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## Anderson's Case Grammar and the history of localism

### VERSION PRÉ-FINALE

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### Introduction

Localism is defined by Anderson as “a hypothesis about semantic structure: the hypothesis that semantic domains (lexical fields, morphological paradigms, semantic/syntactic roles or functions) are structured in terms of the spatial relations most obviously instantiated in expressions of concrete location and direction/movement” (1994: 2276). As noted by Lyons, localism is most often associated with the claim that spatial conceptualization is of prime importance in human cognition (Lyons 1977: 718). Anderson is a cautious adherent of this position.

Localism has been revived in the past decades by several linguists, as we shall see. For anyone undertaking to write this history, it is somewhat frustrating that these forms of neolocalism generally seem to ignore their past or do not reveal their sources. Anderson, however is the exception. Quite remarkably, especially when we consider the all too frequent “eclipsing stance” of modern linguistics, he has always taken great care to situate his own conception in the history of localist ideas. Anderson's remarks about contemporary grammatical models and localist accounts offer a perceptive contextualization of his own theory. They also reach beyond his own time. While he often relies on Hjelmslev's classical presentation (*La Catégorie des Cas*, 1935/7 [1972]) for the history of localism, observations scattered in his work show that he does not reduce this history to what fell within Hjelmslev's purview, and sometimes disagrees with him. Yet, however invaluable this historiographical work may be, I believe there is still something to be said about the more distant origins of localist ideas, as well as about the transmission of these ideas up to Anderson's time.

The first part of this chapter is devoted to the contextualization of Anderson's ideas, their formation and their evolution. As hinted above, much has been said by Anderson himself about the theories he entertained a dialogue with. However, a purely historical account may help understand how different brands of localism have arisen in the past fifty years. Throughout this text, we shall focus on those aspects of Anderson's theory which concern cases and localism. Other facets of his theory, such as his phonological ideas, his notional

description of parts of speech, his account of raising, control, finiteness, subordination etc. will be hardly touched upon or will be left aside.

Our second part sketches a history of localism from Aristotle up to the present. Of course, neither space nor the competence of the author can allow for anything approaching an adequate overview. It is merely hoped that the presentation offered here will be one more step toward understanding the evolution of localism.<sup>1</sup>

## **1. The context of Anderson's theory**

The next sections present important aspects of Anderson's environment, notably views which developed in the context of generative grammar. This presentation is followed by an account of Anderson's theory. In the years following its development (the 1970s), case grammar has been incorporated into a more ambitious program which aims at a foundation of linguistics on notional bases (1997, 2011). As mentioned in the introduction, this development is not directly relevant to our central concern, Anderson's version of localism.

### *1.1 Fillmore on case grammar*

There are several reasons why presenting Fillmore's early work on case grammar may provide a good start. First, Fillmore's programmatic paper for a case grammar (1966a, b) is historically the first of its kind<sup>2</sup>, although Anderson's proposal appeared almost simultaneously, and, as testified in Anderson (1968), independently. Their environments were, to a certain extent, comparable insofar as they were both led to situate themselves with respect to transformational grammar, in a time when it held sway over syntactic theory; the presentation which follows may therefore help us contextualize the advent of case grammars. Finally, from what we read in Anderson's own accounts, we may gather that Fillmore's views influenced the development of Anderson's model.

Fillmore's inaugural attempt at a case grammar was expounded in two papers (1966a, 1966b), of which one (1966b) is in fact an expanded version of the other (1966a). Two initial

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<sup>1</sup> I thank József Andor, Nigel Vincent and my friend and colleague Valérie Raby for their very useful corrections and suggestions. My deepest gratitude goes to Roger Böhm, whose exceptionally clear and detailed review has made me benefit from his vast knowledge of Anderson's theory and of theories of case generally; many misguided interpretations and formulations have been rectified thanks to his help.

<sup>2</sup> If we except Gruber (1965), to be discussed below, but this study was Gruber's dissertation and was apparently little known before Jackendoff (1972, 1976) integrated it into his own theory.

concerns appear to motivate Fillmore's introduction of "deep cases". The first is to formulate constraints on the nature and number of adverbial phrases in a derivation, including constraints related to selectional restrictions (such as the type of prepositions used in manner and time adverbials). In this he was touching upon a sensitive issue of *Aspects*, since Chomsky, unfaithful to his own ban on "functional" notions, had introduced rules of phrase-structure that made reference to semantic notions, such as 'Time' and 'Place', in his treatment of adverbials (see also Anderson's discussion of the same point, in Anderson 1975: 21; 2005: 16). The second motivation claimed by Fillmore is that some generalizations would be missed if no appeal were made to deep cases. In his famous examples (1966b: 5):

- (1) *The door will open.*
- (2) *The janitor will open the door.*

*the door* designates an argument which, in spite of sustaining different grammatical relations in the sentences, has the same semantic role in (1) and (2), which Fillmore labels "Ergative" and later (as of Fillmore 1968) "Objective".<sup>3</sup> Further, and this brings us back to the matter of preposition choice in adverbials, Case constrains the preposition an argument may occur with. In English, for instance, the Instrumental Case is marked by *with* when it functions as an adjunct/circumstantial:

- (3) *The door will open with the key.*

These concerns are handled by introducing deep structures in which all arguments are labelled with Cases, and associated with specific "prepositions" (renamed *K*, for *Kasus*, in Fillmore 1968), i.e. Case markers which, in English, are deleted in certain positions and with certain verbs. The projection to grammatical relations is captured in rules of which the most important states a hierarchy of accessibility to the subject position: if an Agent is present in an active sentence, it preempts the subject position, if not the Instrumental will, and if neither an Agent nor an Instrumental is present, the subject position is assigned to the Ergative.

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<sup>3</sup> This terminological change might not be without significance : Fillmore's first choices ("prepositions" and "Ergative") designate a class of forms and a formal pattern. In 1968 these categories are given semantic labels and therefore are, so to speak, "semanticized". The "semanticization" of linguistic categories will be a recurrent feature of American grammatical theory in the years under consideration here.

Note that throughout this first part, cases spelled with an initial capital letter will refer to "deep" cases, that is, semantic-functional case relations, by contrast with surface case forms (like the Latin nominative, accusative etc.).

Grammatical relations being derivative, in Fillmore's framework sequencing and configurationality are derivative too. The result is a model that is valence-based and makes all arguments dependents of the verb in equal measure. At this juncture, Fillmore acknowledges his debt to Tesnière and his followers, although he differs from them in giving pride of place to semantic roles.<sup>4</sup> In deference to Tesnière, deep cases also go by the name of *actants*.

## 1.2 *Fillmore and the wider scientific context*

When recollecting about the evolution of his thinking, Fillmore mentions his structuralist and pre-generative commitment under the guidance of Fries and the influence of Pike (Fillmore 1982). His brief autobiographical notes are meant to link up the notions of syntactic frame and case frame with its semantic counterpart of later coinage<sup>5</sup>; however, I believe they also point to a source of Fillmore's deep cases.

In *Language* (1933), Bloomfield's constructional meaning is the semantic pole of units, or *tagmemes*, comprising morphosyntactic and intonational features (or *taxemes*). Following in Bloomfield's footsteps, both Pike and Fries considered that syntactic constructions were associated with a *sui generis* meaning. For the transitive pattern, this meaning was characterized as that of a situation in which 'an actor performs an action'. When Pike (1943) combined the Bloomfieldian tagmeme with immediate constituent analysis, he made each constituent, down to the morpheme, a tagmeme. In a popular handbook of tagmemics, analyzing the morphosyntax of a language consisted in listing patterns of form-function (or meaning) pairings, from the most inclusive pattern to the morpheme. For example, in Sierra Popoluca, the sequence of the tagmemes forming the most inclusive propositional construction was given as

Introducer (e.g. 'then') Predicate Manner Location Instrument Time

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<sup>4</sup> Fillmore (1982: 114) says that he had got acquainted with European and American work on valence theory. The European work he alludes to includes Tesnière and his German disciples (esp. Helbig, it seems; he cites as a ref. Helbig and Schenkel 1973). Unlike Fillmore, the Germans are very much concerned with distinguishing participants (obligatory or not), and circumstantials.

As for the American work, he may have wished to refer to the formal presentation of Hays (1964).

<sup>5</sup> In Fillmore (1975) frames are linguistic systems representing scenes, which in turn are "not only visual scenes, but also familiar kinds of interpersonal transactions, standard scenarios defined by the culture, institutional structures, enactive experiences, body image, and, in general, any kind of coherent segment of human beliefs, actions, experiences or imagings" (Fillmore 1975: 124). On the evolution from case frames to situation-based data-structures, see Fillmore's interview with Andor (2010). In Fillmore's theory, general cases progressively grew into roles relativized to specific situations.

(Elson & Pickett 1964: 70-1; free S and O are optional, non-marked and disfavoured, they occur in “detail slots”).

In other words, tagmemic analysis embodied what Fillmore (1966a/b) wanted transformational grammar to be supplemented with, namely functional descriptions of constituents, such as ‘actor’, ‘manner’, ‘instrument’ etc.

Fillmore’s and Anderson’s case grammars are formulated at a crucial juncture in the history of generative grammar, that is, after Chomsky’s *Aspects* (1965). Testimonies of linguists coming of academic age at that time, as well as their own approaches, show that transformational grammar, especially *Aspects*, was taken as opening a semantic breach in a discipline that, under the Bloomfieldians, had reputedly been averse to meaning. McCawley, for instance, declared: “*Aspects* brought semantics out of the closet. Here was finally a theory of grammar that not only incorporated semantics (albeit very programmatically) but indeed claimed that semantics was systematically related to syntax” (McCawley 1976b: 6). In this respect, *Syntactic Structures* were somewhat ambivalent. On one hand, grammar was described as “a self-contained study independent of semantics” (1957: 106), but, on the other hand, the treatment of ambiguities like *the shooting of the hunters* illustrated that “we should like the syntactic framework of the language that is isolated and exhibited by the grammar to be able to support semantic description” (1957: 102).<sup>6</sup> Now, the deep structures posited in *Aspects* were intended to achieve precisely this goal, since they were supposed to be the level which supported semantic interpretation. Before Chomsky, Katz and Postal (1964: 33f.) had argued for the existence of underlying phrase-markers from which grammatical relations, constituent structure, deleted and moved elements could be recovered.<sup>7</sup> In addition, they suggested that utterances sharing the same selectional restrictions and felt to be semantically equivalent had to be derived from the same underlying phrase-marker, e.g. *John’s flying of the plane* and *the way in which John flies the plane*, on the ground that both surface forms occurred with *erratic* and *foolish* (Katz & Postal 1964: 140). Such a conception reflected on the part of transformationalists a very extensive conception of synonymy, if not a certain amount of semantic laxity (as forcefully argued by Bolinger 1977).

For some transformationalists, it would be an easy step to convert deep syntactic structures into semantic structures. Fillmore (1966a, b, 1968), in deriving *have* from *be*,

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<sup>6</sup> See the nuanced discussion of this point in Matthews (1993: 138-40).

<sup>7</sup> According to Jackendoff (in Huck & Goldsmith 1995: 98-9), Chomsky’s conception of deep structures in *Aspects* reflected the influence of Katz and Postal.

posited a deep semantic structure with deep cases; Langacker, who had first adopted the framework of Katz and Postal, seized upon Fillmore's cases and converted his syntactic derivations into generative processes starting from semantic deep structures (1968).

In an early paper heralding the semantic turn of some transformationalists, Lakoff (1976 [1963]) attempted a foray into verbal semantics.<sup>8</sup> First, he said, if synonymy required that paraphrases have the same underlying structure, then *I like the book* and *the book pleases me* had to be derived from the same structure. This implied to delve more deeply into semantic matters, the relation of semantics to grammatical relations, and the shades of meaning distinguishing (or not) paraphrases. Then, Lakoff proceeded to classify verbs according to features, inter al., of agentivity, affectedness of their direct object, and the directedness of the denoted change. For example, *listen* was classified as agentive because of its ability to have a *do* pro-form (cf. *What I'm doing is listening to the lecture*), which is not the case of *hear*. Verbs of directed change fell into two groups: those oriented toward a goal (*I became insane, his face went pale*) and those oriented toward a source (*I lost my sanity*). Such "neutralized" spatial features, he argued, could account for the widespread expression of change by means of spatial markers (as in *I came to know that*). A general view underlay Lakoff's sketch: generation of surface forms must proceed from "thoughts" (Lakoff's term), i.e. semantic structures.

This fundamental idea summarizes the endeavour known as *generative semantics*, a movement to which, besides Postal and Lakoff, McCawley, Ross, Langacker, Chafe and Talmy were affiliated (in different ways) during the decade 1965-1975. It is far beyond the scope of this chapter to narrate its emergence, the inner fighting it caused in the generativist camp, and its eventual demise (see Harris 1993, Huck & Goldsmith 1995), or rather, transmutation into cognitive linguistics (Fortis 2015). Through the semantic breach opened up by deep structures, generative semanticists let in and tried to handle a vast range of issues: anaphora, quantification, referential ambiguity, propositional attitudes and opacity, information structure, presupposition... In positing deep semantic structures, they felt, or so it seems, that they were taking generative grammar in a direction which accorded with Chomsky's views. Had he not implied, in *Cartesian Linguistics*, that generative grammar was engaged in the same endeavour as what he imagined to be the pursuit of Descartes and Humboldt, i.e. that it sought to expose the underlying linguistic structuring of thought?<sup>9</sup> Such a misunderstanding also rested on the fact that, for example, Chomsky seemed to praise Port-

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<sup>8</sup> However, this paper had little impact when it was first circulated (Harris 1993: 105).

<sup>9</sup> See on this point the testimony of Robin Lakoff (1989).

Royal grammarians for their quest of deep “significant semantic connections among the elements of speech” (1966: 44-5); yet, his own theory was focused on syntactic, not semantic, relations. This inconsistency between Chomsky’s declared affinities and his own practice has not escaped Anderson, for whom it attests to the lingering influence of structuralism in Chomsky’s thought (Anderson 2006: 29-30; 2011: 43-4 & 51-2).

In this semantic turn induced by generativism, and in addition to Fillmore’s work, two further interconnected lines of investigation are especially relevant to our subject and deserve to be mentioned. The first involves the analysis of lexical meaning into prelexical structures; the second line is the variety of localism introduced by Gruber (1965), shortly after adopted and reworked by Jackendoff. We will now turn to these two subjects.

### 1.3 *Prelexical analysis*<sup>10</sup>

In Anderson’s theory, some verbs have a structure containing an embedded predication which is dependent on a predicator with an agentive argument. A transfer verb like *give*, for example, is decomposed into a causative predicator (with an ‘Agent’ ~ Ergative argument) and a dependent directional predicator, i.e. a complex lexical structure that may be paraphrased as ‘w causes x to go from y to z’/‘w causes z to receive x from y’.

. The motivation for this type of structure is discussed first in Anderson (1971) and at greater length in Anderson (1977) as well as in later work (see Anderson’s presentation in Andor, this volume). This type of analysis became familiar in the circle of generative semanticists. Further, different versions of it have circulated since in linguistic theory; one of them (Jackendoff’s) is localist (or, as we shall see, localistic), and characterizes roles by the fact of being arguments of certain deep predicates. On such a view, roles are derived notions and are given configurational definitions as argument positions in “deep” predications. In this sense, prelexical syntax may be viewed as an alternative to accounts in which roles are directly identified as semantic, i.e. are “cases”. For all these reasons, it might be in order to say a few words about the context in which this kind of analysis arose.

In Lakoff’s dissertation (1970 [1965]), transformations were used to account for derivational morphology (*thick* > *thicken*<sub>INCHOATIVE</sub> or *thicken*<sub>CAUSATIVE</sub>), and were generalized to morphologically simple items like *kill* (*die* > *kill*). Inchoative and causative verbs were derived from the merging of lexical items like *thick* with abstract, phonologically empty verbs

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<sup>10</sup> This section partly repeats the section 2.4 of Fortis (2015).



(“pro-verbs”) with the features [+inchoative] or [+causative]. In effect, Lakoff was proposing a *syntactic* analysis of the *semantic* composition of lexical units. McCawley (1971) took Lakoff’s account a little further by suggesting that we should treat pro-verbs and their features as deep *semantic* units (CAUSE, BECOME), on a par with the *content* of the items they merge with (DEAD). This merging (or *predicate raising*) thus occurs on a semantic level, even if it is accomplished with syntactic means, that is, transformations performed on tree-structures. McCawley’s proposal received some support from Morgan (1969), who argued that adverbs like *almost* could selectively target one of the deep components of *kill*, e.g. in *I almost caused John to die* (= ‘I almost caused John to die’ or ‘I caused John to almost die’). The semantic equivalence of *kill* and *cause to die* was, however, subject to controversy (Chomsky 1972, Fodor 1970; an early refutation was proposed by Hall 1965: 25f.). In brief, prelexical syntax was an attempt at extending transformational grammar below the word and, in so doing, the theory moved to a semantic level of analysis.

Anderson’s own version of lexical decompositional analysis has, I believe, one essential function, which is to provide a representation for the internal structure of some agentive verbs: in effect, this representation separates the locational system and the system we may call “actional” (a term Anderson sometimes uses). For example, when analyzing the relations sustained by the subjects of ‘own’ and ‘buy’, he initially assigns the same Case to both, namely [loc,erg] (1977: 143-5). Yet, it is intuitively clear that the two arguments are not agentive to the same degree. The way out of this difficulty consists in splitting ‘buy’ into two component predicators: an agentive predicator with an [erg] argument encodes the causing event and embeds a directional predicator which designates the transfer of ownership. ‘Own’ has no such internal structure and, as it were, unites the ergative and locative features in its subject argument (1977: 160ff).<sup>11</sup> Note that such lexical analysis, like in generative semantics, applies to underived lexical items, not just to morphologically or syntactically complex causative structures. However, unlike generative semanticists, Anderson mostly restricts this analysis to causative-locational structures (but see Anderson’s account of ‘persuade’ in 2006: 362-3, with a deep ‘intend’). Such internal complexity, as noted by Anderson, deviates from Fillmore’s approach, who differentiated between intransitive and transitive *open* simply by listing an optional agent in the case frame: *Open* O(A) (Anderson 1970b: 101ff., 2006: 398).

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<sup>11</sup> Another benefit of this prelexical analysis is to offer a criterion for distinguishing verbs which accept the imperative and verbs which do not but accept a passive with *by*, and are thus agentive to a certain degree. Verbs that imperativize require a separate ergative, while verbs compatible with an agentive *by* may subcategorize a complex relation containing an ergative (e.g. [erg,loc] for *own*).

