

## Concepts and consequences of case grammar

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### Introduction

My title separates out ‘concepts’ and ‘consequences’ in relation to ‘case grammar’. This is a little artificial; but, apart from helping organise what I have to say, the distinction has some validity in relation to the ideas associated with ‘case grammar’ that I want to talk about. ‘Case grammar’ is an approach to grammar that was first identified as such in the late 60s of last century. Over the next couple of decades certain concepts established themselves as fundamental to the approach; and their content as such was relatively well understood. These are the ‘concepts’ of my title, and I’ll deal with them here not as fully as they deserve, and partly as a background to looking at some ‘consequences’, as I’ve called them. The ‘consequences’ I’m going to look at are implications of the approach that only slowly came to be followed through, but in some ways, it seems to me, are as important as the concepts that were established in those early decades.

I should make it clear that the concepts that I’m suggesting were well established in this early period were not necessarily generally recognised as such; only latterly has a more general recognition of the fundamental status of these concepts been given – and then typically only by implication, without acknowledgement.

Various scholars in the late 60s introduced – or re-introduced – the idea that a level at which predicators imposed semantic relations on their arguments was fundamental to the syntax. These relations are often signalled by the case inflexions on the arguments of the predicators, as in the Finnish sentence in (1):

- (1)           Jussi meni asemalle  
              Jussi went station+*allative*           (‘Jussi went to the station’)

where allative labels a case inflection that expresses the semantic relation Goal. Hence the name for these approaches, ‘case grammar’.

Of course, this simple labelling leaves out various complications: some case inflections mark neutralisations of the semantic relations, such as the nominative associated with the first noun in (1), which bears in different sentences no consistent semantic relation but one of several. And, conversely, semantic relations are not always expressed by case inflections; this is illustrated by the English gloss to the sentence in (1), where we find a preposition in this role. And we should remember too that other, traditional, grammars have been very much concerned with the grammar of case: to that extent, ‘case grammar’ was scarcely an innovation.

However we name them, these approaches labelled ‘case grammar’ had in common the assertion of a level at which the syntax was structured by semantic valencies derived from the lexicon: the semantic relations associated lexically with predicators define a fundamental syntactic level.

Associated with the idea that there is such a level was the conclusion that, if this level is interpreted in the context of a transformational grammar of the time, it replaces the level of syntactic ‘deep structure’ attributed to such transformational grammars. ‘Deep structure’ was conceived of as a semantic-relation-free level that has access to the lexicon.

These are two fundamental concepts of ‘case grammar’:

*Concepts of case grammar:*

- a) *the constructional relevance of semantic relations:*  
there is a level of syntactic structure that is constructed on the basis of (among other things) the semantic relations contained in the lexical entries of predicators
- b) *the irrelevance of 'deep structure'*  
this level replaces (and displaces) 'deep structure' as the interface with the lexicon and as basic to syntactic structure

This view is shared by a number of publications appearing in the late 60s and early 70s (such as Anderson 1968, 1971 and Brekle 1970). But, particularly in the USA, it has primarily been associated with the name of Charles Fillmore. At this point I'd like to make things a bit more concrete by trying to illustrate his interpretation of these concepts by outlining the proposals made in his landmark paper, 'The case for case' (1968). I apologise to those of you who may already be over-familiar with this.

**1. Concepts of case grammar**

Let's say that the verb *dry* in Present-day English is represented in the lexicon as requiring the semantic relations in (2a) or (2b):

- (2) a. *dry* O(bjjective) A(gentive)
- b. *dry* O
- c. *dry* O (A)

(2a) and (b) are abbreviated as (2c), where, as usual, the round brackets signal optionality. These subparts of lexical entries are what Fillmore calls 'case frames'; they specify the semantic valency of the predicator. Respective structures corresponding to the two lexical possibilities in (2) are illustrated in (3):

- (3) a. Bill dried them (in the sun)
- b. They dried (in the sun)

The bracketed portions are adjuncts, also involving semantic relations, but not part of the valency of *dry*.

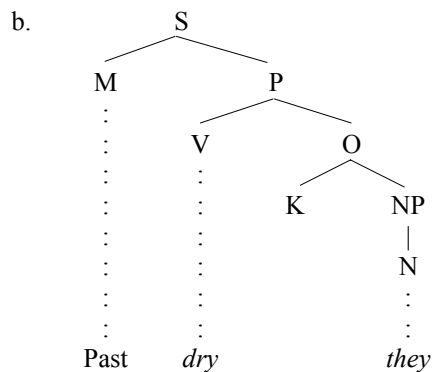
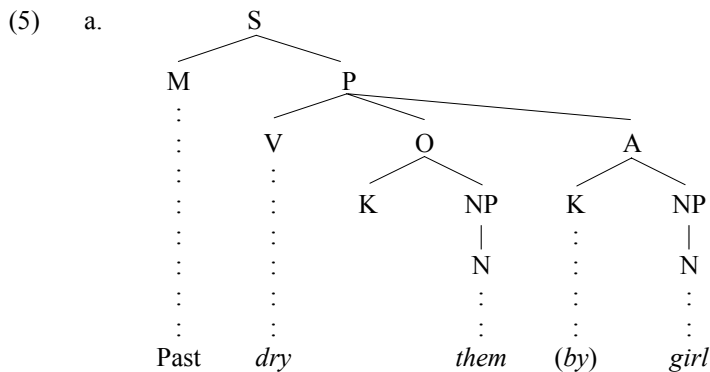
A and O label semantic relations – in Fillmore's terms, 'case relations', or simply 'cases'. The ones relevant here he defines as in (4):

- (4) *Agentive* (A), the case of the typically animate perceived instigator of the action identified by the verb.

*Objective* (O), the semantically most neutral case, the case of anything representable as a noun whose role in the action or state identified by the verb is identified by the semantic interpretation of the verb itself; conceivably the concept should be limited to things which are affected by the action or state identified by the verb.

The nature of the semantic relations and their individual characterisation is something I'll return to under 'consequences', since they mark a major unfinished business for Fillmorean 'case grammar'.

In Fillmore's notation, these induce the relevant parts of the structures in (5):



The ‘cases’ A and O in (5) dominate a K(asus) constituent and a NP. K is realised typically in English by a preposition. The A preposition is *by*; but there are circumstances in which it is not realised, so I have marked it as optional. The realisation of O is various, so I have not entered a preposition in (4). P stands for Proposition, which goes together with a M(odal) element to form the S(entence). The M element may be realised inflexionally on the verb or as a separate element, as in (6):

- (6) a. Bill will dry them (in the sun)  
 b. They will dry (in the sun)

Similarly K may be realised as a separate adposition or in the nominal inflexion. Fillmore also associates the adjuncts with the M element. But I won’t go into that here.

The graphs in (4) are so-called ‘wild’ trees (Staal 1967, Sanders 1972): they are unordered from left to right; the elements are unsequenced. This is another point I’ll return to when we turn to ‘consequences’ rather than ‘concepts’. Non-initial assignment of linearity raises various possibilities concerning assignment, particular the place of assignment, and the mutability or otherwise of linearity once assigned.

