Modification as a propositional act (draft 2014)
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1. Introduction[1]

Since categorization is one of the most fundamental traits of human cognition (cf. Harnad 2005: 'to cognize is to categorize'), categories should play a central role in grammatical theory, with different theories possibly favoring different kinds of categories.[2] As may be expected, formal categories such as Verb Phrase, Noun Phrase / Determiner Phrase and Prepositional Phrase take pride of place in formal, syntactocentric approaches to grammar, but interestingly functional categories do not always play a conspicuous role in functional theories of grammar.[3] For example, the term 'functional category' (as defined below) is not employed in *Functional Discourse Grammar* (henceforth FDG). The only categories that are explicitly mentioned in FDG are semantic categories (Hengeveld and Mackenzie 2008: 130-138), which, however, are not so much concerned with meaning as coded in linguistic forms or constructions ('linguistic semantics'), but rather with ontological categories to the extent that they are reflected in grammar ('philosophical semantics'; cf. Lyons 1995, see

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[1] Abbreviations used in this chapter: 1/2/3 = 1/2/3 person, ADJ = adjective, ART = article, C = common gender, DECL = declarative, DEF = definite, FDG = Functional Discourse Grammar, Gen = genitive, N = noun, NC1 = noun class 1, NC7 = noun class 7, NP = Noun Phrase, PL = plural, PP1 = class 1 pronominal prefix, PRES = present tense, RED = reduplication, REL = relative clause, REL.PX = relativizing prefix, S = Subject, SG = singular, SoM = Subact of Modification, TAM = Tense/Aspect/Mood; in a gloss the equals sign (i.e. =) indicates a clitic boundary.

[2] Cf. Butler (2008: 1): "[…] to achieve true cognitive adequacy, we must go well beyond the grammar itself to include the processes of conceptualisation, categorisation and construal […]."

[3] Formal theories of grammar also employ what are called 'functional categories', but this is merely another label for grammatical (i.e. non lexical) elements like affixes and particles (Muysken 2008).

also Jackendoff 1983: 51).

Functional categories are not concerned with 'form' or (coded) 'meaning', but rather with the actual job ('function') of a linguistic form or construction in the process of verbal communication. The functional approach to categorization can be said to have its roots in the Prague School of Linguistics in the first half of the 20th century, whose members were "seeking to understand what jobs the various components were doing […]" (Sampson 1980: 104). This paper is concerned with the various jobs of modifiers in the noun phrase (NP), arguing that each instance of MODIFICATION should be treated as a propositional act (cf. Croft 1990), more specifically as a SUBACT OF MODIFICATION within a DISCOURSE ACT at the Interpersonal Level of representation in FDG, in addition to subacts of reference and subacts of ascription (Hengeveld and Mackenzie 2008: 107-124).[4]

So far at least five functional modifier categories (representing five different kinds of Subacts of Modification) have been proposed, which are relevant for the NP as well as the clause (Rijkhoff 2008a, 2009, 2010) and which are organized in layers around the head constituent, reflecting differences in semantic scope (Fig. 1).[5] Thus, classifying modifiers, such as 'solar' in 'solar energy' or 'departmental' in 'a departmental meeting', which are accommodated in the innermost 'Kind' layer, only have the head constituent ('energy', 'meeting') in their scope, whereas discourse-referential modifiers like definite and indefinite articles, which have the widest scope, are represented in the outermost layer of modification. Notice that there is no slot for grammatical modifiers or 'operators' in the quality layer, the reason being that qualifying modifiers typically express gradable notions

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[4] As argued in e.g. Croft (1990, 2000), this three-way division of propositional acts is reflected in the part-of-speech system of languages with dedicated lexical word classes for each of these propositional acts: verbs (predication/ascription), nouns (reference), adjectives/adverbs (modification).

[5] Van de Velde (2007, 2012) has argued that a complete representation of NP-structure should also allow for illocutionary and modal distinctions.

like *sad* ('rather sad'), or *funny* ('extremely funny') and that operators (function words, particles, affixes etc. used to express categories like Definiteness, Number or Tense) are, by their nature, non-gradable (Rijkhoff 2008a: 85-86).
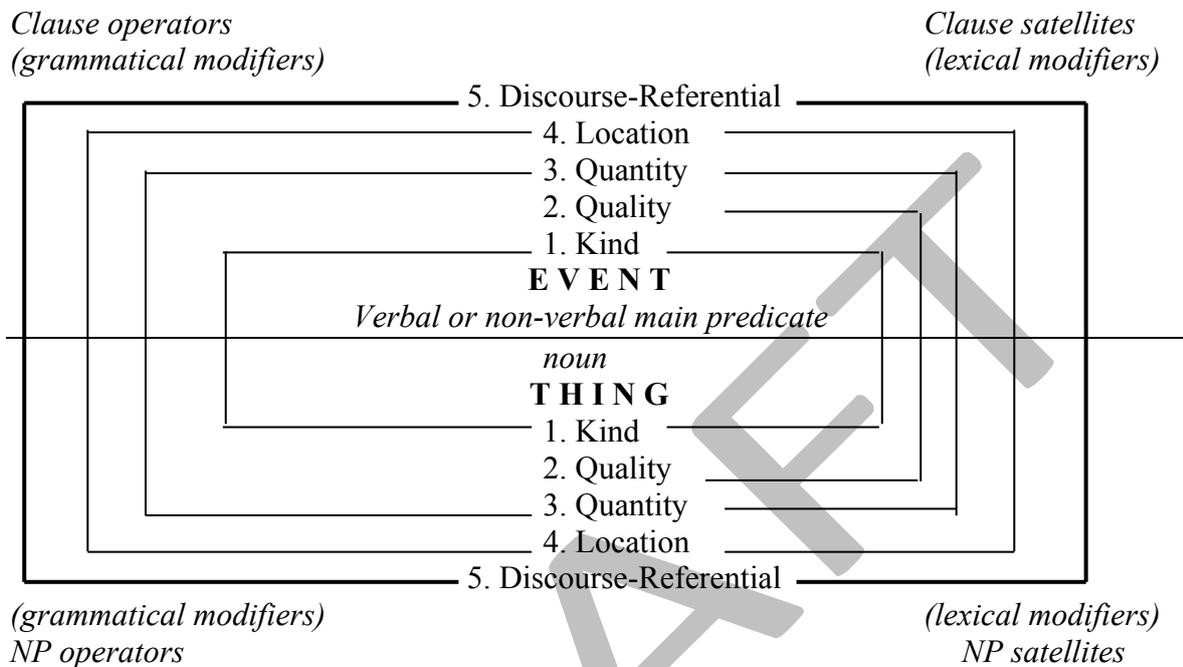
Clause operators   *Clause satellites*
(grammatical modifiers)   *(lexical modifiers)*