Finally, it is worthy of note that <sup>12</sup>lexical analysis is Anderson's substitute for what, in construction grammar of the Goldberg (1995) type, results from the merging of a lexical item with a constructional pattern. In *The professor talked us into a stupor*, we are not dealing with a caused motion construction merged with *talk*; rather, says Anderson, 'talk' is an instrumental circumstantial subordinated to a causative directional structure. In other words, causative *talk* has an internal lexical structure paraphrasable as 'X cause Y to go to Z by means of 'talk''. This account illustrates a fundamental aspect of Anderson's theory, that is, the preponderant role of the lexicon in driving syntactic construction.

#### 1.4 Gruber and Jackendoff on thematic relations

According to Gruber, the prelexical structure of verbs expressing concrete motion (in his words, "positional transition") incorporates semantic roles, some of which are common to other, "abstract" fields; further, all abstract roles appear to have a concrete counterpart. We may gather from the text that these generalized roles are those of *Theme* (the located or moving entity), *Source*, *Goal*, *Location*, *Agent*<sup>13</sup>. When this frame is generalized to non-spatial transitions, Gruber speaks of situations of "abstract motion".

It should be noted that the prelexical level is generated by phrase-structure rules and is syntactic; as such, it is not considered to be a semantic structure. To put it differently, roles get semantically interpreted by the interpretive component of grammar. In addition, prelexical structure should state the kind of complements a verb can occur with, that is, whether it takes a direct object, and/or a prepositional complement, which kind of preposition is compatible with it, and the selectional restrictions that hold of its arguments. These multiple functions may be illustrated with *pierce*, which takes a *through*-headed PP or a direct object whose selectional restrictions, according to Gruber, are those of 'through'. To capture these facts, Gruber posits that *pierce* optionally incorporates 'through'; when 'through' is incorporated, *pierce* takes a direct object with the same selectional restrictions as 'through' (Gruber 1965: 15-6). Incidentally, note that the role identified by 'through' does not seem to have an abstract counterpart in Gruber's account.

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<sup>12</sup> This is not really surprising given that, according to Anderson "semantic representations are constructed out of predications that are locational or directional or non-locative non-directional" (Anderson 1973b: 10).

<sup>13</sup> To be precise, Gruber distinguishes "causative agents" (*John entered the sparrow into the cage*) and "permissive agents" (*John let the bird out of the cage*) (Gruber's examples; 1965: 225f.).

The following table shows the different kinds of abstract motion recognized by Gruber (1965: 47-8). The examples are meant to illustrate the motion of a Theme from a source to a goal; in the example of identificational transition, the Theme is conflated with the source.

Varieties of “abstract motion”	Examples
Transition of activity	<i>The climate changed from being rainy to manifesting the dryness of the desert.</i>
Identificational transition	<i>The coach turned into a pumpkin.</i>
Possessional transition	<i>John obtained a book from Mary. John gave a book to Bill.</i>
Transition of class membership	<i>John translated the letter from Russian into English.</i>
Transfer of abstract entity	<i>John reported to Mary from Bill that he would like to see her.</i>

FIG. 1: Fields of abstract motion in Gruber (1965)

However, Gruber does not argue in favour of the primacy of spatial relations. On the contrary, he explicitly says that on his view “there is no particular priority intended for the sense of concrete motion” (Gruber 1965: 48). Space, therefore, is not a more basic domain but shares a neutral “motional” structure with other fields. In Anderson’s terminology (Anderson 1994), the neutral view is *localistic*, by contrast with the *localist* conception, which typically holds that space is more basic for cognitive reasons.

Among the shared roles, Location has a special status and appears to be more basic than Source and Goal (1965: 71f.; 88-9; 122). Source, says Gruber, is negative Location in the context of a dynamic verb (such as *go*), while Goal is positive Location; indeed, an argument for placing *from* and *to* at, respectively, the negative and positive poles of location is that *from* may express ‘not being at’ (*The statue was standing away from the wall*), while *to* is associated with a positive state of affairs or the positive pole of a process. For instance, *John came into money* is positive insofar as the resulting state ‘John is in the money’ corresponds to the presence of money with John (vs. its absence).

As in Anderson’s theory, an argument may carry more than one role. Such is the case, for instance, with the subject of *keep* in *John kept the ball with him*: John controls the position/location of the ball and retains it in his immediate proximity; John is therefore an Agent and at the same time a Location (1965: 244). Again, we see that Anderson makes the same kind of point, which leads him to reject Fillmore’s principle (1968) that one argument

may bear no more than one Case.<sup>14</sup> And Anderson's derivations are in the spirit of Gruber's since they are based on roles, not on the kind of conceptual functions (e.g. CAUSE) that were common in generative semantics and would later be adopted by Jackendoff, as we are going to see now.<sup>15</sup>

Initially, neither the localistic import of Gruber's account, nor its semantic justification do seem to play a prominent part in the adoption of Gruber's roles by Jackendoff (1969). These roles or, in Jackendoff's terms, "thematic relations", are first appropriated for a double purpose. The first is to state a condition on reflexivization that would take into account the relevance of semantic factors. For instance, Jackendoff (1969: 69-70) observes that the difference in acceptability between (4) and (5) seems to hinge on the fact that the second occurrence of *smell* is agentive while the first is not:

- (4)     \**He smelled funny to himself.*
- (5)     *I smelled myself in order to see if I needed a shower.*

Further examples of the same kind and the flaws of previous accounts offer grounds for a new general condition of reflexivization, namely, the *Thematic Hierarchy Condition*. According to this condition, a reflexive may not be higher than its antecedent on the hierarchy Agent > Source/Location/Goal > Theme (Jackendoff 1969: 80; this condition is generalized to passives in Jackendoff 1972: 44-6: the *by*-phrase must be higher than the subject of a passive verb). The second context in which thematic relations are resorted to involves the control of  $\emptyset$  arguments in complement clauses, especially infinitival clauses. Jackendoff argues that formulating formal, or configurational, constraints on such processes as Equi-deletion either takes us too far from surface structures or does not succeed. It appears to be simpler to state that the controller is the argument filling a given thematic relation. For example, this argument is the Theme for *get*, no matter what the position of the controller is. For *promise*, even with an intervening object, the controller is the Source:

- (6)     *John {got/promised} to leave.*
- (7)     *John {got/promised} Bill to leave.* (Jackendoff 1969: 140-1)

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<sup>14</sup> This principle is abandoned in Fillmore (1969). For a discussion on the repetition of identical cases in a predication, cf. for example Starosta (1978).

<sup>15</sup> It should be noted that in more recent texts Gruber has moved to the same position as Jackendoff: his roles are now specified with respect to argument positions of conceptual predicates (Gruber 1997a/b, Gruber 2001). Thanks to R. Boehm for having pointed this out to me.

At this stage, one of Jackendoff’s concerns is of undermining generative semantics. To this end, he tries to show that deep structure is not the level which supports semantic interpretation; surface order, for instance, is relevant for determining the scope of quantifiers. However, coreference phenomena seem to imply that semantic factors are conditions on transformations. Jackendoff’s solution to the dilemma is to assign the status of interpretive rules to principles such as the *Thematic Hierarchy Condition*. Roughly, transformations cannot look into semantic conditions like coreference. We should not rule out the passive \**Himself was shaved by John* by imposing a special restriction on coreferential arguments (*pace* Postal; cf. the discussion *ibid.*: 73-4). Rather, transformations are syntactic processes that make no appeal to semantics, and interpretive rules (such as the Thematic Hierarchy Condition) take care of filtering out the wrong interpretations. In defending an interpretive view of semantics, Jackendoff was the ally of Chomsky, whose lexicalist positions also took aim at generative semantics (Chomsky 1972).

Although Jackendoff’s analyses remain largely unchanged in his 1972 book, his new stand on semantic representations brings him closer to his former opponents, generative semanticists. Under the name of *functional structure*, he appropriates the prelexical analysis of generative semantics, which he links via indices to the subcategorization of a lexical item. For example, the lexical entry for *buy* takes the following form, with the “semantic functions” indicated in capitals and followed by their arguments (*Y* stands for an indeterminate “semantic residue” left unanalyzed):

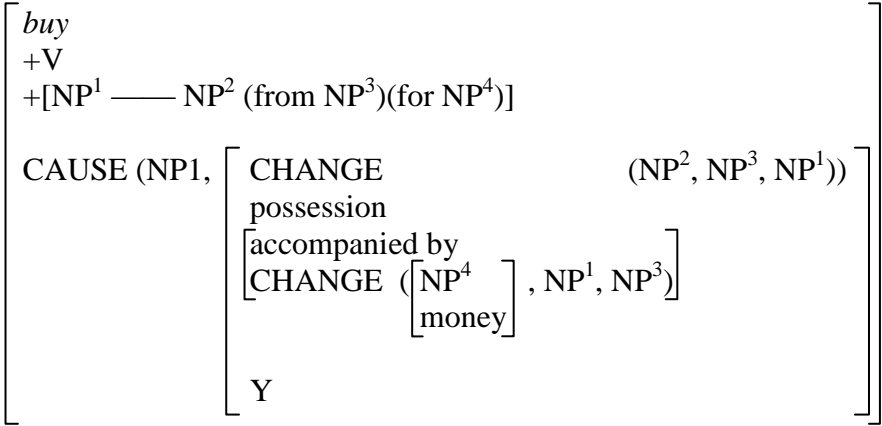


FIG. 2: The lexical structure of *buy* in Jackendoff (1972: 40)

Gruber’s roles now correspond to argument positions of semantic functions. Agent is the first argument of CAUSE; Theme is the first argument of CHANGE and Source and Goal are the

second and third ones.<sup>16</sup> *Possession*, as in Gruber's account, specifies the field in which this argument structure is realized. At this point, what separates Jackendoff from generative semantics is the position that semantic structures must remain distinct from syntactic structures; the apparatus provided in lexical entries is meant to link these two domains, not to derive surface structure from syntactico-semantic structures (1972: 42).

In subsequent work, Jackendoff develops his lexical structures into a model claimed to be *explanatory*, that is, cognitively natural and empirically adequate (1983, 1990). The cognitive import of semantic structures is much emphasized. In his 1976 paper, a set of primitive functions (GO, BE, STAY), hypothesized to be universal and innate (at least in some fields), is substituted for complex predicates like CHANGE. Gruber's positional, possessional, identificational and activity (renamed "circumstantial") fields further differentiate these functions according to their conceptual domain of application; for example, a change of state is represented by an identificational GO: *the metal turned red* is semantically GO<sub>Ident</sub> (THE METAL, y, RED) (where y is an unexpressed initial state). Other semantic features related to, for example, translocational (*he went to the station*) versus extensional meanings (*the road goes to the station*) are indicated in subscripts, in other words, they have the status of conceptual differentiae of semantic primitives. The formalism is intended to capture Gruber's insight that spatial relations furnish the skeletal structure of predications. This fundamental insight is the gist of Jackendoff's *Thematic Relations Hypothesis* (1983, ch. 10).

Are Jackendoff's views localist or localistic? In 1976, the balance seems to tip towards a localist conception granting cognitive primacy to physical relations:

"...contrary to current fashion, the semantics of natural language must not be approached by developing alternative versions of formal logic. Insight is to be found rather in the study of the innate conception of the physical world and the way in which conceptual structures generalize to ever wider, more abstract domains." (Jackendoff 1976: 149)

In 1983, his stand appears to be more cautious, and he distances himself from a metaphorical perspective, in what is a likely allusion to the neo-empiricist metaphor theory of Lakoff & Johnson (1980):

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<sup>16</sup> It might be asked whether this configurational definition of roles does not strip them of their substantive content; see Anderson (2006: 249) on this point, and Robinson (1970: 57-80).

“I am inclined to think of thematic structure not as spatial metaphor but as an abstract organization that can be applied with suitable organization”.

During phylogeny, a localist evolution of the structuring of abstract domains is not to be dismissed; however, ontogeny might be a different matter. In the following passage, Jackendoff seems to conceive of thematic relations as an organization which does not go through the “empiricist” process he has hypothesized for phylogeny. This view apparently implies that no privilege accrues to spatial relations:

“...thematic structure is an innate organization with which the organism structures his experience. At most, the developing organism must learn the definition of location in a particular field in order to be able to develop a full range of event- and state-concepts in that field” (1983: 210).

We can conclude, therefore, that Jackendoff’s theory is, from a phylogenetic point of view, localist, but is best described as localistic when it comes to ontogeny.

History teaches us, I believe, that theories never arise out of a theoretical vacuum. We might therefore be disconcerted when a long-established view resurfaces in a new guise out of nowhere. And this is the case of Gruber’s theory. His text makes no mention at all of past localist views. We have seen his views adopted by Jackendoff, who, to all appearances, was similarly unaware of this history until he read Anderson’s *Grammar of Case* (1971), cited in his 1983 book. In the second part, we shall see one more instance of what seems to be another neolocalist creation ex nihilo, namely, Talmy’s initial work.

### 1.5 *Anderson’s case grammar: the first steps*

What follows is an attempt at spelling out the context in which Anderson introduced case grammar. To this context pertain the issues his proposal was meant to handle, and also the way these issues were framed. I will be primarily concerned with the establishment of his case grammar and the steps leading to the version presented in this volume (cf. Andor, this volume). By necessity, then, this presentation will focus on those aspects of Anderson’s model which properly concern Cases.

In his 1968a paper, Anderson points out the potential relevance of two dimensions of ergativity in English. First, alternations like

(8) *He drowned his uncle.*

(9) *His uncle drowned.*

show that an argument (*his uncle*) may bear to a verb the same semantic relation, whether the verb is intransitive or transitive. In Basque, an ergative language, this sameness is manifested by the (unmarked) nominative case.<sup>17</sup> Now, Anderson suggests, English could be analyzed as being deeply like Basque, with the proviso that, in English, an ordering rule places the ergative nominal in subject position and convert it to a nominative (which would account for its being unmarked). At a deep level, a transitive verb like *drown*, even if morphologically simple, has a causative structure. The latter view is reminiscent of prelexical analysis in generative semantics. Second, ergativity, understood this time as Agentive Case, plays a part in the ability of verbs to accept the imperative. Finally, some nominalizations are considered to exhibit an ergative pattern. In

(10)a *the president's assassination*

b *the president's assassination by a slave*

(11)a *the assassination of the president*

b *the assassination of the president by a slave*

*of* and *'s* would be realizations, says Anderson, of an underlying Nominative. The apparent counterexample

(12) *the slave's assassination of the president*

is accounted for by a supplementary rule converting an ergative *by* into a nominative *'s*. This treatment anticipates the idea that languages like English neutralize the ergative case in some aspects of their grammar. Indeed, Anderson suggests, his view supports the idea that some

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<sup>17</sup> Anderson often mentions the Basque language. It may be noted that the notion of a case form used for the purpose of signalling the Agentive role was introduced, under the terms *casus activus* or *casus agendi*, by Oihenart (1638) in his description of Basque (Oyharçabal 1989). *Nominative* is the term used in traditional grammars of Basque (as noted by Anderson). As far as is known, the term *ergative* was coined by Dirr (1912, 1928) in his analysis of a Dagestanian language (see Seely 1977).



nominative inflexions of Indo-European are originally ergative markers generalized to subjects of transitive and passive verbs.<sup>18</sup> Further, Anderson proposes to generate sequences from complex symbols and subcategorization rules which express the patterns of features listed in the grammar ( $\pm$ ergative,  $\pm$ passive,  $\pm$ active etc.). Constituency rules then expand these features into sequences.

To sum up, at this stage, several important tenets of case grammar are already in place: cases as a syntactic category indicate the mode of participation of nominals in predications and are therefore universally present; these modes of participation (or case relations) are variously manifested as inflexions, pre- or postpositions, or word order; such forms may wholly or partially neutralize case relations<sup>19</sup>; ergative and accusative languages are non-distinct at the deep level of syntactic structure (as projected from the lexicon), and the subject/object relations are superficial phenomena; the agentive transitive pattern may derive from an underlying causative structure; subcategorization rules, which, in particular, include semantic features, are given pride of place; in this first version they precede constituency rules. In establishing this model, Anderson adopts the generative style and his main interlocutor is Chomsky. His own theory is modelled after the “algorithmic” style of transformational grammar, yet is called to distance itself from Chomsky’s views. Like Gruber, Fillmore and Lakoff, Anderson is especially interested in the way verbal semantics conditions the surface behavior of verbs.

### 1.6 *Anderson’s basic case relations*

Localistic ideas are conspicuously absent from the just presented 1968 paper. In another article published the same year, a brief allusion hints at a locative interpretation of *buy* and *sell* (1968b: 314). As a perspective of a wider embrace, localism is first introduced in the conclusive “rash speculations” of a slightly posterior study (1969), in which Anderson suggests to analyse ‘abstract’ uses of *from / to* and the Dative argument (esp. of cognitive verbs like *know*) as subtypes of a general locative relation.

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<sup>18</sup> The idea of a diachronic primacy of semantic roles can be found in Bopp (1826), who claims that some nominative inflexions come from pronouns designating animate or active entities, while some accusative endings form neuters because grammatical objects tend to be patients, and patients tend to be inanimate. Humboldt (1907 [1830-35], §14) holds a similar view, not without speculating on the phonetic symbolism carried by these forms.

<sup>19</sup> This also holds for an “ergative” language like Basque, as pointed out shortly after in Anderson (1970a). The definition of case as manifesting (in more or less direct ways) the mode of participation of a nominal in a predication is provided in Anderson’s dissertation (1972a: 1-2).

In Anderson's first book on case grammar (1971), localistic analyses (if we except the introduction) do not appear until the discussion of local cases, from chapter 6 onward. The first part of the book is thus devoted to matters related to the ones dealt with in 1968. Importantly, it involves deciding on the most appropriate choice of a model of syntactic structure. Like Fillmore, Anderson settles on a valency-based model. Special emphasis is laid on making local cases fit in the feature-based rules previously put forth, and on explaining their projection to grammatical relations (subject/object). When first discussing the locative case, Anderson's initial concern is to state rules expressing the correlations between "locative verbs" (e.g. spatial *stand on*) and other features (ergativity, causativity, stativity), as well as accounting for the occurrence of locative arguments in, we may say, "non-canonical" positions (non-PP), for instance as subject (*The box contains apples*) and object (*A statue occupies the plinth*).

The two local cases Anderson introduces are the locative and the ablative. Thus, in all, case relations (that is, "deep" cases) are reduced to a parsimonious system of two non-local cases (labelled "ergative" and "nominative" in 1971) and two local cases, the locative and the ablative. Keeping in mind that Anderson's theory is about "deep" case relations and adopts an onomasiological perspective, this division between ergative and nominative on one hand, and locative-ablative on the other hand, is reminiscent of the semilocalist accounts of the 19<sup>th</sup> and 20<sup>th</sup> centuries (cf. part 2). The amount of influence these accounts have had on Anderson is unclear to me. The role of Lyons may have been significant (see Andor this volume: XX). For example, in his *Introduction* (1968: §7.4.5 & 7.4.6), Lyons distinguished *grammatical* and *local* (or *concrete* cases). However, Lyons's perspective mixed semantic and grammatical criteria: the comitative, for example, was listed in the "grammatical" cases, next to the nominative as case of the subject. Further, his localism was rather moderate: he cautiously alluded, for instance, to a possible conflation of directional and benefactive 'to' into a common local value. Further, semilocalist accounts of the past tended to have richer inventories, either because they were based on Sanskrit, or because they included prepositional systems and other means of expressing case relations, which implied a far longer list of relational expressions (adessive, illative, 'beside' etc.; cf. Wundt 1912). The acme is reached by Hjelmslev (1935/7 [1972]) who breaks down the semantic features encodable by cases into three dimensions with several subdivisions each, with a theoretical maximum of 216 case distinctions.

