

SEMIOTIC AND POSSESSIVE MODELS IN RELATIONAL CLAUSES: THINKING WITH GRAMMAR ABOUT GRAMMAR

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ABSTRACT

In this article, I will investigate the semantic models construed by relational clauses, more specifically by intensive and possessive clauses. The approach followed will be the one pioneered by Halliday, viz. the coupling of form and meaning. On the formal side, the main methods used will involve lexical and grammatical selection restrictions and controlled reformulation. On the semantic side, there will be input from semiotics and grammatics. The case will be argued that intensive clauses construe the semiotic models of instantiation and realization, while possessive clauses construe models such as constituency and dependency.

1. INTRODUCTION: ON GRAMMAR AND GRAMMATICS*

About thirty years ago, Halliday (1967a, 1967b, 1968) proposed that clauses such as the following encode a semantic model of “*realization*”:

- (1) A circumstantial expression of Reason represents the reason for which a process takes place (Halliday 1985:140).
- (2) [...] the Subject specifies the entity in respect of which the assertion is claimed to have validity (Halliday 1985:76).

Unlike the mainstream, which has broached two-participant clauses basically in terms of “*causation*” models only, he thus made the point that “*action*” models cannot account for all two-participant clauses. These apply to “*material*” processes such

as, for instance, *hit*, which has a “hitter” (Actor) and a “hit one” (Goal). But “relational identifying” processes such as *represent* have a “representer” (Token) and a “represented” (Value). “Mental” clauses encode yet another semantic model, viz. a “*phenomenological*” one: clauses such as *Music reached us — We heard music* feature a Phenomenon and a Senser, whose encounter can be represented from the perspective of either. In other words, language turns out to encode not just the category of causation which has received so much attention in epistemology, but also fundamental categories of semiotics and phenomenology.

By pointing out that intensive identifying clauses grammaticalize the semiotic relation of representation, which also defines the linguistic sign, Halliday opened up a very intriguing research *dialectic*. In it, grammar becomes a tool to “think about” grammar, i.e. to formulate a “grammatics,” or “theory of grammar.” By the same token, semiotic and grammatical theory are shown to be relevant to the semantics of grammar.

In the work of Langacker (1991:67-69), we find, I believe, another manifestation of the grammar-grammatics dialectic. He proposes that attributive clauses encode the semantic model of “*instantiation*,” as in

(3) A human deliberate Agent is a prototypical Agent.

A human deliberate Agent is construed as a prototypical “instance” of the Agent-category. Attributive clauses can thus be interpreted as the grammaticalization of the (qualitatively gradable) instantiation relation. It is perhaps not entirely coincidental that this analysis of attributive clauses emerged within a theoretical framework which foregrounds gradable instantiation as the central form of linguistic categorization.

In further support of the link between grammar and grammatics, I also refer to my interpretation of existential clauses (Davidse 1997/forthcoming) such as

(4) Certainly, there are plenty of similar examples occurring in the texts in this study (Parsons 1991:43).

(5) For instance, there are three occurrences of *growing period*, two in sentence (7), and one in sentence (8) (Parsons 1991:51).

I have argued that they express whether or not a general category is instantiated in a specific search domain, and if so in what cardinal measure. For instance, (5) states that in the corpus investigated, *three* tokens of the lexical type “*growing period*” were found. We can conclude that existential clauses construe a model of *QUANTITATIVE instantiation*, in contrast with the model of *QUALITATIVE instantiation* embodied by attributive clauses.

In this article, I will first recapitulate the main lines of the semiotic models expressed by intensive relational clauses. For each, I will show how they can construe a specific way of approaching linguistic categories and I will illustrate these in different types of linguistic metalanguage (section 2). In the next section, I will venture into the domain of possessive relational clauses. By working with corpus data from the discourse of linguistics, with whose ideational semantics we should, as linguists, have a natural familiarity, I will attempt to begin to dig up the distinct models of

possession encoded by the various types of possessive clauses (section 3). If concepts from linguistic theory prove of help to elucidate possessive clauses, then we will, in the Conclusion, have cause to re-affirm the importance of the dialectic between grammar and grammatical theory.

2. INTENSIVE CLAUSES: SEMIOTIC MODELS

2.1. EXISTENTIAL CLAUSES: QUANTITATIVE INSTANTIATION

The unmarked, or “cardinal,” type of existential illustrated by (4) and (5) above and (6), construes a “QUANTITATIVE instantiation” model (Davidse 1997/forthcoming)¹

(6) In Step 3, there are *two* referential chains, one of “silver” the other “the customers.”

As I will describe below, the cardinal existential expresses, put simply,

- i) “how much”
- ii) “instantiation of a general category”
- iii) “occurs”
- iv) in a specific “search domain.”

i) *Cardinal quantification*

Measuring “how much” corresponds to the linguistic notion of absolute, or “*cardinal*,” quantification, which indicates the *intrinsic* magnitude of a mass. Cardinal quantification contrasts with “*relative*” quantification, which *compares* the actually designated mass with some reference mass (Milsark 1977, Langacker 1991:Ch. 3). For instance, if you say, as in example (5), that there are *three* occurrences of “growing period” in a specific text, you indicate the intrinsic size of the occurrence. By contrast, if you say that *All occurrences of “growing period” are to be found in sentences (7) and (8)*, then the listener knows how the attestation of “growing period” in (7) and (8) compares with that in the whole text, but he has no clue as to the cardinal value corresponding to *all*.

The unmarked type of existential is concerned with *cardinal* quantification, which is expressed by two of its structural elements, viz. the quantificational element(s) in the Existent nominal group and the general pronoun *there*. This is why I refer to this type of existential as the cardinal one.

As observed by Milsark (1974/77), the unmarked existential requires its Existent nominals to have cardinal quantification. It is because of this “cardinality restriction” that it states “*how much*” instantiation of a general type there is, as in examples (4)-(6): *plenty, three, two*, etc. It conveys this meaning irrespective of whether the existential is *there-less* as in *In section 4 follow some reflections* or does have existential *there* as in the examples above.

