Modern Grammars of Case

The past is not dead. It is not even past.

William Faulkner
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Modern Grammars of Case

A Retrospective

JOHN M. ANDERSON
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Preface

This book addresses a piece of relatively recent history and its continuing consequences. I should acknowledge that it is ‘a personal history’: I am not remote, in any sense, from some of the events of the ‘history’; I am not an impartial historian, and cannot pretend to be one. So the ‘history’ not only suffers from gaps in my knowledge and understanding—and no doubt in my sympathies; it has also assumed a shape that would almost certainly not have been given it by any other narrator. Moreover, if I can indulge in more explanation of the reasons for the continuing scare quotes around ‘history’, what follows is not a strict chronicle, insofar as what there is of ‘history’ is intermeshed with reinterpretations and reassessments and other after-thoughts concerning the proposals and disputes that form much of the matter of the book. I am primarily concerned with what of the ‘history’ I see as important now, not necessarily with how different developments were viewed at earlier times, though I shall try to document how earlier reactions and non-reactions have had an effect on this history and on present-day attitudes. But since the subject of the ‘history’ itself is not temporally remote events, what seems important, even as it strikes a single person, will doubtless change before long. To sum up, what is offered here cannot pretend, of course, to substitute for direct consultation of the record: it provides only one perspective on the development of the complex of issues that have arisen and arise out of recent concerns with the grammar of case.

The book grew out of preparations for seminars and lectures to be given at the Universities of Toulouse II and Bordeaux III, June 2004, one of them at the conference ‘Journées de Linguistique Anglaise’, in Toulouse, 17–18 June 2004, organized by the Équipe de Recherche en Syntaxe et Sémantique (ERSS) (UMR 5610). The others (Toulouse 15–16 June 2004, Bordeaux 21 June 2004) constituted part of the ‘Perpaus’ programme, the Peripatetic Seminar on Language, Computation and Cognition. I am very grateful to those responsible for the organization of these events for, among other things, the opportunity to have been able, in this extended way, to expose to my peers some of my thoughts on the development of grammars of case. These heartfelt thanks go particularly to Jacques Durand (ERSS, Toulouse), Anne Przewowny and Jean Pamies (Département des Études du Monde Anglophone, Toulouse), Claude Müller (Bordeaux), and Michel Aurnague (University of Pau).
The varied discussions that accompanied the above presentations did much to contribute to the form and to modify the content of the first five chapters of this book: considerations of time and compassion ensured that these long-suffering and stimulating audiences were spared most of what is discussed in the rest. It is invidious to single out particular participants on these occasions, but I must acknowledge the particularly helpful comments and questions proffered by Christian Bassac, Jacques Durand, André Morillo, Claude Müller, and Jean Pamiès. A revision of these presentations appears in the series *Carnets de grammaire* (ERSS, UMR 5610, CNRS and Université de Toulouse-Le Mirail) no. 15 (2005). That version profited from the comments and suggestions of Jacques Durand.

As usual, written versions of (parts of) the book have also benefited from the perceptive comments and suggestions of Roger Böhm and Fran Colman, as also from Jacques Durand’s and Christian Bassac’s continuing interest and stimulus. The extent of acknowledgment in the text of the contribution of the first of these does not do justice to the extent of his influence on it; and I shall no doubt again regret not making more of his attempts to save me from myself. This version is also dependent on the comments of two anonymous readers. The volume would not be, without the help and encouragement of John Davey, Consultant Editor Linguistics, Humanities and Social Sciences, OUP.

The book is dedicated to John Lyons, who honoured the Toulouse conference with his presence, as did his wife Danielle:

Λαμπάδια ἔχοντες διαδώσανσιν ἀλλήλοις (Plato)

He it was who first accused me of being a ‘localist’; but he is not to blame, any more than the others mentioned above, for what I have made of it, or the other ideas discussed here.

J.M.A.

*Methoni Messinias, Greece*

*July 2005*
Conventions and Abbreviations

Examples are numbered consecutively throughout each chapter, (1) to (n). References to and re-presentation of examples in other chapters are preceded by the chapter number, so that (4,3) is example (3) in Chapter 4; but the chapter number is omitted with (reference to) examples in the current chapter. Cited words (and lexemes) and word forms are not distinguished typographically or otherwise, since it should be clear from the context which is intended.

On grounds of practical economy, the previous work of the present author is invoked as simply ‘Anderson (date etc.)’, and that of Stephen Anderson as ‘S.R. Anderson (date etc.)’.

The following abbreviations are used in glosses of examples, where the practice recommended by the Leipzig glossing rules is followed where appropriate. The rules are available at: http://www.eva.mpg.de/lingua/files/morpheme.html

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Abbreviations for semantic relations

A  Agentive abl ablative abs
B  Benefactive abs absolutive loc locative
D  Dative erg ergative src/erg source
F  Factitive loc locative
I  Instrumentalprt partitive Second order
L  Locative
O  Objective src source
T  Time

Fillmore elsewhere (only those alluded to here, and ignoring mere terminological variation)
E  Experiencer
G  Goal
S  Source
P  Path

Other category abbreviations
A  adjective pass passive
C  comparator pat patient
D  determinative prog progressive
dim  dimensional T finiteness
N  noun V verb
N  referentiable / takes as a complement
P  predicative \ modifies
By my title I’ve described the area that I want to look at here as ‘modern grammars of case’. Much of the discussion will be concerned with the concept of ‘case grammar’ that began to be developed in the late 1960s. I’ve chosen the label ‘grammars of case’ here, rather than, say, ‘case grammar’, to signal that it is misleading to see the tradition that came to be called ‘case grammar’ in isolation from other developments in the study of case with which this tradition interacted. And the boundaries between different traditions are fluid. Moreover, the ramifications of the ‘case grammar’ enterprise of the third quarter of last century extend beyond the immediate concerns that dominated the study of case at that period.

Certainly, I think one can establish something distinctive about the core of the ‘case grammar’ tradition that has evolved over the last forty years; and this is one of my main aims here. But this can be established most transparently against the background of other work of the same period—and, to some extent more importantly, of the period before. Here I follow the recommendation of Lyons (1965: 7): ‘Nothing is more helpful in acquiring an understanding of the principles of modern linguistics than some knowledge of the history of the subject.’

As is usual in connection with any scholarly enterprise, the recent(-ish) ideas about ‘case’ that I’m going to examine are often not entirely novel; and it is important to understand why in some instances we find a continuation and development of earlier work and in others more drastic revision and rejection. Only thus can we achieve a non-parochial perspective in the evaluation of the adequacy as well as the originality of present-day opinions. And, in general, knowledge of the past may at least help us avoid some overgrown garden paths.

So, though I am focusing on ‘modern grammars of case’, theories primarily of the twentieth century, work of the preceding decades, which embodied traditions going back some centuries, has a role to play in the development and evaluation of recent theorizing and its consequences. It offers a baseline from which to survey more recent developments and to evaluate the extent to
which they offer any progress over the tradition, or have failed to avoid its mistakes. This earlier tradition is recognized, at least symbolically, in the title of one of the earliest publications in 'case grammar'—Charles Fillmore’s ‘Toward a Modern Theory of Case’, of 1965. The title also encapsulates the ambivalence of the term ‘case’, as denoting either the relations (semantic or grammatical) expressed by morphological case or that morphological means of expression itself.

In modern work on ‘case’, in either sense, much of the acknowledgment of the contribution of earlier work is (as in this title) implicit only, though Fillmore (1968a), for instance, does offer a brief critique of the practice of some previous grammars of case. But, as anticipated, I shall try to make this debt a bit more overt as we proceed—and, indeed, from the very beginning. Of course, even this is limited in the present work by the space proportionately available for such ‘contextualization’. However, Chapter 2, ‘The Classical Tradition and its Critics’, endeavours to provide some background to the developments stemming from the third quarter of the last century whose evolution we are primarily concerned with here, as well as to establish the extent to which ‘case grammar’, compared with other modern treatments of case, maintains traditional ideas of case and its centrality in the grammar.

In what immediately follows that chapter, what I see as the main concepts that emerged as a rough consensus from the earliest embodiments of ‘case grammar’ are our immediate concern. This consensus takes over the traditional notion that ‘case forms’ express both semantic relations (such as ‘agent’ and ‘location’) and grammatical relations (such as ‘subject’). These agreed concepts will occupy us in Chapters 3–5. Thereafter we shall be concerned with ‘unfinished business’ from these early years.

In the first place there are central issues which were not resolved at that time, one of which, the question of the set of semantic ‘cases’, or semantic relations, already emerges as such in Chapter 5. The latter part of that chapter is devoted to one attempt to resolve the question of the identity of ‘cases’ and of ‘case’, an undertaking whose origins are rather ancient, namely the so-called ‘localist theory of case’, whose early implementation in a variety of ‘case grammar’ is discussed there.

The scare quotes around ‘case grammar’ are a reminder that this approach is only one variety of a grammar of case. Those around ‘cases’ and ‘case’ recognize that it has been acknowledged for some time that the relations expressed by morphological case can be expressed in other ways, notably by adpositions and position. ‘Case’ refers to these common relations; and morphological case is only one kind of ‘case form’, one way of expressing ‘case relations’, or simply ‘case’.
With Chapter 6, which looks at more recent attempts to implement the localist hypothesis, we move on to more recent developments in ‘localist case grammar’. This chapter thus initiates discussion of ideas that emerged after the earliest period of ‘case grammar’. We can conveniently locate the end of this period in the late 1970s, the time of Fillmore’s partial ‘retraction’ (1977) and of ‘defences’ of the ‘case grammar’ hypothesis against early criticisms such as Anderson (1977).

Chapter 7 pursues questions to do with the articulation of the relationship between ‘case’ relations and ‘case forms’, the morphological, lexical, and positional signals of the ‘cases’, including the ways in which the ‘case forms’ neutralize expression of the semantic or ‘case’ relations. It looks at arguments that the patterns of neutralization, such as subject formation, are not universal, though the variant possibilities show similarities, including functional motivation.

Chapter 8 focuses on attempts to resolve the question of the categoriality of ‘case’: what kind of category do the ‘cases’ belong to? It is a type of category that, as I have indicated, can be manifested in various ways, as e.g. preposition, inflectionally, or by position. How is this to be accommodated, and how is the co-presence of these different kinds of manifestation in the same language system to be articulated? This concerns the status of ‘functional’ categories. Chapter 9 then looks in more detail at the lexical structure and the syntax of the category of ‘case’, the ‘functor’, in the terminology adopted there.

The concluding chapters of the book concern a slightly different kind of unfinished business. In various ways the ‘cases’ could be seen as slightly anomalous within the framework of assumptions that determined the shape and substance of the grammar in which they were initially embedded. There are at least two important aspects to this.

As I shall discuss in Chapter 10, the ‘cases’ are clearly grounded in semantic substance: they are identified semantically and their semantics determines their basic distribution. The implementation of this identification has been controversial (and remains so); but it has generally been thought to be an appropriate pursuit, even by those who would reduce ‘case’ to a conjunction of other categories. And even in Starosta’s austerely autonomous (from semantics) development of ‘case grammar’, the ‘case relations’ are regarded as ‘still meaningful, but in a quite abstract and general way’ (1988: 123). The extent to which other syntactic categories are similarly grounded was one of the unresolved issues of early ‘case grammar’ (and this was matched by similar controversy in other approaches to grammar in which grounding was not simply denied).
However, the consequences of a decision in this area go far beyond the confines of the original ‘case grammar’ programme. It is only rather more recently that there has been given any recognition to the conclusion that ‘case grammar’ is simply a sub-theory of a general ‘notional’, or ‘ontologically based’ grammar, and that an assumption of autonomy for syntax is no less injurious elsewhere in the grammar than it is in relation to the ‘cases’. Chapter 10 looks at proposals to apply ‘groundedness’ in the study of syntactic categories in general. Just as phonology is regarded by many phonologists as ‘grounded’ in phonetic substance, so too syntactic categories and relationships are ‘grounded’ in meaning. This is one aspect of a more general variety of unfinished business.

In the second place, other questions arise from the fact that, with minor departures consequent upon recognition of the centrality of ‘cases’, Fillmore’s (1968a) proposals are embedded in a standard transformational grammar of the time; and this emerges as a particularly salient issue in a ‘case grammar’. From different points of view, there developed in subsequent work a conviction that this was undesirable: the transformational apparatus is not only undesirable in itself, but it is also especially inappropriate, and unnecessary, in a ‘case grammar’. In the final chapters of the book I shall look at how some of the properties that have accrued to ‘case grammar’ have been said to render superfluous any appeal to transformations and their equally unpalatable concomitant, ‘empty categories’.

What emerges overall from these more recent developments and their ongoing continuation is an understanding of the extent to which an appeal to the autonomy of the ‘computational system’ has grossly distorted linguists’ conception of the relationship between meaning and grammar. It has moreover led to a perverse characterization of what counts as ‘linguistic creativity’, reducing it to a by-product of the ability to compute recursive routinized (meaning-free) formulae. For Foley and van Valin, for instance, ‘linguistic creativity’ is ‘the ability of native speakers to produce and understand an (in principle) infinite number of sentences’ (1984: 319). This lays emphasis on the computational capacity underlying this ability to cope with an ‘infinity’ of sentences. But creativity in language, on any normal understanding, involves, rather, the capacity to formulate representations for newly perceived ‘scenes’ and to decode them, possibly in novel situations; and it includes lexical as well as (and probably more so than) syntactic capacities. This capacity depends on an understanding of figurativeness, which, despite the relative routinization, or institutionalization, involved in lexicalization and grammaticalization, is basic to the structure and development of both lexical and grammatical systems.
The notion of ‘rule-governed creativity’ (Chomsky 1976), versus ‘rule-breaking creativity’, involves a misapprehension: rules cannot govern ‘creativity’; rather, they may help to enable creativity, or to provoke to ‘rule-breaking creativity’. ‘Rule-governed creativity’ is a misnomer. We have a term already for ‘creativity’ that is said to be ‘rule-governed’: it is usually called ‘(recursive) productivity’. Such productivity has a minor contribution to make to creativity, but it should not be identified with it or considered basic to it.

It is also misleading to describe ‘literary’ creativity as ‘rule-breaking’; typically it is ‘rule-extending’ or ‘rule-making’ (for example Thorne 1965; 1969; and other references in Thorne 1970). When, for instance, to take a simple example, Peter Carey writes—or, rather, one of his characters says—‘She grew me up’ (Jack Maggs, ch. 26), he is ‘extending’ the lexical incidence of causativization by conversion (cf. the lexical causative Bring up). It is obvious too that such creativity is not confined to ‘literature’; it is basic to our capacity to use language to express our perceptions and to interpret the expressions of others.

As implied by the preceding chapter descriptions and groupings, I have divided the set of chapters which follow this Prologue into three parts, followed by an Epilogue. Part I, ‘The Tradition’, discusses, against the earlier background, the evolution of grammars of case in the twentieth century, particularly its third quarter, and particularly the early development of the approach that came to be called ‘case grammar’. This part comprises Chapters 2–5, terminating in the chapter on the identity of semantic relations.

The boundary between Parts I and II cuts across a grouping implied in the description of the chapters given above: both the latter part of Chapter 5 and Chapter 6 are concerned with localism. As I’ve suggested already, one reason for this is that all of the material in Parts II and III concerns developments that are for the most part later than the work discussed in Part I. The proposed incorporation of the ‘localist hypothesis’ into ‘case grammar’ occurred quite early in the evolution of the latter; and, though its status was not generally agreed on, it was adopted rather early in some form in a variety of approaches stemming from ‘case grammar’. The developments presented in Chapter 6, however, though based on the ‘localist hypothesis’, belong to a much later period, and are indeed partly original to this volume. There is a chronological motivation for the division.

Another reason for the proposed division between Parts I and II is that the work discussed from that point on focuses on attempts to articulate more explicitly the basic ideas discussed in Part I and their consequences. The discussion from this point on also shows a further admitted narrowing of ‘scholarly focus’, in its concentration on developments in the localist
interpretation of ‘case grammar’. Nevertheless, there is also an attempt there to give attention to differing viewpoints, both in work which regards itself as ‘case grammar’ and in studies that do not, as illustrated by concern with the status if any of ‘macro-roles’ and ‘abstract syntax’ (Chapter 9).

Part II, ‘The Implementation of the Category of Case’, comprises those chapters, 6–9, that seek to establish the categorial character of ‘case’ in the wide sense. Part II is divided from Part III not for reasons of chronology, since the proposals discussed in the two parts developed in parallel, and not entirely independently; rather, as anticipated in the brief descriptions of the individual chapters, the division reflects again a difference in focus, but in this case in focus within the grammar.

While Part II is concerned very much with the category of ‘case’, and other functional categories, the chapters that follow involve the recognition that ‘case’ is typical of syntactic categories in being semantically grounded: Part III is called ‘Case Grammar as a Notional Grammar’. This is introduced in Chapter 10; Chapters 11 and 12 concern work that examines more explicitly the role of ‘case’ in the syntax and morphology of such a ‘notional grammar’, and particularly its part in eliminating appeal to syntactic transformations and other syntactic paraphernalia, in favour of simple projections from a richly structured but formally parsimonious lexicon.

The book closes with an Epilogue which tries to draw together the main results, as I see them, of the various developments in grammars of case in the chapters which precede it, as well as to point to some extensions and further consequences of the main traditions which can be described as grammars of case. The history offered here is too personal, and too (re)interpretative (often with the benefit, or handicap, of hindsight) to count as historiography; it also transcends the historiographical in offering novel analyses of many of the phenomena considered—not just in the Epilogue but also, for instance, in the discussion of localism in Chapter 6. It is a history, from my viewpoint, of certain ideas whose development is as informative as the form they take at any one period; the present has only a minor privilege in this respect. This developmental orientation means that analyses are presented as evolving rather than as having assumed some ‘final’ form, so that, for example, the treatment of passives or causatives is recurrently modified in the light of conceptual shifts. This orientation also underlies the alternation in the text between more panoramic views of general developments and explicit and detailed concern with the motivations and consequences of these as exemplified by particular analyses.

A historical perspective keeps before us the contingency of our theoretical assumptions, and their unsuitability for constituting dogma. The result of the
approach adopted here is that, as well as not being properly historiographical, the presentation departs from the usual formula of: exposition (or often simply assumption) of the theoretical framework; consideration of previous research within that general framework on a particular area of variable scope; (re-)application to the area of the framework, or some limited revision of it. This scarcely seemed to be appropriate to the (re-)evaluative goals of the present enterprise. It is also salutary, I suggest, for us to give up now and again the pretence that linguistic research can only be pursued as if only what is familiar today is what is most relevant. Every epilogue is also a prologue.
Part I

The Tradition
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The category of case occupied a central position in grammars of the classical tradition that dominated linguistic theorizing in Europe before the twentieth century. The study and example of Latin pervaded much of this tradition for many centuries. But many of the elements of the tradition were drawn from the Greeks, particularly the Stoics; and the later tradition of philosophical grammars, in particular, liberated itself to some extent from the example of Latin and Latin grammars. And even among the usually less enterprising pedagogical grammars of the European vernaculars that flourished from the Renaissance onwards, some attempt was made to adapt the framework to these vernaculars. I shall refer to all of these grammatical enterprises as the 'classical tradition', while recognizing that this term includes a wide variety of different approaches and purposes, ranging from pedagogical and rhetorical grammars through the comparative to the more theoretically oriented and philosophical.

2.1 The tradition

Within the early core of this tradition, case was conceived of as a morphological category, the members of the category being expressed in the particular form taken by nouns and related categories. But a precise and transparent characterization of the category and its function does not emerge in antiquity or in subsequent work in the less philosophical strands of the tradition—except perhaps negatively: not gender, not number. Rather, we get recognition of a distinction between two kinds of cases: the casus rectus, the nominative, which marks the subject of the finite verb, and the oblique cases, which at least in some uses signal a semantic relation to the verb, as illustrated in (1):

(1) Missī légātī Athēnās sunt
    sent envoys:NOM Athens:ACC are
    (‘Envoys were sent to Athens’)

Here the accusative marks the spatial goal of the movement signalled by the verb. The nature of this alleged distinction between the casus rectus and the others, and variants of such a distinction, underlie much of the debate within modern grammars of case.

Not so much debated of late has been the problematical status of the vocative (see, however, Hjelmslev (1935/7) and Mel’čuk (1986), who reject it as a case). As observed by the ancients, the vocative seems to belong paradigmatically with the cases, as illustrated by the (modern) Greek paradigm in (2a), but functionally has little in common with them, as illustrated by (2b):

(2) a. filos NOM ≈ file VOC ≈ filo ACC ≈ filou GEN, friend
    b. Ti ějine, file?
       (‘What (has) happened, friend?’)

Perhaps, however, we can see in the classical tradition a generalization that covers at least the rest of the cases: if subjecthood and ‘spatial goal-hood’ are both relational notions, we can say that case marks a relation of some sort between the noun and some other element, in particular a relation specifying the kind of participation attributed to the noun in either the semantic or the syntactic requirements of the other item.

2.1.1 The syntax of case and adposition

Despite some uncertainties concerning the characterization of the category, in the central classical tradition case occupied a crucial place in the syntax. It’s not just that case was seen as a defining property of word classes. So, for Varro, for instance, the word classes of Latin were defined as in Table 2.1 (adapted from Robins 1951: 54). Here, ‘nouns’ include ‘adjectives’ as a subclass; and ‘conjunctions etc.’ is clearly the ‘ragbag’ of categories lacking case and tense.

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<td>participles</td>
</tr>
</tbody>
</table>

But, in addition to case having this role in defining word classes, reference to distinctions in case was seen as fundamental in formulating the syntax of a language. Gildersleeve’s Latin grammar, revised by Gonzalez Lodge—i.e. what
we know familiarly, and I have already referred to, as Gildersleeve and Lodge (1968)—comes late in this tradition. But still its description of the syntax of the cases occupies a large part of the segment of the grammar devoted to ‘qualification of predicate’, as well as cases being invoked elsewhere in the syntax of the ‘simple sentence’, as in the discussion of the subject. Sixty-nine out of the ninety-four pages of the aforementioned segment alone deal entirely with case syntax. Tense, on the other hand, although it also figures in the classification in Table 2.1, occupies only nine pages of the syntax, compared with fourteen devoted to mood, which is not for Varro a word-class-defining category. Case is central to the description of the syntax. A classical grammar is a ‘grammar of case’ to this extent.

As is typical in descriptive grammars of the classical tradition, prepositions in Gildersleeve and Lodge belong to the ‘ragbag’ of the upper-right box of Table 2.1. Most of their syntax, however, is discussed as ancillary to the syntax of the cases. So, Gildersleeve and Lodge observe that the use of the accusative in \((1)\) is limited to ‘Names of Towns and small Islands’, whereas ‘Countries and large islands being looked upon as areas, and not as points, require prepositions’ (1968: 213–14), as in \((3)\):

\[
(3) \quad \text{In Graeciam pervēnit} \\
\text{in Greece: } \text{ACC s/he.arrived} \\
\text{‘S/he arrived in Greece’}
\]

The tradition recognizes that a semantic relation ‘goal’ is involved here, as well as formulating the notional basis for the distinction in usage between \((1)\) and \((3)\): whether the goal is conceived of as an area or not. And the joint role in \((3)\) of the preposition and the case inflection in signalling the semantic relation is also acknowledged. There is a perception that the descriptions of case and preposition are linked.

According to Hjelmslev (1935: 24, 40–43) it is, however, only in the nineteenth century that the equivalence of adposition and case in signalling relations of some sort is given full recognition (in the work of Bernhardi (1805) in particular). This is slightly misleading: the case/preposition relationship was already familiar to the tradition of humanist grammars (such as that of Linacre (1533)—see Padley (1976: 43–4)) and subsequent philosophical grammars. It is dwelt on at some length in the Port-Royal Grammar (Lancelot and Arnauld 1660: ch. 6), as well as in Lancelot’s Nouvelle méthode latine (1644). The grammar essentially suggests that nouns inflected for case are abbreviated prepositional phrases. It notes too that the relations expressed by case can also be signalled by word order.
The analysis of prepositions is not pursued further, however, either by Bernhardi or by Lancelot and Arnauld. And neither in the seventeenth nor in later centuries is there confrontation of the problem posed most acutely by such as (3), namely, the articulating of the combined role of adposition and inflection in expressing the semantic relation. Are the adposition and the case the same kind of entity, despite their different morphosyntax? How, particularly if this is the case, is their co-occurrence regulated? I shall be suggesting that even modern grammars of case have failed adequately to address these questions, especially the latter.

This is already pointed out, however, by Kuryłowicz (1949: 20):

L’analyse incorrecte des tours prépositionnels nous semble avoir été un des obstacles les plus sérieux à une analyse adéquate de la catégorie des cas. Dans les essais récents consacrés aux cas (L. Hjelmslev [(1935/7)], R. Jakobson [(1936)], A.W. de Groot [(1939)]) les tours prépositionnels sont soit passés sous silence soit traités d’une manière autre que les formes casuelles ‘synthétiques’. En établissant la valeur générale d’un cas M. Jakobson découpe les tours prépositionnels en préposition + forme casuelle…, en détruisant ainsi l’unité morphologique formée par la préposition et la désinence qui en dépend.

I shall return to Kuryłowicz’s proposals subsequently, when I take up this problem, which, it seems to me, and as I’ve implied, remained unresolved through the twentieth century.

By the nineteenth century there is certainly an acknowledged recognition of the adposition/case affinity; but this affinity is not well articulated. And, more recently, a case/adposition equivalence is again recognized in the conjunction of the titles of two early papers of Fillmore’s, ‘Toward a Modern Theory of Case’ (1965), already alluded to, and ‘A proposal concerning English prepositions’ (1966). But once more the relationship between them, and their possible co-occurrence, are not explicitly formulated.

2.1.2 Grammatical versus local cases

What apparently does belong specifically to the nineteenth century is the firm establishment of a distinction between grammatical and notional or ‘local’ cases, not just between nominative and oblique cases. The suggestion that some other cases as well as the nominative should be defined syntactically we can associate particularly with the name of Theodor Rumpel (1845; 1866). For him the nominative is the case of the subject of the verb, the accusative that of the ‘direct object’, the dative that of the ‘indirect object’, and the genitive marks subjects or ‘objects’ of nouns. The cases are defined by grammatical
relations allegedly borne by the nouns. Hjelmslev (1935: pt. I, §B.3) characterizes his position as ‘anti-localist’, as based on grammatical rather than semantic (specifically ‘local’) relations.

It is clear, however, that not all cases can be so defined. There are also notional or ‘local’ cases, which reflect relations that are more obviously semantic, and typically spatial. This distinction between ‘grammatical’ and ‘local’ is most fully developed in the first place by Holzweissig (1877), based on work of Ahrens, though their system excludes the nominative and the casus rectus, as well as the vocative: in this system the grammatical, or ‘logical’, cases in the early Indo-European languages are the accusative, dative, and genitive, as shown in (4):

(4)  
a. grammatical cases: accusative, dative, genitive
b. local cases: ablative, locative, instrumental

However, the boundary between the two types of case does not seem to be strict: there are doubtful cases (in both senses). This renders this ‘demi-localist’ position (Hjelmslev 1935: pt. I, §B.4) somewhat unstable.

All of this can be illustrated from Finnish. Finnish has at least the set of cases listed in (5):

(5)  
a. nominative, genitive, accusative
b. essive, partitive, translative
c. inessive, elative, illative—adessive, ablative, allative

Traditionally, (5a) are the ‘grammatical’ cases, and (5c) the ‘local’: the first three in (5c) are ‘interior’ cases, the latter are ‘exterior’ or non-interior. The cases in (5b) I shall return to.

So the accusative, for instance, can be interpreted as representing the ‘direct object’, and the illative and allative as representing spatial goal (‘interior’ or not), as illustrated in (6) (examples from Rigler (1992: 93–5):

(6)  
a. Liisa sai rahan
   Liisa got money:ACC
   (‘Liisa got the money’)

b. Marja pani kirjan laatikkoon
   Marja put book:ACC box:ILL
   (‘Marja put the book into the box’)

c. Jussi meni asemalle
   Jussi went station:ALL
   (‘Jussi went to the station’)

The Classical Tradition and its Critics 15
Though the illative and allative have other uses than those illustrated in (6), none of them can be interpreted as grammatical. Not all cases can be grammatical, then.

This explicitly mixed-relational view of case—some ‘grammatical’, some ‘local’, notional—is basically what twentieth-century grammarians inherited. As I’ve observed, the division is not strict or abrupt; some cases do not fall easily into just one category. The cases in (b) in (5) that I haven’t commented on so far illustrate this rather well. The essive, for instance, marks predicatives, arguably a grammatical function (or, at least, not an obvious ‘local’ relation), as in (7b), as an alternative to (a), with the nominative:

\[(7) \quad \begin{align*}
\text{a. } & \text{Kivi on kova} \\
& \text{stone is hard:} \text{NOM} \\
\text{b. } & \text{Marja oli sairaana} \\
& \text{Marja was ill:} \text{ESS} \\
\text{c. } & \text{Pekka on opettaja} \\
& \text{Pekka is teacher:} \text{NOM} \\
\text{d. } & \text{Pekka on opettajana} \\
& \text{Pekka is teacher:} \text{ESS} \\
\text{e. } & \text{Tytö oli kotona} \\
& \text{girl was home:} \text{ESS} \\
& (‘The girl was at home’) \\
\text{f. } & \text{Jussi lähti maanantaina} \\
& \text{Jussi left Monday:} \text{ESS} \\
& (‘Jussi left on Monday’) \\
\end{align*}\]

But the essive is associated with predicatives only if they are contingent or temporary in some way; otherwise, the nominative is used, as in (7a). Likewise, the contingent status of the predicative noun in (7d) is signalled by the presence of the essive inflection, rather than of the nominative with the same noun shown in (c) (Rigler 1992: 108). Rigler comments on these latter: ‘\((7c)\) implies that Pekka is a teacher by profession, and \((7d)\) that he is working as a teacher at the moment.’

The most straightforward characterization of these phenomena thus introduces notional considerations into the syntax. And this characterization, it would seem, also introduces, after all, ‘local’ relations into the grammar of predicatives, given that as well as (7b, d), illustrating the predicative use of the essive, we also find obviously ‘local’ essives such as (7e) and (f) (Rigler 1992: 94, 108); and since ‘contingency’ of some sort is also signalled in other
languages (such as Spanish) by locative-based expressions (Comrie 1976a: §5.2.1.2).

Moreover, the partitive, which has the ‘local’ use in (8b) also alternates with the accusative as a marker of ‘direct object’, where it signals partial involvement of the object, as in (8a) (examples from Rigler 1992: 94); the latter should be compared with the example with accusative in (6a):

(8)  a. Jussi sai rahaa
     Jussi got money:PART
     ('Jussi got (some) money')

     b. Jussi tuli kotoa
     Jussi came home:PART
     ('Jussi came from home')

Denison comments: ‘The general theme of the historical syntax of the partitive in Finnish is the emergence of such [less concrete] functions out of the primary ablative function’ (1957: 322). The elative is apparently following the same course, insofar as it alternates with the partitive in its apparently ‘non-local’ function. We return to the functions of the Finnish partitive in Chapter 7, in particular. The relevant observation at this point is that comparison of (6a) and (8a) confirms that even the Finnish ‘grammatical’ cases of (5a) are not purely so: accusative marks only a semantic subset of objects.

And this duality of function of a ‘grammatical’ case is (if anything) even clearer in the case of the Latin accusative. We have indeed already witnessed the ‘local’ use of (1). The same case can also be interpreted as marking the ‘direct object’ in (9):

(9)  Römus urbem Römam condidit
     Romulus city:ACC Rome:ACC he.founded
     ('Romulus founded the city of Rome')

All cases other than the nominative have ‘not-purely-grammatical’ uses, analogous to the use of the accusative in (1).

The nominative in Latin and Finnish emerges as distinctively ‘grammatical’, though with notional restrictions not just on its predicative use in the latter language, as illustrated in (7), but also when it is as a subject, since the apparent subject of (10) is in the partitive:

(10) Leipä on poydällä
     bread:PART is on.table
     ('There is some bread on the table')
Again, use of the nominative (in this instance) is semantically restricted.

All the cases other than the nominative are more generally and obviously mixed, however, and cannot simply be identified with the expression of some supposed ‘grammatical relation’. As we shall see, work within the ‘case grammar’ framework of the twentieth century, as well as related work, indeed supports an even more radical result: the elimination, or at least marginalization, of grammatical relations such as ‘direct object’ and ‘indirect object’, and so of the description of cases such as the accusative and dative as ‘grammatical’. The scare quotes that I have been putting around the various terms for ‘objects’ are intended to signal this at best provisional, uncertain status.

This is not to deny that subjects, and thus nominatives, display a range of semantic relations, as is familiar (and as we are reminded by Fillmore (1968a: 6)). But use of the nominative, unlike the other cases, is unified (to a very large extent) by the description ‘case of the subject’—though usages whereby the term ‘nominative’ (or ‘subject case’) is used for the ‘absolutive’ in languages like Basque confuse this somewhat (as will be clear from §7.5). Insofar as the notion ‘subject’, unlike other proposed grammatical relations, is well defined (and I shall be suggesting here that it is, despite the variety of ways in which it can be expressed—positional, configurational, morphological—and despite ‘clashes’ among these), nominative is unlike other proposed ‘syntactic’ cases in principally marking a grammatical relation and not also a semantic relation. Even where the nominative is used in opposition to other cases, like the Finnish essive or partitive in predicative and subject function, it seems to be the default case as subject marker.

The uniqueness of the nominative, it can be suggested, is what ultimately underlies the exclusion of nominative from Holzweissig’s system in (4) and from discussions by other nineteenth-century treatments. And the nominative continues to be treated distinctively in much of the central classical tradition, even when the definition of subject that is offered remains vague. Recognition of its distinctiveness survives as well in the ‘vernacular’ pedagogical grammars that burgeoned in the modern period, in the form of recounting of traditional anecdotes like the following, familiar from Port-Royal, for instance:

The word case is from the Latin casus, and means a falling. The old grammarians regarded the nominative as the upright case, and all the others as falling from that. Hence the use of the words decline and declension. (Of course the nominative cannot be a real case, because it is upright and not falling.)

(Meiklejohn 1892: 19, n.(i))
Primary and secondary functions

I want now to note the existence of further refinements of the systems of Rumpel (1845; 1866) and Holzweissig (1877). These refinements have exerted some (even recent) influence, and they deserve some attention before we try to sum up what emerges as ‘common ground’ from the classical tradition. One variety of these is associated with de Groot (1939) and Kuryłowicz (1949). These maintain a distinction between ‘grammatical’ or ‘syntactic’ cases and ‘concrete’. But among the ‘concrete’ uses of cases, de Groot recognizes a hierarchy of ‘centrality’ in their relation to the verb. Kuryłowicz also talks about relative ‘centrality’; but he further makes a distinction between ‘primary’ and ‘secondary’ functions of a case (a distinction pursued more recently by Fischer and van der Leek (1987), for instance). De Groot’s hierarchy is less developed and rather language-particularistic, and I want to focus here on Kuryłowicz’s proposals.

For Kuryłowicz, a case whose ‘primary’ function is ‘syntactic’ is a ‘syntactic’ case, such as the Latin accusative, whose ‘primary’ function for Kuryłowicz is to mark the ‘régime direct’; a case whose primary function is ‘concrete’ is a ‘concrete’ case, such as the Latin ablative. A ‘secondary’ function is one associated with verbal government: the ‘concrete’ use of the accusative is ‘secondary’ because it is determined by a particular (notional or lexical/idiosyncratic) subclass of verbs, ‘verbs of movement’, as in (1) versus (9); in (9) the accusative signals the ‘régime direct’. The ablative, however, is ‘primarily’ ‘concrete’ in use, with ‘secondary’ uses again associated with particular subclasses of verb. This is illustrated in (11) (Gildersleeve and Lodge 1968: §§408, 393, 356), with a governed use of the ablative (a), marking ‘cause’ with verbs of emotion, and a (‘primary’) use that is not governed (b), as a time ‘adverbial’, or adjunct:

(11) a. Odèrunt peccàre bonì virtùtis amôre
they.hate to.sin the.good of.virtue love:abl
(‘The good hate to sin from (their) love of virtue’)

b. Quà nocte nàtus Alexander est, eàdem Diànae
which:abl night:abl born Alexander he.is, that.same:abl of.Diana
Ephesiae templum dèfagrât vit
of.Ephesus temple it.burnt.down
(‘On the same night on which Alexander was born, the temple of Diana of Ephesus burned to the ground’)

However, the ‘syntactic’/‘concrete’ distinction still seems not to be clear-cut. Even the use of the ‘accusative’ as marker of ‘régime direct’ is not straightforward:
in Turkish, for example (in addition to the Finnish restriction), this case is used only if the putative ‘régime direct’ is definite. And there are problems in the invocation of ‘government’. For instance, Kuryłowicz (1949), contrary to the Rumpelian tradition, groups the dative with the ‘concrete’ cases. He appears to regard its ‘primary’ uses as those which are illustrated in (12):

(12) Neminı meus adventus laböri aut sümptutı fuit
no-one:DAT my arrival burden:DAT or expense:DAT it.was
(‘To no one was my arrival a burden or an expense’)

In Gildersleeve and Lodge’s terms, these ‘concrete’ uses include ‘the Dative of the Object for which (to what end), and often at the same time a Dative of the Personal Object For Whom, or To Whom’ (1968: 227). But Gildersleeve and Lodge regard these as verb-governed, so ‘governed’ in Kuryłowicz’s terms. And though Kuryłowicz regards its use as marking the ‘régime indirect’ as ‘secondary’, he comments (1949: 38):

Quant au datif la tradition grammaticale le groupe avec les cas à fonction syntaxique (nom. acc. gen.) en tant que cas du régime indirect. Le terme régime indirect est justifié là où le groupe (verbe + régime direct) régit un cas oblique. Or c’est normalement le datif de la personne à laquelle l’action s’adresse (donner à, dire à etc.). Bien que dans ses constructions le datif soit régé, il est moins central, c.-à-d. plus adverbial, que l’accusatif, étant restreint aux substantifs désignant une personne.

It is, however, unclear why, in Kuryłowicz’s own terms, the marking of ‘régime indirect’ is not a ‘primary’ use. True, it is governed by the construction ‘(verbe + régime direct)’, but this does not in itself directly involve specification of a semantic subclass of verbs, any more than government by simply verb does, in the case of the ‘régime direct’. Later (1964: 179), he concedes that ‘the position of the dat. stays uncertain’.

Fillmore (1968a: §1.2) discusses the inadequacies of these and other twentieth-century elaborations of the classical tradition. He is particularly critical of attempts to ‘capture single comprehensive “meanings” of the cases’, which ‘have suffered from the vagueness and circularity expected of any attempt to find semantic characterizations of surface-structure phenomena’ (1968a: 9). And he simply discounts as ‘discredited’ one of the attempts to arrive at a semantic definition of ‘case’ as a category, namely the ‘localist theory’ (to which we shall return in Chapters 5 and 6).

The observations made in such studies as Kuryłowicz’s also undermine attempts to describe cases in terms of simple paradigmatic oppositions, as proposed by Jakobson (1936), for instance. The uses of a case or different cases
differ syntagmatically as well as paradigmatically: in terms of ‘centrality’, or, in later terms, complement versus adjunct, for instance.

However, it is misleading to associate these failures to arrive at ‘meanings’ of the ‘cases’, as Fillmore does, with an exclusive concern with ‘surface structure’. The same problems have dogged the study (in modern frameworks displaying a variety of architectures) of the meanings of individual semantic relations (or ‘cases’, or ‘thematic roles’, in another particular tradition) and of the category of ‘case’ as a whole, as we shall again discuss in (especially) Chapters 5 and 6.

On the other hand, attempts to associate case with grammatical relations other than the subject (which permits a rough fit) have not been notably more successful. This is associated with the fact that, as I have already noted, the notions ‘régime direct’ and ‘régime indirect’, ‘direct’ and ‘indirect object’, are not transparent, and have indeed been adopted with contradictory referents: see, for example, the contributions to Plank (1984)—as well as S.R. Anderson (1988), who sees no place for such notions in grammatical theory. And they are called into question in the further development of ‘case grammar’, as I have already anticipated, and as we shall examine further below.

Different aspects of this early to mid-twentieth-century work will be taken up in what follows. Included among these are suggestions, based (ultimately) on diachronic reasoning, recognizing the role of the adnominal genitive in sharing with the nominative the neutralizing of distinctions expressed elsewhere. Thus, as Fillmore describes (1968a: 8), Benveniste (1962) proposed that:

The so-called proper genitive basically results from the process of converting a sentence into a nominal. The distinction of meaning between ‘genitivus subjectivus’ and ‘genitivus objectivus’ constructions merely reflects the difference between situations in which the genitive noun is an original subject and those where it is an original object, the genitive representing a kind of neutralization of the nominative/accusative distinction found in the underlying sentences.

To this we shall come back. But we shall be looking, in particular, at suggestions (§§6.4, 7.4, 9.2.4) that the neutralization does not involve nominative/accusative (or ‘subject/object’) but semantic relations, and that what is involved is not a relationship ‘converting a sentence into a nominal’ but a relationship in derivational morphology, the derivation of a noun from a verb.

Perhaps what these early twentieth-century attempts to make precise and extend the classical tradition serve to make most plain are the difficulties in going beyond the rather general and unarticulated idea of ‘case’ and ‘case forms’ that is offered by this tradition, particularly the Rumpelian offshoot.
I now attempt to sum up what it is we can extract as common from the
tradition, with all these limitations in mind.

2.1.4 Conclusion: what is a grammar of case?
At this point, against this exceedingly brief sketch of a historical background,
we can perhaps give a rough characterization of what I shall call a level 1
grammar of case. I suggest something along the lines of:

Grammar of case level 1
A grammar of case gives an account of the syntax of the relations that in
some languages are expressed by case inflections.

This leaves the identity of the relations vague; but they presumably include
both grammatical relations and semantic relations. Grammatical relations are
notionally empty, as is usually assumed of the subject relation signalled by the
nominative; semantic relations have notional content, as signalled by the
‘local’ cases of Finnish. However, the division between ‘syntactic’ and ‘local’
is controversial, as we have seen; and both the syntactic and semantic content
are controversial.

This formulation of what constitutes a grammar of case is not as anodyne as
it might seem, insofar as it requires that such a grammar should be able in
principle to express a certain kind of generalization; and it seems to me to
represent a reasonable if basic requirement. It is, however, as we shall see, a
requirement not accepted by many twentieth-century grammars. I shall sug-
gest in §2.2.3, indeed, that most recent ‘theories of case’ fail to meet this
requirement in any unified non-ad hoc way. But the requirement is, in some
respects, otherwise so bland that it could apply to almost any grammar written
within the classical tradition. Thus presence or lack of such a concern roughly
divides work of the classical tradition from the twentieth-century proposals
that sought to supplant it, which we look at in the section that follows.