Anderson wards off such proliferation by arguing (1971: 81-2) that the multiplicity of spatial meanings results from the subcategorization of the locative category (together with the

ablative category, to be introduced later in the text). Thus, the primary distinctions of the local cases boil down to the abstract features of Hjelmslev's first dimension, namely, the basic AT, TO and FROM relations (a reduction Lyons hints at in 1968, loc. cit.). As Anderson points out (first in 1971: §§1.21, 2.121, 6.1, 11.61), the semantic subdivisions of these basic relations are often expressed by relational nouns, the implication being that (if I understand it right) they are manifestly complex and dependent on these basic relations; in fact, they will be analyzed as dependent on a locative functor in Anderson's "notional" theory of the parts of speech (e.g. Anderson 1997: 112-3).

Localist and semilocalist accounts, as we shall see in our second part, often posited a threefold distinction in local cases, namely between a case expressing static location, a case expressing motion to a goal, and a case expressing motion away from a source (with possible syncretisms, as in Hjelmslev's interpretation of Wüllner). For example, in Holzweissig's semilocalist account (1877), four basic local cases were recognized: dative, ablative, locative and, in addition, an instrumental-comitative. In Anderson's account, the locative conflates the values of Holzweissig's dative (the "lative" *Wohincasus*) and the locative per se (the static *Wocasus*). This might be unexpected: why should we derive *mihi placet* and *John is cold* from underlying locatives (1971: 96, 103), given that the first is a surface dative and the second has a dative inflection in other languages (cf. *mir ist kalt*)? Anderson marshals several arguments in favour of his view. He invokes the authority of Kuryłowicz (e.g. 1964: 190-1), who claims that the dative was a variant of the locative used with nouns referring to persons<sup>20</sup>. Further, he argues that dative and locative appear to be in complementary distribution and do not cooccur when referring to participants, which would justify treating one as the variant of the other (Anderson 1977: 129-33)<sup>21</sup>. As a *Wohincasus*, the dative can be regarded as a contextual variant of the Locative: the locative takes on an allative meaning when it cooccurs with an Ablative (Anderson 1971: 120). Finally, there is an implicational relationship between the Allative and the Locative: 'he has come here' implies 'he is here' (Anderson 1971: 119-20, and cit. ref.). In short, the locative functions as a *Wohincasus*, and subsumes the allative value that, in the localist tradition, had been assigned either to the dative (e.g. Wüllner 1827) or,

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<sup>20</sup> Objections to Kuryłowicz can be found in Serbat (1981) and Anderson (2006: 19-20).

<sup>21</sup> Anderson (1977) points out that, when a dative and a locative cooccur, one of them is a circumstantial and does not refer to a participant. Cf. for example: *Nothing ever happens to Charlie in Edinburgh (in Edinburgh is a circumstantial or "outer locative")*.

alternatively, to the accusative (e.g. Hartung 1831)<sup>22</sup>. In Hjelmslev's parlance, the Locative Case of Anderson is therefore the *extensive* member of the set of local Cases.

What about the Instrumental, which figured in the list of local cases in Holzweissig's account (1877), and was identified as a separate case, distinct from the Agentive, by Fillmore (1968)? Initially, Anderson (1968) treats it as a causee in a complex causative structure, that is, as a mediating agent which is assigned an ergative marking. In *The Grammar of Case* (1971: 170-2), it is suggested that the Instrumental be assimilated to a Locative, or a subspecies of Locative, for example of the comitative subtype for *with*. Anderson seems to imply that its agentive content may result from its being subordinated to a higher causative structure, as would have occurred with a preposition like *by*. In *On Case Grammar* (1977), instrumental *with* and *by* are clearly distinguished; instrumental *with* is hypothesized to manifest a case relation that is basically the local VIA relation, or 'path', which syncretism is particularly visible in German *durch* (both 'through' and 'by means of'). *By*, on the other hand, is assumed to be additionally agentive and thus doubly marked as [erg.path]. In more recent texts, the Path relation appears to be restricted to lexical items whose local meaning clearly involves a movement through space, such as the Latin ablative and English *for* (in *It rolled for twenty meters*; 2006: 198-9, 233), and the Path relation itself is analyzed as the combination of the two basic Source and Goal Cases. The Instrumental reduces to the non-locational Source when its dependent is subcategorized by the predicate (2006: 86-7). When the Instrumental is a circumstantial, like other circumstantials, it is analyzed as a variety of Locative. Further, Anderson pursues the idea of a contextual determination of the Instrumental, hinted at above and evoked in *The Grammar of Case*: thus *with* expounds a Locative of the comitative subtype that gets interpreted as 'agentive' when the *with*-phrase modifies a predicate with an ergative argument (2006: 238). To sum up, the Instrumental has no independent status; it is reducible to the basic Source and Locative case relations, and in some instances is contextually determined. Let us now turn to the Ablative.

The Ablative has, with respect to the Locative, a simple meaning and designates the source argument; it constitutes, to speak again like Hjelmslev (1935/7 [1972]), the *intensive* member of the pair of local cases. In a localist (or localistic) account, the Ablative can naturally be expected to take on an agentive meaning, since the agent can be conceived of as the source of the action; agentivity was in fact the meaning emphasized by Varro for this

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<sup>22</sup> Creissels provides additional support for this view when he observes that languages seem to conflate the locative-essive and the allative in one marker much more commonly than the locative-essive and the ablative, let alone the ablative and the allative (Creissels 2008). As a conflation of the first kind, Anderson mentions the Latin examples *mihi est liber* and *mihi dedit librum* (1971: 138).

Latin case (*De Lingua Latina* 8, 16). Initially, however, Anderson makes a distinction between the Ergative and the Ablative. In a sentence like (13), the ergative case marker *by* is assigned to *Mary*, while *John* bears the ablative case *from*:

(13) *The book was bought from John by Mary.* (Anderson 1971: 130)

But the semantic kinship between Agent and Source could hardly be missed, and Anderson (1971: 173f.) explores the possibility of identifying the Ergative with the Ablative. such that the Ablative is interpreted as an Ergative in a predication which does not contain a co-present Locative argument.

Now, in (13), *by Mary* does cooccur with a locative argument, yet its meaning is agentive. The way out of this difficulty rests on an analysis of (13) into two component predications, such that the predication which describes the abstract (or concrete) motion event, i.e. the transfer of the book from John to Mary, is subordinated to a causative predication with a non-local Ablative argument, in a fashion that is once again reminiscent of prelexical syntax in generative semantics (1971: 180-1). Surface structure is generated through conflation, or later, “raising”, in a way parallel to predicate raising in generative semantics.

The elimination of the Ergative is, however, only temporary: the Ergative case reappears in Anderson (1973a, 1975). The process of raising an Ablative to an Ergative, by which *John* in (13) comes to be marked as [Abl, Erg], makes a clear distinction between the causal and the local planes. In Anderson (1972b) the kinship of the ergative and ablative case relations is shifted to the level of their component features; both case relations share a directional negative feature (in the spirit of Gruber’s polar opposition, see §1.4). *On Case Grammar* (1977) renames this feature as [+source]. First hinted at in *The Grammar of Case* (1971: §12.3), the featural representation of case relations takes the following form (1977: 115):

ABS	LOC	ERG	ABL
	place		place
		source	source

FIG. 3: Features of cases in Anderson (1977)

In his recent work, Anderson has generalized the use of features in his designation of categories, including parts of speech. As a result, his former case relations are now expressed by the features displayed in fig. 3. What was formerly the Ergative is a functor endowed with

the feature [source], noted { {src}} in recent texts; the Absolutive is the “neutral” feature (Anderson 1997). The Ablative becomes a subspecies of the Locative functor, and is marked as { {loc{source}}} (the empty space stands for the functor category; for details see Andor, this volume). A logical conclusion would be that the Ablative, being complex, no longer mirrors what would be, from a cognitive point of view, a simplex FROM relation (of the nature of an image-schema, e.g., as in Johnson 1987); in fact, Anderson does mention the possibility that the inventory of basic case relations be pared down to the three simplex ones: the absolutive, the locative, and the source (1977: 119). However, this is not the solution he follows, for reasons we shall come back to.

From the table above it can be seen that the Absolutive (formerly “Nominative”) is defined by opposition to the other cases. In accusative languages, the primary exponent of an Absolutive is the accusative case form, and in localist accounts, or in the “physicalist” conception of transitivity (as we shall see below), the accusative was often taken to mark the endpoint of an action. Apparently unaware of this tradition, Gruber (1967) had followed in its footsteps by suggesting that a verb like *see* be analyzed as ‘motional’ and as incorporating a goal marker ‘TO’. There is little doubt, therefore, that a connoisseur of this tradition like Anderson would at least envisage the possibility of treating patients or themes as goals. Anderson, in the same way as Wüllner (1827: 109), does consider the possibility that *videre Romam* and *ire Romam* do not constitute two distinct uses of the accusative. However, while hinting at a directional interpretation of the Absolutive as goal (1971: 173), he does not pursue this line extensively at first. The fundamental value of the Absolutive is that of a “neutral” (Anderson 1997), or “unmarked” Case in a minimal system of oppositions, such as the one illustrated in the table above. This systemic and minimalist perspective evinces a structuralist (or Hjelmslevian) proclivity that is not present in other theories of thematic roles. It has been in particular justified by a principle of *complementarity* which, to put it briefly, states that semantic features present in the context should not be attributed to case forms; a consequence of this principle is, for example, to rule out a case relation ‘Time’ and to enforce a generalized Locative encompassing spatial and temporal relations (Anderson 1977: 125-136; 2006: 84-88).

Overall, then, two case subsystems coexist. They are non-disjoint, since they both include the neutral case. The first is presumably the cognitively basic one; this is the locational subsystem comprising the absolutive (referring, in this subsystem, to the located or moving entity), the locational source, the locative and, contextually, the goal. The second subsystem is a transposition of the latter to non-locational domains and includes the absolutive, the non-

locational source (the former ergative) and the non-locational goal. The locational and non-locational goals are contextual variants (in the presence of a source) of, respectively, the locative and the absolutive. In the latest version of the theory, these six cases make up a set of two symmetrical ternary subsystems (Anderson 2006: 123 & 410-2) and furnish the “alphabet of semantic relations” (Anderson 2011: 107), composed of the following elementary relations: absolutive, absolutive{goal}, locative, locative{goal}, locative{source}, source. As noted by Anderson himself (2006: 123), this ternary subdivision is close to some previous localist accounts, especially to Hjelmslev’s first dimension of case systems, that of direction.

### 1.7 *Complex case relations*

The “alphabet” of basic case relations does not exhaust the range of roles borne by nominals.<sup>23</sup> First, a one-to-one mapping from these basic case relations to the dependents and modifiers of a predicator would fall short of a fine-grained semantic analysis of argument roles. For example, arguments of middle or ‘medio-passive’ verbs are, in Anderson’s terms, both Absolutive and Ergative (source; 2011: 109), and, more precisely, {abs{src}} (or {abs;src}) with the Absolutive dominant within the combination. There are also contexts in which locations may be seen as affected such that a Locative argument may also be marked as Absolutive, as, for instance, in *The basement flooded with water* (2006: 401).<sup>24</sup> Second, since grammatical relations are mapped from case relations, alternations in which the same arguments are mapped to different grammatical relations must bear distinct roles.

The issue of syntactic alternations had been abundantly discussed from the 1960s onward, and had proved to be a bone of contention for supporters of deep structures and adherents of case grammar. The question of alternation had come to occupy center stage in the context of transformational grammar. Hall (1965), for instance, according to S.R. Anderson (1971), had been the first to suggest a transformational relationship between the two following sentences, illustrating a variety of alternation known since as the ‘locative alternation’:

- (14) *John smeared paint on the wall.*  
 (15) *John smeared the wall with paint.*

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<sup>23</sup> A *role* is a combination of case relations. For example, {src{loc}} is a role composed of two case relations (Anderson 1997: 251).

<sup>24</sup> Anderson (Andor, this volume: XX) attributes to *the basement* the role {loc{gol{abs}}}

Other examples adduced by Fraser (1969) pointed to a subtle semantic difference, which S.R. Anderson characterized in terms of ‘partitive’ vs. ‘holistic’ content:

- (16) *John jammed a pencil into the jar.* [partitive]
- (17) *?John jammed the jar with a pencil.* [holistic]
- (18) *John jammed the jar with pencils.* [holistic]

The bizarreness of (17) seems to be due to the fact that, when in object position, the jar has to be completely (‘holistically’) affected, which a single pencil can hardly achieve in standard circumstances. It was argued by S.R. Anderson that such sentences highlighted the relevance of grammatical relations for semantic interpretation. Further, since this semantic effect persisted under various transformations, it had to hinge on grammatical relations defined at deep structure. Fillmore had acknowledged the problem posed by these alternations, but had not come up with any very specific proposal beyond rather vague intimations of differences in *focus* or *perspective* (Fillmore 1968, 1977). Starosta (1973) simply made no semantic distinction and attributed the same deep cases to predications entering into constructional alternations.

In his 1977 book, Anderson argues at length against syntactic generalizations cast in terms of grammatical relations rather than case relations, and alternations of the kind above are given much importance. The distinction between partitive and holistic readings can be accounted for, he claims, by retaining the idea that *the jar* is a locative argument in all the sentences above, but is additionally construed as ‘affected’, i.e. as Absolute, when in object position.<sup>25</sup> An Absolute argument is interpreted as holistically involved in the process designated by the verb, unless an element of the context decides otherwise (as, e.g., the progressive in *John was reading the book*). In other words, in (18), *the jar* bears two notional features and is marked as {abs,loc} (cf. Anderson 1975, 1977: §§1.8, 2.8.9. In such combinations, features do not separately retain their full import nor simply add up; they are, as it were, diluted in the whole. Thus, the agentive quality of an Experiencer like *John* in *John was reading the book* (i.e. a nominal dependent on a { {loc,erg}} ~ {loc,src} functor) is only

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<sup>25</sup> The first demonstration that grammatical relations are irrelevant to the partitive / holistic readings is to be found in Anderson (1975).



residual when compared with the full potency of an independent Ergative in an actional predication.<sup>26</sup>

In Anderson's perspective, the fact that the holistic reading does not solely accrue to arguments in object position attests to the irrelevance of grammatical relations for semantic interpretation. For example, in *The garden is swarming with bees*, the holistically affected actant, i.e. *the garden*, is the argument in subject position, not in object position (1977: 54-6; 2006: 60-1). The crucial factor appears to be the absolutive relation borne by *the garden* and *the jar*, not their grammatical relation. This conclusion, however, can be firmly established only if a further avatar of the grammatical account, namely the Unaccusativity Hypothesis, is discarded, which task Anderson undertakes in several places (esp. 1980, 1997, §3.1.3).

The possibility of assigning more than one case relation to a dependent or a modifier gives much flexibility to the theory. It enables Anderson to provide a gloss for the Experiencer Case while keeping to his minimal inventory, that is, without introducing a special Case relation. In *The Grammar of Case* (1971: 104), the highest argument of *know* is marked as locative and *ergative* on the grounds that *know* cooccurs, respectively, with *to* (*known to*) and *by* (*known by*). In addition, some issues introduced by case assignments can be solved by the combined resources of multi-case marking and prelexical analysis, as we saw above for the verbs *buy* and *own* (§1.3; cf. Anderson 1977: 144-5 & 160-1). From a typological point of view, the dual marking of experiencers makes good sense. As observed by Anderson (2006: 171-3), languages variously treat experiencers as patients or agents, or both; the experiencer is both the source of the sensation and the location into which the stimulus is absorbed (Anderson 1977: 116). In this matter, the extensive discussion of Croft on this two-way relation and its impact on cross-linguistic variation is fully consonant with Anderson's remarks: the variations in the grammatical patterns associated with arguments of "mental" or experiencer verbs reflect this ambivalence (Croft 1991: 213ff.).

As mentioned above (§1.4 and note 12), Anderson concurs with Gruber in rejecting Fillmore's principle (Fillmore 1968) that each argument in a predication may not bear more than one case. However, he maintains in another guise another constraint assumed by Fillmore to be universally valid, namely, that each predication may not contain more than one token of each case.<sup>27</sup> For Anderson, this constraint holds of complex cases, that is, of roles, and not of simplex cases, with the exception of the Absolutive, which is multiply instantiated

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<sup>26</sup> My thanks to Rober Böhm for having pointed this out to me.

<sup>27</sup> To be precise, and in recent work, Anderson (2006: 374-5) speaks of only one token per simplex predicator, a simplex predicator being a head in a possibly complex prelexical structure.

in equative sentences (1997: 251-2; 2006: 373-4). This constraint (the *Role Criterion*) does justice to the intuition that each verbal node distributes distinct roles to actants and pictures relations between entities of the world as a “little drama” in which each actant has a specific part to play (Tesnière 1959).<sup>28</sup>

Our intention is not to review the whole range of complex roles posited by Anderson and the verbs he assigns them to. We must emphasize that his analyses aim at capturing semantic distinctions on two planes, actional and locational, as well as selectional restrictions (such as the compatibility of a verb with *by*). This occasionally leads to roles made up of three notional features as is, for instance, the role attributed to *Phil* in *Phil suffered from asthma*, which combines the featural complex {erg,loc} ~ ‘Experiencer’ – whose loc component feature is further specified with a directional {goal} subfeature (*from asthma* being a loc{source} term), thus {erg,loc{goal}}. In turn, this complex combines (in fact, must combine) with an {abs} feature in order for the entire predication to be well-formed (since every predication contains an {abs} functor, whether combined or not). (2006: 135).

