.e. that they will introduce a number of argument slots. In this way, the act of evoking a verbal predicate frame contributes to the build-up of the discourse not only intrinsically but also by allowing potential interaction with acts of reference. And indeed, the verbal predicate frames of English, for example, show a range of valency from 0 to 3: rain, hail (0); emerge, collapse (1); hit, see (2); give, teach (3). Only the relatively marginal aivalent predicates fail to provide any slot for an act of reference.

Similarly, given the prototypical function of nouns as names for participants and props, it would be natural to suppose that such frames are normally aivalent, and this is a position I indeed shall defend. As might be predicted, the standard FG view of nominal predicates as property-assigning entails that they are normally monovalent, with the one argument representing the entity to which the property is assigned. In the following section, I shall submit the standard view of nominal predicates to a critical examination.

3. Nominal predicates: the standard view

As was intimated above, nominal predicates are said to be either relational or non-relational. Relational nominal predicates are those which designate a relation between two, and possibly among three participants. Non-relational nominal predicates, on the other hand, serve to designate properties and are taken to represent the unmarked case for nominal predicates. They will consequently be dealt with first.

Non-relational predicates are represented in the fund as monovalent:

(1) \( \Phi_N (X_1) \)
Thus **woman** is shown as follows:

\[(2) \quad \text{woman}_n (x_1) \phi\]

To be interpreted as \((x_1)\) has the property 'woman(hood)' or, equivalently, \((x_1)\) is a member of the class of women. The advantages of this representation are fourfold.

Firstly, the presence of the \(\phi\)-argument makes it clear that the SoA designated belongs to the class of States, i.e. that it is non-dynamic and non-controlled.

Secondly, the presence of such predicate frames in the fund makes it possible, in certain languages, directly to form major property-assigning predications through the application of the appropriate predicate-operators. This is very attractive for those languages in which 'She is a woman' is expressed as (Quasi-English) **She woman** or, with copula insertion, as **She is woman**.

Thirdly, the presence of an argument slot makes it possible to express selection restrictions on the entities to which the property can be assigned, as in (3a), in which the restrictions are shown as predicates, or as in (3b), in which they are shown as metalinguistic items (both representational possibilities are encountered in the FG literature):

\[(3a) \quad \text{woman}_n (x_1: \text{animate}(x_1): \text{human}(x_1): \text{adult}(x_1): \text{female}(x_1))\]

\[(3b) \quad \text{woman}_n <\text{anim}, \text{hum}, \text{adult}, \text{female}> (x_1) \phi\]

Fourthly, integration of a predication formed from the predicate frame into term structure, a typical destination for nominal predications, is unproblematic: the material to the right of the colon in the term schema (4) is merely replaced by the open nominal predication (2) to give (5):

\[(4) \quad (\forall x_1: \phi(x_1))\]

\[(5) \quad (\text{dlx}_1: \text{woman}_n (x_1) \phi) \quad \text{'the woman'}\]

The justification for the representation of relational nominal predicates as polyvalent (i.e. two- or three-place) runs
largely parallel to that given for non-relational predicates. A distinction has to be made, however, between \( \alpha \)-relational and \( \beta \)-relational predicates. \( \alpha \)-relational predicates designate non-dynamic, non-controlled SoA's (States), are necessarily two-place, one of the arguments having the semantic function Zero and the other the function Ref(ERENCE), and designate a relationship between first-order entities; \( \beta \)-relational predicates may designate any type of SoA, may be either two- or three-place, with a wide range of semantic functions for the arguments, and designate a second-order entity that is an (abstract) relationship between/among entities (or a third-order entity that is the intensional correlate of the corresponding second-order entity -- for details, see Lyons 1977: 445-446). Consider the following examples:

(6a) \( \alpha \)-relational: \( \text{father}_N (x_1)_\delta (x_2)_\kappa \)

(6b) \( \beta \)-relational: \( \text{destruction}_N (x_1)_\alpha (x_2)_\theta \)

Again, the advantages of these representations are fourfold. Firstly, the parallelism between relational nominal predicates and lexically cognate verbal predicates is reflected by the formalism. Consider, for example, the similarity between the lexical representations of the \( \alpha \)-relational noun \textit{father} and the verb \textit{father} and of the \( \beta \)-relational noun \textit{destruction} and the verb \textit{destroy}:

(7a) \( \text{father}_N (x_1)_\delta (x_2)_\kappa \)

(7b) \( \text{father}_V (x_1)_\alpha (x_2)_\theta \)

(8a) \( \text{destruction}_N (x_1)_\alpha (x_2)_\theta \)

(8b) \( \text{destroy}_V (x_1)_\alpha (x_2)_\theta \)

Secondly, at least as far as \( \alpha \)-relational predicates are concerned, there is the possibility of directly forming major predications by inserting terms into both argument positions. This is attractive for languages with such constructions as \textit{He father of two children}, or, with copula insertion, \textit{He is father of two children}.

Thirdly, for both \( \alpha \)- and \( \beta \)-relational predicates, there is
the possibility of stipulating selection restrictions on all the arguments of the predicate, e.g.:

(9) \( \text{father}_n(x_1): \text{animate}(x_1): \text{human}(x_1): \text{adult}(x_1): \text{male}(x_1) \quad (x_2: \text{animate}(x_2)) \subseteq \)

(10) \( \text{destruction}_n(x_1: \text{animate}(x_1)) \subseteq (x_2: \text{concrete}(x_2)) \subseteq \)

Fourthly, for \( \alpha \)-relational predicates, integration into term structure is unproblematic: provided that the predication is 'open', i.e. has one of its arguments left variable (in casu that with Zero-function), it can straightforwardly replace the material to the right of the colon:

(11) \( (\text{dl}_x_1: \text{father}_n(x_1)) \subseteq (\text{d}_2x_2: \text{child}_n(x_2)) \subseteq \text{the father of the two children} \)

With \( \beta \)-relational predications, the situation is, as we shall see, more complex, since none of the arguments of the nominal predicate can be used to refer to the referent of the entire term.

4. Term formation: the standard view

Before the special status of \( \beta \)-relational predicates can be demonstrated, it will be necessary to devote brief consideration to the 'orthodox' FG approach to term formation. As is well known, the general schema for a term is as follows:

(12) \( (\text{ax}_1: \Phi(x_1)) \)

The material to the right of the colon is to be read as 'an open predication in \( x_1 \)', which is understood as a predication that has (at least) one of its argument positions left variable, namely \( (x_1) \); this argument is necessarily coindexed with the variable to the left of the colon. The predicate slot symbolized by \( \Phi \) may be filled by (a) a lexical predicate, drawn from the lexicon; (b) a derived predicate, resulting from predicate formation; or (c) a predicational predicate, formed by rule from a predication. In Mackenzie (1986: 3), I pointed out that for this third class a rule of Predication-Predicate Formation is tacitly assumed; it is
invoked whenever a predication serves as an argument or satellite in a higher predication. This rule is formally parallel to Term-Predicate Formation as discussed by Dik (1980: 105) and Hannay (1985: 50), and has the following effect: given a predication \( P \), Predication-Predicate Formation will create, productively, a derived predication \( P' \), the predicate of which is derived from predication \( P \):

\[
\text{(13) PREDICATION-PREDICATE FORMATION}
\]

Input: \( P \)
Output: \( \{P\} (x_1) \alpha ( = P') \)
Meaning: The predication \( P \) obtains

For all types of terms, term formation merely involves substituting for the material to the right of the colon in (12) an open predication satifying the requirement set out above. Where that predication has a non-relational predicate, the entry in the fund will provide a variable, as in (1); this variable will then be treated as coreferential with the variable to the left of the colon. Where the predication has an \( \alpha \)-relational predicate, the entry in the fund will contain two or more variables, as in (6a): the argument with the semantic function Zero will be chosen to be coreferential with the variable to the left of the colon; the other argument(s) may or may not be left variable. Where the predication has a \( \beta \)-relational predicate, Predication-Predicate Formation must apply: the variable introduced by the rule, i.e. \( (x_1) \) in (13), will be coreferential with the variable to the left of the colon.