Meanwhile I’ll add non-initial linearity our set of ‘case grammar’ concepts:

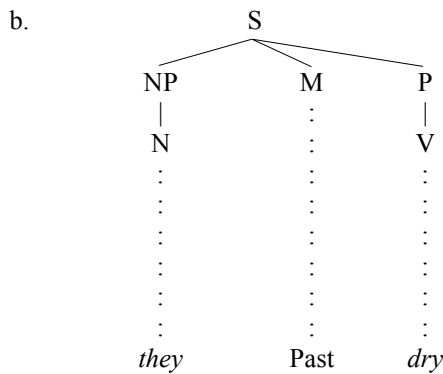
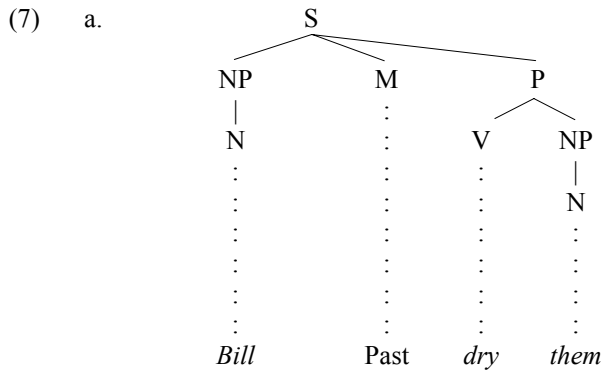
*Concepts of case grammar:*

- a) *the constructional relevance of semantic relations:*  
 there is a level of syntactic structure that is constructed on the basis of (among other things) the semantic relations contained in the lexical entries of predicators

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this level replaces (and displaces) 'deep structure' as the interface with the lexicon and as basic to syntactic structure
- c) *the derivative status of linearity*

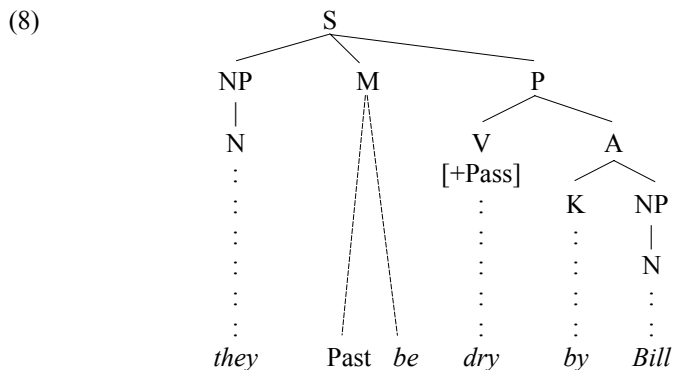
As I've said, (c) here leaves much undetermined about the assignment of linearity.

Rules of syntactic derivation, transformations, apply to such structures as (4) to give a 'surface structure'. In particular, subject-formation re-attaches one of the 'case' phrases to S, and serialises it to the left of M, as shown in (7):



Subjecthood is thus derived. And selection of the subject is directed by a hierarchy of semantic relations, so that in this instance, and in general, A outranks O as subject candidate, as shown in (7a). It is normally only in the absence of an A that the O can become subject, as in (7b). Subject-formation also, in Fillmore's interpretation, prunes the nodes for semantic relations and Ks.

However, with *dry* we do find O in subject position in (8):



Fillmore interprets such passives as being marked as departures from the hierarchy of subject selection; this is marked by the presence of *Be* associated with a particular form of the verb. In these circumstances the O is selected as subject in preference to the unmarked choice, the A. Rather than (8) being a problematical exception to the hierarchy, it provides evidence for it, by virtue of its having to be marked as departing from it.

There are problems with this analysis of passives. In the first place, it involves attributing to transformations the power to introduce lexical material, here *Be*. This greatly enhances the already undesirable power of transformations; and it undermines any claim that it is only at ‘deep structure’, or rather its replacement in ‘case grammar’, that there is access to the repository of lexical material, the lexicon.

Secondly, it is *Be* that determines the morphological form of the other verbal; normally such rection goes from an element to its complement, as with the preposition and pronoun in (9a):

- (9) a. She went towards him  
 b. They have been dried by Bill

It’s not clear in Fillmore’s account that the non-finite can be described as the complement of passive *Be*, particularly when the latter is part of a complex M, as in (9b).

Finally here, the representation in (8) does not express the adjunct status of the *by*-phrase, which as such is optional; the sentence is complete without it. In many languages such a phrase is preferably or obligatorily absent.

However, these are problems shared by the standard transformational analyses of the time. They are problem shared by any analysis that doesn’t recognise that the passive contains two verbals, with the non-finite verb form subordinate to the ‘auxiliary’, and by an analysis that fails to recognise that the valency of the passive participle is different from that of the other verb forms. Resolution of the problems doesn’t introduce a problem for the hierarchy, particularly if the non-finite does not take an A complement; there is nothing to outrank the O in this case. And in this way the claims embodied in the ‘case grammar’ concepts a and b remain intact.

Subsequently there were various attempts to defend the traditional notion of ‘deep structure’. One of these (S.R. Anderson 1971) Fillmore (1977) found convincing. But the argument can be shown to be flawed (Anderson 1977: §1.8), as is implied even by subsequent work of S.R. Anderson (1977: 369-70), and even by contemporary of Chomsky’s (1972: §6.8.3). ‘Deep’ grammatical relations seem to have no relevance to the lexicon (e.g. Anderson 1984a). And various other developments within the main transformational-generative tradition served to undermine the traditional view of ‘deep structure’.

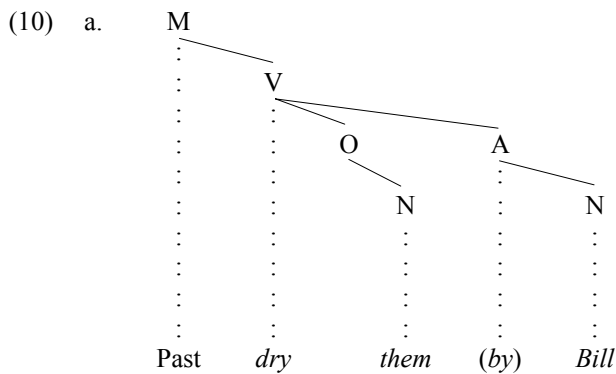
A significant step in this is adoption of the idea that ‘deep structure’ is the level at which the ‘ $\theta$ -criterion’ applies (Chomsky 1981: §§2.2, 2.5). The ‘ $\theta$ -criterion’ regulates the relationship

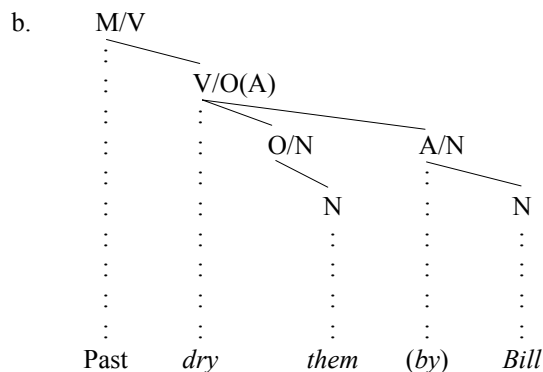
between NPs and semantic relations, the so-called ‘θ-roles’. ‘Deep structure’ thus comes to conform to concept a of ‘case grammar’. However, in the approach advocated in Chomsky (1981), another level has been introduced, ‘logical form’, which is associated with a component of the grammar that interprets ‘surface structure’ (§§2.2, 2.6). ‘Logical form’, while intended ‘to capture what the language faculty determines about the meaning of an expression (Chomsky 1995: 21), remains part of ‘“narrow syntax”’ (p.34). With respect to ‘logical form’, however, ‘the fundamental notion is that of θ-role’ (p.101). ‘θ-roles’ – i.e. semantic relations – are basic to both levels.