### 1.8 *Extension of local cases to non-spatial domains*

We now come to the spatial structuring of non-spatial domains other than the thematic roles discussed above. It comes as no surprise that one of the first domains mentioned by Anderson is possession. During the era of transformational grammar, it was proposed that possessional *have* (‘I have x’) be derived from deep structures with *be* (‘x is to me’), in the first place by Fillmore (1966a, b, 1968) and Gruber (1965), but also by Langacker (1968). Such deep structures with a dative could be interpreted as the *locative* source of *have* sentences, as Lyons (1967), independently of Gruber, observed. In justifying his treatment of possession as a subtype of location, Lyons noted there is a semantic and sometimes morphosyntactic parallelism between locative patterns and possessive ones: ‘be-located-at’ was to ‘go-to’ like ‘have’ was ‘to get’; this equivalence is reflected in Russian by the use of a locative

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<sup>28</sup> The metaphor of the “little drama” can be found, before Tesnière, in Sechehaye and Bréal, and may take its origin in pedagogical texts. (Arabyan 2014). The conception of the verb as a central ‘role-distributor’ must have been reinforced by vitalist conceptions which, around the turn of the 18th to 19th century and onward, make the verb the linguistic counterpart of a vital principle which permeates entities (Arabyan *ibid.*). In this vitalist framework, the verb becomes the central node of the proposition, a preponderance which anticipates on its function in dependency grammars. Michelsen (1843), for example, states that “Das Verb ist der lebendige Mittelpunkt des Satzes, folglich der erste Theil derselben” (“the verb is the vital center of the proposition, hence its first part”). His analysis of cases accords with his vitalist views: primary cases are dynamic and express activity (cause and effect) and finality; local cases are, as it were, transpositions of these in a Kantian form of intuition (space). For example, the *woher* (‘whence’) case is the *local* counterpart of the *subjective* case, which case fundamentally expresses the cause of an event.

construction in *u menja kniga*, lit. ‘at/by me <is> book’, i.e. ‘I have a book’ (Lyons 1967: 394). In conformity with the latter view, Anderson (e.g. 1997: 292-295) assimilates possession to static location. Further, possession and partitivity are treated next to each other. In Condillac’s localist account (1775; cf. infra §2.7), both notions were connected by the fact they correspond to two different senses of French *de*. Anderson’s discussion, however, is not based on a semasiological analysis; rather, it rests on an appreciation of the semantic kinship of possession and part-whole relations, linked together through the concept of inalienable possession. In agreement with a tradition that goes from Sanctius to Condillac, Beauzée and beyond, partitivity is defined as extraction of a subset from a set, hence as a source relation, by contrast with possession, which Anderson associates with the ‘place’ feature (see fig. 3). In the early texts of Anderson, much attention is paid to the localistic construal of verbs of three major classes: verbs of perception and cognition, such as *smell, feel, learn, know, teach*; verbs of more or less “abstract” transfer, such as *buy, sell, give, help*; and verbs which may be considered as belonging to the intersection of these classes (e.g. *advise*). In the same way as Lyons and Gruber, Anderson considers that semantico-syntactic analogies across spatial and non-spatial fields support the existence of an underlying locative structure. For example, he points out the parallelism between

- (19) *Ulysses has gone from London to San Francisco* ⇒  
*Ulysses is not in London, Ulysses is in San Francisco* [location]

and

- (20) *The car went from the secretary to the professor*  
*(The professor bought the car from the secretary)* ⇒  
*The secretary doesn’t own the car, The professor owns the car* [possession]

Similarly, he suggests that, in the field of cognition

- (21) The professor has learnt demotic Greek from the secretary ⇒  
The professor knows demotic Greek (≠ The secretary doesn’t know demotic Greek)

be likened to, in the field of location,

(22) *The fog spread from London to Brighton* ( $\neq$  *The fog is not in London*)

both being instances of “dynamic extension”, so to speak (Anderson 1977: 143-5).

In *The Grammar of Case*, Anderson also considers the possibility of handling in localist terms the possession of a property (such as ‘be a policeman’) and changes of state (e.g. *Fred has become a monster*). This possibility, however, is little exploited, perhaps because such speculation would entail giving an internal localist analysis of ‘be P’, e.g. ‘be exhausted’; an analysis of the kind would take us beyond argument structure and bring us closer to what has been done in generative semantics and later in Jackendoff’s theory of conceptual structure.<sup>29</sup> However, we do find in subsequent work a few allusions to an interpretation of properties as bearers of case relations, for instance of the German passive participle employed with *werden* ‘become’ (2006: 372). An equally rare instance of a semantic decomposition into “deep” predicates is Anderson’s analysis of *persuade* as containing a structure corresponding to the predicator ‘intend’ (2006: 362-3); however, prelexical analysis is essentially confined to dependency and modifying relations between cases, which tends to restrict the range of semantic functions (or “deep predicates”) to the roles hypothesized by the theory, unlike in generative semantics, which made a more liberal use of deep predicates.<sup>30</sup>

From 1972 on, tenses have been treated as subordinate to the locative case (e.g. Anderson 1973a), which gives to case grammar the potential of linking to diachrony and typology, since aspect and tense markers sometimes derive from spatial morphemes, or are identical to them. In this way, Anderson anticipated on the localist construal of temporal relations that would become so prominent in cognitive linguistics, conceptual metaphor theory and diachronic linguistics, under the heading of grammaticalization.<sup>31</sup> Once again, Anderson’s penchant for history shows up in his reference to what short-sighted linguists would consider as antiquated work; thus, Darrigol (1827) is mentioned several times for his

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<sup>29</sup> In several places, however, Anderson analyzes (1972b: §VI; 1973b: §4.2; 2000: §4) ‘contingent’ predicative adjectives as dependent on LOC.

<sup>30</sup> The analysis of *persuade* into a deep structure paraphrasable as ‘cause to come about to intend to do’ had been proposed by Lakoff (1970) in the time when generative semantics was his theoretical framework.

<sup>31</sup> For other early illustrations of these approaches see e.g. Pottier (1962) and Clark (1973) on the dynamic and spatial conceptualization of time. Traugott (1975), in addition, takes diachrony into consideration.

localist (and partly comparative) account of some periphrastic expressions of aspectual relations in Basque (e.g. Anderson 1994 and Andor, this volume: XX).<sup>32</sup>

In contrast to what precedes, certain applications of Anderson's case relations have, to all appearances, no counterpart in history. These applications concern the substitution of case relations for grammatical relations and what are elsewhere empty categories in the analysis of various syntactic patterns. Anderson visibly aims at providing an alternative to analyses of phenomena which have been much discussed by syntacticians in the past decades, such as raising, control, causativization and movements of various kinds. This line of investigation is prominent in his *On Case Grammar* (1977), where the relevance of grammatical relations for various generalizations occupies center stage, and it is pursued in subsequent work. We shall content ourselves with two examples taken from *Modern Grammars of Case* (2006). The first concerns causativization, which Anderson treats as a rule imparting a locative feature to the causee; this locative relation is transparently expressed by a dative form in the following example from Turkish (Anderson 2006: 258-9):

- (23) *Hasan kasab-a et-i kes-tir-di.*  
Hasan butcher-DAT meat-ACC cut-CAUS-PST  
'Hasan had the butcher cut the meat.'

The second example raises the issue of the case relation to be assigned to the subject of so-called *tough*-movement structures, as, for example in:

- (24) *The lock was easy to pick.*

By arguing that the property 'easy to pick' can be conceived of as 'located' in the lock, Anderson confers to the latter argument the role {loc,abs} (2006: 366-8); the distinction between raising verbs, like *seem*, which do not 'locate' a property, and *tough*-like predicates is thereby correlated with a distinction in the case relations dependent on them.

### 1.9 Roles and surface realization

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<sup>32</sup> Darrigol also played a role in the elaboration of Anderson's notional description of parts of speech (according to Anderson 1975). A whole essay has been devoted by Anderson to an analysis of Darrigol's work (Anderson 1973b).

As mentioned above, a number of syntactic generalizations, e.g. concerning reflexivization or raising, can be recast in terms of case relations (Anderson 1977). This is not to deny, of course, the relevance of grammatical relations for describing other phenomena such as agreement, case marking, coordination, relativization, or linear order. However, in Anderson's theory, grammatical relations have a derivative status. Moreover syntactic structure is built on the basis of the lexically given categorizations of lexical items, including items which are lexically categorially complex and show no distinction in the linear order of their component categories (cf. Anderson in Andor, this volume). As a consequence, linear order is not even partly specified by the relations between a head and its dependents and modifiers. For a time, lexical entries do not even single out the roles assigned to each argument; they comprise a list of case features that is developed into a mapping of roles to arguments through redundancy rules (Anderson 1975, 1977). We may remark that the same representation of lexical entries is advocated by Starosta at the same time, although his own relations are not initially defined in localist terms (1976a).

Outside of case grammar proper, and slightly before Anderson, Chafe (1970a) has a comparable view of the derivativeness of grammatical relations and linear order; his semantic structures, in addition to semantic roles (akin to case relations), comprise lexical and pragmatic features which are realized and linearized by "post-semantic" processes. But Chafe's model includes more than one stratum of unordered representations and lays much emphasis on verbal semantics and information structure. This multi-stratal conception is to a certain extent a sequel of American structuralism (cf. Chafe 1962).

The mapping from roles to relations and their linearization is an important issue in Anderson's theory. His treatment of the subject relation will serve us to illustrate how he conceives of this mapping, what this conception means for typology, and the way he deals with problems related to the definition of 'subject'.

In the *Grammar of Case* (1971), subjectivization and linearization are handled together. For example, in English, an ergative argument which is not used with a stative verb gets anteposed through an 'inversion' rule (1971: 89). In effect, therefore, this rule selects a case relation and places the corresponding argument in the first position of a predication. In subsequent work, Anderson treats subjectivization and linearization separately. The access to the subject position is governed by the *subject selection hierarchy*, which prescribes which case relation is prioritized. For reasons we shall not go into, in *On Case Grammar* (1977: 87), this hierarchy is formulated as: [erg, (case)] > [case, abs] > abs, that is, an ergative, or a role containing an ergative has priority over a role containing an absolutive, and the latter over a

simple absolutive. This way of attacking the problem is of course reminiscent of Fillmore's account, in which a hierarchy performing the same function was also posited (see our §1.1), and we saw above that Jackendoff resorted to a hierarchy of thematic relations.<sup>33</sup> However, unlike other accounts, as noted by Böhm (1993: 16, footnote 12), Anderson's is immune to the problem posed by seemingly conflicting hierarchies.<sup>34</sup>

After *The Grammar of Case*, the question of linearizing the argument selected as subject becomes a distinct issue, to which an important discussion is devoted in *A Notional Theory* (1997: 216-229). The solution involves attaching the hierarchically highest argument to the absolutive introduced by the functional syntactic category {P}, the finiteness category (see Andor, this volume). An additional proviso states that such absolutives linearize like modifiers (in English, they precede the head; 2006: 338).

If the subject argument is determined according to the subject-selection hierarchy, languages (or patterns within a language) which do not follow this hierarchy should be subjectless; indeed, subjecthood is the association of morphosyntactic properties with the argument locally highest on this hierarchy (Anderson 1997: 193). In Tagalog, for instance, the morphosyntactically "privileged" argument, whose semantic role is marked on the verb, is not selected according to the subject selection hierarchy. Such patterns exhibit a different kind of grammatical relation, which Anderson labels "prime" (1997: 194-196).<sup>35</sup> All this discussion is to be situated within a lively and still ongoing debate on the definition of 'subject', the properties associated with this grammatical relation, and its typological validity.<sup>36</sup>

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<sup>33</sup> We should not forget Starosta who, in an early sketch of his case grammar (Starosta 1973), proposes that nominative and accusative case forms be mapped to case relations in conformity with two hierarchies, respectively Agentive > Objective > Dative and Objective > Locative > Dative (Objective and Dative are similar to their Fillmorean counterparts). We shall not present here the later stage of Starosta's case grammar, his Lexicase model (Starosta 1988).

<sup>34</sup> An example of such a conflict, provided by Böhm (ibid.), is the alternation *Blood was dripping from the wound* / *The wound was dripping with blood*. If *blood* is Absolutive and *wound* Ablative, then the Absolutive overrides the Ablative in the access to the subject relation of the first sentence, while the Ablative outranks the Absolutive in the second instance. In Anderson's framework, the lexical structure of drip specifies that its Ablative is optionally combined with an Absolutive. The resulting combination outranks a simple Absolutive and yields the grammatical structure illustrated in the second sentence.

<sup>35</sup> It has to be emphasized that, for Anderson, languages may be only *predominantly* ergative or accusative, or may even be "mixed" (cf. the phenomena associated with split ergativity); this is the reason why, in some occurrences, we speak of ergative and accusative *patterns* rather than of ergative and accusative *languages*. A typological description of the grammatical expression of semantic roles is further complicated by the fact that languages exhibit various patterns of neutralizations. For example, according to Anderson, Malagasy marks intransitive primes as actors, whereas Tagalog makes a distinction (in the verbal 'voice' affixes) between agentive and non-agentive primes; Malagasy prime, therefore, is more "neutralizing" (see esp. the ch. 7 of Anderson 2006).

<sup>36</sup> See for instance the work done by Foley and Van Valin in the past decades. Like Anderson, Van Valin (2005) considers that 'subject' is a syntactic notion insofar as it involves the neutralization of semantic roles. At least since Schachter (1976) and Keenan (1976), modern typologists have wished to relativize the notion of 'subject'

What precedes has consequences for a typology of grammatical relations. The subject selection hierarchy makes it clear that the subject relation neutralizes a wide range of semantic roles. In a canonical, ideal, ergative pattern, on the other hand, a semantic role (the absolutive) is univocally privileged and no neutralization occurs. This does not mean that actual languages classified as ergative do conform to this ideal type (Anderson 1970a), but it might at least be said that their degree of neutralization is lower. The fact that ergative patterns are, in this sense, “simpler”, appears to dovetail with the privileged status of the absolutive as obligatory functor (Anderson 1977: 252-3) and with the hypothesis that case systems are centered on an absolutive “locatee”. A pattern in which different roles are neutralized is cognitively and semantically “unnatural” since it fails to reflect grammatically the “natural” distinction of actional and locational relations. For Anderson, the motivation of such accusative patterns is of a pragmatic order, and is to be sought in the “morphosyntacticization” of topics: speakers, he says, “routinize an extension of marking of the agentive topic to non-agentive ergatives (experiencers), eventually even non-agentive ‘intransitive’ absolutives” (2006: 158).<sup>37</sup> . In Anderson’s view, therefore, the privilege which, in accusative languages, is originally granted to agentive ergatives is progressively diluted through the grammaticalization of topics. This process of dilution also explains why some verbs, like *contain*, constitute exceptions to the selection hierarchy: originally agentive (Lat. *contineo*), they have become non-agentive and stative in locative contexts (2006: 392-5).

What about objecthood? If I understand Anderson right, the accusative marking (whether it be positional or inflectional) fails to single out a clearly delineated grammatical function; passivization, for instance, notoriously gives mixed results. The definition of the object is semantic and its realization subsidiary to the subject selection hierarchy: an object is an absolutive that has been denied subjecthood (e.g. 1977: 275-6; 1997: 156, 176). I believe this way of tackling the problem makes apparent the heterogeneous character of case forms: as marker of the subject, the nominative identifies morphosyntactic functions but no single case role; on the other hand, the Latin dative and ablative correspond to locative case relations (2006: 204-8). Such heterogeneity was also present in Starosta’s list of case forms (1976a),

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to constructions, or split the notion of ‘subject’ into a set of properties that are variably manifested across different languages. On this matter and its typological aspects, see Anderson (1979).

<sup>37</sup> A very similar idea had been argued for by Givón (initially in 1976, 1979). More distantly, the anteriority of the ergative pattern and the derived status of the nominative / accusative alignment had been argued for at various times. Uhlenbeck (1901), for instance, had hypothesized that in Pre-Indo-European the essential distinction was between a Kasus Aktivus and a Kasus Passivus, and somewhat later he would claim that the ergative / active structure antedates the accusative one (see too our note 18). Now, we know, for example from *The Grammar of Case*, that Anderson was acquainted with Uhlenbeck’s hypothesis (I thank R. Böhm for having reminded me of this point).



which included presumably grammatical cases, like the nominative and the accusative, and semantically defined forms, like the “locative”. In Starosta’s account, then, case forms had to be distinguished both from case relations, e.g. the objective, akin to Fillmore’s case of the same name, and case markers. For example, a locative case form marked by a preposition could be said to realize an objective relation in certain instances (compare Starosta 1976a, b and 1985a). In short, semantic notions like ‘locative’ seemed to do double-duty since they characterized case forms as well as case relations. Starosta was probably aware of the problem: what was in Sora a ‘from’ marker glossed as a *locative* case form would later become a *prepositional* form bearing a locative relation (ibid.). By contrast, in Anderson’s theory, case markers (adpositions, inflexions or word order) are exponent of Cases and there is no level corresponding to Starosta’s case forms.

After this presentation of Anderson’s case theory and of its historical context, we can now turn to the evolution of localist ideas in the history of linguistics.

## 2. On the history of localism

In what follows, we will inevitably be led to repeat some elements provided notably by Hjelmslev. As much as possible, we will try to set the views presented here in their historical context. We will also emphasize those aspects in which our interpretation differs from those of our predecessors.<sup>38</sup>

### 2.1 *On the origins of localism: Planudes?*

In his history of localism, Hjelmslev (1935/7 [1972]) gives much importance to the Byzantine grammarians Maximus Planudes and Theodore of Gaza, whom he considers to be the first linguists to have developed a localist analysis. To Hjelmslev’s eyes, this insight promotes them to the rank of precursors of the best possible theory of cases. From an historical point of view, the hunt for precursors is a worthwhile pursuit only insofar as there are grounds for claiming that their ideas had an influence on later work. But this is hardly the case for Planudes, the most interesting of the Byzantines for our subject. The view that

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<sup>38</sup> Lack of space prevents me from going into the early history of the notion of case, although this early period is relevant to our subject; for the philosophical underpinnings of the Stoic notion of case, see the remarkable study by Ildefonse (1997). Some gaps left by the present account can be made good by consulting other accounts (Anderson 2005; Hjelmslev 1935/7 [1972]; Anderson, *passim*; Parret 1989; Cienki 1995; Willems 1997).

Planudes was a localist can be found in Curtius (1864), who apparently gets it from a slightly earlier and unknown source<sup>39</sup>; it is repeated in Steinthal's *Geschichte der Sprachwissenschaft* (2<sup>nd</sup> ed. of 1891) and Hjelmslev, who refers back to Steinthal. Before these 19th century mentions, to the best of my knowledge, Planudes was a voice in the desert. Anderson is therefore justified in saying that Planudes, and his fellow Gaza, "had no influence on the development of theories of case in the main (Greco-Latin based) tradition" (Anderson 1994: 2276).

