

REFERENTIAL AND ATTITUDINAL CONSTRUCTIONS

1. STATEMENT OF THE PROBLEM

The pivotal principle of De Groot's beautiful theory of the sentence is the recognition that every linguistic utterance performs a twofold semantic function: it *refers to reality* by means of the individual words contained in the utterance, and it *expresses*, by means of the sentence intonation, *the speaker's attitude* towards the things designated by the word material¹⁾. The distinction of these two functional layers pervades the entire linguistic system: it recurs, for instance, in the morphology of the noun in Latin, where the vocative has attitudinal function, while the other cases (apart from the nominative) have referential function²⁾. Thus the question arises which are the common structural characteristics, if any, of referential and attitudinal function, and how we are to describe their interplay on different planes of the language. The present paper is meant as a contribution to this problem; our chief objective is to establish some of the *structural laws* that we believe to be valid in this field of language.

2. FUNDAMENTAL NOTIONS

A linguistic utterance can be adequately described as a combination of certain conventional arrangements of words, which we call *constructions*³⁾. A construction always involves, firstly, a syntactic connection⁴⁾ between words and, secondly, one or more observable features which indicate the *group character* of the expression consisting

¹⁾ A sentence "always refers to something in reality, and it always expresses a mental attitude of the speaker towards this something. So it has always a word or words, and it has always a definite intonation. . . . This may be called the *law of the two strata of the sentence*". A. de Groot, *Structural Linguistics and Syntactic Laws*, Word 5 (1949), p. 3.

²⁾ A. Willem de Groot, *Classification of Cases and Uses of Cases*, For Roman Jakobson, The Hague 1956, p. 189 (diagram).

³⁾ This is the term now used by De Groot; it replaces his older term "word-group", e.g. in *Classification of Word-Groups*, Lingua VI (1956).

⁴⁾ We are using the term "connection" here in accordance with Anton Reichling, *Principles and Methods of Syntax: Cryptanalytical Formalism*, Lingua X (1961), p. 1.

of those words. The group character of a construction manifests itself in one or more of such features as fixed order and relative cohesion of the members of the construction (*red roses*), and concord, government or cross-reference⁵⁾ between the members (*that table / those tables, I hit him / he hit me, John his knife / Mary her knife*). A syntactic connection between words or other meaningful elements takes the form of a greater or lesser *compulsion* in the selection of one meaningful element in the neighbourhood of another pertaining to the same sentence. As an example, consider the sentence *the birds are preening their feathers*. There is a strong compulsion in the selection of the object-noun *feathers*, insofar as the majority of other nouns yield sentences of vanishingly small applicability; therefore we say that there is a syntactic connection between *preening* and *feathers*; it appears that this is also true of *birds* and *preening*, and *birds* and *feathers*. It also appears from this example that syntactic connection may exist between elements not forming an immediate constituent on any level of analysis. Having thus established the notion of syntactic connection, we may now define a construction as a connection between two meaningful elements, which concurs with the group character of the expression consisting of those elements.

The nature of the connection between words often depends on the nature of those words, i.e. on the selection of a particular *lexical meaning*. Thus, if we replace in the Dutch construction *de verovering van de stad* 'the conquest of the town' the first noun by another, say *muren* 'walls', we obtain a different construction, as proved by the fact that the latter can be split up by a copula, whereas the former cannot:

<i>de muren van de stad</i>	<i>de muren zijn van de stad</i>
<i>de verovering van de stad</i>	* <i>de verovering is van de stad</i>

The lexical meaning of a word may be thought of as a *free* (i.e. non-combinatory) *variant* of the *grammatical* or *class meaning* of that word; in contradistinction to the latter, lexical meaning is always conveyed by a word or word combination occupying a definite *position* in the word material of the sentence. If a word or word combination in addition figures as an immediate constituent of the sentence, the lexical meaning of the given unit will normally depend on the place of that unit in the sequence of immediate sentence constituents.

5) Leonard Bloomfield, *Language*, New York 1933, 12.9.

Consider, for instance, the effect of changing the order of sentence constituents in the following example, taken from Gunnar Bech⁶⁾: *der Vater schickte den Sohn nach Hause, um den Streit zu schlichten* (which implies *der Sohn sollte den Streit schlichten*) beside *um den Streit zu schlichten, schickte der Vater den Sohn nach Hause* (implying *der Vater wollte den Streit schlichten*). We call the sequence of immediate sentence constituents the level of *actuality*⁷⁾; it is the linguistic counterpart of what is often designated as "time of utterance".