What existential *there* does then, in my opinion, is point to the Existent in terms of the general model “cardinal instantiation of a type.” I follow Halliday and Hasan’s

(1976:101) systematization of pronouns and determiners here, when they propose the following proportionality: *it* and *there* are —mostly cataphoric— non-salient pronominal heads, which have the same value as *those* and *some* respectively. This proportionality is brought out nicely by the following alternation between clefts (7, 9) and pseudo-clefts (8, 10):

- (7) It's Jules and Jim that got away with it.
- (8) Those/The ones that got away with it are Jules and Jim.
- (9) There's Jules and Jim that got away with it.
- (10) Some/Ones that got away with it are Jules and Jim.

The definite pronoun *it* has relative quantification. *It* evokes the general model of a designated mass and a reference mass which coincide completely with each other. The Complement *Jules and Jim* in (7) is cataphorically pointed to in those terms, i.e. as “instantiation coinciding fully with the reference mass.” In the corresponding pseudo-cleft, the notion of instantiation coinciding with reference mass is conveyed by the demonstrative determiner *those*, or definite *the ones*. *There*, in contrast, is an indefinite pronoun with cardinal quantification. It evokes the concept of an unspecified cardinal measure, i.e. some part of a quantitative scale. In (9) *there* points cataphorically to the Complement *Jules and Jim* in terms of the meaning “cardinal instantiation of a type.” Therefore, *Jules and Jim* are understood here as an instantiation which is *part of* a quantitative scale, leaving potential room for further instantiation. In the corresponding pseudo-cleft, the meaning “cardinal instantiation of a type” is expressed by *some/ones*. In sum, I view existential *there* as an indefinite, cardinal general pronoun, which is mostly used cataphorically in existential clauses and which “announces” that instantiation of a type in a cardinal quantity will be involved.

ii) *Instantiation of a type*

Most linguistic and philosophical approaches to the nominal group (henceforth NG) have implicitly recognized that the notions of “instance” and “type” are central to its semantics, but Langacker (1991:144-148) has made these notions operational as grammatical categories. The “*type specification*” is designated by the common noun head and its modifiers. The functions of quantification and grounding, both of which presuppose *instantiation*, are realized by quantifiers and determiners. For instance, in *those two chestnut ponies*, the type concept is expressed by *chestnut ponies*, which is turned into the conception of an instance by *those two*.

Cardinal existentials simply quantify the instantiation of the *type* designated by the head noun and its modifiers, e.g. “referential chains” in (6) and “cohesion with what went before,” “cohesion with the situation” in (11).

- (11) There is no cohesion with what went before [...] but there is cohesion with the situation by means of the exophoric deictic *this* and the lexical items *job* and *silver* (Halliday 1985:347).

It is interesting to note that the philosopher Strawson (1959:241), who also had a strong interest in the concept of instantiation, has made basically the same descriptive

claim, viz. that existential *be* should be interpreted as “be instantiated” and that the central NG provides a description of the “non-particulars” that instantiation is being declared or denied of. Mainstream philosophy has largely ignored his proposal.

III) “*Occurrence*” meaning of the verb

The general model defining the verb senses that are found in cardinal existentials is that of “occurrence” (in the sense of “actual finite instantiation of a general type”). Either the “stative” aspect (*be, exist, occur*, etc.), or the “dynamic” aspect (*arise, appear, emerge, erupt*, etc.) of the “occurrence” can be focused on. In linguistic metalanguage, a lexical verb such as *occur* is particularly in evidence (see, for instance, example 4).

IV) *Search domain*

Finally, it should be noted that existentials look for instances (of the type expressed by the type specification) *within a specific search domain*. The search domain to which a specific existential applies is construed by domain circumstances such as *in the texts in this study* in (4) and *in step 3* in (6), as well as by the temporal or modal grounding expressed by the existential’s Finite, and by other relevant contextual features. Statements about the occurrence of tokens of linguistic types are generally couched in the present tense, expressive of “permanent” temporal validity; domain restrictions tend to pertain to the boundaries of the database considered, such as *in the texts in this study* in (4).

2.2. INTENSIVE ATTRIBUTIVE CLAUSES AND QUALITATIVE INSTANTIATION

Whereas existential clauses focus on instantiation from a quantitative angle, attributive clauses construe a QUALITATIVE perspective on the “instantiation” relation. They designate:

- i) an instance and a schema,
- ii) the categorizing relation between which is one-directional
- iii) and potentially gradable.

i) *Instance and schema*

The “instance” and the “schema” by which it is categorized are designated by the Subject and Complement of attributive clauses respectively. The attributive Complement can be either a nominal group

- (12) The grammar, then, is at once both a grammar of the system and a grammar of the text (Halliday 1985:xxii).

or an adjective

- (13) By its very nature, a plural is *special* (Langacker 1991:41).

Note that in linguistic metalanguage, adjectival Complements often designate the type of which the Subject is an instance (14-15). As pointed out by McGregor

(1997:178), they should not be confused with the Classifiers found in the NG, which designate a subtype of the type denoted by the nominal Head, as in *electric train*.

(14) If there is no deictic element, the nominal group is non-specific and, within that, non-singular (Halliday 1985: 62).

(15) The pattern here is prosodic (Halliday 1985: 69).

If the Attribute is a full nominal group, then the attributive clause expresses that the Subject is an (arbitrary) instance (Langacker 1991:68) of the type designated by the nominal head plus modifiers in the Complement, e.g.

(16) Experientially, a phrasal verb is a single Process [...] (208).

(17) [...] the pairs of clauses that are formed in this way [...] are not usually intransitive/transitive pairs, but non-ergative/ergative ones (Halliday 1994:163).

Note that the Subject is mostly construed as *an* instance of the type, but, with Attributes expressing “one-member classes” it has to be construed as *the* instance of the type, as in

(18) His mother was the queen.