It might even be doubted that Planudes aimed at providing a localist account of cases. Robins's judgment on Planudes is, in this respect, very nuanced, although, somewhat paradoxically, he declares him a localist (Robins 1993). A crucial passage is the following:

"Here it is also to be noticed how by some sort of natural agreement [κατά τινα φυσικὴν ἀκολουθίαν] the three questions 'whence?', 'where?', and 'whither?' have had assigned to them the three oblique cases, 'whence?' having the genitive, 'where?' the dative, and 'whither?' the acusative; and as in the noun paradigm, the genitive comes first, then the dative, and then the accusative, so too πόθεν 'whence?' comes first, then ποῦ 'where?', and then πῆ 'whither?', corresponding to the three divisions of time. For 'whence?' refers to past time [i.e. before the point of reference, R in Reichenbach's system, comment mine, JMF]; if we ask πόθεν ἦλθεν ὁ ἄνθρωπος (or ἔρχεται or ἔλευσεται)? 'where has this man come from (or is coming from, or will come from)?', we indicate that he has already left the place from which he has come, is now coming, or will have come. 'Where?' refers to the present; asking ποῦ ἐστὶν ὁ δεῖνα (or ἦν, or ἔσται) 'where is so-and-so (or where was he, or where will he be)?' we are simply referring to the place in which he is, was, or will be at a given time; 'whither?' refers to the future; if we ask πῆ βαδίζει ὁ ἄνθρωπος (or ἐβάδισεν, or βάδισει)? 'where is the man walking to (or where was he walking to, or will be walking to)?', we are referring to his arrival in the (relative) future"

(*Peri Syntaxeōs* in Bachmann 1828: 122.23-123.6, cit. in Robins 1993: 218-9).

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<sup>39</sup> This source could be Schmidt's *Beiträge zur Geschichte der Grammatik des Griechischen und des Lateinischen* (1859). This book is given by Hübschmann (1875) as a source for a presentation of Planudes's ideas.

Admittedly, Planudes establishes a correspondence between the genitive, dative and accusative and, respectively, the questions ‘whence?’, ‘where?’, and ‘whither?’. But he also lays much emphasis on the fact that the order of the three cases matches that of events in time. If we follow Chanet (1985), Planudes appears to suggest that the landmarks involved in the three cases are met during the motion event in the sequence in which they are *conventionally* enumerated. This would be a far cry from saying that the basic meanings of the three cases are “local”.

If that way of reading Planudes is correct, his line of argumentation cannot but seem outlandish to modern readers. A clue provided by Chanet (1985), shows that this reading has some plausibility. In his *Dialogue on Grammar*, Planudes attempts to justify the use of cases in the sentence [*tou Patroklou pesontos*]<sub>gen</sub> *Akhilleus*<sub>nom</sub> *exēlthen eis polemon*, lit. ‘Patrocles having fallen, Achilles went to battle’. The sentence, he says, juxtaposes without any mediation a genitive absolute and a nominative, and displays, as it were, an immediate “case-mutation” (*metaptōsis*). What does this immediacy consist in? For Planudes, the case-mutation is immediate insofar as the genitive is next to the nominative in the conventional order of cases. Such an immediate *metaptōsis*, Planudes argues, is all the more appropriate in a sentence that depicts an immediate transition (*metabasis*) from Patrocles’ death to Achilles’ resolution to fight. In other words, events that are juxtaposed in time call for cases that are next to each other in their conventional order. If Planudes reasons along the same lines in the passage above, then we should conclude that he is in fact trying to find a natural motivation for a conventional order.

## 2.2 *The first localist analysis: Aristotle?*

Aristotle can lay claim to have submitted the first localist account, not in the context of a discussion about parts of speech and other linguistic matters, but in his *Physics* (IV.3, 210a14s). In this passage, Aristotle enumerates the various meanings of *en* ‘in’, and singles out the spatial meaning as “primary”, with the hope of clarifying what ‘being contained in’, i.e. having a ‘place’, means. To sum up Aristotle’s analysis, he distinguishes the following meanings:

- (i) a part is in a whole (a finger is in a hand)
- (ii) a whole consists in parts
- (iii) man is in animal (*eidōs en genei*, ‘the species/form is in the genus’)

- (iv) animal is in man (*meros tou eidous en tōi tou eidous logōi* ‘part of the species/form is in the definition of the species’)
- (v) health is in warm and cold things (*to eidos en tēi hulēi* ‘the form in matter’, formal cause)
- (vi) the affairs of Greece lie in the King’s hands (*en tōi prōtōi kinētikōi* ‘in the first mover’, efficient cause)
- (vii) [the motive to action is found] in the [expected] good (*en tōi telei* ‘in the end/goal’, final cause)
- (viii) primary sense (*kuriōtaton*): ‘in a vessel’ and generally ‘in a place’.

Aristotle regards the relation of spatial containment as primary. In *Physics*, the justification he puts forward for this primacy is ontological. Space is primary because, he says, “that without which nothing else can exist but which can exist without anything else is primary” (*Physics* 209a1-2). It might be objected that localism is not simply the claim that everything exists in space, but also that non-spatial domains are conceptualized in spatial terms. However, in Aristotle’s thought, the ontological primacy of space entails that nothing can be conceived without spatial extension. In the *De Anima*, he declares: “But since apparently nothing has a separate existence, except sensible magnitudes, the objects of thought — both the so-called abstractions of mathematics and all states and affections of sensible things — reside in the sensible forms.” (432a3-8). This statement, I believe, is sufficient ground for declaring Aristotle the first proponent of cognitive localism in lexical semantics.

It is difficult to ascertain whether this analysis played a role in the history of linguistics, or is merely a hapax, until localist semantics emerged again and thrived. Even then, it is unclear if this analysis, isolated as it was in a non-linguistic treatise, had any impact on localist analyses. We know that in the Middle-Ages, Modistic grammar was influenced by Aristotle’s *Physics*, which, from the 12th century onward, was translated and edited as many times as the *Metaphysics* books themselves (Dod 1982). But Modistic grammar would be more aptly characterised as “physicalist” (see the next section) than as localist.

### 2.3 *On physicalism*

We may define “physicalism” as the claim that the structure of physical reality, its conceptual representation and the linguistic structuring of this representation are correlated. Since Apollonius Dyscolus, for instance, there is a long tradition of analysing transitivity as

reflecting the transfer of an activity from a participant to another. Thus, Apollonius correlates transitivity with the fact that “activity is something that passes over to some object as in verbs like ‘he cuts’, ‘he beats’ ” (tr. Householder 1981: 208)<sup>40</sup>. This physical grounding of the notion of transitivity is not without problems; for example, Apollonius is at pains to defend the rationality of grammar in cases like τρέμω σε, lit. ‘I tremble you’ (i.e. ‘you make me tremble’), which he explains by the ellipsis of the preposition *διὰ* (‘because of’). For our subject matter, what he says about verbs governing the genitive deserves a little attention. Apollonius obviously associates the genitive with, on the part of the affected participant, a degree of passivity. This passivity is most explicit when the genitive follows *ὑπό* ‘by’ in a passive construction. We have, as it were, an intermediate degree of passivity with verbs that are active, yet take a genitive object. Such is the case of verbs related to hearing, for hearing is partly passive. On the other hand, seeing is inherently more active and thus requires an accusative (cf. III, 416,4 – 418, 7 for this discussion). Other inflectional alternations are similarly described as conditioned by the dynamic content of the verb. It is important to note that cases are analyzed together with verbal semantic classes and are not considered in isolation. In addition, for a verb to involve human participants was seen as a criterion of transitivity, with the consequence that Priscian regarded *tuus sum* ‘I am yours’ as transitive (Colombat 2009). This criterion would cease to interfere with transitivity when the notion of person would be “desemanticized” and reduced to its grammatical aspect. Such extensive views of transitivity may underlie the fact that in the history of linguistics, transitivity is not solely the property of verbs governing the accusative case; although it does get occasionally restricted to the accusative, it often extends to all cases, and we see grammarians seeking correlations between verbal semantic classes and cases (Colombat 2003). To sum up, semantic features related to the intensity of the transition and the nature of the participants involved were crucial aspects of the conception of transitivity which prevailed from Apollonius to Priscian and beyond.

Physicalist elements penetrate into linguistic theory more massively when, after the 12<sup>th</sup> century, the modist grammarians initiate a “logicisation of grammar”, which becomes “a branch of speculative philosophy” (Bursill-Hall 1971: 27). As a philosophical science, grammar deals with the correlations between *modi essendi*, their intellectual apprehension through *modi intelligendi*, and the various modes of signifying which are associated with linguistic signs and their construction. Thus, conceptual definitions of the parts of speech and

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<sup>40</sup> Cf.: “ἡ ἐνέργεια ὡς πρὸς ὑποκειμένον τι διαβιβάζεται, ὡς τὸ τέμνει, τύπτει.” I have suppressed the verb ‘he skins’ from Householder’s translation. This verb does not figure in the more recent edition by Lallot (1997).

of their traditional “accidentēs” (such as having case for nouns) are now cast in terms which reflect ontological categories and physical aspects of reality (*modi consignificandi*). Remarkably, the mode of signifying which is attributed to nouns and pronouns is sometimes glossed in terms of permanency and repose (*modus permanentis/quietis*; Bursill-Hall 1971: 134), by contrast to verbs, which command a processual apprehension. Modist grammarians obviously seek to give pride of place to notions which are proper to physics and metaphysics, and which they regard as more fundamental than the traditional “accidentēs”; tense, for instance, expresses time and time is but a property of motion (*motus*, cf. the *Physics*), consequently, motion or process (*fieri, fluxus*) are more fundamental than tense for the purpose of defining verbs (Kelly 1977: 113).

The syntax of speculative grammar is based on dependency, and the fact that arguments fill up the valency of a verb is sometimes expressed with a physicalist metalanguage. For example, Simon of Dacia explains that “est accusativus quidam casus dicens terminum motus, eo quod disponit substantiam in comparatione termini ad actum”, that is, the accusative indicates, or “disposes” the substance with respect to the terminus ad quem of the motion denoted by the verb (Kelly 1977: 112). Similarly, the ablative is sometimes defined as the origin of what has been taken out of something (Rosier 1983: 113). Among the Modists, as pointed out by Serbat (1981: 26-7), Martin of Dacia may be singled out for his localist view of cases. These are defined along two dimensions: whether they denote an origin (or source) or a goal, and whether they determine a substance or an action. For example, the nominative is said to indicate the origin of an action, and the genitive, as adnominal case, the origin with respect to a substance; dative and ablative determine substances as well as actions, and indicate respectively goal and source.

#### 2.4 *Some conditions favouring localism*

Before launching into the presentation of modern localist analyses, we must try to understand as far as possible the conditions which favoured the emergence of such analyses. I tentatively suggest that these conditions come down to the conjunction of the following circumstances, in a period which coincides with the rise of empiricism and mechanical philosophy:

- 1) Space has gained a prominent status in the scientific culture. This status may be exemplified by the junction between mechanism, geometry and the theory of motion during the 16<sup>th</sup> and 17<sup>th</sup> centuries (Bertoloni Meli 2006). Further, the 17<sup>th</sup> century witnesses a revival of varieties of atomistic or corpuscular philosophy, which lay much importance on the spatial

determinations of body. In Boyle's account, for instance, substantial forms are redescribed as modifications of size, shape, motion and texture (spatial arrangement) of the corpuscles (Boyle 1999-2000 [1666]: 302). The progressive demise of the Aristotelian notion of 'place' in favour of an absolute system of reference (absolute space for Newton) or, alternatively, of a relativist, or partly relativist, conception of motion (cf. Leibniz) both point to the fact that space is increasingly "desubstantialized". Hence the importance of the abstract notion of "relation".

2) The rise of empiricism favours some forms of nominalism, of which an extreme version can be found in Hobbes: only words are universal, and truth being about universals, true and false are attributes of speech (this scandalized many). The other side of the coin is a critique of language, as a master of errors and falsity. Such "misoglossy" is perceptible in Locke's *Essays*, but it also reflects a trust in the cognitive power of language (Dawson 2007). Locke's empiricist views will be turned into a theory of *the semiotic genesis of thought* by Condillac (on this move and its importance, cf. Aarsleff 1982, 1983). In other words, empiricism favours the idea that studying language provides a window into the functioning of the mind, hence the importance of semantic analysis.

3) Spatial relations being of sensible origin, they are especially well-suited to an empiricist theory of knowledge, for which "...we should find, in all Languages, the Names which stand for things that fall not under our Senses, to have had their first rise from sensible Ideas..." (Locke 1975 [1700], II.i.x, §103). This perspective was sufficiently influential for philosophers who are not of an empiricist persuasion (like Leibniz) to have adopted it in the form of localism. Metaphorization was the usual device employed for explaining how we move from spatial relations to the structuring of more abstract domains (Formigari 1988).

4) The interest in language is reinforced by the demise of ancient logic, especially on the ground that it fails to capture some modes of reasoning in natural language and in science. This results in an interest in reasoning conducted in natural language and a very extensive view of the domain of logic (esp. during the 18<sup>th</sup> century), or rather a partial dissolution of logic into rhetoric and grammar, and generally into considerations on the relation of thought and language (Auroux 1995, Dominicy 1992). To these theoretical factors we should add an important circumstance, which antedates the rise of empiricism: the grammatization<sup>41</sup> of vernacular languages, which is conducive to cross-linguistic comparisons, especially of Latin

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<sup>41</sup> "Grammatization" means that languages other than Latin and Greek are progressively equipped with linguistic tools (esp. grammars, manuals, and dictionaries) and a theoretical apparatus, by and large derived from the adaptation of Latin and Greek models (Auroux 1994).

with non-inflectional languages. We shall see below the effect of this circumstance for the generalized notion of “relation”. Taken together, these factors lay the groundwork for a cognitive approach to “relations” expressed in natural language.

5) Finally, in the realm of grammatical theory, there is a discernible shift to more semantically-oriented analyses of cases and prepositions. More syntactically-oriented and contextual descriptions of relators (e.g. appealing to verb classes, or describing the ablative as a prepositional case) progressively give way (in the 18<sup>th</sup> and after) to descriptions singling out prepositions and cases as bearers of meaning in their own right (Colombat 1981). For example, Wüllner (1827) will analyze *tinós* in the Greek *akoúein tinós* ‘hear sth<sub>gen</sub>’ not as dependent on a perception verb (like Apollonius), but as an instance of one value of the genitive (‘receptive’).

## 2.5 *On post-medieval semantic accounts of cases and prepositions*

Nominal inflections, being contextual alterations of a form, have often been treated as covarying with, or governed by another element defined morphosyntactically or semantically, or both. For example, Sanctius (1587), in a radical attempt to systematize Latin grammar, maintains that the ablative is always conditioned by the presence of a preposition which, if absent, must be implicitly understood. Other authors, like Despautère (1527 [1509]), who set out to list the lexical items which prompt the use of a given case, make the task more manageable by classifying these items semantically. Thus, in Despautère’s *Sintaxis*, words which condition the use of an ablative, whatever their part of speech, are grouped in various semantic classes listed in sequence. Lancelot combines both approaches when he states, in a special rule, that Latin nouns and verbs signifying lack or abundance take an ablative, which inflection also requires an implicit preposition, like in Sanctius’ account (*a* or *de*; Lancelot 1653: 498-9; Colombat 1981). When the semantic strategy is carried out by listing under a case the classes of words which condition this case, the case under scrutiny gains a kind of primacy from being singled out. When cases will be analyzed autonomously, as we shall see below, semantic values that were attributed to governing words will be shifted to the cases themselves.

During this period and in the 17<sup>th</sup> century, semantic analyses envisage prepositions as autonomous more commonly than they do so for cases. These analyses are generally not very developed; but it should be remembered that in the Greek and Latin tradition, the problems posed by prepositions were originally of a morphosyntactic nature, and only secondarily



semantic. In the Greek tradition, for example, particular emphasis was placed on the distinction between prepositions as independent words (assembled by *parathesis*) and prepositions as prefixes (joined by *sunthesis*), and the behavior of prepositional groups in which the preposition was postposed to the noun it “cosignifies” with (cf. Auroux et al. 1998; the notion of government arises much later).<sup>42</sup> As a matter of fact, well into the 18<sup>th</sup> century, prepositions and prefixes will sometimes be treated as belonging to the same part of speech (e.g. by Harris 1773). Semantic definitions of prepositions, after the Modistic interlude, seem to reappear during the 16<sup>th</sup> century, sometimes with a localist bent. An example is Ramus, who claims that prepositions properly mean ‘place’, but are also used for time, persons and “things” (1564, f.54v; éd. 1578: 104)<sup>43</sup>. An influential localist is Scaliger, who applies Aristotelian categories to the analysis of language and associates the class of prepositions with the category of place (πού; Scaliger 1540, c.152-153). Interestingly, he appeals to iconicity in justifying the fact that prepositions are anteposed: since they properly denote the space extending between the termini of a motion, they are naturally placed between the noun(s); when there is no motion and a preposition designates a static location, e.g. *in urbe*, it is anteposed because being located at a place presupposes that the path leading to this place, hence “before” this place, has been traversed (Scaliger 1540, c.152). According to Scaliger, non-spatial uses of prepositions derive from the spatial ones by *analogy*, and verbs such as ‘learn’ are analogically related to motion verbs.

## 2.6 *Empiricism and localism: Leibniz on particles*

The rise of empiricism (especially after Locke)<sup>44</sup>, which results in a new interest in the relation of language to thought, brings to attention words which express connections between ideas, and which Locke calls “particles”. In Locke’s *Essay*, there are two exceptions to the thesis that words signify nothing immediately but ideas in the mind: particles (1975 [1700]<sup>4</sup>, III.7, 2), and privative and negative words (1975 [1700]<sup>4</sup>, III.1, 4). According to Nuchelmans, this view had its roots in two divisions that were in use before Locke: on one hand, a distinction was established between categorematic and syncategorematic words, respectively

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<sup>42</sup> By and large, those issues arose from the need to segment correctly a text in which words were not separated by spaces.

<sup>43</sup> “Praepositiones, nativam loci significationem habent; sed temporibus, personis, rebus inserviunt” (cit. in Auroux et al. 1998, to app.).

<sup>44</sup> Of course, empiricism was not born with Locke. Its origin can be traced back to Aristotle (cf. again *De Anima* 432a5s ; see here §2.3). The presence of the famous motto *nihil est intellectu quod non prius fuerit in sensu* in authors like Thomas Aquinas, Gassendi and Locke shows that it had remained on the philosophical horizon.

words having an independent meaning versus words which signify in combination with others<sup>45</sup>; on the other hand, particles were sometimes considered as expressing not an act of signifying something (*actus significatus*), but the very performance of a mental act (*actus exercitus*); for example, the noun *negatio* was taken to stand for the concept of negation (*actus significatus*), whereas *non* signalled the very act of negating (*actus exercitus*; Nuchelmans 1986).