To illustrate this notion of actuality, we may compare the two sentences *Tell me, John, what are you going to do?* and *I asked John to tell me what he was going to do.* In the first specimen, three parts of the word material are localized on the line of actuality, in the second only one, *viz.* the entire word material of the sentence.

The lexical meaning of a verb differs from that of a noun (in any language where an opposition of this sort exists) in that the former is dependent on the level of actuality: in Dutch, for instance, an infinitive (unlike a noun) enters into combination with a subordinate clause, e.g. *slapen, terwijl de anderen moeten werken, is onsportief*, where the noun *slaap* (not to speak of more typical nouns as *tafel* or *man*) would be impossible or very unusual. In *our horses ran away* the group *our horses* has a contextually conditioned lexical meaning, which we may term "actor function". As the context in our example, *viz.* the finite verb group *ran away*, is an immediate constituent of the sentence, we designate this form of conditioning as *actualization*⁸⁾ (see further § 7). Applying this notion, we can define the structural level of De Groot's *parts of the sentence* ("zinsdelen") as the result of the concurrence of actualized lexical meaning (e.g. actor function, goal function, or recipient function) with group character: in the example above, the expression *our horses* is a relatively cohesive unit, which is easily permutable in the sentence (group character), and at the same time performs actor function. We may think of this conditioned lexical meaning of a word as a *combinatory variant* of its grammatical or class meaning (cf. what was said above about the lexical meaning of a word).

⁶⁾ *Studien über das deutsche verbum infinitum*, 2. Band, København 1957, § 364 (p. 99) and § 392 (p. 121).

⁷⁾ This term is modeled after Martinet's "actualization"; see fn. 8.

⁸⁾ André Martinet, *Éléments de linguistique générale*, Paris 1960, 4.25.

It may be remarked in passing that the notion of actualization corresponds exactly to Trubetzkoy's "types de neutralisation conditionnées par le contexte"⁹⁾.

In general, the syntactic connection between the members of a construction depends both upon the lexical meaning of the members and on the level of actuality: in the latter case, we speak of a *dynamic* construction, otherwise the construction is called *static* (see § 3); a static construction may also be called a *phrase*.

Since constructions, like words, enter into combination with one another, it follows that a construction, like the lexical meaning of its members, will occupy a definite position relative to other constructions of the same sentence. In *John hit the ball* the two constructions "actor performing action" and "action performed on object" are connected by means of the verb *hit* (which accordingly contains two connection terminals) so as to form a combination, in which the former construction occupies the position of the center, the latter the position of the modifier.

Constructions are found to be of two fundamental types, which we call, in accordance with established phonologic terminology, *inherent* and *prosodic*. An inherent construction can be completely specified in terms of the three levels of actuality, lexical meaning and group character; a prosodic construction in addition involves the feature of *limitation* (comprising what is sometimes called "deixis"; see further § 4), which is manifested by the accentual pattern of a construction, together with the concomitant tone contour. For instance, the difference between the constructions of *John did it* and *JOHN did it* (with emphatic stress on *John*), or of French *Jean l'a fait* and *c'est Jean qui l'a fait*, as well as between the constructions of *John* (rising) *died* (falling) and *he DIED* or Dutch *hij eet vis* and *hij EET de vis*, ultimately resides in the role of limitation; it is clear that this feature is also included in those pronouns which are intrinsically unaccented (Dutch *je, me, de*, French *tu, te, je, me, le*) or stand in opposition to such forms (Dutch *wij, jou, mij, die*, French *toi, moi, lui*).

A prosodic construction may be *referential* or *attitudinal* (or both); the former type is specifically associated with limitation, while the latter type is specifically associated with tone contours (rising, falling,

⁹⁾ N. S. Trubetzkoy, *Principes de Phonologie* (Trad. J. Cantineau), Paris, 1957, p. 247.

etc.) and *expressive devices*, such as the vowel lengthening in Bolinger's example *these women could not bear children* (as against ... *could not bear children*, without vowel lengthening of *bear*¹⁰).

The syntactic pattern of a referential construction consists of a major terminal or *center*¹¹) and a minor terminal or *adjunct*¹²), which may be predicative or attributive. From an expression such as Dutch *ze trouwden jong* 'they married young' we extract a referential construction *ze ... jong*, in which *ze* is the center (among other reasons, because it can figure as a subject) and *jong* is the adjunct (because it can figure as an attribute in such expressions as *jonge mensen*); the expression *ze trouwden* in addition contains a referential construction *ze ... trouw—*, whose minor terminal is the verb stem *trouw—* (compare *ze zijn getrouwed* 'they are married' and *een getrouwed stel* 'a married couple', where *getrouwed* figures again as an attribute). In *trouwe vrienden* the word *vrienden* is the center of a referential construction, with *trouwe* as the adjunct.