Out of context, such examples are ambiguous between an attributive and an identifying reading, but it is important to see that their attributive reading is by no means anomalous (see also Halliday 1967a: 68). The observation that Attributes are *typically* indefinite merely follows from the fact that most schemata have more than one instance.

ii) *The one-directionality of the “schematic” relation*

Constructionally, attributive clauses are “one-participant” clauses. If the Attribute is a nominal group, then it is always a “non-referential” one (Declerck 1988:56-62): it does not “pick out” an entity in the universe of discourse. Constructionally, it is not a second participant; rather, it indicates the Range of the attributive process (Davidse 1992:102). Attributive clauses are non-reversible in the sense that they do not allow for Subject-Complement switch (Huddleston 1984:457). This grammatical feature is iconic with the semantics of the “instance-schema” relation being expressed, which is a *directional* relation going from instance to schema, but not vice versa (Langacker 1991:55ff). For instance, a kangaroo is always an instance of a marsupial, but a marsupial is not always an instance of a kangaroo. A schema is a *general* categorial construct, containing relatively few semantic specifications. Therefore it can be used to categorize various types of *specific* instances which have lots of individual features in addition to those of the schema, e.g.

(19) Some, like *John!* and *good night!* are MINOR clauses [...] (Halliday 1985:44).

“Schematicity” relations include not only category-instance relations, but also category-subcategory relations: instances that can be subsumed under *one* very gen-

eral schema, may also form subclusters under *distinct* more specific schemata. Compare

(20) Quotes, reports and facts are categories of the language (Halliday 1985:251).

(21) Facts are a kind of projection (Halliday 1985:227).

III) *Gradability of the schematicity relation*

The grammar of attributive clauses also incorporates various structural possibilities for expressing the *gradability* of the instantiation relation, such as

- submodification of adjectival Attributes
- modification of the general “type” in nominal Attributes
- modification of the instantiation relation expressed by the verb.

For the adjectival Attributes, we find basically two classes of submodifiers (cf. Sinclair et al 1990: 94-95): those “measuring” the intensity of a quality of the instance (22) (23), e.g. *very, extremely, highly, quite, faintly, rather*, etc. and those loosening or tightening the boundaries of the categorial description (24)-(26), e.g. *strictly, completely, exclusively, inherently, mainly, typically, loosely, roughly*, etc. The former are typically associated with adjectives depicting qualities (22-23) and the latter with adjectives describing categories (24-26).

(22) Their type specification is of course *highly* schematic within the plural morpheme (Langacker 1991:77).

(23) The subject’s tendency to assume a pivotal role in grammatical structure is [...] symptomatic of some special cognitive salience that makes it *particularly* accessible [...] (Langacker 1991:306).

(24) [...] this noun is *inherently* relational (Langacker 1991:38).

(25) Its role is agentive or *completely* passive (Langacker 1991:40).

(26) [...] experiential Epithets are *potentially* defining, whereas interpersonal ones are not [...] (Halliday 1985:163).

Nominal Attributes also contain structural possibilities for expressing gradability, such as submodification of the Epithet, as in

(27) It would have to be an *especially* salient facet of the ground [...] (Langacker 1991:323).

The gradability associated with the Attribute is also evident in its ability to manifest the degrees of comparison. Note that superlative Attributes also define “one member” classes, which, out of context, may lend themselves to either an attributive or identifying reading, e.g.

(28) ...[n] is probably the most prototypical of the nasal consonants... (Langacker 1991:55).

Finally, the “instantiation” relation expressed by the verbal group may be modified by adverbials, as in

(29) its role is active *to some degree* (Langacker 1991:41).

(30) *Most typically*, the Beneficiary is human (Halliday 1985: 133).

This motif of potential gradability of the type-instance relation sets attributive clauses off against existential clauses, in which the type-instance relation is construed from a non-gradable, quantitative point of view.

The fact that the grammar of relational clauses offers us both perspectives on the category-instance relation is, of course, very significant for our appreciation of linguistic metalanguage —and the grammatics it allows us to conceptualize. It is a matter of Whorfian common sense to accept that the quantitative and qualitative perspectives on instantiation embodied in existential and attributive clauses constitute the two complementary models allowing us to conceive of categorization, including linguistic categorization. In their more “programmatically” vocabulary, various schools of linguistic thought may emphasize one perspective more than the other, but in the grammar of the metalanguage they actually use, both perspectives tend to be present to some extent.

Thus, the schematic networks of cognitive grammar model type-type and type-instance relations, which are all subsumed under one general categorial schema, i.e. they model “intra-categorial” relations only. Moreover, attempts have been made to model the “qualitative” aspect of these “instantiation” relations, that is to say, the fact that some instances are “more typical,” “more central” instances of the schema, while others are more marginal. By allowing for “extensions” and “elaborations” of the “proto-typical” relations, the point is made that even instances which do not have all the features of the schema can still be related to it (Langacker 1990). “Radial” networks (e.g. Lakoff 1987) attempt to model the relative distance or closeness between instances even more directly, without reference to mediating (sub)schemata. On the other hand, interest in the quantitative exponence of categories tends to remain on the backburner in this school of thought, although the question of the relation between prototypicality and statistical frequency has been raised.

Whereas the schematic networks of cognitive grammar represent only intra-categorial relations, the system networks of systemic functional grammar model, besides intra-categorial, also inter-categorial relations. In Gleason’s (1965) terms, they model not only enation (identity of structure), but also agnation (structural relatedness) (cf. Davidse 1998). As for the instantiation component of system networks, Henrici’s (1981) “canonical forms” and Hasan’s (1987) “inheritance paths” are lists of increasingly specific categorial schemata. In other words, grammatical constructions can be described as complex categories, involving many layers of more delicate subcategorization, e.g. [major, indicative, interrogative, polar] for a yes/no interrogative. Moreover, the schematic features of the system are viewed as standing in a dialectic relation to the textual “exponence” (Halliday 1992). As much as possible, systemic functional grammar tends to correlate the features in the system networks to their relative frequency of instantiation. However, this consistent interest in the quantitative instantiation of categories has not prevented the development of a

concomitant, more “qualitative” notion of “typicality” and “(un)markedness” (e.g. Halliday 1985:Ch 2).