In addition, however, what the tradition gradually had come to add to its
concern for these relations, as expressed in the formulation just given, was the
explicit recognition that the syntax of these relations involves adpositions as
well as cases. So that by the nineteenth century there seemed to be some
agreement within the tradition that the formulation just given could be
amplified to give explicit reference to adpositions, at least, as a manifestation
of ‘case’:

Grammar of case level 2
A grammar of case gives an account of the syntax of the relations that are
typically expressed by case inflections or adpositions.
Such a concern as is expressed here is even further from the aims of the twentieth-century grammars that came to be more and more typical and influential, including most so-called ‘theories of case’.

The ‘equivalence’ of case and adposition was something that had been recognized for some time in philosophical grammars. And in other ways their thinking outstripped the main tradition. Consider Chomsky’s description of the Port-Royal Grammar’s concern with ‘the problem of how the significant semantic connections among the elements of speech are expressed’ (1966: 44–5):

Chapter VI of the Port-Royal Grammar considers the expression of these relations in case systems, as in the classical languages, or by internal modification, as in the construct state in Hebrew, or by particles, as in the vernacular languages, or simply by fixed word order, as in the case of the subject-verb and verb-object relations in French.… Notice that what is assumed is the existence of a uniform set of relations into which words can enter, in any language, these corresponding to the exigencies of thought. The philosophical grammarians do not try to show that all languages literally have case systems, that they use inflectional devices to express these relations. On the contrary, they repeatedly stress that a case system is only one device for expressing these relations.

As we have noted, consonant with the last sentence, the Grammar recognizes that expression of the relations involves a range of different exponencies, including position.

This last suggests that, with respect to this ‘philosophical’ tradition at least, we can elaborate on grammar of case of level 2 at the very least as follows:

*Grammar of case level 2*

A grammar of case gives an account of the syntax of the relations that are typically expressed by case inflections or adpositions or position.

But also there is a recognition in what Chomsky describes of the Grammar—one not uncommon in the philosophical tradition—that these relations underlying the variety of expression are, to repeat the words of Chomsky, ‘the significant semantic connections among the elements of speech’. This is to anticipate in part a core proposition of later ‘case grammar’.

None of the grammars in the classical tradition provides an adequate articulation of a grammar of case, however. The role of prepositions (and position), for instance, remains sketchy. But something like a grammar of case of level 2 is often explicitly recognized as a desideratum within the classical tradition that continued into the twentieth century (in which we can include Hjelmslev (1935/7) and the others mentioned by Kuryłowicz (1949)). Such
work also continued many of the concerns of the sub-tradition of 'philosophical grammars'. It is not the case that 'the tradition of universal grammar came to an end more than a century ago', as Chomsky (1969: 5) asserts as a prelude to discussing the reasons for 'the decline of traditional linguistic theory'. It is only in the 'autonomist', anti-notional version of structuralism practised in the United States (which Chomsky inherited) that there was a substantial loss of the insights of the range of work to which the classical tradition on 'case' belongs.

The reasons for this are obvious in the case of 'case'. Both the formulations of grammars of case just given are based on the assumption that the relations involved, whether grammatical or semantic, have a syntax. And this offends, in the case of the latter relations, against any assumption that syntax is autonomous, that it makes no reference to semantic properties, in particular. And this offence came to be a major factor in the reaction against the tradition. To try to understand this, we must confront the coming of what I shall call 'the autonomists'.

2.2 The autonomists and other critics of the tradition

In some twentieth-century work, perhaps ultimately the most influential of it, there was a reaction against the classical tradition, and specifically its notion-alism, more specifically still the inclusion of reference to semantic relations in the syntax, even alongside 'grammatical' relations. Syntax was seen as autonomous from semantic considerations. This began, in relation to English, with the 'new grammar', which from the 1940s, particularly in the United States, began to challenge the school grammars of English of the time. A consequence of this was that, if the classical tradition failed adequately to articulate the case–preposition relationship, then the 'new grammarians' abandoned any attempt to do so. It was not part of syntax: what linked prepositions and case was their expression of (particularly semantic) relations. Expression of semantic distinctions was not the concern of syntactic descriptions.

2.2.1 The 'new grammarians'

The critiques by the 'new grammarians' of aspects of the tradition certainly had some force. The vernacular grammars that came forth in the seventeenth and subsequent centuries, and particularly the school grammar tradition of the nineteenth and twentieth centuries, made only marginal innovations to cope with differences between the 'vernaculars' and Latin. Moreover, the
classical tradition, flawed as it was, was applied with little understanding or consistency, partly as a result of whatever attempts there were to accommodate to the ‘vernaculars’. So that, for instance, in establishing word classes there was inconsistency in whether notional properties or morphological or functional or distributional properties were to be appealed to as decisive. Thus, the same grammar might define a noun as ‘the name of a person, place or thing’, an adjective as ‘a word that modifies a noun or pronoun’, and a preposition as ‘used with a noun (or noun-equivalent)’. And, as is familiar, the definitions themselves, particularly the notional ones, often cannot be applied unambiguously.

A twentieth-century traditional pedagogical grammar (Pink and Thomas 1934: 8–9) offers the following:

A Noun is a name of a person or thing. . . . A verb is a word which says something about the person or thing denoted by the subject of the sentence.

The latter definition is identical to the definition of the ‘predicate’ which has just been given in the same book. The ‘subject’ is, correspondingly, defined as ‘the word or group of words about which something is said’. Here the learner is almost totally dependent on the examples given for any enlightenment. See further, on the English pedagogical tradition, e.g. Michael (1987), Leitner (1991).

Such points are made rather forcibly in the flagship of the ‘new grammar’, Fries (1952: ch. 5), and in other works such as Nida (1960: ch. 2). And Gleason (1965: pt. I) provides a compact survey of these various more recent developments in grammatical thinking and their attitudes to the tradition.

However, in their reaction, and in line with the assumptions of the American structuralists of the middle decades of the twentieth century, the ‘new grammarians’ set themselves goals which are either unrealistic or simply vacuous, as illustrated by the following quotation from Fries (1952: 8):

It is my hope . . . that the linguistic specialist will not . . . impatiently discard the book with a hasty skimming, assuming that it is a popularization of well-known materials, and miss my effort not only to challenge anew the conventional use of ‘meaning’ as the basic tool of analysis in the area of linguistic study in which it has its strongest hold—sentence structure and syntax—but also to illustrate the use of procedures that assume that all the signals of structure are formal matters that can be described in physical terms.

If this simply means that there must be distributional or morphological reasons for recognizing different syntactic constructions, it does not represent, as more or less a definition of syntax, a particularly novel point of view,
except in its rejection of appeal to meaning. But, in particular instances, a particular utterance may be associated with alternative constructions, which we disambiguate on the basis of semantics/pragmatics: it is difficult to see what could be the physical correlates of structural ambiguity (despite attempts to provide it with phonological indicators, for example by Hill (1958)).

Moreover, the failure of Nida's (1960) 'immediate constituency' notation to provide, for example, a means of distinguishing between complement and adjunct—they are both for him 'modifiers'—allows him to ignore the conclusion that the distinction, though syntactically relevant, is best drawn in semantic terms. This is acknowledged later by, for example, Jackendoff (1977b: 264):

Complements [which include what he calls 'modifiers' (an unfortunate terminological mismatch)—JMA] can in fact be divided up on essentially semantic grounds, corroborated in part by syntactic evidence.

Complements satisfy the semantic valency of a predicator, though given ellipsis, either anaphoric or indefinite (though embodying some expectations), a complement in many cases need not be present, as in (13a):

(13)  a. Have you eaten (the oysters)?
       b. I ate (the oysters) (this morning)

The second post-verbal phrase in (13b), on the other hand, is an adjunct; it is not prescribed by the valency of the verb. In terms of the crude distributional indicators deployed by the 'new grammarians', such adjuncts share the distribution of complements.

Such attitudes of the 'new grammarians' are very relevant to our present more limited theme. In Fries (1952), for instance, 'case' is not mentioned, and prepositions figure only as 'group F' among the parts of speech, a group established on the basis of an 'indicator' that involves the ability to occur in the frames in (14):

(14)  A  1 F A  1 2 F A  1
    The concerts at the school are at the top
    A  1 F A  1 2 3 F A  1
    The dress at the end is dirty at the bottom

The numerals represent classes of 'lexical' words established in the same way; the capital letters are groups of 'function words'. This is, of course, quite non-explanatory (which seemed to be a virtue for the 'new grammarians'—see again Nida (1960: ch. 2; also Joos (1958))). It is not clear why such a class should occur in such a 'frame', or why this is an appropriate 'frame' to choose
Of immediate relevance to us, it is not clear how such grammars could capture the generalization required of a grammar of case of level 1 or 2.

### 2.2.2 Jespersen versus Hjelmslev on case

It is easy, and not just for the 'new grammarians', to find faults with the practice of traditional grammarians who wanted to attribute various different cases to present-day English nouns. The only obvious candidate in English as a morphologically marked case is the genitive; and it is rather marginal as a morphological element, given its well-known capacity to attach to the end of phrases, whatever the class of the final element in the phrase, as in (15), where it attaches to a phrase ending in a verb:

(15) the girl I met’s handbag

But much of the criticism of the invocation of case in relation to languages like present-day English was only partially fair to the intentions behind these proposals, which were designed to acknowledge that not just prepositions but also position or word order can signal the relations otherwise marked by cases.

We can associate such developments of the tradition with recognition of the refinement of a grammar of case of level 2 that I formulated as characterizing level 2', which embodies the assumption that these various modes can express the same relations. The positional possibility was already recognized in, for instance, the Port-Royal grammar, as we observed. But the intention of acknowledging the role of position in signalling relations was not generally consistently pursued within the general tradition.

However, it is such an intention—recognition of some equivalence between morphological case and position—that motivates, for instance, Hjelmslev’s suggestion concerning ‘cases’ in English (1935: 118–19), in my estimation:

Ainsi dans la série the boy sent his mother a letter il y a trois cas distincts reconnais-sables par l’ordre des éléments: un subjectif (the boy), un translatif (the letter) et un datif (his mother). Remarquons en passant que les distinctions constatées ne sont de rigueur que dans l’usage neutre (style normal prosaïque); en d’autres usages les syncrétismes admis par le système sont déjà réalisables. Mais là où il y a distinction dans l’expression, le cas subjectif est marqué par sa place devant le verbe; le translatif et le datif sont marqués par leur place après le verbe, et ils sont distingués mutuellement par leur ordre respectif.

The qualification ‘style normal prosaïque’ is important, however. It offers some recognition of the complexities of function associated with word order.
And there are obviously other questions to be raised concerning such an approach. And they were.

Jespersen, for instance, in the course of his criticism of similar suggestions made somewhat earlier (1924: ch. 13), lists the sentences of various types in (16a) alongside an alleged dative-accusative sentence such as (16b):

(16) a. I asked the boy a few questions
    I heard the boy his lessons
    I took the boy long walks
    I painted the wall a different colour
    I called the boy bad names
    I called the boy a scoundrel

b. Peter gives Paul’s son a book

And he comments (1924: 174) on the suggestion that the post-verbal sequence in (16b) contains a dative plus an accusative:

If we are to speak of separate datives and accusatives in English, I for one do not know where in this list the dative goes out and the accusative comes in, and I find no guidance in those grammars that speak of these two cases.

However, though (admittedly) Hjelmslev’s brief account (for instance) lacks appeal to such support, there are syntactic differences between alleged ‘dative-accusative’ sentences and those in (16a). Jespersen cites, and dismisses, phenomena to do with passivization. But the range of alternative systematically related structures, including passives, in which the set of arguments in (16b) can occur is, nevertheless, unique. And it is a pity that Jespersen devotes so much of his attention in his discussion to the scarcely taxing demolition of the easy target constituted by a work such as Sonnenschein (1921) (the product of his favourite ‘bad guy’). The association of position with the signalling of ‘case’ is not in principle to be lightly dismissed; it demands more careful attention than Jespersen affords it.

Moreover, if we interpret the relations involved here as semantic, as does Hjelmslev, in the case of the post-verbal elements (at least), then their identification is ensured by the semantic valency of the verb, which regulates the syntax. This, I shall suggest, is the crucial insight of ‘case grammar’. But, again, this is to anticipate too much. All that I have tried to establish here is, in the first place, the development of a set of grammars, the ‘new grammars’, that are apparently not grammars of case, even at level 1. Secondly, I have tried to show that criticism by the ‘new grammarians’ and others are not always well founded, while acknowledging some of the inadequacies of manifestations of the classical tradition.
2.2.3 Early transformational-generative grammar

Early transformational-generative grammar was in many respects transparently the offspring of the American structuralist matrix that fostered the 'new grammarians'—despite its overt embracing of very different philosophical attitudes. Such grammars of this period, in particular, are clearly also not grammars of case. In this respect there is a seamless transition from Roberts’ pedagogical ‘new grammar’ of 1956 to his pedagogical transformational grammars of 1962 and 1964: the only major innovation is the introduction of transformations. And this is little changed in Chomsky (1965). From our point of view, the major innovation over earlier transformational studies that we can associate with the tradition initiated by this work is the installation of a pre-transformational ‘deep’ syntactic structure which is associated with access to the lexicon and a ‘surface’ structure which is created by the application of (structure-changing) transformational rules. Crucially, grammatical relations are associated with both ‘deep’ and ‘surface’ structures.

The framework advanced in Chomsky (1965) is difficult to reconcile with the enthusiasm for the treatment of case systems by the Port-Royal grammarians and others that is expressed in the quotation cited in the conclusion to the preceding section, which I repeat here, but now along with the sentence that in the text comes just before the original quotation (1965: 44–5):

The identity of deep structure underlying a variety of surface forms in different languages is frequently stressed, throughout this period, in connection with the problem of how the significant semantic connections among the elements of speech are expressed. Chapter VI of the Port-Royal Grammar considers the expression of these relations in case systems, as in the classical languages, or by internal modification, as in the construct state in Hebrew, or by particles, as in the vernacular languages, or simply by fixed word order, as in the case of the subject-verb and verb-object relations in French… Notice that what is assumed is the existence of a uniform set of relations into which words can enter, in any language, these corresponding to the exigencies of thought. The philosophical grammarians do not try to show that all languages literally have case systems, that they use inflectional devices to express these relations. On the contrary, they repeatedly stress that a case system is only one device for expressing these relations.

One transparent interpretation of this passage (without the first sentence) is as a blueprint for a grammar of case level 2'. And what Chomsky describes goes beyond even that (and in the direction of ‘case grammar’) in describing what is expressed in these various ways as being ‘the significant semantic [my italics—JMA] connections among the elements of speech’. This renders bizarre Chomsky’s apparent identification, at the beginning of the passage just
cited, of these cross-linguistically manifested 'semantic connections' of the *Grammar* with the proposed (autonomously) syntactic 'deep structure' of Chomsky (1965), which is also in practice insistently English-particular. To identify the 'semantic connections' of the *Grammar* with 'deep structure' would constitute a gross misrepresentation of the *Grammar* and of the 'philosophical grammar' tradition in general.

Chomsky (1965) provides at most only an elliptical and very partial access to anything that might be called a grammar of case of level 2, or even of level 1. This work contains no direct account whatsoever of the semantic relations expressed by prepositions or case. This is perhaps unsurprising in the latter instance, of course, given the paucity of case inflections in English and their not-obviously-semantic character. And there is indeed only one indexed mention of 'case' in Chomsky (1965: ch. 2, n. 35), which contains a (hedged) formulation (in wording reminiscent of Hjelmslev's appeal to 'style normal prosaïque') in which 'case' might be said to be 'determined' by word order:

Case is usually determined by the position of the noun in surface structure rather than in deep structure, although the surface structures given by stylistic inversions do not affect Case.

This is not a very precise, or generalizable, suggestion. But it must again be conceded that case inflection is certainly not prominent in English.

Nevertheless, within the tradition that proceeded from this work there later did appear a 'case theory' (for example Chomsky 1981: §3.2.2; 1995: §1.4.3), but one that bears little relations to traditional concerns or conceptions. '(Syntactic) case' therein is an 'autonomous' syntactic device that 'is always present abstractly' (Chomsky 1995: 110). This involves the introduction of another of those autonomous syntactic elements with (at least potentially) no overt realization. As with (other) 'empty categories' (see Chapters 11 and 12 below), such an element should be eschewed in a properly restrictive theory.

Since then there has indeed developed a variety of such 'theories of case' (see for a convenient survey Butt (2005: esp. chs. 3–5)). Some of these 'theories' struggle to recapture an understanding of the range of phenomena encompassed by the classical tradition, with its acknowledgment of the equivalence, in some sense, of morphological case, adpositions, and position. But, it seems to me, these later 'theories of case' do not further the traditional position, except perhaps in terms of explicitness, and fail to offer any uniformly articulated theory of case to rival the traditional view. None of them contributes much to an understanding of the relationship between the areas encompassed by the classical tradition. Indeed, as with Chomsky's notion of 'case', they have little empirical import (with few exceptions—such as Smith...
(1996)), but, rather, reflect the internal articulation of the frameworks in which they are embedded. I therefore do not pursue these traditions as such here, though aspects of some of them will be commented on as we proceed.

Also within the framework of Chomsky (1965), even the grammatical relations are excluded from the syntax as such, despite the positing of two sets of these, one associated with 'deep structure', the other with 'surface structure'. Grammatical relations like subject are defined on categorial configurations, so that, as is familiar, the 'deep subject' and 'deep object' of a sentence is the noun phrase that in 'deep structure' appears in the respective configurations in (17a.i):

(17) a.i \[ S \rightarrow NP \]
    a.ii. Subject-of [NP,S]

b. \[ VP \rightarrow NP \]
   b. Direct-Object-of [NP,VP]

Linearity, however, is not relevant to the definition of these relations at 'deep structure', so the definitions reduce to (17a.ii). Chomsky concedes that 'somewhat different definitions are needed for the surface notions' (1965: 221). This immediately raises the question of whether the same relations are indeed involved in that case. What is the independent shared content that justifies identification as '(direct) objects' of, for example, 'surface (direct) object' with 'deep (direct) object'? And why does this override the patent differences in the definitions of the 'deep' and 'surface' relations? And other questions have arisen.

The relations defined in (17) play no role in the syntax. Indeed, it is unclear what role they might have anywhere. Katz (1972: 109–11) suggests that they have a semantic role. But any semantic generalizations can refer directly to the defining configurations rather than having to invoke the relations (Anderson 1977: 17). The only apparent motivation for their inclusion in the grammar is the desire to show that the grammar presented in Chomsky (1965) can accommodate all those kinds of information provided by 'traditional' grammars that Chomsky pronounces as 'without question, substantially correct' and 'essential to any account of how language is used or acquired' (1965: 64).
But his suggestion concerning the status of ‘grammatical relations’ reverses the traditional conception of the relationship between the relations and the structural properties that signal their presence. The whole burden of the classical tradition concerning case, adposition, and word order is that the relations cannot be identified with or by their manifestations.

Despite the relations allowed for by Chomsky apparently being superfluous in his framework, problems with such definitions have been much discussed. Issues include: the invocation, as already alluded to, of two sets of relations, ‘deep’ and ‘surface’, which involve different kinds of definition (Chomsky 1965: ch. 2, n. 32); the questions raised by ‘double-object’ constructions; the intractability of ‘non-configurational’ languages and other indications that subjecthood may have a more independent role; and the possible non-universality of these relations. For a detailed contemporary critique see for example Dik (1968: §8.2). We return to some of these at various points later. But perhaps most relevant to our present concerns is the observation that the grammar of Chomsky (1965) is inconsistent in its treatment of relations.

Included in the ‘illustrative fragment of the base component’ given in Chomsky (1965: ch. 3, §3) are the rules in (18):

\begin{align*}
\text{(18) a.} & \quad \text{Predicate-phrase} \rightarrow \text{Aux}^{\wedge} \text{VP (Place) (Time)} \\
\text{b.} & \quad \text{VP} \rightarrow \text{V (NP) (Prep-phrase) (Prep-phrase) (Manner)} \\
\text{c.} & \quad \text{Prep-phrase} \rightarrow \text{Direction, Duration, Place, Frequency, etc.}
\end{align*}

The rules provided do not offer an expansion of the ‘Place’ and ‘Time’ categories of (18a); but presumably one possibility is (19), in the light of the likes of (20):

\begin{align*}
\text{(19) Place, Time} & \rightarrow \text{Prep-phrase} \\
\text{(20) We shall sell wine in Adelaide in the future}
\end{align*}

By combined application of (18) and (19), Place, at least, both immediately dominates and is immediately dominated by Prep-phrase, as can be seen in (21):

\begin{align*}
\text{(21) a.} & \quad \text{Place} \quad \quad \quad (\text{by (18a) + (19)}) \\
& \quad \quad \quad \text{Prep-phrase} \\
\text{b.} & \quad \text{Prep-phrase} \quad \quad \quad (\text{by (18b) + (18c)}) \\
& \quad \quad \quad \text{Place}
\end{align*}

This is one kind of inconsistency, one that is damaging enough. But it is clear that yet another, more fundamental inconsistency underlies this one.
For the alternative expansions in (18c) all involve relations, in this case semantic relations (as observed by Fillmore (1965)). Within the (autonomous) syntax, categorial recognition is given, paradoxically, to semantic but not syntactic relations—though it is not acknowledged in Chomsky (1965) that this is what is involved. And the primary motivations for including these categories are apparently semantic; they are given no syntactic motivation, at any rate.

One problem here is that the semantic distinctions among Place and the rest are signalled by prepositions and the lexical items in the noun phrases that complement them, even though, according to (18c), the preposition is in this case outside the Place phrase itself. The semantic properties of Place are carried by elements outside the Place phrase. This suggests that this is not the way to characterize semantic relations grammatically—by the back door, as it were. And this failure is a consequence of an attempted autonomist attitude: syntax does not invoke semantics; the syntax of syntactic elements is independent of their semantics.

Moreover, in this particular instance, the semantic properties associated with Place, Direction, etc. do have syntactic consequences. Thus in German adverbs of Time and Manner normally precede those of Place, as in (22):

(22) a. Er geht jetzt nach Hause
    he goes now to home
    ('He is going home now')

    b. Er fährt mit dem Zug nach Hause
    he travels with the train to home
    ('He goes home by train')

One can exclude such phenomena by fiat from ‘syntax’; but this is a rather transparent device to avoid disconfirmation of the autonomy hypothesis at the expense of the traditional understanding of the domain of syntax.

In these instances, of course, one might appeal to the complement/adjunct distinction (adjuncts before complement in (22)), but that distinction too is semantically based (§2.2.1). Moreover, there are other instances of ordering involving adjuncts of different semantic classes, as established by Frey and Pittner (1998; 1999). Thus, the comitative in (23) precedes the instrumental:

(23) a. Er hat (zusammen) mit einem Freund mit einem
    he has (together) with a friend with a
    Kleintransporter den Schrank herbeigeschaft
    minivan the wardrobe hither.brought
(‘He (has) brought the wardrobe here with (the help of) a friend in a minivan’)

b. (?) Er hat mit einem Kleintransporter (zusammen) mit einem Freund den Schrank herbeigeschafft

As Frey and Pittner (1998) put it, (23), their (56a, b) shows ‘dass man Instrumentaladverbiale lieber beim Verb plaziert als Komitative [...] Diese semantische Präferenz hat aber keinen syntaktischen Niederschlag im Sinne von syntaktisch fixierten Grundpositionen, die die Adverbiale relativ zueinander einnehmen würden.’

There are reasons for thinking that Place and Time, for instance, are composites (phrases) that have in common their relational structure: relationally, they are both instances of location in different dimensions, as is discussed later. It’s the substance of the dimension rather than the relation in which they differ; and for (22) it is the former which is relevant to the syntax. But such relations themselves also have a syntax, as well as these composites. Let me give a preliminary illustration—though what follows will illustrate this in some depth.

It is not implausible to distinguish between a semantic relation Source and a semantic relation Path, presumably subtypes of Chomsky’s Directional. These are respectively illustrated in (24a–c) and (d)—where we’re not concerned with whether the post-verbal phrases are complements or adjuncts (where the notation of (24c) indicates that the conjunction cannot be omitted):

(24)  a. *Fred came from Birmingham out of the Midlands/North
b. *Fred came from Birmingham and out of the Midlands/North
c. People came from Birmingham *(and) from Leicester
d. Fred came through the valley (via Stirling)(and across the plain)

Comparison of (24a, b) with (d) shows that only the Path can be duplicated, with or without coordination; the Source cannot be duplicated if a single journey is involved, whether or not the second Source is coordinated with the first (24b) or not (24a). (24a, b) are either tautologous (Birmingham, England, is in the Midlands) or contradictory (Birmingham is not in the North). Of course, the Source can be coordinated, without difficulty if this is compatible with the subject and aspect, as in (24c); but an uncoordinated version is not available. All of this ties syntactic possibilities to semantic relations—as assumed, amongst other things, in a grammar of case.
2.3 Conclusion

From what I have described here concerning early transformational grammar, one gets the impression of a grammar of case struggling to escape from the bonds of Chomsky (1965), as implied already by Matthews (1967: 132–5). Chomsky’s book illustrated that it was a time to return to grammars of case, to explore the aspirations of the philosophical grammarians, so misleadingly extolled by Chomsky. Thus, more generally, what I’ve said so far is intended to illustrate something of the extent to which what happened at this point was a return. And this is already apparent in terms of the background invoked in Anderson (1971b), as well as in the brief survey of recent ideas on case offered by Fillmore (1968a). American structuralism and its transformational offshoot, on the other hand, represented a significant (and, I shall argue, unnecessary) break with ‘traditional grammar’.
Early Case Grammar

A return to a concern with grammars of case was attempted in a variety of work in the late 1960s and 1970s, some of which came to be referred to as ‘case grammar’. What further distinguishes what it seems to be appropriate to label ‘case grammar’ from the main tradition of grammars of case, however, is the adoption of a more restrictive and explicit view of the relationship between semantic and grammatical relations than is embodied in a grammar of case of level 2. A level 2 grammar, indeed, doesn’t specify any relationship between the different kinds of relation. Such a development is first evident in the work of Fillmore (1965; 1966; 1968a; 1971), but it is also manifested, independently to begin with, in a range of other contemporary work, including Anderson (1968a; 1969; 1971b), Brekle (1970), and Chafe (1970), as well as to some extent in variants of ‘functional grammar’. I shall concentrate to begin with on Fillmore’s work, which for many people, particularly in the USA, came to be identified with ‘case grammar’, and which will help us, I think, to establish what is distinctive about what we might want to call ‘case grammar’.

What comes to be envisaged at this point is what I shall refer to as a grammar of case of level 3:

Grammar of case level 3
a) A grammar of case gives an account of the syntax of the relations that are typically expressed by case inflections or adpositions or position.

b) Among these relations semantic relations have primacy.

This formulation adds to that for grammar of case level 2’ (= (a) here) the stipulation (b) that semantic relations have primacy over grammatical. ‘Primacy’ can be articulated in various ways, of course, depending on other properties of the grammar; the determination of how it is to be articulated constitutes one unfinished task of early ‘case grammar’, or at least one that came to be seen as not satisfactorily concluded. However, assertion of the ‘primacy’ in principle of the semantic over the grammatical relations distinguishes ‘case grammar’ from most other grammars of case.
On the other hand, it seems to me that ‘case grammar’ is in this respect more clearly than ‘core’ transformational-generative grammar the ‘spiritual heir’ of the tradition of philosophical grammars to which the work of the Port-Royal group belongs. I have contended that the work of that group is not a prelude to the central transformational tradition; such a view is the result of wish-fulfilment based on perceived shared ideas in the philosophy of mind rather than reflecting comparison of grammatical analyses in the two traditions. As I have suggested, the work of the Port-Royal group incorporates a grammar of case of at least level 2. And I now suggest that they seem to have in mind a grammar of level 3, as just formulated, though this is not precisely articulated. And I think this emerges clearly even from just a comparison of the quotation concerning Port-Royal from Chomsky given in §2.1.4 with what follows. But for a more detailed basis for comparison, see for example Lancelot and Arnauld (1660: chs. 7, 11, 12).

3.1 The Fillmorean initiative

Against the background of transformational-generative grammar, Fillmore (1965; 1966; 1968a) suggested a transformational relationship between (structures containing) semantic relations, on the one hand, and (structures associated with) grammatical relations, on the other. Gone are the ‘deep’ grammatical relations of Chomsky (1965); instead, the identification of ‘surface’ grammatical relations is based on structures derived from ‘underlying’ structures which crucially contain nodes corresponding to different semantic relations; there are only ‘surface’ grammatical relations.

Even at this point we can be a little more specific about the form of the grammar proposed by Fillmore, which can be spelled out as follows:

*Fundamental 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 predications.

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 attempts to highlight two of the concepts that most clearly serve to distinguish early ‘case grammar’ from the main transformational tradition. Let us look in more detail, and more formally, at what these ‘fundamental concepts’ involve.
3.1.1 ‘Cases’ and grammar

Thus, Fillmore suggests ‘underlying’ structures like the respective representations given in (2) for the sentences in (1):

(1) a. The door opened
    b. The girl opened the door

(2) a. 

```
```

Past open the door

b. 

```
```

Past open the door (by) the girl

(cf. Fillmore 1968a: §3.1). The S(entence) consists of a M(odality) constituent and a P(roposition); the former is realized by various sentential modalities, including tense, and the latter contains the verb and its arguments. O and A are semantic relations, what Fillmore calls ‘case relations’, or simply ‘cases’. I shall return in due course to the identification of the semantic relations O(bjective) and A(gentive). K is a ‘kasus’, a non-phrasal category that in English is usually realized by a preposition; a preposition, such as by in (2b), is thus (whatever else) a kind of ‘case form’. But we can already see
from these representations that apparently not all instances of ‘cases’ are marked by a preposition. I take this up again in a moment.

Part of the restrictions on what arguments a verb can take is specified in terms of the set of semantic relations it can co-occur with in a proposition, its ‘case frame’. In this instance we say that the frame for open is at least as in (3), where the brackets enclose an optional element, one not associated with all instances of open:

(3) \[ \text{open O (A)} \]

(I’m not concerned at this point with whether (3) is exhaustive or not.) The content of the ‘case’ node percolates down into its kasus and noun phrase constituents; and this may be reflected in, for example, choice of preposition, so that by is, among other things, a marker of A.

The elements in both (2) and (3) are not ordered in sequence; the trees in (2) are ‘wild trees’ (Staal 1967). This comes close to being another ‘fundamental concept’, but one that was not fully exploited until somewhat later in the development of ‘case grammar’, as well as not as distinctive of ‘case grammar’ as concepts (a) and (b). We shall return to begin to look at the significance of this further ‘concept’ in §3.1.2.

On Fillmore’s account, only after the configurations associated with grammatical relations are created is order determined, as in (4):

(4) a. 

```
S  
/   
NP M       P      
/     
the door Past open
```

b. 

```
S  
/   
PN M       P  
/     
the girl Past open the door
```
The subject in (4a, b) is selected in terms of a hierarchy of ‘cases’ in which A outranks O as subject choice. The ‘passive’ in (4c) involves a ‘marked’ selection of subject triggered by the presence of [+Pass] on the verb, and signalled as ‘marked’ by the presence of the be and the participle form. Formation of subject and object involve pruning of the case (and kasus) nodes as well as positioning of the remnants.

There are (by now familiar) problems with the kind of analysis of passives proposed here. In the first place, it involves attributing to transformations the power, allowed to early transformational grammars, of introducing lexical material, here be. This is undesirable on theoretical and (in this case) empirical grounds. It 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. Later developments of passive in ‘case grammar’ (as described in §§9.2, 12.2.2) offer interpretations compatible with more restrictive syntactic assumptions, and more in accord with other observations concerning the syntax of passives, as anticipated in what immediately follows.

Secondly, it is the presence of be that determines the morphological form of the other verbal; normally such rectification or government of morphological form goes from an element to its complement, as with the preposition and pronoun in (5), where the complement is underlined:

\[
\text{(5) She went towards } \underline{\text{him}}
\]
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 (4c).

Finally here, the representation in (4c) does not express the adjunct status of the *by*-phrase, which as such is optional; the sentence is complete without it, it is intransitive. In many languages such a phrase is preferably or indeed obligatorily absent.

However, these are problems shared by the standard transformational analyses of the time. They are problems shared by any analysis that doesn’t recognize that the passive contains two verbals, with the non-finite verb form subordinate to the ‘auxiliary’, and by an analysis that fails to recognize 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 subject selection hierarchy of ‘cases’; indeed, it is supportive thereof. For instance, if the non-finite in passives is ‘intransitive’, i.e. it 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.

3.1.2 Linearity

I should say something at this point about the absence of linear precedence relations from (2) and (3). Anderson (1971b) also assumes no initial ordering; underlying structure involves ‘wild trees’, as envisaged by Curry (1961) and Šaumjan and Soboleva (1963). And ordering is derived on the basis of other information, and imposed more superficially. This view is defended in Anderson (1977: §1.11), particularly against objections raised by Chomsky (1965: 124–6) and Bach (1975). Bach argues for a universal base which attributes the same order to the elements of all languages, but fails to make a convincing case on either empirical grounds or grounds of restrictiveness: he claims that this hypothesis ‘rules out more possible states of affairs within its domain of application’ (1975: §1), which is simply not the case.

Such a (‘universal underlying word order’) hypothesis continues to be raised in various forms, but not in any way that disturbs the conclusion of Koutsoudas and Sanders (1974: 20):

The most restrictive and empirically most well-supported hypothesis about constituent ordering is in fact that which asserts that all underlying representations are wholly free of ordering specifications, that such specifications are assigned by rules to the superficial groupings of superficial constituents, and that all ordering relations are derivationally invariant.

(Cf. too Sanders 1970; 1972.)
Linear order in underlying structure is necessary only if it is assumed that all subsequent derivation essentially involves manipulation of linearity, transformations that mediate between different linear orders. It is this assumption that underlies Chomsky’s (1971) once-contemplated rejection of transformations involving ‘vacuous movement’, transformations that affect only constituency. Such a rule is the traditional ‘raising’ operation postulated to derive the object of believe in (6) from the subject of be:

(6) I believe him to be dishonest

The order of elements is unchanged under raising in this instance; only the bracketing is altered. This violates the contemplated ban on ‘non-vacuous movement’. Chomsky (1977a: 113) comments: ‘One might then raise the question whether cyclic transformations should not be constrained so as to forbid operations that never change the terminal string of a phrase marker but only its structure, as in the original formulations of subject raising to object position (see, for example, Kiparsky and Kiparsky (1970)).’ On the assumption of invariance, however, such a ban on ‘vacuous movements’ is meaningless: all structural changes are ‘vacuous’ in this respect; they involve only at most reattachments.

Derivational invariance, on the other hand, is not quite fully adopted, however, in Anderson (1977), which envisages ‘post-cyclic’ assignment of precedence. But perhaps the major shift in the variant of ‘case grammar’ that evolved from this last work was the adoption not just of invariance in linear position in derivations but also of configurational invariance: as well as no movements, there are no reattachments. This has been formulated as ‘inalterability’ (Böhm 1982: §§1.1.2, 2.1.2; 1998a: §2.2.1; Anderson 1991: §§4–5; 1997: §§1.3, 3.1):

**Inalterability condition**

The relations of dependency and sequence assigned to an element are inalterable.

Much of the elimination of movement suggested in (for instance) Anderson (1977) involves (re)interpretation of alleged movements as reattachment. What subsequent work adds, in the light of inalterability, is the reinterpretation of ‘reattachment’ as ‘supplementary attachment’: attachments are added, not substituted one for another.

But again I am anticipating. We take these matters up in some detail in Chapters 11 and 12. Let us at this point return to the sets of representations in (2) and (4) and the relationships between the sets. What is relevant at this point is the observation that the derivation eventuating in (4) involves
crucially reattachment: the subject is extracted from the Proposition to attach to S. Linearity is contingent upon this. A (linearity-based) variation of such a derivation was to resurface later as the ‘VP-internal subject hypothesis’ (e.g. Kitagawa 1986; Speas 1986; Rosen 1990; Koopman and Sportiche 1991).

3.1.3 ‘Cases’ and the subject-selection hierarchy

(4a) and (b) differ in their subject selection because the Agentive argument is preferred as a subject over the Objective: there is a hierarchy of semantic relations with respect to selection as subject. (7) gives the relevant sub-part, where A outranks O:

(7) Subject selection hierarchy: A > O

Passive sentences represent, as noted, a ‘marked’ option where the abnormal elevation of the lower-ranking O is signalled by the presence of Be and the verb morphology. In (4) subject and object are created by pruning of the case nodes O and A and the associated kasus; and ‘surface’ subject and ‘object’ can be defined in this circumstance as in (2.5) (i.e. example (5) in Chapter 2). The configurations associated with grammatical relations result from rule-governed neutralization of semantic relations. The A that doesn’t undergo subject formation in (4c) is not pruned (along with its associated kasus), and the kasus is realized as by.

The hierarchy can be further extended. Let’s look at one step in this direction at this point. It is often assumed that the sentences in (8) all share the semantic relations O, A, and what Fillmore (1968a) called ‘D(ative)’:

(8) a. John gave the books to my brother
    b. John gave my brother the books
    c. The books were given to my brother
    d. My brother was given the books

Let’s assume for present purposes, consistent with analyses of the time, that they do. (8a, b) show that Agentive outranks both Dative and Objective with respect to subject selection, as indicated in an extended version of (7):

(7’ Subject selection hierarchy: A > D,O

We haven’t at this point looked at evidence for ranking O and D, which will be our concern elsewhere (for example in §5.4.3).

We can see already that Dative and Objective are (in some sense) ‘alternative objects’, however, as revealed by (8a) vs. (b). These selections of ‘primary object’ (Dryer 1986), closest to the verb, correspond to different passives, (8c) and (d) respectively. The Dative outranks the Objective as a ‘primary object’.
This is a grouping at odds with the traditional distinction between ‘direct’ and ‘indirect’ objects, where the Dative is distinguished as the latter and the former includes the Objective in simple transitives and in ‘double-object’ constructions. And there are indeed other language systems which apparently appeal to the ‘direct’/‘indirect’ distinction. Anderson (2005a: §1.3) discusses some of the literature concerning this typological distinction; and see further Chapters 6 and 12 below.

At this point we leave many issues concerning these constructions unresolved. It is not clear, for instance, why, if (8c) and (8d) are equivalent, there is apparently no overt kasus for the O in (8b), which seems to have been ‘passed over’ as ‘primary object’. Is it still an ‘object’, and indeed, like the ‘primary’ in (8a) ‘direct’, rather than ‘indirect’, like the other ‘object’ in (8b), as many traditional accounts would have it? And there are of course other problems to which we shall come back (particularly in §12.2.2). But if, given some such analysis, we assume that the kasus of O in (8b) has also been pruned (by some extension of ‘object formation’), then we can define various (‘surface’) grammatical relations in terms of configuration and sequence, as envisaged for ‘surface’ relations by Chomsky (1965: ch. 2, n.32):

By (9) my brother and the books are both ‘objects’, as immediately dominated by the verb phrase node, but we can distinguish, for instance, an ‘indirect object’ from a ‘direct’ in terms of sequence. This hierarchical equivalence of the two post-verbal noun phrases has been questioned in a range of subsequent work, some of which we shall return to (for example in Chapters 12 and 13), in considering the further development of the ‘case grammar’ interpretation of such sentences as we find in (8).

The crucial innovation associated with the various derivations described here, with respect to conventional transformational grammar, is obviously the introduction into the syntax of semantic relations, in the shape of Fillmore’s
‘cases’. Fillmore (1968a: 24–5) offers the definitions in (10) for the three ‘cases’ we have been looking at so far:

(10)  

\[ \begin{align*} 
\text{Agentive (A),} & \text{ the case of the typically animate perceived instigator of the action identified by the verb.} \\
\text{Dative (D),} & \text{ the case of the animate being affected by the state or action identified by the verb.} \\
\text{Objective (O),} & \text{ the semantically most neutral case, the case of anything representable as a noun whose role in the action or state identified by the verb is identified by the semantic interpretation of the verb itself; conceivably the concept should be limited to things which are affected by the action or state identified by the verb.} 
\end{align*} \]

I ignore the qualifying last clause of this last definition in what follows: it introduces considerations to which we give attention in Chapter 6. These definitions and those of the other ‘cases’, and indeed of the set of ‘cases’, have been the subject of much discussion, including by Fillmore himself (see for example 1968b; 1969; 1969). And we shall, of course, return to this whole area at some length in the chapters that follow—particularly, in Part I, in Chapter 5.

3.1.4 Conclusion and prospect

I include here the complex of questions surrounding the identification of the ‘cases’ as one of several basic issues raised by Fillmore’s proposals that have been the subject of debate, and which I now want to address in turn. The listing in (11) is intended to provide us with a framework for organizing what is to follow:

(11)  

\[ \begin{align*} 
\text{Some issues raised by Fillmore’s proposals} \\
& \quad \text{i) the representation of case relations and forms} \\
& \quad \text{ii) the rejection of ‘deep structure’} \\
& \quad \text{iii) the identification of case and of individual case relations} \\
& \quad \text{iv) the general syntactic framework} 
\end{align*} \]

Different proposed resolutions of these issues have been offered—including again by Fillmore himself; or they have (often) been ignored. And proposed answers to the questions raised by (11), and particularly by (iii), have been the basis for some of the major criticisms of the ‘case grammar’ enterprise. I am going to look at the components of (11) in order, coming last to perhaps the most contentious areas, represented by (11iii) and (11iv). The last arises from a consideration of whether a grammar of case, in particular, is best embedded in a transformational grammar. Let’s start, then, with (11i). One aspect of this is the concern of what follows in this chapter; but it will be a continuing theme in the subsequent discussion, as we see ideas of representation evolve in
various ways in relation to other developments, particularly in response to (11iii) and (iv). Chapter 4 explores the consequences of (11iii).

3.2 The representation of case relations and forms

Fillmore himself was uncertain about the proper representation of ‘case’ (1968a: 87); and many workers using his framework have simply ignored the question. This meant that much of what might be expected of a grammar of case was neglected. The crucial relationship between adposition and case inflection is not clarified—and in particular what I shall call the ‘Kuryłowicz problem’, on the basis of the quotation from his work given in §1.1. This problem may be formulated as the question: how does one articulate the relationship between adposition and case inflection when they co-occur, as in (12)?

(12) a. Ad flūmen it puella
to river:ACC she-went girl

b. In Graeciam pervēnit
in Greece:ACC s/he arrived

In each instance, the adposition and case inflection collectively express a non-interior versus an interior goal respectively. If the adposition and inflection are instances of the same category, we need some account of how the division of labour between the two instances is articulated, as well as an explication of the co-occurrence restrictions. This can emerge only from a more explicitly formulated notation. And we return to the problem later, at a point in the development of the framework when it might be more explicitly addressed. At this point I look at an early representational suggestion—or rather an interrelated set of suggestions—that pave(s) the way for this later discussion of the Kuryłowicz problem.