Although not an empiricist philosopher himself, Leibniz was impressed by Locke's observations on particles (*Nouveaux Essais*, III.7), and took up the challenge of finding a signification for them (Dascal 1990). Leibniz does not hold that they manifest a mental act, and, in several texts, he sets about describing their conceptual meaning. It is at this point that he explicitly endorses localist ideas about the core meaning of a class of particles, namely prepositions<sup>46</sup>. For him, prepositions "originally" signify a relation to a spatial position (*respectus ad situm*), and, by a kind of figure (*tropo quodam*), are transposed to less imageable notions (Leibniz 1687-8: 890).<sup>47</sup>

By providing a semantic description of prepositions, Leibniz hopes to provide paraphrases for them, and by so doing, demonstrate that they can be dispensed with in an ideal language (the *Characteristica*). Cases, it should be noted, are more cursorily treated. They are given a semantic analysis, but it is not clear if they can be interpreted in localist terms; the dative, at least, is explained as incorporating the preposition *ad* ('to'), which would seem to imply that its original meaning is spatial (Leibniz 1687-8). Like prepositions, cases are deemed useless for a universal language, and they can be eliminated by paraphrases (*reparavi domum* = 'ego sum reparans quatenus domus est patiens'; Leibniz 1685-1686).

Leibniz's reflections about particles are representative of several of the new circumstances which, as noted above, prevailed at this historical juncture. It is tempting to relate his account of prepositions to his discussion of the nature of space and his relational conception of it, in opposition to the Newtonian concept of absolute space. Further, the *situs* which figures in the semantic definition of prepositional core meanings irresistibly evokes the *Analysis Situs*, a branch of science which Leibniz projected to be a non-algebraic formalism for geometrical forms and relations of position (a sort or pre-topology; Couturat 1985 [1901]).

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<sup>45</sup> This distinction is found in Aristotle and later in Apollonius. The terms are not attested in Greek (for details on the multiple variants of this distinction and its evolution up to Ockham, cf. Rosier-Catach, ed., 2003).

<sup>46</sup> The particles include prepositions, conjunctions, adverbs and pronouns.

<sup>47</sup> The idea that "spiritual things" or abstract notions are known and designated by words denoting "bodily things", for ex. through metaphors, is widespread in the 17<sup>th</sup> century, that is, before Locke. Thus, neither Locke nor *a fortiori* Leibniz are the first authors who associate a cognitive theory of metaphor with a semantic analysis of linguistic forms. The same view is advocated by Clauberg and Lamy (Formigari 1988: 112ff.). Clauberg is claimed by Aarsleff to be a possible source of Locke (Aarsleff 1982: 66-7).

That prepositions determine “magnitude-neutral” topological relations, is a view recently defended by Talmy (2000 [1988]).

Leibniz is quite explicit about the cognitive import of semantics. His analysis of particles, he says, is a way of exploring a “mirror of the human mind” (in *Nouveaux Essais* III, 7); linguistic inquiry is therefore invested with a special importance. The cognitive role of semiotic systems is also embodied in his project of a universal language: a new semiotic system can be devised that does away with prepositions and cases, which entails that an artificial system may serve to “reprogram” mental operations. Finally, and aside from the empiricist strand, Leibniz may be placed in a lineage of philosophical grammarians who strove to ground the functions of parts of speech in the apprehension of reality, pursuing in a way the Modists’ line of inquiry. In this respect, he may have been influenced by Scaliger and his version of speculative grammar.

## 2.7 *On prepositions and cases in Grammaire Générale*

In its various versions, *Grammaire Générale*<sup>48</sup> may be characterized as an account of linguistic structures in terms of operations of the mind, i.e. combinations of ideas (although there are also specifically linguistic processes). The description of these combinations rests on an intensional logic, developed in particular by Arnauld & Nicole (1662), and comparable to an algebra defined on a set with a null element (the idea of non-existence) and various relations and operations, such as inclusion and addition. This quasi-algebra notably accounts for predication and determination (Auroux 1993). A proposition is the result of an act by which two ideas (the subject and its predicate) are compared and found to agree or disagree. In *man is an animal*, the inclusion of the idea ‘animal’ in the idea ‘man’ warrants the affirmative *is*. Every act of *judgment* is expressed by the “verbe substantif” (the copula), with the result that all verbs are resolved into the logical formula ‘be V-ing’.

What is the idea associated with cases and preposition? The answer, repeated again and again by authors of this tradition, is that they express the idea of a relation between things: “...cases and prepositions <have> been invented for the same purpose, which is to indicate the relations that things have to each other” (Arnauld & Lancelot 1969 [1660]: 62). That prepositions and cases have the same function is a view that probably owes much to the long-

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<sup>48</sup> The inception of *Grammaire Générale* might be conveniently dated from the work of Arnauld & Lancelot (1660). Its influence extends over the 18<sup>th</sup> century and, in some areas, like Great Britain, well into the 19<sup>th</sup> century. On the periodization of *Grammaire Générale*, see Dominicy (1992).

standing practice of paraphrasing Latin cases with prepositions, first and foremost for pedagogical reasons (Colombat et al. 2010, c. 26). As for the abstract notion of *relation* (French *rapport*), it might be directly connected with cases and prepositions in two respects. Cases and prepositions are used for the expression of relational terms, sometimes called *connotative* terms (like *father*, in *father of Alexander*) by philosophers. Further, the grammatical structures realized by cases and prepositions are relational in the sense that they are *analogous* or *proportional*. Beauzée (1786) notes, for instance, that there is a structural and semantic analogy in *contraire à la paix/utile à la nation/agréable à mon père*. Lastly, philosophy has long availed itself of an abstract concept of relation, much discussed since Aristotle had given it the status of a category of being. While the ontological status of relations has been the subject of much controversy up to the present, there seems to be a progressive shift toward a non-realist stance, that is, toward the view that a relation is not a property really inhering in the relata; this paves the way for a concept of relation existing in abstraction from its relata or next to its relata (for the Middle Ages, see Brower 2015; about the concept of relation in science, Cassirer 1953).

The ‘S is P’ structure is manifestly inadequate to handle relations, in particular of a verb to its complements. However, this structure coexists with the old and dependency-based concept of government (*regimen*), which is given a notional definition by authors like Dumarsais, namely that of ‘determination’ (Dumarsais 1751b). In Beauzée’s account, the preposition is said to determine the first term of a relation, which relation is further particularized or determined by the second term.

From what we have said so far, it might be expected that, within the framework of *Grammaire Générale*, semantic analyses, in particular of a localist orientation, would equally apply to cases and prepositions. However, this is not so. Some authors appear to be reluctant to expand on the semantics of cases and prepositions and argue that there is a degree of arbitrariness in their use that no artificial systematization (like in Sanctius) can fix. Such is the attitude of Arnauld and Lancelot (1969 [1660]: c. 6, e.g.: 36 and c. 11). Further, cases are not only regarded as equivalent to prepositions, but also to *word order*. This equivalence is at the heart of the famous dispute on the natural word order (Ricken 1977). Granted that the subject-verb-object order is natural, inflectionally-rich languages, like Latin and Greek, are massively deviant. These two facts are connected: case forms are alternate ways of recovering the grammatical relations that Latin and Greek often obfuscate and these languages can use order for other purposes (of a rhetorical, pragmatic or aesthetic nature). Now, grammatical relations implemented in word order were not interpreted in localist terms. Dumarsais, a defender of

the natural word order, describes cases in isolation from their governors and assigns them to modes of conceptualization, but he devotes relatively little attention to their semantics (1751a). The junction between localism and grammatical relations is left unrealized.

With prepositions, we face a different situation. We have seen that, in an empiricist environment, localist accounts were put forward by authors of a philosophical inclination, like Scaliger and Leibniz. *Grammaire Générale* similarly favours this cognitive orientation. In Condillac's grand scheme, the analysis of prepositions becomes part of a theory on the semiotic genesis of thought: since mastering linguistic structures conditions analytical thinking, accounting for the origin of prepositions is intended to shed light on cognitive development (Condillac 1775, I: 74 and II: c. XIII). This origin is unambiguously localist, and, it should be added, ostensive: *de*, for instance, was originally a gesture indicating the place where one was coming from (Condillac 1775, I: 74). From this spatial core radiate more abstract senses:

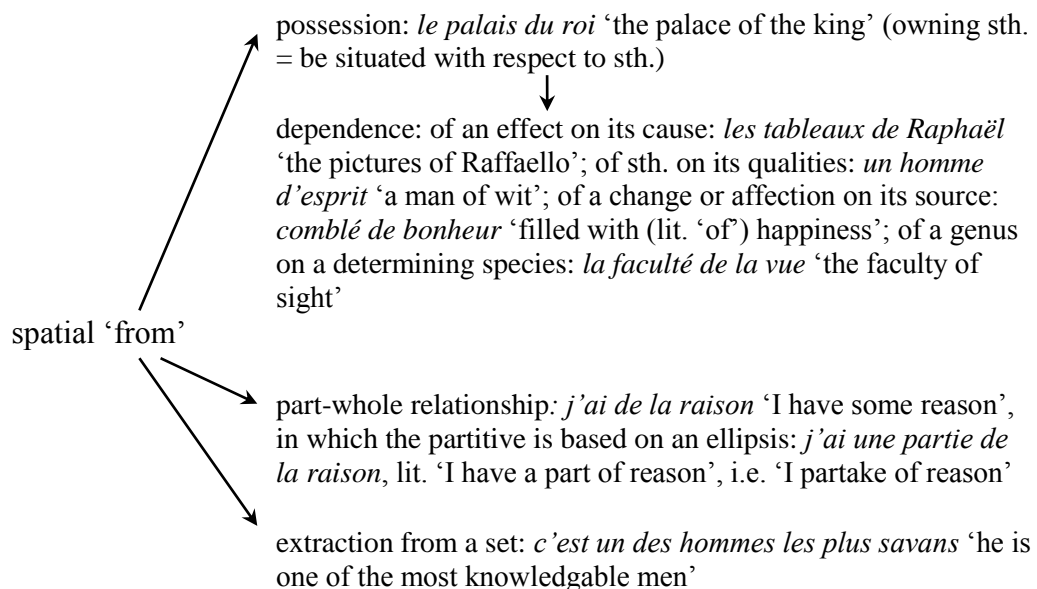


FIG. 4: the senses of *de* according to Condillac (1775, II: c.XIII)

Likewise, in his *Hermes*, the British contemporary of Condillac, James Harris (1773, 1<sup>st</sup> ed. 1751), makes apparent his localist leanings. While Condillac clearly belongs, with Locke, to the empiricist lineage, Harris is an unconventional character and is more difficult to situate. He is imbued with Greek grammatical theory and Greek philosophy; a solitary Neoplatonist lost in his time, he tries to reconcile Aristotle with Plato, sensation with the existence of archetypal forms. He is not, therefore, an empiricist, though Aristotle and modern empiricism

have left their mark on him (in this he might be compared to Leibniz). Above all, he abhors atomism and the modern fad for everything experimental. However, his fondness for Greeks does not mean he rejects what posterity has brought about. He is also an heir to Modistic grammar, modern philosophical grammar and Grammaire Générale. On his view, linguistic structure mirrors the conceptualization of the physical world, and this conceptualization ultimately manifests higher realities (the archetypal forms). This broad parallelism has Modistic overtones, but he sometimes borrows analyses from Grammaire Générale, and among modern authors, most often sides with Scaliger. From Scaliger's *De Causis*, he says, he borrows his "essential definition" of prepositions, which is to denote spatial relations between substances:

"It must be observed that most, if not all Prepositions seem originally formed to denote the *Relations* of PLACE. The reason is, this is that grand Relation, which *Bodies* or *natural Substances* maintain at all times one to another, whether they are contiguous or remote, whether in motion, or at rest. (...) But though the original use of Prepositions was to denote *the Relations of Place*, they could not be confined to this Office only. They by degrees extended themselves to Subjects *incorporeal*, and came to denote Relations, as well *intellectual* as *local*. Thus, because in Place he, who is *above*, has commonly the advantage over him, who is *below*, hence we transfer OVER and UNDER to *Dominion* and *Obedience*; of a King we say, *he ruled OVER his People*; of a common Soldier, *he served UNDER such a General*. So too we say, *with Thought*; *without Attention*; thinking *over* a Subject ; *under Anxiety*; *from fear*; *out of Love*; *through Jealousy*, etc." (Harris 1773: 266-8).

Harris is thereby committed to upholding that

"the *first Words* of men, like their *first Ideas*, had an immediate reference to *sensible Objects*, and that in afterdays, when they began to discern with their *Intellect*, they took those Words which they found *already* made, and transferred them by metaphor to *intellectual Conceptions*." (ibid.: 269).

I have quoted this passage at length for the reader to appreciate its proximity to Locke (for this conclusion) and to Leibniz (for the semantic analysis).

Not all authors of the time, however, subscribe to localism when dealing with prepositions. Beauzée (1786), for instance, dismisses Dangeau's localist account of *après* ('after'; Dangeau 1754) on the ground that he does not see what kind of evidence could possibly support the primacy of the spatial meaning. Rather, Beauzée maintains that *après* (and other prepositions) abstract away from time, space, motion and rest. From this generalized, non-exclusively spatial, "intuitive" meaning springs the kind of figurative meaning found in "moral" (non-physical) contexts such as, e.g., *courir après les honneurs* 'run after honors'.<sup>49</sup> Finally, a further obstacle to localist analyses of prepositions may have been the fact that they were sometimes classified with conjunctions, especially from the second half of the 18<sup>th</sup> century onward and in work affiliated to *Grammaire Générale*. De Sacy, for instance, has a semantically undeveloped view of the function of prepositions and conjunctions, which he considers to be that of establishing *rappports* between, respectively, lexical items and propositions (1803: 96-7). Harris himself associates prepositions and conjunctions in the class of *connectives* and, quite paradoxically given what we have seen above, says in one place that they are "devoid of signification" (1773: 261).<sup>50</sup>

## 2.8 *The heyday of case localism in Germany*

Since a large part of the historical section of Hjelmslev's book is devoted to a presentation of German localist, semilocalist and antilocalist studies of case, it would be futile to repeat what has been said in *La Catégorie des Cas* (1935/7 [1972]: 1-70). Cienki's paper, which pursues and extends Hjelmslev's inquiry, provides useful complements (1995), as does Parret (1989). We will content ourselves with a few additions, especially when we feel our interpretation differs from theirs. A certain amount of repetition, however, is inevitable.

To begin with, a few words need to be said about the historical context. The linguistic work to be discussed here illustrates a philosophical turn of German grammatical analysis (Burkard 2003). In this turn, the prospect of elaborating a general grammar (*Allgemeine Grammatik*) owes much to the program of the same name in France, and some German authors, like Becker, clearly adopt and develop elements borrowed from French authors, like Girard. There is, however, a specifically German stamp in this evolution. A number of authors, in proposing a "rational" organization of cases, tried to ground this organization in

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<sup>49</sup> The notion of an intuitive meaning encompassing space, time and motion is similarly emphasized by Pottier (1962) in his analysis of cases and prepositions in Romance. Through Gustave Guillaume, Pottier might be considered as a distant descendant of *Grammaire Générale*.

<sup>50</sup> I thank my colleague Valérie Raby for having pointed this out to me.

Kantian philosophy and Kantian categories. Especially relevant for our subject is Kant's concept of *Anschauung* 'intuition' as mediating the understanding of concepts through experience:

"Intuition and concepts therefore constitute the elements of all our cognition, so that neither concepts without intuition corresponding to them in some way nor intuition without concepts can yield a cognition. (...) Without sensibility no object would be given to us, and without understanding none would be thought. Thoughts without content are empty, intuitions without concepts are blind." (Kant 1998 [1781-1787]: 193-4).

From this view of intuition follows that concepts have to be intuited in space and time to be rationally evaluated, lest they give rise to paradoxes (cf. the Kantian antinomies). Further, our only form of non-empirical (non-receptive) intuition, e.g. in geometry, is restricted to intuition realized in the forms of space and time. Hjelmslev has rightly recognized this Kantian influence in German linguistics (see too Burkard 2003). The reader may be referred to his account of Gottfried Hermann's work, which furnishes a good example of the way the Kantian categories could be applied to cases (1972 [1935-7]: 29-32). In this global context, and in extending localism to cases, Wüllner and Hartung extrapolate from two premises that had been established within the framework of philosophical grammar and *Grammaire Générale*: (1) prepositions primarily denote spatial relations; (2) cases and prepositions have the same function and express relations; *ergo*, cases primarily express spatial relations.<sup>51</sup> Harris, it should be noted, had preceded them, although he had not provided a full-blown localist theory of cases. He had explicitly glossed cases with English prepositions, saying, for instance, that the Greek genitive and dative expressed, respectively, 'from' and 'to' in *deomai sou* 'of thee I ask' vs. *didomi soi* 'to thee I give' (1773: 285). In Germany, Doeleke (1814) had followed in Harris' footsteps, with an important addition: after having claimed that case-endings had evolved from postpositions, he now held the view that they came from pronouns and articles. By contrast with Harris, Doeleke illustrated the new historical trend of German grammatical speculation.

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<sup>51</sup> This premise is not a discovery made by Bernhardi, as noted by Anderson (2005), and contrary to what Hjelmslev says (1935/7 [1972]: 24). Generally, Hjelmslev neglects the fact that some of the authors he mentions, such as Becker, were relaying some central tenets of *Grammaire Générale*.



Wüllner and Hartung pursue this line but provide more radically localist studies of a larger scale. Both leave the nominative out of the picture, with the effect that agentivity and passivity, which, in Harris and Doeleke, figured prominently in the nominative/accusative contrast, become secondary features derived from local relations. We shall focus here on Wüllner's theory, which Hjelmslev presents as the best modern localist account.

Wüllner's analysis essentially bears on Latin and Greek (1827) and later on Sanskrit as well (1831), with frequent references to German, and occasional mentions of English, Italian, French, Modern Greek and Hebrew. According to Wüllner, the basic meanings (*Grundbedeutungen*) of the genitive, accusative and dative cases are spatial intuitions (*Anschauungen*), respectively of a starting point (*woher* 'where from'), of a goal (*wohin* 'where to') and a localization (*wo* 'where'). Intuitions reflect the *subjective* nature of language, and give rise to the conception of abstract relations. The primacy of space rests on the fact that, says Wüllner, "our mind embodies [*verkörpert*] everything to which it confers existence, and, by the same move, thinks of this being as existing in space" (1831: 272). The implicit reference might be to Herder's *Metakritik*, in which Herder proposes an empiricist alternative to Kantian criticism. In particular, he claims that the concept of existence stems from the experience of persisting in a place. Being experientially based, space is not, therefore, an *a priori* condition of experience (*pace* Kant). In Herder, Wüllner might have found a full-fledged defense of localism from the perspective of a theory of knowledge and, in some places, of semantics.<sup>52</sup>

By way of illustration, the following network sums up the various uses of the genitive case and their connections (the diagrammatic representation and the labels are my own, the examples are taken from Wüllner, the translations are literal):

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<sup>52</sup> Wüllner refers to Herder's treatise on the origin of language in this book (Herder 1978 [1772]). To shore up his empiricist views, in his *Metakritik*, Herder makes an allusion to Horne Tooke's etymologies and his attempt at establishing the primary concrete meaning of various designations (Herder 1799: 59; Tooke 1786-1805; on Tooke see Aarsleff 1983). In viewing Wüllner as a Herderian rather than as a Kantian, I differ from Hjelmslev (1972 [1935-7]) and Parret (1989).