In general, systemic functional grammar has been less reluctant than other schools to link functional typicality to quantitative frequency. The most frequent clusters of features and intersections of categories are assumed to be also functionally the most central. This is not very controversial for general categories. For instance, the position that there is something inherent in the Subject which favours topical Theme status is supported by statistics. So is the view that the passive is functionally marked in comparison with the active. However, systemic functional grammar tends to extend this line of reasoning very consistently to the marked terms of systems that are intermediate or even rather specific in delicacy (Halliday 1991). Frequency is also a central argument in the systemic re-interpretations of the dative and locative alternations proposed by Davidse (1996a) and Laffut and Davidse (1999).

2.3. INTENSIVE IDENTIFYING CLAUSES AND REALIZATION

In a previous article (1996b), I have documented how the dialectic between grammar and grammatics led me to a lexicogrammatical description of intensive identifying clauses, which, I proposed, harmonizes well with the grammatical analysis of these clauses first presented by Halliday in “Notes on Transitivity and Theme.” In this section, I will recapitulate the main lines of this discovery process.

2.3.1. *The Token-Value Dimension*

It was only when I read in “Notes on Transitivity and Theme 2” that one element in an identifying clause “is, as it were, the *realisation* of the other” (Halliday 1967b:228) that it dawned on me that Halliday analyzes intensive identifying clauses in terms of the semiotic model of “realization,” and that Token and Value were not devilishly elusive concepts, but the “agentive” and “patientive” roles associated with processes of “representation.” Ultimately, each lexical verb defines its own set of specific participant roles. For instance, the verb *slap* takes an agentive “slapper” and a patientive “slapped one,” the verb *hit* a “hitter” and a “hit” one, etc. (Langacker 1991: 284-286). Halliday’s process-participant “types” formulate primary generalizations about the multitude of role sets defined by individual verbs. Token and Value thus generalize over all the processes depicting a form of “symbolic relation.”²

When it came to drawing up classes of verbs designating “symbolic relations,” few problems were posed by subclasses such as *express*, *convey*, *denote*, *indicate*, *construe*, or *embody*, *manifest*, *display*, *mark*. However, after further study of linguistic metalanguage, I started wondering about verbs such as *motivate*, *explain*, *account for*, *determine*, *affect*, *skew*. They too seemed to construe symbolic relations, but I could not fit them into the general picture.

There was also a long struggle with the eight-cell paradigm of identifying clauses Halliday had presented in “Notes,” but which he had more or less retracted from public discussion after complaints such as those by Higgins (1976:175) about its undigestible complexity. What this original paradigm did was re-distribute the categories of Token and Value to the two terms of the identification: *John* (Tk) *is the leader* (Vl) as well as *The leader* (Tk) *is John* (Vl). The semantic consequence of this is that the model of “realization” is posited to be intrinsically *invertible*.

Unable to make sense of this, I started reading up on “representation” in foundational semiotic works such as Peirce (1982), Hjelmslev (1969) and, indeed, Halliday (1992), finding after a while, to my surprise, that they had all stressed that the sign relation *is* intrinsically invertible. As Hjelmslev (1969:58) puts it: “The sign is then —paradoxical as it may seem— a sign for a content-substance and a sign for an expression-substance.”

It was then that things began to fall into place —at least so it seemed to me— with my attempts to analyze various samples of linguistic metalanguage focusing on the symbolic relation between grammar and semantics. This relation can be construed as going “upwards” or “downwards” between the two symbolic interfaces:

i) from grammar to semantics, i.e. from “more concrete” to “more abstract” symbolic stratum, e.g.

(31) [...] the intention (“X thought this: I want this: I will do this”) (VI) *is conveyed* by the TO complement (Tk) (Wierzbicka 1988:31).

ii) or from semantics to grammar, i.e. from “more abstract” to “more concrete” symbolic stratum.

(32) [...] the choice of complements (VI) *is motivated* by the semantics (Tk).

I referred to construals of the first type as belonging to the “expression” subparadigm, and those of the second type as belonging to the “motivation” subparadigm. Each defined relatively clearcut distinct verb classes:

i) expression: *express, represent, convey, denote, indicate, construe, describe, reflect, embody, manifest, display, mark.*

ii) motivation: *motivate, explain, account for, determine, affect, skew.*

In this way, the *raison d’être* of the “second” —motivation— half of the eight-cell paradigm could be made plausible both from the lexicogrammatical and the “grammatics” angle.

2.3.2. *The Identified-Identifier Dimension*

The second role configuration proposed by Halliday for intensive identifying clauses, Identified-Identifier, has perhaps been slightly less controversial, even though certain queries have cropped up regularly in the literature. The main one is whether Identified-Identifier are really “experiential” categories or merely double-ups of Given-New (cf. Toolan 1992:88). A related question is why differences in information focus lead to a set of distinct roles in the relational, but not in the material paradigm.

Halliday (1967a:224) defined the Identifier as providing a definite value for the participant to be identified, the Identified. The Identified can thus be likened to the “x” in a mathematical equation and the Identifier to its actual value in that equation. The Identifier is the participant which corresponds to the wh-item of the wh-question presupposed by the identifying clause. In spoken discourse, the Identifier is typically

signalled by tonic prominence: it then coincides with the information focus. However, the function of Identifier can also be fulfilled by an element intrinsically incapable of carrying the information focus, such as a non-contrastive, anaphoric pronoun (Halliday 1967b:231-233), as in

(33) That (Ir) “s what I *meant* (Id).

Identified and Identifier thus receive a definition which is clearly different from that of Given and New, but the deeper question remains, viz. why is it necessary to posit an identifying dimension for relational effective clauses and not for instance for material effective clauses, and what does the identifying dimension contribute to the semantics of “realization”?

Let us approach this question in terms of the following pair of examples:

(34) The Theme (Tk/Id) is/realizes the point of departure of the *message* (VI/Ir).

(35) The first *constituent* (Tk/Ir) is/realizes the Theme (VI/Id).