The syntactic pattern of an attitudinal construction also consists of a center and an adjunct, but the center in this case is itself either a referential construction or the adjunct of a referential construction. For instance, the indicative morpheme contained in *ze trouwden jong* figures as an attitudinal adjunct with respect to the referential construction *ze ... trouw—* (see *supra*); in *die bliksemse jongen* the interjective stem *bliksems—* figures as an attitudinal adjunct with respect to the referential construction *die... jongen*.

We have distinguished three types of constructions, each associated with a definite gestalt characteristic of the expression containing the construction:

construction type	characteristic feature of construction gestalt
inherent	group character
prosodic { referential	limitation
attitudinal	expressive devices

¹⁰) Dwight L. Bolinger, *Generality, Gradience, and the All-or-None*, 's-Gravenhage 1961, p. 33, where the term "expressive lengthening" is used.

¹¹) Bloomfield, *Language*, 12.11.

¹²) De Groot, *Scientific Grammar of Present-Day English*, Vancouver 1954, p. 99 and id., *Classification of Word-Groups*, p. 131.

After this preliminary synopsis of structural levels, we now pass on to the detailed description of referential and attitudinal constructions.

3. DYNAMIC AND STATIC PROSODIC CONSTRUCTIONS

We have distinguished above between dynamic and static constructions.

A dynamic referential construction is characterized by the fact that the center and the adjunct belong to different sentence constituents. Thus in *the roses are red* the referential construction *the roses...red* transcends the boundary between subject and predicate of the sentence, while in Dutch *hij koopt z'n meubels tweedehands* the referential construction *z'n meubels tweedehands* transcends the boundary between object and object predicate of the sentence. A static referential construction, e.g. *the red roses*, Dutch *z'n tweedehands meubels*, does not contain such a boundary.

The same distinction applies to attitudinal constructions. In expressions like *awfully good, terribly dull, of paramount importance, with supreme scorn, a tower of a man*, Dutch *fantastisch gezellig, reusachtig klein, in het uiterste geval, een boom van een vent, die bliksemse jongen*, we have each time an attitudinal construction included in a phrase, hence of the static type. A notable difference with the static referential construction is the lack of a *direct* dynamic counterpart: beside *a terribly dull evening* we find nothing like **terribly was the evening dull*, beside *die bliksemse jongen* nothing like **die jongen is bliksem* occurs.

In a dynamic attitudinal construction the center and the adjunct again belong to different sentence constituents. Typical examples are the combination of a clause with a "modal" adverb, e.g. *perhaps he will return to-night, he is definitely wrong, and not in he did not say that*; further, the combination of the indicative morpheme with the referential subject-predicate construction; finally, the combination of a declarative non-emphatic sentence intonation with the entire word material of the sentence. In conclusion, we may draw attention to the fact that a dynamic referential construction is always accompanied by an attitudinal construction, whereas a dynamic attitudinal construction, conversely, is always accompanied by a referential construction. A more exact formulation of this structural law will be given in § 7.

4. REFERENTIAL FUNCTION AND LIMITATION

To establish the structural connection between referential function and the associated feature of limitation (§ 2) let us first examine the structure of the referential phrase. Some English examples are¹³⁾:

- D A N : *red roses, the red roses, much trouble, numerous birds*
- D VA N : *barking dogs, the barking dogs*
- D N / P...N : *the man with the red face, eyes of iron* (Swinburne)
- D N / P O : *roses from abroad*
- D N / P V : *his desire to travel*

The static character of these constructions seems to reside in the following features.

(1) The members are in contact with each other and cannot be separated by exogenous expressions, in particular by modal adverbs.

(2) The order of the members is fixed: an adjectival adjunct A normally precedes the center, a prepositional adjunct P...N or P O normally follows.

(3) The center of a referential phrase is either a noun or a combination of a noun with preceding article. We divide an expression like *the red roses* into *the...roses* and *red*, because determination is compulsory in English. Bloomfield says: "The definite and indefinite categories may be said, in fact, to embrace the entire class of English noun expressions, because even those types of noun expression which do not always take a determiner, can be classed as definite or indefinite: *John*, for instance, as definite, *kindness* as indefinite"¹⁴⁾. The article, together with such words as *his, my, all, John's, whose*, according to Bloomfield constitute a special class of "limiting" adjectives¹⁵⁾, we therefore call their common feature *limitation* (cf. § 2).