5. Discourse-Referential
4. Location
3. Quantity
2. Quality
1. Kind
E V E N T
Verbal or non-verbal main predicate

noun
T H I N G
1. Kind
2. Quality
3. Quantity
4. Location
5. Discourse-Referential

(grammatical modifiers)   *(lexical modifiers)*
NP operators   *NP satellites*

Figure 1. Functional modifier categories: diagrammatic representation of parallels between the layered organization of NPs and clauses (Rijkhoff 2008a, b).[6]

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[6] The five-layered NP model can be formally represented as in (i) below, where each grammatical modifier (operator ω) and lexical modifier (satellite τ) takes a certain layer (L) as its argument. In this slightly simplified, linear representation, the Interpersonal and the Representational level do not clearly co-exist as separate entities (as in current FDG) and the f-variable has been omitted (García Velasco and Rijkhoff 2008: 26):

(i) NP_i: $[\ _{L5}[\ \omega_5 \ _{L4}[\ \omega_4 \ _{L3}[\ \omega_3 \ _{L2}[\ \varnothing \ _{L1}[\ \omega_1 \ _{L0}[\ NOUN(x_i) \ ]_{L0} \ \tau_1(L_0) \ ]_{L1} \ \tau_2(L_1) \ ]_{L2} \ \tau_3(L_2) \ ]_{L3} \ \tau_4(L_3) \ ]_{L4} \ \tau_5(L_4)]_{L5} \ ]_{NPi}$

x   referent variable, symbolizing the referent of the NP;

ω term (NP) operator: classifying operator ω_1, quantifying operator ω_3, localizing operator ω_4, discourse-referential operator ω_5;

This paper argues that each modifier can be regarded as the realization of a communicative strategy that is available to the speaker in the act of (further) specifying properties of spatial or temporal entities, but also higher order entities, as in the case of NPs headed by nouns like 'empathy' or 'linguistics', which refer to more abstract entities. Unlike referring or ascribing/predicating, however, modification is not regarded as a distinct kind of action of the speaker in the process of verbal communication in FDG. Since the main function of modifiers is not to refer or to ascribe (predicate), their discourse function is basically unaccounted for in FDG (section 2). Moreover, since not all the linguistic material in a Discourse Act can be further analyzed in terms of subacts of reference or ascription, the Discourse Act contains many elements (e.g. expressions of grammatical categories like Tense, Aspect or Mood) that seem to have no obvious function at all in the interpersonal process of verbal communication.[7] This paper argues that a

τ term (NP) satellite: classifying satellite τ_1, qualifying satellite τ_2, quantifying satellite τ_3, localizing satellite τ_4, discourse-referential satellite τ_5.

Formally speaking, operator ω and satellite τ of layer L_N are PREDICATES take the same argument, i.e. information specified in layer L_{N-1} (e.g. the argument of operator ω_5 and satellite τ_5 is everything contained in layer L_4). The indexed variable 'NP_i' allows for reference to the noun phrase (García and Rijkhoff 2008: 20). Notice that the model in Fig. 1 can also account for languages with 'nominal tense' (Nordlinger and Sadler 2004), because the functional modifier categories are characterized in general, NP/clause neutral terms. For example, the layered NP/clause model does not specify whether localizing modifiers in the NP concerns 'location' in the spatial dimension (e.g. attributive demonstratives) or in the temporal dimension (tense markers, time adverbs/adverbials). The same holds for localizing modifiers at the level of the clause, which can specify the temporal or spatial location of an event (see e.g. the verbal category 'absentive', which is basically a spatial deictic construction; cf. de Groot 2000). For a diachronic account of the layered approach to modification, see Van de Velde (2009).

[7] Cf. Halliday (2004: 60) on the general principle of exhaustiveness: "The general principle of exhaustiveness means that everything in the wording has some function at every rank (cf. Halliday 1961, 1966)."

structural-functional theory of grammar such as FDG should specify the main communicative function of **all** the elements in an utterance (see note 7 on Halliday's 'principle of exhaustiveness'). In FDG this can be achieved, if MODIFICATION is regarded as a distinct, major subact at the Interpersonal Level, in addition to the already existing subacts of REFERENCE and ASCRIPTION.