Both examples have “upward” symbolic directionality (from more concrete to more abstract), and in both Token and Value are mapped onto Subject and Complement respectively – that is, both have active voice. However, they have *opposite* directions of identification. In (34) the category Theme is identified in terms of its semantic value, while in (35) the formal realization of the category Theme is specified. Halliday (1967b:228) has referred to this as the semantic distinction between decoding (34) and encoding (35): decoding clauses identify in terms of a Value/Identifier, while encoding clauses identify in terms of a Token/Identifier. Corpus study reveals that this distinction triggers certain lexical preferences, in the sense that encoding examples may for instance take verbs such as *mark*, *manifest* and *embody*, which are rare in the decoding. Admittedly, the distinction is less “strong” than the one between the “expression” and “motivation” subparadigm, which triggers distinct verb classes, not just different preferential tendencies.

Ultimately, the very presence of this “identifying” dimension in the relational domain boils down, I think, to the fact that the Token-Value relation is a *correlation*, which potentially faces both ways and thus raises a question as to the “directionality of identification.” In contrast, the “causal” and “action” models coded by material clauses are uni-directional. If we change the information focus for a clause such as:

(36) The rabbit bit the *dog*.

(37) The *rabbit* bit the dog.

there is no concomitant change in the directionality or any other “experiential” aspect of the causal relation.

If we put the vectors of “expression-motivation” and “decoding-encoding” together, we find four experientially distinct subtypes in the intensive identifying paradigm. (The fact that there are eight cells is due to the distinction between active-passive voice.) I have attempted to characterize these four subtypes as follows.

i) Expression: decoding: the “diagnostic” mode. It diagnoses the more abstract significance of more concrete phenomena, e.g.

(38) Such a piece of DNA (Tk/Id) would probably constitute a gene (VI/Ir) (WSJ).

(39) A circumstantial expression of Reason (Tk/Id) represents the reason for which a process takes place (VI/Ir) (Halliday 1985:140).

ii) Expression: encoding: the “symptomatic” mode. It specifies by which more concrete symptoms a more abstract entity is externalized or embodied, e.g.

(40) Cystic fibrosis (VI/Id) is marked by faulty digestion, difficulty breathing and excessive loss of salt through the sweat glands (Tk/Ir) (WSJ).

(41) [...] the end of the New (VI/Id) is marked by tonic prominence (Tk/Ir) (Halliday 1985:275).

iii) Motivation: decoding: the “reactive” mode. It identifies the concrete results of, or the reactions to, the determining factors at the more abstract semi-otic stratum.

(42) The restructuring (Tk/Id) will involve the transfer and lay-off of employees in U.S. operations (VI/Ir) (WSJ).

(43) Parataxis (Tk/Id) favours extending (VI/Ir) (Halliday 1991:52).

iv) Motivation: encoding: the “catalytic” mode. It specifies the more abstract determining factors, or the catalytic factors, of more concrete phenomena, e.g.

(44) Rates (VI/Id) are determined by the difference between the purchase price and face value (Tk/Ir) (WSJ).

(45) the options (VI/Id) differentially favored by one or other social group (Tk/Ir) (Halliday 1991:46).

Note finally that the encoding construals occur more frequently in the passive (roughly 66% passive versus 33% active in my data). This is so because the passive has unmarked, final, information focus, whereas the Subject/Identifier in the active tends to require more marked clause initial information focus (Davidse 1996b:386).

This section has clearly shown how the approach I developed to intensive identifying clauses over the years was crucially influenced by grammatical theory on the one hand and a close involvement with linguistic metalanguage on the other.

3. POSSESSIVE CLAUSES: POSSESSIVE MODELS

Halliday’s (1985/1994) approach to relational clauses posits a continuum which ranges from intensive clauses over circumstantial clauses to possessive clauses. Thus, Halliday makes the intriguing claim that there is a natural grammatico-semantic rela-

tion between the coding of semiotic models and the coding of possessive models. Concretely, he claims in the first place that the attributive-identifying distinction also applies to possessive clauses. Secondly, he extends the participant roles found with intensive clauses (Carrier-Attribute; Token-Value, Identified-Identifier) to possessive clauses.

We find the starting points here for an approach to possessive clauses which is very different from their mainstream analysis, which has tended to foreground alienable versus inalienable possession as the main distinction involved in the (grammatico?-) semantics of possessive clauses (see e.g. Seiler 1983, Heine 1997, Chappell & McGregor 1995).

In the section that follows, I will broach some of the problems raised by Halliday's proposed analysis of possessive clauses. I will do this in the light of the generalized "semiotic" interpretation of intensive clauses proposed above:

- Does the distinction attributive-identifying apply to possessive clauses and, if so, in what sense?
- Can we associate a clear distinction in semantic models of "possession" with it, comparable to the distinction between "instantiation" and "realization" found with intensive clauses?
- Can the participant roles of Carrier-Attribute and Token-Value be extended to possessive clauses? In other words, do they *generalize* over the semantics of the process-participant relations in intensive and possessive clauses?
- Finally, does the identifying dimension apply to effective possessive clauses and, if so, can their experiential import for possession be further fleshed out?

As with intensive clauses, the bulk of the examples looked at will be drawn from linguistic metalanguage. And again, the hope is that, if any deeper insight is to be gained into the highly abstract models encoded by the *grammar* of possessive clauses, our familiarity with the abstract models of possession central to *grammatical theory*, such as constituency and dependency, may be of some help.

3.1. ATTRIBUTIVE CLAUSES

Within the attributive domain, we find various construal types which are in some sense concerned with possession. Following Hjelmslev (1969) we could say that "possession" constitutes their "*purport*," the general "motif" which they convey.³ These types can be illustrated by the following examples:

- (46) The piano is Peter's/mine.
- (47) The piano is along o' me (Halliday 1985:122).
- (48) I have a piano.

However, these types use different grammatical models, and hence also distinct semantic schemata, to convey the possessive purport. We will look at each subtype in turn.