(4) The omissible member of a static referential construction, the adjunct, is either *descriptive* (to use Bloomfield's term¹⁶⁾) or *specifying*. In English, a descriptive adjunct normally precedes the center, whereas a specifying adjunct normally follows: *an iron will* vs. *eyes*

¹³⁾ N : noun, A : adjective, D : article or equivalent, V : infinitive verb.
P : preposition, O : adverb.

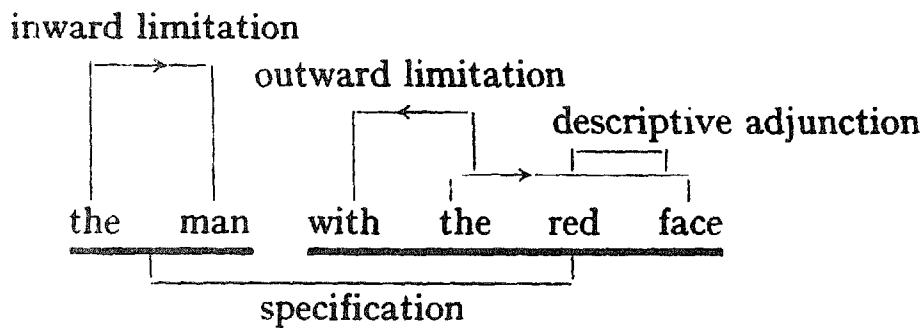
¹⁴⁾ Bloomfield, op. cit., 12.14.

¹⁵⁾ ibid.

¹⁶⁾ ibid.

of iron (see further the examples above). A descriptive adjunct is on the whole more closely tied to its center than a specifying adjunct. In Dutch we find side by side *het werk aan de fabriek bevalt me niet langer* and *het werk bevalt me niet langer aan de fabriek*, a permutation which is flatly impossible with a descriptive adjunct, as in *het vervelende werk*. Semantically, the descriptive adjunct may be said to present two things as one, e.g. "dread" and "night" as one thing in *a dreadful night*, whereas the specifying adjunct presents one thing as two, e.g. *a night full of dread*; further: *a thing of beauty*, *a will of iron* (as against *an iron will*), and also *dogs that bark* (as against *barking dogs*).

The structural difference between these two subtypes of the referential phrase is paralleled by (and ultimately appears to reside in) the different *orientation* of the limiting determiner on the one hand, as against that of the preposition (or other connective) on the other. While in the former type of construction the noun is the characteristic member, in the latter type it is rather the preposition. We designate these two types of limitation as *inward* (article or equivalent) and *outward* (preposition or equivalent)¹⁷). The results of this structural analysis may be summed up as follows:



In this way a striking parallelism comes to light between the two constructions 'limiting determiner + noun' and 'preposition + noun': while both are "exocentric" (Bloomfield) or "conjunctive" (De Groot), they differ only in the orientation of the relationship between their members¹⁸).

¹⁷⁾ There is every reason to interpret this opposition as one between a positive term $+a$ and a negative term $-a$; cf. § 7. Cf. Martinet, *Eléments...*, 4.20, where *le* in *avec le sourire* is called "un élément centripète" and *avec* "un élément centrifuge".

¹⁸⁾ Compare Russian *moj*, *moja*, ... 'my', whose stem *moj-* belongs to the genitive category (as appears from the parallel form *ego* 'his'), while the ending

From the foregoing considerations it appears that a referential phrase results from the concurrence of a referential connection, *viz.* adjunction, with the feature of (outward or inward) limitation. We suppose this rule to be valid for any language, so we regard it as a *structural law*. It can be written in the form of an "equation" in the following fashion:

phrase = referential connection concurring with limitation... (1)

This is not the only way to factorize the phrase. For instance, if *John's arrival* is to be described as a transform of *John arrived*, the phrase level will here result from the concurrence of group character (§ 2) with an inherent connection (§ 2), *viz.* the connection between the finite verb and one of its primary nominal complements, c.q. the subject. A third way of factorizing the phrase would be to describe it as the concurrence of an attitudinal connection with an expressive device (§ 2).