3.2.1 Dependency

Robinson (1970b) and Anderson (1971a) argue for characterizations of semantic relations in terms of dependency relationships (in the sense of the tradition(s) of Tesnière (1959) and Hays (1964)). In terms of the framework of Anderson (1971b) (though retaining Fillmorean labels—and see for example Anderson (1977: §2.2) for a much fuller discussion), we should reinterpret (2b) as in (13), where phrase labels have been replaced by the labels of their characteristic element, which is said to govern the other, subordinate elements
in the phrase—modal is characteristic for sentence, verb for proposition, the relational marker for ‘case’, noun for noun phrase (for the moment):

\[(13)\]  

\[
\begin{array}{cccc}
M & : & V & : \\
: & : & : & : \\
: & : & O & A \\
: & : & : & : \\
: & : & : & : \\
: & : & : & : \\
\end{array}
\]

This ignores the internal structure of the noun phrases. Each arc (directed line) in (13) initiates in a head and terminates in a dependent, with the asymmetrical relation conventionally represented as higher placement for the head; the lines are thus arcs given direction, or orientation, by the dependency relation. We can think of the dependency relation as ‘immediate subordination’: in (13) all of the nodes other than Modal are (ultimately) subordinate to Modal, but only Verb is dependent on it.

We should note too that, with respect to these particular dependency relations, each category is subcategorized for its dependent(s). To anticipate a little in terms of notation, we can represent these subcategorizations as in (14):

\[(14)\]  

\[
\begin{array}{cccc}
M/V & : & V/O(A) & : \\
: & : & : & : \\
: & : & O/N & A/N \\
: & : & : & : \\
: & : & : & : \\
: & : & : & : \\
\end{array}
\]

In accordance with the notation of Anderson (1997), the subcategorization is indicated to the right of the slash. The subcategorization of the verb must be included in its lexical entry; but the other subcategorizations can be supplied by lexical redundancy. Verb is the necessary dependent of Modal, and Noun is the unmarked dependent of the semantic relations.
Not all dependents are subcategorized—for by their heads, however, as we shall see; so that the dependency relation cannot be reduced to subcategorization. The dependents in (13, 14) are complements; other dependents are adjuncts. Adjuncts are optional modifiers of a head; we return to their characterization in §9.2.

A head is an atomic, non-phrasal element which may be accompanied by (possibly phrasal) complements and/or by optional modifiers/adjuncts. It is a ‘construction-forming’ element; it forms constructions of which it is the characteristic element. There is no need to appeal to other, contingent criteria and the controversy these arouse (see for example the discussions in Mel’čuk (1979); Hudson (1980a; 1980b; 1987); Dahl (1980); Zwicky (1985); Corbett et al. (1993)). But that, again, and more seriously, is to anticipate later developments than what emerges in early ‘case grammar’.

Both Anderson and Robinson argue that dependency-based representations are in general preferable, other things being equal, to constituency-based (see particularly Robinson (1970a)). Dependency representations more severely constrain the notion ‘possible construction’: each construction is headed, and this doesn’t have to be a separate constraint on the representations, as it would be in constituency-based grammars (as implemented in, say, ‘X-bar syntax’). And ‘case grammar’ has not been alone in recognizing this (cf. among more recent applications Hudson (1984; 1990)). But Anderson and Robinson suggest that the motivations for a dependency treatment of ‘case’ are particularly cogent.

Notice, for instance, that (13, 14) avoid the needless duplication of ‘case’ and kasus that necessitates a percolating mechanism whereby its constituents inherit the properties of a ‘case’. This is inappropriate anyway as far as the noun phrase is concerned: though the ‘agency’ of the ‘case’ itself may set up expectations concerning nouns functioning as As (such as ‘typically animate’), ‘agency’ is not a property of nouns. And ‘agentive’ nouns like baker don’t necessarily function as As. But representation of ‘agency’ can more plausibly be attributed to a preposition like by. ‘Agency’ percolates only to the non-phrasal constituent in (4b); and this is the head of the construction in terms of (13/14)—where percolation is unnecessary, because ‘case’ and kasus are identified.

3.2.2 The categorial identity of case and preposition: a functional category

Another motivation for the adoption of dependency representations came from the proposals made at about the same time in Anderson (1971c). These provide dependency representations of ‘case’ with the capacity to allow for adposition and case inflection as instances of the same category, on the
assumption that syntactic and word-internal categorial representations both involve dependency relations.

What is suggested there is that we should distinguish between dependency relations that are accompanied by potential linear difference between head and dependent and those that are not. Word-internal categorial representations have only a limited potentiality for linearization, but syntactically distinct categories are quintessentially linearly ordered. Morphology can impose linearity, but this linearization is of the morphological elements (stems, affixes) expressing categories rather than of the categories themselves. Certainly, morphological ordering is apparently invisible to the syntax.

Thus, the non-subjective arguments in (15) can be represented as showing the same ‘case’—let’s call it G(oal) for the moment—despite difference in expression of the ‘case’:

(15) a. Marcus Römam iit
       Marcus Rome:ACC went

b. Mark went to Rome

They differ in that in the Latin example of (15a) (and of (2.1)) the semantic relation occupies the same syntactic position as its dependent, as shown in the partial representation in (16a), which, for simplicity, ignores the role of the modal element and of subcategorizations:

(16) a.  

b.  

\[ \text{went to } \text{Rome} \]
In (16b) the noun is adjoined to the Goal, as the latter is to the verb: its realization is linearly distinct. In (16a) the noun is said to be subjoined to Goal; they coincide in linear precedence. The marking of the noun in (16a) as Goal-governed is carried out by the inflectional morphology, which, in ‘processive’ terms, attaches to the noun stem a suffix that cumulates signalling of case and other categories and where even the suffixal boundary vis-à-vis the stem is uncertain.

This characterization of the relationship between dependency and linearity provides for the expression of the equivalence, to configurations of categories expressed independently in the syntax, of word-internal expression of these configurations—in this instance the equivalence of adposition and case inflection. We can thus distinguish between ‘analytic’ and ‘synthetic’ expression while still showing what they have in common.

Latin is (unsurprisingly, given its centrality in the grammatical tradition) one of those ‘synthetic’ languages where a need for a ‘word-and-paradigm’ approach to inflectional morphology has been seen as most evident (see for example Robins (1959); Matthews (1972)). The morphological signalling of categories therein (such as case, gender, number) is, as well as quite independent of the syntax, also in itself linearly complex, with cumulations, diversifications, syncretisms, linear overlappings, etc. It offers a good illustration of the observation that, for the syntax, words have no internal linear structure. This is not to deny, of course, that the elements of words in ‘polysynthetic’ languages, with complex incorporations, may be ordered by analogous principles to those attributable to the syntax. The main point here, though, is simply to indicate the capacity of dependency relations to allow for ‘analytic’ versus. morphological expression of ‘case’.

The possibilities introduced by the availability of subjunction versus adjunction do not yet provide in themselves an answer to Kuryłowicz’s problem concerning the co-presence of adposition and case: for example, what representations are appropriate in (12) above, with preposition combined with case inflection? As indicated, such a question has remained unanswered through most of the history of ‘case grammar’. And, again as indicated, I delay further discussion awaiting the exposition of other relevant developments.

The realization of semantic relations both as independent word and as a word category differentiated by a morphological affix (or whatever) is one indication that they belong to a functional class—what was later to be called a ‘functional category’. Functional categories are discussed in Chapter 8, where a more restrictive view of them is proposed than has been generally current in syntactic theory.
This status for the category of ‘case’ is argued for at some length in the ‘case grammar’ tradition eventuating in Anderson (1997). And such a (functional) status for adpositions has recently been acknowledged even within some non-case grammar’ developments of the transformational tradition (Baker 2003: app. 1). This is opposed to the persistent view of adpositions in this tradition as constituting a lexical category on a par with verbs, nouns, and adjectives, as embodied in the \([ \pm V, \pm N ]\) notation of Chomsky (1970) (discussed below in Chapter 10). Is this a sign that this (central transformational) tradition may eventually develop into a grammar of case? There are other indications of this, as we shall find as we pursue our history, particularly in Chapter 4.

3.2.3 ‘Case’ and position

At this point, let’s note that, by extension (and in accord with the spirit of Anderson (1971c)), Anderson (1977: for example §2.8.2) argues that a representation such as (16a) is appropriate even when there is no morphological reflection of the ‘case’ node, even if the ‘case’ is neutralized (as subject, say). Rather, the relation is signalled positionally, as in (1a):

(1) a. The door opened

‘Positionally’ one can interpret in the obvious way but also as ‘configurational position’, as revealed by syntactic phenomena that refer to this ‘configurational position’—phenomena such as underlie Chomsky’s (2.5) definition of ‘subject’. But we cannot identify subjeachood with ‘position’, in whatever sense. ‘Position’ is not definitional.

Anderson (1977) thus departs here from Fillmore’s (1968a) suggestion that subjects involve ‘pruning’. The ‘case’ node is retained, though neutralized in content; subjeachood is merely signalled by ‘position’, not identified with it. The relation ‘subject’ borne by the door may be a neutralized one, but it is clear that cross-linguistically (‘surface’) subjeachood cannot be reduced to a particular position or a particular configuration. All the possible permutations of subject, verb, and ‘object’ are found in the languages of the world; and there appear to be ‘non-configurational’ languages (Hale 1983), lacking a verb phrase constituent. Positional or configurational properties, along with morphological (marking with a distinctive case form, the ‘nominative’), may in particular languages be manifestations of the presence of subjeachood. None of these contingent properties can be considered definitional properties of subjeachood even within a single language; this would render subjeachood incommensurate in different languages. Contrary to Chomsky’s (1965) claims, ‘relational’ nodes are not redundant (at any level).
Thus, the case phrase in *the door* in (13/14) does not lose its case node. Rather, the phrase in subject position has the noun subjoined to the semantic relation:

\[
\begin{array}{c}
O \\
N \\
: \\
: \\
\text{the door}
\end{array}
\]

As is typically the case for subjects, the morphology of English does not support distinctions among the semantic relations of the nouns in subject position: the semantic relations of subjects are morphosyntactically neutralized. And in English even subjecthood itself is for the most part given no morphological expression except by control of what minimal verbal agreement the languages possesses.

There are other motivations for denying a subsequent derivation involving ‘pruning’ to (13, 14), (17), etc. It is undesirable anyway, other things being equal, to incorporate the powerful operation of deletion in accounts of syntax. Moreover, the presence of relational nodes (identified by the valency of the verb) enables us to adopt linear invariance, the elimination of appeal to ‘movement’ in syntactic formulations, and eventually the elimination of derivationality in general from the syntax. This brings us, however, rather prematurely on to issue (iv) in (11), to do with constraining the grammar, and indeed with the (in)appropriateness of postulating transformational derivations. In the main this issue arose at a later date than the main strand of our history has reached; certainly, the other issues listed in (11) became more apparent at a very early stage. So derivationality itself is an area that belongs to later chapters of our ‘history’.

3.2.4 Conclusion

As concerns the representation of ‘case’, topic (i) of (11), I’ve outlined what seems to me to have been the most fruitful approach to this. This involves the treatment of semantic relations as labels on nodes in dependency trees. Semantic relations belong to a category whose role is to satisfy the valency of lexical categories. I shall consider in Chapter 8, in looking at attempts to give a more precise specification of the category type of ‘case’, arguments that it is a functional, rather than lexical, category. As a functional category, the ‘case’ category can be given independent expression, as an adposition; or
morphological expression, as an inflection (on the noun, or sometimes on the
predicator); or it may be signalled positionally. This is provided for by the
dependency notation, without recourse to deletion.

Subject, at least (given the uncertain status of ‘objects’ of various sorts), is a
neutralized relation, which can likewise be signalled in various ways. It
belongs to the same category as the ‘cases’ (as we shall explore in Chapter
7), and is distinguished by the drastic neutralization in expression involved.

I conclude this section on the representation of ‘case’ by highlighting an
aspect of the analysis suggested in §3.2.1 which will assume some importance
in what follows. It was suggested there that while some of the subcategoriza-
tions in (14) are lexically specific, and must therefore be included in lexical
entries, such as the valency of the verb, other subcategorizations may be
supplied by lexical redundancy, such as the requirement that the O case in
(14) take a nominal as an argument. That O takes a nominal as an argument is
simply an instance of the unmarked requirement for ‘cases’, and need not be
specified individually; only exceptions need be indicated. Such redundancies
play a large part in building lexical structure, including forming complex
categories, and they serve as a bridge between individual lexical entries and
the syntax. It will turn out that they allow us to avoid undesirable abstractness
in syntactic representations, as well as simplifying individual lexical entries.
However, the implementation of this lexical mechanism again awaits later
developments in the theory of categories, discussed here from Chapter 8
onwards.

3.3 Conclusion

Much of linguistic structure (in particular) remained underspecified in these
early ‘case grammar’ proposals. What united them was an acceptance of the
goal of a grammar of case of level 3, as formulated initially in this chapter, i.e.:

Grammar of case level 3

a) A grammar of case gives an account of the syntax of the relations that
are typically expressed by case inflections or adpositions or position.
b) Among these relations semantic relations have primacy.

This obviously leaves much of the syntactic framework unformulated as such.

The proposals of Fillmore outlined in §3.1 remove a lot of these uncertain-
ties. I suggested that we could recognize the embodiment in these proposals in
particular of two fundamental concepts of ‘case grammar’, formulated as:
Fundamental 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 predicates.

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.

And something akin to this is shared by other variants of early ‘case grammar’. We have also looked in §3.2 at some of the motivations for and consequences of one distinctive (and not generally adopted) development: the interpretation of the syntactic representations of a ‘case grammar’ as dependency trees. This too will figure largely in the following discussion.

Subsequent developments have to some extent taken even more different paths than I have already acknowledged, ranging (to mention but a sample) from the lexicalist and essentially autonomist proposals of the ‘lexicase’ framework (see particularly Starosta (1988)) to the ‘tagmemics’-influenced conceptions of Platt (1971) and Cook (for example 1978; 1979) to Anderson’s (1972; 1977) overtly semantically grounded and decompositional proposals, not to mention later offshoots such as the now quite widely manifest tradition associated with ‘role and reference grammar’ (for example Foley and van Valin 1984) and some of the developments in ‘cognitive grammar’. As we proceed we shall also encounter just a smattering of the fairly widespread but largely unacknowledged adoptions from (or reinventions of) ‘case grammar’ to be found in other recent work.

In what follows I cannot pretend to follow all these divergent developments. Much valuable work will thus not be done justice to here. In pursuing the indeterminacies and consequences of early ‘case grammar’ I adopt an even more decidedly unfeignedly personal perspective. The ‘issues’ enumerated in §3.1.4 to be addressed, as well as the adoption of a dependency interpretation of ‘case grammar’ structures, already represent very much my own priorities:

(11) Some issues raised by Fillmore’s proposals

i) the representation of case relations and forms
ii) the rejection of ‘deep structure’
iii) the identification of case and of individual case relations
iv) the general syntactic framework
But they do reflect what it seems to me have to be core issues for any grammar of case, as well as tracing important consequences that go beyond the original ‘case grammar’ programme itself. Pursuit of issues (iii) and especially (iv), however, involves the adoption here of a resolution that is far from being shared by most contributors to the ‘case grammar’ programme.
Case Grammar and the Demise of Deep Structure

The suggestions made in Chapter 3 go some way towards the development of a framework that conforms to the formulation of a grammar of case of level 3. But many questions remain; some of the more important are embodied in (iii) and (iv) of (3.11), just repeated at the end of Chapter 3. Let us look first, though, at the consequences of (ii) in (3.11):

(3.11) ii. the rejection of ‘deep structure’

That is, let us look at the repercussions of the proposed banishment of ‘deep’ grammatical relations implied by the relegation of grammatical relations to a role derivative of the semantic relations, as ‘surface’ relations only, and at the kind of counter-arguments to this proposal that were advanced in work of the time.

Perhaps the best-known defence of ‘deep’ grammatical relations—or, rather, of the presence in ‘deep’ structure of the configurations in terms of which they can be defined, as in (2.5)—is contained in S.R. Anderson (1971). The argument presented there leads Fillmore (1977) to a reconsideration of the structure of the grammar, one that essentially reinstates ‘deep’ structure and minimizes the syntactic role of the semantic relations. This obviously considerably weakens the ‘case grammar’ hypothesis, in partially retracting concept (a) and abandoning (b):

Fundamental 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.
Indeed, in the judgment of Sgall (1980: 5), ‘the level including cases... does not belong to the language system in the strict sense, but rather to the realm of cognitive content’. Let us now look at this argument of S.R. Anderson’s, before looking at other debates concerning the status of grammatical relations that arose in the 1970s and beyond.

4.1 ‘Deep structure’ and the place of holisticness

Fillmore (1968a) had noted pairs like those in (1) and (2):

(1) a. John smeared paint on the wall
    b. John smeared the wall with paint
(2) a. John planted peas and corn in his garden
    b. John planted his garden with peas and corn

And he registers a difference in meaning between the members of the pairs that he describes as a distinction in ‘focusing’ (1968a: 48, n. 9); this difference correlates with choice of ‘object’.

But ‘focusing’ is a rather inadequate label for the semantic distinction involved (cf. for example Fraser 1971), which has come to be described in terms of a ‘partitive’ vs. a ‘holistic’ interpretation of (in these examples) the the wall and his garden phrases. In the (b) examples of (1, 2) the relative dimensions of the entity represented by the ‘object’ are presented as being essentially exhausted by the action of the verb; the referent of the ‘object’ is interpreted holistically. This is not the case with the corresponding phrase in the (partitive) (a) examples.

Further, the holistic interpretation is associated with a phrase with a locational (hence potentially dimensional) interpretation that, in a grammar of the type described in Chomsky (1965), occupies specifically the ‘deep object’ position (without necessarily being ‘surface object’). S.R. Anderson (1971) is concerned to provide evidence for this, and thus for the combined semantic and syntactic relevance of ‘deep objects’. Consider the pairs in (3)–(5):

(3) a. John jammed pencils into the jar
    b. John jammed the jar with pencils
(4) a. A pencil would be easy for John to jam into the jar
    b. A pencil is certain to be jammed into the jar by John
(5) a. It’s the jar that John is certain to jam with pencils
    b. It’s pencils that John is certain to jam the jar with
(3) exhibits the familiar partitive/holistic distinction ((a) vs. (b)). The jar in both of (4) is partitive and in (5) holistic. But, unlike in (3b), in neither instance in (5) is the relevant noun phrase in 'surface object' position. S.R. Anderson comments concerning the place in the grammar of the partitive/holistic distinction: 'the structural level in question must precede the application of more or less well-known transformations' (1971: 390). What the holistic sentences of (3b) and (5) share is occupation by the jar of 'deep object' position. We have a semantic distinction whose formulation must apparently make reference to 'deep object'.

Further, 'deep structure' is the level at which verbs are subcategorized for their arguments. And verbs are subcategorized for taking both these constructions or only one or the other (or neither), as shown in (6):

(6)  a. John spread/threw/*covered paint on the canvas  
     b. John spread/ *threw/covered the canvas with paint

Whereas *spread* takes both constructions, *throw* takes only the partitive, and *cover* only the holistic. This seems to be difficult to reconcile with the 'case grammar' position that verbs are subcategorized for cases, not for the configurations of the 'deep structure' of Chomsky (1965).

But we must note, in the first place, that this distinction is not restricted to alleged 'deep object' position:

(7)  a. Bees are swarming in the garden  
     b. The garden is swarming with bees

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

*The garden* and *the tank* are holistic in (7/8b), where, in terms of Chomsky (1965), they would occupy 'deep subject' position, but they are not holistic in (7/8a), where they do not occupy this position. And this difference again remains under the application of transformations that destroy the positional affiliations of the two phrases, as in (9):

(9)  a. It's the garden that bees are swarming in  
     b. It's the garden that is swarming with bees

(9b) is holistic despite the displacement of *garden* from subject position with respect to *swarming*. Any generalization concerning this semantic distinction thus must also, apparently, invoke 'deep subject' (see for example Chomsky 1972: §6.8.3; S.R. Anderson 1977: 369–70; 1988: 292–5).

Now, this might not seem to offer much comfort for the 'case grammar' hypothesis concerning the merely superficial status of grammatical relations:
we now have two ‘deep’ grammatical relations apparently involved. But this duplication is itself suggestive. There is, recall, a ‘case’ that characteristically occurs as either ‘surface subject’ or ‘object’; and it is ‘object’ in the presence of an Agentive, as in (3.1b) vs. (a) (as represented in the structures in (3.4)):

(3.1) a. The door opened
    b. The girl opened the door

Anderson (1975, 1977: §1.8) suggests that the holistic argument in these various examples is, whatever else, an Objective; it is this that they crucially have in common, whether or not they go through a stage of being ‘objects’. In (1/2b) the Objective occupies ‘object’ position in the presence of an Agentive, which outranks it for purposes of subject selection unless other positional stipulations intervene and the Objective fails to be even an ‘object’, as in (5). If not outranked it becomes a ‘subject’, as in (7/8b)—again, unless other constructive requirements intervene, as in (9b). There is no reason to suppose that the locational Objectives in (5) and (9b) have gone through the stage of being ‘object’ or subject. The semantic generalization invokes Objective. This allows a simpler formulation than via appeal to (two) ‘deep’ grammatical relations.

And this suggestion is consistent with what we can attribute to Objective elsewhere. Unless this is overridden by the context, an Objective argument is normally interpreted as participating as a whole in the event labelled by the predicator. Contrast (10a) and (b) involving the place noun room:

(10) a. Bill searched in the room
    b. Bill searched the room

The progressive in (11a) overrides our normal expectation that the action exhausts (the relevant dimensions of) a place noun that is an Objective:

(11) a. Bill was searching the room
    b. John was smearing the wall with paint

The same is true in the holistic (11b); since the Objective in the latter also, as locational, introduces a place, the exhaustiveness is associated with the relevant dimension of the entity denoted by the argument. Other dimensions may be relevant with nouns which do not typically denote concrete places. In (12b) what the progressive overrules is our expectation that the book was read as a whole:

(12) a. Bill read the book
    b. Bill was reading the book

Our normal expectation is associated with (12a), with no progressive; and the progressive again postpones the fulfilment of our expectation.
The suggestion that *the wall* in (1b) and *the garden* in (7b), to take a couple of the examples discussed, are Objectives raises a number of questions, to be sure. If these are Objectives, what are the (other) post-verbal arguments, for instance? Anderson (1977: §1.8) regards them as also Objective in both partitives and holistics; in partitives they may occupy ‘object’ position. This offends against one of the principles Fillmore deploys in constraining the combination of ‘cases’—the requirement that only one (possibly coordinate) token of each case is permitted per proposition (1968a: 22). But Objective is arguably exceptional in this regard, on other grounds. There is, for instance, no reason to regard the arguments in simple equative sentences as other than two Objectives:

(13)   a. The guy over there is my lover
       b. My lover is the guy over there

(see too Anderson 1975; 1997: §3.1.2). Differences in subject selection here reflect discourse concerns rather than semantic relation. But what then is the difference between (13) and (7b), if they both contain two Objectives? And how do we account for the use of *with* in the latter, and the non-reversibility of the verb’s arguments?

There was an attempt at this point in the development of ‘case grammar’ to answer these last questions at least. Note that the first post-verbal noun phrase in (1, 2b) and the rest, as well as being Objective, also retains its locational interpretation: it is the dimensions of a located space that are exhausted under the holistic interpretation. Given this, Anderson (1977: §1.8) suggests that *the garden* in (7b) is both Objective and L(ocative). The members of the pair in (7) differ as in (14):

(14)   a. O,L *(the garden)* O *(with bees)*
       b. O *(bees)* L *(in the garden)*

The *with* marks an Objective that is outranked for subject selection or for ‘object’ position (as in (1b, 2b)) by a complex Objective.

Elsewhere in English *with* marks ‘instruments’ or ‘comitatives’, as respectively in (15):

(15)   a. John smeared paint on the wall with a rag
       b. John smeared paint on the wall with a friend

((15b) involves a ‘comitative’, on a charitable interpretation of John’s actions, at least.) That the *with*-phrase in (1b) is neither of these is suggested by (16):
(16) a. John smeared the wall with paint with a rag
b. John smeared the wall with paint with a friend
c. John smeared the wall with paint with a rag with a friend

In each of the first two, the two co-occurring with-phrases show a clear difference in meaning and syntax (such as positional restrictions); in (6c) all three are distinct.

To allow for the syntax of (7, 8b), we apparently need to extend the subject-selection hierarchy, as it affects Objective and Agentive, as in (17), where ‘O’ is a combination of O and some other relation:

(17) Subject selection hierarchy: A > O, > O

Similarly, the non-locational Objective in (1/2b) is outranked as ‘object’.

Of course, the invocation of arguments which bear more than one relation, of roles that are relationally non-unary, violates another of Fillmore’s constraints (1968a: 24): that each noun phrase is associated with only one case label. But again there are motivations for relaxing this, for allowing the role of an argument to be represented by a conjunction of relations. I’ll come back to this when we turn to our next topic, the identification of the cases, and a discussion of Fillmore’s constraints.

Other questions raised by these suggestions (such as the status of the ‘displaced’ Objective) awaited the development of explicit accounts of the lexical relationship between the verbs in these partitive/holistic pairs. But it is at least clear, I think, that S.R. Anderson’s (1971) defence of ‘deep structure’ is inconclusive, at most. And other attempts at empirical defence were similarly unsuccessful. However, the official announcement of the demise of ‘deep structure’ was not to come for a number of years, with the introduction of the ‘minimalist program’.

4.2 The after-life of ‘deep structure’

As a sort of apologia for ‘deep structure’, Chomsky (1995: 187) contends, concerning a grammar that postulates a ‘deep structure’ and a ‘surface structure’, that ‘the empirical justification for this approach . . . is substantial’. He says concerning ‘D(EEP)-structure’, specifically:

D-structure is the internal interface between the lexicon and the computational system . . . Certain principles of U<versal> G<rammar> are . . . held to apply to D-structure, specifically, the Projection Principle and the θ-Criterion.
But application of the ‘projection principle’ is not limited to ‘deep structure’. And the ‘θ-criterion’ regulates the relationship between semantic relations and arguments; and, rightly or wrongly, it even embodies Fillmore’s constraints. ‘Case grammar’ argues that it is not surprising that the interface with the lexicon should be associated with the same level as semantic relations are available at; this is basic to the ‘case grammar’ proposal. There is no need to associate this conjunction of lexical access and the presence of semantic relations with an arbitrary ‘internal’ level, distinct from ‘case’ structure, however. The principles mentioned do not select ‘deep structure’, but a level containing semantic relations.

Lexical entries are sensitive to semantic relations, not grammatical relations, or the configurations that allegedly define them. No verbs are subcategorized as to whether they take a subject or not. Nor are such grammatical-relations-based notions as (the usual understanding of) ‘transitive’ relevant to subcategorization. Thus, the partial lexical entry in (3.3) is appropriate for verbs like Open (though, as I shall discuss, it oversimplifies the relationship between the two uses of Open):

(3.3) Open  O (A)

But it obscures the relationship between the two uses of the verb, on the other hand, to describe it as simply optionally ‘transitive’, as expressed in something like (18):

(18) Open (___ NP)

This might possibly be appropriate for a verb such as the Eat of (19), with constant subject and optional object, though it is not the most transparent mechanism for expressing the availability of ellipsis of non-specific indefinites:

(19) Have you eaten (the fish)?

But what is constant with Open is the element that appears as the ‘transitive’ ‘object’ and the ‘intransitive’ subject; the two uses are in an ‘ergative’ relationship (Lyons 1968: 352). The constant is the presence of an Objective, whatever its grammatical relation. Reference is again to semantic relations, not grammatical.

4.2.1 ‘Unaccusativity’

There are, of course, devices available for avoiding the conclusion concerning ‘ergative’ verbs given at the end of the preceding section. One can, for instance, adopt the ‘unaccusative hypothesis’ made popular by Perlmutter (1978). It recognizes two kinds of ‘intransitive’ subject, one that is (in deriv-
ational terms) an ‘underlying’ subject and the other that is an ‘underlying object’. In terms of this we might regard the subject in (3.1a) as an ‘underlying object’, as represented in subcategorization in (18)’ rather than (18):

(3.1)  
  a. The door opened  
  b. The girl opened the door

(18)’  
Open ___ NP

Open always takes an ‘object’, but it may lack a (‘deep’) subject. This, as an alternative to the ‘case grammar’ notation of (3.3), allows us to recognize the invariance of the the door argument in (3.1a).

As evidence for such a distinction, Perlmutter (1978) points to two classes of ‘intransitives’, which are distinguished in Dutch, for instance, by their capacity or incapacity to show (‘impersonal’) passivization. Compare the acceptabilities registered in (20) and (21):

(20)  
  a. De jongelei dansen hier vaak  
     (‘The young people dance here often’)  
  b. Er wordt hier door de jongelei vaak gedaanst  
     it is here by the young-people often danced

(21)  
  a. De kinderen verdwijnen uit dit weeshuis  
     (‘The children disappear from this orphanage’)  
  b. *Uit dit weeshuis wordt (er) door vele kinderen verdwenen  
     from this orphanage is (it) by many children disappeared

On Perlmutter’s analysis, the (‘superficial’) subject in (21a) is an ‘underlying object’ (‘initial object’, in his terms), and as such unavailable for ‘displacement’ from subject position by passive: (21b) is unacceptable. The (‘superficial’) subject of (20a), on the other hand, is also the ‘underlying subject’, which is, like ‘transitive underlying subjects’, a potential victim of passivization in Dutch, as witnessed by (20b) versus. (21b).

But there is a patent difference in the unmarked semantic relations taken by the ‘intransitive’ verbs of (20) and those of (21): the former take an Agentive, the latter a simple Objective. Passive fails if what is normally the ‘surface subject’ is an Objective. And this applies in the case of ‘transitives’ also: passive applies to Agentives and Datives, in particular, but not to Objectives. It is unnecessary to postulate an arbitrary difference in ‘deep structure’ as well as the semantically motivated distinction in semantic relations. The generalization is that, prototypically, the phrase that is ‘displaced’ by passive cannot be Objective—however precisely (depending on other aspects of the grammatical framework) that is to be formulated.
Perlmutter’s analysis requires us to posit (in derivational terms) a process subjectifying the ‘underlying object’ of certain verbs. Grounds of economy, apart from anything else, argue against this: we already have a mapping of Objective onto subject in accordance with the subject-selection hierarchy of (17). Such a process as Perlmutter appeals to would also be crucially unlike passive; passive involves a marked subject selection, and is morphologically signalled as such. Appearance of the Objective of (21) in subject position is not marked, nor signalled as such; it is normal, in accordance with the hierarchy. Moreover, ‘unaccusativity’ frustrates any straightforward interpretation of the notion that sentences must have a subject. This is untenable anyway, but its non-maintenance in a grammar that attributes subject and ‘object’ to both ‘deep’ and ‘surface’ structure drastically weakens the claims being made about syntactic structure. And it undermines any claim concerning the ‘deep-structure’ distinctiveness of subject.

Subsequent attempts to provide support for the ‘unaccusative hypothesis’ have invoked a range of phenomena from ‘perfect-auxiliary’ selection in various Germanic and Romance languages (for example Haider 1984) to cliticization in Italian (Belletti and Rizzi 1981; Burzio 1986), to the ‘smear-paint’ alternations of (1) etc. (Levin and Rappaport 1986). For further references on ‘unaccusativity’ see Anderson (1997: §§3.1.3, 3.3, 3.6); more recently Alexiadou et al. (2004). Here I mention just a few of the issues that have arisen; but the problems they illustrate in relation to the unity of ‘unaccusativity’ are not untypical.

Anderson (1997: 179), following particularly Böhm (1993), argues that auxiliary selection involves more centrally distinctions to do with Aktionsart, and do not correlate neatly with the phenomena in (20, 21); and the latter are compatible with a ‘case grammar’ interpretation, as we have seen. Böhm (1993: §4.2.2) illustrates the importance of Aktionsart for ‘perfect-auxiliary’ selection with the pair of ‘perfects’ in (22) containing the same German verb:

(22) a. Molly hat auf der Bühne getanzt
    Molly has on the:DAT stage:DAT danced

b. Molly ist auf die Bühne getanzt
    Molly is on(to) the:ACC stage:ACC danced

(22a) represents a ‘process’, it is ‘atelic’; (22b), on the other hand, is an ‘accomplishment’, and ‘telic’ (see also Tenny 1994).

Sorace (2000) and Keller and Sorace (2003) illustrate the complex and gradient nature of the factors influencing choice of auxiliary in Italian and German respectively. They establish a hierarchy of ‘intransitive’ verbs, from
core ‘change of location’ (telic) verbs that take the ‘be’ auxiliary in different languages to core ‘controlled non-motion’ (agentive) verbs that take ‘have’. In between there is a hierarchy of verbs more or less likely to agree with either pole: ‘intermediate verbs between the two extremes incorporate telicity and agentivity to lesser degrees’, and they ‘are subject to cross-linguistic differences and exhibit gradient auxiliary selection preferences’ (Keller and Sorace 2003: 60–61).

This doesn’t relate in a simple way to other putative ‘unaccusative’ phenomena, which also do not seem to apply consistently (see Lonzi 1985). ‘Unaccusativity’ doesn’t appear to be a simple unitary phenomenon, involving stipulated reference to ‘deep (or initial) objects’. On the other hand, the intermediate classes of verb that Keller and Sorace (2003) found to vary in acceptability of the ‘impersonal passive’ are those which most readily invite either an agentive or a non-agentive interpretation; presence of an inanimate ‘subject’, as we might expect, disfavoured the ‘passive’. And auxiliary selection also works between agentive and non-agentive poles, whatever else is involved.

Likewise, the fact that viability of ‘impersonal passives’ may reflect volition rather than merely agency (Zaenen 1993) is unproblematical for the ‘case grammar’ approach. In some languages (such as Bats), for instance, the ergative case can be used (rather than the absolutive) to mark the Agentive with ‘intransitive’ as well as ‘transitive’, but only if the Agentive is imputed to be ‘responsible’, and even if the verb is not typically agentive (example from Comrie (1973)):

(23) a. So wože
    \[I_{\text{ABS}} \text{fell}\]

b. As wože
    \[I_{\text{ERG}} \text{fell}\]

In (23b) the ‘falling’ is ‘my’ own fault. It is not surprising if properties associated with prototypical agency, such as ‘volition’ and ‘responsibility’, should be involved in specialization of Agentive marking. Likewise, in Kewa (Franklin 1971), transitive Agentives are distinguished as prototypical (human, volitional) and not (non-human, elsewhere typically the ‘instrument’ of a prototypical agent). Our grammar must recognize the possibility of departures from prototypical expression of valency requirements which are well motivated semantically. Not all case morphology signals only semantic relations; other semantic distinctions may interfere.

I do not want to underestimate the difficulties of interpretation presented by the various phenomena that have been associated with ‘unaccusativity’. But
none of what we have looked at conflicts with the notion that predicators are subcategorized in terms of the semantic relations of their complements, not in terms of ‘(deep) transitivity’ etc. And other phenomena support the proposed irrelevance of ‘deep structure’ configurations to the lexicon.

4.2.2 Lexical evidence

If the lexicon were accessed at ‘deep structure’, one would expect lexical relationships to reflect this. For instance, we might attempt to describe the relationship between the base verbs in (24a) and the derived adjectives in (24b) as involving crucially the ‘deep object’ relation in the case of the verb:

(24) a. The alternative can be achieved/believed
    b. The alternative is achievable/believable

This is indeed the traditional view adopted by, for example, Wasow (1977: §3.2), on the basis of such examples and of his proposed ‘criterion 3’ for lexical rules:

Lexical rules . . . involve only NPs bearing grammatical relations to items in question. (p. 331)

So he formulates the relationship illustrated in (24) as:

. . . the lexical rule relating verbs to the corresponding -able adjectives identifies the subject of the latter with the direct object of the former . . . (p. 336)

But, as observed in Anderson (1984a: §3.2), the same relationship also involves ‘intransitive’ verbs (provided they are again ‘dynamic’) and -able adjectives, as illustrated in (25):

(25) a. The solution can work—The solution is workable
    b. The rubber can perish—The rubber is perishable

And there are other -able adjectives that could correspond to either a ‘transitive’ or an ‘intransitive’, as shown by comparison of (26) and (27):

(26) a. The meeting day can be changed/varied
    b. The meeting day is changeable/variable

(27) a. The weather can change/vary
    b. The weather is changeable/variable

We have a familiar pattern: the argument of -able adjectives ‘corresponds to’ the ‘object’ of the ‘transitive’ base and the ‘subject’ of an ‘intransitive’. This is the distribution of Objective, the ‘semantically most neutral case’ (Fillmore 1968a); in (26, 27) it introduces, in this instance, the entity that can change or be changed. The generalization invokes not grammatical relations but the
Objective argument of the verb and the Objective argument of the adjective. Their distribution as ‘subject’ and ‘object’ of the verbal forms follows from this.

Again, we can, instead, invoke the ‘unaccusative hypothesis’ here (see for example Horn 1980). But again it is superfluous to do so. There are no motivations for attributing ‘objecthood’ to the subjects in (24), (25), and (27). The behaviour of these items follows from their independently motivated semantic relations. I am ignoring here other, minor patterns displayed by some -able adjectives (Marchand 1969: §4.2.1; Anderson 1984a: §3.2); but these do not affect the argument.

Apparently more problematical for the ‘case grammar’ assumption that grammatical relations are not available to the lexicon are -er nouns in English such as those in (28):

(28) a. writer, murderer
    b. walker, jogger

We have to distinguish these from nouns showing a number of other patterns in -er, such as the ‘place-of-origin’ nouns of (29):

(29) Berliner, Londoner

What seems to characterize the pattern in (28), however, is noun formation apparently based on the subject of a verb, whether ‘transitive’, as in (28a), or ‘intransitive’, as in (28b). And this is how the relationship is characterized by McCawley (1968); Moravcsik (1978a); and Aronoff (1980: §3.1), for example.

However, not all subjects are available for this formation. In (28) we have agentive subjects; and this seems to be the earliest pattern. In (30a), and perhaps (b), we have subjects conforming to the pattern which are in some sense ‘instruments’—or ‘secondary’, non-prototypical agents:

(30) a. cooker, container
    b. peepers, gogglers (applied to ‘eyes’)
    c. believer, experiencer
    d. goner, faller

For the second item in (30b), consider the example: while her ladyship, . . . turning her own grey gogglers up to heaven, . . . (Thackeray, The Bedford-Row Conspiracy, ch. 3). In (30c) the formation is extended to Datives. But we don’t find comparable -er formations based on Objective. The examples in (30d) are isolated and belong to a distinct pattern involving ‘aspectual’ properties. A ‘goner’ is someone who has just died (or is about to die), and a ‘faller’ is a horse that has fallen in the course of a horse race. Objective participants are
not susceptible to the -er formation exemplified by (28) and (30a, b), just as they may not be 'displaced' by passive.

It is thus not very accurate or informative to interpret the formation exemplified by these latter as ‘subject-based’; it is available to verbs which take arguments in a particular subset of semantic relations (crucially Agentive and Dative). By virtue of these relations the arguments contracting them normally occupy subject position in the verbal construction, given the subject-selection hierarchy, extended to incorporate Dative from (17) as in (17)’:

(17) Subject selection hierarchy: A > O, > O
(17)’ Subject selection hierarchy: A > D > O, > O

The Dative of believe and experience outranks the Objective that they also take, as illustrated in (31):

(31) a. She believed that fabrication
   b. She experienced a sinking feeling

Subjecthood in sentence structure is contingent on the semantic relations present, and subjecthood is not relevant as such to the lexicon: as we have seen, not all potential subjects are eligible for the lexical derivational formation.

This account interprets the forms in (30a, b) as non-prototypical Agentives. Otherwise the hierarchy would have to be further extended (to include putative ‘instrumentals’) — I shall look later at arguments that there are no ‘instrumental’ subjects. Or we might interpret these formations as neither subject-based nor Agentive-based, but the product of a distinct process, involving the property of ‘being used’. In either case, it remains misleading to couch these relationships in terms of reference to subject.

I note finally here, however, that the extension to the subject hierarchy embodied in (17)’ raises some apparent problems. In accordance with that hierarchization the Dative outranks the Objective as subject choice, as in (31). Like and please in English appear to present a problem, however, if they share ‘case frames’; only (32a) seems to conform to (17)’:

(32) a. I liked the play (*by (its) not being too long)
   b. The play pleased me (by (its) not being too long)

But this would involve us in a failure to recognize that alternative sentences can offer different presentations of what can be ‘objectively’ the same scene (cf. for example DeLancey 1991). Thus, with buy and sell a transaction can be represented as involving either the buyer or the seller as Agentive, the ‘primary agent’ from the point of view of that presentation (cf. for example
Similarly, it seems not implausible to suggest that, while (32a) presents an orientation whereby the subject is an Agentive, albeit a non-prototypical one, and the post-verbal complement is a Dative, in (32b) the subject is Dative and the other participant an Objective. This is consistent with the relative viability of the continuation in (32) (Daneš 1968; Kirkwood 1973; Anderson 1977: §2.1.5). Both subject choices then conform to the Agentive-Dative-Objective hierarchy.

We return in §5.3 to the consequences of accepting that predications are not determined by the ‘real world’, i.e. of rejecting what DeLancey calls ‘the objectivist’s misconception’ in relation to assignment of semantic relations; but rather they reflect different presentations of how it is perceived, or indeed different perceptions. The hierarchy proposed in (17)’ also raises questions concerning the ‘double-object’ construction and its passive invoked in §3.1.3. We return to these too at various points in what follows.

What we have looked at in this subsection is only a fragment of even that lexical evidence for the ‘case grammar’ hypothesis touched on in Anderson (1984a), for example, not to mention what arises just from work of the same period outside this tradition, such as that presented in S.R. Anderson (1977); Moravcsik (1978a); Amritavalli (1980); Randall (1988); and Rozwadowska (1988). I know, however, of no evidence of the relevance of distinctions in grammatical relations to the lexical relationships expressed by derivational regularities. Wasow’s (1977) formulation of able-formation, for instance, is thus unwarranted and indeed illegitimate.

4.2.3 Raising

Distinctions in grammatical relations do not seem to be relevant to the lexicon, then. What are the respective roles of semantic and grammatical relations in syntax, however? In a ‘case grammar’ of the early period, the grammatical relations arise derivatively. In a derivational syntax, however, the ‘case grammar’ claim concerning the relationship between semantic and grammatical relations is less interesting to the extent that subject formation is derivationally early; this limits the syntactic role of the semantic relations and enhances that of the grammatical relations, as in Fillmore’s (1977) proposal. Anderson (1975; 1977: §1.8) argued that this was an unnecessary compromise—as emerges from what I have described in the preceding. As far as the smear-paint phenomena are concerned, the syntax and the lexicon refer to semantic relations and not to ‘deep grammatical relations’. There is, moreover, evidence that in a derivational grammar semantic relations remain accessible, and that subject formation is not early.
The syntactic relevance of the semantic relations has already been illustrated by discussion of the Dutch 'impersonal' passive phenomena of (20) and (21). But let us look rather more explicitly at another, crucial illustration of the relative syntactic roles of semantic relations and grammatical relations.

In the derivational grammars that developed from the 1960s onwards a major part of the derivation of structure was assigned to a body of rules that applied cyclically. If one maintains this kind of framework, or its equivalent, it is possible to show that subject formation is not pre-cyclic. Say subject formation neutralizes (the morphosyntactic expression of) semantic relations, as envisaged in Fillmore's account; initial subject formation is incompatible with the observation that there are cyclic rules that refer to these semantic relations. Moreover, reference to subject is always into a clause subordinate to the cyclic clause. Thus, at the earliest, application of subject formation is cycle-final (or simply cyclic, if, as it was expressed at the time, the cyclic rules are not extrinsically ordered). We can illustrate this via a consideration of the rule of raising.