Finally, ‘deep structure’ (as well as ‘surface structure’) is abandoned as part of the ‘minimalist program’ (Chomsky 1995: ch.3, §3.3). ‘θ-roles’, or ‘thematic relations’, remain, however, a crucial property of the head-complement relation (Chomsky 1995: ch.3, §3.2). And we are left with a level, ‘logical form’, at which ‘the fundamental relation is that of θ-role’. What mainly differentiates the early ‘case grammar’ view summarised as concepts a and b and the view put forward in the ‘minimalist program’ seems to be simply this: in early ‘case grammar’ the structural level determined by the semantic relations and other lexical properties is rather immediately constructed; in the ‘minimalist program’ the association between these lexical properties and ‘logical form’ is a complex one, involving a range of structural operations, including crucially ‘mergers’ and ‘movements’. Developments in ‘case grammar’ since the 80s have lessened this discrepancy; but the relationship between lexicon and erection of structure remains much less complex than in the ‘minimalist program’.

But we must, at long last, turn to some of these developments in ‘case grammar’, what I have labelled ‘consequences’ of ‘case grammar’. One of these, however, can be seen as a consequence of another concept that, while not established in all the early ‘case grammars’, came to be accepted in a range of later developments. Fillmore (1968) remains undecided about how semantic relations are to be represented, and he puts forward the constituency-tree structures in (4), (7) and (8) very tentatively. Nevertheless, it became standard in the many applications of his work that followed. Other researchers sharing in the general ‘case grammar’ program adopted dependency structures in their syntactic representations. This approach to syntactic structure had developed independently of ‘case grammar’, initially under the impetus of the work of Tesnière (1959). But a number of researchers (such as Robinson 1970, Anderson 1971 and, with qualifications, Starosta 1988) saw it as particularly suitable for representing the ‘relational’ character of ‘case relations’, which could be seen as linking lexical head and complement.

We could in such terms substitute for (4a) the representation in (10):





All the complements are said to depend on their respective heads; this dependency relation, rather than a constituency one, is indicated by the solid lines in (10), with each head at a higher level than the dependent(s) to which it is linked. Such representations eliminate, for instance, the duplication of the case relation and K nodes, which required some mechanism for filtering the case information from the case relation node to the K node.

I have adopted in (10b) the slash notation of Anderson (1997), whereby the valency of each head is indicated to the right of the slash, and its category to the left. This representation illustrates rather 'graphically' the extent to which the structure of the tree is determined by the lexical valencies represented by the slash notation.

Dependency representation I shall regard as a concept of 'case grammar', despite its far from universal adoption. So we can add it to concepts a-c:

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- a) *the constructional relevance of semantic relations:*  
there is a level of syntactic structure that is constructed on the basis of (among other things) the semantic relations contained in the lexical entries of predicators
- b) *the irrelevance of 'deep structure'*  
this level replaces (and displaces) 'deep structure' as the interface with the lexicon and as basic to syntactic structure
- c) *the derivative status of linearity*
- d) *the dependency representation of syntax*  
syntactic structure is represented by dependency trees with labelled nodes

This concept, however, leaves much to be further specified about representation. Indeed, all four concepts together leave much of syntactic structure and the form of the syntax undetermined. But certain 'consequences' impose themselves.

## 2. Consequences of case grammar

I shall now list in the form of a set of questions consequences of the 'case grammar' programme whose pursuit is at least encouraged or indeed demanded by the concepts that we've looked at:

*Consequences of case grammar:*

- α) the question of content
- β) the question of category
- γ) the question of consistency
- δ) the question of derivationality

These are interrelated; I shall look at them in an order that exploits this, i.e. the order in which I have just given them. Let me briefly gloss each question, and indicate some of the developments it provoked, before looking at the first of them in more detail.

Failure to provide an agreed systematic answer to question α has underlain much of the adverse criticism of ‘case grammar’ (cf. e.g. Chapin 1972). This has stemmed from the impression that the grammarian is left free to drop or introduce or re-introduce individual ‘cases’ as contingency demands. Almost every paper produced in the tradition offers a different set of ‘case relations’; and papers with titles like ‘Can “area” be taken out of the waste-basket?’ (Radden 1978) are scarcely encouraging. ‘Case grammar’ needs to establish a principled limitation on the set of semantic relations. Of course, this is true of any theory that invokes semantic relations, or ‘thematic relations’, or whatever. But the centrality of these to ‘case grammar’ raises the question rather urgently.

As I’ve described, a number of researchers adopted the idea that semantic relations are represented by labelled nodes in a dependency tree. But that leaves unspecified their categorial status: if A, O etc. are ‘cases’ or semantic relations, what kind of category is ‘case’ itself? How is it related to other categories, and how are the representations of individual ‘cases’ related? This is the import of question β. And it leads on to question γ, which I’ll also now try to make more explicit.

What I want to ask in this case is this: is whatever category semantic relations belong to unique, so far as its obviously semantic basis is concerned? Traditionally in the transformational tradition, for instance, syntactic categories are not characterised semantically. This is already called into question by the introduction of ‘thematic roles’. But generalising the assumption that syntactic categories are semantically based leads to re-introduction of ‘notional’ or ‘ontologically-based’ grammar. A ‘case grammar’ embedded in such a general framework is consistent in this respect. Renewal of interest in ‘notional grammar’ in the second half of the twentieth century took place independently of ‘case grammar’ (see Lyons 1966). But one strand in the re-development of ‘notional grammar’ has taken its startingpoint from the ‘notional’ character of the ‘cases’ of ‘case grammar’.

Another concept of ‘case grammar’, one which I noted earlier only in passing, raises the issue of derivationality, question δ. Initial structures in ‘case grammars’ are unordered, the trees are ‘wild trees’, they are linearised in the course of derivation. The strongest assumption here would be the adoption of the assumption that linear order is invariant (Sanders 1970, 1972): it is immutable once assigned. Something approaching this assumption can be seen as underlying Anderson’s (1977) suggestion that linearisation is ‘post-cyclic’, occurring after application of the ‘cyclic transformations’. Thus, in this account, the subject-formation rule corresponding to Fillmore’s derivation of (7) and (8) is cyclic, so neither changes nor assigns linear position; unlike Fillmore’s rule it simply re-attaches the selected ‘case phrase’ rather than also positioning it.

The question that arises here is this: can the assumption of linear invariance be extended to attachment? Do syntactic structures also show invariance of attachment? A positive answer to this depends on exploitation of some other more local ‘concepts’ generally adopted in ‘case grammar’, particularly the special status of O. Briefly, O is assumed by many to be obligatory in any predication, even if not part of the ‘case frame’ of the predicator. This ‘empty’ O is the target for multiple attachments which allow ‘argument-sharing’ between different predicators (Anderson 1991, Böhm 1993). These ‘multiple-attachments’ obviate the need for ‘re-attachments’ as well as



for change in linearity – thus any need for transformations. Such a non-mutative framework is developed once more in Anderson (1997).

In relation to the latter questions concerning ‘consequences’, I’ve spent an increasing amount of time in outlining developments provoked by the questions. This is in inverse proportion to the amount of time I have to devote to them here. I want to turn now to a development – or rather a re-discovery – provoked by question  $\alpha$ : this is the localist theory of case. This will take up most of our remaining time, since it concerns what has long been a central issue in ‘case grammar’, and since even this development alone has evolved in diverse ways that I’d like to illustrate.