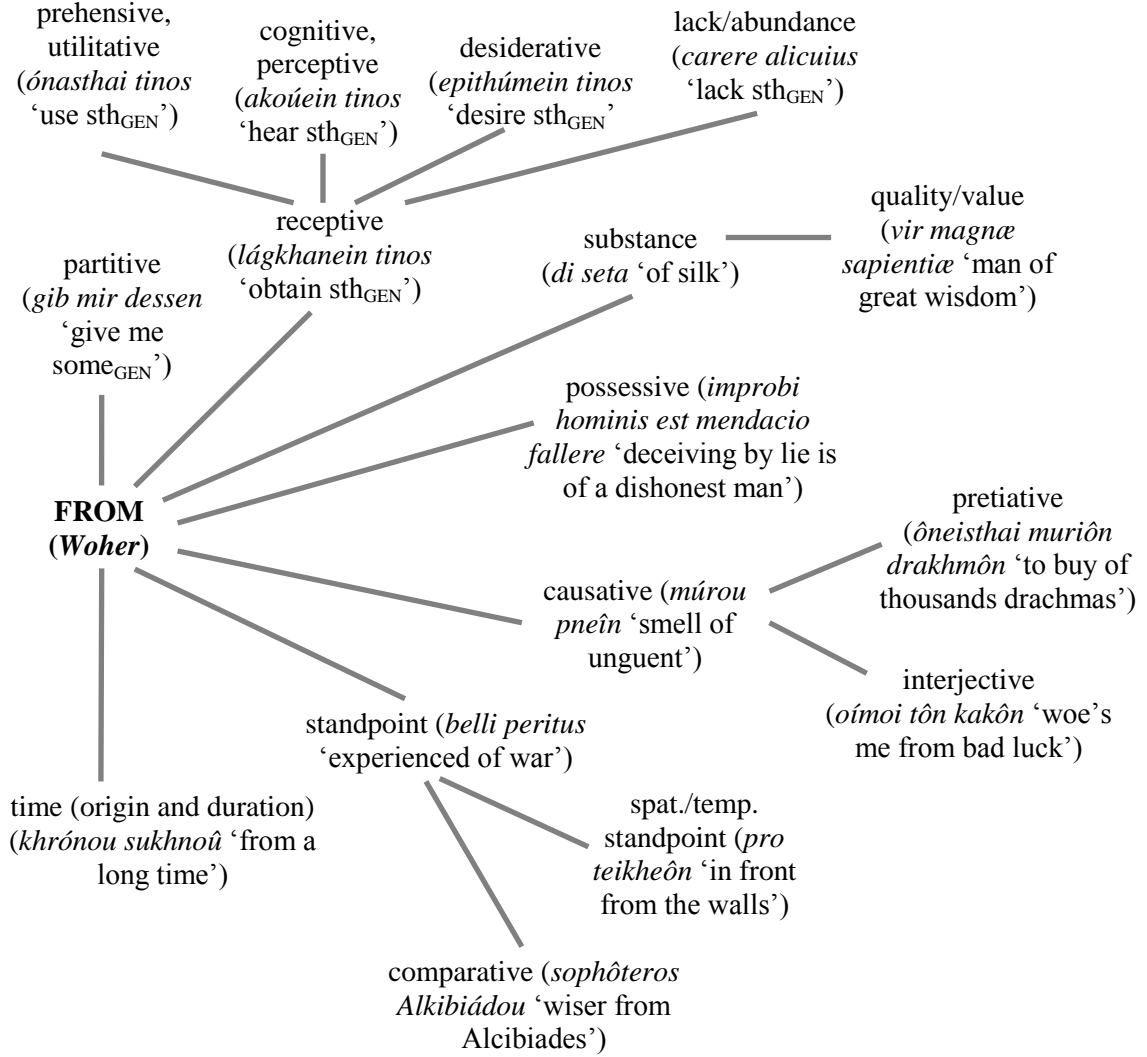


FIG. 5: The network of senses associated with the genitive in Wüllner (1827)

When we consider this diagram, the minimalist elegance that Hjelmslev attributes to Wüllner’s system is not strikingly apparent. Wüllner does not posit generalized meanings abstracted from the extension of spatial basic meanings to other semantic fields. Rather, he proposes a network of related senses and his *Grundbedeutung* is close to what Condillac understood as the original meaning of a preposition, or to what contemporary cognitive linguistics identifies as the prototypical meaning of a polysemous item. Note that some examples, such as *akoúein tinos*, have been discussed since Apollonius. As noted above, Wüllner transfers to a case semantic features that were associated with the words governing this case.

The second book of Wüllner (1831) is an exercise in comparative grammar, rife with data from Sanskrit, in addition to Latin and Greek (Sanskrit is nearly absent from his 1827

book). According to Wüllner, forms expressing motion, deixis and spatial relations are the main source of all linguistic forms. Here, Bopp's influence is perceptible. Bopp had shown that some endings of Sanskrit, Latin and Greek declensions came from demonstratives or prepositions with an "originally" spatial meaning, and that at least some prepositions were closely related to demonstratives (Bopp 1826). There is, therefore, no doubt that Bopp entertained localist ideas.<sup>53</sup>

Wüllner claims that roots of "original" (*ursprüngliche*) motion verbs can be found in a number of verbs and verbal suffixes. An example is his analysis of inchoative verbs like Latin *matur-es-c-o* = 'ripe-to.be-go-1P', where *es-* is said to be found in Latin *esse*, and *c-* is claimed to be akin to a Sanskrit form *gâ*, also found in Eng. *go* and Germ. *gehen* (Wüllner 1831: 72). Pronouns, some case forms and verbal endings, some adverbs are derived from the three "most original" (*ursprünglichste*) demonstrative adverbs *i/a/u* (resp. proximal/distal/proximal and below, hidden from view). Substantives and adjectives are hypothesized to have pronominal (and ultimately, demonstrative) endings, on the ground that pronouns serve to anchor a referent in space (1831: 272-3). For instance, Latin *frag-i-li-s* is analyzed as a substantification of the breaking action, with locativization by *-i-*, and pronominalization by *li-*, with the resulting meaning 'breaking-in-the one' i.e. 'the one involved in a breaking action' (1831: 318). Although these claims appear to be quite speculative, Hjelmslev is remarkably forgiving to Wüllner, whom he regards as his precursor.

## 2.9 *Half-hearted localists*

Though I cannot provide first-hand confirmation of this, repeated statements made by protagonists like Holzweissig, Curtius or Rumpel point to the fact that localism had gained wide acceptance, especially among teachers of Latin and Greek.

However, localist theories were facing serious difficulties (Curtius 1864). They had nothing to say about the nominative (and vocative) cases. Formal similarity or identity between nominative and accusative forms was troublesome, since the nominative could not be regarded as a local case. Further, if the accusative had a spatial basic meaning, why was it hardly ever replaced by a preposition in modern languages? Also, the genitive appeared to be

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<sup>53</sup> For example he says that "causality and instrumentality, because they are not spatial, external nor sensuous, are necessarily conceptualized spatially in order to be expressed" (1826: 78). His justification for assigning the ablative to an early linguistic stage is also very revealing: "if external, spatial relations are the first for which a language must find a designation, it follows that the ablative, in the sense in which it is used in Sanskrit, can be justifiably regarded as one of the oldest and most natural cases" (Bopp 1826 : 87-8).

strongly associated with nominal determination, and its spatial uses seemed to be marginal at best. *Semi-localism* was a way out of these difficulties. For example, Holzweissig (1877) distinguished between cases with a grammatical function and cases with a basic spatial meaning:

<b>Grammatical cases</b>	<b>Local cases</b>
nominative	dative
vocative	ablative
accusative	locative
genitive	instr.-sociat.

FIG. 6: The division of cases according to Holzweissig (1877)

Local cases result from the splitting of an adverbial case during an early period of Common Indogermanic. From “Common Indogermanic” to Sanskrit to Greek and Latin, the values of local cases get “reshuffled”:

<b>Latin</b>	<b>Greek</b>	<b>Sanskrit</b>	<b>Basic meaning (Grundbedeutung)</b>
<i>abl. separat.</i>	<i>gen.</i>	<i>abl.</i>	From-case ( <i>Wohercasus</i> )
<i>abl. loci/temp.</i>	<i>dat. loci/temp.</i>	<i>loc.</i>	Where-case ( <i>Wocaus</i> )
<i>abl. comit./mod./ instr.</i>	<i>dat. comit./mod./ instr.</i>	<i>instr.-sociat.</i>	With-case ( <i>Mitcasus</i> )
<i>dat.</i>	<i>dat.</i>	<i>dat.</i>	To-case ( <i>Wohincasus</i> )

FIG. 7: The distribution of cases in Latin, Greek and Sanskrit according to Holzweissig (1877)

It is interesting to note that basic spatial meanings, in their pure, non-syncretic form, are now associated with Sanskrit. Sanskrit has the status, as it were, of a cognitively transparent stage of Indo-European.

Diachronic alterations of forms and meanings solved further problems. For example, why does the accusative override the dative for the expression of goal? Holzweissig claims that dative (or ablative), after having absorbed the locative case, came to be associated with stasis, while the meaning of the accusative was extended to goals.

Holzweissig's views are relatively close to Ahrens division between "logical" and "topical cases", and to Steinthal's distinction between "real cases", and "expressions of spatial relations", in line with Wundt (1912). The latter two, however, do not consider spatial cases as genuine cases. For Wundt (1912), intuitive relations ("external determinations") are not restricted to spatial relations, their list is open-ended, and includes determinations such as 'lack of', 'comitative', 'prosecutive (along)' etc.<sup>54</sup> On the other hand, genuine cases ("cases of internal determination") constitute a finite set: nominative, vocative, accusative, genitive, dative. They fulfill functions which sometimes bear no special marking, and can be expressed by word order and composition (e.g. *Vaterhaus* 'house of father', where possession is rendered by composition). Interestingly, Wundt pursues Holzweissig's idea of a possible syncretism of grammatical and local values, but in another guise. About the genitive, for instance, he suggests that there is a certain fluidity which makes it possible for a language to use a genitive case where another one uses an external determination; compare, for instance, the Greek *lambánô tês kheirós* and the German *ich ergreife bei der Hand* 'I grasp by the hand'. Being potentially generalized from the notion of possession (*Besitz*) to a very wide notion of 'narrow connection' or 'dominion' (*Zugehörigkeit*), the genitive may take on the function of what is denoted more "intuitively" in another language. Without going into any further details, I may observe that Kuryłowicz (1964) makes such fluidity a rule: cases fall into two groups, the predominantly grammatical ones and the predominantly spatial ones, and each case has both a grammatical and a spatial dimension.

### 2.10 *Localistophobics*

Rumpel (1845, 1866) and Curtius (1866) were probably the most prominent adversaries of localism. Since their objections have not yet been presented in full, I will now enumerate them (see also the beginning of the preceding section):

- (i) According to localists, when men invented language, they only had representations of sensory origin. By depriving men of their faculty of understanding, localists do not explain how mankind managed to form abstract representations (Rumpel 1866).

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<sup>54</sup> In a similar vein, Delbrück emphasizes that, while cases first reflected concrete relations, these relations were not confined to spatial relations, but had to involve subjective perspective (foregrounding vs. backgrounding of a participant) and dynamic notions, such as conflict and domination, giving and helping etc. (1901: 131f.).

- (ii) Localists have nothing to say about the nominative; they simply ignore the most important “logical” fact of all languages, namely that language reflects thought, hence inherits from *judgment* the *subject-predicate* structure, which conditions the nominative-verb structure (Rumpel 1845, 1866).
- (iii) Localists simply repeat the subcategories of cases recognized in traditional grammar, distinguishing, e.g. for the genitive, between a *gen. materiae*, a *gen. possessoris*, a *gen. causae*, a *gen. qualitatis*. By so doing, they unjustifiably transfer to cases the lexical meaning (*materiale Bedeutung*) of words present in their context of use (Rumpel 1845).
- (iv) In addition, localists are prone to translating what is expressed by a case in one language into what is expressed by a preposition in another language. This practice contributes to overspecifying the meaning of cases, because prepositions are usually more specific than cases (Rumpel 1845).
- (v) A given spatial relation may be expressed by more than one case, and conversely (Rumpel 1866).
- (vi) If spatial relations were so basic for oblique cases, why did Greeks feel the need to use specifically spatial suffixes like *-θι*, *-θεν*, *-δε* etc? (Rumpel 1845, 1866).

Objections (iii) and (iv) are not without grounds, if we consider Wüllner’s account. Rumpel insists that the meanings of cases are much more abstract than what localists take them to be. His definitions remain partly conceptual, but they are essentially a description of formal relations; for instance, says Rumpel, “the meaning of the object accusative is to establish an immediate bond between a substantive and a verb, that is, a bond which requires no specific mediation in thought” (1866: 16).

Rumpel illustrates a growing emphasis on the *formal* analysis of cases in terms of grammatical relations. His approach is severely criticized by Hjelmslev (1935/7 [1972]: 49-50). Rumpel, he objects, imports into the definition of a morphological system (i.e. cases) notions which pertain to another level of analysis (the clause) and come from traditional grammar, especially the notions of subject and predicate. In short, for Hjelmslev, Rumpel does not analyze a system in its own terms and resorts to extraneous notions. He is, in Hjelmslev’s words, a practitioner of “transcendental linguistics”.

This judgment is somewhat unfair, for Rumpel’s perspective separates what had often been conflated in grammatical analysis, that is, the semantic plane and the grammatical plane.

From a more distant view, and leaving aside the question of cases, Rumpel's point of view could be seen as a clarification. In German grammatical analysis, for instance, the grammatical object had often been enmeshed with the notion of patient, or set in opposition to animacy (Burkard 2003). The logical origin of the subject-predicate structure is not in doubt, but this structure had progressively been given a grammatical function immune from such confusions. What Rumpel was doing was not, therefore, a form of transcendental linguistics. On the contrary, he was breaking away from the "logical" tradition. A further step beyond the decomposition of a proposition into subject-attribute and subject-predicate structures will be the "delogicization" of these structures; this delogicization would be the origin, especially in Bloomfield's reelaboration of Wundt, of constituent analysis. Needless to say, this move would be an innovation of great importance in linguistics (Seuren 1998). Finally, note that the most recent localist accounts presented in this paper (including Anderson's) have given up the prospect of a one-to-one matching of case-forms and surface grammatical relations to semantic roles. In this respect, they are the heirs of this separation of semantic roles and surface relations which led to Rumpel.

### 2.11 *Hjelmslev*

Hjelmslev (1935/7 [1972]) is faithful to the localist idea that direction is a basic dimension of case systems, but for him direction is a very abstract notion which subsumes the various senses that Wüllner derives from each basic meaning. In Anderson's terminology, therefore, his account is localistic (Anderson 1994). Further, Hjelmslev points out that case systems cannot be reduced to the dimension of direction. More complex systems than the ones found in Indo-European languages show that more than direction is involved. The very simplicity of Indo-European systems is likely to conceal possible syncretisms, and more complex systems would therefore be better suited to telling apart the semantic dimensions of case. Taking into account such systems leads Hjelmslev to distinguish three dimensions of contrast. The first one is that of *direction*, as in localist accounts. The second dimension pertains to the "intimacy" of the locative relationship (i.e. *in* vs. *on*, *on* vs. *above*), or, in Hjelmslev's words, to the *coherence/incoherence* of the relation which associates two entities. Finally, the third dimension involves an opposition between subjectively construed relations and objective ones

or, in modern parlance, relations conceptualized in a relative frame of reference or not.<sup>55</sup> This categorization is not without posterity. Drawing his inspiration from Hjelmslev, Creissels (2008) proposes a classification of spatial case systems based on the number of dimensions they encode: unidimensional (based on dynamicity, i.e. relations such as ‘to’ and ‘from’), bidimensional (combining dynamicity with “topological” relations, such as ‘in’), tridimensional, where the dimension of “orientation” or “vicinity” combines with the preceding dimensions.

One of the main objections raised against Hjelmslev touches on a familiar problem met by localist accounts: in what way can the nominative be considered as a local case? (Anderson 1977: 111-2; Anderson 2005: 53-4; Serbat 1981: 102). Hjelmslev’s solution is unorthodox, not to say bizarre: like the ablative, the nominative is associated both with ‘to’ (*quo perventus est*?) and ‘from’ (*Romā proficisci*) but in a different way; as governing agreement<sup>56</sup>, it signifies distance, while the agreement morpheme of the governed element, being brought into concord with the head, signals its proximity to the governor. Distance and proximity being spatial notions, Hjelmslev believes his solution renders the nominative compatible with localism. Anderson has rightly objected that the kinds of distance and proximity invoked here take us to a metaphorical plane of an order different from other localist notions; moreover, Hjelmslev’s account simply obscures the fact that the nominative, as case of the subject, neutralizes a wide range of case relations (2006: 100). On Anderson’s view, this neutralization has one main reason: the essential relationality of predicators is manifested by the existence of at least one grammatical relation in languages that are not ergative; and by neutralizing different case relations, this grammatical relation is associated with a high degree of semantic dilution (Anderson 2006).

Other objections have been voiced by Anderson (e.g. 1977: 114-5; 2005). On one hand, Hjelmslev explains that case forms are but one of the manifestations of syntactic relations (with adpositions and word order), but, on the other hand, his discussion is confined to the semantics of case forms and to specific case systems. As a consequence, his perspective does not enable him to reach beyond case forms and particular systems so as to establish a universal array of case relations. Finally, his view of the mapping from case relations to case forms is too simple and neglects neutralizations (on neutralizations, cf. Anderson 2006: chs. 6 and 7).

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<sup>55</sup> In Levinson’s terminology (2003), a relative frame is such that an object is located along an axis determined by a viewer distinct from the reference object, e.g. *the man is in front of the tree*, where the front of the tree is the side facing the viewer.

<sup>56</sup> The way Hjelmslev speaks of concord in terms of *rection* (government) is a little puzzling.



## 2.12 Localist morphosyntactic structuring in cognitive linguistics

In the first part of this paper, I tried to contextualize the formation of Anderson's case grammar and set it against the background of these contemporary localist accounts to which his own was most closely related. These models do not exhaust the forms of localism which have appeared in the past decades. In this section and the next, I will present a brief overview of two recent localist strands. To start, let us turn to the localist treatment of morphosyntax in two cognitive approaches.

Talmy's dissertation (1972) is chronologically the second localist American study which was incubated in the environment of generative grammar. It is close in spirit to generative semantics. Like Gruber's dissertation, it makes no mention of previous localist studies, though Whorf may have been inspirational (Whorf also used the notions of figure and ground in linguistic description, but in a different way).

Talmy's undertaking would have seemed quixotic in other, non-universalist times of American linguistics, since he sought to assign identical "deep" structures to English and a polysynthetic language of California, Atsugewi. This was not, however, the first attempt of this kind (cf. Chafe 1970b).<sup>57</sup> Perhaps because deep syntactic structures in the generative style were not well-suited for this purpose, Talmy went to a deeper, semantic, level.