We are concerned with the controversial history of the sentence types illustrated by (33):

(33) a. Sheila/she seems to be a fraud
    b. I believe Sheila/her to be a fraud

There is a familiar range of evidence showing that the Sheila/she/her element belongs semantically and syntactically in both instances with the subordinate (infinitival) clause. But morphosyntactically it is linked also to the main clause containing (in this instance) the finite verb: most obviously, the position of this element and the varying morphology of the pronoun seem to reflect its syntactic status in that clause rather than in the other. Postal (1974: chs. 1–3) charts the early development of transformational analyses of these constructions, and the motivations offered (and he adds arguments of his own subsequently in the volume). In the analysis he defends, both of these sentence types were considered to involve raising of the Sheila element from the lower into the upper clause: into subject position in one case, into 'object' position in the other.

In the relational grammar tradition (for example Perlmutter and Postal 1983) it is proposed, pursuing this kind of analysis, that in (33a) the subject of the lower clause is raised out of that clause to become the subject of the upper; whereas the subject of the lower clause is raised to be the 'object' of the upper. Further, these raised elements take over the grammatical relation borne initially by the clause out of which they are raised: the lower clause in (33a) is initially subject of the main clause, and the element raised out of it becomes
subject and displaces it; the lower clause in (33b) is initially an 'object', and the
element raised out of it displaces its original clause as 'object'. The raisings
conform to the 'relational succession law' (variously named elsewhere), which
requires raised elements to take over the grammatical relation of the con-
struction out of which they are raised.

But, once more, appeal to such an arbitrary syntactic 'law' is unnecessary.
We can achieve a simple generalization with reference to semantic relations.
Appeal to subject and 'object' in the main clause obscures this generalization,
and we then require recourse to the 'law'. In semantic-relational terms, the
raised element assumes an Objective relation, the 'semantically most neutral'
relation, in the main clause. Unlike other 'cases', it does not impose semantic
expectations on the predicator, and its relation to it is negatively specified (as
not one of the other 'cases'). In (33a) it becomes subject, as there is no other
candidate; but in (33b) it becomes 'object', being outranked as subject by the
Dative. The distribution follows from the semantic relations.

Some detailed alternative formulations are given in Anderson (1977: §2.8.2;
1986a: §5; 1992: §3.5). Anderson (1992: §3.5) envisages the raisees as taking over
the Objective relation of their original clauses. The noun phrases are derived
Objectives, which are not as such subcategorized for by the verbs they come to
depend on. But I shall return below to the precise formulation of raising (see
particularly §11.2). What is relevant at this point is merely the relational status
of the various arguments in the clauses concerned.

The raised arguments are Objectives in the 'host' clause. That it is, on the
other hand, the subject of the subordinate clause (whatever its semantic
relation) that undergoes raising is consistent with subjecthood being assigned
at the end of each cycle. Subjecthood is then available in subordinate clauses,
clauses to which the cycle of rules has applied, but not in the clause that is the
cyclic one at that point.

There is no motivation for regarding the two subordinate clauses in (33) as
having initially two different grammatical relations—or indeed for regarding
them as bearing any grammatical relation at all. The latter superfluity still
arises if appeal is made to the 'unaccusative hypothesis'. In terms of it, both of
the subordinate clauses are initial 'objects', and raising confers their object-
hood on the raisees, which displace them. Again, this attribution of gram-
matical relations to the clauses is unnecessary. And it again envisages a clause,
the main clause, which initially has an object but no subject, contrary to the
traditional assumption that objecthood is defined in relation to subjecthood.

The main tradition within transformational grammar for a long time
abandoned any attempt to capture the generalization underlying the obvious
similarities between (33a) and (33b). A raising analysis of such as (33b) was
indeed rejected. No empirical motivation has been offered for this. Rather, there has been offered a series of (sometimes ephemeral) theory-internal motivations. These include, at various times, the fact that a raising derivation for (33b) would involve ‘vacuous movement’ (Chomsky 1972), and assumptions concerning ‘0-marking’ and movement (Chomsky 1981: 99–130). A basic problem here for the transformational tradition is that a raising analysis of (33b) would involve the recognition of a class of verbs that do not ‘0-mark’ their objects, as well as verbs, like seem, that do not ‘0-mark’ their subjects. This violates the assumption that absence of ‘0-marking’ is limited to subjects. Adoption of an ‘unaccusative’ analysis of (33a) would obviously swell the former set, thus rendering yet more fragile the assumption that absence of ‘0-marking’ is limited to subjects.

In general the rejection of raising in relation to (33b) is based on a theory-dicted incapacity to acknowledge Sheila/her in (33b) etc. as the ‘object’ of the main verb. But the distribution of the raised arguments in (33) is highly reminiscent of ‘unaccusativity’. This is unsurprising, given that both raisees are (derived) Objective. The similarity is embarrassing, however, for supporters of ‘unaccusativity’ who reject the raising analysis of (33b) but not of (33a): the two positions—‘unaccusativity’ and absence of raising in (33b)—are difficult to reconcile.

4.2.4 Conclusion

A clear conclusion emerges from consideration of the relationship between relations of different sorts and the lexicon and the syntax: the lexicon makes no reference to distinctions in grammatical relations, and the latter are derivative of semantic relations, which, unlike them, are basic to the syntax. There is thus no basis for Chomsky’s (1995: 187) assertion that ‘there is empirical justification’ for an approach that includes the claim that access to the lexicon and to semantic relations selects a level identical with ‘deep structure’, at which can be defined ‘deep grammatical relations’.

Chomsky points indeed, at the same time, to various problems that the postulation of ‘deep structure’ incurs (1995: 188). But the superfluity and capacity for obscuration of such a level were already evident two decades before this. However, two decades earlier transformational grammar was unwilling to countenance semantic relations as part of syntax. The position concerning the autonomy of syntax adopted by the ‘new grammarians’ lingered on in undiluted form in the early transformational tradition.

Ideas about the special status of ‘deep subjects’, in particular, have displayed a striking inertia. For instance, even after a role for ‘thematic relations’ had been found within transformational grammar, the distinctiveness of subjects
has often been associated with alleged ‘asymmetries’ such as those described by Chomsky (1986: 60), who claims that ‘the semantic role of the subject is assigned compositionally, depending on the meaning of the unit V-NP’. He illustrates this with examples like those in (34):

\[\begin{align*}
(34) & \quad \text{a. John threw a fit} \\
& \text{b. John threw the ball}
\end{align*}\]

The ‘V-object idiom’ cancels normal expectations concerning the semantic role of the subject.

But Anderson (1997: 167) observes that other arguments are also affected, not just the subject, as is shown in (35):

\[\begin{align*}
(35) & \quad \text{a. *John threw a fit to his friend} \\
& \text{b. John threw the ball to his friend}
\end{align*}\]

If one is to talk about ‘idioms’ here, what we have is a ‘V-Objective idiom’ (cf. Moravcsik 1978a) which affects our expectations concerning all the rest of the semantic relations that are contracted by (the ‘non-idiomatic’) throw.

In the presence of an Agentive such idioms will appear to involve the verb and its object, but we also find ‘subject-verb idioms’ that affect the valencies of the verb (Anderson 1997: 168), as in (36a):

\[\begin{align*}
(36) & \quad \text{a. My heart leapt (*from the table)(*onto the shelf)} \\
& \text{b. The cat leapt from the table onto the shelf}
\end{align*}\]

These ‘idioms’ don’t show us anything about the ‘compositionality’ or otherwise of ‘assignment’ of semantic relations either to putative ‘deep subjects’ or to ‘surface subjects’. They are apparently part of a general pattern whereby ‘verb-Objective idioms’ disrupt semantic expectations, including those involving semantic relations. Thus, for instance, the ‘idiomatic’ sense of (37a) is not available in (37b)—except as the coining of a new figurative extension:

\[\begin{align*}
(37) & \quad \text{a. Her face fell} \\
& \text{b. Her face fell to the floor}
\end{align*}\]

\textit{(Ouch!)}. Consider too (38a), which has an ‘idiomatic’ interpretation not available to (b):

\[\begin{align*}
(38) & \quad \text{a. He froze} \\
& \text{b. The lake froze}
\end{align*}\]

Comparable verb-Agentive ‘idioms’ are rare, at best (Marantz 1984), as are purely verb-locative ones. This can be said to reflect the special status of Objective, to which we shall come back on various grounds.
Of course, and as is familiar, there are other patterns of ‘idiom’ apparently involving patterns of semantic relations besides these ‘ergative’ ones, as the couple of examples in (39) and (40) illustrate:

(39) Fred put that on me
(40) a. She fell apart
    b. The crystal fell apart
    c. The crowd fell apart

There is an interpretation of (39) in which on me is a Dative, or ‘patient’, rather than a simple location. Similarly, there is a sense of (40a) that is not shared by (40b), where the subject is again a Dative, perhaps; and a sense parallel to that of (40b) is perhaps easier to associate with (40c), as well as the ‘idiomatic’ one dominant in (40a). However these are analysed, they too do not reveal any distinctiveness for subjects.

However, contemplation of these last might make us question our labelling (34a) as involving either a ‘V-NP idiom’—or a ‘V-Objective idiom’. For isn’t the change in the semantic role of the subject an integral part of the ‘idiom’, as it seems to be in (38a) and (40a), rather than a consequence of it? Just as the change in the role of the on-phrase in (39) is part of the ‘idiom’. The pervasiveness of the Objective in these may simply reflect its presumed universality. We return to such formations again in Chapter 13, specifically §13.2.2. Here I merely register that arguments for the special status of ‘deep subject’ based on alleged idiom asymmetries are illusory.

On the basis of the preceding, and of what else has emerged in this section, a brief look at the course of the infiltration of ‘thematic relations’ into transformational grammar is perhaps in order at this point.

4.3 Excursus on the tortuous history of ‘thematic relations’

Semantic relations begin in the 1970s to enter into accounts of transformational grammar. But the relations involved are not the ‘cases’ of for example Fillmore (1968a) but the confusingly named ‘thematic relations’ of Gruber (1965). These were introduced initially in order to articulate lexical structure, and have a role in stating ‘selectional restrictions’. Jackendoff (1972: 33–4) assigns the ‘thematic relations’ a basically lexical role. But he does also argue for their relevance to the formulation of some restrictions on syntactic phenomena, including passivization; there are ‘thematic constraints’ on various syntactic phenomena. The ‘constraints’ proposed by Jackendoff are problematical (Anderson 1977: §1.4.3), however; and the syntactic role of
‘thematic relations’ seems to be at most peripheral at that point in the
development of transformational grammar.

This is confirmed by the lack of attention given to them in textbooks
produced on the basis of work of the 1970s. Radford (1981), for instance,
devotes only one tentative paragraph to them (pp. 140–41), where he men-
tions for them only a lexical role. The evolution of the well-known Radfordian
textbooks, indeed, provides a measure of the status of ‘thematic relations’ in
the work of the years preceding their respective publications. Thus, by the
time of Radford (1988), Jackendoff’s arguments for ‘thematic constraints’ are
(belatedly) presented, as well as some of Gruber’s and Fillmore’s observations
concerning semantic relations and ‘selectional restrictions’ (§7.10); and pres-
ence of semantic relations is argued to contribute to the elimination of
subcategorization by syntactic category from the lexicon. Semantic relations
are not part of ‘syntactic constituency structure’, but there are principles
‘correlating’ the two (§7.11). And, indeed, there is anticipation that subcat-
egorization for constituency may be predictable from the array of semantic
relations taken by an item (Radford 1988: 384; cf. Chomsky 1986: 86). We are
approaching acknowledgment of some form of UTAH, the ‘uniform theta-
assignment hypothesis’ (Baker 1988: 46):

Uniformity of theta assignment hypothesis

Identical thematic relationships between items are represented by identical
structural relationships between those items at deep structure.

(Compare its predecessor in ‘relational grammar’, Perlmutter and Postal’s
(1984) ‘universal alignment hypothesis.’) We return to the significance of
this in §9.3.1. There is a final anticipation by Radford (1988: 392) that ‘in
Volume Two, we shall see that thematic constraints such as the THETA
CRITERION and the PROJECTION PRINCIPLE have a fundamental role
to play in the description of the Syntax of a variety of constructions’.

Such envisaged roles for semantic relations are difficult to reconcile with
the ‘autonomous syntax principle’ espoused earlier in the same volume
(Radford 1988: 31):

Autonomous syntax principle

No syntactic rule can make reference to pragmatic, phonological, or sem-
antic information.

(See Chomsky 1977a: 42.) It is perhaps not coincidental that in Radford
(1997a) the ‘autonomous syntax principle’ has disappeared from the
index. Of course, one might perhaps be able to construe ‘thematic constraints’
as extrasyntactic filters. But the ‘constraints’ do not control ‘surface’
representations as such; rather, they determine the applicability of rules like passive.
In the absence of the promised ‘Volume Two’ to Radford (1988), Radford (1997a) provides us with an idea of the role of the ‘theta criterion’ (and thus of semantic relations) in various syntactic restrictions (for example ‘raising’ versus ‘control’, pp. 339–41; ‘passive’, p. 347). The ‘projection principle’, however, has also disappeared as such between the two books. But the essential function of semantic roles in the ‘merging’ of arguments with a ‘lexical category’ is described (Radford 1997a: §8.4). There is, following particularly Chomsky (1995), on the other hand, no role for ‘deep structure’ in the syntax, and mention of ‘grammatical relations’, ‘deep’ or ‘surface’, is entirely absent from the index, despite the alleged importance of subjects. We have lost ‘deep structure’, and semantic roles have been assimilated into the syntax, as Fillmore and others had advocated. Also, Chomsky (1988: 104) envisages that ‘in languages that lack actual case endings, prepositions are generally used to indicate case’ (which comes close to the assumptions of a grammar of case of level 2). We still don’t have here a unified ‘grammar of case’, however. But, rather than our pursuing that, it is time to return to the development of ‘case grammar’ itself.

4.4 Conclusion: where we have reached

In pursuit of an understanding of the prolonged debate about ‘deep structure’, I have led us into other histories than that of ‘case grammar’, and, in particular, into that surrounding the demise of the notion of ‘deep structure’. What we have seen is that various other developments within the main transformational-generative tradition served to undermine the traditional view of ‘deep structure’, developments that can be seen as a belated progressive implementation of the early ‘case grammar’ programme.

A significant step in this is adoption of the idea that ‘deep structure’ is the level at which the ‘0-criterion’ applies (Chomsky 1981: §§2.2, 2.5). The ‘0-criterion’ regulates the relationship between NPs and semantic relations, the so-called ‘0-roles’. ‘Deep structure’ thus comes to conform to concept (a) of ‘case grammar’:

Fundamental 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.
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, as we have seen, ‘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’. Concept (b) of ‘case grammar’ has been implemented:

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.

A curious history.

The treatment of the semantic relations played a significant role in the demise of ‘deep structure’. They belong to the syntactically relevant category whose cross-linguistic identification is most obviously semantically based. The destructive consequences of recognition of their syntactic role for autonomy and ‘deep structure’ was clear from the outset, and the results were embodied in early ‘case grammar’. And the incorporation of semantic relations into the syntax portends the recognition of the semantic basis for other syntactic categories.

What mainly differentiates the early ‘case grammar’ view summarized as concepts (a) and (b), repeated above, 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’ (or various kinds of ‘merger’, if you prefer). Developments in ‘case grammar’ since the 1980s have lessened this discrepancy somewhat; but the relationship between lexicon and erection of structure remains much less complex than in the ‘minimalist program’, where developments have tended to increase the discrepancy. This is partly because much of what is conceived of as ‘syntactic’ in the minimalist program involves lexical relationships in a ‘case grammar’. Most of the phenomena associated with
conflation and ‘light verbs’ (as in Hale and Keyser 2002), for instance, whose development in ‘minimalist’ work is part of a retreat from ‘lexicalism’ to syntactic derivationality, do not involve syntax in the ‘case grammar’ framework. I look at these development in §9.3.

Moreover, in a ‘case grammar’ the level defined by the interpretation of the information provided by the lexicon is unlinearized; if this is insisted on throughout the syntax, as has come to be the case, there can be no ‘movements’ or ‘mergers’. The consequences of this, too, are pursued in what follows, especially in Chapters 11 and 12.

Comparative histories are instructive; in the case of comparisons of the evolution of different traditions of ideas within a particular domain, they can have a role both in terms of elucidating the ‘sociology’ of the discipline concerned and in the light they throw on the individual histories that are compared. But it is time to return to our programme concerned with issues raised by early ‘case grammar’ proposals.

Recall the issues identified at the end of Chapter 3:

(3.11) Some issues raised by Fillmore’s proposals

   i) the representation of case relations and forms
   ii) the rejection of ‘deep structure’
   iii) the identification of case and of individual case relations
   iv) the general syntactic framework

We have now reached issue (iii), which for a number of years attracted more attention than any of the others. Chapter 5 looks at something of the diversity of approaches to this issue in the work of those concerned with the early developments in ‘case grammar’. Chapter 6 pursues the implementation in more recent work of one approach to identification—and to the identity of ‘case’ in general—the ‘localist theory’. In moving our ‘history’ forward in time it initiates Part II of this book.
The Identity of Semantic Relations

I think that in the ‘case grammar’ tradition we can distinguish three main approaches that have been taken to the identification of ‘case’ and ‘cases’. All of them recognize overtly that, despite the assumption that ‘cases’ have a coherent semantic content, their individual identification and authentication depends on distribution; and the last of them involves in addition the recognition that an explanation of these distributions depends on an understanding of the notional content of ‘case’.

The first two approaches attempt, then, to complement the individual semantic definitions of ‘cases’ with distributional manifestations of the relations so defined. Just as the general approach to the semantics of ‘cases’ has focused on their individual meaning, so the first distributional approach is atomistic, concerned with syntactic evidence for individual proposed putative ‘cases’. I have listed this as (a) in (1):

(1) The identification of case(s)
   a) distribution of individual semantic relations
   b) contrast and complementarity
   c) the content of case

The second kind of approach, (b), appeals to the distribution of ‘cases’ in general with respect to the items which are subcategorized for them and in syntactic constructions, with respect to their role in ‘case frames’ and to restrictions on their syntax. These can be grouped together as ‘criterial’ approaches to the identification of the ‘cases’. The final approach, (c), eschews the atomistic approach to the semantics of ‘cases’, and attempts to define what characterizes the category of ‘case’ itself substantively, and to relate this to the distribution of the category and its members, the ‘cases’.

All of these endeavours have a contribution to make to our understanding; they are complementary. Let me here first, in §5.1, exemplify (1a), before moving on, in §5.2 to (1b). The somewhat different task imposed by attention to (c), and the implications of one attempt—or, rather, series of attempts—to resolve it, is examined in §5.4. Its location at the end of the chapter reflects its
status as a link to the chapter that follows. The intervening section is concerned with some early, abortive attempts to eliminate ‘cases’ identified as in §§5.1 and 2 as independent grammatical elements. These seem to me to involve misunderstandings of the status of ‘case’ and of linguistic representation in general.

5.1 Distributional criteria for particular ‘cases’

Much of syntax is determined by valency. But, also, certain syntactic constructions depend on the presence of a particular semantic relation. These constructions are rather specialized; but this is not surprising given their restriction to particular circumstances, crucially the presence of a specific semantic relation. One such instance is exemplified in (2):

\[
(2) \quad \begin{align*}
\text{a. Bill was cleaning the car} \\
\text{b. Bill was working} \\
\text{c. \text{*Bill was sleeping}} \\
\text{d. \text{*Bill was feeling good}} \\
\text{e. \text{*Bill was breathing}}
\end{align*}
\]

The \textit{be at it} pro-form for the progressive is normally available only under an agentive interpretation, such as is associated with the (respectively) ‘transitive’ and ‘intransitive’ sentences in (2a, b). The Objective of (2e) and even the Dative of (2d) are not acceptable, even though they involve a human. (2c) exhibits acceptability only under an abnormal, ‘active’ interpretation of the subject of \textit{be sleeping}—for example if Bill was determined to have a sleep.

Some distributional correlates of the semantic relations involve ‘selectional restrictions’. A number of these are discussed in the work of Gruber and Fillmore, for instance. Thus, an adverb like \textit{(very) skilfully} is normally associated with an Agentive, as illustrated by (3), where the subjects in (a) and (b) are again Agentives:

\[
(3) \quad \begin{align*}
\text{a. Bill performed (that)} \\
\text{b. Bill laboured} \\
\text{c. \text{*Bill learnt (that)}} \\
\text{d. \text{*Bill knew that}} \\
\text{e. \text{*Bill expired}}
\end{align*}
\]

(3c) may be interpreted actively, say on the reading ‘Bill managed to get to know about that skilfully’; but often the subject is not interpreted as an Agentive. (3d, e) again involve human non-agents.
It might be objected—and, indeed, it has been—that (3) exhibits a purely semantic restriction and therefore does not relate to the syntax of semantic relations. But this is to miss the point somewhat. These and other 'selectional restrictions' have to be associated with a relationship between particular syntactic categories; they express an inter-categorial relationship, a restriction between the members of two categories. They presuppose the existence of two categories. Let me illustrate this, first, with phenomena that can be interpreted as not necessarily involving 'case relations', before taking up their relevance to the establishment of the latter.

Thus, as a rough approximation, the adjective long is normally predicated of nouns representing concrete entities which are oriented but not usually vertically oriented, as in (4a) vs. (4b, c), or representing an event that takes place through time, as in (4d):

\[
\begin{align*}
(4) & \quad \text{a. The table} \\
& \quad \text{b. *The woman} \\
& \quad \text{c. *The sphere} \\
& \quad \text{d. The play} \\
& \quad \text{e. *The skill} \\
\end{align*}
\]

The noun in (4e) (despite the model of \textit{ars longa}, ...) doesn’t normally meet either of these criteria. Whatever refinements are necessary to such a description, the important point is that the 'selectional restriction', whatever its precise formulation, holds between two syntactic categories, in this instance noun and adjective.

Consider again what is illustrated by (3) in the light of this. The 'selectional restriction' holds between a manner adverb and what? The adverb is associated semantically with an agent. But agency is not a property of the entities represented by nouns; to be an agent it is not enough to be human or animate, which are properties of some of the entities represented by nouns. So the 'selectional restriction' doesn’t hold between adverb and noun. One possibility is to relate the 'selectional restriction' to the relationship between the adverb and the verb: the adverb requires agentive verbs. But this doesn’t account for the fact that \textit{very skilfully} is attributed not to the verb as such but to the manner of participation of one specific argument in the event denoted by the verb: agency—as opposed to being agentive or actional—is not a property of the verb itself, either. The 'selectional restriction' holds between the adverb and a semantic relation, the specific relation between verb and noun.
This suggests that semantic relations belong to a category that, like other categories, enters into ‘selectional restrictions’. The category may not be overtly expressed as such, as in (3) or (5a):

(5) a. That was performed very skilfully
   b. That was performed very skilfully by the orchestra

But it may be given overt expression, as in (5b). In this way, ‘selectional restrictions’ illuminate the syntax of the sentences concerned, in particular their categorial structure. And they show that this category, of semantic relations, has semantically systematic members, whose identity correlates with that established by more centrally syntactic evidence. I do not pursue the approach in (1a) further, except to observe that I am aware of such evidence only for some members of the sets of ‘cases’ that have been proposed (basically the ‘localist’ ones—see below). But we shall come back to further instances of ‘selectional’ evidence.

5.2 General criteria: principles of ‘complementarity’ and ‘contrast’

Here we are concerned with distributional patterns that apply to instances of any member of the category of ‘case’. Discussion of these largely originates in Fillmore’s (1971) proposal of various principles of ‘complementarity’ and ‘contrast’ which regulate the occurrence of any member of the category (or, by implication, given their apparently intended general applicability, any other category). The form these principles took, however, was determined by Fillmore’s conception of the relationships between ‘case’ and its accompanying argument and between ‘case’ and its head (to put it in dependency terms). The proposed character of these relationships is both in accord with some principles and a determinant of the form of other principles. I look first at the constraints on these relationships between ‘case’ and other elements suggested by Fillmore.

Fillmore’s (1968a) formulation of what came to be called elsewhere the ‘theta-criterion’ underlies the principles invoked under (1b):

*Fillmore’s proto-theta-criterion*

Only one (possibly coordinate) token of each case is permitted per proposition (p. 22).

Each N<Pnoun> P<phrase> is associated with only one case label, such that in any proposition there is a one-to-one matching of C<ase> R<relation>s and NPs (p. 24).
In dependency terms, the first part of this criterion concerns the dependency between predicator and 'case', the second the 'case'-argument dependency. This criterion can be seen as the basis for the application of proposed principles of contrastivity versus complementarity. Before turning to the latter, however, let us look further at the motivations for the criterion itself.

Given the coincidence between the formulation of Fillmore and the 'θ-criterion' adopted in later developments in the main transformational tradition, the choice within the transformational tradition of Gruber's (1965) notation (of 'thematic relations') over Fillmore's 'cases' is discrepant. Jackendoff (1972: §2.3) is at pains to point out that one (the?) advantage of Gruber’s system is that in it ‘noun phrases can function in more than one thematic role within the same sentence’ (p. 34). Gruber’s system allows violation of the ‘θ-criterion’ in this respect.

In support of Gruber’s position, Jackendoff argues that though the subjects in (6) share the role of ‘Theme’ (roughly, Objective), the sentence in (b) is ambiguous in a way that (a) is not:

(6)  a. The rock rolled down the hill
    b. Max rolled down the hill

*Max* in (6b) may or may not also be ‘Agent’. On one interpretation it combines the roles of ‘Theme’ and ‘Agent’. On both interpretations *Max*, as ‘Theme’, represents the entity undergoing the movement, but on only one of them *Max*, as an ‘Agent’, designates the instigator of the movement as well (cf. too Anderson 1968a: app.; 1971b: esp. ch. 4; 1977: esp. §2.1; Huddleston 1970; Fillmore 1969: §4).

A few later publications adopt Gruber’s view that semantic relations may be combined to take a single argument (see for example Culicover and Wilkins 1986), but on the whole the restrictions embodied in Fillmore’s ‘θ-criterion’ have prevailed. And even for Broadwell (1988) for example, ‘multiple θ-role assignment’ depends on lexical decomposition, so that an argument receives only one role from any one ‘predicate’. And Chomsky, in adopting the ‘θ-criterion’ (1981: 39, n. 14) as a whole, explicitly rejects Gruber’s approach in favour of the Fillmorean one, apparently. However, he comments mysteriously on Jackendoff’s interpretation of the agentive interpretation of (6b): ‘I will assume that such cases should be dealt with by modification of θ-role assignment rather than by modification of the θ-criterion, though it is not obvious that this decision is the right one.’ Consideration of the application of principles of ‘complementarity’ and ‘contrast’ suggests that it was indeed not ‘the right one’. Let us now look at such applications.
On the basis of his proto-theta-criterion, Fillmore (1971: §3(c)) suggests, for instance, a principle of ‘contrast’ that is particularly easily exemplified by subjects. In terms of the principle, if the subject of a certain class of predicators shows systematic ambiguity apparently in semantic relations and only one of the readings is available with a different set of predicators, a contrast in semantic relation can be posited in subject position with the first class of predicators. So, whereas the subject in (7a) shares a putative semantic relation with that in (7b), we can associate with it a further alternative that is not as obviously shared:

(7)  a. This jacket is warm  Place/Instrumental  
     b. This room is warm  Place

The interpretation in common between (7a) and (b) is of ‘warmth-possessor’, or ‘warmth-location’; the subjects are ‘P(laces)’ for Fillmore. The distinctive interpretation of (7a) is of ‘warmth-giver’. Fillmore labels the latter ‘I(nstrumental)’. We might note that, in terms of Fillmorean ‘cases’, we can associate a further interpretative distinction with (8), involving whether the ‘warmth possessed’ is physical or mental, a spatial location or a mental attribute:

(8)  I am warm  Place/Dative

Whereas (7a) is either Place or Instrumental, (8) is either Place or Dative. We have provisional distinctions in semantic relation here. Subject position involves neutralization of these.

The proliferation of such distinctions in ‘case’ is intended to be checked by considerations of ‘complementarity’ (Fillmore 1971: §3(d)), i.e. circumstances where possible distinctions in semantic relation can rather be ascribed to other elements in the structures, as in (9a):

(9)  a. The ball rolled from the door to the window  
     b. The house changed from a mansion into a ruin

Here, semantic relations in the two sentences are the same, consistent with the case-marking; the difference between ‘change of place’ and ‘change of class’ relates to a concrete versus abstract interpretation of the predicator (cf. Anderson 1970); this reflects the domains occupied by the predicator and its arguments. The corresponding arguments of these two sentences do not contrast in semantic relation: there is no pairwise neutralization of semantic relations. Even the ‘case’ of the subject is in common.

Application of this notion of complementarity also undermines, however, aspects of what Fillmore has to say about the subject of warm. He suggests
that the subject of (10) shows a semantic relation distinct from those in (7), which he labels Time:

(10) Summer is warm Time

But complementarity requires that we attribute the temporal interpretation to the noun. It represents a different kind of ‘possessor-of-warmth’, a different kind of ‘location-of-warmth’, a different domain for Place of location of the ‘warmth’. Differences in the interpretation of what location is involved in the two instances are complementary, and determined by the content of the noun.

Indeed, to pursue this further, with the ‘warmth-giving’ interpretation of (7a), it may simply be that some entities are more easily seen as implying the giving out of warmth, without this being embodied in the semantic relations imposed by *warm* rather than, say, *warming*. Contrast the source of heat interpretation associated with the subject of (11):

(11) This jacket is warming

The contrasts in subject position of *warm* may reduce on Fillmore’s criterion to (at most) Place versus. Dative (one meaning of (8)).

Other aspects of contrastivity are explored in Anderson (1977: §§1.7, 2.6). He suggests that adoption of something like Fillmore’s ‘proto-theta-criterion’ means that if a predicator is subcategorized for more than one ‘case’ phrase, these phrases must realize different ‘cases’; they contrast lexically. If two putative ‘cases’ do not contrast in this way—i.e. they never co-occur in ‘case frames’—they are not in contrastive distribution. Only co-occurrence in the same ‘case frame’ ensures what we might call ‘syntagmatic contrastivity’ or ‘syntagmatic non-complementarity’.

Thus, trivially, the two arguments in (12) are distinct in semantic relation, whereas the subjects in (7b) and (10), labelled Place versus. Time by Fillmore, do not involve a contrastive distinction in semantic relation:

(12) The girl opened the door

Putative Place and Time co-occur in a sentence only by virtue of circumstantial, or adjunct, status. In (13) no more than one of the arguments is part of the ‘case frame’ or proposition:

(13) a. Summer was warm in Sweden
    b. Sweden is warm in summer
    c. The weather is warm in Sweden in summer
The circumstantials are marked overtly as Place, as with the propositional Places of (14):

(14)  a. Bill is in London
       b. The concert is on Tuesday

As (13) already illustrates (and as explored in §9.2), constraints on circumstantials involve other considerations, however—as raised, for example, in Fillmore’s reconsideration of Place and Time (1971: §8). But we can conclude that, on the basis of syntagmatic contrastivity, too, the relations borne by the subjects in (7b) and (10) are semantically the same: Place, in Fillmorean terms. There is no case for a ‘case’ Time, on any grounds.

Discussions of contrast and complementarity also underline the importance of semantic substance in evaluating distributional evidence, just as reference to phonetic substance is essential in the phonology. Hence the suggested complementary versus contrastive analogy with the phonology, introduced as such by Fillmore (1971b). We need to be able to locate the category to which a particular notion belongs; whether for example, the Time/Space distinction is relational or nominal in its expression. The primary identification of ‘cases’ is by their contrastive substance. General applicability of this recognition is what underlies ‘notional grammar’. But that, once again, is to anticipate: see Chapter 10.

Insufficient attention to complementarity and (particularly what I have called syntagmatic) contrastivity has led to a proliferation of ‘cases’. Recognition of a further instance of non-contrastivity resolves many of the problems that have been attributed to one of Fillmore’s proposed ‘cases’, the much criticized Instrumental (see for example Dougherty 1970; Huddleston 1970; Chomsky 1972: §6.8.3). Despite the proposed status of Instrumental as a propositional ‘case’, there are no predicators that contain both Agentive and Instrumental in their ‘case frames’, no propositions containing both. Thus, the final phrase in (15a) is a circumstantial, absent in (12):

(15)  a. The girl opened the door (with the/a key)
       b. The key opened the door

Certainly, this is a circumstantial that normally requires the presence of an Agentive in the proposition. But this, however it is to be expressed, is not unusual: cf. ‘circumstantials of purpose’—for example with in order to— which also require a propositional Agentive. See again §9.2 on such properties of circumstantials.

The putative Instrumental in subject position in (15b) does not co-occur with a propositional Agentive; they are mutually exclusive, because they
involve the same participant type. Propositional Instrumental and Agentive share the semantic characterization ‘source of the action’. We differentiate as speakers between the two in that the human referent of the noun in (15a) can display volition, intention in her action—though not necessarily. But this doesn’t motivate the positing of a distinction in semantic relation here. We can recognize that the Agentive in (15a) is prototypical, in that it allows or even encourages these interpretational possibilities (volition etc.), as well as allowing modification by ‘instrumental’ and ‘purposive’ circumstantials. These are all associated with the human-ness of the denotatum of the Agentive argument. But the subjects in (15) are not contrastive in ‘case’: in both instances they are presented as sources of the action, with semantic relation Agentive—even if we understand that the Agentive in (15b) is not the ‘ultimate source’ in the ‘real world’, but most likely should be interpreted as an ‘intermediary’.

Projecting the non-agentive status of the circumstantial with-phrase in (15a) onto the subject of (15b) and attributing to the latter a different ‘case’ than in (15) again ignores the fact that the same situation in the world can be conceptualized and represented in different ways. So that the optional phrase in (16a) is a non-propositional ‘agent’, assuming that the passive ‘agent’ is some sort of circumstantial; but that in (b) is a (non-propositional) ‘instrument’:

(16) a. The door was opened (by the key)
   b. The door was opened (with the key)
   c. The door was opened (with the key) (by the girl)

(16c) has a succession of (non-propositional) ‘instrument’ and ‘agent’. Whatever the appropriate analysis of such ‘instrumentals’ might be, they are circumstantial only.

I note in passing that by describing the by-phrase in (16a) as non-propositional I am again anticipating developments in the analysis of passives that are later than the discussions of Instrumental that I have alluded to (see §10.2). Some of the history of these developments is recorded in Anderson (1977: §3.3; 1997: §3.5). In terms of later developments (see §9.2.2), we can characterize ‘passive by-phrases’ as circumstantials that are coreferential with a propositional Agentive that has been ‘incorporated’ in the lexicon into the verb (signalled by the morphology), whereas ‘with-instrumentals’ are circumstantials that are not in this coreferential, appositive relation to the verb structure.

The subject of (15b) represents a type of non-prototypical Agentive, along with the subject of (17a):

The Identity of Semantic Relations
(17) a. The wind opened the door  
    b. The door was opened by the wind

There is no motivation for introducing a further semantic relation, ‘Force’ (Huddleston 1970), in this latter instance either, or for its assimilation to Instrumentals (Fillmore 1971: §5(b)). The ‘displaced’ Force in (17b) is marked with by, as a (non-propositional) ‘agent’.

‘Instrumental’ is only circumstantial. The differentiation between the pre-verbal arguments in the Kewa sentences in (18) (from Palmer (1994: 48), citing Franklin (1971: 62)) thus doesn’t reflect a distinction in participant role:

(18) a. áá-mé répena póá-a  
    man-agt tree cut-did  
    ('The man cut the tree')

    b. rai-mi tá-a  
    axe-ins hit-did  
    ('The axe hit it')

Both arguments are Agentive. The morphology marks a difference in prototypicality of the Agent. Moreover, by using the instrumental inflection for the non-prototypical, it reflects the fact that such arguments are often (circumstantial) ‘instrumentals’. This does not mean that the argument in (b) is ‘instrumental’—any more than the use of the same inflection for (participant) Agentive and (circumstantial) ‘instrumental’ in a number of ‘ergative’ languages (such as Tabasaran—see §8.4) means that the former are ‘instrumentals’.

The wide interpretation of Agentive described here also means that the very limited relevance of ‘case’ to coordination, also invoked by Fillmore (1968a) as involving a ‘principle’ requiring the sharing of ‘case’ by conjuncts, is highlighted, given the awkwardness of combining different kinds of Agentive, particularly prototypical and inanimate.

(19) a. *John and a hammer broke the window  
    b. *John and the march of time/my finger/the wind/high temperature/  
       nobody/the Neanderthal man broke the window

Fillmore (1968a) suggested that the anomalous character of (19a) reflects a constraint on the coordination of arguments having different case relations. Now, it may be that such a preference for shared semantic relation may underlie the unacceptability of some coordinations. But clearly that is not all that is involved, as emerges from discussions at the time referred to in Anderson (1977: §1.6), and from the selection of examples in (19b).
A couple of final remarks that will have relevance later, before we conclude this inconclusive review of ‘case criteria’. 

On the basis of such arguments as we have looked at in this chapter, and others, Cook (1978; 1979) envisages five propositional ‘cases’, which he presents as in (20):

(20) (Experiencer)
    (Agent) (Benefactive) Object
    (Locative)

The brackets indicate optional presence in a proposition; Cook assumes that the Object(ive) is obligatory (cf. Gruber 1965; Anderson 1971b: 37; Taylor 1972; Starosta 1978; 1988: §4.2.1.4), and we shall return to this. But the three ‘cases’ presented vertically in (20) are regarded as mutually exclusive. This offends against syntagmatic contrastiveness, however: ‘cases’ cannot be complementary. And it does not seem to be correct as an observation. Consider, for example, (21):

(21) Jeff derived considerable pleasure from the expedition

Here we seem to have, from right to left, a propositional Locative, an Objective, and a Benefactive or Experiencer.

The situation is a little more complex, then, though there is something to Cook’s suggestion: these ‘cases’ are related in some way. Attempting to describe this relationship will bring us on to the approach to the identification of ‘cases’ given as (c) in (1), which we take up in §5.4:

(1) The identification of case(s)
    c) the content of case

The relationship underlying Cook’s suggestion emerges in one particular attempt to address (1c) that we’ll look at there.

Let us note also that the kind of perception that underlies Cook’s suggestion has also led to the recognition of the some variety of ‘componentiality’ for ‘case’. Nilsen (1972), for instance, argues for a characterization of something like the traditional ‘cases’ as bundles of semantic feature values. And suggestions that some ‘cases’ at least could be combined (as initially in this section) can also be seen as invoking ‘componentiality’. These latter suggestions lead to a distinction between ‘case role’ and ‘case relation’, where a ‘role’ may be defined as a combination of ‘relations’. This last development too is intertwined with the pursuit of a theory of content we shall be looking at in §5.4.
5.3 The ineluctability of ‘case’

The failure to establish a well-defined set of ‘cases’ has been justifiably much criticized, and this criticism obviously extends to frameworks that invoke ‘thematic relations’. Andrews (1985: 70) affirms that ‘no presently known system of semantic relations can be comprehensively applied in a convincing manner’, while Carlson (1984) acknowledges the lack of a theory of ‘thematic roles’, despite the ‘persistence and utility of such constructs’ (p. 260). On the other hand, there have been detailed criticisms of the notion of case relation (or thematic role/relation) that are based on illusions concerning the status of these. Specifically, these critiques confuse linguistic representations with representations of the real world, as well as assuming arbitrary and implausible assignments of case relations.

Dowty (1989)—and see too, more recently, particularly Ackerman and Moore (2001), for instance—points to ‘three recurrent problems’ allegedly arising from the conflict between the ‘argument-indexing’ role of ‘cases’/‘thematic roles’ and their semantic characterization. Dowty adduces in the first place the ‘problem’ associated with assigning the ‘Agent’ relation to all of the subjects in (22):

(22)  a. The duck is swimming
    b. The duck is dying
    c. The duck saw the frog
    d. The duck swallowed the frog

However, it is unclear why anybody would want to claim that these subjects have the same role in the predication. Only the subject of (22a), on one interpretation at least, is a straightforward Agentive, and even in its case Agentive is combined with Objective, since the denotatum of the subject combines the source of the action with the entity subjected to it. The subject of (22b) is a straightforward Objective, though the verb also, by virtue of its meaning, imposes an animacy requirement on the Objective argument. The subject of (22c) is what Fillmore (1968a) called a Dative (roughly what has subsequently been known as an ‘Experiencer’). We can again associate Agentive with the subject of (22d), but in this instance it is not combined with Objective (but rather, in terms of the analysis developed in the following chapter, a Goal). There is no ‘problem’ of accounting for why all of these ‘sub-roles’ can be combined into the role of ‘Agent’: only (22a) and (22d) involve Agentive, and each of them involves in addition a different relation. There is no such ‘combining’; there is no ‘problem’.
Dowty (1989) also reintroduces the familiar examples of ‘symmetric(al) predicates’, ‘psych predicates’, and pairs like buy and sell (discussed in, for example, Fillmore 1972). Concerning these last, Dowty observes, concerning the pair in (23), as expressed by Ackerman and Moore (2001: 24), that ‘on an intuitive level one would assume that, e.g., Max is an AGENT and Mary is a RECIPIENT in both the (a) and (b) sentences’:

(23)  
   a. Max sold the piano to Mary for $1,000  
   b. Mary bought the piano from Max for $1,000

Appeals to ‘an intuitive level’ are always suspect; linguists’ intuitions (which are of diverse origins) are not evidence. And in the present case (as discussed in §4.2.2), it doesn’t follow from the assumption that the ‘vendor’ in (23a) is an Agentive, as source of the immediate action described by the verb, that the ‘vendor’ in (23b) is presented as an Agentive. In the latter instance it is rather the ‘customer’ that is presented as the source of the immediate action, even though the same ‘real-world’ event may be being referred to by (23a) and (23b). To maintain otherwise is to succumb to ‘the objectivist’s misconception’ (see again DeLancey 1991).

A related misunderstanding lies behind the alleged problem concerning such phrases as for $1,000, which Dowty (1989: 106) identifies as a ‘secondary theme’. Such phrases are not part of the ‘case frame’; they are circumstantial. Exchange of money may be essential to our understanding of buying and selling, to the extent that such an argument is ‘incorporated’ in the lexical structure of these verbs (perhaps after the fashion of §9.2, i.e. with for $1,000 in apposition to an incorporated argument); but such overt phrases as for $1,000 are not encoded as participants. And they certainly have nothing in common with other putative (participant) ‘Themes’. We have stepped over what Dowty calls elsewhere ‘the elusive boundary between arguments and modifiers’ (1982: §9). It is unhelpful to render the ‘boundary’ more ‘elusive’ than is warranted.