### 3. Localist case grammar

Individual ‘cases’ have occupied a lot of attention from ‘case grammarians’ and critics. There have been notable attempts to identify the semantic and syntactic characteristics of particular ‘cases’. But such research can make little progress without some idea of the system of ‘cases’ as a whole, and of what it takes semantically to be a case. Fillmore put forward various ‘principles’ of ‘complementarity’ and contrastivity’ applicable to the differentiation of different cases. But again these do not as such provide much more insight into ‘case’ and ‘cases’. And these ‘principles’ did not resolve ongoing controversies on the status of, say, the putative ‘case relation’ ‘I(nstrumental)’: see e.g. Fillmore (1968, 1977), Chafe (1970: §§12-4-6), Dougherty (1970), Huddleston (1970), Fletcher (1971), Chomsky (1972), Nilsen (1973), Vestergaard (1973), Anderson (1977: §§1.6-7); more recently, see e.g. Schlesinger (1995), Anderson (1998: §1).

The pre-transformational tradition was well aware of the need for a theory of semantic relations and the category to which they belong. Let me recall to you how this is expressed by Hjelmslev (1935: 4):

Délimiter exactement une catégorie est impossible sans une idée précise sur les faits de signification. Il ne suffit pas d’avoir des idées sur les significations de chacune des formes entrant dans la catégorie. Il faut pouvoir indiquer la signification de la catégorie prise dans son ensemble.

And Hjelmslev himself espoused the localist theory, which had fallen into disfavour in the late 19th century, after centuries of being given intermittent attention. Hjelmslev gave the localist theory its most radical interpretation: not only the ‘local cases’ of the standard theory of case at the time but also the so-called ‘grammatical cases’, like nominative, dative, accusative and genitive, had a ‘local’ content. They were structured by a dimension of directionality, with respect to which they could be positively or negatively oriented or neutral between these two poles

We can, rather crudely, illustrate something of the system for the traditionally ‘local’ cases with the set from Finnish in (11), which can be interpreted as showing respectively neutral orientation, positive and negative:

(11)

0	+	÷
<i>talolla</i>	<i>talolle</i>	<i>talolta</i>
adessive	allative	ablative

This is the basic semantic dimension for case systems, one of ‘direction’.

This presentation oversimplifies Hjelmslev’s proposals considerably. He also allows for a distinction between an ‘intensive case’ which is semantically marked, and an ‘extensive’, which is diffuse in their meaning. He says (1935: 114) of an ‘intensive’ case (the genitive in English):

c’est lui seul qui comporte une signification restreinte et bien définie.

And its identity is something that differs from language to language. And an opposition may be ‘complex’, i.e. combine the zones in (11), in various ways: it may be ‘contraire’ or ‘contradictoire’ or ‘participative’. I won’t pursue this here.

Hjelmslev recognises, however, that the semantic space occupied by case systems is more extensive than is allowed for simply by the single dimension of ‘direction’. The dimension of (11) may be accompanied by a second dimension, of ‘cohérence’, as included in (12):

(12)

	0	+	÷	
incoherent	<i>talolla</i>	<i>tallole</i>	<i>talolta</i>	<b>ad/ab-</b>
cohérent	<i>talossa</i>	<i>talon</i>	<i>talosta</i>	<b>in-/ex</b>
	<b>-essive</b>	<b>ad-/in-</b>	<b>ab-/ex-</b>	
		<b>-lative</b>		

The interior cases are ‘cohérent’, the others ‘incoherent’, a distinction which Hjelmslev paraphrases as: ‘une différence dans le degré d’intimité avec lequel les deux objets envisagés par le rapport casuel sont liés ensemble’ (1935: 36).

Presence of the second dimension allows for the potential presence of a third, which involves what Hjelmslev labels ‘subjectivité’ vs. ‘objectivité’. He illustrates with the French prepositional expressions in (13):

- (13) a. subjective: *devant/derrière*  
 b. objective: *au-dessus/au-dessous*

These are all, in a sense, ‘subjective’ compared with the distinctions associated with the other dimensions, in involving either deictic reference (13a) or canonical orientation (13b). But Hjelmslev seems to associate ‘subjectivité’ with deictic reference only.

There are clearly other dimensions which would fall within each group. Many of them, at least, are allowed by deployment of the third, ‘neutral’ term of ‘coherence’ (p.130), or by ‘complexity’ (with the two poles combined, p.132). And within the interior group we need to be able to allow for the distinction between the ‘interior of a container or area’ or the ‘interior of a line or surface’. In English, the former is marked by *in*, the latter by *on*, as illustrated in (14):

- (14) a. It’s in the house/square  
 b. It’s on the way/table

Hjelmslev would differentiate ‘inhérence’ and ‘adhérence’ (1935: 129-30).

The establishment of the structure of dimensionalities is of interest in itself. However, I don’t pursue this, as none of these dimensions except for the first involve the manner of participation in the situation of the complements of the case or adposition. They are not central to our present concerns. And they are operative only with those cases or adpositions that have an obviously concrete-spatial interpretation. But, crucially for the localist, even those ‘cases’ that have no obvious concrete interpretation are characterised and distinguished with respect to the dimension of direction.

Hjelmslev goes out on a limb in including the nominative as directly reflecting directionality. The main problem is that the nominative is the case that is recognised on the basis of its representing the subject, whatever else. And the subject seems to display a variety of ‘orientations’ with respect to its predicator, as illustrated by the familiar set of examples in (15), all with the same name of a human as subject:

- (15) a. Bill read the book  
 b. Bill fell to the ground  
 c. Bill flew to China  
 d. Bill lay on the floor  
 e. Bill lived in China  
 f. Bill slipped  
 g. Bill was clever/a peasant  
 h. Bill knew the answer  
 i. Bill acquired a new shirt/outlook  
 j. Bill suffered from asthma/delusions

In (a) we have an A, in (b) an O, whereas (c), as usually interpreted, seems to combine the two – as I’ll come back to. (d) is an O again, presumably, but here introducing the argument that refers to the located entity rather than the moved entity, as in (b-c). (e) seems to combine located entity and A, as typically interpreted. In (f), *Bill* is presumably again an O, but without attribution of goal or location; and in (g) a quality or class is attributed. In (h) the subject is apparently neither A or O, on both semantic and syntactic grounds that are familiar; nor is that in (i) or (j).

Hjelmslev takes a more ‘abstract’ view of directionality in relation to the nominative and other traditionally ‘grammatical cases’. Consider his remarks (1935: 53) on the nominatives in the Russian clause in (16), presented in his transcription and with his segmentation:

- (16)            *róz-a*            *krasív-a*  
                   *rose-nom*    *beautiful-nom*  
                   (‘The rose is beautiful’)

Ici le nominatif de *róz-a* implique un éloignement syntagmatique (le fait de régir), et le nominatif de *krasív-a* implique un rapprochement syntagmatique (le fait d’être régi).

Now, we must be careful, as Hjelmslev warns us, not to identify directionality and space in general with just its concrete manifestations. Otherwise, for instance, we prevent the application of the localist idea to tense and aspect and other domains which do not denote part of physical space, but where localism has proved insightful (see e.g. Miller 1972, 1985, Anderson 1973, Jackendoff 1976, Lyons 1977: §15.7). But the metaphor of the directionality of rection seems to take us into quite a different domain from these others. It may be appropriate to that domain; but simply collapsing rection with these other manifestations of directionality and taking it to define the nominative obscures the neutralisation of semantic relations that we find in (15).