3.1.1. *Intensive attributive constructions: The instantiation schema*

The clause type illustrated by (46) has got the pattern Subject + *be* + Complement realized by genitive or possessive proform. It is not easy to interpret its seman-

tic value because the semantics of the nominal with possessive inflexion have not received a lot of attention yet. In any case, as pointed out by Langacker (1991:176), a nominal such as *Tom's* can designate either an entity, as in *a friend of Tom's*, or a “stative relation,” as in *The hat is Tom's*. Langacker suggests that in the context of this latter construction it assumes the special value of “the possessor’s dominion.” As such, the value of this possessive Complement might be somewhere in between the “categorial specification” typical of intensive clauses and the “location” characteristic of circumstantial clauses (see 3.1.2. below).

All in all, clauses such as *The hat is Tom's* seem to me intensive attributive clauses, which express a “categorizing” relation for the following reasons. Firstly, the verb *be* can be replaced only by verbs such as *remain*, *become*, not *sit*, *stand*, *lie*, etc. *Become* and *remain* seem to express how the Subject relates to a categorial circumscription, not where the Subject is located in time, space, or any other domain. Secondly, the possessive nominal itself also seems to express a “categorial delineation” rather than a specific location. The possessive Complement is more general than the instance designated by the Subject, which strongly suggests the “instantiation” schema typical of intensive attributive clauses.

3.1.2. *Circumstantial attributive constructions: The location schema*

In many languages, the locative schema is very prominent as a vehicle to convey possessive purport (Heine 1997). For instance, in Russian

(49) Masina u Péti. (Heine 1993)
 “The car is with/at Peter”

In English, however, the schema of spatial contiguity is rather marginal. As pointed out by Halliday (1985:122), the strictly locative schema occurs in some dialects of English as a variant for “belong to.”

(50) The piano is along o' me.

Constructionally, this is a circumstantial attributive clause. In circumstantial attributive clauses, the process expresses “location” —not “categorization”— and the Complement is on the same level of generality as the Subject. For instance, in *The cat is on the mat*, *the cat* and *the mat* are both concrete entities. In this respect, I follow McGregor (1997:149) in his criticism of Halliday’s “intensive” analysis of circumstantial clauses such as *The cat is on the mat*. As pointed out by McGregor, *on the mat* is probed by *where?*, not by a probe suggesting anything “categorial” such as *what (type of)?* Also, as mentioned above, circumstantial attributive clauses take verbs like *sit*, *stand*, *lie*, which express “location,” in the sense of “contiguity” between two equally specific entities. These lexicogrammatical features seem to me to argue against a “categorizing” interpretation of *on the mat* —or *along o' me* for that matter.

Note further that, besides the locative schema, there are other possible circumstantial codings of possession such as the comitative schema in

(51) Courage comes with bodily grace.

Here too, the verb expresses “contiguity” (not instantiation) and the two entities involved in the relation are equally specific.

3.1.3. *Possessive attributive clauses: The “holding” schema*

Examples such as *I have a piano* cannot be analyzed as either intensive or circumstantial. They constitute a third type of attributive clause, viz. the possessive construction proper. This type with Possessor/Subject-Possessed/Complement takes verbs such as *have*, *lack*, etc. According to Heine (1993), this construal type is typologically copular-like. In a number of languages it lacks, like intensive relational clauses (McGregor 1997:150), verbal predication. In English, the verb is non-salient and its Complement is a Range, which specifies the extent of the “having.” In English, too, the most important lexical predication is thus made by the Complement.

Note that the well-known concepts of inalienable and alienable possession and inherent versus accidental possession are not much use if we try to make a semantic *generalization* about clauses with *have*, *lack* + Complement, since they can be used equally well for “permanent” characteristics such as *have red hair* as for very ephemeral ones, as in *do you have a pencil with you?* Rather, the distinctness of the model of possession construed must be sought in the process-Range grammar that characterizes all examples.

Lexically, the verb most commonly used in it is *have*. *Have* is clearly the most general lexical verb for this type of possessive relation. The collocational span of its complements is maximally wide and covers all of the following:

- “having red hair, a hot temper” (body part feature/mental feature)
- “having a house, a wife” (permanent having)
- “having something to write with” (accidental having)
- “having a cold, pain, a dream” (experience)

Because of its generality, the lexical import of *have* may be hard to grasp. Heine (1993) has characterized the lexicogrammatical schema involved here in the more specific terms of “seizing” and “holding.” Perhaps “*holding*” does convey the semantics of the lexicogrammatical pattern involved here more vividly:

- the holding or displaying of a physical or mental feature.
- the holding of a more separate entity, in a permanent or accidental relation.
- the holding within oneself of a physical or psychological experience.

Constructionally, this type of possessive clause is “one-participant,” or “middle,” according to Halliday’s (1985:151) “voice” classification. It is the type of ranged clause that does *not* passivize. As with the intensive Complement in attributive clauses, the possessive Complement is thus *not a separate participant*, but it restates the coordinates of the process of “having.”

In all the subtypes listed above, the non-salient possessive process conveys the immediacy of the Subject’s relation to the Complement, whether it be the immediacy of a feature to its Carrier, the immediacy of “availability” of —or “external connection” to— an entity, or the “immediacy” of experience.

In this type of possessive clause, possession is very much construed with the Possessor/Subject as dominant participant. The Possessor is the only real participant; the “having” predication is expressed by a non-salient verb and its non-participant Range.

In this context, we can note that the Hallidayan roles of Carrier and Attribute work rather well as *generalizations* over the semiotic and possessive models. There is a core of “attribution” (expressed by the non-salient relational verb and non-participant Range) to both. *Intensive* attributive clauses construe the qualitative *instantiation* model of “being,” while the *possessive* attributive ones construe the “holding” model of possession. Both the qualitative instantiation and the holding model is *uni-directional*, which is reflected in the non-passivizable grammar of these attributive clauses.

“Have-clauses” in linguistic metalanguage often seem to be used to describe a characteristic constituent or feature of a linguistic unit, concentrating more on the impact of this constituent or feature on the unit in question, than on the precise *nature* of the relationship between “whole” and “part.” For instance,

(52) Every process has an Actor. Some processes, but not all, also have a second participant, which we shall call a Goal (Halliday 1985:103).

As we will see in the next section, the semantic domain of the various possible relationships between whole and parts is covered by identifying possessive clauses.