The approach to term formation sketched in the previous paragraphs involves ascribing to, for example, the term phrase a bachelor a representation that may be read, in quasi-English, as 'one indefinite entity such that the property "bachelor" is predicated of that entity', or, more informally, 'someone who is a bachelor'. This approach owes much to the generative-semantic treatment of NP's, and in particular to Bach, who, it will be recalled, proposed that 'all nouns ... are derived in one way, namely from structures of roughly the form "Det + one + S" (1968: 92); in other words, he suggested that the same underlying structure should be accorded to (14a) and (14b):

\[
\text{(14a) I met someone who is a bachelor.}
\]
The underlying structure, Bach (1968: 121) adds, would look 'in some ways very much like the logical systems familiar from the work of modern logicians like Rudolf Carnap, Hans Reichenbach and others', and indeed he characterizes his proposals as involving 'a system of variables and quantifiers much like those of lower functional calculus' (1968: 91).

It is my contention that the 'orthodox' analysis of term phrases in FG is notationally equivalent to Bach's proposals and, as such, represents an undesirable importation of logical-semantic formalism into what is, as we saw above in the discussion of reference and predication, properly regarded as a pragmatic domain. The major drawback of the Bach-like representation of terms is that the notion of the production of a term as an attempt at a combined act of reference and predication is not captured. A more pragmatically oriented approach will analyse the term in (14b) not as 'one indefinite entity such that the property "bachelor" is predicated of that entity' but rather as 'one indefinite entity such that I, the Speaker, tender the name "bachelor"'. For all the reasons mentioned in Section 1 above, 'bachelor' may not be the ideal description of the individual referred to, but in the context of utterance it serves its purpose: as long as the Speaker, in his self-monitoring, or the hearer, in his effort to make sense of what is being said, does not object to the predicate tendered, the description is likely to stand, if that is perceived as contributing to the ongoing communication.

5. Term formation: a new proposal

In this light, I should wish to present a representation of the term which differs only marginally from the 'orthodox' analysis yet which, I believe, does justice to the notion of referring and predicking as attempts at communication. I assume that a term has, maximally, a twofold function in discourse. Firstly, it is by means of a term that a Speaker refers to an entity (of whatever order). The intended referent is represented by the x-variable to the left of the colon, the nature of the reference being narrowed down by term operators, if present, and indexing. In the familiar manner, term operators provide information about such matters as the assumed identifiability, specificity, proxi-
imity and cardinality of the referent(s). The index indicates the position of the intended referent in the store of pragmatic information that underpins the discourse: it can be regarded as the 'address' of a location in the memory of the Speaker. The Speaker will normally assume that the Addressee will have an equivalent address in his memory, or will be prepared to add one. It follows that many terms, especially those with purely anaphoric or deictic function, e.g. he, that, two, will be represented without further ado as term operator + indexed variable. Anaphoric he, for example, can be represented merely as \((x_n)\) where \(n\) is the address of the intended referent. There is no need for an anaphoric operator \(A\) that is encountered here and there in the FG literature since the anaphoricity will follow from the presence of \(n\) as an address in the memory, nor, as far as I can see, is there any need for specifications of definiteness or number, since these are indicated on or derivable from the first mention of \((x_n)\); the masculine singular form he, rather than she, it or they will be used in accordance with the Speaker's judgment that that form represents the most effective clue to the intended referent; and the case form he rather than him will follow from the functional specification of the term.

The proposal is thus that there should be no explicit linking of the two functions of a term by means of co-indexed variables. This means, for example, that the term 'the woman' is to be represented as follows:

\[(15)\]  
\((dlx_1: \text{woman}_n)\)

\((15)\) differs from \((5)\) in lacking any co-indexed variable to the right of the colon. Similarly, 'the father of the two children', given an orthodox representation as \((11)\) above, now appears as \((16)\):

\[(16)\]  
\((dlx_1: \text{father}_n (dlx_2: \text{child}_n)_R) \text{ 'the father of the two children'}\)

Terms that in orthodox FG require Predication-Predicate Formation can now be represented straightforwardly: 'Caesar's destruction of the city', may be shown as \((17)\).

\[(17)\]  
\((dlx_m: \text{destruction}_n (dlx_1: \text{Caesar}_n)_{\text{A}} (dlx_2: \text{city}_n)_{\text{A}})\)
It must count as an advantage of my proposal that all terms are now formed in the same way, without any need to invoke a special predicate formation rule for one class.