2. The actional status of modification

The following three basic functions are relevant for most if not all languages in the process of verbal communication:

1. to predicate a property of an entity or a relation between entities (typically associated with verbs);
2. to refer to persons, objects and other entities (typically associated with nouns or rather NPs);
3. to modify ('enrich', 'supplement') core linguistic material used in the act of predicating or referring (typically associated with adjectives, adverbs and other attributive, more or less optional linguistic forms and constructions).

Croft (1984, 1990, 2000) referred to these three functions (predicating, referring, modifying) as 'major propositional acts', building on earlier work by Searle (1969, 1976), who concerned himself with the acts of reference and predication (Croft 1990: 250):[8]

Searle's work, based in the philosophical tradition, restricts itself to reference

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[8] See also e.g. Lehmann and Shin (2005: 27): "… there are three propositional operations: reference, predication and modification …".

and predication, and does not attempt to provide an exhaustive taxonomy of propositional acts in the same fashion that Searle later provided a taxonomy of illocutionary acts (Searle 1976). In fact, the cross-linguistic analysis of the major syntactic categories already provides a third propositional act, that of modification, which appears to serve the purpose of 'enriching' or adding to the description of an entity being referred to (Wierzbicka 1986: 374, and below).

In FDG, however, only REFERRING and ASCRIBING (predicating) are regarded as actional, i.e. as 'pragmatic, cooperative action[s] of a Speaker within a pattern of verbal interaction between that Speaker and some Addressee' (Dik 1978: 55; as quoted in Hengeveld and Mackenzie 2008: 107).

The main goal of this paper is to argue that modifying is no less 'actional' than referring or ascribing, in that modifying also "involves an attempt by the Speaker to influence the Addressee's 'pragmatic information'" (Hengeveld and Mackenzie 2008: 107; see also Dik 1997: 10-11).[9] In other words, in addition to the subacts of reference and ascription, FDG should recognize the SUBACT OF MODIFICATION as a major propositional act in the analysis and representation of linguistic expressions. Furthermore, whereas there is only one subact of reference and one subact of ascription, minimally five Subacts of Modification should be distinguished (plus: attitudinal modification; see section 4).[10] As I have shown elsewhere (e.g. Rijkhoff 2008a, 2008b) the same five Subacts of Modification can also be used to analyze clausal structures.

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[9] Pragmatic information is deemed to consist of "all the information (long-term, situational and immediate) that communicators bring to bear upon their interaction" (Hengeveld and Mackenzie 2008: 107).

[10] In this paper I will be mainly concerned with hierarchically organized NPs that are used to refer to discrete spatial (first order) entities like 'a car', 'those five black boxes in the corner' or 'the beautiful table that you bought last year'.

Notice that there is an important difference between Croft's *syntactic* modifier category (Croft 1990: 248), which only includes lexical modifiers of the noun (in particular adjectives), and the various *functional* modifier categories discussed here, which include both grammatical and lexical modifiers and which cover all the 'dependents' that are not arguments or complements, both in the NP and the clause (such as: determiners, adjectives, relative clauses, TAM markers, adverbs, adverbials).

Modifiers in the NP serve one of the following five communicative functions (for the clause we need to posit at least two additional modifier functions (Rijkhoff 2008a: 101); see also note 5):

1. to further specify what KIND of entity is denoted by the head constituent (as in e.g. 'PRESIDENTIAL election' or 'EVOLUTIONARY biology') ⇒ classifying modification;

2. to specify MORE OR LESS INHERENT PROPERTIES ('qualities') of an entity (e.g. 'BLACK cars' or 'a HEAVY box') ⇒ qualifying modification;

3. to specify QUANTITATIVE PROPERTIES (quantity, number, cardinality) of an entity (e.g. 'TWO cars' or 'SEVERAL books') ⇒ quantifying modification;

4. to specify LOCATIVE PROPERTIES of an entity, thus making the referent identifiable (locatable) for the addressee (e.g. 'THIS car' or 'THAT house ON THE CORNER') ⇒ localizing (or anchoring) modification;

5. to specify DISCOURSE-REFERENTIAL PROPERTIES of an entity (e.g. 'THE/A car') ⇒ discourse-referential modification.

In specifying these details about an entity, the speaker employs modifiers that belong to one of five SUBACTS OF MODIFICATION (SoMs): (a) a CLASSIFYING SoM (further specifying 'what kind it is'), (b) a QUALIFYING SoM ('how it is'), (c) a QUANTIFYING SoM ('how many or how much it is'), (d) a LOCALIZING or ANCHORING SoM ('where it is'; more on 'anchoring' below), and (e) a DISCOURSE-REFERENTIAL SoM ('that it is (not)', i.e. whether

or not the entity has an identifiable place in the World of Discourse; Rijkhoff and Seibt 2005).

Subacts of Modification may themselves include subacts of ascription or reference (e.g. in the form of an adnominal genitive or a relative clause), but not all the linguistic material that is part of a Subact of Modification can be further analyzed in terms of just these two kinds of subacts. For example, grammatical modifiers such as definite articles or adnominal demonstratives are part of a referential act, but in current FDG it is not clear why the speaker would want to employ these modifiers (or any other modifier, for that matter) from an interpersonal, communicative perspective - and the same goes for modifiers at the level of the level of the clause, of course.