3.2. IDENTIFYING CLAUSES

3.2.1. *Identifying possessive clauses*

Whereas attributive possessive clauses are “ranged,” identifying possessive clauses are “effective” clauses that have two real participants and that passivize. Like intensive identifying processes, possessive identifying processes have an “agentive” and “patientive” participant. “Agentive” and “patientive” should be understood in a sufficiently general sense. Just as a clause such as *Tonic prominence expresses information focus* has an “expressor,” or “Token” and an “expressed,” or “Value,” a possessive clause such as *The clause contains these three elements* has an agentive “container” and a patientive “contained.” In this section, I will attempt to systematize the lexicogrammar of possessive identifying clauses further along these lines.

3.2.1.1. The “Agent”-“Patient” dimension

To capture the “Agent”-“Patient” dimension of identifying possessive clauses, Halliday extends the roles of Token and Value to them. As I (1996b) have explained elsewhere, this extension of the *semiotic* concepts Token and Value to possessive clauses is, in my opinion, problematic. The categories of an agentive Representans, the “Token,” and a “patientive” Representandum, the “Value,” capture the lexicogrammar of clauses with processes such as *express*, *convey*, etc., which construe the semantic model of “representation.” This model is characterized by a difference in “coding abstraction”: of the two strata involved in symbolization, one is always more “abstract” than the other. However, with possessive identifying clauses, the two participants are always on the same level of abstraction, and the relation between them is

not one of representation, but a “part-whole” one. For this reason, I introduced the categories of Implicans-Implicandum for possessive identifying clauses: these concepts are meant to suggest the “enfolding,” part-whole nature of the relation, while also indicating that one is construed as agentive participant (the Implicans) and the other as patientive (the Implicandum).

Possessive identifying clauses have to be looked at in their own terms. The thing that strikes one fairly quickly then is that there is a basic “inversion” similar to that in the intensive identifying paradigm in the possessive paradigm. Actually, the fact that there are two distinct possessive directionalities is clearer in the lexico-semantics of possessive identifying verbs, and requires less reflection and argumentation than did the difficult concepts of “expression” versus “motivation” in the “representation” paradigm. With verbs such as *contain*, *include*, etc. the agentive participant is clearly the whole and the patientive participant the parts. In contrast, with verbs such as *constitute*, *make up*, the parts form the agentive participant and the whole the patientive one.⁴ This can be illustrated with linguistic and non-linguistic examples:

part → whole

(53) The history of conquest *constitutes* much of the human race (CB).

(54) It [finiteness] *constitutes* the verbal component in the Mood (Halliday 1985:76).

(55) Michelle and partner Debbie Marr *make up* Queensland’s top-ranked beach volleyball team (CB).

(56) Examples of words *making up* larger units.

whole → part

(57) The ground floor *contains* a third bedroom, office, rumpus room, casual lounge laundry, bathroom, toilet and laundry (CB).

(58) The Residue *contains* the Complements.

(59) Each pack *includes* a concert T-shirt (specially designed by Mambo) and two double passes to the Vibes festival (CB).

(60) The Theme of any clause [...] *includes* the topical Theme (Halliday 1985:56).

We immediately see that linguistic examples such as (56) code the theoretical notion of *constituency*, which is, of course, generally defined as a whole-part relation (McGregor 1997:137-138).

Interestingly, the grammatics notion of “*dependency*” appears to be construed also by possessive-identifying clauses, e.g.

(61) In extension, one clause extends the meaning of another [...] (Halliday 1985:207).

(62) [...] the verb *complain* elaborates the schematic processual profile of *will* [...] (Langacker 1991:491).

In grammatical theory, “*dependency*” is generally defined as involving a part-part relation in contrast with the part-whole relation characteristic of “*constituency*” (McGregor 1997:137-138). Once again, it is interesting to move from the grammatics

to the lexicogrammar, and to analyze the metalanguage used to think and talk about constituency and dependency. Intriguingly, the difference between statements about constituency and dependency turns out to be only lexical, not grammatical. Statements about constituency take lexical verbs such as *contain*, *include*, and *constitute*, *form*, *make up*, whose lexical semantics invoke a whole and its parts. Statements about dependency take lexical verbs such as *elaborate*, *extend*, *enhance*, *expand*, *embellish* and *control*, *govern*, *dominate*. Their lexical semantics invoke less the relation between a whole and its parts than that between a “larger” or dominant part and a “smaller,” dependent part. Thus:

whole - part: *contain*, *include*

dominant part - dependent part: *control*, *govern*, *dominate*

part - whole: *constitute*, *make up*, *build up*

dependent part - dominant part: *elaborate*, *extend*, *enhance*, *expand*, *embellish*, *qualify*, *modify*

Again, the “dependency” verbs can be illustrated both for non-linguistic and linguistic contexts:

(63) Its skyline *is dominated* by the central mosque (CB).

(64) The subject *governs* person-marking on the verb.

(65) Labour now *controls* more councils than ever before (CB).

(66) Tense marking *is controlled* by the subject.

(67) Baked peaches, filled with crumbled amaretti biscuits, *complete* a relatively guilt-free menu (CB).

(68) The core or nucleus of a clause may *be expanded* by the inclusion of additional linguistic units [...] (McGregor 1997:168).

(69) Julie Shirvington says, the home *is enhanced* by an easy care garden [...] (CB).

(70) [...] the unit introduced by *before* in examples (5-57) and (5)58): it *enhances* the situation (McGregor 1997:169).

Note finally that the “dependency” verbs in which the dominant part is the Agent, appear to construe mainly the notion of “*government*.” Those in which the dependent part is the Agent construe the notion of “*elaboration*.”

3.2.1.2. The Identified-Identifier dimension

The next question to be addressed is whether, like with intensive identifying clauses, Identified and Identifier should be recognized as a second experiential role configuration. As we saw in 2.3.2, the reason for positing the “identifying” dimension is that, without it, the relational effective clause would be —experientially— ambiguous. The deeper cause of this ambiguity lies in the fact that effective relational processes code correlations, which potentially face in two directions. In effective relational clauses, there is “something more” than a textual difference between.