Similar confusions also explain the adducing of the other pair-types alluded to above. On so-called ‘psych verbs’, see here again §4.2.2; on ‘symmetric predicates’, see Anderson (1973b). Basic to the idea expressed there is that a verb like resemble in (24) is a directional verb, as spelled out in the complement of the adjective similar (to), as well as being equative like be:

(24)  
   a. The grocer resembles that statue  
   b. That statue resembles the grocer

Recall the equative of (4.13), discussed in §4.1, and see further §6.1:
(4.13)  a. The guy over there is my lover
       b. My lover is the guy over there

So that, in present terms, the subject in (24) is an Objective Source, the post-
verbal complement an Objective Goal. Reversibility is associated with the
presence of two Objectives, as with simple equatives.

As Fillmore (1972: 12) observes, there are restrictions on reversibility. (25a)
is not reversible:

(25)  a. Your brother resembles a horse
       b. There is a horse that resembles your brother

But this has to do with the avoidance of indefinites as subjects. And (25b)
ilustrates that, on a non-generic interpretation, it is possible for the indefinite
to function ‘indirectly’ as the subject of such a verb. Likewise, though the
equative (26a) is not obviously reversible, (26b) allows ‘indirect subjeckhood’:

(26)  a. Her lover is a plumber
       b. It’s a plumber who is her lover

This also illustrates incidentally that we cannot equate the predicative versus
equative distinction with definite versus indefinite: (26a) has both a predicative
and an equative reading.

Such arguments as Dowty offers are based on a fundamental misunder-
standing: linguistic representations do not represent the ‘real world’; they
don’t even represent ‘our perceptions of the real world’, but only one per-
pective on our perceptions. ‘Real world’ situations do not determine linguis-
tic representation. Dowty’s programme for denying case relations an
independent role, and specifically a combined semantic and a syntactic role,
has nevertheless been pursued in various ways, as evidenced already by Acker-
man and Moore’s (2001) approach and by developments in ‘role and reference
grammar’ (Foley and van Valin 1984: esp. ch. 2).

At a somewhat later time van Valin (1993a: 43) states his position thus:

In Fillmore’s original proposal (1968[a]), the ‘case frame’ of a verb, e.g.[A (1) O], was
intended to be a partial representation of the meaning of the verb, and it also fed into
the operation of grammatical rules, e.g. the subjectivization, objectivization and
raising rules. In R<ole and> R<ference> G<rammar>, thematic relations have
only the second function; the L<logical> S<tructure> of the verb is its semantic
representation, and the role labels like ‘effector’ and ‘theme’ are mnemonics for the
argument positions in LS.

But the motivation for this weakening of Fillmore’s proposal is unclear.
Indeed, the counting of ‘case’ valency as part of the meaning of an item
renders much of 'LS' superfluous to the description of language. And the valency is basic: an 'action' is a 'scene' containing an 'agent'; no agent, no action.

The Dowty enterprise also surfaces in rather different form in, for example, Grimshaw and Mester (1988); Grimshaw (1990), and in the traditions exemplified by Hale and Keyser (2002). These more or less 'reductionist' views of semantic relations are generally implemented (as also in the case of Dowty (1976; 1989: §2; 1991)) at the cost of acceptance of an undesirably abstract view of syntax and of the syntacticization of lexical structure. This is the kind of view that was associated with the development in the 1960s of what was labelled 'abstract syntax' and ultimately 'generative semantics'. Thus Dowty (1982: 84):

A verb that ultimately takes $n$ arguments is always treated as combining by a single syntactic rule with exactly one argument to produce a phrase of the same category as a verb of $n-1$ arguments.

Lexical derivation is mediated by a 'syntactic rule'. And in a programme such as Dowty’s or that of Cooper and Parsons (1976), despite such stipulations, the notation inherently loses the unity of the category ‘verb’, for instance. Similarly, Grimshaw’s (1990) attempted elimination of case relations invokes a hierarchy of arguments that is either arbitrary or derivative and non-universal, just as Dowty’s and van Valin’s depend on the invoking of an arbitrary hierarchy of ‘positions’.

We return to some of the more recent developments of this kind, and their relationship to ‘generative semantics’, in §9.3. In the next chapter, however, we look at one tradition that attempts to arrive at a comprehensive theory of ‘case’ compatible with the overall Fillmorean position, the ‘localist’ tradition described and formulated in Hjelmslev (1935/7); and on the basis of this we return briefly to arguments for the basicness of semantic relations in §6.3.

### 5.4 Localist grammars of case

Before considering some attempts to eliminate case relations from a central role in expressing and linking semantics and syntax, we have looked in this chapter at the kind of criteria that can be invoked in support of the positing of individual ‘cases’, and at various principles of contrastivity and complementarity. However, there has not been any general agreement on the implementation of either apparatus discussed here (in §5.1 and §5.2 respectively), nor have they been consistently and persistently applied. I shall suggest that this is not surprising, in principle.
5.4.1 The insufficiency of ‘criteria’

The combination of principles of (1b) is distributionally based, though they also rely on semantic substance, specifically semantic similarity (the necessity for which we shall return to). If they are appropriate (or could be made appropriate), the combination should, when applied consistently, lead to the establishment of a set of semantic relations language by language, so that these also correlate with syntactic criteria associated with particular ‘cases’ in a particular language. But in itself this provides no account of why the ‘cases’ constitute (if they do) a universal set, nor why the set is the size it is, why it comprises the semantic relations it does. And it therefore still leaves some scope for the ex tempore proliferation of ‘cases’ in relation to particular languages. It doesn’t tell us what in principle it takes to be a ‘case’.

Moreover, as revealed by the short discussion of ‘unaccusativity’ in §4.2.1, ‘criteria’ are in practice difficult to apply, and may even be contradictory. Particular morphosyntactic properties tend to reflect several (say, categorial) distinctions at once; they are not ‘pure’. This is also exemplified by constraints on coordination (§5.2), or by the construction illustrated by (2) in §5.1: the final…at it has been invoked as evidence for the analysis of progressives as locative (Anderson 1973a), but its occurrence is limited to agentive expressions. ‘Criteria’ are explicanda rather than definitive of some aspect of structure; and they are insufficient as ‘criteria’ unless we can show why particular ‘criteria’ are relevant to the analysis of a particular domain.

Invocation of the ‘principles’ of §5.2 did not resolve ongoing controversies on the status of, say, the putative case relation ‘Instrumental’: see for example Fillmore (1968a; 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 for example Schlesinger (1995), Anderson (1998: §1). Certainly, this was in part due to the failure to implement the ‘principles’ consistently, as suggested in §5.2. But, anyway, application of such procedures also does not necessarily lead to understanding of what the ‘principles’ are identifying. I have given here only very selective impression of the attempts to apply such ‘principles’ (though a somewhat fuller account of the early work, which it is unnecessary to duplicate, is offered in Anderson (1977: ch. 1)). But the inconclusiveness of what we have looked at is indicative. This is characteristic of ‘criterial’ approaches to categories: they may provide insight into the syntax and semantics of ‘cases’, but they do not constitute a theory of the category, which depends on characterization of its content; only thus can we explain why the ‘criteria’ are ‘criterial’.
Hjelmslev points out the unsatisfactory character of the lack of a theory of case (1935: 4):

Délimiter exactement une catégorie est impossible sans une idée precise 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.

The mainstream of modern linguistics inherited no unified account of case. As we have seen, the dominant view was that there were two kinds of case, the grammatical and the local or notional, as displayed in (2.4), which presents Holzweissig’s interpretation of the early Indo-European languages:

(1.4) a. grammatical cases: accusative, dative, genitive
    b. local cases: ablative, locative, instrumental

And observe again that nominative and vocative stand outside both of these divisions.

Hjelmslev himself reintroduced the localist tradition (1935/7), which had been sidelined by the end of the nineteenth century, after a contentious history of some centuries. The localist theory of the content of case is articulated in terms of spatial dimensions: all the cases are ‘local’. Anderson (1971b) argued too that this offered the most promising theory of case and ‘case’, though his articulation of localism differs from Hjelmslev’s. Some of the differences are contingent (as implied by Starosta 1981; 1988: 194), depending on the syntactic-derivationalist orientation of Anderson (1971b) and (1977). Others are more fundamental, as we shall see.

However, I think that Anderson (1992: 71) provides a reasonably uncontroversial summary of the core of the ‘localist’ enterprise as conceived in both recent and ancient times:

The strong version of this view limits the set of C(ase) R(elations) to those which are defined by the semantic components required to express concrete location and direction; the use of them to express concrete location and direction . . . merely constituting one, albeit privileged, manifestation. Concrete spatial expressions have a special status: they are, for instance, more highly differentiated in terms of dimensionality. But other, abstract situations are conceptualized in these spatial terms; the CRs provide . . . ‘suppletive metaphors’ (rather than the merely ‘supplementary’ metaphors of rhetoric), i.e. metaphors for which there is no ‘literal’ equivalent. Abstract domains are structured linguistically by space-based metaphor, including its egocentric orientation. . . . The localist hypothesis makes available not only a restrictive specification of the domain of CRs but also one that, along with other linguistic phenomena, can be said to instantiate more general cognitive principles (cf. for example Miller & Johnson-Laird 1976).
It is the task of the rest of this chapter and of the following one to look at the morphosyntactic consequences of such a view. For such an approach to the content of ‘case’ is argued not merely to be compatible with distributional observations but to underlie them. The theory of ‘case’ selects and makes sense of the ‘criteria’.

I shall not attempt here to trace further back the long history of the debate concerning localism, which includes its application to areas other than case—for example Darrigol (1829) on ‘aspect’ in Basque (on which see Anderson (1973a)). Such a historiographic enterprise is never without its interests. The controversy over the status in the history of localism of the Byzantine Maximus Planudes is but one area that has provoked revelatory controversy (Robins 1993: ch. 11), concerning which Robins concludes (p. 226):

In sum, it is not unreasonable to conclude that a localist theory of noun cases had been gradually developing, from its first hints in the Téchnē, through further observations in the works of Apollonius and Priscian, and receiving more prominence among the Byzantine grammarians, notably Heliodorus, but that it received its first recorded explicit presentation at the hands of Planudes.

It is in our own interest, too, as in general, to have an awareness and acknowledgement of this history; but I want to retain my focus here on ‘modern grammars of case’.

Hjelmslev provides a fairly detailed overall survey of localist and non-localist theories of case (1935: pt. I). There he identifies the ‘problème’ of the nature of the category of case, with particular attention being given to the proposals of the nineteenth century. And it is his work that is most relevant to more recent developments.

5.4.2 Hjelmslev and localism

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 dative, accusative, and genitive, and even nominative, 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 (and indeed, ultimately, possibly misleadingly), illustrate something of the Hjelmslevian system for traditionally ‘local’ cases with the set from Finnish in Table 5.1, which can be interpreted as showing respectively negative orientation, neutral and positive.

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 in the particular language, and an ‘extensive’, which is diffuse in 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 we can associate this with its typical concentration in one of the zones in such as Table 5.1, compared with the zonal ‘diffuseness of other cases. Moreover, the identity of the ‘intensive’ is something that differs from language to language. Further, an opposition between cases may be ‘complex’, i.e. involving terms that combine the zones in Table 5.1 in various ways: it may be ‘contraire’ or ‘contradictoire’ or ‘participative’. I won’t pursue this here, revealing though it is as concerns the system of case forms of individual languages (as demonstrated by the detailed analyses offered in Hjelmslev (1935/7)).

Hjelmslev also recognizes, however, that the semantic space occupied by some case systems is more extensive than is allowed for simply by the single dimension of ‘direction’. The dimension of Table 5.1 may be accompanied, he suggests, by a second dimension, which presupposes the first. This he labels the dimension of ‘cohérence’, as included in Table 5.2, again illustrated from Finnish.

The interior cases are ‘cohérent’, the others ‘incohérent’, a distinction which Hjelmslev paraphrases as: ‘une difference dans le degre 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’ versus ‘objectivité’.

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<td>cohérent</td>
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<td>-essive</td>
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He illustrates this with the French prepositional expressions in (27) and (28) respectively:

(27) subjective: devant/derrière
(28) objective: au-dessus/au-dessous

These could all, in some general sense, be regarded as ‘subjective’, compared with the distinctions associated with the other dimensions, in involving either deictic reference (27) or canonical orientation (28). But Hjelmslev seems to associate ‘subjectivité’ with deictic reference only.

There are clearly other potential dimensions which seem to fall within each of the groupings prescribed by Hjelmslev’s dimensions. Many of them, at least, are allowed for by deployment of the third, ‘neutral’ term of the dimension of ‘coherence’ (1935: 130), or by ‘complexity’ (with the two poles combined for some cases, (1935: 132)). But within the interior group we need to be able to allow for the distinction between the ‘interior of a container or area’ and the ‘interior of a line or surface’. In English, the former is marked by in, the latter by on, as illustrated in (29) and (30):

(29) It’s in the house/square
(30) It’s on the way/table


The establishment of the structure of dimensionalities is of interest in itself. However, again I don’t pursue this at this point, as none of these dimensions except for the first directly involves the kind of participation in the situation of the complements of the case or adposition. This area will be relevant, however, to our look in Chapter 8 at complex ‘case’ categories. The dimensions other than the first are not central to our present concern. And they are operative only with those cases or adpositions that can have an obviously concrete-spatial interpretation. But, crucially for the localist, even those cases that have, whatever else, no obvious concrete interpretation are characterized and distinguished with respect to the dimension of direction.

It is, however, important to observe concerning Hjelmslev’s proposals that he rather goes out on a limb in including the nominative as directly reflecting directionality. This is not a position adopted by his localist predecessors, Byzantine or later (notably Hartung (1831) and Wüllner (1827; 1831)). Hjelmslev comments (1935: 43):

Dans le système localiste établi par Wüllner, il y a une chose qui surprend: c’est l’absence du nominatif. Wüllner et Hartung ont ici adopté la même manière de voir que les localistes de l’école grecque: il ont mis le nominatif à part. Wüllner le fait...
d’ailleurs en donnant la même définition du nominatif que celle qui avait été donnée par les Anciens et par Maxime Planude: le nominatif indique l’indépendence ou l’absence d’une relation.

Hjelmslev thus aligns himself rather, in this respect, with the non-localists Ast (1808) and Döleke (1814), who abandoned, along with Hjelmslev, the dependent/independent (upright/oblique) notion as distinguishing the other cases and the nominative, and overtly recognized them all (except the vocative) as expressing relations. Now, the ancient ‘independence’ characterization of the nominative leaves much inexplicit about its role; and I would not want to deny the relationality of the nominative. But the localist analysis of the nominative put forward by Hjelmslev has not found much acceptance.

The main problem here is that the nominative is the case that is recognized on the basis of its representing the subject, whatever else. And (as noted in recent times by Fillmore (1968a: §1.1) and elsewhere) the subject seems to display a variety of semantic ‘orientations’ with respect to its predicator. This is illustrated by the set of examples in (31), of a familiar character, all with the same name of a human as subject:

(31)  
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 (31a) we have an Agentive, in (b) an Objective, whereas (c), as usually interpreted, seems to combine the two—as I’ll come back to. (31d) is an Objective again, presumably, but here introducing the argument that refers to the located entity rather than the moved entity, as in (31b, c). (31e) seems to combine located entity, Objective, and Agentive, as typically interpreted. In (31f), Bill is presumably again an Objective, but without attribution of goal or location; and in (31g) a quality or class is attributed. In (31h) the subject is apparently neither Agentive or Objective, on both semantic and syntactic grounds that are familiar; nor is that in (31i) or (31j).

Hjelmslev, however, 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 (32), presented in his transcription and with his segmentation:

(32) róz-ə krasiv-ə
    rose-NOM beautiful-NOM
    (‘The rose is beautiful’)

Ici le nominatif de róz-ə implique un éloignement syntagmatique (le fait de régir), et le nominatif de krasiv-ə implique un rapprochement syntagmatique (le fait d’être régir).

Now, we must be careful, as Hjelmslev warns us, not to identify directionality and space in general with just its concrete spatial manifestations. Otherwise, for instance, we prevent the application of the localist idea to tense and aspect and quantification, other domains which do not denote part of physical space, but where localism of some sort has proved insightful (see for example among exemplars from the last few decades, Gruber (1965); Anderson (1971b; 1973a; 1973b; 1974a; 1974b); Miller (1972; 1985); Jessen (1973; 1975); Traugott (1975); Jackendoff (1976; 1983); Lyons (1977: §15.7); van Buren (1979); Talmy (1983); Langacker (1987; 1991a; 1991b). But the metaphor of the directionality of rection seems to take us into quite a different domain from these others. It may well be appropriate, in some sense, to that domain; but simply collapsing ‘rection’ with these other manifestations of directionality and taking it to define the nominative obscures the neutralization of semantic relations that we find in (31). It is unsurprising that most localists have not attempted a localist analysis of subjects as such (as opposed to, in some instances, the semantic relations that it neutralizes)—but we pursue the characterization of the nominative in such terms in §6.3.

5.4.3 A localist interpretation of ‘datives/experiencers’

Even if, say, following Fillmore (1968a) and Anderson (1971b; 1977), for example, we recognize that subjecthood involves something different from the semantic relations themselves, a neutralization, it is still not clear how we are to apply the localist hypothesis to the full range of subjects in (31).

Objective, which I’ve associated with the subjects in (31b–g), seems to be unproblematic, in a negative kind of way: it introduces an argument which does not denote a location or a goal or a source, which is at most located or undergoes movement. We can characterize it as, though locatable, lacking the locational property itself, as it seems to lack everything else: its relation to the predicator is a kind of default determined by that predicator.

From the point of view of localism, even less problematical in a different way, obviously, are the locations and goals which occur as complements of the
verbs in (31b–e). And the subjects in (31i), at least, (31j) perhaps, might also be argued to involve a goal, possibly ‘abstract’—though here 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 might look to be the most intractable, the subjects in (31 a, c, e) and particularly (31h). In what follows I give an interpretation of the much fuller discussions in Anderson (1971b; 1977).

I associated, fairly uncontroversially, the subject of (31a) with Agentive. In (31b, c) it is combined with Objective: the action is exerted on the agent itself. As I’ve said, I’ll be coming back to further motivations for such combinations. A rather traditional directional interpretation of Agentive immediately suggests itself, however: its interpretation as the ‘source of the action’. It is differentiated from spatial sources, such as that marked by from in (33), as being not also locative:

(33) Bill flew from Singapore to China

The ‘source of the action’ cannot be instantiated, in any other domain than that of ‘action’; it is in a sense a ‘defective’ source. Contrast with it the ‘causal’ source in (34), which involves application to an abstract domain of a locative source relation that also applies to concrete domains:

(34) She suffers from diabetes

Thus Agentive is a specialization 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 into localist components as in Table 5.3.

‘Erg(ative)’ on Table 5.3 is roughly Agentive, and ‘Abs(olutive)’ roughly Objective. I’ll use these terms in what immediately follows to highlight that the former in particular diverges quite a bit from the general understanding of Agentive, insofar as there has been one. ‘Loc(ative)’ and ‘Abl(ative)’ are

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<th>Table 5.3 A localist interpretation of the ‘cases’</th>
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<td>Case relations</td>
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reasonably transparent. In the system of Anderson (1977), Locative is inter-
preted as a Goal in the presence of an Ablative or Source, as in (33), even if this
presence is only implied by the semantics of the verb, as in (31b, c).

On the basis of Table 5.3 we can assign the semantic relations in (35) to the
arguments in the sentences of (31):

(35) 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 ? + (?)abl

The last three obviously remain problematic, despite a possible goal inter-
pretation of the subjects of (35i, j).

These subjects all seem to fit Fillmore’s (1968a) definition of the Dative, whose formulation was given in (3.10):

(3.10) Dative (D), the case of the animate being affected by the state
or action identified by the verb

This is not obviously localist. Fillmore later (1969; 1971) dispersed what he had
regarded as instances of Dative into Objective and Goal and a new ‘case’
‘Experiencer’:

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

This reformulation removes, for instance, something of the vagueness and
over-reliance on animacy of (3.10), but the replacement ‘case’ doesn’t appear
any more amenable to a localist interpretation, despite residual vagueness.
The modification as a whole does at least recognize the locative basis of some
of the former Datives (those that are reanalysed as Goal and Objective). What
it fails to recognize is that the residue of Datives that are reinterpreted as
Experiencers are also locative (Anderson 1971b: chs. 7, 9). Let us look now at
some of the evidence for the locative character of Experiencer.

The sentence in (31/35i), for instance, enters into just the semantic impli-
cations you’d expect if its subject were locative. Consider firstly the patently
locative-directional pair in (37):
Here the truth of (37a) is reasonably to be deduced from the truth of (37b) (provided (37b) is not interpreted as habitual); the Location in (37a) and the Goal in (37b) relate the same located entity and place. We find a similar relationship between (a) and (b) in (38), where in the latter we have also an overt Source/Ablative:

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

And the Goal of (38b), implied by the presence of the Source, is the subject, and it is identical to the subject of (38a), which we can plausibly interpret as a Location, the location—or one location—of knowledge. (38) differs from (37) 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, (37) and (38), and they allow the same inferences to be drawn. Experiencers seem to be locations, whatever else.

Cook (1978; 1979) suggests indeed, as we have seen, that the putative ‘cases’ Experiencer, Benefactive, and L(ocative) are mutually exclusive. This calls into question their distinctiveness as ‘cases’, however, unless their occurrence is being claimed to be not context-conditioned. And the suggestion that they are mutually exclusive does not seem to be quite correct (§5.2, and cf. Anderson (1971b: §2.6.3)). We need some other way of indicating the perceived shared ‘locativeness’ of the three ‘cases’. At this point I’ll concentrate on the Experiencer relation rather than Benefactive, given that the localist interpretation of Benefactive, exemplified by the first ‘object’ in (39) is rather more obvious:

(39)  Bill bought Bella the book

There is, however, some brief discussion of Benefactives in Chapter 13.

Consider here again sentence (38b). 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. This again illustrates that the situation is a little more complex than Cook suggests, then. Locative and Experiencer can co-occur if one is a Source, the other a Goal. This is what characterizes Sources and Goals in general, as in (40a):

(40)  a. Bill flew from Singapore to China
      b. Bill flew from Singapore
      c. Bill flew to China
With directional verbs, Source and Goal imply each other, even if one of them is not overtly expressed, as in (40b, c). (I shall suggest later that such ‘missing’ Goals and Sources are ‘incorporated’ into the verb.) It thus appears to be more accurate to say that Experiencer shares the joint distribution of Locative and Goal, in particular.

But we cannot simply identify Experiencer with Locative and Goal. The Experiencers of (12) are differentiated from other Locatives and Goals both syntactically and lexically—and sometimes inflectionally, in the shape of a distinct ‘dative’ inflection. Other Locatives and Goals are not usually preferred in subject selection over Objectives/Absolutives, as shown in (35b–e) and (35j), unless they are holistic, i.e. are also Objective.

The acquisition of apparent 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 Locative subjects, unlike actives with Experiencer subjects, do not have a canonical passive. Compare (41) and (42):

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

(42) a. They were contained in that box  
b. That box contained them

We find the ‘normal’ passive with such items only when they are agentive, and thus have Agentive subjects in the active, as in (43):

(43) a. They were contained by two armoured divisions  
b. Two armoured divisions contained them

Know may also have a distinctive passive marker for the Experiencer, to, but in general the ‘displaced’ Experiencers in passives share their marker with ‘displaced’ Agentives. Syntactically, Experiencers pattern more with Agentives than with other Locatives. We must return later, in Chapter 13, however, to further consideration of how we are to characterize the apparently counter-hierarchical subject selection in (42b), where L is apparently preferred to Objective.

Experiencers and Agentives also share semantic restrictions, as illustrated in (44):

(44) 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 (44b), (44d), (44f) and (44g) to be viable, the subjects must be given an Agentive interpretation. I have temporarily filled in the missing subject relations in (44h–j) as E(xperiencer). The capacity to be modified by secretly is shared by sentences with Agentive/ergative and sentences with Experiencer, whether simple Locative Experiencer, as in (18h), or a Goal Experiencer (44i, 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 absolutive (or at least one that is a life form) don’t accept secretly, unless they have an agentive or experiential interpretation:

(45)  *Bill secretly died

Die is a change-of-state verb not, unlike the suffer of (44j), an Experiencer verb.

This suggests that, as well as being Locatives, Experiencers share some property with Agentives. Anderson (1977: §2.6.3) proposes, indeed, that Fillmore’s Experiencer is a complex role, involving two semantic relations, locative combined with ergative. Such a distribution for ergative is one reason for the change of label from Agentive embodied in Table 5.3: Ergative is not always agentive. But how then is it to be characterized?

We can think of the Agentive as the source of the existence of the action denoted by the verb: without an Agentive there is no action. Similarly, the Experiencer is the source of the existence of the experience denoted by the verb: without an Experiencer there is no experience. What these have in common—they are the ‘existential source’ of the scene depicted by the verb—is denoted by ergative. That we are necessarily in the experiential rather than the actional domain is signalled by the combination of locative with ergative; in the absence of locative, the ergative verb denotes not necessarily an internal situation but an actional one (which may be internal (or mental) or external).
Such an analysis again violates Fillmore’s requirement that each argument should bear only one case relation. This requirement was subsequently embodied as the first part of the ‘theta criterion’ (Chomsky 1981: 36):

(46) \textit{\theta-criterion}

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

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 that counts against (46) in a moment.

Thus, on the basis of an analysis involving the interpretation of ergative as not necessarily agentive, we can define Experiencer as in (47):

(47) \textit{Experiencer} = \textit{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 Experiencer suggested in Anderson (1977) and elsewhere we can substitute for the valency specifications in (44h–j) those in (48):

(48) a. Bill secretly knew the answer \textit{erg,loc + abs}
    b. Bill secretly acquired a new shirt/outlook \textit{erg,loc(goal) + abs}
    c. Bill secretly suffered from asthma/delusions \textit{erg,loc(goal) + abl}

The latter two involve a Goal locative, even though in (48b) the ablative is in this instance not overtly expressed. The perhaps least promising candidate for a localist interpretation reveals in its syntax and semantics that such an interpretation is after all appropriate. Anderson (1977) thus argues that the set of putative ‘cases’ reduces to a localist group such as that enumerated in Table 5.3.

5.5 Conclusion and prospect

The first two sections of this chapter looked at attempts to develop and implement ‘criteria’, semantic and syntactic, for the ‘cases’. These sections also and (particularly) §5.4.1 look at the insufficiency of these, in the absence of a theory of the category and its content. Despite this, the basic idea of the fundamental role of ‘case’ in the grammar is difficult to dislodge (§5.3). The immediately preceding section (after §5.4.1) has been largely concerned with looking at those twentieth-century developments in ‘case grammar’ which, on
the basis of the assumed semanticity of case, involved the evaluation and integration of the most comprehensive attempt to describe the content of ‘case’ and its implementation in linguistic structure, the localist theory, particularly as investigated by Hjelmslev (1935/7) and Anderson (1971b; 1977).

The initial ‘case grammar’ work on this was carried out in the 1970s, and it is largely some of the fruits of this that are presented in §5.4.3, on the interpretation of Experiencers. Much else of relevance has scarcely been touched on here, such as the (re-)extension of the localist theory (and ‘case’) to less obvious areas. And such concerns continue to occupy work based on the early investigations in the ‘case grammar’ tradition, as well as on the later developments we shall now look at.

Starosta (1988: §5.2) also espouses ‘localism’ (and see too for such a ‘lexicase’ approach to ‘localism’ Starosta (1985a; 1985b)). Indeed, there it is claimed that ‘earlier linguistic analyses by Jakobson (1936) and Hjelmslev (1935/37) . . . are in fact somewhat closer in form and spirit to localism as practised in the lexicase framework’ than the ‘localism’ of Anderson (1971b). However, Starosta’s proposals, like those of Gruber (1965) and Jackendo (1976; 1983), are at most ‘demi-localist’ in Hjelmslevian terms (cf. Hjelmslev 1935: pt. I, §B.4): in ‘lexicase’ the content of ‘case’ is not exhausted by the Hjelmslevian ‘dimensions’. And the positing of the ‘lexicase’ ‘case relations’ ‘Agent’ and ‘Patient’ (for example Starosta 1988: §4.2.1.3) is indeed reminiscent of the ‘anti-localist’ theory of Michelsen (1843)—see Hjelmslev (1935: pt. I, §B.3)—rather than reflecting the ‘localism’ of Hjelmslev.

On the basis of this consideration of the localist theory and the implementation of one interpretation of it, I shall turn to exploration not only of other aspects of it but also of further issues raised in some way by early ‘case grammar’ but even more generally and seriously left out of account at this point in its development. In Chapter 3 I grouped together as (3.11) some of these consequences of early ‘case grammar’ that were apparent at the time or shortly thereafter, labelling them ‘some issues raised by Fillmore’s proposals’:

(3.11) Some issues raised by Fillmore’s proposals
   i) the representation of case relations and forms
   ii) the rejection of ‘deep structure’
   iii) the identification of case and of individual case relations
   iv) the general syntactic framework

We have come through the core of stage (iii) in our programme of looking at these in turn. After this point we begin to depart from issues directly raised by the work of Fillmore.
After a further consideration of (iii) in Chapter 6 and its relation to neutralization in Chapter 7, what I’m going to turn to are mainly aspects of syntax that not merely remained underdetermined by the original ‘case grammar’ programme but did not even arise as issues in the late 1960s. But with hindsight there can be seen to emerge from these early discussions various indirect ‘consequences’: aspects of syntax that might prove problematical for the programme as originally conceived, or emerge from parts of the programme that were not seen as essential to its initial pursuit, or, more positively still, aspects of syntax whose analysis might gain insight from rather obvious extensions of the programme.

I now expand as three members of a set of ‘consequences’ things grouped rather arbitrarily together as (iv) in (3.11). In early work much of what might be thought to be implicated in the vague label of (3.11iv) was not overtly discussed; as we have seen, even the constituency/dependency debate was not generally resolved. I list these ‘consequences’ along with the (only partially answered) question of content, which is part of the issue raised in (3.11iii), as an iconic link between what has preceded and what is to follow. For there have also been further consequences of the localist enterprise, consequences beyond localist interpretation of various domains. These ‘consequences’ as a whole are what will be pursued in the chapters that follow.

They take the form of a set of questions concerning those consequences of the ‘case grammar’ programme whose pursuit, it seems to me, is at least encouraged or even demanded by the basic concepts that we’ve looked at in previous chapters, as follows:

(49) **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 (as anticipated) pursuing the first of them in more explicit detail than in this chapter. Concern with the content of case in Chapters 6 and 7 unites Parts I and II of this work, at whose junction we make a transition from the earliest developments in ‘case grammar’ to subsequent developments.

Failure to provide an agreed systematic answer to question (α) has underlain much of the adverse criticism of ‘case grammar’ (cf. for example Chapin 1972). This has stemmed from the impression that the grammarian is left free
to drop or introduce or reintroduce individual ‘cases’ as contingency demands. Almost every paper produced in the tradition offers a different set of ‘case relations’; and to encounter paper titles like ‘Can “Area” be Taken out of the Waste-Basket?’ (Radden 1978) is scarcely encouraging to a worker in the field. ‘Case grammar’ needs to establish a principled limitation on the set of semantic relations.

Of course, as noted, this is true of any theory that invokes semantic relations, or ‘thematic relations’, or whatever. And there has signally failed to emerge any consistent, comprehensive, and agreed-on theory of ‘θ-roles’, or of the ‘hierarchy’ that is often imputed to them (compare for example the hierarchies of Larson (1988) and Stroik (1996)). It seems to me that Wilkins’s (1988a: 5) remark that ‘too rarely have research results obtained by linguists from different theoretical backgrounds led to extensive interaction’ applies rather well, unfortunately, to the collection devoted to ‘thematic roles’ she is introducing, as well as to the relation between the work reported on there and what might be happening in the rest of the linguistic world. The book offers an instructive, if limited, variety of viewpoints, but for the most part the contributors talk past each other.

However, the centrality of semantic relations to ‘case grammar’, to be sure, raises the question rather urgently (as it does in relation to the ‘minimalist program’). And question (α) will thus demand more of our attention immediately, before we proceed to questions arising perhaps more indirectly from the early ‘case grammar’ proposals. Chapter 6 attempts, on the basis of more recent work, to articulate more precisely an implementation of the localist theory of ‘case’ whose earlier manifestations have been the concern of the present chapter. Chapter 7 then considers something of the typology of linguistic systems involving different neutralizations of the ‘cases’ suggested in Chapters 5 and 6. After that, discussions focus, in Chapters 8–10, on questions to do with the categoriality of ‘case’. To begin with, in Chapters 8 and 9, the discussion focuses specifically on question (β). Chapters 6–9 are grouped together as Part II of this work, ‘The Implementation of the Category of Case’.

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 Agentive, Objective 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? To put it another way: say, as a result of the work I describe here in Chapter 5, we have found a basis for a delimitation of the content of ‘case’ and the extent of the membership of the set of ‘cases’. We have established, then, if we have
been successful, the set of possible distinctions that can be carried by the
category of ‘case’. We have, in other words, described the secondary categories
of the primary category of ‘case’. These secondary categories are apparently
related to ‘case’ roughly as, say, ‘gender/class’ is to nouns. But what kind of
category is ‘case’? How is it like or unlike ‘noun’ or ‘verb’, say? And how is this
to be represented?

The early ‘case grammar’ programme is not very clear about this. And the
importance of these questions was obscured notationally by the adoption of a
simplex label like Objective or Agentive for individual ‘cases’: the ‘cases’ lack a
categorial feature in common, disguising their status as secondary features
rather than primary, or categorial, features. This is the import of an attempt
to address question (β) that we shall explore in Chapters 8 and 9.

And this discussion leads on naturally to question (γ), which, in Chapter
10, broadens our concern with ‘category’ to embrace other categories than
‘case’, but seen in the light of our discussion of the latter. Let me now try to
make this too a little more explicit.

What is being asked in this last instance is this: is whatever category
semantic relations belong to unique, so far as its obviously semantic basis is
concerned? In the transformational tradition, for instance, syntactic categor-
ies are not characterized semantically. This assumption is already called into
question by the introduction of ‘thematic roles’, if these are syntactic categor-
ies. But generalizing, beyond these, the idea that syntactic categories are
semantically based leads to reintroduction of ‘notional’ or ‘ontologically
based’ grammar, involving for any grammar that acknowledges this a more
general retreat from ‘autonomy’ of syntax. A ‘case grammar’ embedded in
such a general framework is consistent in this respect: syntactic categories are
uniformly ontologically based.

Renewal of interest in ‘notional grammar’ in the second half of the twen-
tieth century took place independently of ‘case grammar’ (see for example
Lyons 1966). But one strand in the redevelopment of ‘notional grammar’ has
taken its starting-point from the ‘notional’ character of the ‘cases’ of ‘case
grammar’. I shall try to illustrate this in Chapter 10. Confrontation of general
notionalism takes us into Part III of this work, ‘Case Grammar as a Notional
Grammar’.

The applications of the localist hypothesis described in Chapters 5 and 6 do
not seek to substitute a notional characterization of ‘case’ for distributional
(including morphological) definitions. Rather, both are necessary. More-
over—and this identifies ‘localist case grammar’ with a strong form of
notionalism—the semantic characterization is essential to an explication
not just of the meaning but also of the distribution. Thus, the fact that
‘case’ distinguishes the modes of participation of elements of the scene being described underlies its role both in defining the valency of the predicator, thus specifying its complements and in itself taking (typically) a nominal as a complement. The morphological and distributional properties are not semantically arbitrary; the semantic relationality of ‘case’ is reflected in morphosyntactic relationality.

Another concept of ‘case grammar’, one which I noted earlier only in passing, raises the issue of derivationality, or ‘mutation’, question (δ). Initial structures in ‘case grammars’ are unordered, the trees are ‘wild trees’; they are linearized 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 (recall Koutsoudas and Sanders (1974: 20), as quoted in §3.1.2). As also noted there, something approaching this assumption can be seen as underlying Anderson’s (1977) suggestion that linearization 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 it neither changes nor assigns linear position; unlike Fillmore’s rule, it simply reattaches 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 Objective, or Absolutive. Briefly, Objective is assumed by many to be obligatory in any predication, even if (though this is not the general view) not part of the ‘case frame’ of the predicator. Some recent work has argued that this unsubcategorized-for Objective is the target for multiple attachments which allow ‘argument-sharing’ between different predicators (see for example Anderson 1991; Böhm 1993). These ‘multiple attachments’ obviate the need for ‘reattachments’ as well as for change in linearity—thus any need for ‘classical’ transformations such as ‘raising’. The ‘case grammar’ programme does not require such ‘derivationality’.

This negative conclusion concerning syntactic ‘derivationality’ is also arrived at, but rather differently, by Starosta and his associates (see particularly Starosta (1988)). In the ‘lexicase’ framework the predicational universality of Objective is ensured by adopting subcategorizations which weaken the semantic content of the ‘case relations’; and transformations (and much else of what was ‘syntax’ in previous work) are replaced by extensive lexical redundancies based on a rich battery of syntactic features. Related aspects of the ‘lexicase’ approach will receive some attention in Chapter 9.
The alternative non-mutative framework of the kind anticipated here is developed in Anderson (1997; 2001a); I shall outline this in Chapters 11 and 12, together with some revisions of and extensions to what is suggested in those places. At this point, however, we return, at the start of Part II, to the localist theory of 'case', in pursuit of question (α) of the 'consequences' listed in (49).
Part II
The Implementation of the
Category of Case
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§5.4 offered a short overview of the twentieth-century developments in ‘localism’ that were incorporated into one strand of ‘case grammar’. It focused on the content of the relations themselves. One aspect somewhat neglected in that chapter was the ‘implementation’ of the ‘cases’, the status of ‘case’ as a syntactic category, and the nature of the relationship between semantic relations and ‘case forms’. And this to a large extent reflects the bias of this early work. Indeed, Starosta is critical of the presentation in Anderson (1971b) insofar as, among other things, it ‘does not make the lexicase distinction between case forms and case relations’ (1988: 194). And the relationship between semantic relation and the ‘case forms’, such as, in the morphology, nominative or dative, that expressed them certainly received insufficient attention in much of the early work on ‘case grammar’.

In many instances, however, and particularly with ‘local’ cases and adpositions, this relationship is rather straightforward: there is a transparent relationship between the localist relations and their lexical expression. A particular semantic relation correlates with the presence of a particular member of a nominal paradigm, for instance, or a preposition. And there is in such instances no need to interpose between relation and expression additional representational apparatus. This is evident not merely in the use of ‘cases’ in reference to concrete spatial phenomena, but also in more ‘abstract’ manifestations of such ‘cases’. Indeed, these latter depend on the consistency of expression to indicate instances of the same ‘case’ being used in both ‘abstract’ and concrete domains.

Thus, much of the discussion of Anderson (1973a) is concerned with documenting the widespread lexical evidence for a localist interpretation of aspect. We find such instances as the Swahili constructions in (1):

(1) a. Enda na-m
    Go with-me

b. Ni-na-soma
   1-with-read
   (‘I am reading’)

Localist Case Grammar
(Examples from Ashton (1944)). Here the locative marker *na*, as illustrated by (1a), is used also as an aspectual marker in (1b). The localist assumption is that typically such recurrence is not arbitrary; it reveals a common locational basis to the constructions.

Likewise, the English change-of-state expression in (2) and (5.9b) involves prepositions otherwise used, as in (5.9a), to express concrete movement and goal:

(2) Bobo changed into a monster
(5.9) a. The ball rolled from the door to the window
    b. The house changed from a mansion into a ruin

And so on. Many ‘abstract’ domains are structured by locational notions manifested by the same expressions as with concrete location. This is ‘lexically natural’.

But what of the so-called ‘syntactic’ or ‘logical’ markers of predicator–argument relations? How exactly are they to be related to the kind of ‘localist’ theory described in the previous chapters? And how represented? Here systematically neutralized categories intervene between the semantic relation and its expression, as in the case of subjects. How extensive are such neutralizations, such syntactic ‘distortions’ of the relation between case relation and ‘case form’? A brief investigation of these questions will have consequences for the localist analysis of certain constructions: we pursue some of these in §6.2. In the section that immediately follows now our focus is on the status of the (‘logical’) markers themselves.

### 6.1 ‘Syntactic/logical’ case forms and ‘localism’

We turn now, then, to consider how the so-called ‘syntactic’ or ‘logical’ ‘case forms’ relate to a ‘localist’ view of semantic relations. We shall also be concerned with the question: how extensive is morphosyntactic neutralization of semantic relations (as with subjects) of the expression of the semantic relations? Are there other neutralized relations? Are ‘objects’ such?

We are, of course, not concerned with sporadic lexical neutralizations, such as the not infrequent neutralization of spatial goal and simple location, as in the French:

(3) Il va/est à Toulouse

    he goes/is to/at Toulouse
This leaves a residue of the semantic content in common, ‘locative but not source’. Subjects, at least, do not seem to share such common content, and apparently involve a much more general neutralization, where the residue is not in common.

6.1.1 Nominative and genitive

Insofar as it represents the neutralized relation traditionally referred to as ‘subject’, the ‘case form’ nominative may be said to display apparently extensive ‘grammaticalization’ and fail to express directly differences in semantic relation. The nominative may also mark predicative and equative nominals, a further degree of ‘grammaticalization’.

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

(2.7) c. Pekka on opettaja
    Pekka:NOM is teacher:NOM

d. Pekka on opettajana
    Pekka:NOM is teacher:ESS

As we have seen in §2.1.2, the essive in the Finnish sentence in (2.7d) expresses ‘contingency’, a temporary situation; if the teacher is a permanent professional then the nominative in (2.7c) is preferred. Its occurrence is semantically conditioned.

Subjective nominatives also show semantic conditioning in Finnish, moreover, as illustrated by (2.10) or (4), in which latter subject position is occupied by a partitive phrase that does not control concord on the verb:

(4) Miehiä tulee
    men:PART come:3SG

    ('Some men are coming')

The partitive signals ‘partial participation’ of some sort (on this see further §6.4).

The essive and the partitive, however, are not limited to predicative and subject position respectively. Recall that the partitive, for instance, occurs as a non-subject in (2.8a) and marks a spatial source in (2.8b):

(2.8) a. Jussi sai rahaa
    Jusii got money:PART

    ('Jussi got (some) money')

b. Jussi tuli kotoa
    Jusii came home:PART

    ('Jussi came from home')
But we can neither equate subjecthood (or predicativity of a nominal) necessarily with nominative nor, say, partitive with subjecthood. Nevertheless, as I have observed, the marking of subjects by nominative is the more pervasive and consistent neutralization. And among the so-called ‘logical’ cases we shall find that it is the only one (in a subject-forming system) showing consistent neutralization of the relations born by the arguments of a predicator.

In many languages, however, the adnominal genitive, though often retaining locational uses elsewhere, neutralizes the semantic relations contracted by adnominal nominals, particularly of de-verbal and de-adjectival nominalizations. Consider the English nominals in (5), where I’ve indicated proposed typical semantic relations associated with the base verb:

\[(5)\]
\[
\begin{align*}
  a. & \text{his wife’s rescue (of Bill)} & \text{erg(abs)} \\
  b. & \text{Bill’s death} & \text{abs} \\
  c. & \text{Bill’s flight (from the scene)} & \text{abs,erg (abl)} \\
  d. & \text{Bill’s rescue (by his wife)} & \text{abs(erg)} \\
  e. & \text{last night’s rescue (of Bill/by his wife)} & \text{adjunct (abs/erg)}
\end{align*}
\]

The relations associated with the post-nominals are indicated in brackets. I have not indicated the semantic relations of unexpressed arguments. (5e), with adjunct genitive, reveals that, in English, neutralization is even more extensive with the genitive than with the nominative (insofar as English has the latter case—at any rate, more extensive than with the subject).