Even if, following e.g. Anderson (1971, 1977), we recognise that subjecthood involves something distinctive from the semantic relations themselves, it is still not clear how we apply the localist hypothesis to the full range of subjects in (16). O, which I’ve associated with the subjects in (b-g) in (15), seems to be unproblematic, in a negative kind of way: it introduces an argument which does not denote a location or a goal, which is at most located or undergoes movement. We can characterise it as lacking the locational property, as it seems to lack everything else: its relation to the predicator is a kind of default determined by that predicator. Even less problematical, obviously, are the locations and goals which occur as complements of the verbs in (b-e) of (15). And the subjects in (i) and (j) can also be argued to involve goals, possibly ‘abstract’ – though with them something else seems to be involved over and above location of the goal. And I’ll return to this. Let’s look first, however, at what look to be the most intractable, the subjects in (a,c,e) and (h).

I associated, fairly uncontroversially, the subject of (15a) with A. In (c) it is combined with O: the action is exerted on the agent itself. As I've said, I'll be coming back to the motivations for such combinations. And a rather traditional directional interpretation of A immediately suggests itself, its interpretation as the 'source of the action'. It is differentiated from spatial sources, such as that marked by *from* in (17), as being not also loc:

(17) Bill flew from Singapore to China

The 'source of the action' cannot be 'located', or instantiated, in any other domain than that of 'action'. Thus A is a specialisation of the locational source, which has lost the latter's capacity to be both concrete and abstract.

Anderson (1977: 115) proposes that the set of semantic relations reduces to four localist ones that can be decomposed as in (18):

(18)

case relation	abs	erg	loc	abl
composition			place	
		source		source

'Erg(ative)' is roughly A, and 'Abs(olutive)' roughly O. I'll use these terms in what follows to highlight that the former in particular diverges quite a bit from the general understanding of A, in so far as there is one. 'Loc(ative)' and 'Abl(ative)' are reasonably transparent. Loc is interpreted as a Goal in the presence of Abl, as in (17), even if this presence is only implied by the semantics of the verb, as in (15.b-c).

On the basis of (18) we can assign the semantic relations in (19) to the sentences of (15):

(19)

a.	Bill read the book	erg + abs
b.	Bill fell to the ground	abs + loc(goal)
c.	Bill flew to China	abs,erg + loc(goal)
d.	Bill lay on the floor	abs + loc
e.	Bill lived in China	abs,erg + loc
f.	Bill slipped	abs
g.	Bill was clever/a peasant	abs
h.	Bill knew the answer	? + (?)abs
i.	Bill acquired a new shirt/outlook	? + (?)abs
j.	Bill suffered from asthma/delusions	? + (?)source

The last three are obviously problematic. Their subject arguments all seem to fit Fillmore's (1968) definition of the D(ative), which we can add to the set in (4), but which is not obviously localist:

(4)' *Dative* (D), the case of the animate being affected by the state or action identified by the verb.

Fillmore later (1971a,b) dispersed what he had regarded as instances of D(ative) into O and G(oal) and a new 'case' E(xperiencer):

(20) *Experiencer* (E), the entity which receives or accepts or experiences or undergoes the effect of an action (earlier called by me 'Dative')

This removes, for instance, something of the vagueness and over-reliance on animacy of (4)', but the replacement 'case' isn't any more amenable to a localist interpretation. The modification as a

whole does at least recognise the locative basis of some of the former Ds. What it fails to recognise is that the residue of Ds that are re-interpreted as Es are also locative (Anderson 1971: chs.7 & 9).

The sentence in (15/19h), for instance, enters into just the semantic implications you'd expect if its subject were locative. Consider firstly the patently locative-directional pair in (21):

- (21) a. Bill is in China  
b. Bill has reached China

Here the truth of (21a) is reasonably to be deduced from the truth of (21b) (provided (21b) is not interpreted as habitual); the Location and the Goal relate the same entity and place. We find a similar relationship between (a) and (b) in (22), where in the latter we have also an overt Source:

- (22) a. Bill knows (about) that  
b. Bill has learnt (about) that from Sam

And the Goal of (22b), implied by the presence of the Source, is the subject, and it is identical to the subject of (22a), which we can plausibly interpret as a Location, the location – or one location – of knowledge. (22) differs from (21) in that both the Location and the Goal are subjects rather than complements. Otherwise, the crucial case relations Location and Goal are present in both instances, (21) and (22). Es seem to be locations, whatever else.

Cook (1977, 1979) suggests indeed that the putative 'cases' E, B(enefactive) and L(ocative) are mutually exclusive. This calls into question their distinctiveness as 'cases', however: their occurrence is being claimed to be context-conditioned. And the suggestion that they are mutually exclusive does not seem to be quite correct (and cf. Anderson 1971: §2.6.3). At this point I'll concentrate on the E relation rather than B, given that the localist interpretation of B, exemplified by the first 'object' in (23):

- (23) Bill bought Bella the book

is rather more obvious.

Consider here again sentence (22b). Here we seem to have, from right to left, a Source Locative, an Objective and an Experiencer, all part of the valency of the verb. The situation is a little more complex than Cook suggests, then. L and E can co-occur if one is a Source, the other a Goal. This is what characterises Sources and Goals in general, as in (24a):

- (24) a. Bill flew from Singapore to China  
b. Bill flew from Singapore  
c. Bill flew to China (= 15/19c)

With directional verbs, Source and Goal imply each other, even if one of them is not overtly expressed, as in (24b-c). It thus appears to be more accurate to say that E shares the joint distribution of L and G, in particular.

But we cannot simply identify E with L and G. The experiencers of (22) are differentiated from other Ls and Gs both syntactically and lexically – and sometimes inflectionally, in the shape of a distinct 'dative' inflection. Other Ls and Gs are not usually preferred in subject-selection over Os/absolutives, as shown in (19b-e) and (19j).

The acquisition of locative-subject verbs with the sense of 'contain' and 'include' seems to be a late development or a loan even in those languages which have them, and to be parasitic upon an earlier agentive meaning. In English, for example, the verbs *Contain* and *Include* are both late-ish

loans. And active sentences with such L subjects, unlike actives with E subjects, do not have a canonical passive. Compare (25) and (26):

- (25) a. That was known (about) by Sam  
b. That was learnt (about) by Sam

(26) They were contained in that box

We find the ‘normal’ passive only with a non-subject A, as in (27):

(27) They were contained by two armoured divisions

*Know* may also have a distinctive passive marker for the E, *to*, but in general Es in passives share their marker with As. Syntactically, Es pattern more with As than with other Ls.

Es and As also share semantic restrictions, as illustrated in (28):

- |         |  |                     |
|---------|--|---------------------|
| (28) a. | Bill secretly read the book                  | erg + abs           |
| b.      | *Bill secretly fell to the ground            | abs + loc(goal)     |
| c.      | Bill secretly flew to China                  | abs,erg + loc(goal) |
| d.      | *Bill secretly lay on the floor              | abs + loc           |
| e.      | Bill secretly lived in China                 | abs,erg + loc       |
| f.      | *Bill secretly slipped                       | abs                 |
| g.      | *Bill was secretly clever/a peasant          | abs                 |
| h.      | Bill secretly knew the answer                | E + abs             |
| i.      | Bill secretly acquired a new shirt/outlook   | E + abs             |
| j.      | Bill secretly suffered from asthma/delusions | E + abl             |

In order for (19b), (d), (f) and (g) to be viable, the subjects must be given an agentive interpretation. I have temporarily filled in the missing subject relations in (28h-j) as E. The capacity to be modified by *secretly* is shared by sentences with erg and sentences with E, whether simple Locative E, as in (28h), or a Goal E (28i-j). It is clearly not enough for the subject to be animate or even human. Even verbs that necessarily (unless used figuratively) take an animate abs (or at least one that is a life-form) don’t accept *secretly*, unless given an agentive interpretation:

(29) \*Bill secretly died

*Die* is a change-of-state verb not an E verb.