(71) Theme (Tk/Id) expresses point of departure (Vl/Ir).

(72) Theme (Vl/Id) is expressed by first position (Tk/Ir).

(73) Theme-Rheme (parts/Id) constitute the message (whole/Ir).

(74) In wh-interrogatives, the Theme (whole/Id) is constituted solely by the wh-element (part/Ir).

As we saw in 2.3.2, decoding (71), which identifies in terms of the Value, states what Theme means, while encoding (72), which identifies in terms of the Token, states by what formal means theme is realized. This is the distinction between “conveying meaning” and “formal manifestation.” Similarly, (73), which identifies in terms of the whole, states which global, meaningful whole is formed by Theme-Rheme, while (74), which identifies in terms of the parts, is concerned more with the completion—or extension—of the structure. As with intensive identifying processes, this construal difference is reflected to a certain extent by lexical preferences: identification in terms of the whole uses verbs such as *form*, *constitute*, *make up*, etc. but identification in terms of the parts attracts verbs such as *complete*, *elaborate*, *extend*, *enhance*, *expand*, *embellish*. The two “identifying” directions of “motivation,” reaction and catalysis, were discussed in 2.3.2. Similarly, possessive clauses designating the “whole-part” relation allow for identification in terms of either the parts or the “controlling” whole, and display concomitant lexical preferences in their choice of verb.

(75) This analysis (whole/Id) also includes the particles (parts/Ir) which are otherwise left out.

(76) Case choice (part/Id) is governed by the preposition (whole/Ir).

To indicate the extensive parallelism with intensive identifying clauses in the way Identified-Identifier impact on the paradigm of possessive identifying clauses, the intensive identifying paradigm is reproduced below alongside the possessive identifying one.

Identifying intensive	identifying possessive
Concrete → Abstract	Parts → Whole
Decoding: Ir = Abstract e.g. <i>express</i>	Ir = Whole e.g. <i>constitute</i>
Encoding: Ir = Concr. e.g. <i>embody</i>	Ir = Part e.g. <i>complete</i>
Abstract → Concrete	Whole → Parts
Decoding: Ir = Abstract e.g. <i>motivate</i>	Ir = Parts e.g. <i>contain</i>
Encoding: Ir = Concr. e.g. <i>determine</i>	Ir = Whole e.g. <i>govern</i>

3.2.2. Intensive identifying clauses with possessive purport

Finally, some words are in order about the “intensive” identifying reading posited by Halliday (1985:122) for a clause such as (46) *The Piano is Peter’s*: “both *the piano* and *Peter’s* express “that which Peter possesses,” the relationship between them being one of identity.” This reading was clarified to me by An Laffut (p.c.), who pointed out that, in order to get an identifying reading out of (46), *Peter’s* has to be

interpreted as a definite nominal with the meaning of “the thing owned by Peter.” Such intensive identifying clauses can presumably be made plausible in a context like the following. Imagine a hat check girl who has to return the hats to their owners. The resulting “identifications” could be worded in terms such as

(77) Tom’s (VI/Id) is *this hat* (Tk/Ir).

(78) *This hat* (Tk/Ir) is Tom’s (VI/Id).

with *Tom’s* meaning “Tom’s hat.” The construal type is an “ordinary” intensive identifying clause; the nominal with possessive inflexion (cf. Langacker 1991:176) is a definite nominal and designates the entity owned by the possessor in question.

4. CONCLUSION

In this article, I have pursued the dialectic between grammar and grammatics, indicated first by Halliday in the domain of intensive identifying clauses. I have extended it first to existential (section 2.1) and intensive attributive clauses (section 2.2), which can be interpreted as the grammaticalization of the *quantitative* and *qualitative* models of *instantiation* respectively. In section 2.3, I have recapitulated my lexicogrammatical description of intensive identifying clauses, which grammaticalize the sign relation itself, the semiotic concept of *realization*. I have paid particular attention to the “inversion” intrinsic to their constructional paradigm, which accounts for the difference between the *expression* and *motivation* subparadigms.

In section 3, I then turned to possessive clauses. In 3.1, I have proposed analyses of the various types of attributive clauses concerned with possessive purport, stressing somewhat more than Halliday their distinct constructional values. In 3.2, finally, I have developed, often still tentatively, a lexicogrammatical description of possessive identifying clauses which does justice to the “inversion” of the part-whole relation displayed both lexically and constructionally by these construals. The contrast between expression and motivation found with intensive identifying clauses turned out to be mirrored by the contrast between the “part-whole” and the “whole-part” perspective.

Along the way, it has become even clearer just how strongly grammatics and grammar are intertwined. Not only the semiotic models of instantiation and realization, but also those of constituency and dependency turn out to be deeply incapsulated into the lexicogrammar, without however losing any of their conceptual complexity or flexibility for it. As Halliday once put it in a lecture given at the University of Leuven, the grammar is a trap from which we cannot escape —certainly not in linguistic metalanguage, but it is a “tender trap.”

Data Sources

The corpus examples quoted are taken from the Wall Street Journal Corpus (WSJ) and from the COBUILD corpus (CB).

Notes

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¹ In Davids (1997, forthcoming), I discuss, besides the unmarked, “cardinal,” existential, also the enumerative existential, e.g. *Which cities in Australia should we visit? Well, there’s Sydney, Melbourne and Brisbane for a start.*

² In section 3.2, I will give some arguments why Token and Value are, in my opinion, not very suitable as categories for possessive identifying clauses.

³ Following Hjelmslev, a fundamental distinction is made here between the *semantics of the lexicon*, which is coded by language specific sign relations, and the *general communicative purport*, which is what can be “translated” between languages.

⁴ That is to say, the distinction becomes clear once you recognize the agentive-patientive dimension specific to possessive identifying verbs. In a previous article (1996a), I had overlooked myself the clear whole-part and part-whole semantics of the two distinct classes of possessive verbs. I had proposed instead *Peter owns the piano* and *The piano is Peter’s* as typical codings of the two directionalities of possessive clauses. However, I now view, as I will argue below, *The piano is Peter’s* as an intensive construal.

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