(5e) confirms too that it is inappropriate to regard (5d) as a passive: genitive selection is simply less constrained than that of passive subjects. (5d) 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 (6b), and not in (6a):

\[(6)\]
\[
\begin{align*}
  a. & \text{(the) death of Bill} & \text{abs} \\
  b. & \text{(the) flight by Bill (from the scene)} & \text{abs,erg (abl)} \\
  c. & \text{(the) flight of Bill (from the scene)} & \text{abs,erg (abl)} \\
  d. & \text{(the) rescue of Bill (by his wife)} & \text{abs(erg)}
\end{align*}
\]

Apparently, the *by* simply marks an unneutralized ergative, and is not the product of passive. The *of* possibility illustrated by (6c), compared with (6b), reflects the dual relation held by that argument: it is both absolutive and ergative, representing another complex role. This combination, already incorporated into (5,35c, e), for example, has been argued for on various grounds, as have other combinations of relations.
Genitive neutralization involves more argument types than subject formation, and it is not hierarchy-bound in the same way as subject selection. It is inappropriate to identify the two kinds of neutralization. Nominalized forms do not take subjects. It is clear too that the cross-linguistic distributions of subjecthood and genitive formation do not coincide: Italian, for instance, has subjects but lacks anything corresponding to the English genitive. And constraints on genitive formation are very variable from language to language, whereas subject formation is identified as such cross-linguistically with reference to the selection hierarchy.

We have, then, extensive neutralization with genitives in English, different from what we find with typical nominatives. But the neutralizations are largely undone if the argument concerned occurs in post-nominal position, as in (5a) versus. (5d), and (6). And there are semantic restrictions on genitive formation, as shown by (7a), with no genitive corresponding to the locative adjunct in (7b) or (7c), and by (7d), where the absolutive of an experiencer verb is not acceptable (for discussion see Rozwadowska (1988: §2.1)):

(7)

a. *London’s rescue of Bill by his wife
b. the rescue of Bill by his wife in London
c. Bill was rescued by his wife in London
d. *the film’s enjoyment by John/on John’s part (cf. John’s enjoyment of the film) (the) enjoyment of the film by John/on John’s part
e. The dog (they love (above everything))’s death

I do not pursue these here. Nevertheless, it is worth registering that the English adnominal genitive involves a less constrained neutralization of semantic relations than subjects. It marks a pre-nominal determiner that may also be an argument of the verbal base of the noun. But, as we have already noted, it is scarcely any more a prototypical inflection, in that it suffixes or cliticizes to whatever item comes at the end of the noun phrase, as again illustrated by (7e). We come back to the adnominal status of genitives in §6.4, and to a more specific proposal (dependent on other developments yet to be discussed) in §10.3.3.

6.1.2 Dative and accusative

Dative is sometimes considered to be a ‘grammatical’ inflection, the marker of a ‘grammatical relation’, ‘indirect object’ (cf. again Rumpel (1845; 1866), Holzweissig (1877), opponents of nineteenth-century localist theories). But typically it represents a specialized locative, directional or not, though its presence may be lexicalized for complements of specific verbs, as with the
genitive complements of verbs. And it is recognized cross-linguistically, where it is distinguished in expression from a general Locative or Goal, as typically a marker of Experiencer. It is, moreover, very difficult to provide much support for a universal grammatical relation ‘indirect object’ (see for example Anderson 1978; Böhm 1986). And its configurational definition is not obvious (cf. for example Larson 1988; 1990; Jackendoff 1990b).

Accusative is even more deeply entrenched in the main grammatical tradition as marking the grammatical relation ‘(direct) object’. But, as well as there being difficulties in giving an independent characterization of ‘(direct) object’ (for example, Anderson 1984b; S.R. Anderson 1988), it can be argued that what we call an ‘accusative’ also typically marks a particular semantic relation, though not every manifestation of it.

In all of the absolutive phrases in (5.31) in which the absolutive is not subject, i.e. in (5.31a, h, i), reproduced here, it can be substituted for by the oblique pronoun them rather than the subject pronoun they:

(5.31)  
a. Bill secretly read the book erg + 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

I follow Anderson (1997: §3.3.3) in suggesting, as a first approximation, that this represents one form of the basic distribution of accusative in languages which distinguish one:

(8)  
**Accusative marking**

Accusatives signal an absolutive that has been denied subjecthood.

This formulation is not quite accurate, in that the post-verbal complement in (9), which seems to be an absolutive, is represented by the subject pronouns in formal English, as in (9a):

(9)  
a. It was they/I  
b. It was them/me  
c. Oh I quite conceive . . . that your idea of the best isn’t me

(9b), with the accusative (historically a dative) is informal. The usage of (9a) is recessive, decreasingly manifested outside these shibbolethic examples; compare (9c) (from Henry James, *The Wings of the Dove*, bk. ii, ch. 2). Other languages reject one or the other possibility, or both.

As we’ve noted, Anderson (1977: §1.8; 1997: §3.1.2) suggests that both arguments in equatives such as (9) are absolutive (which is thus a relation that can involve violation of the second part of the ‘θ-criterion’). The argu-
ments in such sentences can, therefore (as observed in §4.1), given the appropriate context and choice of lexical items, be ‘interchanged’:

(4.13)  a. The guy over there is my lover
       b. My lover is the guy over there

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 for some English speakers by the choice of nominative for both arguments in (9a)—though the syncretism of it doesn’t reflect this.

We can accommodate the contrast between (9a) and (9b) by associating the system that does not permit (9b) with the more restricted version of (8) given as (8)′:

(8)′ Accusative marking

Accusatives signal an absolutive that has been denied subjecthood by an ergative.

(See again Anderson (1997: §3.3.3)). English systems that prefer (9b) to (9a) have the original (8).

(9b) represents a historical extension of the basic pattern represented by the sentences in (10), where I’ve replaced the nominal ‘objects’ in the equivalent sentences in (5.31) with the equivalent (third-person singular feminine) pronouns:

(10) a. Bill secretly read her (say, Anaïs Nin) erg + abs
       h. Bill secretly knew her E (= erg,loc) + abs
       i. Bill secretly acquired her E (= erg,loc(goal)) + abs

Here, in conformity with (8), accusative marks an absolutive that has been denied subjecthood by an ergative, if, as in (10), we interpret Experiencer as a combination of ergative and locative, as was suggested in the previous chapter. A further extension is represented by the use of the accusative to mark the ‘object’ of prepositions: to him. We return shortly to such extensions.

6.1.3 Accusative as goal

We can appropriately focus our account of accusative marking in terms of what, I suggest, is a more perspicuous articulation of the relationships in Table 5.3, one which eliminates the two-level representation suggested there. In terms of Table 5.3 the basic components ‘place’ and ‘source’ are only indirectly relevant to the grammar; and the Table does not incorporate
recognition of the status of goal. Say we recognize more directly that ergative is simply source, and make explicit the idea that the locational relations are simple, or complex, with the complex one bearing, as a ‘second-order’ feature this time, \{source\}, as represented in (11) (partly anticipated in Anderson (1971b: §11.2)), which replaces and simplifies Table 5.3:

(11)  *An alternative localist interpretation of the ‘cases’*

```
abs  source  loc  loc{source}
```

Absolutive is simply neither source nor (non-source) locative; it is the semantically empty ‘case relation’, but for convenience I give it a ‘positive’ label. The source associated with locative is a second-order feature; it presupposes locative. Ergative is interpreted as a first-order source—i.e. not subordinated to locative. In this way, (11) need not be interpreted as allowing to predications simple violations of the \(\Theta\)-criterion, insofar as the two ‘sources’ are at different levels. Locative, as before, is simple except in the presence of another locative that is marked source.

With a directional verb it is thus marked as goal. This contingent status for locational goals is characterized in (12a):

(12)  *Goal specification*

```
a. V/loc \{s(ou)rc(e)} \quad V/loc{src}  
  \quad |  
  \quad loc \quad \Rightarrow \quad loc{goal}  

b. V/src \quad V/src  
  \quad |  
  \quad abs \quad \Rightarrow \quad abs{goal}  

c. V/loc \{>src<\} \quad V/loc{>src<}  
  \quad |  
  \quad <loc> \quad \Rightarrow \quad <loc>{goal}
```

(12a) says that locative is a goal if it is a dependent of a verb subcategorized for locative source. This expands (11) as (11)’:

(11)’  *An alternative localist interpretation of the ‘cases’*

```
abs  source  loc{goal}  loc{source}
```

The optional second-order feature \{goal\} is due to (12).

Now, one thing that emerges from this is that we can allow for what I suggest is the core of accusative marking in a similar way; specifically, if an analogous diversification applies to absolutive, as in (12b). That is, absolutive, as a dependent of a verb subcategorized for a (non-locative) source—i.e.
ergative—is a goal absolutive. We can collapse (12a) and (b) as in (12c), where the angles < > enclose linked optional elements: either everything within the angles is present or it is absent. All present gives (12a); all absent gives (12b), on the assumption that a source cannot be added to a source.

This means that, by (12c), (11)' is expanded as (11)’:

(11)” An alternative localist interpretation of the ‘cases’
abs({goal}) source loc({goal}) loc{source}

Both absolutive and locative acquire a second-order {goal} as the result of (12c).

If we relabel ‘absolutive’ as ‘neutral’, and we re-diagram (12) as in (12)', then it is rather clear that what is involved here is a double articulation of Hjelmslev’s (1935) ‘first dimension’ of ‘direction’, involving ‘source-neutral-goal’, but where simple neutral and locative are excluded in the presence of the co-argumental source.

Compare with this the crude representation of an illustration that was offered in Table 5.1 of Hjelmslev’s ‘first dimension’, with the zones ÷, o, +. The double (‘two-way’) arrows in (12)' indicate the capacity to be co-arguments of the same predicator; the single, (‘unidirectional’) ones indicate, at the tail, a case feature whose presence determines the addition (‘+++’) of a feature (at the head) to a co-argumental feature.

Given (12b), we can formulate the central role of the accusative in many languages as marking non-locational goals, the goals of the action or experience. This is ‘absolutive-goal accusative marking’ (which can replace (8)’):

(13) Absolutive-goal accusative
Accusatives signal an absolutive {goal}.

Robins (1951: 56) comments on the origin of the term ‘accusative’ thus:
Our ‘accusative’ case is probably so named through a mistranslation by Varro; its Greek name ‘αἰτιατική’ (πώςις) means, appropriately enough, the case of that which is acted on, or the object case, but Varro seems to have taken the Greek word as derived from ‘αἰτιάομαι’ (‘to accuse’), and so passed on to us the misnomer ‘casus accusativus’.

If this is just (cf. Lersch 1838–41: pt. 2, 186), then the Greek label is indeed appropriate as a characterization of the narrow absolutive goal form (17a)—though Robins’s appeal to the unsatisfactory term ‘object’ is unnecessary, and indeed unhelpful.

In some language systems an even narrower specification than given in (13) is appropriate: the accusative marks only a absolutive goal whose subject is Agentive. Thus, both the Experiencer (\{src,loc\} or \{erg,loc\}) subject and the non-subject absolutive are nominative in the Japanese sentence of (14a), whereas the non-subject absolutive in (14b), with an agentive subject, is accusative (Shibatani 1982: 105):

(14) a. Taroo-ga Hanoko-ga sukida
    Taroo-NOM Hanako-NOM likes

     b. Taroo-ga hono-o yonda
        Taroo-NOM book-ACC reads

We seem to have to recognize a ‘narrow absolutive-goal accusative’ associated with the presence of an agentive subject. We might relate this to the non-operation of (12b) if the source/ergative is accompanied by locative (is an Experiencer). The nominative in (14a) marks both the subject and the non-goal absolutive, both in some sense neutralized.

In some other languages we find a variant of this that involves nominative-marking of a non-subject absolutive if the Experiencer (\{erg,loc\}) subject is marked as dative, despite behaving syntactically (at least in some respects) like a subject. In this case accusative marking seems to be dependent on nominative marking of the subject, i.e. morphological marking of subjecthood as well as manifestation of such a syntactic status. But this again can be related to failure of (12b) with Experiencers.

Thus, the dative-marked subject of the Icelandic sentence in (15a) has undergone raising (on the traditional analysis), just like other subjects of infinitives, while the other argument of the infinitival verb here is in the nominative case (and also controls agreement on this verb in finite clauses):

(15) a. Ég tel honum lika þeir bilar
    I:NOM believe he-DAT to+like those cars:
    (‘I believe he likes those cars’) NOM
b. Þeir seldi honum drengina
they:NOM sold he-DAT the:boys:ACC
(‘They sold him the boys’)

(Cole et al. (1978: 45–6)—though Þeir in (15b) is misglossed there as ‘him (dat)’; and see too for example Rognvaldsson (1982: 470)). (15b) illustrates ‘non-subject’ use of the dative. This system displays an alternative manifestation of ‘narrow absolutive-goal accusative’—as a residue of a (‘ergative’—see §7.5) system in which the absolutive with verbs like like also behaved syntactically as an ‘absolutive’, not an accusative. With both ‘narrow’ possibilities lexical exceptions can develop, of course, given particularly the intrusiveness of the generalized nominative-accusative system (see again Chapter 7).

We find a different kind of restriction on the distribution of accusative in Finnish. Just as the subject of (4c) may be marked by a partitive, so a subset or sub-part relation associated with a non-subject absolutive is signalled by use of the partitive rather than the accusative. Recall (2.6a) versus (2.8a) in §2.1.2. We return to the partitive in §6.4 in particular.

These examples have all involved absolutive (i.e. non-locative) goals. In some languages, however, including some we have mentioned, the accusative marks the locative as well as the non-locative goal. Consider the Latin of (16b), with spatial goal, alongside (a), with absolutive goal:

(16) a. Immodica ĭra ĭgnit ĭnsāniam
excessive anger it-causes madness:ACC
b. Innumerābilēs īnumquam domum revertērunt
innumerable never home:ACC (they-returned)
c. In Graeciam pervēnit
in Greece:ACC s/he arrived
d. In portū nāvīgō
in harbour:ABL I-sail

(16a) and (16b) illustrate familiar usages I have already commented on (recall (2.9) vs. (2.1) in §2.1). In (16a) the accusative marks the goal of the (in this case causative) action; in (16b) 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 (16b). Even with a preposition like in it is the accusative that signals goal. Compare the goal in (16c) with the non-directional locative in (16d), where the same preposition is accompanied by the ablative case. All the Latin examples are again from Gildersleeve and Lodge (1968).
The examples in (16) thus involve what we might call simply ‘goal accusative marking’, as formulated in (17b)—(17a) repeats what seems to be the other core possibility (13), which is more specific about kind of goal:

(17)  
<table>
<thead>
<tr>
<th>a.</th>
<th>Absolutive-goal accusative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accusatives signal an absolutive {goal}.</td>
</tr>
<tr>
<td>b.</td>
<td>Goal accusative</td>
</tr>
<tr>
<td></td>
<td>Accusatives signal a goal.</td>
</tr>
</tbody>
</table>

By (17b), the accusative signals either spatial or non-spatial goal. This and the (various forms of) ‘narrow absolutive goal marking’ are the most constrained accusative usages.

The use of either (17a) or (17b) may be restricted by other factors. Thus in Latin, the spatial goal accusative unaccompanied by a preposition is limited, as we have exemplified, to names and a few other items. And in Finnish the use of the non-spatial-goal accusative alternates with the partitive as an absolutive marker. There can be similar restrictions on adpositional marking of goals. Thus, in Spanish the adposition *a* that marks the spatial goal also signals only animate non-spatial goals, like those in (18a) and (18b), and unlike that in (c), which has no *a*:

(18)  
<table>
<thead>
<tr>
<th>a.</th>
<th>Esperan a alguien</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>they-are-waiting-for someone</td>
</tr>
<tr>
<td>b.</td>
<td>A ella no la conocen</td>
</tr>
<tr>
<td></td>
<td>her not her-they-know</td>
</tr>
<tr>
<td>c.</td>
<td>Ensalzó a la virtud del santo</td>
</tr>
<tr>
<td></td>
<td>he-praised the virtue of the saint</td>
</tr>
<tr>
<td>b.</td>
<td>Ensalzó a la virtud</td>
</tr>
<tr>
<td></td>
<td>He-praised virtue</td>
</tr>
</tbody>
</table>

* A is lacking with non-animate non-spatial goals, unless personified, as in (18d). The examples are from Alarcos Llorach (1999: §335), where some of the other factors involved, and other circumstances in which *a* can mark ‘direct objects’, are also discussed. (See too Company (2001), and, more generally, work in the tradition of Moravcsik (1978b).)

Of course, the accusative can be ‘grammaticalized’, particularly the ‘absolutive goal’ usage. Thus, the descendant of the accusative has spread in (9b) even to the equative complement. And this same form marks pronouns governed by a preposition in English (*to her/him* etc.). Contrast French, with a distinct prepositional pronoun (*moi, lui*), which also functions as a dative, and indeed can be regarded as a further ‘grammaticalization’ of the latter.
We also find this same (‘accusative’) form in English with the absolutive arguments of verbs apparently with simple locative subjects, where there is no question of the subject being an Agentive or Experiencer, i.e. a primary source of some kind, triggering goal in the post-verbal absolutive:

(5.42)  b. That box contained them/*they

The analysis of the verb in (5.42b) is problematical, particularly in relation to the subject selection hierarchy (as observed in §5.4.3). An attempt at resolving this problem is made in Chapter 13, by which time a suitable conceptual apparatus has been assembled for the task. But, whatever, the subject of (5.42b) is not a primary source/ergative.

If, however, for the moment we assume that there is simply some factor associated with the locative in (5.42b) and the like which enables it to outrank the absolutive, it looks as if, to accommodate this, we have to widen (17a), or (8), to apply to any absolutive that is denied subjecthood, even if the subject is not a source/ergative, as in (17c) (i.e. the equivalent of (8)):

(17c)  Non-subject absolutive accusative

Accusatives signal a non-subject absolutive.

If in the same system (9a) is preferred to (9b), then we would have to add to (17c) ‘unless the subject is simple absolutive’. This distribution of accusative obviously exceeds the boundaries prescribed by (17a). The non-subject argument in (5.42b) is not a goal, as defined by (12b, c).

We are closer overall in English, whatever we make of (5.42b), to a situation whereby this morphological form marks not just (in informal English) any non-subject absolutive, as in (17c), but also pronominal complements of prepositions (to him etc.): the descendant of the accusative marks any pronoun with an overt non-subject governor. Given this, the residue of the accusative in English can be characterized negatively: it is a morphological form that is neither nominative, which marks subjects, nor genitive, which marks adnominals. Indeed, we might say that the accusative in English is a non-case; it is the unmarked form of the pronoun. However, the core accusative, that found in all languages with something we can call an accusative, conforms to (12b). And this underlies the traditional notion of the accusative as marking the ‘goal of the action’.

In the circumstances, it is not surprising that variability in usage concerning nominative and accusative in English extends beyond the situation illustrated by the equative in (9). So that we find usages such as those illustrated in (19) alongside the traditional ones:
In (19a), *me* is not nominative as we would expect of (part of) a subject, but rather seems to reflect dependence on a conjunction; in (19b) and (19c) neither dependence on a conjunction nor on a preposition, on the other hand, triggers the traditional accusative. And in (19d) (from Graham Greene, *The End of the Affair*, bk. ii, ch 2) we find even the first element in a conjunct subject in the accusative.

In English, then, to sum up, the accusative is still found in its core, goal-absolutive, function; but this is only a small part of its overall distribution. Of course, here I have omitted half of the diachronic story, the marginalization of signalling of accusative (to pronouns) and the reduction of the adverbal/predicational case system to nominative versus accusative. The histories of inflectional impoverishment and the dilution of the accusative are intertwined, and the ‘diffusion’ of the accusative is promoted by these developments. But pursuit of this would take us away from our main concern here. We have already spent some time on English in examining the dilution of the notion of the non-spatial accusative as the inflection whose distribution is essentially determined by (17a). Such a formulation represents the core usage, and links it to the spatial usage found in languages like Latin, where (17b) is appropriate.

In one prominent tradition, as we have seen, however, accusative is thought of as primarily the case of the ‘(direct) object’. It is already becoming clear that the relationship of accusative to any notion of ‘(direct) object’ is not straightforward. Thus, not all languages to which ‘objects’ have been attributed have accusative marking of these ‘objects’ or accusatives that mark only ‘objects’. English is now arguably such a language where there is a mismatch. And other criteria—such as capacity for passivization—that have been invoked in relation to the identification of ‘objects’ may not coincide with accusative marking. But perhaps we can say that accusative at least serves to identify, in those languages where it is appropriate, a core of what we might want to call ‘(direct) objects’, identified by their semantic relation, without our having to involve ourselves in too many of the uncertainties surrounding the latter notion.

### 6.1.4 Conclusion

By focusing on accusatives I have tried to give also some definite content to a putative grammatical relation ‘object’ whose identification—indeed existence—is otherwise uncertain (cf. again Anderson 1984b; S.R. Anderson
1988). However, more importantly for our present concerns, those ‘case forms’ that have been called ‘accusative’ are typically a type of absolutive (where not locative). They do not resemble subjects in terms of being essentially neutralizations, except, in some languages, such as Latin, between locative and non-locative goal; rather, they involve diversification (of the representation of the absolutive argument—and sometimes of locative, as again in Latin). And this situation resembles the lexical neutralization seen in (3).

This section has looked at attempts to establish the isolation of the subject as an absolutely neutralizing adverbal relation, along with the adnominal genitive, whose neutralizing obeys different principles. The other traditional adverbal ‘logical’ relations involve at most local, lexical neutralizations. They can be described more illuminatingly in terms of specializations of markers for a semantic relation. Another way of looking at what the section has aimed at is to think of it as a rough guide to applying the traditional terms for morphological expression (in subject-forming languages) of those relations that are not simply spatial (relations that are ‘logical’ in a sense).

6.2 ‘Patients’

There is an apparent problem for the analysis of ‘objects’ and accusatives as non-subject neutrals when we consider locatives that are certainly not subjects but do appear in ‘object’ position and/or are marked (where it is available) with an accusative. Consider such verbs as those in (20), which seem to take a goal or source ‘object’ or an ‘object’ that is a simple locative:

(20)  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 passivization) which bear various locative relations. Compare here Fillmore’s (1970) discussion of the ‘surface-contact verb’ hit, whose ‘direct object’ he identifies as a locative. But these ‘objects’ are semantically not simply locatives: the achievement of ‘contact’ is an important aspect. In this respect, they do not present the same problem as the locative subject of contain and the like.

The ‘objects’ in (20) all conform to something like Pinker’s (1989: 85) description of ‘patients’. He too 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.

Pinker’s definition of ‘patient’, whatever his intentions, allows for a very inclusive category, however, apparently including a wide range of neutral ‘patients’: a ‘patient’ need not undergo a ‘change of state’, but ‘change of state’ is one way in which an entity may be ‘impinged on’ or ‘involved in an action’. And Chafe, for instance, also 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).

But the various ‘objects’ in (20) belong to a more specific subset which involve what one might call ‘intimacy of contact’. They express the ‘contact’ referred to by Pinker latterly in the quotation. If this narrow notion of ‘patient’ attributable to (20) is to have any content independent of ‘absolutive’, it involves something like ‘intimate contact’. I shall refer to a ‘contactive’ relation, as possibly a subtype of ‘patient’ in Pinker’s sense, insofar as this is coherent. I shall return to other notions of ‘patient’ in what follows.

In (20a, b) one consequence of the contactive status of the argument concerned is the ‘demotion’ of the other locational to adjunct status. This does not affect the status of the verbs as directionals, i.e. as subcategorized for both source and goal. In terms of the proposals discussed in Chapter 9, the ‘missing’ goal or source argument is ‘incorporated’; the valency is satisfied ‘internally’. On such an analysis, the adjunct in (20a, b) is in apposition with the ‘incorporated’ goal/source. However, we need not explore the details of this further at this point. It suffices to recognize the adjunct status of the ‘missing’ directionals in (20a, b).

This adjunct status for the source/goal in (20a, b) is reflected not just in their optionality, where absence is the preferred option. 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 constructions such as (21a, b):

(21)  a. The ferry reached Patra (from Venice) (on Wednesday)
   b. The ferry left Venice (for Patra) (on Tuesday)
   c. The ferry travelled from Venice to Patra on Tuesday
The time given in \((21a, b)\) is respectively that of arrival and departure. In \((21a)\), 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 utterance of \((21c)\) would imply the introduction of a new ‘super-fast’ ferry. Both locatives in \((21c)\), as complements, come within the scope of the time adjunct. Thus ‘objecthood’ here seems to be associated with ‘contactivehood'; in the form of ‘focus’ on contact, and this goes along with ‘demotion’, out of ‘focus’, and out of complement status, of the other locative which normally accompanies directional verbs.

Roger Böhm points out to me that, alternatively, on a ‘border-crossing’ analysis of the kind discussed by Jessen (1975), Patra in \((20a)\) is a \{goal, src\} element; there is no ‘demotion’, simply optional presence of a source circumstantial. But, on either analysis, the immediately post-verbal arguments in \((20)\) are neutrals.

Now, ‘objects’ are generally absolatives. And it makes sense to associate ‘contactivehood’, ‘patient’ in this narrow sense, with a locative that is simultaneously absolutive: in \((20a, b)\) the ‘object’ is indeed interpreted as being ‘acted upon’, as the goal of the action by \((12b)\), as well as being a spatial goal or a source. ‘Patient’ in the narrow sense of contactive involves a conjunction of absolutive goal and locative:

\[(22) \text{Contactive} = \text{abs,loc} \]

Locatives that are not also absolutive do not necessarily involve ‘intimate contact’; nor does an absolutive that is not also locative, as in \((23a)\):

\[(23) \begin{align*}
\text{a. } & \text{Bill reads lots of books} \\
\text{b. } & \text{Bill’s books are much read} \\
\text{c. } & \text{Bill’s books are well-read}
\end{align*} \]

Only in \((23c)\) is the ‘read’ form, here a derived adjective, contactive; ‘intimate contact’ is apparent. This is what we expect of a subject that is simultaneously locative and absolutive, as a consequence of the derivation of the \textit{well-read} form.

Thus, \textit{reach} is a verb that, despite being directional, and because it ‘incorporates’ its source, takes a goal but not a source as overt complement (rather than adjunct); and this goal is also absolutive, represented lexically as the second argument in \((24a)\):

\[(24) \begin{align*}
\text{a. } & \text{reach } \text{abs,erg} + \text{abs,loc}\{\text{goal}\} \ (\text{‘incorporated’ } \{\text{source}\}) \\
\text{b. } & \text{leave } \text{abs,erg} + \text{abs,loc}\{\text{src}\} \ (\text{‘incorporated’ } \{\text{goal}\})
\end{align*} \]

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Leave shows the complementary pattern shown in (24b). Such a suggestion involves again infringement, indeed two infringements each in (24a) and (24b), of the first part of the ‘Θ-criterion’, as well as, along with equatives, of the second part: there are two instances of absolutive, of equal degree.

I note in passing that we can associate the same properties with so-called ‘prepositional objects’ that are goals, such as that in (25):

(25) The ferry arrived at Patra (from Venice) (on Wednesday)

Again this is not a simple locative goal, despite the presence of the preposition, but involves an absolutive.

So far we’ve been dealing with intransitive ‘point’ locative goals, realized in English, when not combined with absolutive, as to/from, and with agentive intransitives. We also find transitive examples of such pairs in (26) and (27), in one case with phonologically the same verb:

(26) a. John supplied the treasure to Bill
    b. John supplied Bill (with the treasure)

(27) a. John stole the treasure from Bill
    b. John robbed Bill (of the treasure)

Here, in the contactive variant the absolutive of the simple locative version is ‘demoted’ in the lexicon to adjunct status.

Let’s turn now to ‘multidimensional’ locatives. With in/on and out of/off of, there is a further consequence of this conjunction of semantic relations. With such ‘multidimensional’ locatives, contactive conjunction of locative and absolutive is naturally extended to ‘exhaustiveness’ of the action of the verb with respect to the dimensions involved. As discussed, these arguments are said to be holistic, as in the familiar example of (4.1b), compared with the partitive (4.1a):

(4.1) a. John smeared paint on the wall
    b. John smeared the wall with paint

(4.1b) is normally interpreted as involving an action which exhausts the relevant dimensions of the locative argument. This is not the case with (4.1a), in which the locative is not ‘object’.

We find the same pattern with the spatial {src} of (28b) versus (28a) and of (29b) versus (29a):

(28) a. John cleared junk from the attic
    b. John cleared the attic (of junk)
(29) a. Jane emptied money out of the jar
   b. Jane emptied the jar of money

(Cf. for example Vestergaard 1973.)
Lexically these verbs can be represented in the relevant aspects respectively as in (29):

(29) a. *smear*  
   \[ \text{erg} + \text{abs} + \text{loc}_{\text{goal}} \]  
   \[ \text{erg} + \text{abs},\text{loc}_{\text{goal}} (+ \text{‘incorporated’ abs}) \]  

b. *clear*  
   \[ \text{erg} + \text{abs} + \text{loc}_{\text{src}} \]  
   \[ \text{erg} + \text{abs},\text{loc}_{\text{src}} (+ \text{‘incorporated’ abs}) \]

With them, again, as in the case of holistics such as (4.1b), not only the other locative of the directional verb (not specified in (29) but also the absolutive found in the non-holistic (b) examples of (27, 28) are not overt; they are ‘demoted’ to adjunct status in the holistic version. Notice the use of *with* as marker of ‘demotion’ in the ‘goal-focused’ (26b) and (4.1.b), and of *of* in the ‘source-focused’ (27b) and (28b). We can also attribute holisticness to the non-directional ‘dimensional’ locative ‘object’ in (20c).

Association of holisticness with the presence of absolutive is again quite natural. As discussed, we find a holistic/non-holistic distinction with both subjects and ‘objects’, a distribution associated with absolutive. Recall (4.8b) as an example with a holistic subject:

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

In (4.8b) the relevant dimensions of the tank are exhausted by the process.

More generally, semantically absolutive normally marks an entity as participating as a whole in the situation identified by the verb, though not necessarily contactive, involving location. Thus, (4.12a) is to be understood, unless this is corrected by other signals, as meaning that the book was read as a whole:

(4.12) a. Bill read the book

Normally we understand Bill in (4.12a) to have read at that particular point in time what can be regarded as the whole book (though not necessarily the ISBN).

This may be overruled in various ways, as by the presence of a progressive in English, as we have seen, and as shown in (4.12b), or of a quantifier of some sort, as in (30):

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Bill was reading the book
Bill read some of the book

Compare (31), showing the same effect with holistics:

(31)  a. John was painting/clearing the attic
     b. John painted/cleared some of the attic

Such ‘cancelling’ is not uncommon in language.

In Finnish a ‘cancelling’ function may be performed by a different kind of special form of the absolutive; this is the partitive of (32b), versus the accusative of (32a):

(32)  a. Mies luki kirjan
     man read book:ACC
     (‘The man read the book’)
     b. Mies luki kirjaa:PART
        (‘The man was reading the book, The man read some of the book’)

Absolutive is inherently ‘holistic’; this is overridden by the special form of it in (32b). Recall too the subject absolutive in (4):

(4)   Miehiä tulee
       men:PART come:3SG
       (‘Some men are coming’)

The subject is marked by a partitive rather than a nominative, signalling ‘partial’ participation, cancelling the normal assumption with absolutive (though there other factors relevant here, to be sure—see Denison (1957: ch. 3). Whatever, the partitive is not a distinct adverbal/predicational semantic relation, but a kind of absolutive.

Traditionally, in Finnish studies there have been distinguished two kinds of ‘partial participation', both of which we’ve encountered at various points in the preceding. The two possibilities are illustrated by the glosses to (32b), where the Finnish is translated either by an overtly aspectual form (the action is only partially evolved) or by a (partial) quantifier. Kiparsky unifies these in terms of ‘boundedness’ (1998: 285): ‘a V<erb> P<hrase> predicate is unbounded if it has either an unbounded head, or an unbounded argument’. So that (p. 286): ‘the object of an unbounded VP is obligatorily partitive’. The extension of interpretation of the partitive from ‘unbounded argument’ to unbounded head’ is a natural one. However, the important point here is that in neither interpretation is it appropriate to say that the partitive signals a distinctive role in the predication.
The treatment of the partitive implied here, as with my invocation of other cases in Finnish, ignores many complexities. Denison comments that ‘there can scarcely have been a semantically more productive suffix in the history of the Finnish language’ (1957: 258). And, more recently, Anttila and Fong (2000), for instance, describe the alternation between partitive and elative and its relation to the type of partitive head. But I do not think that these complexities undermine the suggestions being made about the basic uses confronted. I take up the analysis of partitive case in §6.4, however.

As I’ve observed, ‘patient’ has been applied in a variety of related ways. Experiencers such as (5.31h–j, 35h–j, 44h–j) are arguably also ‘patients’, in a slightly wider sense. Here I’ve been associating ‘patient’, more narrowly, with ‘intimate contact’, involving specialized location, location combined with absolutive. With Experiencers we can also speak of ‘contact’; but the ‘contact’ is physical or mental or both, but crucially ‘experiential’. They too are specialized locatives with a syntactic distribution different from ordinary locatives. The generalization covering ‘patients’, in this more general sense, seems to be that locative combined with a non-locative relation, i.e. a simple ergative or absolutive, is a ‘patient’:

\[
\text{(33) Patient} = \text{non-loc,loc}
\]

Experiencers are a kind of ‘patient’, then. And, as with Experiencers themselves, {erg,loc}, we have here another putatively ‘abstract’, non-spatial semantic relation, ‘patient’ in this more general sense, that can thus be provided with a fairly straightforward localist interpretation.

Some ‘patients’ are also both Experiencers and contactives, as perhaps the subject of (34):

\[
\text{(34) Phil suffered (from asthma)}
\]

\[
\text{abs,erg,loc\{goal\} (loc\{src\})}
\]

This means that these first-order ‘case’ features, as well as all being co-argumental, i.e. marking (possibly distinct) arguments of the same predicator, as allowed for in (12)', and combinable one with another, can all three combine to define a single role. We find all possible combinations of the three first-order primary features.

‘Patient’ has also been used in a more general way still (as apparently by Pinker) to include absolutive arguments that undergo a change of ‘place’ or ‘state’, but still does not include all neutrals. If, in accordance with a fairly obvious application of localist assumptions, we interpret ‘states’ as abstract places, then we can characterize such ‘translative’ relations in general as:
That is, translatives are the absolutive of a verb that is also subcategorized for a loc [src], i.e. is directional, as in (36):

(36) a. The cheque fell on the floor  
    b. Percival threw the cheque on the floor  
    c. The rat died  
    d. The duckling turned nasty/into a swan  
    e. Bill turned it from a slum into a palace

I assume this class includes verbs that take ‘effective/created’ and ‘affective’ absolutive arguments, as exemplified by (37a) and (b), respectively:

(37) a. Bert built the shrine  
    b. Conan demolished the shrine

In (37a), the shrine is brought into existence, in (37b) it goes out of existence. Together, we can perhaps label patients (as defined in (33)) and at least ‘affective’ translatives (i.e. all but the type of (37a) as ‘affected’ arguments (corresponding roughly to Pinker’s ‘patient’) — though, as with ‘patient’, usage of ‘affected’, even within linguistics, shows considerable fluctuation.

We return to ‘patienthood’ in §9.1 in connection with another issue. Here we set out looking at ‘patients’ and the like in pursuit of an evaluation of the notion that ‘objects’ and many accusatives are a kind of non-subjective absolutive. The locative ‘objects’ we’ve just been looking at—all of (20, 21) and (25) and the (b) instances in (26–29)—are, on the account I’ve given, all also absolutes, and a core of them, at least, conform to (12b, 17a). It looks as if we can indeed suggest, then, that ‘objects’ and accusative are associated with a specialization of absolutive—and in some languages (such as Latin) with a similar specialization of locatives and absolutes, as allowed for by (17b). Prototypically, in the presence of a separate source, both absolutive and locative are marked as goal, triggering accusative.

### 6.3 Nominatives, subjects, and subject formation

If the interpretation of ‘objects’ given in the preceding two sections is appropriate, this leaves us with only subject as a grammatical relation (in subject-forming systems), and only nominative as a truly grammatical or ‘syntactic’ case in predications—in accord with a tradition with rather ancient roots.
And even its occurrence (as subject or predicative/equative complement) can be limited by semantic constraints. Genitive as an adnominal case also neutralizes semantic relations in some languages.

However, dative and accusative are associated with particular semantic relations, Experiencer in the case of dative, absolutive goal or goal in general in the case of accusative. In the latter instance, however, there can be much diffusion in the use of the accusative, particularly where it is the only alternative (except genitive) to the nominative.

There also emerges as a consequence—or at least under the stimulus—of the discussion in this chapter a couple of final points concerning subjects. As alluded to in §5.4, it has quite commonly been assumed, particularly within the ‘case grammar’ tradition, that every predication must contain an absolutive relation. This assumption is an analogue to the universality of subjects required, arbitrarily, by the second part of Chomsky’s (for example 1982) ‘projection principle’. Subjects are not universal from the (traditionally based) ‘case grammar’ perspective. But the least specific semantic relation, which is characterized as simply being neither source nor location, is assumed to be universal. This is a consequence of the semantic notion ‘predication’ (see further §10.1): the relationality of predication demands that a predicator must have at least one argument, and arguments bear semantic relations. In one strand of ‘case grammar’ this eventuates in the idea that if a predicator is not subcategorized for an absolutive, one will nevertheless be introduced in that predication to fulfil this demand.

The central role of neutrals (absolutives) in various syntactic relationships, such as raising, is discussed in, for example, Anderson (1977: ch. 3). In later developments (see for example Anderson 1997: §3.3), the absolutive that serves as the ‘host’ to raising is interpreted as not subcategorized for by its predicator, but its presence is required by the assumed universality of absolutive. Its valency is satisfied in a language like English by the sharing of the subject argument of the subordinate predicator. As already anticipated, we look at these developments in more detail in Chapter 11; what is important here is the universality assumption itself, and its consequences for our view of subject selection.

If subjects can only be participants that bear an absolutive or a non-spatial source relation, as would follow from the analysis of experiencer as \{src,loc\} and the universality of absolutive, then the subject selection hierarchy of §4.1 need not be extended further:

\[(4.17)’ \quad \text{Subject selection hierarchy}: A > D > O, > O\]

This is reformulated as (38), replacing \((4.17)’\):
The optional comma in (38) allows for a complex absolutive ‘case’ to take precedence over a simple one, as in (4.8b):

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

In (4.8a) the simple absolutive is subject; the other argument does not combine locative with absolutive. However, if the with-phrase in (4.8b) is an adjunct, so not eligible for subject selection, then (38) might be simplified by omission of the comma, as in (38)′:

(38)′ Subject selection hierarchy: erg > erg, > abs

There remains, of course, the question of the contain type, which, as indicated, we pursue in Chapter 13.

Moreover, in addition to simplifying subject selection as in (38) or (38)′, if subjects can only be participants that bear an absolutive or a non-spatial source relation, as would follow from the presence of both relations in the hierarchy and from the universality of absolutive, then we can give a straightforward account of the neutralization involved in subject formation. The crucial neutralization is between ergative and ergative absolutive (in transitive and intransitive source/erg predications) on the one hand, and (when not outranked by these) non-ergative absolutive on the other. The former are illustrated by (5.44a), (5.44c), and (5.44h–j), updated as (39), the latter by (5.44b):

(39) a. Bill read the book erg + abs = erg + abs
    b. Bill fell to the ground abs + loc(goal) = abs + loc(goal)
    c. Bill flew to China abs,erg + loc(goal) = abs,erg + loc{goal}
    h. Bill knew the answer E + abs = erg,loc + abs
    i. Bill acquired a new shirt/outlook E + abs = erg,loc{goal} + abs
    j. Bill suffered from asthma/delusions E + abl = abs,erg,loc{goal} + loc{src}

All of the subjectivized arguments in the former group include (non-loca
tional) source, or ergative, in their specification: the neutralization in their case is one that leaves a residue of what the neutralized arguments have in common, as with the preposition in example (3):

(3) Il va/est à Toulouse
    He goes/is to/at Toulouse
But (39b) is different; its subject is not inherently an ergative: it appears to have been ‘assimilated’ to those subjects that share an inherent (subcategorized-for) ergative.

We can formulate the neutralization as a sequel to (12b) or (12c), which form a goal absolutive if the absolutive is co-dependent with an ergative. That is, we can add here (40), which occurs in subject-forming languages if (12b, c) fail; it affects a participant absolutive that is not marked as goal and marks it, by default, as a source/ergative:

(40) Subject formation
absolutive \Rightarrow absolutive[erg]

(cf. for example Böhm 1993: §2.1.2). We can then say that subject marks a source which is not spatial, whether an inherent source (combined or not with an absolutive) or one derived by (40). By (12b, c) expression of absolutive is diversified (goal versus non-goal); and an inherent distinction between agentive and non-agentive absolutive is neutralized by the application to the non-goal neutrals of (40). This adds to the minor neutralization involved in the absence of a distinction in expression between transitive Agents and intransitive Agents and Experiencers. Subjecthood itself involves, after all, just the simple, but absolute, neutralization resulting from (40).

But subjecthood does involve an assimilatory neutralization: an \{abs\} ‘becomes like’ an \{erg\}, and this is reflected in its morphosyntax. As observed, subject formation is not like the lexical neutralization of (3), where the neutralized relations have an inherent semantic property in common. To what extent then can we say that the \{abs\} ‘become like’ an \{erg\}? By subject formation an absolutive acquires a relation, source, but clearly not its full semantics. But is there any semantic accommodation?

The semantics of categories can come to apply, if only weakly, even to peripheral members, even to one that might seem to share simply a distribution in common with the prototypical. Even subject may not be purely grammatical, if some such content in common can be given to the label ‘ergative’ which by (40) comes to be associated with (non-goal) non-spatials in general. One (not unparalleled) suggestion is that of Noonan (reported by Li and Thompson (1976: 464)):

The subject can be characterized as providing the orientation or the point of view of the action, experience, state, etc., denoted by the verb.

Compare Dik (1978: 87):
I hope it has become clear in the preceding sections that our definition of the Subject function is basically a semantic one: we defined the Subject as that constituent which refers to the entity which is taken as a point of departure for the presentation of the state of affairs in which it participates.

But such characterizations are difficult to make precise; Dik admits his is ‘rather vague’. And, given that the subject is determined by the array of semantic relations, its status as ‘point of view’ or ‘point of departure’ can scarcely be said to be freely (semantico-pragmatically) chosen. At best it is perhaps the unmarked locus for such ‘points’.

And, as conceded, we certainly cannot claim that an ergative derived by \((40)\) can be given anything like the agentive or experiencer interpretations of an inherent non-spatial source. Is the absolutive subject, nevertheless, to be thought of as (like other sources) the ‘existential’ source of the scene depicted? In these terms, perhaps we can say that, just as the agent licenses an actional predication, and an experiencer an experiential one (as I suggested in §5.4.3), the absolutive (which is a derived source) licenses predications lacking the preceding relations. This commonness would be what is recognized by \((40)\).