5. AMALGAMATION

The structural disparity between referential and attitudinal constructions is further reflected by their different behaviour in the process of *semantic amalgamation*. In Martinet's *Éléments de linguistique générale*¹⁹⁾ we read about this phenomenon: "L'influence qu'exercent l'un sur l'autre deux signifiants en contact s'accompagne fréquemment d'une influence mutuelle des signifiés correspondants...". Thus *œil-de-bœuf* "désigne un objet qui n'a proprement rien en commun ni avec un œil ni avec un bœuf". If we compare two such expressions as *a fresh herring* and *a red herring*, or Dutch *lekkere bonen* 'fine beans' and *blauwe bonen* 'blue plums, ounce of lead', the first specimen of each pair appears to be the result of two separate selections from the lexicon, wherea. in the second specimen only one such selection is made: we have before us a "word combination with word meaning"²⁰⁾. The proof of the amalgamation is readily furnished: for instance, while *lekkere bonen* is matched by *erg lekkere bonen* and *de bonen zijn lekker* (or... *erg lekker*), the phrase *blauwe bonen* cannot be so transformed. This is generally true of all such combinations, so that the conclusion

is in the plural or singular, with *ego* 'his' or *ich* 'their', whose stem is in the singular or plural while the ending belongs to the genitive category. But this distinction is perhaps not paralleled by differences in syntactic behaviour between *moj* etc. and *ego* etc.

¹⁹⁾ 4.14 (p. 111-112).

²⁰⁾ De Groot, *Introduction to General Linguistics* (forthcoming).

imposes itself that the phrase constituents in this case are not separately selected from the vocabulary, but merely are phonologically independent parts of the expression of a single lexical item.

Now it appears that the combinations susceptible of amalgamation are always of the referential type. Indeed, when an attitudinal construction is subjected to semantic amalgamation, the attitudinal function vanishes (if we may use this "diachronical" terminology). Bech mentions some striking examples in Russian: the elements *-nibud'* (*bud'* otherwise an imperative), *by to ni bylo* (with modal particle *by*), and *kakby, kak budto, budto by*, show the typical symptoms of amalgamation and at the same time are devoid of modality, as appears from the use of e.g. *kakby* with indicative in a sentence like *on kak by čuvstvuet, čto . . .*²¹⁾. A well-known example from Latin is the expression *nescio quo modo*²²⁾, which requires the subjunctive mood when *quo modo* is a normal word combination, whereas it does not require any particular modal category when *nescio quo modo* is amalgamated: *nescio quo modo hoc fecerit* 'I do not know how he did it' vs. *nescio quo modo hoc ſecit* 'he did it somehow'.

About the phrases of the type *red herring* and *blauwe bonen* we further notice that it is impossible to apply expressive lengthening (§ 2) to a word that is not actually selected from the lexicon. Thus the expression *supreme court*, which is amalgamated, as proved by the fact that one does not say *this court is supreme, . . . rather supreme, . . . almost supreme*, etc., cannot be pronounced with lengthened second syllable of *supreme*, in contradistinction to the same word in a non-amalgamated expression like *with supreme scorn, supreme ignorance*. Other examples are *prime* in *prime minister* as against *a matter of prime importance*, and Dutch *eerste* in *eerste minister* 'prime minister' as against *hij is de eerste minister die ik zo iets heb horen zeggen* 'he is the first minister whom I have heard say such a thing'. All this is perfectly confirmed by Bolinger's findings that "the idiomizing [i.e. semantic amalgamation, v.H.] of *bear children* causes *bear* 'give birth to' to be shortened"²³⁾.

²¹⁾ Gunnar Bech, *Zur syntax des tschechischen konjunktivs . . .*, TCLC VII (1951), p. 100.

²²⁾ I am indebted for this example to my colleague Mrs. G. F. Bos.

²³⁾ *Generality . . .*, p. 33.

Amalgamation is obviously a form of neutralization of the adjunct function, called forth by the structure of the phrase as a whole; we may compare this with Trubetzkoy's "types de neutralisation... conditionnés par la structure"²⁴⁾.

The structure here consists in a combination of elements *in different positions* (§ 2), such that the result is an element *without position*. Thus in *blauwe bonen* the combination of the semantic element "blauw" in the position before the center of the phrase, and of the semantic element "bonen" in the position of center, yields a third semantic element "blauwe bonen", whose position is not specified (until we know its use in a larger expression). We call this form of neutralization *endocentric*.

The result of this paragraph may be summarized by two equations:

endocentric neutralization of referential connection = word combination with word meaning (2)

endocentric neutralization of attitudinal connection = 0 . . . (3)

where the symbol 0 in the right member of (3) indicates that an amalgamated attitudinal construction is not illustrated by any expression in any language.