Notice furthermore that not all adnominal possessives or genitives are referential in the sense of pinpointing some entity in the world of discourse (Reboul 2010; Koptjevskaja-Tamm 2003), as will be shown in section 3.1 on classifying genitives.[11] Similarly, not all adjectives in an NP are instances of acts of ascription (Bolinger 1967). For example, a relational adjective like 'molecular' in 'molecular gastronomy' is a separate word according to phonological criteria, but unlike qualifying adjectives, relational adjectives cannot be used in an ascriptive (predicative) function. Compare, for example, a qualifying adjective like 'big$_A$' in 'a big$_A$ house' and 'the house is big$_A$' with a classifying, relational adjective such as 'departmental$_A$', which can only be used attributively ('a departmental$_A$

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[11] Strictly speaking, 'referential function' or 'referential act' cannot be used to characterize the communicative function of all clause-level (i.e. non-modifying) NPs either (García and Rijkhoff 2008: 15), as also is evident from this statement (Reboul 2001: 515): "NPs which always refer are generally considered to be proper names, demonstratives and pronouns, while NPs which never refer are indefinite descriptions. Some NPs, such as definite descriptions, may refer or not refer depending on the use the speaker is making of them". For this reason, Dik (1997: 130) distinguished between 'constructing reference' and 'identifying reference'.

meeting' vs. *'this meeting is departmental$_A$'; see sections 3.1 and 3.2).

Notice finally that members of the same formal category (e.g. Prepositional Phrase or PP) can be used in different modifier functions (Fig. 2).

Dutch adnominal PPs with *van* 'of'	**MODIFICATION** (OF THE NOUN IN THE PP)	**PREDICATION**	**REFERENCE**
LOCALIZING/ANCHORING *de fiets van mijn vader* **'the bike of my father'**	*de fiets van mijn (oude) vader* **'the bike of my old father'** ('my father's bike')	*die fiets is van mijn (oude) vader* **'the bike is of my old father'** ('my old father's bike')	*de fiets van Peters vader* **'the bike of Peter's father'** (reference to an entity)
QUALIFYING B+ *Beelden van grote kwaliteit* **'statues of great quality'**	*beelden van grote kwaliteit* **'statues of high quality'**	*de beelden zijn van grote kwaliteit* **'the statues are of high quality'**	*beelden van deze kwaliteit* **'statues of this quality'** (reference to *a property* of an entity)
QUALIFYING A *een kroon van goud* **'a crown of gold'**	*een kroon van (zuiver) goud* **'a crown of (pure) gold'**	*de kroon is van (zuiver) goud* **'the crown is of (pure) gold'**	—
CLASSIFYING C+ *een man van vele gezichten* **'a man of many faces'**	*een man van vele gezichten* **'a man of many faces'**	—	—
CLASSIFYING B *een man van gezag* **'a man of authority'**	*een man van (groot) gezag* **'a man of (great) authority'**	—	—
CLASSIFYING A *een man van de wereld* **'a man of the world'**	—	—	—

Figure 2. Same form, different function: the various modifier functions of Dutch adnominal PPs with *van* 'of'. Notice the different subtypes of qualifying modification; + = the attribute (here *vele* 'many' and *grote* 'big, high') is obligatory in the modifying PP).

Conversely, members of different formal categories may be used in the same kind of Subact of Modification (Fig. 3; see also section 2.2). Fig. 3 also shows that Subacts of Modification should be represented at the Interpersonal Level, the highest level of

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representation in the grammatical component of FDG, as they appear to outrank both semantic and formal representations at the Representational Level and the Morphosyntactic Level, respectively.

Qualifying Subacts of Modification			
SEMANTIC CATEGORIES:	FORMAL CATEGORIES:		
	ADJECTIVE	PREPOSITIONAL PHRASE	REL. CLAUSE ...
SIZE	*big N*	*N of enormous size*	*N that was rather big*
VALUE / QUALITY	*expensive N*	*N of great value*	…
AGE	*young N*	*N under age 16*	…
COLOR	*red N*	*N of incredible redness*	…
…	…	…	…

Figure 3. Same function, different forms: examples of modifiers that can be used in a qualifying Subact of Modification (N = head noun).

Since languages across the globe do not necessarily employ the same formal categories such as Adjective or Prepositional Phrase, we find that different languages may use members of different (language-specific) form classes for the same kind of Subact of Modification. For example, languages without a distinct class of adjectives often use verbal or nominal forms (stative verbs, abstract nouns) to express 'adjectival' notions. This is shown in the following examples from Kiribati (Kiribati, Micronesia) and Makwe (Palma, Mozambique), whose speakers must use verbal or nominal roots to express properties such as 'pretty' or 'silent' in a qualifying Subact of Modification.

(1) *te   uee   ae   e   tikiraoi*

 ART flower REL 3SG.S be.pretty

 'a pretty flower' (lit. 'a flower that pretties') (Kiribati; Ross 1998: 90)

(2) *muú-nu*   *w-á=ki-búúli*

NC1-person   PP1-GEN=NC7-silence

'a silent person' (lit. 'a person of silence') (Makwe; Devos 2008: 136)

Different languages do not necessarily share the same set of SEMANTIC CATEGORIES either. For example, Everett (2005: 627-628) claims that there are no dedicated color terms in the South-American language Pirahã (see also Dixon 1982 on the absence of certain 'adjectival' categories in specific languages).