It may be, however, that the extension of \{erg\} given in \((40)\) is indeed also metaphorically based in another way. This is one way in which we can interpret Hjelmslev’s discussion of the Russian nominative in \((5.32)\):

\[
\begin{align*}
(5.32) & \quad \text{röz-a} \quad \text{krasiv-a} \\
& \quad \text{rose-NOM beautiful-NOM} \\
& \quad \text{('The rose is beautiful')} \\
\end{align*}
\]

Ici le nominatif de \text{röz-a} implique un éloignement syntagmatique (le fait de régir), et le nominatif de \text{krasiv-a} implique un rapprochement syntagmatique (le fait d’être régir).

The governor of concord is the source of the concord relation. But the metaphor is much less obvious, more abstract, than in the case of, for example, the extension of the set of entities that can be Experiencers to include the subject in such as \((41a)\):

\[
\begin{align*}
(41) & \quad \text{a. Tuesday saw the opening of the gallery} \\
& \quad \text{b. Tuesday’s opening of the gallery} \\
\end{align*}
\]

\((41a)\) involves an extension of what counts as an Experiencer with \text{see}; \((41b)\), on the other hand, apparently involves a neutralization. Or is there a metaphor here also? If it involves a metaphor, it is again much less obvious than the extension in \((41a)\).

At best, then, maybe what we have with \((40)\) is a purely syntactic, idiomatized, implementation of the notion of source, along the lines envisaged by
Hjelmslev (1935). In the case of the genitive of (41b) a metaphorical basis for the extension of the genitive to time locative circumstantials is even less palpable (‘the event is presented as the possession of the day’).

(41a) also illustrates the language particularity of what can count as suitable to assume a specific semantic role: it thus illustrates that the postulation of a universal theory of ‘case’ is, of course, not to say that the ‘same’ situation will be expressed in terms of the same ‘case frame’ in different languages, or that what can be a non-spatial source in language X will necessarily correspond to a source or an {erg,loc} in language Y (cf. for example Dahl 1987). The English Experiencer (erg,loc} in (41a) is alien to a large number of languages, for instance. Rather, these relations form the basis for constructing clause structures in any language, and their applicability is seen as limited, within the localist tradition, by the spatial prototypes with which they are associated and by the imagination of speakers (see for example Persson 1990: ch. 7). In general, beliefs concerning the world will determine the range of suitable arguments for a particular role.

All but one of the roles in (11) define a type of predicator. Locative is the valency for a locational predicator; source and goal, as second-order primary features, define, in combination with locative, a directional predicator. Locative in combination with primary (ergative) source defines experiential predicators, directional or not. Source without locative defines agentive or action predicators.

Only absolutive does not define a type of predicator, except when a predicator is subcategorized for two of them, and so is equative. Otherwise, the predicator type is independent of whether or not it takes an absolutive as an argument; the absolutive is transparent. This underlies the various idiosyncrasies of absolutives: co-occurrence with the same predicator, universality in predications, etc. And it may render it susceptible to metaphorical extensions, make it more amenable to their adoption, including in the case of subjecthood, as formulated in (40).

In this and the preceding chapter we have looked at attempts to define the category of ‘case’ within a localist framework. Obviously, the present treatment and, indeed, the attempts described themselves are not exhaustive. Many systems of ‘case’ remain unexplored. But the localist theory provides an in principle testable hypothesis concerning the domain of ‘case’.

6.4 Partitives and genitives

Perhaps the most notable omission from our consideration of the traditional inventory of cases, aside from the other grammaticalized variants (apart from
subject) to be discussed in the next chapter, is a specific treatment of the ‘partitive’, even though I have invoked it at various points in discussing the status of other cases. A number of languages have had a partitive attributed to their case systems. Are such instances problematical for the localist theory we’ve been looking at here?

Concerning partitives we can immediately observe two fundamentals: typically they are diachronic specializations of an ablative, and, insofar as they mark a participant in a predication, they signal not so much, as with other cases, the manner of participation of an argument, its role in clause structure, as the ‘degree’ of participation. In Finnish, for instance, the partitives we have already encountered in §§2.1.2 and 6.2 retain ‘ablative’ uses, as illustrated by (42) (Rigler 1992: §4.1):

(42) Jussi tuli kotoa
    Jussi came home:PART
    (‘Jussi came from home’)

And elsewhere, as we have also seen, it signals ‘partial involvement’ of a participant, as in the examples brought together in (43), often translatable in ‘aspectual’ terms, as in (43b), and (32b):

(43) a. Jussi sai rahaa
    Jussi got money:PART
    (‘Jussi got (some) money’)

b. Luin kirjaa
    I-read book:PART
    (‘I was reading the/a book’)

It is the interpretation of these latter that perhaps challenges the localist hypothesis. Diachronic evidence and present usage suggest an obvious localist source, preserved in the ‘ablative’ use of (42). But how does this relate to the usage of (43)?

Anderson (1997: 297) suggests that these latter usages reflect, as elsewhere, as illustrated by (44), the role of the partitive in nominal structure, rather than signalling a clausal relation:

(44) pullo viskiä
    bottle whisky:PART
    (‘bottle of whisky’)

The partitive here is not a predicational case. (44) involves a clearly intra-argument structure where the first nominal will have a quite different inflection reflecting its manner of participation in the predication. On Anderson’s
account, the equivalent of this nominal structure in (44) is expressed as the single noun in (43); specifically the partitive reflects the relation between an ‘absorbed’ quantifier and the host noun. And he points out that this is confirmed by the fact that even if the number of the initial noun in (2.10) were plural the verb would remain singular, as is illustrated by (4), both discussed before in other connections:

(2.10) Leipää on pöydällä
    bread:PART is on-the table
    (‘There is some bread on the table’)

(4) Miehiä tulee
    men:PART come:3SG
    (‘Some men are coming’)

Its semantic role in the clause, and that of the postverbal NPs in the predications in (43) is that of absolutive. It would be the plurality of the noun, the subjoined partitive argument of an invariant quantifier, that would be reflected in plurality, but this is blocked by the quantifier.

I take up in §9.2.5 the characterization of ‘absorption’, as used here, versus ‘incorporation’, as used, for example, in the discussion of passives in §5.2; they both involve the ‘creation’, within the lexicon, of complex lexical structures, but we must await some developments in our notation before the differences between them can be formulated explicitly. Basically, they have to do with ‘category change’ (‘absorption’) versus ‘category incorporation’ (‘incorporation’). I shall continue to use the scare quotes to remind us that these terms each have in principle a specific (and opposed) ‘technical’ interpretation which we still have to make precise.

At this point we move on, rather, to a concern, at a more informal level, with suggestions concerning the character of the role of the partitive relation in nominal structure. Anderson (1997; 1998) argues that it is characterizable in terms of source, as suggested by its minor uses, as exemplified in (42), and given the semantic appropriateness of invoking this relation: the partitive marks the label for the superset from which is extracted some subpart. Just as the ergative can be interpreted as a non-spatial source that is contracted by verbs, partitive is the source dependent on nominals. That is, the prototypical use of the partitive is to express the source of the subpart or subset denoted by the head of the construction, whether the head is separately expressed (is adjoined to) or not (is subjoined to). In this use partitive is a non-locational source; it is the adnominal equivalent of the adverbal relation ergative.
We thus need not add to the set of semantic relations allowed for by Table 5.3, or its replacement (11):

\[(11) \text{abs source loc loc\{source\}}\]

Both ergative and partitive are non-place sources; they are complementary realizations of a non-place source. Partitive simply marks the adnominal (non-locational) source relation. Its characterization is thus consistent with the localist hypothesis. Here and elsewhere the localist hypothesis involves an expectation that no semantic relations beyond those allowed for by combination of the features of (11)—and thus no purely ‘abstract’ relations—will be encountered.

The Finnish partitive has a secondary use as a locational source, illustrated by (4a). To this extent it is a neutralization, but the two uses retain the source component in common. As we shall see, such support for the source content of partitive equivalents recurs elsewhere. This will emerge as we look at alternative ways in which the adnominal source relation is expressed.

In many subsystems the adnominal source is signalled by juxtaposition simply, as in English (45a):

\[(45)\]
\[\begin{align*}
&\text{a. many men} \\
&\text{b. many of the men}
\end{align*}\]

But in other systems we find a so-called ‘partitive genitive’, as in (46a), from Old English, alongside (46b) (Mitchell 1985: §432):

\[(46)\]
\[\begin{align*}
&\text{a. monige þara broðra} \\
&\quad \text{many the:GEN brothers:GEN} \\
&\text{b. monige men}
\end{align*}\]

We also find there a ‘periphrastic genitive’, involving a preposition that is historically a source item, and which governs a morphological dative, as in (47):

\[(47)\]
\[\begin{align*}
&\text{manega of þam folce} \\
&\quad \text{many of the:DAT people:DAT}
\end{align*}\]

And the latter survives into present-day English as (45b), minus the dative inflection.

A kind of ‘periphrastic partitive genitive’ construction is even more widespread in French, where we find it not only with definite sources, as in English, but also with many indefinite sources:
And we even find a ‘periphrastic’ equivalent to the Finnish (44):

(49) Il y a du vin sur la table
it there has of-the wine on the table
(‘There is some wine on the table’)

Now, part of the interest of this use of ‘genitives’ for the adnominal source is that in languages like Old English there are signs that the adverbal uses of the genitive also involve some kind of source, as does the periphrastic equivalent in French.

These adverbal uses show a lot of lexicalization (in the form of idiomatization and the presence of exceptions). But, in Old English, Visser, for example, suggests the label ‘causative object’ for the genitive complements of verbs, despite there being constructions to which it does not seem to apply, and he explains (1973: 255):

That the name ‘causative object’ has been adopted here is not due to the conviction that this is the best term, but simply to the fact that in a great number of cases—notably with verbs of rejoicing, regretting, boasting, wondering and the like—the causal notion is evident: ‘Ic gefeah ðæs weorces’ = ‘I was glad because of, or on account of, that work’; ‘hie gescomedon eargra weorca’ = ‘they were ashamed of the evil works’.

The most obvious interpretation of such ‘causes’ is as abstract locational sources. And such an interpretation is applicable to a wider range of verbal constructions with the genitive than just the ones with what Visser dubs ‘causative objects’. The Old English genitive neutralizes the adnominal source of (46a) and the abstract locational source of these uses.

Moreover, there seem also to be instances of the apparently adverbal genitive where a ‘partitive’ interpretation is appropriate, as Visser (1973: 356) and others have noted. Visser quotes from Andern (1948: p. xvi): ‘where the action affects less than the totality of a thing’. And he cites (50):

(50) a. Ic notode þæs hlafes
I ate the:GEN loaf:GEN
(‘I ate part of the loaf’)

b. drincende wines
drinking wine:GEN
(‘drinking some (of the) wine’)

c. Our Christmas turkey choked me as I ate of it

With regard to (50b), we have already noted a correlation between present participle and partitiveness (recall (31a, b)). Visser also notes (1973: 356) the occurrence of ‘periphrastic partitive’ adverbial genitives in of... I give (50c) as a (more recent) example, from Thackeray’s *The Adventures of Philip*, vol. ii, ch. 3. Even the adverbal genitive, then, appears to neutralize locational and non-locational source—though the ‘partitive genitive’ here again reflects the internal structure of the argument rather than its semantic relation to the verb (recall (44)).

The core use of the adnominal genitive seems to be as an expression of a ‘partitive’ that simultaneously ‘identifies’ or locates the source. Thus in (51) the genitive establishes a singular subset from the set of forks which is to be located, concretely or abstractly, with respect to Jim:

(51) Jim’s fork

The genitive is not a simple adnominal case; it expresses two roles at once, ‘partitive’, i.e. adnominal source, with the genitive as the head, and what is often called ‘possessive’, i.e. location, where the genitive in (51), for instance, depends on the following noun. It is involved in two contrary dependencies at the same time. We look at this more precisely in §10.3.3.

The location associated with the genitive may involve ownership, in which case we can attribute to the locational relation involved also a source relation: it is itself a complex role, involving two relations, an Experiencer, i.e. {erg, loc}. Typically genitives neutralize this distinction, though Basque, for instance, distinguishes a ‘locative’ from a ‘possessive’ genitive; but the ‘locative’ in Basque seems to involve specifically a complex ‘case’ of a kind described in §8.4, which includes other dimensions than the simple ‘directional’ one of Hjelmslev, involving location in relation to a spatial dimension (cf. Aurnague (1998), on the complex factors determining the respective uses of the two Basque genitives).

We can associate further neutralization with nouns like that in (52):

(52) Jim’s picture

The non-‘partitive’ relation in (52) may be simply locational ({loc}), or ‘ownership’ ({erg, loc}), or ‘creator’ ({erg}), or ‘subject of the picture’ ({abs}). The noun in (52) is not a simplex noun, but embodies a predicational internal structure; and the genitive participates in this, as well as being the head of a partitive construction.
With overt nominalizations in English we find even more neutralization in what the genitive expresses, as we saw in relation to (5):

(5)  
- a. his wife’s rescue (of Bill)                     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 Bill/by his wife)      adjunct(abs/erg)

These make even clearer the predicational structure ‘incorporated’ in the noun, and this is indeed reflected in the morphology. (52) and particularly (5) illustrate the kind of radical neutralization that I shall look at in the chapter which follows under the rubric of ‘routinization’.

6.5 Conclusion

This chapter has been primarily concerned with the localist analysis of the traditional ‘logical cases’. In doing so it has tried to make explicit the role of goal and source in the system of ‘cases’; they are the basic elements differentiating ‘cases’, along with absolutive (non-source, non-locative). I shall nevertheless, for clarity, and as anticipated by usage in the immediately preceding, maintain the use in what follows of the label ‘ergative’ for a source that is not second-order, i.e. does not presuppose locative. I shall also, for convenience, use the term ‘experiencer’, versus ‘agentive’, for any combination of source (ergative) and locative, whether secondarily directional or not. I run the risk here of adding to the confusion of proliferating terminology in the area of semantic relations.

Perhaps it will be of some help, however, to enumerate some of the terminological usages that the ergative component partially corresponds to, and includes:

(53)  
      ‘instrumental’,…  
- b. src,loc = erg,loc = experiencer = ‘experiencer’, ‘cognizer’, ‘possessor’,  
      ‘dative’, ‘recipient’, ‘benefactive’,…

This at least registers my awareness of some of the problems of mutual comprehension that beset us. But also the continuing creation and differentiation of such terms reveal the extent to which the lessons of the debates of the 1960s and 1970s (let alone earlier periods) have not been learnt. There can be no principled resolution of these indeterminacies in the inventory of
semantic relations, or '0-roles', in the absence of a common substantive theory of 'case', implemented in conformity with agreed criteria of contrast and complementarity.

The next chapter widens consideration of the expression of 'case' and its neutralizations to 'case forms' in general, and recognizes the availability in language of different systems of neutralization, and of what I label 'routinization'.
The Variety of Grammatical Relations

7.1 Grounding and its loss

‘Cases’ are members of what we can call a ‘grounded’ category, perhaps more obviously so than many other traditional syntactic categories: the prototypical members of the category are clearly grounded in a particular semantic content, which is crucial to their identification. And it is these semantically prototypical instances that define the morphosyntax of the category, centrally those aspects of distribution and morphology which constitute the non-semantic signals of ‘case’.

We can illustrate something of this in relation to the vocative case. This case is not prototypical: it does not bear the same kind of semantic content as other cases, and it does not share their distribution as introducers of participant or circumstantial arguments. A vocative element, such as that in (2.2b), is not related to the verb in this way (see Anderson 2004b):

(2.2) b. Ti ējine, file?
    (What (has) happened, friend?)

Its special pragmatico-semantic function correlates with a special morphosyntax. It cannot be the basis for a theory of case, or of ‘case’.

Recognition of the groundedness of ‘case’ is what underlies the reluctance of the autonomists to recognize its syntactic status, and it is one of the motivations for persistent attempts to eliminate semantic (or ‘thematic’) relations as such from the syntax. We shall take up some recent (and not so recent) such attempts in later chapters (particularly in §9.3), as a prelude to a consideration of the consequences of a general recognition of the groundedness of syntactic categories, which latter will be the main concern of Chapter 10.

However, this is an appropriate point at which to consider the causes and consequences of relative loss of grounding, i.e. loosening of the directness of the relation between semantic content and distributional or morphological phenomena. This can indeed be seen as an extension of our concern with
'logical/syntactic case forms' in Chapter 6: some such forms show relative loss of grounding, and this is associated with non-prototypicality.

'Loss of grounding' can be seen as one aspect of 'grammaticalization'. Indeed, in the preceding chapter I referred to the relative loss of groundedness associated with uses of the nominative and accusative as 'grammaticalization'. The latter notion has been around for some time, but despite much recent work on its content, particularly in the continuing tradition represented by Hopper and Traugott (1993) and Traugott and Heine (1991), it remains rather amorphous. And henceforth here I shall prefer to distinguish individual development types, such as 'loss of grounding', or 'morphologization', or 'lexicalization', without prejudice as to whether these might constitute integral parts of some more general phenomenon, such as 'grammaticalization'. At this point, the relevant notion is 'loss or loosening of grounding', which refers to linguistic phenomena which show increased distance from determination by content, either compared with other synchronous phenomena or diachronically, compared with earlier usage. The accusative in English, for instance, shows increasing loss of grounding, increasing distance from direct relation to one or more semantic relations.

Loss or loosening of grounding is perhaps most apparent in the area of the range of positions in which particular classes occur, 'word order'. Devices for signalling pragmatic function like topicality and focus are particularly prone to such a development. And I want here to look at something of this vast area. In the immediately following section we look at the syntactic role of neutralized relations (so reduced in grounding) typically originating in topicalization constructions. Subject formation is one instance of this. The development of 'case grammar' was an important stimulus to (renewal of) work on language systems showing different modes of neutralization of semantic relations, involving grammatical relations whose connection with both topicalization etc. and semantic relations, 'cases', is 'loosened'. This concern with different systems of grammatical relation is already evident in, for example, Fillmore (1968a), Anderson (1968a; 1971b); but fuller investigation within the 'case grammar' tradition belongs to a later period. Anderson (1977: §3.5; 1979; 1997: §§3.3, 3.5) provide overviews.

In what follows I shall look at arguments that these phenomena typically involve neutralization of distinctions in semantic relation that are signalled elsewhere in the predication (as in Tagalog), or of semantic distinctions that are involved in the selection of which element is to undergo the neutralization (as in subject formation in English). That is, they are to be accounted for in the context of a theory of semantic relations whereby syntax is largely determined by these relations. Let me now try to clarify this view.
7.2 Subjecthood and the non-universality of syntax

Elements which are topical or focused are typically expressed ‘ectopically’, i.e. not in the position that such elements usually occupy when they are not singled out for such a pragmatic function, if there is one—i.e. if indeed the particular topic can be integrated into the syntax of the rest of the sentence (see Li and Thompson (1976), invoked in the introduction to Chapter 11 below). I use the term ‘ectopicity’ here instead of ‘movement’, say, since it is not obvious that such positioning is best described in terms of ‘movement’ (cf. for example Anderson 1997: ch 3), even with other topical elements than those just described. We shall return to this too in more detail in Chapter 11.

Characteristically, the ectopic position for topical elements is initial, or sometimes final, as in (1):

(1) a. His mother, he doesn’t like
   b. She doesn’t like Bill, Mary’s mother
   c. Mary’s mother, she doesn’t like Bill

(1b) also differs from (1a) in that the ectopic element is apposed to an element occupying its unmarked position, while the topic in (1c) is ‘resumed’ by the pronoun. I am primarily concerned here with the type of (1a). However, in all of them syntactic and/or phonological ‘dislocation’, or ‘non-integration’, correlates with the informational priority of the topical element; there is a close association between pragmatic function and its expression.

Sometimes ectopicity is accompanied by other syntactic signals, as in the restricted ‘inversion’ construction of (2a):

(2) a. Never have I seen such a mess
   b. I’ve never seen such a mess

Compare the non-ectopic negative adverb in (2b). (2a) is a residue of what was a general possibility in earlier English, placement of the verb after an initial topic/focus. Already in Old English this construction shows loss of its grounding in topicality. The loss of grounding in this construction is much more strikingly evident in Modern German, however, as is familiar.

In German, second position for the finite verb is mandatory in clauses that are not marked as subordinated—except in circumstances that involve particular factors, such as alternative questions, as in (3a):

(3) a. Is der Apfel reif?
   is the apple ripe
b. Heute Morgen machte ich einer Spaziergang
   this morning took I a walk

c. Als ich in die Schule ging, regnete es
   as I to school was going rained it

d. Die Dame, die mich jetzt besucht, ist meine Freundin
   the lady who me now visits/is visiting is my friend

The imposition of a mandatory status on verbal second position favours loss of grounding, though in particular instances the first element may well be topical/focused. Thus the factors leading to first position in such as (3b–d) are often unclear; neither the temporal elements in (3b, c) nor the subject in (3d) is necessarily topical or in focus/contrast, for instance. And interpretation of them in these ways can be overridden by intonational marking in particular. We can describe the occurrence of an element in first position in German as ‘routinized’, not necessarily sensitive to its putative pragmatic function, reflecting a general loss of grounding.

Routinization refers to a general ‘process’, not one limited to lexical expression of individual distinctions in, for example, semantic relations. We anticipated such a distinction in §6.1, where (6.3) was used to illustrate lexical neutralization, as opposed to what I am now calling ‘routinization’, which involves a more general, syntactically systematic loosening of grounding:

(6.3) Il va/est à Toulouse
   he goes/is to/at Toulouse

The preposition in (6.3) has locative in common in both uses, goal or not; it shows some neutralization but not routinization.

Anderson (1997: 288–91) suggests that the initial element in (3b–d) and the like bears a grammatical relation, one which, like subject, neutralizes, among other things, the positioning of elements bearing a variety of semantic relations to the verb. He calls this relation the ‘prime’. In this case it does not otherwise (than positionally) involve any increase in neutralization of semantic (or grammatical) relations. It represents one fashion in which semantic relations can be neutralized with respect to one aspect of their expression in a very general way: prime is indeed a relation available very generally to elements of different status, as is illustrated in any reference or pedagogical grammar of German (such as Cochran (1963: ch. 18), from which the examples in (3) are drawn). This routinization is positional.

Expression of the prime relation, however, may be lexically implemented, given lexical expression, rather than simply being signalled by position.
Indeed, the Tagalog prime is not limited to a particular position, except that it is, as with other arguments, post-verbal. In this case the expression of semantic relations themselves, not just their positioning, is neutralized, quite generally, in that role. Lexical implementation typically involves marking of the prime by a particular distinctive adposition or inflection. This characterizes the so-called 'topic/focus' element in Tagalog.

The prime in Tagalog is normally definite; it involves what, for example, Schachter (1976) calls 'presupposed referentiality'. However, definiteness is not unique to the prime; other elements may be definite, and be explicitly marked as such, as with definite pronouns. And the prime need not be topical, as in the reply to (4a) given in (b) (Schachter 1976: 496):

(4)  a. Speaker A: Nasaan si Maria?
   where T Maria
   ('Where’s Maria?')
   b. Speaker B: Hinuhugas niya ang mga pinggan
   is washing:GT she:AT dishes
   ('She’s washing the dishes')

'T' and 'A' abbreviate Schachter’s (1976) terms 'Topic' and 'Actor': these label-relation-signalling elements preceding the nominals they are associated with. 'T' is what Anderson (1997: 194–7) calls ‘prime’, in order to avoid such misleading traditional terminology as has been applied to Tagalog and the like; the nominal so marked does not itself bear a signal of its semantic relation. However, 'GT' in (4b), standing for 'Goal-Topic', is one of a set of morphological forms of the verb which do signal the semantic relation of the 'T' element, the prime—i.e. they 'undo' the neutralization.

So the neutralization of semantic relations associated with the prime in Tagalog is local only; the identity of the relation is signalled elsewhere in the same clause. Prime formation here involves morphological routinization, but the neutralization created is purely local, given the relation markers on the verb. These relation markers themselves show neutralization, but these seem to involve non-arbitrary groupings of semantic relations. They are lexical neutralizations rather than routinizations.

(5)–(7) provide further illustration, again taken from Schachter (1976). Either of the nominals in each of (5), (6), and (7) may be selected as prime:

(5)  a. Lumapit ang ulap sa araw
     approach:AT T cloud D sun
     ('The cloud approached the sun')
b. Linapitan ng ulap ang araw
approach:DT a cloud T sun
(‘The cloud approached the sun’) (6)

a. Tumanggap ang estudyante ng liham
received:AT T student G letter
(‘The student received a letter’) 

b. Tinanggap ng estudyante ang liham
received:GY A student T letter
(‘The student received the letter’) 

a. Nagtiis ang babae ng kahirapan
endured:AT T woman G hardship
(‘The woman endured some hardship’) (7) 

b. Tiniis ng babae ang kahirapan
endured:GT A woman T hardship
(‘The woman endured some hardship’) 


Schachter (1976: 497) comments on the ‘topic’/prime:

When a sentence contains more than one noun phrase whose referentiality is presupposed, it is not always clear why one of these noun phrases, rather than another, is chosen as topic. Under such circumstances, it seems clear that there is often a good deal of leeway with regard to the choice of topic, even in a fixed discourse context, but this is a matter that requires further investigation.

This variability and uncertainty concerning potential semantic/pragmatic motivations for selection of prime again reflects a loosening of semantic/pragmatic grounding. This is associated with the observation that in most clause types the marking of a prime is obligatory.

The Tagalog prime also displays more extensive loss of grounding than German in the form of the presence of what have been seen as ‘subject-like’ syntactic properties: in particular, it is only primes that can be relativized (Schachter 1976: 500). This apparently shows more routinization. In a moment I shall illustrate similar relativization phenomenon from Malagasy. What is important at this point is to observe that degree of morphosyntactization of primehood is apparently gradient: primes may be more or less morphosyntactically distinctive. In German, where prime is less morphosyntactically integrated, it occurs only in unsubordinated clauses, reflecting its lack of distance from a topicalization function.
Let us return briefly to the character of the neutralizations associated with the relation markers in Tagalog. Schachter (1976: 497) suggests, for instance, that we should not equate the Tagalog ‘actor’ with ‘agent’. He avers (p. 498):

While I know of no really satisfactory generalization about the semantic characteristics associated with the actor (and perhaps none is possible, given the dependency of the interpretation of the actor’s role on the interpretation of the verb), I find that the following characterization (taken from Benton 1971: 167) will, if interpreted charitably enough, cover most cases: ‘the entity to which the action of the verb is attributed.’ (The requisite charitable interpretation allows ‘action’ to serve as a cover term for actions, happenings, and conditions in general.)

And he cites the examples in (5–7) to illustrate the difficulty, and comments (p. 498): ‘The examples of [(5)] and [(6)] show that an animate actor is not necessarily the “instigator” of the action, and the examples of [(7)] show that the actor need not even be animate.’ This might be taken to suggest that actor is perhaps in itself a grammatical relation (as well as the prime).

But the examples cited are all plausible instances of (non-locative) source, or ergative, as characterized in the preceding chapter (for which the quotation from Benton (1971) provides a rough paraphrase). Combined with locative, ergative is not the ‘“instigator” of the action’, but the source of an experience, including that of ‘ownership’ or ‘acquisition’. And ergative itself is not usefully restricted to animates. Of course, the actor marker involves neutralization between, for example, agentive and experiencer, but this leaves ergative as a retained common element; there is no routinization. Actor is not a grammatical relation like prime or subject (though, as acknowledged, even the routinization associated with Tagalog prime itself results in only local neutralization).

There is, to return to the prime, a misleading tendency to group under the rubric ‘subject’ all routinized neutralizations of such a sort, i.e. where there is extensive neutralization of semantic relations by a morphologically or positionally expressed element that displays distinctive syntax/morphology of a particular kind—such as being ‘most relativizable’, most likely to control agreement (cf. Keenan 1976b; Kroeger 1993). It is equally unnecessary and misleading, in relation to Tagalog, to talk about spreading ‘subject properties’ across two different categories, as do Schachter (1976) and Falk (2000). I speak here, instead, of there being different ways in which elements can be morphosyntactically neutralized with respect to their semantic relations, where I have labelled the neutralized relation in the present case ‘prime’. Both primes and subjects are what Anderson (1997: §3.3.1, 2) calls ‘principal relations’, neutralized relations that are morphosyntactically particularly active. In the
light of the discussion in the previous chapter, and the lack of support for such putative ‘grammatical relations’ as (‘direct’ and ‘indirect’) ‘object’, we can perhaps simply call prime and subject ‘alternative grammatical relations’. In particular subsystems there is only one ‘principal’, only one true grammatical relation.

To apply the ‘subject’ label to this more extensive class of alternative grammatical relations would have at least two unfortunate consequences. In the first place, it is difficult to reconcile with the fact that a language may display both kinds of principal: German has both subjects and primes, with non-identical properties; only subjecthood, for instance, is marked morphologically. This is one reason why in the previous paragraph I suggested that there can only be one grammatical relation per subsystem—rather than per language. Secondly, there are indeed two crucial difference between subjecthood, as it has been applied in the European tradition, and primehood, a distinction which simply identifying them obscures. Subjects are selected in accordance with a hierarchy of semantic relations of participants; this does not seem to be reflected in the selection of primes. And primes, but not subjects, can bear circumstantial (adjunct) as well as participant (subcategorized-for) relations to the verb. Tagalog illustrates a language system with a grammatical relation but without subjects (cf. further for example Mithun (1994), on Philippine diatheses and the absence of subjects, and the interesting case of Kapampangan).

The neutralized relation subject thus adds these two requirements to the sort of loosening of grounding and the obligatory status that are associated with primes: a restriction of the neutralization involved to participant rather than circumstantial elements, together with the imposition of a hierarchy on the selection of subject that is based on the semantic relations. So, as we have seen, in a subject-based system, if a clause contains a verb which takes an ergative participant, then this participant will be the subject; otherwise an absolutive is subject:

\[(6.38)\text{'} \quad \text{Subject selection hierarchy:} \ erg > \ erg, > \ abs\]

(from §6.5). Given these restrictions, and particularly the hierarchy, the semantic relations neutralized under subject formation do not need to be signalled elsewhere in the clause (as they are in Tagalog, which is not subject-forming).

Subjects involve substantial neutralization: all roles containing an ergative relation (‘agents’, prototypical or not, ‘intransitive’ or not, experiencers of all types) are expressed in the same way, as well as some absolutes (those not outranked by the independent presence of such an ergative in the predica-
tion). But only the latter neutralization represents routinization. This routinization was expressed (6.40) as an assimilatory neutralization:

(6.40) \textit{Subject-formation}
\[ \text{abs} \Rightarrow \text{abs[erg]} \]

A non-ergative absolutive not outranked by an ergative is neutralized to share its expression with all the other ergatives.

Subject-based systems may also be lexically (as well as syntactically) implemented in the form of adpositional and/or inflectional expression of the neutralization, as we saw in §6.3. Many systems of inflectional case are subject-based: this is characteristic of the more conservative Indo-European languages, with a nominative case that also controls agreement on the verb. However, the existence in one language of both positional and morphological expression of subjecthood can lead to discrepancies between the two, as in (8):

(8) a. There is a fly in my soup
    b. There are flies in my soup

In (8) the inflectional subject \textit{a fly/flies} controls concord on the verb, but it is distinct from the positional subject, \textit{there}. It is the latter that ‘inverts’ in various circumstances, one of them exemplified in (9):

(9) a. Is there a fly in your soup?
    b. Are there flies in your soup?

Compare (10):

(10) a. Here comes a waiter
    b. Here come (some) waiters

In (10) it is the inflectional subject that has ‘inverted’; it is also the positional subject; \textit{here} is not a subject. We have in (10) a residue of the ‘verb-second’ constraint associated with the German prime. It should be observed, though, that, since ‘inversion’ of the subject is obligatory in the reading appropriate to such examples, its status as the positional subject can be established only indirectly.

Subjecthood seems to originate as a routinization of a specific kind of topic. Lehmann, for instance, invoking Li and Thompson’s (1976) distinction between ‘topic-prominent’ and ‘subject-prominent’ languages, claims (1976: 454) that:

Indo-European in its earlier stages was a topic-prominent language. Yet in the course of three millennia, from such a topic-prominent language, subject-prominent languages have developed.
Subjects routinize an extension of marking of the agentive topic to non-agentive ergatives (experiencers), eventually even non-agentive ‘intransitive’ absolutes. An ‘agent’ topic has a special status among topics, as being favoured by considerations of empathy and anthropocentricity (cf. e.g. Ska-lička 1962). And there are reasons for associating this status with the development of subjecthood (see for example Givón 1976; Shibatani 1991); the crucial role of an ‘agent’ topic in the development of subjecthood is reflected in a variety of phenomena.

For instance, part of the prehistory of the Indo-European case system can be characterized, though controversially, by the extension of originally ‘agent’ (or more generally ergative) inflections (in a previously ‘ergative’ system—see below) to ‘non-agent’ topical elements that thereby come to constitute with them subjects (for example Uhlenbeck 1901; Haudry 1970). This extension is observable in only the masculine and feminine declensions, and not the neuter, which did not provide prototypical ‘agents’ (Meillet 1934: ch. 6, §D); in neuter declensions the nominative and accusative share endings. The nominative singular, at least, seems also to be associated with definiteness in its origin (Biese 1950), as befits a topic (Li and Thompson 1976). The role of the ‘agent’ topic in the development of subjecthood remains in the form of the hierarchy, which prefers simple {erg} arguments.

7.3 The function of subjects and other grammatical relations

Subjecthood may originate in topicalization devices, together with a preference for agent orientation, but, as with the prime, once the routinization occurs, it typically is given a widening set of syntactic roles, once established; and variation in the extent of this in different languages is reflected in the non-universality of the morphosyntactic ‘subject properties’ described by Keenan (1976b), to cite a familiar survey. Some of them are, of course, properties of (‘principal’) grammatical relations in general, but that does not affect the generalization concerning non-universality of the properties of these relations, whichever kind of grammatical relation is involved.

One widespread syntactic role fulfilled by subject is what I shall refer to (not very elegantly) as a ‘transclausal device’: in certain constructions identification of the role of an ‘absent’ element in a subordinate clause which is overtly realized as an (at least apparent) participant in the upper clause is facilitated by the knowledge that it can be identified as the subject of the subordinate, which in turn can be identified by the valency of the verb. Subjecthood helps identify an element that is absent from its usual position in a predication.
This knowledge is what enables the parsing of raising structures such as those in (11) and (12):

(11) They seemed to like the play
(12) a. They were expected to like the play
    b. People expected them to like the play

The absolutive argument in the upper clause, which is a semantically inert participant in that clause, can be identified as the (positional) subject of the infinitive, chosen in accordance with the hierarchy. This syntactic relationship thus serves a purpose in parsing; it is functionally based, functionally motivated. And the subject of the infinitive that is shared with an upper clause element continues to be identified within its clause by the subject-selection hierarchy. It is still indirectly grounded.

Likewise, it is the subject of the (typically agentive) infinitive governed by the main verbs in (13) and (14) that is (in one terminology) 'controlled' by the agentive and experiencer, respectively, of that verb:

(13) a. Basil tried to leave her
    b. Basil promised (Jeremy) to leave her
(14) a. Basil wanted/expected to leave her
    b. Jeremy persuaded Basil to leave her

In each case Basil is the element 'shared' between the two clauses (on the analysis of Anderson (2001a), described in Chapter 12); it is the subject, whether or not it is the agentive, of the agentive infinitive construction.

It is only in cases of 'control' which is apparently by a participant that is apparently not an ergative (agentive or experiencer) that the shared element is not the subject of the infinitive, but rather another participant than the (typically agentive or experiencer) subject of the infinitive. This is illustrated in (15) and (16):

(15) a. The lock was easy to pick
    b. Methoni is easy to get to
    c. The route is easy to remember
(16) a. This problem is a hornets' nest to deal with
    b. Mary is pretty to look at

The examples in (16) are from Lasnik and Fiengo (1974); on the basis of such they argue for what can be interpreted, in the relevant respects, as a 'control' analysis, rather than a raising one. Lasnik and Fiengo point out that, though the adjective in (15) also appears in the construction in (17a), this is not the case with the predicatars in (16)—cf. (17b):
(17) a. It was easy to pick the lock
   b. "It is a hornets’ nest to deal with this problem
   c. "It is pretty to look at Mary

*Easy* has a sense lacking to the predicators in (16); there is a contrast in the roles of its subjects. Chapter 12 takes up the analysis of apparent ‘control’ by a non-ergative: there it is argued that there is a simple locative ‘controller’ in these cases. ‘Control’ by the non-ergative in (16) is of non-subjects, however else they might be circumscribed. However, we can say that, otherwise, it is typically the infinitival subject that is shared with the main verb in raising and control. I do not consider here the kind of analysis advocated in Chomsky (1977b: 103–10), whereby such constructions involve ‘wh-movement’ (but see already Bach (1977: §4.4)). What is suggested there depends on dubious judgements, as well as on heavily theory-particular assumptions that bring with them unacceptable deletions (of *wh*- and other forms).

Elements that bear radically neutralized semantic—i.e. grammatical—relations can also play a role in ectopicity involving an ‘extraclausal’ position that is apparently not that of a ‘normal’ participant or circumstantial, as in Malagasy.

The principal relation in Malagasy is signalled positionally and in terms of susceptibility to various inter-clausal phenomena. In simple sentences the neutralized element is final, though a sequence of adjuncts may follow (Keenan 1976a: 249–50). As in the Philippine languages, a range of participants and circumstantials can have their semantic relations neutralized in a radical way. (18) illustrates what Keenan refers to as the ‘four distinct voices’ (1976a: §2.1) of Malagasy, respectively, ‘active’, ‘circumstantial’, ‘goal’, and ‘intermediary’:

(18) a. Man-asa lamba amin’ity savony it Rasoa
   wash:ACT clothes with this soap this Rasoa
   (‘Rasoa is washing the clothes with this soap’)
   b. Anasan- dRasoa lamba ity savon ity
   wash:CIRC- by Rasoa clothes this soap this
   (‘This soap is being washed clothes with by Rasoa’)
   c. Sasan- dRasoa ny lamba
   wash:G- by Rasoa the clothes
   (‘The clothes are washed by Rasoa’)
   d. Atolo- ko ny vahini ny vary
   Offer:INTER- by me the rice the guests
   (‘The rice is offered by me to the guests’)

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As in Tagalog, the voices themselves involve some neutralization. The final (positionally neutralized) element in (18a) is an ‘agent’. However, the final element in ‘circumstantial voice’ sentences like (18b) is any one of a range of circumstantials (‘the instrument, benefactee, location, time, purpose, manner, . . . of the action’—Keenan 1976a: 256). In (18c) it is the goal experiencer in ‘double-object’ constructions or the goal absolutive in simple transitives (Keenan 1976a: 257)—i.e. a so-called ‘primary object’ (recall §3.1.3). The final element in the ‘intermediary’ voice of (18d) is the absolutive in ‘double-object’ clauses and ‘certain types of “weak” instrumental’ (Keenan 1976a: 157).

There is considerable grammatical-relation-like neutralization of semantic relations involved in occupation of final position, even taking into account the ‘voice’ marking on the verb, which renders the positional neutralization local; but the ‘voices’ themselves to a large extent group together various clearly related semantic relations. This is clear as concerns the ‘voices’ illustrated by (18a–c). It is difficult to assess Keenan’s rather vague description of the ‘intermediary voice’ of (18d).

However, what is presently most relevant is that relativization in Malagasy affects only the radically neutralized element and no other. To illustrate this, Keenan offers the examples in (19), among others (1976a: §2.2.1):

(19) a. ny zazavavy (izay) manasy ny lamba
    the girl that wash:ACT the clothes
    (‘the girl that is washing the clothes’)

b. *ny lamba (izay) manasy ny zazavavy
    the clothes that wash:ACT the girl
    (* = ‘the clothes that the girl washes’)

c. ny lamba (izay) sasan’ny zazavavy
    the clothes that wash:G the girl
    (‘the clothes that are washed by the girl’)

d. ny vato izay anasan- dRasoa lamba
    the stone where/with which wash:circ- by Rasoa clothes
    (‘the stone where/with which clothes are washed by Rasoa’)

The relative clause in (19a) is ‘active’; and (19b) illustrates that the absolutive in an ‘active’ clause cannot be relativized. (19c) gives the permitted relativization in a ‘goal’ clause. And (19d) illustrates relativization in a circumstantial.

The neutralized element is what is permitted to be relativized. In this respect it is behaving as a grammatical relation; and its behaviour in general
is like that of the prime in Tagalog. So far in discussing Malagasy, however, I have held back from giving this label to the neutralized element because this equation is explicitly denied by Keenan (1976a). I think he is mistaken. But a consideration of the arguments he offers will illuminate further the character of (principal) grammatical relations, as discussed in the following section.

7.4 The continuum of grammatical relations

Keenan devotes a section of his paper (1976a: §II) to arguing that the neutralized element in Malagasy is not like the prime in Tagalog and other Philippine languages, but can, rather, be identified as a subject. Some of these arguments, such as the unique relativizability of the neutralized element, merely show that it is a (principal) grammatical relation, not specifically a subject, in the hierarchical sense of this adopted here. And the Tagalog prime is also the only relativizable element. Other ‘subject’ properties, such as the exercising of control, or expression of ‘the addressee of imperatives’ (the latter a problem for Keenan 1976a: 461), are more properly associated with semantic relations (Anderson 1977: ch. 2, §3), not with subjecthood as such, nor with principals in general. Crucially, given the distinction between subject and prime that I have drawn, Keenan doesn’t make a case for there being a hierarchical relation among the semantic relations that are neutralized in Malagasy: choice is not hierarchically determined. Moreover, in Malagasy, as in Tagalog, non-participants undergo the neutralization. The neutralized element in Malagasy is, at the very least, very much more of a prime than it is a subject.

Nevertheless, two of Keenan’s observations are suggestive. He points out that, unlike in Malagasy there are clauses in Tagalog with no ‘actor-topic’ version, notably non-verbal clauses and some with intransitive verbs, illustrated in (20a) and (20b) respectively:

(20) a. Abogado ang lalaki
    lawyer T man
    (‘The man is a lawyer’)

b. Papawisan ang lalaki
    will.sweat:GT/DT T man
    (‘The man will sweat’)

c. Magtrabaho ang lalaki
    will.work:AT T man
    (‘The man will work’)

Modern Grammars of Case
But (20a) merely shows that non-verbal clauses in Tagalog don’t signal any relation as neutralized, and this reflects the impoverished valency of non-verbal predications. And comparison of (20b) and (20c), both from Tagalog, with corresponding sentences in Malagasy, shows, on the assumption that (20b) is non-agentive but (20c) agentive, that the difference between Tagalog and Malagasy is merely that in this area Malagasy shows more neutralization in the signalling of the semantic relations absolute versus agentive. Tagalog distinguishes, in clauses which do not have distinct agentive and absolutive (i.e. are ‘intransitives’), between a simple absolutive (20b) and an agentive participant (20c); in Malagasy all ‘intransitive’ elements, whether agentive or not, are marked as actors. In this respect, the Malagasy ‘actor’ is certainly more subject-like than that in Tagalog. However, this provides only marginal support for Keenan’s contention that Malagasy has subjects. The Malagasy ‘actor voice’ is at most a minor subject-former in competition with the major prime-based system.