6. REFERENTIAL AND ATTITUDINAL FUNCTION OF SENTENCE INTONATION

If we follow De Groot in assigning to sentence intonation an exclusively attitudinal function²⁵⁾, the various forms of "emphasis" will have to be evaluated as attitudinal sentence types, despite the fact that the tone configuration of *relative prominence* (accent), by which emphasis is manifested in languages like English, German, Dutch, and Russian, is a typical feature of the sound form of constructions, and consequently rather of a referential nature; it might be described as "tone deixis". Such is also the opinion of Trubetzkoy²⁶⁾. Consider, for instance, an expression like Dutch *ze zijn LANG gebleven*

²⁴⁾ *Principes...*, p. 247.

²⁵⁾ See *Structural Linguistics and Syntactic Laws*, p. 3, and *Introduction to General Linguistics*, ch. "The Sentence"; a similar view is expressed by Reichling, *Over het personale aspect in het taalgebruik*, Bundel... De Vooys (1940), p. 299, where we read: "De zinsklankvorm heeft, linguistisch gesproken, geen "objectieve", geen "zakelijke" inhoud: hij "noemt" niet (...): hij brengt aan den hoorder de persoonlijke, ook intentionele, momentele geestesbeweging van den spreker over".

²⁶⁾ Inasmuch as emphasis is treated in the *Principes* as part of the "phonologie représentative", p. 16-29. Cf. Reichling's criticism, op. cit., p. 298: "De 'betekenis'-verschijnselen die met de zinsmelodie optreden behoren niet onder 'Darstellungsfunktion' . . .".

'they stayed a long time / ... remained long'. This expression can be interpreted either as the emphatic form of *ze zijn lang gebleven*, where *gebleven* is an independent verb and *lang* an adverb, or as a non-emphatic sentence, with *gebleven* figuring as a copula and *lang* as its complement: precisely the same tone contour is used in emphasis as in the normal realization of a construction 'copula-complement'. On the other hand, emphasis also has a clear-cut attitudinal function, inasmuch as it calls the listener's attention to some particular word or word group, and often answers to a preceding interrogative sentence. We conclude, then, that in emphasis, just as in interrogation (see § 7), the intonation stratum performs both referential and attitudinal function. It need hardly be added that in any sentence the intonation contains all the sound features marking off the lesser units included in the word material of the sentence.

The difference between emphatic and non-emphatic sentences concerns the syntactic status of the two functions under study: in an emphatic sentence the referential function prevails over the attitudinal function, in a non-emphatic sentence the converse relationship holds. We might say that each of the sentence types in question contains the other as its underlying *transformandum*. As a simple illustration, consider the emphatic sentence type with *c'est... qui* in French. Here *qui* subordinates the attitudinal category (e.g. the indicative contained in *a* in *c'est Jean qui l'a fait*), while the referential nominal expression *Jean*, which, as a subject, is subordinate in the transformed original *Jean l'a fait*, becomes the predicate, and hence the center, of the emphatic sentence. The converse transformation is illustrated by the dissolution of the prominence contour (group accent) of a determinative word group into a rising-falling contour when the group is used in a non-emphatic sentence: thus Dutch *LANG blijven* is dissolved into an expression with rising-falling contour in *hij blijft lang*. Another example is the expression *the dogs barked furiously*, uttered as a non-emphatic sentence, hence with rising-falling tone contour on *barked furiously*. We assume our expression contains as a *transformandum* the expression ...*were FURIOUS*²⁷⁾, with inherently unaccented copula and accented complement; so here too, a prominence contour,

²⁷⁾ Following the approach propounded by Dean Stoddard Worth, *Transform Analysis of Russian Instrumental Constructions*, Word 14 (1958) p. 247-290.

typical of emphasis, is dissolved into a rising-falling pattern when . . . *were FURIOUS* is transformed into *the dogs barked furiously*.

These few examples may suffice to clarify the issue under discussion, *viz.* the assumption that the referential and attitudinal functions interact on *any* rank of the sentence hierarchy, in such a way that a rank with predominant referential function (an "emphatic" rank) is preceded and followed by a rank with predominant attitudinal function ("non-emphatic" rank). This division of the ranks of a sentence into two sets may be compared with Jakobson's "connectors" and "designators"²⁸⁾. In the next paragraph we submit this interplay to a syntactic analysis.