This suggests that, as well as being Ls, Es share some property with As. Anderson (1977: §2.6.3) proposes, indeed, that E is a complex role, involving two semantic relations, loc combined with erg. Such a distribution for erg is one reason for the change of label from A: erg is not always agentive. How then is it to be characterised? We can think of the A as the source of the existence of the action denoted by the verb: without an A there is no action. Similarly the experiencer is the source of the existence of the experience denoted by the verb: without an E there is no experience. What these have in common is denoted by erg. That we are in the experiential rather than the actional domain is signalled by the combination of loc with erg; in the absence of loc, the verb denotes not an internal situation but an actional one.

Such an analysis again violates Fillmore requirement that each argument bears only one case relation. This was subsequently embodied as the first part of the ‘theta criterion’:

*θ-criterion*

Each argument bears one and only one  $\theta$ -role, and each  $\theta$ -role is assigned to one and only one argument

(Chomsky 1981: 36). Chomsky regards this as ‘a reasonable criterion of adequacy for L[ogical] F[orm]’. But there is much evidence that it is inappropriate, particularly in the context of an otherwise more restricted theory of semantic relations. See Anderson (1977: 160) for reference to earlier work. We’ll come back to another piece of evidence in a moment.

Thus, we can define E as:

*Experiencer* = erg,loc

What might have appeared to be the most intransigent semantic relation can be given an appropriate localist interpretation. In terms of this analysis of E suggested by Anderson (1977) we can substitute for the valency specifications in (28h-j) those in (30):

- |      |    |  |                     |
|------|----|--|---------------------|
| (30) | a. | Bill secretly knew the answer                | erg,loc + abs       |
|      | b. | Bill secretly acquired a new shirt/outlook   | erg,loc(goal) + abs |
|      | c. | Bill secretly suffered from asthma/delusions | erg,loc(goal) + abl |

The latter two involve a goal locative, even though in (30b) the abl is in this instance not overtly expressed.

Let’s turn now to consider how the so-called ‘syntactic’ or ‘logical’ ‘case forms’ relate to such a localist view of semantic relations.

The markers of the semantic relations may of course display extensive grammaticalisation and fail to express directly differences in semantic relation. The nominative typically neutralises the semantic relations associated with the nominals that bear the inflection. It represents a neutralised relation traditionally referred to as ‘subject’. Moreover, it may also mark predicative nominals, a further grammaticalisation.

In some languages, however, the predicative nominative alternates with a specifically predicative inflection:

- |      |    |                          |    |                            |
|------|----|--------------------------|----|----------------------------|
| (31) | a. | Pekka                    | on | opettaya                   |
|      |    | Pekka+ <i>nominative</i> | is | teacher+ <i>nominative</i> |
|      | b. | Pekka                    | on | opettayana                 |
|      |    | Pekka+ <i>nominative</i> | is | teacher+ <i>essive</i>     |

The *essive* in the Finnish sentence in (31b) expresses ‘contingency’, a temporary situation; if the teacher is a permanent professional then the *nominative* in (31a) is preferred. Its occurrence is semantically conditioned. Moreover, selection of subject involves a hierarchy of semantic relations. Subject has a derivative status, in relation to the semantic relations.

In many languages, too, the adnominal genitive, though often retaining locational uses elsewhere, neutralises the semantic relations contracted by adnominal nominals, particularly deverbal and deadjectival nominalisations. Consider the nominals in (32), where I’ve indicated proposed typical semantic relations:

- |      |    |                                |               |
|------|----|--------------------------------|---------------|
| (32) | a. | Bill’s rescue (of the cat)     | erg (abs)     |
|      | b. | Bill’s death                   | abs           |
|      | c. | Bill’s flight (from the scene) | abs,erg (abl) |
|      | d. | Bill’s rescue (by his wife)    | abs (erg)     |

- e. last night's rescue (of the cat/by his wife) adjunct (abs/erg)

I have not indicated the semantic relations of unexpressed arguments. (32e), with adjunct subject, reveals that in English neutralisation is even more extensive with the genitive than with the nominative (in so far as English has the latter) – at any rate, than with the subject.

(32e) confirms too that it is inappropriate to regard (32d) as a passive: genitive selection is simply less constrained. (32d) also lacks any marking as passive. And we cannot take the presence of *by* as supporting a passive analysis, since we find the same *by* in the genitive-less phrase in (33b), and not in (33a):

- |      |    |                                       |               |
|------|----|---------------------------------------|---------------|
| (33) | a. | (the) death of Bill                   | abs           |
|      | b. | (the) flight by Bill (from the scene) | abs,erg (abl) |
|      | c. | (the) flight of Bill (from the scene) | abs,erg (abl) |

The *by* simply marks an unneutralised erg, and is not the product of passive. The *of* possibility illustrated by (33c) reflects the dual relation held by that argument: it is both abs and erg, representing another complex role. This combination has been argued for on various grounds (cf. e.g. Huddleston 1970, Anderson 1977: §2.1).

We have, then, extensive neutralisation with genitives in English, different from what we find with typical nominatives. But the neutralisations are largely undone if the argument concerned occurs in post-nominal position, as in (32a) vs. (d), and (33). And there are semantic restrictions on genitive formation:

- |      |    |  |
|------|----|--|
| (34) | a. | *London's rescue of Bill by his wife   |
|      | b. | Bill was rescued by his wife in London |

I do not pursue these here, however.

Dative is sometimes considered to be a 'grammatical' inflection, the marker of a 'grammatical relation', 'indirect object' (cf. Rumpel 1845, 1866, Holzweissig 1877, opponents of nineteenth-century localist theories). But typically it represents a specialised locative, directional or not, though its presence may be lexicalised for complements of specific verbs, as with the genitive complements of verbs. It is, moreover, very difficult to provide much support for a universal grammatical relation 'indirect object' (see e.g. Anderson 1978).

Accusative is even more deeply entrenched in the main grammatical tradition as marking the grammatical relation '(direct) object'. But it can be argued that 'accusative' typically marks a semantic relation, though not every manifestation of it. In all of the abs phrases in (28) in which the absolutive is not subject (i.e. in (28a, h-i), it can be substituted for by the oblique pronoun *them* rather than the subject pronoun *they*. I suggest, as a first approximation, that this represents the basic distribution of accusative in languages which distinguish one:

*Accusative marking*

Accusatives signal an abs that has been denied subjecthood

This formulation is not quite accurate, in that the post-verbal complement in (35), which seems to be an abs, is represented by the subject pronouns in formal English, as in (35a):

- |      |    |             |
|------|----|-------------|
| (35) | a. | It was they |
|      | b. | It was them |

(35b) is informal. Other languages reject one or the other possibility. Anderson (1997: §2.1.6) suggests that both arguments in equatives such as (35) are abs (which is thus a relation that can



involve violation of the second part of the  $\theta$ -criterion). They can, therefore, given the appropriate context and choice of lexical items, be ‘interchanged’:

- (36) a. That boy is the one I love  
b. The one I love is that boy

They don’t outrank each other, grammatically, i.e. in the subject selection hierarchy, but the choice of subject is pragmatically determined. This syntactic equivalence is reflected by the choice of nominative for both arguments in (35a).