The range of semantic and formal categories that can be employed in a Subact of Modification is also dealt with in section 3, where the various modifiers will be labeled after the kind of modificational subact in which they are used (see also above). Thus, we will refer to (i) classifying modifiers (section 3.1), (ii) qualifying modifiers (section 3.2), (iii) quantifying modifiers (section 3.3), (iv) localizing (or 'anchoring') modifiers (section 3.4), and (v) discourse-referential modifiers (section 3.5).

3. Modifiers used in Subacts of Modification

This section discusses some of the cross-linguistically common forms and constructions that are used in the various Subacts of Modification: classifying modifiers, qualifying modifiers (recall that there are no qualifying operators), quantifying modifiers, localizing (or 'anchoring') modifiers, and discourse-referential modifiers (Fig. 4; L = layer of modification).
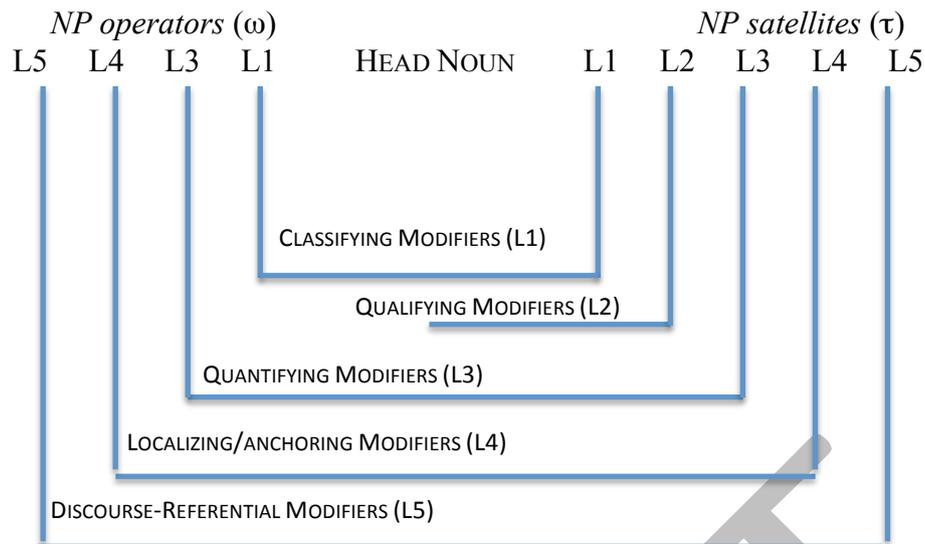
Figure 4. Functional modifier categories in a layered representation of NP structure.

Grammatical modifiers or 'operators', symbolized by ω in Fig. 5 below, and lexical modifiers or 'satellites', symbolized by τ in Fig. 5, are functionally equivalent, but by convention grammatical modifiers (marking e.g. Tense, Aspect, Definiteness, Number) are represented on the left side of the head constituent, and lexical modifiers (e.g. adjectives, adpositional phrases, relative clauses) are represented on the right side. Thus, a simplified representation of '*those two famous political advisors across the table*' according to the layered model could look like the diagram in Fig. 5 (see Hengeveld and Mackenzie (2008) for the way underlying representations at the various levels in FDG are turned into actual linguistic expressions):
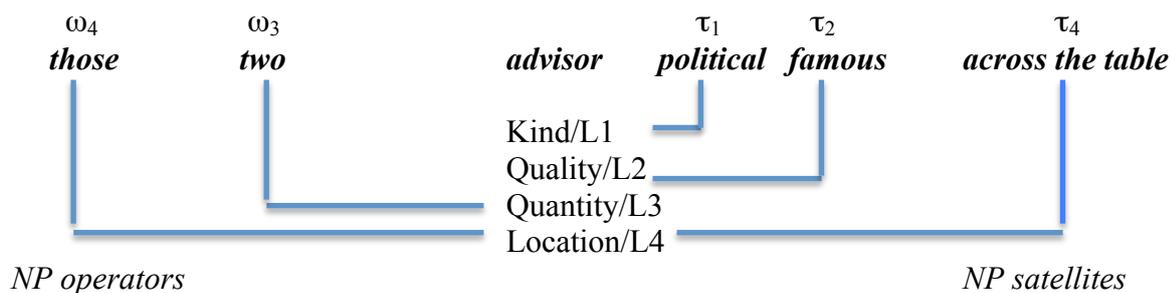
| ω_4 | ω_3 | | | τ_1 | τ_2 | τ_4 |

those   *two*   *advisor*   *political*   *famous*   *across the table*

Kind/L1
Quality/L2
Quantity/L3
Location/L4

NP operators   *NP satellites*

Figure 5. A simplified 'layered' representation of '*those two famous political advisors across the table*'.[12]

Each of the five functional modifier categories in Fig. 4 is discussed below, beginning with classifying modifiers in the innermost layer (L1).

3.1. Modifiers used in classifying Subacts of Modification: classifying modifiers

Classifying modifiers are used in subacts that serve to further specify ('sub-classify') the KIND of entity that is being referred to by the speaker, for example: *annual* in 'annual report', *presidential* in 'presidential election', *electric* in 'electric train', or *social* in 'social security'. The semantic range of classifying modifiers is rather broad and may include such categories as material, purpose and function, status and rank, origin, and mode of operation (Halliday and Matthiessen 2004: 320). Essentially they relate to any feature that may serve to classify entities into a system of smaller sets.