7. INTERPLAY OF REFERENTIAL AND ATTITUDINAL FUNCTION IN DYNAMIC CONSTRUCTIONS

The semantic interpretation of a tone contour depends to a large extent on the nature of the word material under that contour. Compare, for instance, the Dutch expressions *geschiedenis* /ɣəsxídənɪs/ 'history' and *gr ziet de nis* /ɣə zít də nɪs/ 'you see the niche': the tone contours are exactly identical, yet only the last utterance is interpreted as a statement about something. This interpretation is normally made if the word material contains a finite verb as its central or characteristic element.

Now a finite verb always constitutes (in any language where it makes sense to speak of a finite verb) the central or characteristic member of an independent clause (basic favorite sentence type), because, among other reasons, the finite verb performs only this function, whereas the substantival member normally occurs in other positions as well. Yet the finite verb by itself does not constitute a *complete* clause unless it mentions, by means of an affixal element, the category of the subject (impersonal/personal, first/second person, etc.). Examples are Latin *venit* 'he (she, it) is coming', Russian *mrozit* 'it is freezing'.

The expressions of the form N Vf²⁹⁾ resemble in some respects the prepositional expressions of the form P N (cf. § 4): in both cases there is a characteristic member (Vf, P), which is, however, incomplete

²⁸⁾ Roman Jakobson, *Shifters, Verbal Categories, and the Russian Verb*, Harvard University 1957, 2.11 (p. 3).

²⁹⁾ Vf indicates a finite verb.

without the other member, in both types N (noun or pronoun); moreover, the members in the two types are both indispensable, the constructions are both "exocentric" (Bloomfield) or "conjunctive" (De Groot). As concerns the differences, we observe, firstly, that N Vf contains a referential connection, which can be made manifest by a nominalizing transformation ³⁰⁾: thus $N \text{ Vf} \rightarrow A \text{ N}$, e.g. *the dogs barked* → *the barking dogs*; or $N_s \text{ Vf } N_o \rightarrow N_o \text{ P } N_s$ (subscripts ..._s, ..._o indicate subject and object position, respectively), e.g. *Byron wrote Childe Harold* → *Byron's Childe Harold*, *the table has four legs* → *the four legs of the table*. We are thus led to describe the expressions N Vf as the occurrence of a referential connection in an exocentric expression.

The occurrence of a referential connection in an exocentric expression is another form of Trubetzkoy's "types de neutralization ... conditionnés par la structure" ³¹⁾. The neutralization here consists (as in the case of amalgamation, see § 5) in the fact that the expression as a whole transcends the selection of the members, so that the referential function cannot be said to be performed by any one individual segment, but is rather distributed over the whole expression (cf. *blauwe bonen*, to which the above statement equally applies). The structure of an exocentric expression can be defined as a combination of elements in two different positions (say, N and V- in *our horses ran away*), such that the result is again an element in a definite position, which differs from the other two (in the example, this position is represented by the finite ending -f). We accordingly speak here of *exocentric* neutralization.

It was remarked in § 3 that a dynamic referential construction is always accompanied by an attitudinal construction, in this sense that the expression containing a referential connection is as a whole attitudinal. At present, we are especially interested in the constructions of the form N_s Vf and their expansions, e.g.

$N_s \text{ Vf}$	<i>Jan werkt</i>
$N_s \text{ Vf } N_o$	<i>Jan drinkt melk</i>
$N_s \text{ Vf } A$	<i>Jan werkt hard, Jan drinkt snel</i>
$N_s \text{ Vf } P \text{ N}$	<i>Jan werkt op een atelier</i>

³⁰⁾ Noam Chomsky, *Syntactic Structures*, 's-Gravenhage 1957, p. 72, transformation T_{Adj} , which converts e.g. *the boy is tall* into *the tall boy*.

³¹⁾ *Principes...*, p. 247.

The attitudinal character of the parts N_s , N_o , A, and P N in these examples is contextually conditioned; De Groot accordingly speaks of the "attitudinal use" of such constructions³²⁾. In *Jan werkt hard*, for instance, the adjunct *hard* is not inherently attitudinal (like *zelfs*, *toch*, *helaas*), but assumes its attitudinal function only in contact with the finite verb as the center of a sentence; *hard* here figures as the "propos", whereas the preceding part of the sentence constitutes the "theme"³³⁾. If the center of a sentence belongs to the imperative mood, the determiners of that center frequently assume the same or a similar modal function, which can be demonstrated by a suitable transformation or substitution. Thus in forming the passive of an imperative sentence *drink melk* the use of a subjunctive or more commonly, a modal auxiliary, is compulsory; we get *er worde melk gedronken* or *er moet melk gedronken worden*. In *Jan drinkt snel* we can substitute for *snel* a phrase like *nogal snel*, which would hardly occur after the imperative *drink*; similarly, beside *ik ben uit m'n humeur*, *ik ben thuis* we hardly find *wees uit je humeur*, *wees thuis* (instead of the latter one would rather say *kom thuis*), beside *hij werkt tegenwoordig* an imperative **werk tegenwoordig* is flatly impossible. These examples could be easily multiplied.