The equivalent of (35a) is the unmarked possibility in inflectional systems. (35b) represents an extension of the basic pattern represented by the sentences in (37), with pronominal ‘objects’ replacing the nouns in (28):

- |      |    |  |                     |
|------|----|--|---------------------|
| (37) | a. | Bill secretly read her                       | erg + abs           |
|      | b. | *Bill secretly fell to the ground            | abs + loc(goal)     |
|      | c. | Bill secretly flew to China                  | abs,erg + loc(goal) |
|      | d. | *Bill secretly lay on the floor              | abs + loc           |
|      | e. | Bill secretly lived in China                 | abs,erg + loc       |
|      | f. | *Bill secretly slipped                       | abs                 |
|      | g. | *Bill was secretly clever/a peasant          | abs                 |
|      | h. | Bill secretly knew her                       | E + abs             |
|      | i. | Bill secretly acquired her                   | E + abs             |
|      | j. | Bill secretly suffered from asthma/delusions | E + abl             |

Here accusative marks an abs that has been denied subjecthood by an erg, if we interpret E as erg.loc (compare e.g. Böhm 1993: §2.1.2).

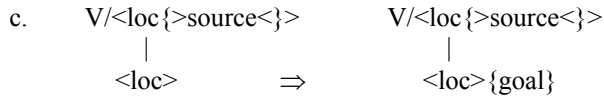
We can appropriately restrict our account of accusative marking in terms of what I’m going to suggest is a more perspicuous articulation of the relationships in (18), one which eliminates the two-level representation suggested there. In terms of (18) the basic components place and source are only indirectly relevant to the grammar. Say we recognise that erg is simply source, and that the locational relations are simple, or complex, with the complex ones being either goal or source, as represented in (38), which replaces (18):

- (38)            abs    source    loc    loc{source}    loc{goal}

Abs simply lacks both source and loc. The source and goal associated with loc are second-degree features; they pre-suppose loc. Erg is interpreted as a first degree source – i.e. not subordinated to loc. In this way, (38) need not be interpreted as allowing simple violation of the  $\theta$ -criterion, in so far as the two ‘sources’ are at different levels. Loc, as before, is simple except in the presence of another loc, marked source. With a directional verb it is marked goal. We can characterise this as in (39a):

- (39) *Goal specification*

- |    |               |   |               |
|----|---------------|---|---------------|
| a. | V/loc{source} |   | V/loc{source} |
|    |               |   |               |
|    | loc           | ⇒ | loc{goal}     |
| b. | V/source      |   | V/source      |
|    |               |   |               |
|    | abs           | ⇒ | abs{goal}     |



(39a) says that locative is a goal if it is a dependent of a verb subcategorised for source. Now, we can allow for accusative marking if an analogous redundancy applies to abs, as in (39b). That is, abs, as a dependent of a verb subcategorised for a (non-loc) source – i.e. erg – is a goal. We can collapse (39a) and (b) as in (39c), where the angles < > enclose linked optional elements: either everything within the angles is present or it is absent. All present gives (39a); all absent gives (39b), on the assumption that a source cannot be added to a source.

The central role of the accusative in many languages is to mark non-locational goals, the goals of the action or experience. In some languages the accusative marks the loc as well as the non-loc goal. Consider the Latin of (40):

- (40) a.     Immodica   īra   gignit   īnsāniam  
          excessive   anger   it-causes   madness+acc
- b.     Innumerābilēs   numquam   domum   revertērunt  
          innumerable   never   home+acc   they-returned

In (40a) the accusative marks the goal of the (causative) action; in (40b) it indicates the spatial goal, as it does regularly with names of cities and small islands and with a few other lexical items like that in (40). Even with a preposition like *in* it is the accusative that signals goal. Compare the goal in (41a) with the non-directional loc in (41b), where the preposition is accompanied by the ablative case:

- (41) a.     In Graeciam   pervēnit  
          in Greece+acc   s/he arrived
- b.     In portū       nāvigō  
          in harbour+abl   I-sail

All the Latin examples are from Gildersleeve & Lodge (1968).

Of course, the accusative can be grammaticalised, just as the descendant of the accusative has spread in (35b) even to the equative complement. And this same form marks pronouns governed by a preposition in English (*to her/him* etc.). We also find this same form with the abs arguments of verbs with simple locative sentences, where there is no question of an agent or experiencer, i.e. a non-locative source, triggering goal:

- (42)       That box contained them/\*they

Again we are closer to the situation of this form marking any non-subject abs, as well as any preposition-governed pronoun. The descendant of the accusative marks any pronoun with an overt governor, in informal English at least. However, the core accusative, that found in all languages with something we can call an accusative, conforms to (39). And this underlies the traditional notion of the accusative as marking the ‘goal of the action’.

I have perhaps implied, misleadingly, in my discussion conflation of accusative and ‘(direct) object’. The relationship is not straightforward, however. Thus, not all languages to which ‘objects’ have been attributed have accusative marking of these ‘objects’. English is now arguably such a language. And other criteria – such as capacity for passivisation – have been

invoked in relation to the identification of ‘objects’, and these may not coincide with accusative marking. But accusative at least serves to identify, in those languages where it is appropriate, a core of ‘(direct) objects’, without our having to involve ourselves in too many of the uncertainties surrounding the latter notion. By focusing on accusatives I have tried to give some definite content to a putative grammatical relation whose identification – indeed existence – is uncertain (Anderson 1984b, S.R. Anderson 1988).

There is an apparent problem for the analysis of ‘objects’ and accusatives as non-subject abs when we consider locs that are not subjects but appear in ‘object’ position. Consider such verbs as those in (43), which seem to take a goal or source ‘object’ or an ‘object’ that is a simple loc:

- (43) a. The ferry reached Patra (on Wednesday) *goal*  
 b. The ferry left Venice (on Tuesday) *source*  
 c. The ferry occupies that berth *simple locative*

We have ‘objects’ (with some possibilities for passivisation) which bear various loc relations.

But these ‘objects’ are not simply locs. They all conform to something like Pinker’s (1989:85) description of ‘patients’. He discusses this in relation to the ‘object’ of a verb like *Hit*:

A patient is acted or impinged upon or inherently involved in an action performed by an agent but does not necessarily undergo a specified change. Of course, in real life a patient may undergo a change of state or location, but if it does, the verb does not care what the change is (e.g. the wall could shatter, fall over, or tumble down a hill, and the verb *hit* would be equally appropriate). However, the patient must be inherently involved in or affected by the action, playing a role in defining what the action consists of. For example, moving one’s hand to within a fraction of an inch of the wall, even if the accompanying wind or static electricity causes the wall to fall over, would not count as *hitting the wall*, because the kind of motion or act denoted by hitting is inherently defined as terminating in contact with some patient.

However, Pinker’s ‘patient’ is a very inclusive category, apparently including any abs. Chafe, for instance, offers such a general definition of ‘patient’, whereby it introduces any entity undergoing a process or having a state attributed to it (1970: §9.8). The various ‘objects’ in (43) belong to a more specific subset which involve ‘intimacy’ of contact. They focus on the ‘contact’ referred to by Pinker latterly in the quotation. If ‘patient’ is to have any content independent of abs, it involves ‘intimate contact’.