(3)   a. ***parental*** *rights*   b. *a man **of the stage***

If a language has a separate class of adjectives, the functional category of classifying

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[12] A simplified formal representation of '*those two famous political advisors across the table*' looks like this (cf. note 5): NP_i: [$_{L5}$[Def $_{L4}$[Dem$_{Remote\ L3}$[ω_3 $_{L2}$[$\emptyset$ $_{L1}$[ω_1 $_{L0}$[advisor (x_i)]$_{L0}$ political (L_0)]$_{L1}$ famous (L_1)]$_{L2}$ $\tau_3(L_2)$]$_{L3}$ across the table (L_3)]$_{L4}$ $T_5(L_4)$]$_{L5}$]$_{NPi}$.

modifiers may also include (noun-derived) RELATIONAL ADJECTIVES, such as *musical* in 'musical instrument' or, for that matter, *relational* in 'relational adjective' (Warren 1984, Heynderickx 2001, Gunkel and Zifonun 2008). Here are some Russian examples (INFL stands for 'inflectional morphology', showing agreement in number, gender and case with the head noun):

(4) a. *zamoch-n-aja*   *skvazhina*   b. *knizh-n-yj*   *magazine*

　　　 lock-ADJ-INFL   hole　　　　　　 book-ADJ-INFL   store

　　　 'a/the keyhole'　　　　　　　　 'a/the bookstore'

　　　 (Russian; Mezhevich 2002: 97, 105)

Classifying adjectives have a number of grammatical properties that set them apart from qualifying adjectives; for example, they usually do not admit intensifiers, comparison, or predicative position (Quirk et al. 1985: 1339; on non-predicative adjectives, see also e.g. Dornseiff 1921, Bally 1944, Bolinger 1967, Farsi 1968, Levi 1973):

(5)　 *a musical instrument*　 vs.　 * *a very musical instrument* [intensifier]

(6)　 *a departmental meeting*　 vs.　 * *a more departmental meeting* [comparison]

(7)　 *the presidential election*　 vs.　 * *the election is presidential* [predicative use]

Notice furthermore that a classifying adjective (in the examples below: *political* and *musical*) cannot be conjoined with a qualifying adjective (section 3.2) and is normally adjacent to the head noun:

(8)   *a rich and friendly advisor*   vs.   * *a rich and political advisor*

(9)   *an expensive musical instrument*   vs.   * *a musical expensive instrument*

Some adjectives can be ambiguous between a classifying and a qualifying interpretation, depending on the noun they modify (Farsi 1968; Mezhevich 2002: 99; Heynderickx 2001: 116-126; Halliday and Matthiessen 2004: 319). For example, an adjective like *civil* serves as a qualifying modifier in 'a civil reply' (cf. 'a very civil reply') and as a classifying modifier in 'civil rights' (cf. * 'very civil rights').

As already shown in (3), members of different formal categories can serve as classifying modifiers. In (10a) and (11a), we see that classifying genitives (also referred to as non-referential or non-determiner genitives) further specify what kind of entity is denoted by the head noun 'hat'. As in the case of classifying adjectives, classifying genitives such as *woman's* in (10a) and (11a) cannot be modified (10b) or separated from the head noun (11b). In such cases the (now: possessive) genitive serves as a localizing/anchoring modifier (section 3.4).

CLASSIFYING GENITIVE   POSSESSIVE GENITIVE

(10) a. *the pretty [woman's hat]*   b. *the [pretty woman's] hat*

CLASSIFYING GENITIVE   POSSESSIVE GENITIVE

(11) a. *the blue [woman's hat]*   b. *the [woman's] blue hat*

Here are also some examples of classifying genitives in Swedish and Lithuanian.

(12) a. *en   folk-et-s   teater*

a: C   people-DEF.C-GEN   theatre

'a theatre for the people'

b. *en   skolan-s   uppgift*

a:C   people-DEF.C-GEN   task

'a task for the school'

(Swedish; Koptjevskaja-Tamm 2003: 539–40)

(13) a. *duon-os   peilis*   b. *kav-os   puodelis*

bread-GEN knife   coffee-GEN cup

'a bread knife'   'a coffee cup'

(Lithuanian; Koptjevskaja-Tamm 2002: 155)

Classifying modifiers also include grammatical elements, in particular nominal aspect markers, which modify the *Seinsart* ('mode of being') of a noun: the way a nominal property is projected in the spatial dimension in terms of the features Shape and Homogeneity (Rijkhoff 2004: 100–121; Rijkhoff 2008c). For example, many nouns in Oromo are lexically coded for a *Seinsart* that I have called "set noun" (i.e. these nouns are transnumeral and can be in direct construction with a numeral), but when they are provided with a (bound) collective or individual aspect marker, they designate a special KIND of set, viz. a *collective set* or a *singleton set* (with just one member) respectively:

(14) a. *farad* 'horse/horses' (unmarked set) vs. *fardoollee* 'horses' (collective set)

(14) b. *nama* 'man/men' (unmarked set) vs. *namica* 'a/the man' (singleton set)

(Oromo; Stroomer 1987: 76–77, 84–85)

3.2. Modifiers used in qualifying Subacts of Modification: qualifying modifiers

A qualifying Subact of Modification involves modifiers that speakers use to specify more or less inherent properties of an entity, i.e. qualifying modifiers. As shown in Dixon (1982), these properties typically include the semantic domains of dimension ('a big house'), age ('an old man'), value ('a good idea') or color ('a black coat') of an entity, but also e.g. physical property ('a heavy box'), human propensity ('a kind person') or speed ('a quick move'). These properties are typically expressed by adjectives, as in the example above, but in languages that do not have a distinct class of adjectives they are often expressed by nominal or verbal constructions, as was already shown in (1) and (2).[13] For example, speakers of the Papuan language Galela employ participles, which are formed by reduplicating the first syllable of the verb:

(15) a. *o   tahu   ḋa   lòha*

ART   house   3   be_beautiful

'the house is beautiful'

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[13] Some language are even claimed to have property words that "may occur as either nouns or verbs, with no apparent semantic distinction" (Holton 1999: 349).