6. Nominal predicates: a new proposal

Since there is no variable to the right of the colon in the proposed term representations, the opportunity arises to simplify the entries for nominal predicates in the fund. Accordingly, I will grasp this opportunity and show 'woman', 'father' and 'destruction' as follows [3]:

(18) \[ \text{woman}_n \]

(19) \[ \text{father}_n (x_1)_{\text{FR}} \]

(20) \[ \text{destruction}_n (x_1)_{\text{AG}} (x_2)_{\text{OG}} \]

Each of these entries, with -- where relevant -- the argument slots either left variable or specified by other predicates, can be filled into a term, to the right of the colon, whenever the Speaker judges that it is appropriate to do so. The general schema for a term may now be shown as:

(21) \[ (\forall x_1: \text{FUND ENTRY}) \]

This schema does not exclude the possibility that the fund entry may contain a variable that is co-indexed with the variable to the left of the colon. Speakers are not denied the possibility of asserting an identity of this kind, and indeed it is this possibility that is expressed in English as a relative clause. Consider the following representation of 'the boy who is studying in the library':

(22) \[ (\forall x_1: \text{boy}_n: \text{PresProg study}_n (x_1)_{\text{AG}} (dly)_j: \text{library}_{\text{LOC}}) \]

To summarize, the main points of my proposal are as follows:

1. -- to exclude from the formalism of FG the necessary co-indexing of the obligatory referring part of the term with the optional predicking part to the right of the
colon;

2. -- to banish from the fund entry for nominal predicates the argument variable proposed in earlier work, and thereby to present non-relational nominal predicates as explicitly avalent;

3. -- to do away with the rule of Predication-Predicate Formation, which turns out to be an artefact of the orthodox formalism.

7. Possible objections

It remains to be considered whether ridding FG of (a) co-indexing within the term, (b) the argument variable in the lexicon, and (c) Predication-Predicate Formation does not lead to a decrease in adequacy. Let us consider various possible objections to these proposals that may be derived from the justification for the orthodox approach to term formation (cf. section 3 above).

Firstly, it may be objected that by dropping the Zero-function argument in the fund for non-relational and δ-relational nominal predicates, we fail to make clear that such predicates designate a State. There is, however, a precedent in the representation of avalent verbal predicates (e.g. freeze in It's going to freeze tonight), which have no argument, but clearly can be assigned to a class of States of Affairs, e.g. on the basis of the tests evolved by Vester (1983) and De Groot (1983). In any case, the application of the SoA typology to first-order entities is obscure: either they are all vacuously States, in which case the objection fails, or cannot be classified in terms of the typology, in which case it fails again.

Secondly, it may be felt that the parallel between nominal and verbal relational predicates, exemplified above with father, will be lost if father is shown as bivalent and father as monovalent. This may not be so serious, since few nominal relational predicates have a verbal counterpart: mother exists as a verb, but in a different semantic relationship to its nominal counterpart than father; son, daughter, brother, and sister are found only as nouns, and so also with most relational nominal predicates.

Thirdly, the possibility of forming a nominal predication
directly from a fund entry by means of copula insertion is not available in my proposal. The orthodox analysis of (23) is as in (24):

(23) This man is Peter

(24) FUND ENTRY: Peterₙ (x₁)

Pres Peterₙ (d+plx₁: manₙ (x₁)ₜₚ)

The predication is derived by substituting a specified term for the variable in the fund entry. This approach suffers, however, from treating the equating of two entities as though it were a matter of one being in the valency of the other. The putative semantic structure, which shows an argument dependent upon a predicate (i.e. in its valency), is at variance with the notion of an equation: a = b is equivalent to b = a, the only difference lying in a pragmatic motivation, namely the decision to take either a or b as the starting-point (Topic) for the presentation of the equation. In the context of my proposal to treat nouns like Peter and man as valent, there is an alternative analysis in which no appeal is made to valency but rather, and this would appear more appropriate, to the assignment of pragmatic functions. In the following representation of (23), the terms are unordered and have no semantic function (i.e. dependence on a predicate): this is the basis for their being interpreted as equated with each other. The expression of (25) as (23), rather than as Peter is this man, is derived purely from the assignment of Top to this man and Foc to Peter:

(25) Pres (d1x₁: Peter)┬ᶜ (d+plx₁: man)┬ₜₚ

It might be further objected, however, that my proposal will run into difficulties with the distinction in Dutch between (26a) and (26b), which can be captured in the orthodox approach by deriving (26a) directly from the lexicon, whereas (26b) requires term-predicate formation:

(26a) Deze man is schilder (This man's job is to be a painter)
(26b) Deze man is een schilder (This man is a painter)

The orthodox analysis of (26a) runs parallel to that of (23):
(27) FUND ENTRY: \textit{schilder}_N(x_i)

\text{Pres schilder}_N(d+plx_i: \textit{man}_N(x_i)\varnothing)

As we saw in section 3 above, the valency of a nominal predicate is seen as involving a relation of class-membership, so that (27), as a sentence expressing a relation of class-membership (This man belongs to the class of painters), appears to be a very attractive representation of (26a). It should be noted, however, that the construction in question is limited as to the languages it is found in, and, even within Dutch, is restricted to membership of particular (especially professional) classes. Whether or not it is legitimate to regard class-membership as a matter of valency is undecidable as long as there is no agreed definition of the latter term; what is incumbent upon me is to put forward an alternative representation of (26a) that is in keeping with my proposals. What I suggest is (28a), in which the zero-operator and lack of index on the variable left of the colon indicate formal invariance and non-referentiality respectively; (26b), with its requirement of number agreement with the referential (indexed) argument, may be shown as (28b) [4]:

(28a) \text{Pres (x: schilder)_{\text{FOC}} (d+plx}_j: \text{man}_{\text{TOP}}

(28b) \text{Pres (lx: schilder)_{\text{FOC}} (d+plx}_j: \text{man}_{\text{TOP}}

Fourthly, the objection may be anticipated that the opportunity of expressing selection restrictions in the fund is not available in my proposal. Indeed, I cannot show in the fund that \textit{prince} 'requires' a male 'argument' and \textit{princess} a female one, if selection restrictions are to be shown as predicated of that argument, as shown in (3a) above. If, however, selection restrictions are included between angled brackets, as has been the case in much recent FG work, and is exemplified in (3b) above, the problem does not arise, \textit{woman} appearing as (29):

(29) \text{woman}_N <\text{anim, hum, adult, female}>

More generally, however, the desirability of selection restrictions in a pragmatically oriented grammar is highly disputable; the case against selection restrictions in an FG has been elo-

8. The advantages of the new proposals

I hope to have shown that my alternative approach to the representation of nominal predicates in the fund and the resultant ideas for the representation of term phrases is no less adequate than existing proposals. Indeed, by banning the co-indexation requirement, by streamlining the lexical entries for nominal predicates and by doing away with the requirement that $\beta$-relational predicates be introduced by Predication-Predicate Formation, I have achieved an increase in adequacy through a simplification of the representational apparatus and a further rapprochement of grammatical form and pragmatic function. The approach I propose presents the speaker not so much as a generator of well-formed predications but rather as an actor, seeking a balance between referential and predicational acts, proposing terms and tendering predicates in the hope that he will succeed in communicating. It is above all in this respect that I consider my apparently rather marginal proposal to have far-reaching implications for how we understand the role of Functional Grammar in relation to pragmatics.
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Notes

[1] The exceptions concern the utterance of 'gnomic' propositions.

[2] In support of the notion of the choice of a predicate frame as an act, we may note that Bolkestein and Risselada (1985) have insisted on the pragmatic determination of that choice.

[3] It is interesting to note that in Weigand's (1986) Koto, a formal language based on FG predications, nominal predicates and terms are represented in a manner that is notationally equivalent to what is being proposed here. Weigand's motivation is representational simplicity: '[the] variable can be skipped without ambiguity' (1986:2). Weigand however adheres to the orthodox FG position that 'nouns ... are treated as one-place open predicates' (1986:2).

[4] Cf. the plural forms of (26a) and (26b) respectively: Deze mannen zijn schilder and Deze mannen zijn schilders.
References


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