In (43a-b) one consequence of the ‘patient’ status of the argument concerned is the ‘demotion’ of the other locational to adjunct status. This status is reflected not just in their optionality, where absence is the preferred option. But it is also reflected in the fact that, even when present, they are not normally understood as falling within the scope of the time adjunct in (43a-b) – cf. (44):

- (44) a. The ferry reached Patra (from Venice) (on Wednesday)  
 b. The ferry left Venice (for Patra) (on Tuesday)

The time given in (44) is respectively that of arrival and departure. In (44a), for instance, the departure was not necessarily on Wednesday. Indeed, in practical terms the crossing does not normally take place in a single day. This means that neutral utterance of (45) would imply the introduction of a new ‘super-fast’ ferry:

- (45) The ferry travelled from Venice to Patra on Tuesday

Both locs, as complements, come within the scope of the time adjunct. Thus ‘objecthood’ here seems to be associated with ‘patienthood’, in the form of ‘focus’ on contact, together with ‘demotion’, out of ‘focus’, of the other loc which normally accompanies directional verbs.

We can associate ‘patienthood’ in the narrow sense with a loc that is simultaneously abs: the ‘object’ is interpreted as being ‘acted upon’ as well as being a goal or a source. ‘Patient’ in the narrow sense involves a conjunction of abs and loc. As abs they are also ‘patients’ in the wide sense. Thus, *reach* is a verb that takes a goal but not a source as complement, and this goal is also abs, represented lexically as in (46a):

- (46) a. *reach*            abs,source + abs,loc {goal}  
       b. *leave*            abs,source + abs,loc {source}

*Leave* shows the complementary pattern shown in (46b). Such a suggestion involves again infringement, indeed two infringements, of the first part of the  $\theta$ -criterion, as well as, along with equatives, of the second part: there are two instances of abs, of equal degree.

I note in passing that we can associate the same properties with ‘prepositional objects’, such as that in (47):

- (47)            The ferry arrived at Patra (from Venice) (on Wednesday)

Again this is not a simple loc.

So far we’ve been dealing with ‘point’ locs, realised in English as *to/from*, and with agentive intransitives. We find transitive examples of such pairs in (48) and (49), in one case with phonologically the same verb:

- (48) a.        John supplied Bill (with the treasure)  
       b.        John supplied the treasure to Bill
- (49) a.        John robbed Bill (of the treasure)  
       b.        John stole the treasure from Bill

Here the abs of the simple loc version is ‘demoted’ in the lexicon to adjunct status.

Let’s turn now to ‘multidimensional’ locs. With *in/on* and *out of/off of*, there is a further consequence of this conjunction of semantic relations. With such ‘multidimensional’ locs, conjunction of loc and abs is also associated with ‘exhaustiveness’ of the action of the verb with respect to the dimensions involved. These arguments are said to be ‘holistic’, as in the familiar example of (50a), compared with (b):

- (50) a.        John painted the wall (with frescoes)  
       b.        John painted frescoes on the wall

For references see Anderson (1977: §1.8). (50a) is normally interpreted as involving an action which exhausts the relevant dimensions of the loc. This is not the case with (50b). And we find the same pattern with the {source} of (51a) vs. (b) (cf. e.g. Vestergaard 1973):

- (51) a.        John cleared the attic (of junk)  
       b.        John cleared junk from the attic

Lexically these verbs are respectively as in (52):

- (52) a. *smear* source + abs,loc{goal} (50a)  
           source + abs + loc{goal} (50b)
- b. *clear* source + abs,loc{source} (51a)  
           source + abs + loc{source} (51b)

With them again, not only the other loc but also the abs of the ‘non-holistic’ (b) examples of (50-51) are ‘demoted’ to adjunct status in the ‘holistic’ version. Notice the use of *with* as marker of ‘demotion’ in the ‘goal-focused’ (48a) and (50a), and of *of* in the ‘source-focused’ (49a) and (51a). We can also attribute ‘holisticness’ to the non-directional loc ‘object’ in (43c).

Association of ‘holisticness’, as well as ‘patienthood’, with the presence of abs is again quite natural. We find a ‘holistic’/‘non-holistic’ distinction with both subjects and ‘objects’, a distribution associated with abs. (53a) gives an example of a ‘holistic’ subject:

- (53) a. The tank flooded with sewage  
       b. Sewage flooded into the tank

And, semantically, abs normally marks an entity as participating as a whole in the situation identified by the verb. Thus, (15a) is to be understood, unless this is corrected, as meaning that the book was read as a whole:

- (15) a. Bill read the book

This may be overruled in various ways, as by the presence of a progressive in English, or of a quantifier of some sort:

- (54) a. Bill was reading the book  
       b. Bill read some of the book

Cf. too (55):

- (55) a. John was painting the wall  
       b. John was clearing the attic

with ‘holistics’.

In Finnish this function may be performed by a different kind of special form of the abs; this is the ‘partitive’ of (56b), vs. the ‘accusative’ of (55a):

- (56) a. Mies luki kirjan  
           man read book+accusative (‘The man read the book’)
- b. Mies luki kirjaa+partitive (‘The man was reading the book’, ‘The man read some of the book’)
- c. Miehiä tulee  
           men+partitive come+III,singular (‘Some men are coming’)

Abs is inherently ‘holistic’. Consider too the subject abs in (56c). The subject is marked by a partitive rather than a nominative, signalling partial participation, cancelling the normal assumption with abs. The verb is also singular despite the partitive subject being plural.

Es such as (15h-j) are also ‘patients’, in the narrow sense I’ve been using it. Here I’ve been associating ‘patient’ with ‘intimate contact’, involving location. With Es the ‘intimate contact’ is

physical, mental or both. They too are specialised locs with a syntactic distribution different from ordinary locs. The generalisation covering ‘patients’ in general seems to be that loc combined with a non-loc relation, i.e. a simple source (erg) or abs, is a ‘patient’:

*Patient* = non-loc,loc

Es are a kind of ‘patient’. As with Es, another putative ‘abstract’ case relation, ‘patient’ in general, can be provided with a localist interpretation.

However, we set out looking at ‘patients’ in pursuit of an evaluation of the notion that accusatives are a kind of non-subjective abs, the core of which is defined by (39c). The loc ‘objects’ we’ve just been looking at are, on the account I’ve given, all abs, and a core of them, at least, conform to (39c). It looks as if we can indeed suggest, then, that ‘objects’ and accusative are associated with a specialisation of abs. Prototypically, in the presence of a separate source, abs is marked as goal, triggering accusative.

This leaves us with only subject as a grammatical relation, and only nominative as a truly grammatical or ‘syntactic’ case in predications – in accord with a tradition with some rather ancient roots. Genitive is an adnominal case that in some languages also neutralises semantic relations. This conclusion is the result of one aspect of the pursuit of one unfulfilled consequence of the basic ‘case grammar’ tradition, namely the characterisation of the content of and thus limitations on the content of ‘case’. But there are other consequences that have occupied recent work in this tradition, some of which I enumerated earlier.

These constitute the remaining questions in terms of which I framed what I called ‘the consequences of case grammar’:

*Consequences of case grammar:*

- α) the question of content
- β) the question of category
- γ) the question of consistency
- δ) the question of derivationality

And the second of these is perhaps that which would most demand our attention on the basis of what we have been able to establish concerning the first. For, say we have found a basis for a delimitation of the content of ‘case’. We have established, then, if we have been successful, the set of possible distinctions carriable by the category of ‘case’. We have described the secondary categories of the primary category of ‘case’. These secondary categories are related to ‘case’ as ‘aspect’ is to verbs. But what kind of category is ‘case’? How is it like or unlike verb? And how is this to be represented? This is the next of our questions we should address. But it too can be seen to lead on to (γ), the question of what the substance(s) of categories in general might be, and how consistent these substance(s) are. It is partly too the content of ‘case’ that leads us on to question (δ).