(15) b. *o   tahu   ɗa   lo-lòha*

　　　 ART　house　 3　 RED-be_beautiful

　　　 'the beautiful house'

　　　 (Galela; van Baarda 1908: 36)

In addition to adjectives, participial constructions and relative clauses, nominal elements can be used in qualifying Subacts of Modification to express property concepts. According to Newman, qualitative notions "are commonly expressed by use of *mài/màasú* 'owner, possessor of (SG/PL) plus an abstract qualitative nominal" in the Chadic language Hausa (see also e.g. Banti (1988: 223) on the expression of adjectives notions in Somali, another Chadic language):

(16) *ríijìyáa   mài   zúrfii*

　　　 well   'owner, possessor of'   depth

　　　 'a deep well' (Hausa; Newman 1987: 721)

3.3. Modifiers used in quantifying Subacts of Modification: quantifying modifiers

Modifiers that are used in a quantifying Subact of Modification include cardinal numerals, quantifiers as well as number markers like plural affixes (PL). In many languages numerals and quantifiers constitute word classes in their own right, as in Dutch or English:

(17) a. *twee tafel-s* (Dutch)　　　　 b. *weinig   mens-en* (Dutch)

　　　 two   table-PL　　　　　　　　 few   person-PL

　　　 'two tables'　　　　　　　　　　 'few people'

18

Jarawara, an Arauan language spoken in Amazonia (Brazil), is a language in which cardinality is expressed by a verbal form. The root *-fama-* 'be a pair, be a couple (with)' has taken on the additional sense 'be two' (Dixon 2004: 559). In Urarina, spoken in the Peruvian Amazon basin, the native numerals from 1 to 5 are also verbal elements, which have to appear with a nominalizing suffix when used in a quantifying Subact of Modification (for more examples, see e.g. Krasnoukhova 2012: 113f.):

(18) *nitɕataha-j   fwanara*

      three-NMZ   banana

      'three bananas' (Urarina; Olawsky 2006: 277)

3.4. Modifiers used in localizing/anchoring Subacts of Modification: localizing/anchoring modifiers

Speakers use a localizing or anchoring Subact of Modification to help addressees in their attempt to locate (and thus: identify) the referent of the matrix NP by providing them with a referential anchor (cf. Prince 1981: 236), also called the IDENTIFYING ENTITY of a referent (Rijkhoff 1989). This is achieved by various kinds of modifiers in the NP, such as adnominal demonstratives, possessor phrases, adpositional phrases or relative clauses (the synchronic and diachronic relation between location, possession and existence has been investigated by various authors; see e.g. Christie 1970, Clark 1970 and 1978, Lyons 1967). Deictic elements (e.g. 'this', 'those') or prepositional phrases ('on the hill', 'with the funny hat') are commonly used when the referent is available in the visible context:

(19) *Could you give me **those** keys*?

(20) *Look at the man **with the black coat** / **in the corner** / **across the street** / …*

Possessive modifiers are often used when a referent is presented as identifiable on the basis of presupposition. For example, the car in (21) can be identified by virtue of it being linked to the speaker's brother (the referential anchor), whose existence is implicitly assumed (i.e. even if the addressee doesn't know the speaker has a brother, s/he will have no problem identifying this particular car).

(21) ***My brother**'s car has just been stolen.*

Cross-linguistically the use of possessive modifiers for identifying purposes is a rather common strategy, which may involve multiply embeddings, as in this example from Babungo:[14]

(22) *ŋwə́ bá   tɔ́   **wée wéenshú zú Làmbí***

she   weave:PRES   head child brother   wife Lambi

'(she is plaiting) the hair of the child of Lambi's wife's brother'

(Babungo; Schaub 1985: 76)

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[14] For more examples, see e.g. Saltarelli (1988: 80) on Basque; Lee (1989: 120) on Korean; Rausch (1912: 120) on Nasioi; Thomsen (1984: 54) on Sumerian; Asher (1982: 63) on Tamil; Fortescue (1984: 144) on West Greenlandic. Apparently, the Amazonian language Pirahã is an exception, since it is claimed not to employ recursive embedding (Everett 2005).

Here we see a four-step identification procedure: the head noun *tɔ́* 'head'/'hair' is identified through 'Lambi' (presumed identifiable, at the deepest level of embedding), then 'Lambi's wife', then 'Lambi's wife's brother', and finally 'the child of Lambi's wife's brother'.