Referring to what was said in § 2 about the axis of actuality, and actualization as contextual conditioning on the level of the sentence, we register, in the examples above, a case of actualized attitudinal function of a word or phrase. Thus the noun in an N_s Vf expression will be contextually attitudinal because it figures as the "theme" of the sentence, whereas in Vf N_s , e.g. *er loopt een soldaat*, the noun will be contextually attitudinal because it functions as the "propos" of the sentence. We further notice that, while the referential adjunct V—in an exocentric expression of the form N_s Vf is the "propos" of the sentence, the actualized attitudinal function is fulfilled by the "theme" of the same sentence (Martinet therefore rightly regards *l'alcool* in *l'alcool tue* as the "contexte actualisateur"³⁴⁾). If we agree to describe the opposition "theme ↔ propos" (just as the opposition "inward ↔ outward limitation", to which it bears the closest formal resemblance)

³²⁾ *Introduction to General Linguistics*, ch. "The Sentence".

³³⁾ De Groot, *Structurele Syntaxis*, 's-Gravenhage 1949, p. 43.

³⁴⁾ *Éléments...*, 4.26 (p. 134).

as an opposition of positive vs. negative *orientation* (§ 4), then the foregoing statements can be summarized in the form of an equation:

$$\text{exocentric neutralization of referential function} = - \text{actualization of attitudinal function} \dots \quad (4)$$

where the difference in sign between the left and right member of the equation points to the fact that, if the referential adjunct belongs to the "propos", the wordgroup with actualized attitudinal function belongs to, or figures as, the "theme" of the sentence, and vice versa. An equation of approximately converse form:

$$\text{exocentric neutralization of attitudinal function} = \text{actualization of referential function} \dots \quad (5)$$

appears to be equally valid. To demonstrate this, we first note that the attitudinal function of a clause (performed by the finite ending —f in the formula N Vf) can enter into exocentric combination with a subordinative conjunction, e.g. *if he leaves to-night, after he had left, as you know, whether he took it, that he took it*. We can even combine the attitudinal feature of an imperative sentence such as *go* with a subordinative conjunction, provided the appropriate transformations are performed; e.g. *go* → (*I said*) *that you must go*. The role of the conjunction may be equally well fulfilled by a relative or interrogative pronominal expression.

Now we observe that, while a clause of the form N Vf is as a whole attitudinal, the derived subordinate clause C N Vf³⁵) is as a whole referential: indeed, the role of C consists in transforming a sentence (as such attitudinal) into a part of the word material (as such referential). On the other hand, if a sentence is transformed into a subordinate clause, its referential function is contextually conditioned, i.e. *actualised*, by the main clause. In Dutch this actualized referential function manifests itself, for instance, in the fixed order of subject, finite verb and direct object: thus the free choice between *hij had dat boek niet gelezen* and *dat boek had hij niet gelezen* is suspended in *het schijnt dat hij dat boek niet had gelezen*.

³⁵⁾ C indicates a subordinative conjunction, or any equivalent clause-subordinator, e.g. a relative or interrogative pronoun.

In other languages the actualized referential function has found its specific morphological expression. Jakobson mentions the "evidential" category of Bulgarian conjugation, which distinguishes "direct narration" (i.e. dynamic referential function) and "indirect narration" (i.e. actualized referential function), e.g. *zamina* 'I bear witness, it sailed' vs. *zaminala* 'it is claimed to have sailed'³⁸). Thus it appears that the role of the subordinative conjunction or any equivalent connective device can be adequately described either as exocentric neutralization of attitudinal function or as actualization of referential function; and this is precisely what equation (5) expresses.

8. FINAL REMARKS

Needless to say, the theory outlined in the foregoing paragraphs needs further verification on examples taken from a great variety of typologically most diverse languages. Our aim was merely to indicate a new approach, suggested by De Groot's pioneering ideas, to the problem of the interrelations between the structural levels of language.

University of Utrecht

ANDRÉ VAN HOLK

³⁸⁾ op. cit., 2.51.