Talmy's point of departure is the notion of *translatory situation*. A *translatory situation* (an event in which a Figure moves along a path or is in a spatial relation to a Ground) is decomposed into a fixed structure (*translatory structure*) of 4 components:

The Figure: "the object which is considered as moving or located with respect to another object." (F)

The Ground: "the object with respect to which a 1<sup>st</sup> is considered as moving or located." (G)

The Directional: "the respect with which one object is considered as moving or located to another object." (D)

The Motive: "the moving or located state which one object is considered to be in with respect to another object" (M).

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<sup>57</sup> Chafe was the chairman of the department where Talmy was doing his PhD (University of California at Berkeley).

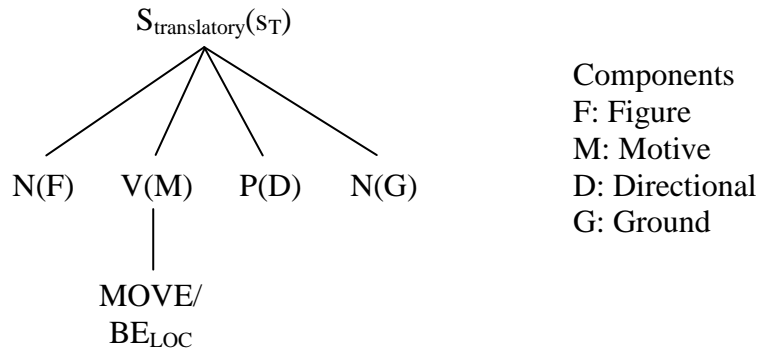


FIG. 8: The *translatory structure* in Talmy (1972: 13)

Some components internal to the translatory structure or external to it may merge with components of this structure, by an operation of *conflation*, defined as “any syntactic process – whether a long derivation involving many deletions and insertions, or just a single lexical insertion – whereby a more complex construction turns into a simpler one” (Talmy 1972: 257). For ex. resulting from *adjunction*:

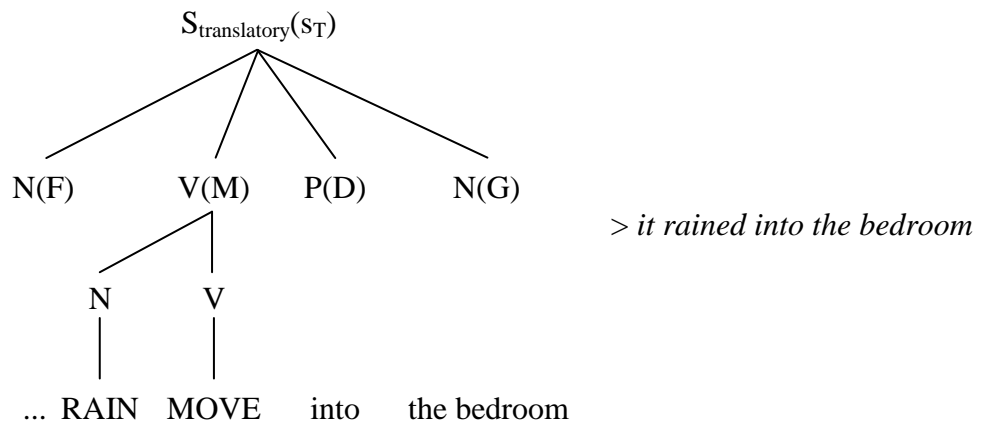


FIG. 9: An example of *adjunction*, followed by a conflation (Talmy 1972)

The conflation by which RAIN merges with MOVE and delivers the verbal form *rain* is similar to predicate raising in generative semantics.

What is distinctly localist in Talmy’s framework is that it is extended to non-spatial situations, esp. causative contexts. For example, *the soot blew into the creek from the wind* is derived from [the soot<sub>F</sub> fell<sub>FM</sub> into<sub>D</sub> the creek<sub>G</sub>]<sub>φ</sub> [followed]<sub>ρ</sub> [from]<sub>δ</sub> [the wind blowing on it]<sub>γ</sub>, where φ-ρ-δ-γ (Figurid-Relator-Director-Groundid) are counterparts, in nonspatial fields, of F-M-D-G.

Beyond causative structures and more generally, says Talmy, “situations that involve state and change of state seem to be organized by the human mind in such a way that they can be specified by structures homologous with motion structures” (1975: 234). As localist as this statement may be, its author does not appear to be aware of the tradition he links to; the proximity of his analyses to positions held by Gruber and Jackendoff is quite apparent, yet he makes no mention of them in his first text. As for Gruber, we seem to be dealing with an idiosyncratic invention without any acknowledged precedent.

The second localistically oriented model of morphosyntactic structure developed in cognitive linguistics is Langacker’s Cognitive Grammar. The first version of Cognitive Grammar went under the name of Space Grammar, and Space Grammar was itself continuing Langacker’s own version of generative semantics. One may wonder how a theory close to generative semantics evolved into Langacker’s final model. I cannot go into the details of Langacker’s complex evolution here (see Fortis 2010). However, two motivations for the term Space Grammar deserve to be noted: at one point, Langacker’s generative trees (close to what was familiar in generative semantics) give way to a stratal and diagrammatic representation which is regarded as iconic (strata, as it were, isomorphic to conceptualization); second, in some studies, Langacker offers a spatial illustration of modal auxiliaries, tenses and modalities, in which, for instance, past is represented as distal from the present (Langacker 1978, 1979). In this form of diagrammatic representation of linguistic categories, the cognitive status of spatial relations is far from clear. Langacker seems to appeal to some sort of symbolic images whose cognitive reality cannot be ascertained.

A different aspect of Langacker’s theory associates him with Talmy’s localism. At one point of his evolution, Langacker adopts the notions of *figure* and *ground* (perhaps borrowed from Talmy) and make them serve a double purpose: first, the figure is what a form designates within a more complex data structure, similar to a Fillmorean frame; second, the figure serves to define the morphosyntactic head, and in this function is called a *profile*; in a clause, for instance, the verb is the head and imposes its processual mode of conceptualization, or profile, on the whole clause. The connection between the head as profile and the designatum as figure is perhaps more apparent in morphology: in *runner*, the morpheme *-er* is both a head and a designatum that stands in relation to its local frame (called its *base*) whose content is the process ‘run’ (Langacker 1979: 109-11). Figure and profile are often represented visually, and their visual import is quite obvious.<sup>58</sup>

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<sup>58</sup> One reason for favouring diagrammatic representations is that propositional representations of meaning (like the deep predicates of generative semantics) superpose a linguistic code onto the target language. That is, they

Again, we are dealing with a theoretical apparatus that makes reference to visual cognition, but whose psychological reality remains an open question. What is the nature of the spatial medium in which this mental imagery is elaborated? Can we properly call this framework localist on the ground that it makes use of diagrammatic representations and calls itself cognitive?

### 2.13 *Localism in lexical semantics*

The past decades have witnessed the flourishing of localist analyses of prepositions in studies generally affiliated to cognitive linguistics.<sup>59</sup> In fact, the subject of prepositional meaning has been central to the revival of lexical semantics in American linguistics, which revival is part of a growing interest for semantic matters, certainly spurred by generative grammar and generative semantics. However, this interest also reflects a long-term evolution which antedates somewhat generative grammar. During the generative age, the first study on the cognitive semantics of prepositions, “particles” and other lexemes was Nagy’s dissertation (1974), and it took its inspiration from the neobehavioristic semantic theory of Osgood (1952). Briefly, Nagy observes that spatial dimensions (esp. verticality) are regularly associated, across the “lexicon”, with nonspatial dimensions. He notes, for instance, that verticality is regularly associated with financial value (*high sum*) and other scales (*my opinion of him went up*). He suggests these regularities should be captured in redundancy rules of a generative grammar, though the problem of exceptions proves to be thorny.

Nagy’s study was only the first of many analyses dealing with prepositions in the new cognitive style. We need to understand why this subject became important, and what favoured the perspectives from which it was tackled. Let us try to describe the historical context in a few words.

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impose their own combinatorial potential on the language to be explained. But a language should be described in its own terms (Langacker 1976).

<sup>59</sup> To be fair, adpositions and spatial markers have been investigated in different frameworks, and from viewpoints which do not reduce to the synchronic semantic/cognitive analysis of particular languages: their origin and evolution (e.g. Svorou 1993, Fagard 2010); their categorization (e.g. their delimitation with respect to cases, serial verbs or converbs etc.; Hagège 2010); the typology of their basic meanings (cf. e.g. the crosslinguistic survey of Levinson et al. 2003); the typology of the spatial frames and coordinate systems that underlie their use (e.g. Levinson 2006); the type of features called on by subjects when they describe spatial scenes using adpositions, with the methods of cognitive psychology (e.g. Garrod et al. 1999); and finally, their morphosyntactic and semantic analysis from functional, formal-generative, or Guillaumian perspectives (Saint-Dizier 2006, Asbury et al. 2008, François et al. 2009, Cinque & Rizzi 2010). I thank Nigel Vincent for reminding me of this point and for pointing out to me some of the references cited here.

When some semantic generativists got disaffiliated from generative grammar and embarked on what is now known as cognitive linguistics, they looked for fields left open by American linguistics. In the long term, we may view their enterprise as continuing the progressive expansion of American linguistics to syntax and to semantics (Hymes & Fought 1981: 234-5).

At any rate, they were, by and large, disconnected from the history of lexical semantics and, for this reason, the field may have seemed all the more promising to them.<sup>60</sup> On the other hand, cognitive linguists were in phase with some aspects of the new “mentalism” promoted by the so-called cognitive “revolution”. The fact that mental images, attention and representational memory were being rehabilitated in psychology during the 1960s legitimized, in one way or another, their use of visual and spatial constructs, the importing of gestaltist notions (important in Neisser 1967), and their view of semantics as being about mental representations. Particularly significant for the new semantics, the prototype theory of “concepts” was elaborated by Rosch during the 1970s, out of elements that had been developed before her, from the 1950s on (Fortis to app.). By providing an impressive synthesis of these elements, her theory gained wide acceptance. Cognitive linguists saw the notion of prototype as a handy tool for dealing, first, with fuzzy categorization (Lakoff 1973), then for doing lexical semantics and handling polysemy.

All of these factors converged on a revival of lexical semantics, and specifically the semantics of words associated with spatial representations. To this we should add that prepositions and “particles” had never disappeared from the linguistic horizon, perhaps because they are particularly salient in English. The cognitivist thesis of Lindner (1981), for example, provides a review which spans the 20<sup>th</sup> century. She was read by Lakoff, and her dissertation on *out* and *up*, of a localist orientation, occasionally cites previous localist work. In his 1987 best seller, Lakoff, capitalizing on Brugman’s study (1981), provided a description of *over* (and also of *there*), with a spatial prototypical meaning at the center of a large network of senses. Numerous localist studies of adpositions have been published since. The empiricist background to Lakoff’s perspective is quite apparent in the book in which he introduces, with Johnson, the conceptual metaphor theory: “we typically conceptualize,” they say, “the nonphysical *in terms of* the physical”, by which they mean that the conceptualization of the physical does not only provide symbolic means for, but gives rise to the conceptualization of the nonphysical (Lakoff & Johnson 1980: 59). As has always been the

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<sup>60</sup> Some linguists having had an influence on cognitive linguistics do make reference to pre-generative work, e.g. Fillmore (1985) and Nunberg (1978).

case, this empiricist inclination has favoured localist views, and even particularly strong ones, since the authors claim that “most of our fundamental concepts are organized in terms of one or more spatialization metaphors” (Lakoff & Johnson 1980: 17). The book contains little reference to previous work and the historical review provided by Johnson (Johnson 1981) shows that he was probably unaware of the long tradition that lay behind the notion of conceptual metaphor. To a certain extent, then, we are dealing with a rediscovery of localist lexical semantics.

Finally, the past thirty years have seen connections being established between the cognitive perspective, diachrony and typology. These connections have contributed to entrench localism in different areas of linguistics and orient research toward issues related to spatial relations. Talmy’s theory, for instance, has ushered into much typological work on the crosslinguistic encoding of spatial relations (e.g. Strömquist & Verhoeven 2004). The localist hypothesis fares well in some areas of diachrony, as shown by Fagard for the evolution of prepositions in Romance (2010). Some typologists interested in diachrony, while emphasizing the role of concrete and non-exclusively spatial relations, point to the importance of spatiality in forms lexicalizing relations such as possession and comparison (Heine 1997). Around the same time as Heine’s first important publications, Starosta (1985b) had suggested a localist diachronic scenario in which relator nouns expressing spatial properties progressively evolved into elements of complex adpositions, compounds and finally inflections.<sup>61</sup> This whole diachronic line of investigation has since linked up with the various strands which have contributed to the growth of grammaticalization research, especially since the 1960s. In the United States, grammaticalization became an important topic under the influence of linguists (like Bybee) who were more or less directly connected to the tradition of historical linguistics<sup>62</sup> and had a background of typological functional linguistics which, it seems, they owed especially to Givón (1979). The connection between typology and grammaticalization research was notably established by Greenberg, whose line would be pursued by Croft and, again, Bybee (Hopper 1996, for this recent history). In Germany, the group of linguists we might designate as the “Cologne school” has much contributed to the crosslinguistic

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<sup>61</sup> Starosta (1985a) says his localist analysis of some Mandarin case markers was inspired by Anderson. His account is, however, semilocalist, since it makes room for purely grammatical markers.

<sup>62</sup> As far as is known, the term *grammaticalization* was coined by Meillet (1912). This issue is closely related to discussions on the primitive character of analytic (Fr. *j’ai aimé*) vs. synthetic forms (Lat. *amavi*), on the cognitive status of these forms, and on a hypothetical evolution toward greater analyticity (defended by Jespersen).

There are widespread similarities between Bybee and historical linguistics in the neogrammarian style, and more generally between usage-based linguistics and the neogrammarian approach to diachrony, especially as it is formulated by Hermann Paul (Auer 2015, Fortis to app.). It is unclear to me how direct this transmission was.

collection of data illustrating various paths of grammaticalization, and has published important theoretical work on the subject (Heine et al. 1991; Lehmann 1982). The new diachronic localism, therefore, should be situated within this broader configuration, in which traditional ideas on the relation of language to cognition, such as localism and conceptual metaphor, are associated with historical-functional-typological work.

### **3. Conclusion**

What precedes has shown that localism is a germinal idea that has been productive throughout the history of Western linguistic thought. From its first attestation in Aristotle to its modern development, we cannot fail to observe that localism has always been associated with empiricism. Yet, all localists have not been empiricist. Leibniz and Harris were not and we can surmise that others were or are rather agnostic. The fundamental reason for this resilience might be that empiricism contributed to shape the modern perspective on language. The role of natural languages in cognitive processes is more fully appreciated if general concepts are not to be found in a universal mental language nor in innate abstractions. Further, a theory of the cognitive import of linguistic elements, such as cases and prepositions, can be translated into ontogenetic and phylogenetic terms. An example of the latter is provided by German localists: Wüllner's speculations on the origin of cases get projected into an ideal stage of Sanskrit by Holzweissig. Localism, therefore, has proved to be inspirational for writing the history of languages. We have also seen that localism must have benefitted from the extension of Greek-Latin grammar to vernacular languages, and that the generalization of localism from prepositions to cases has been favoured by crosslinguistic comparison. In addition, discussions about word order and inflections certainly promoted the idea of abstract grammatical relations indirectly connected to their surface realizations.

The path leading to contemporary localist theories has something paradoxical about it. For an old view has re-emerged in the context of what was the newest dominant linguistic theory, generative grammar. This new theory was by and large an offspring of American structuralism, which, as Anderson (2011: ch. 1) notes, was in some quarters averse to semantic considerations. However, generative grammar was also perceived by some as encouraging linguists to turn to semantic matters, which perception gave birth to this hybrid beast known as generative semantics. We have seen the role of this movement in the conquest of new semantic territories. From this wider perspective, therefore, Uhlenbeck is justified in

saying that in America the discovery (or, we should say, the rediscovery) that semantics was a constitutive part of linguistics was made via the tortuous syntactic route of deep structure (Uhlenbeck 1979: 134). In spite of this rediscovery, there is still some aversion to semantics among generativist syntacticians. But some important tenets of semantically oriented theories, such as theta-roles and prelexical analysis, have been appropriated by these neo-structuralist syntacticians, sometimes by “syntacticizing” them. We may think, in this instance, of *vp*-shells as a syntactic emulation of semantic prelexical analysis. Anderson (2006: 93) has perceptively noted this “syntacticization of lexical structure” and its connection to what was being done in generative semantics (see e.g. his remarks on Hale & Keyser 2002).

The new forms of localism which emerged are different from anything that has preceded them. Localist features are assigned to semantic roles distinguished from surface relations, whereas traditional localism was first and foremost a semasiological analysis of forms, especially prepositions and case inflections. We have seen, while discussing Rumpel, that this separation of forms from notions was a modern achievement. Semantic roles could be neatly distinguished from surface relations if surface relations had been autonomized from semantic notions. Moreover, and this probably reflects the universalist trend launched (or relaunched) by generative grammar, new localist case grammars take their pursuit to have a universal scope. These new forms of universal grammar were of course favoured by the fact that linguistics was permitted to be mentalist and cognitive again. This mentalist turn owed much to the computational model of the mind, which in effect gave linguists and psychologists a free hand in speculating about mental representations without worrying about their material implementation. Contrast this with Bloomfield (1933), who *opposed* “mechanists” and “mentalists”.

With the exception of Anderson, we have seen localism being reintroduced by linguists who made no reference to the past, or looked for the wrong references (like Lakoff and Johnson). The question of transmission arises: is there an empiricist framework that is, so to speak, inborn in modern Western culture? For instance, Langacker, in his longest review ever (as far as I know), declares that “he is basically sympathetic” to the localist hypothesis of Anderson; yet, he was at the time practising a form of generativism close to that defended by Katz and Postal (1964) and he makes a plea for the autonomy of syntax (1964; Langacker 1973). The question remains: was there a transmission of ancient localism after all? If Lyons and Hjelmslev can be cited as sources for Anderson’s localism, what about Gruber and Talmy?



In lexical semantics, things are somewhat clearer: Nagy inherited part of his localism from Osgood, and there were in Osgood's work echoes of the past, for instance in the concept of synesthesia. Lindner may also be considered as a transmitter of pre-generative localist views, which she mentions in her dissertation. Finally, localism found a cognitive foundation in conceptual metaphor theory, perhaps at the initiative of Johnson. More generally, we see localism flourish in environments which revive speculative forms of universal grammar, accept as legitimate the search for a cognitive foundation of this universalism, and do not consider unfavourably empiricist conceptions of phylogeny and/or ontogeny.

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