Relative clauses are also commonly used to make the referent of the matrix NP identifiable for the addressee, as in (23). In fact, in his monograph on relative clauses Lehmann (1984: 405) stated that this is the typical function of relative clauses.[15]

(23)   *The police just arrested the man **who stole Bill's car**.*

In sum, in each localizing/anchoring Subact of Modification, the referent of the matrix NP (e.g. 'the man' in (23)) can be identified by establishing a link between the referent of the matrix NP and a referential anchor (as specified in the Subact of Modification), which itself must always be an entity that is identifiable on the basis of contextual clues. In the case of a deictic demonstrative (example (19)) the referential anchor is an object in the external, physical world. In the case of a phrasal modifier (like a possessor phrase or a relative clause; cf. examples (21), (22) and (23)) the referential anchor is mentioned in the modifying phrase. In (21), 'my brother' or more precisely the entity referred to by the possessive pronoun 'my' (i.e. the speaker) serves as the referential anchor of the car in question. In (22), 'Lambi' (a person assumed to be known by the addressee) is ultimately the referential anchor of 'head'/'hair' and 'Bill', the owner of the car and assumed to be known by the addressee, is the entity that makes it possible to present 'the man' in (23) as

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[15] See also e.g. Foley (1986: 201): "… relative clauses provide crucial background information for the identification of the referents of the head nouns".

identifiable (i.e. as 'having a location' or 'being anchored') in the world of discourse.[16]

3.5. Modifiers used in discourse-referential Subacts of Modification: discourse-referential modifiers

Modifiers in a discourse-referential Subact of Modification have the widest scope and serve to specify the pragmatic status of the referent of the NP in conversational space, the world of discourse created by speaker and addressee (Rijkhoff 2008b; Rijkhoff and Seibt 2005). Discourse-referential modifiers specify, for example, whether or not the speaker has assumed that the referent is identifiable for the addressee (indicated, for example, by using a definite article) or whether or not the referent of an NP is the same entity referred to earlier (indicated by modifiers like 'same' and 'other').

4. Modifiers in attitudinal Subacts of Modification

So far we have been dealing with modifiers which, depending on the Subact of Modification they appear in, only have a certain part of the NP ('layer') in their scope, which is reflected in the layered model of the NP (Fig 5.; see also note 6). There is, however, also a kind of modification, viz. attitudinal modification, which is not connected with any particular layer in the NP structure, because it affects the entire NP. Speakers use this kind of modificational subact to express their positive or negative attitude (sympathy, affection; sarcasm, scorn) towards the referent of the NP (as in 'Poor girl!'). Even though a language may have some more or less 'dedicated' modifiers, i.e. modifiers that tend to appear in attitudinally modified NPs (such as Danish *stakkels* 'poor'; Rijkhoff 2010), attitudinal modification is manifested simultaneously in a various ways as a property of a

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[16] See Rijkhoff (2004: chapter 6), but notice that (in)definite articles are now treated as discourse-referential modifiers.

whole construction (Butler 2008: 225, 243; Rijkhoff 2008a: 74-77; Rijkhoff 2010): lexically (choice of head noun or modifying adjective), morphosyntactically (word order, use of diminutive form), prosodically, in voice quality.[17] This is illustrated in the following example from Dutch, where scorn is expressed through the use of a distal demonstrative "dat", the diminutive suffix "-je" and postnominal possessive construction "van jou", among others.

(24) *Ik vind **dat nieuwe boek-je van jou** helemaal niks* (Dutch)
I find that new book-DIM of you totally nothing
'I do not think much of that new book (lit. 'booklet') of yours.'

If we leave out the diminutive and use the proximal form of the demonstrative or the prenominal possessive, the NP is turned into a neutral expression.

(25) *Ik vind **je nieuwe boek** helemaal niks* (Dutch)
I find your new book absolutely nothing
'I do not think much of your latest book'

The employment of diminutive (or augmentative) markers to express the speaker's attitude seems to be widespread among languages. For example, Butler (2008: 228) discusses the use of the diminutive in Spanish to express affection or sympathy. Furthermore, just as the various kinds of Subacts of Modification discussed in section 3 are

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[17] Cf. also Halliday and Matthiessen (2004: 319): "Since expressions of attitude tend to be strung out prosodically throughout the clause, rather than be associated with one particular place; there are very few words that serve only an attitudinal function."

also relevant at the level of the clause (Rijkhoff 1990; Rijkhoff 2008b), attitudinal modification is a modifier category of the clause as well (Halliday and Matthiessen 2004: 319). For example, Klimaszewska (1983: 69-70) showed that the diminutive is also used for attitudinal modification at the level of the clause in Polish.

5. Summary and conclusion

In this chapter, I have argued that a complete functional theory of grammar should be able to account for each of the three universally attested propositional acts (Croft 1990; see also e.g. Sasse 1993 and Ross 1998): acts of predication, acts of reference, and acts of modification. I have been especially concerned with the place of grammatical and lexical modifiers in one particular structural-functional approach to grammar (Butler 2003): *Functional Discourse Grammar*. I have proposed that modifiers as represented in the layered NP-model proposed in Rijkhoff (2008a, 2009, 2010) should be treated as manifestations of SUBACTS OF MODIFICATION at the Interpersonal Level of representation in FDG, alongside the already established subacts of ascription and reference (Hengeveld and Mackenzie 2008). The main focus has been on members of the various functional modifier categories in the noun phrase, but it has already been shown that the same set of functional modifier categories is also relevant for the clause (e.g. Rijkhoff 1990, 2004; in particular Rijkhoff 2008a, 2008b, *to appear*). One of the main advantages of the proposal that modifiers should be represented as instances of propositional acts at the Interpersonal Level in FDG is that this makes it possible to account for the communicative function of **all** the linguistic material that is contained in a Discourse Act (section 2). Additionally I have argued that attitudinal modification is not realized by a single modifier with its own functional slot in the layered representation of a Discourse Act (as proposed in Hengeveld and Mackenzie 2008: 121), but should rather be treated as an act of modification that

affects the entire construction.

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