Consider, moreover, Keenan’s other pertinent observation. Keenan observes that ‘non-subject agents in Malagasy…do not undergo Equi’ (1976a: 294)—i.e. they are not controlled, unlike the English subjects in (13) and (14). This merely confirms that the ‘non-subject agents’ do not bear the (principal) grammatical relation. The non-prime actor of Tagalog, on the other hand, ‘may undergo Equi-NP deletion’ (Keenan 1976a: 294), as shown in (21a, b) (where ‘LINK’ is ‘Linker’), as well as the ‘actor-topic’ of (21c) (Schachter 1976: 504):

(21) a. Nagatabuli siyang hiramin ang pera sa bangko
hetitated:AT he:ELINK borrow:GT T money D bank
(‘He hesitated to borrow money from a/the bank’)

b. Nagatabuli siyang hiraman ng pera ang bangko
hetitated:AT he:ELINK borrow:DT G money T bank
(‘He hesitated to borrow money from the bank’)

c. Nag-atabuli siyang humiram ng pera sa bangko
hetitated:AT he:ELINK borrow:AT G money D bank
(‘He hesitated to borrow money from a/the bank’)

If these are control structures, then they show that in one respect the non-prime actor in Tagalog acts as a grammatical relation, as it would be in a fully subject-forming language. In this respect, the Tagalog actor is more subject-like than that in Malagasy: we again have minor competition for the prime in the form of a marginal subject.
The primes in the two languages are different. But it seems appropriate to characterize this difference as follows, rather than as a contrast between subjecthood and primehood: Tagalog and Malagasy depart from ‘perfect primehood’ in different respects; both respects involve the presence of a minor subject system. The dominant system in both is prime-based, and they depart in the direction of subjecthood in different respects.

This seems to confirm that languages are not necessarily uniquely subject-forming or prime-forming. Keenan concedes that ‘in any language’ (1976b: 312), the subjects of some basic-sentences can be more subject-like than the subjects of others in the sense that they present a fuller complement of the subject properties.

I am suggesting that, also, languages as a whole may differ in the extent to which they are subject-like versus prime-like, as well as in how generally in the morphosyntax these are manifested. We can roughly diagram this in terms of the dimensions in Figure 7.1. Languages may vary in how strongly (and in what ways) they belong to either pole of the horizontal dimension, as can individual constructions in the language. And primehood and subjecthood may be more or less strongly manifested morphosyntactically in a language, as well as in different constructions in the language: the German prime, for instance, is not well developed morphosyntactically; and the German subject is not positionally homogeneous.

![Figure 7.1 Variability in marking principal relations](image)

The English adnominal genitive, despite being optional, is principal-like in neutralizing a range of disparate semantic relations, as we see from a comparison of (6.5) and (6.6) (recall the preliminary discussion in §6.4); and it is more prime-like than the principal relation in verbal predications in English, as we see from the variety of semantic relations associated with the genitives in (6.5), updated here in terminology:

(6.5) a. his wife’s rescue (of Bill) \(\text{erg(abs)}\)
    b. Bill’s death \(\text{abs}\)
    c. Bill’s flight (from the scene) \(\text{abs,erg(loc(src)})\)
d. Bill's rescue (by his wife)         abs(erg)
e. last night's rescue (of Bill by his wife) adjunct(abs/erg)

The example in (6.5e) is circumstantial in the corresponding verbal constructions.

Moreover, as we have already noted, the alternation between (6.5a–d) and (6.6) (updated again) is not analogous to the active/passive alternation found in verbal constructions in English:

(6.6)  a. (the) death of Bill         abs
     b. (the) flight by Bill (from the scene) abs,erg(loc{src})
     c. (the) flight of Bill (from the scene) abs,erg(loc{src})
     d. (the) rescue of Bill (by his wife)       abs(erg)

Only in (6.6d) are the positional difference and the marking of 'agency' with by shared with the verbal passive. By in (6.6b) alternates with of in (6.6d) in marking the agentive intransitive element, which is both agent and absolutive (compare the simple absolutive in (6.6a), marked with of). Moreover, there is no reason to regard the forms in (6.5), even (a), as more basic than those in (6.6).

We have in (6.5) a familiar kind of neutralization, optional in this case: it is prime-like, though there are restrictions on the range of circumstantials that can be genitives, as was illustrated by (6.7a):

(6.7)  a. *London's rescue of Bill by his wife
     b. the rescue of Bill by his wife in London
     c. Bill was rescued by his wife in London
     d. *the film's enjoyment by John on John's part
        (cf. John's enjoyment of the film / (the) enjoyment of the film by John on John's part)

The phrases in (6.6b, c) that would be circumstantial in the corresponding verbal constructions are not available for genitive formation. Likewise, the absolutive in experiential (6.7d) is not a viable genitive. English, too, is mixed in grammatical relation type; verbal and de-verbal constructions are typologically different.

Another intermediate type is illustrated by the syntax of Chichewa. In Chichewa 'transitive' (ergative + absolutive) sentences seem to be uncontroversially subject-based. But in locative sentences (directional or not) either the locative or the absolutive can be 'subject', as illustrated in (22) vs. (23) (from Bresnan and Kanerva 1989: 2):
(22) a. chi-tsıˆme chi-li ku-mu-dzi 7-well 7-be 17-3-village
   ('The well is in the village')
   b. a-lendó-wo a-na-bwér-á ku-mu-dzi
      2-visitor-2.those 2-REC-come-IND 17-3-village
   ('Those visitors came to the village')

(23) a. ku-mu-dzi ku-li chi-tsıme 17-3-village 17-be 7-well
   ('In the village is a well')
   b. ku-mu-dzi ku-na-bwér-á a-lendó-wo
      17-3-village 17-REC-come-IND 2-visitor-2.those
   ('To the village came those visitors')

Here the numerals indicate noun classes: IND = 'Indicative', REC = 'Recent past'. In (22) the verb is marked as having a 'subject' belonging to a particular class; in each case this is the class of the absolutive. But in (23) it is a member of the class of the locative that the verb is marked as having as a 'subject'. In Chichewa, then, the subject selection hierarchy apparently does not include absolutive; only an ergative that is not absolutive (i.e. one in a transitive sentence) has a privileged status among participants; below that, with locative and absolutive, selection is prime-like. It is inappropriate to talk here of 'inversion', as in Bresnan and Kanerva's (1989) title: the sentences in (22) do not seem to have privileged position with respect to (23). The subject selection hierarchy is 'foreshortened', and absolutive and locative are neutralized as primes.

This 'prime-like' character is emphasized by the fact that even circumstantial locatives can show the 'subject' marker, as illustrated by (24) (from Bresnan and Kanerva 1989: 18):

(24) pa-m-siká pa pá-bádw-a chákúdya
    16-3-market 16this 16.IMM-be.born-IND 10.fist
    ('In this market a fight is going to break out')

(IMM = 'Immediate future') In Chichewa we find a general process of selection of the grammatical relation, with the identity of the selected element being marked consistently morphosyntactically, but selection is part subject-like, part prime-like, adding to the diversity of principal selection that we have already encountered.

These linguistic variants are all variations in the type and extent of the weakening of grounding. There needs to be recognition not just of the underlying groundedness of linguistic elements but also of the variety of ways
in which groundedness can be loosened—i.e. in which there can be ‘grammaticalization’, in one sense of that much-abused term, what I am calling routinization. Not all routinization of the topicalization of elements bearing semantic relations involves a canonical subject, or any kind of subject, though the salience of agentive topics in language tends to propel things in that direction—as manifested in the languages of the world, and as shown in the Chichewa examples we have just considered. The basic morphosyntactic structure of languages is nevertheless variable; what is constant is the semantic-relational determinants. Moreover, these routinizations are typically functionally motivated.

7.5 Ergativity and agentivity

There are other, apparently hierarchical systems (like the subject-based) of neutralization of semantic relations, also restricted to participants, which nevertheless involve less extensive obliteration of the expressional differences between semantic relations. These are systems in which the element bearing the absolutive semantic relation is selected in preference to anything else as morphosyntactic principal. Now, absolutive elements are present with a wide range of predicators. Indeed, as discussed in §6.3, it has been argued that the absolutive is universally present in predications, even if sometimes vacuously (i.e. not subcategorized-for—cf. again Anderson (1997: §3.3)). Universality of absolutes in predications also accounts for non-penetration of the subject-selection hierarchy beyond absolutive in subject-forming systems, excluding not just circumstantials but also spatial locatives. If it is the case that absolutive is universally present in predications, the ‘hierarchy’ found in the languages we are about to look at reduces to selection of one particular semantic relation: absolutes are principals. Such systems are said to be ‘ergative’.

Thanks to the work of Dixon (1972), in particular, probably the best-known ‘ergative’ language is Dyirbal. His description is the basis of the discussions of a ‘case grammar’ approach to ‘ergativity’ in Anderson (1977: §3.5.5; 1997: §3.3.1), as well as in the fuller treatments in Böhm (1993; 1998a). I shall also use it for illustration. Bossong (1984), however, points out that in some respects Dyirbal is not a typical ‘ergative’ language (see for example p. 373). And he defends the view that Basque is syntactically as well as morphologically ‘ergative’, despite such earlier views as those of S. R. Anderson (1976) and de Rijk (1978). Also opposed to these latter analyses are Brettschneider (1979), Wilbur (1979), and van Valin (1980). Exposition of the arguments here would take us into a large digression; so I shall concentrate, as stated, on Dyirbal.
The ‘ergative’ morphology of Dyirbal is seen in the various forms in (25):

(25) a. bayi ya˛ra bañi JU CL man came-here
    (‘The man came here’)

b. bayi ya˛ra bañgun dugumbiru) balgan
   CL man CL.ERG/INS woman:ERG/INS hit
   (‘The woman hit the man’)

The initial class-marker + noun sequence in each of (25) is said to be ‘nominative’, or ‘absolutive’, whereas the ‘agent’ in (25b), the second class-marker + noun, is in the ‘ergative/instrumental’ case. The scare quotes around ‘agent’ remind us that this element may be an experiencer: it is an ergative. The absolutive represents a grammatical relation, not simply a neutralized form: it is the absolutive that is controlled in subordinate clauses—i.e. that is shared with a full semantic participant in the upper clause (as discussed in §7.3). In unmarked constructions, the ‘agent’ of a basic verb in a subordinate predication is not shared under control.

In order for the ‘agent’ to be shared, a derived intransitive verb must be formed, whose absolutive participant is derived from an ‘agentive’ which has acquired an absolutive as part of the derivation and is marked accordingly. We need first, however, to look more closely at (25a). (25a) contains a non-derived agentive intransitive, on the most obvious reading. Agentive and non-agentive intransitives are neutralized in expression; they are both absolutive. This is because the agent of an agentive intransitive is also absolutive, as the entity that undergoes the process, in the case of (25a) movement, as well as being the source of the action. And both agentive and non-agentive participants of intransitives are controllable. The argument of the intransitive verb derived from a basic transitive such as that in (25b) will thus be eligible for control.

This derived form is exemplified in (26):

(26) a. bayi ya˛ra (baṅgu bargandu) durga-nañu
    CL man CL:ERG/INS wallaby:ERG/INS spear-ANTIP.NONFUTURE

b. bayi ya˛ra (baṅgu bargangu) durga-nañu
    CL man CL.DAT wallaby:DAT spear-ANTIP.NONFUTURE
    (‘The man is spearing the wallaby’)

I have marked the derivational affix in (26) ‘antip(assive)’, as is traditional. In the anti-passive construction the element corresponding to the (active) transitive absolutive is optional, as indicated in (26), and marked either by the ‘ergative-instrumental’ (26a) or by the ‘dative’ (26b): it is a circumstantial, like the passive by-phrase in English.
We might, anticipating a little, formulate anti-passive as in (27):

\[(27) \quad \text{Anti-passive} \quad \frac{V/\{\text{erg,abs}\}}{\text{V/\{erg,abs\}}} \]

The derived verb is a ‘complex category’ which satisfies its absolutive valency internally; and the ergative argument is accordingly marked as an intransitive ‘agent’. We can attribute this marking to the universality of absolutive requirement, so that the absolutive on the right of (27) compensates for the loss, by ‘incorporation’, of the absolutive which is part of the subcategorization of the basic verb (as represented on the left). The initial ‘agent’ + (derived) absolutive element is nominative/absolutive. I assume that, as with the passive by-phrase in English, the ‘displaced’ absolutive in (26) is in apposition with the ‘incorporated’ absolutive of (27) (see further §§9.2.2, 12.2.3). But see Böhm’s (1998a) more refined treatment of the typology of such ‘deactivated participants’.

The ‘agent’ + absolutive of a derived anti-passive verb is eligible for being controlled (Dixon 1972: §5.4.4), as illustrated, recursively, in the complex sentence in (28):

\[(28) \quad \text{naḍa bayi yaɾa gigan bagun ḏugumbılgu wawul- ŋay- gu ŋinungu I CL man told CL.DAT woman:DAT fetch- ANTIP nonfuture you mundal-ŋay- gu bagu miɗagu wambal-ŋay- gu bring-ANTIP nonfut CL.DAT house:DAT build- ANTIP nonfuture} \]

(‘I told the man to fetch the woman to bring you to build the house’)

To this extent, the absolutive is routinized. There are devices (such as anti-passive) which feed the syntactic role of the absolutive, though this syntactic role has a functional motivation in providing a determinate shared argument for the lower clause. But in non-derived forms the absolutive does not, unlike the subject, involve assimilatory neutralization; this occurs only in the derived anti-passive construction. The Dyirbal absolutive is, then, a minimally neutralizing principal which is not selected hierarchically but directly on the basis of marking a particular semantic relation, while ignoring whether it is also marked for ergative or not.

There are other languages in which the difference in semantic relations of the (non-locational) participants in agentive and non-agentive intransitives are not neutralized morphologically; these are said to have ‘agent-patient’ systems. Such is Lakhota, illustrated in (29) (from van Valin (1985: 365-6), drawn on by Palmer (1994: 66), in the course of a survey of different types of
systems expressing semantic and neutralized relations—though, of course, it is not conducted in the present terms):

(29) a. ma- yá- kté
   1.PAT- 2.AGT- kill
   (’You killed me’)

b. -wa- kté
   3.PAT -1.AGT- kill
   (’I killed him’)

c. ni- -kté
   2.PAT -3.AGT- -kill
   (’He killed you’)

d. wa- hí
   1.AGT- arrive
   (’I arrived’)

e. ma- khúże
   1.PAT- sick
   (’I am sick’)

f. ya- ű
   2.AGT- come
   (’You are coming’)

g. ni- háske
   2.PAT- tall
   (’You are tall’)

The various person affixes in (29), which in these examples are all singular (so I’ve left that unspecified), also signal ‘agent’ versus ‘patient’, i.e. absolutive in present terms: ’1’ = ‘First person’, ’2’ = ‘Second person’, ’3’ = ‘Third person’; ’AGT’ = ‘Agent’, ’PAT’ = ‘Patient’. Both ‘agent’ and absolutive markers are present in (29a–c), though third person is marked by absence of an affix. The agentive intransitives in (29d) and (29f) take the agent marker; with the non-agentives in (29e) and (29g) we find a marker of absolutive. What is neutralized here is the distinction between {erg} and {abs,erg}, ‘transitive and intransitive’ ergatives. The morphology doesn’t express the sharing of the {abs} relation between the different types of intransitive: ‘agentive’ = {abs,erg}; ‘non-agentive’ = {abs}.

Further examples of languages that have such an ‘agent-patient’ system are discussed by Mithun (1999: §4.3.3); they too distinguish ‘agents’, whether or
not they are also absolutive, i.e. are transitive or intransitive. She illustrates this from Haida, with examples drawn from Levine (1977)—(30a, b) here—and Lawrence (1977)—(30c) (who, the reader should be warned, use different systems of transcription from each other):

(30) a. l\'k\'in x\'a giyu \l\'\quad qudag\n
woods DISTR toward-FOREGROUND 1SG.AGT went

(‘I went up into the woods’)

b. di la squdag\n
1SG 3AGT hit

(‘He hit me’)

c. K\'yuw-\aa-st d\ii dlaw\i\gan

trail-the-from 1PAT fell

(‘I fell off the trail’)

(‘DISTR’ = ‘distributive’). The ‘agent’ pronouns are unmarked. In this system too the distinction between transitive and intransitive ‘agent’ is neutralized. But it also introduces some further considerations.

In some other languages, Mithun notes (1999: 213-14), ‘patient’ marking is associated, as well as with ‘non-stative’ verbs, with all the arguments of ‘statives’ that do not involve spatial location. But in Haida ‘statives’ may or may not be marked as ‘patients’, depending on the presence of an agitative interpretation. An ‘agitative stative’ (from Levine 1977) is shown in (31a):

(31) a. gway-ay gu ?u \l\a ?ij-\inn-i

island-the on FOREGROUND 1SG.AGT exist-past-old

(‘I was out on the islands’)

b. d\ii ag d\ii gul\i\gang

2SG.PAT 1SG.PAT like

(‘I like you’)

(Mithun 1999: 215). And \{loc,erg\} (experiencer) arguments are generally marked as ‘patients’, as in (31b) (Mithun 1999: 216, again from Lawrence 1977). This involves yet another notion of ‘patient’ from those discussed in §6.2. Here the morphologically marked ‘patient’ can be any participant that is not a simple ergative. Palmer (1994: §3.6.2) attributes to Tabas(s)aran(ian) an agent-patient system; but this is limited to a part of the agreement system; otherwise the language is ‘ergative’.
In other (sub)systems still there is no such overall neutralization as we find in Haida or in ‘ergative’ languages proper. Often the range of semantic relations involved is revealed by different morphological devices which individually are neutralizing. This can be illustrated by the sentences in (33), from Eastern Pomo (from McLendon (1978), cited in Anderson (1987a), for example). First, however, consider the forms in (32):

(32) a. ša-k ‘kill (one)’ ~ du-léy ‘kill (several)’  
    b. p^b-a-di-l ‘one leaf drifting’ ~ p^b-yá-w ‘many leaves drifting’

(33) a. mi-p békal du-léya  
    3SG.AGT 3PL.PAT  killed:PL  
    (‘He killed them’)

b. bék^h mi-pal ša-iya  
    3PL.AGT 3SG.PAT  killed:SG  
    (‘They killed him’)

c. mi-p kálahuya  
    3SG.AGT  went:home:SG  
    (‘He went home’)

d. bék^h kálp^h:i-ya  
    3SG.AGT  went:home:PL  
    (‘They went home’)

e. békal ōc-xeka  
    3PL.PAT  slipped  
    (‘They slipped’)

In Eastern Pomo verb stems are (totally or partially) suppletive in accordance with the number of the absolutive participant, whether the latter is also agentive or not, whether the verb is ‘transitive’ (32a) or not (32b). Such suppletion is found in the examples in (33). In (33a) and (33b) the verb stem changes in accordance with the absolutive of the transitive verb. It also alternates in (33c) and (33d) in accordance with the absolutive of the intransitive. But this absolutive is also marked as being an ‘agent’ by the form of the pronoun, which is the same as the ‘agents’ in (33a) and (b) respectively. Whereas the non-agentive absolutive of (33e) shares its shape with the absolutive in the transitive (33a). There is no overall neutralization of ergative and non-ergative absolutives, as opposed to local neutralizations; even this non-assimilatory neutralization found in ‘ergative’ languages is lacking in Eastern Pomo.

Many systems display more neutralization, however. As we have seen, many such systems show the neutralization of agentive versus non-agentive among absolutives (as in Dyirbal) or failure to express the absolutive component of
agentive absolutes in intransitive ‘agents’ (as in Lakhota). And often in all the types system we have been looking at in this section, expression of the experiencer in clauses lacking a true ‘agent’ is identical with that of the true ‘agent’, as in Basque (and unlike as in Haida—recall (31b)):

(34) a. Aitak ogia jaten du
   father:SG.DEF.ERG bread:SG.DEF.ABS eating 3SG.AGT;3SG.ERG
   (‘(My) father is eating the bread’)

   b. Amak aita maitatzen du
   mother:SG.DEF.ERG father:SG.DEF.ABS loving 3SG.ABS;3SG.ERG
   (‘(My) mother loves (my) father’)

Recall that this is why in this section I have been enclosing ‘agent’ within scare quotes. Both the initial agentive in (32a) and the initial experiencer in (32b) are inflected for ‘ergative’; it marks any non-spatial source. And the final ‘auxiliary’ varies with the person/number of both the ‘ergative’ and the ‘absolutive’, second in that clause. Both participants in the sentences are third person and singular and definite, and the former two are reflected in the shape of the ‘auxiliary’.

This very common neutralization (of agentive/experiencer) in ‘ergative’ systems is (transitive-)subject-like, and perhaps reflects the shared pragmatic prominence (in terms of topicality and empathy) of ‘agents’ and ‘experiencers’, as sources of the action or experience (see §13.2.3, however). It is certainly once again lexical rather than part of an assimilatory device, like subject formation, that neutralizes semantic distinctions by addition rather than simply suppression of a difference between roles that retain a relation in common. This last observation is also true of ‘agent-patient’ such as we find in Haida: there is no assimilatory neutralization.

In other cases, the pragmatic pressure favouring a special status for agentives and experiencers can be more drastic, and can lead to subject formation being adopted (or retained) in particular clause types in an otherwise ‘ergative’ system (typically distinguished by tense-aspect or in terms of main/subordinate) or in a particular argument type, such as third persons versus others. That is, it can lead in general to ‘split ergativity’ (illustrated in detail in Dixon (1979)), which is marginally present even in Dyirbal. Bechert (1977) associates the common split between ‘present/ergative’ and ‘past/accusative’ with the idea that in ongoing actions the ‘agent’ is in focus, whereas in accomplished actions it is what I’ve been calling the absolutive that is focused on. In a number of such languages, subject formation is more intrusive still,
but the extent of this is uncertain in many instances, as is illustrated by the earlier discussion of Basque.

Of course, with any of the types of morphological system that we have looked at in this section (and previously), any lexically implemented distinction is liable to loss of grounding, the development of item-specific or idiosyncratic choice of marker. Thus, while verbs that take, say, a genitive complement in the various more traditional Indo-European languages can mostly be grouped into coherent semantic sets (as briefly illustrated for Old English in §6.4), there are exceptional members of such classes.

Also, the notion of ‘agent’ can vary from language to language among languages of the types considered in this subsection (as well as in other languages); perceptions vary. Moreover, the signalling of the ‘agent’/absolutive distinction can be ‘contaminated’ by the use of the markers to signal other semantic distinctions, particularly properties that identify a particular subtype of ‘agent’ or absolutive, especially prototypical ones. Such are ‘volition’, whose perceived importance in the language can lead to non-volitional agentives failing to be distinguished as ‘agents’, and, on the other hand, ‘affectedness’, in terms of which ‘non-affected’ absolutives may not be marked as absolutive (see for example Palmer (1994: §3.5.2), which draws on Mithun (1991a)). Recall too the example from Bats offered in §4.2.1, where ‘responsibility’ is signalled by use of ‘ergative’ marking

(4.23) a. So wože
   1.ABS fell

   b. As wože
   1.ERG fell

However, these last phenomena are themselves associated with alternative semantic grounding, and the absence in these languages of the marked neutralizations associated with subjecthood.

La Polla (1992) describes the ‘split ergativity’ system in Tibeto-Burman. This is ‘person-based’ rather than ‘aspectually based’: here ‘ergative’ vs. ‘accusative’ marking is used to indicate unexpected ‘agents’ versus unexpected ‘patients’. These are said to be ‘unexpected’ on the basis of expectations about which persons constitute respective unmarked instances of these. Watters (2002: §4.5) describes in some detail the system of Kham, where, he suggests, ‘the marking has become fully grammaticalized’ (2002: 69).

The case-marking variants are associated with position on the ‘person hierarchy’ diagrammed by Watters (2002: 69), replicated here as Figure 7.2. In
it is indicated, within the double-headed arrows, the domains of respectively ‘ergative’ and ‘accusative’ case-marking, such that the ‘ergative’ signals ‘marked agents’ and ‘accusative’ signals ‘marked patients’.

Both the ‘agent’ and the ‘patient’ in a predication lack overt case morphology if the former is first or second person, and the ‘patient’ is indefinite third person, as in (35a) (Watters 2002: 68, 66):

(35) a. ge: em-tə mi:- rə ge- ma- ra- dəi-ye
   we road-on person- PL 1PL- NEG- 3PL- find-IPFV
   (‘We met no people on the way’)  
b. tipalkya-e la: səih-ke- o
   Tipalkya-ERG leopard kill-IPFV 3SG
   (‘Tipalkya killed a leopard’)  
c. ƞa-lai cyu:-na- ke- o
   I-ACC look-1SG- PFV- 3SG
   (‘He looked at me’)  
d. gə:h-ye ƞa- lai duhp- na- ke- o
   OX-ERG 1. ACC butt- 1SG- PFV- 3SG
   (‘The ox butted me’)  

(Here ‘(IPFV) = (Im)perfective.’) ‘Ergative’ marking is illustrated in (35b): ‘the subject of a transitive clause receives “ergative” marking if it is 3RD person, but not if it is 1ST or 2ND’ (Watters 2002: 67). A first or second or third person definite ‘patient’ is marked with the ‘accusative’, as in (35c) (Watters 2002: 68). In (35d) we have both a third-person ‘agent’, so it is marked with the ‘ergative’ inflection, and a first-person ‘patient’, marked with ‘accusative’ (ibid.).

It seems to me that (pace Watters) this situation involves at most only weak ‘grammaticalization’, given that the hierarchy determining case-marking is based ultimately on semantic relations and other, inherent semantic properties. But it does illustrate rather well the role of ergativity in marking other things than simply semantic or neutralized relations. Again, however, this reflects grounding in other semantic distinctions.
7.6 Conclusion

This chapter has been concerned to illustrate some of the ways in which grounding of semantic relations can be lessened, including the ‘diversion’ of markers to other semantic functions. It has also tried to display some of the motivations for the presence in languages of ‘loosening’ of the semantic and pragmatic grounding of the use of positional syntax and morphology to signal participant relations. In the development of prime-forming and subject-forming systems, the role of functions grounded in pragmatics, like topicality and (particularly with subject formation) empathy, and their loss of grounding, seem to be important; and topicality seems too to have a role in the development of ‘ergative’ systems (Mallinson and Blake 1981: 109). And the ‘loosening’ of these functions in favour of a (varying, but often considerable) syntactic role can be attributed to functional grounding.

In particular, the bearing of a (principal) grammatical relation such as subject provides a determinate identity for an element whose identification is obscured by ectopicity, by absence from an expected position: it is identified in the case of a subject system by knowledge of the argument structure of the predicator and the hierarchy of subject selection. This contributes to economy and parsability. And the absolutive has a similar role in ‘ergative’ systems, which, however, do not involve full routinization, given the lack of assimilatory (relation-adding) neutralization. This is why the choice (by Anderson and Böhm) of ‘absolutive’ for the relevant semantic relation, though it introduces an ambiguity (‘case relation’ or ‘case form’), is a natural choice—though ‘neutral’ would have avoided the ambiguity (as it would in the case of ‘theme’).

In this way, the grounding in semantics and pragmatics, together with satisfaction of communicative demands, plays an active part in the variation in positional syntax and morphology associated with various neutralized relations. Understanding why syntax is the way it is demands the paying of attention to language use and language users.

Relevant here is Mithun’s (1991b) discussion of the situation in the subjectless languages Selayarese (Austronesian, an ‘ergative’ language) and Cayugo (Iroquoian, ‘agent-patient’). She argues that the development of subjecthood did not take place in their case because the kind of functional motivations we have been looking at were not present, given the structure of the languages, where the syntax involves widespread use of pronouns, to which determiner/noun phrases are apposed.
Further, as revealed by a comparison of ‘topic-prominent’ versus ‘subject-promptinent’ languages, loss of grounding underlies changes in language type. And variation in grounding strategy is associated with other typological differences. The partly different word-order changes in the various Germanic languages, for instance, are associated with the partly different paths of routinization followed in the languages. Pursuit of this, however, would take our path away from the scheduled itinerary.

However, we should also register finally here that the discussion in this chapter has given in addition further illustration that, as well as the assimilatory neutralization associated with subject formation, it is necessary to recognize diversifications, as with goal absolutes (accusative) versus non-goal absolutes.
The Category of Case

The conclusions, suggestions and questions we have arrived at in pursuing the issues raised in Chapters 6 and 7 are the result of the examination of one largely unfulfilled consequence of the early ‘case grammar’ enterprise, namely the need for characterization of the content and thus of limitations on the content of ‘cases’, as well as the extent to which an understanding of this content throws light on the relationship of the ‘cases’ to expression, to ‘case forms’. But there are other consequences that have also much occupied recent work in this tradition, some of which I have alluded to earlier.

Some of the most important of these consequences constitute the remaining questions in terms of which I framed in Chapter 5 what I called (though without intending the enumeration to be exclusive or impartial) ‘consequences of case grammar’:

\[
(5.49) \quad \text{Consequences of case grammar}
\]

\[
\alpha) \quad \text{the question of content}
\]

\[
\beta) \quad \text{the question of category}
\]

\[
\gamma) \quad \text{the question of consistency}
\]

\[
\delta) \quad \text{the question of derivationality}
\]

And the second of these is perhaps that which would seem now to most demand our attention, on the basis of what we have been able to establish so far concerning the first. What kind of category is case? How is it like or unlike a category such as verb or noun? And how is this to be represented? Addressing these questions will occupy us in Chapters 8 and 9.

8.1 ‘Case’ as a functional category

Verbs are complemented by ‘cases’. And the particular semantic relations, the secondary categories of ‘case’ are what distinguish different participant arguments of the verb from each other. The need for more-than-unary complementation by participants reflects the requirements of the interface with
semantic content: specifically, provision of the capacity to represent complex scenes with multiple participants as well as (potentially) multiple circumstantial. But this also involves the articulation of means of differentiating between different participant types, as well as circumstance types. The major means is the category of 'case', and it is of a particular category type, one which reflects this role.

This is a type that may be realized in various ways, as has already begun to emerge from our informal discussions of the preposition/morphological case equivalence, and as was formulated more explicitly in terms of dependency graphs in §§3.2.2–3. Thus, to recall and begin to extend that discussion, 'case', whether neutralized or not, may be represented in a 'pure' form (or 'peri-phrastically', in a general sense of this term), or, perhaps less prejudicially, 'analytically', as in (1a); or it may be realized along with, cumulated with, other categories, as in (1b); or as a result of being 'absorbed' into another category, it may be expressed morphologically, as in (1c); or its 'absorption' may be reflected only positionally, as in (1d):

(1) a. Fritz lives at home/Fritz went to Rome
   b. Fritz lives there
   c. Laertes Rômam iît
      Laertes to-Rome went
   d. Fritz read reviews

I associate the relevant parts of (1) with the configurations in (2), where (1a) corresponds to (2a) and (b):

(2) a. \[ \{V/\{abs,erg\}/loc\} \]
    \[ \{F/loc\} \]
    \[ \{N\} \]
    lives    at    home

b. \[ \{V/\{abs,erg\}/loc\}/\{src\} \]
    \[ \{F/loc\}/goal\} \]
    \[ \{N\} \]
    went    to    Rome
I leave aside subjects for the moment, so that one of the valencies of the verbs in (2) is not satisfied in these representations. (2) includes the representation of the lexical subcategorizations of the primary categories (to the right of the slashes). I have labelled the ‘case’ category ‘F’, for ‘functor’, which I have preferred to ‘case’ as more neutral among realizations of the category. {loc} is a secondary category of the functor, and occurs within inner braces. The functor links the predicator to its arguments, and its secondary categories label the relations that hold between it and them.

The verb in (2a) is subcategorized for a locative complement; and this is satisfied by the locative functor. Functors in general are subcategorized for a nominal complement, and, since this is redundant, specification of this has been left out of the representations. The goal relation of to Rome in (2b) is a variant of {loc} associated with directional verbs (verbs subcategorized, as there, for {{src}}).

In (2c) we have a complex category involving a functor that has subjoined to it a simple deictic element; this is one type of ‘adverb’, i.e. a member of a
group which is typically categorially complex in this way. In this instance we have cumulative realization of the complex category that is formed by the lexically given subjunction path.

In (2d) the functor again heads a complex categorization, but in this case it is itself given morphological expression in the form of the inflection: Rømam is the singular accusative whose citation (nominative) form is Røma. The functor in (2e) is not given any lexical expression: the absolutive required by the subcategorization of the verb is identified by its unmarked location immediately to the right of the verb.

In their different ways, these representations embody crucially the pattern of predicator subcategorization, what we might refer to as the ‘functional argument structure’ of this part of the clause. I note again that the articulation of this is necessitated by the demands of the interface for an adequate representation of conceptual scenes. Fundamental to these functional argument structures and their variety is the presence of a category of a distinctive type, one that is adapted to the expression of these in different typological classes of system.

One aspect of this distinctiveness is that the category may be manifested in various ways rather than always as a single distinct ‘part of speech’, as I have just been illustrating. Another related one is that the role of the category is ‘functional’, in a rather traditional sense opposed to ‘lexical’, as embodied in the labelling ‘functional argument structure’. Functional categories also tend to have a restricted membership: they approximate to being a ‘closed class’. They are often cliticized. On the basis of what has been presented here, Anderson (1997) suggests that the functor is the paradigm example of a ‘functional category’.

8.2 Functional categories

The presence of a functional/lexical distinction involves a specialization of a set of primary categories which articulate the functional structure of various aspects of the scene being represented in the syntax. The functors, in particular, enable expression of argument structure. Anderson (1997) envisages, together with functors, the other possible functional categories in (3a):

(3) a.  Functional categories
     \{F\}  \{T\}  \{D\}  \{C\}
     functor  finiteness  determination  comparator

b.  Lexical categories
     \{V\}  \{N\}  \{A\}
     verb  noun  adjective
For completeness, (3b) lists the lexical categories, which are not our primary concern here—though we shall return to them in Chapter 10, where I introduce the featural representation of the categories in general. The other functional categories resemble the functor in the appropriate respects, as these were outlined at the end of the preceding section.

The comparator is the functional category associated with adjectives. Like adjectives (Anderson 1997: §2.4), the comparator seems to be less prevalent in languages than the other primary categories. But it exhibits the properties associated with functional categories. In English, for instance, it may be expressed independently (periphrastically) or morphologically, or possibly in cumulation, as respectively in (4):

(4) a. Bob is more energetic than John
    b. Bob is stronger than John
    c. Bob is different than John

Comparators can be said to articulate the functional structure of qualitative comparison. The comparator category is least relevant to our present concerns, and indeed the area remains relatively unexplored (as far as categorial status is concerned); for some illustration see Anderson (2004d). I shall concentrate my attention on the other functional categories. The following two subsections are respectively devoted to finiteness and determination.

8.2.1 Finiteness

Let us first look briefly at the finiteness category. It too may be realized as a separate word (‘periphrastically’), as in (5a), or also by the morphology, even in the same language (such as English), as in (b):

(5) a. {T/[V[prog]]}
    :     :  
    :     :  
    :     :  
    :     :  
    was speaking

b. {T}
    |    
    {V}
    :  
    :  
    spoke
(5a) illustrates independent (‘analytic’) expression of the finiteness element; in (5b) it is ‘absorbed’ lexically in the verb. To the extent that in English the morphological expression of the secondary category of tense, and of person/number outside nominals, is associated with prototypical manifestations of finiteness, it may be said to be expressed morphologically in (5b). Finiteness takes a predicator as complement. The particular finiteness element in (5a) is subcategorized for the feature \{prog(ressive)\}; so it comes to govern a progressive form of verbal (where progressive is a secondary feature of verbals). Other finiteness elements—the modals, the perfect, the passive—are subcategorized otherwise, and, particularly in the case of the modals, distinguished in still other ways.

The form carrying finiteness in (5a) is often called an ‘auxiliary’. However, such a term applies more appropriately to the other function of the form, which in this instance coincides with the bearing of finiteness, viz. its role in allowing \{prog\} to be expressed in (particularly) a (finite) simple clause. Otherwise, \{prog\} would be limited to non-finite constructions that involve a verb dependent on a verb, such as that in (6a):

(6)  a. I saw him leaving
     b. I saw him leave
     c. He may be leaving

Compare the non-progressive of (6b). The \{T\} element in (5a) is in this role a ‘helping verb’: it enables expression of progressiveness in verbs in full clausal constructions. But all helping verbs are not necessarily finite, as illustrated by the progressive construction in (6c).

Here, then, I adopt the label ‘operative’ (based on the ‘operator’ of Huddleston (1984) and others) for forms of a class devoted to carrying finiteness independently of the verb. This class may or may not coincide with the class of ‘auxiliaries’ (‘helping verbs’), in the traditional sense. Consider the examples in (7):

(7)  a. She daren’t leave him
     b. She doesn’t dare (to) leave him

(7a) involves an operative \textit{dare}: it is not a lexical verb, and it allows independent expression to \{T\}—unlike the \textit{dare} of (7b), which, as a verb, cannot give independent expression. Hence the presence in (7b) of the operative \textit{does(n’t)}. But neither \textit{dare} seems to have a ‘periphrastic’ role in present-day English.

It can be argued that finiteness may also be expressed purely syntactically, as with functors. Thus, Anderson (1997: §3.6.4; 2001b: §2) suggests that the
final position of the verb in (8a) marks it as non-finite, the position of the finite being in second position in the clause, as in the main clause in (6a), and as in (8b):

(8) a. Er fragte mich, ob ich ihn verstanden hätte
   he asked me if I him understood had

   b. Ich habe ihn verstanden
   I have him understood

This is, of course, counter to the usual assignments of ‘finiteness’ in sentences like (8a); note, though, that the uncontroversial non-finite in (7b) is also in final position.

Anderson (2001b) makes a distinction between syntactic and morphological finiteness: syntactic finiteness is the ability to license an unmarked independent predication; morphological finiteness is associated with the non-reduction in (8a) in the kind of morphology associated with unmarked (declarative) finites. However, such morphological marking may or may not be associated with syntactic finiteness (for example Barron 2000), though it tends to be (thus justifying the same labelling, as involving ‘finiteness’). There is, however, great cross-linguistic variation in this (for example Koptjevskaya-Tamm 1993; Anderson 2001b).

The forms *fragte* in (8a) and *habe* in (b) are both syntactically and morphologically finite, and in particular they occupy the appropriate position for a syntactically finite form. The form *hätte* in (8a) is, in Anderson’s (1997) terms, morphologically finite (though it does diverge from the prototypical in being subjunctive), but it is not syntactically finite: such a form cannot license an independent predication while occupying final position.

The functional role of (syntactic) finiteness is thus to license independent predication: the presence of the finiteness element guarantees the independent predicational status of the construction (other things being equal). The finite provides ‘the functional locutionary structure’, as the functor provides the argument structure. This labelling reflects the role of finiteness in relation to sentence types and their characterization: declaratives are the prototypical sentence type; other sentence types may diverge from them in how finiteness is expressed.

8.2.2 Determination

The role of determination is to provide a potential referent for the arguments in the functional argument structure. Just as verbs, which label predication types, combine with finiteness to provide independent predications, so
nouns, which label entity types, combine with determination to constitute a referentiable argument of a participant or circumstantial relation. This is exemplified by the post-verbal nominals in (9):

(9)  
   a. Fritz read some reviews  
   b. Fritz read a review  
   c. Fritz read reviews  
   d. Fritz read trash

Some and a are determinatives: they belong to a word class which allows independent expression to determination. They take as a complement a partitive noun, i.e. a noun in a dependent partitive (functor) relation to them.

Following Anderson (1997), I represent this as in (10):

(10)  
   {D/{prt}}
       |
       {F{prt}}
       |
       {N}

   some/a review(s)

(11), on the other hand, shows ‘absorbed’ determination, which we can associate with (9c, d):

(11)  
   {D/{prt}}
       |
       {F{prt}}
       |
       {N}

   reviews/trash

(I ignore here the differences between these various expressions which are due to the presence versus absence of plurality/singularity.) In (9c, d) determination is not expressed by a separate item (‘periphrastically’), but the (corresponding) whole configuration in (11) is expressed by a single item. The presence in (11) of ‘absorbed’ determination with a secondary feature associated with ‘indefiniteness’, corresponding to the ‘indefinite’ determinative in (10), differentiates this use of the forms in (11) from the generic use.

As we’ve seen, the ‘p(a)rt(itive)’ functor can be interpreted as the variant of simple source associated with complementation of D and N rather than of V;
source with V is the ‘ergative’. At the moment the constitution of the set of secondary functor categories is not in focus; §6.4 articulated the compatibility of the partitive relation with the localist hypothesis. I merely recall that, as we’d expect of a member of a functional category, the \{prt\} functor in English has overt independent expression elsewhere:

\[(12) \qquad \text{a. Fritz read one/some of the reviews}
\qquad \text{b. Fritz read a selection of the reviews}\]

Here the functor complementing the D or N is a separate word.

This generalization of the partitive to where it is non-overt can be seen as a semantic-relational variant of a tradition that we can trace back at least to Jackendoff (1968), a tradition that has surfaced under various guises—for example in the form of the ‘partitive constraint’ (see for example Jackendoff 1977a; Ladusaw 1982; Anttila and Fong 2000). For an earlier ‘case grammar’ treatment see Anderson (1976: 107–12).

If we desire to distinguish the class of items that constitute overt (independent) determinatives of the (10) construction, then the traditional term ‘quantifier’ might be appropriate, but only in a broad sense, in that the class also includes the indefinite article. These quantifiers are ‘transitive’ determinatives: they take a partitive complement. There is also, however, a sub-class of ‘intransitive’ determinatives, including (proper) names and pronouns. They constitute complete referentiable arguments by themselves: pronouns either ‘absorb’ an indefinite partitive \(\text{someone}\) or are heavily context-dependent (via deixis or anaphora—\(I, \text{you}, (s)he\)); but the name is the prototypical determinantive, as argued in Anderson (2003; 2004b): it has minimal lexical content apart from referentiability. As arguments, both the latter pronouns and names are definite: they are used to signal the speaker’s assumption that the hearer(s) can identify their referents. There is a further class of determinatives in English that are ‘transitive’, but are definite: demonstratives and the definite article.

Determination in general allows for the articulation of ‘functional referential structure’.

8.2.3 Conclusion

Let me try to sum up. We have seen that functors articulate the functional argument structure, allowing predicators to be linked to arguments which have referentiability, which latter is conferred by a determinative governing the argument. Finiteness enhances the predicational character of verbs in particular, allowing them to occur in independent predications. The comparator enhances the gradient character of core (i.e. intensity of quality, or
'gradient’) adjectives, enabling them, via the functional structure it brings along, to relate the relative properties of entities. Compare here, for example, Bolinger’s view of ‘the adjective as the basic intensifiable’ (1972: 168–72). Finally, as noted, determinative enhances the referential capacity of nouns, enabling them to be associated with referents and constitute arguments.

I have gone into a little detail concerning these functional categories because they introduce into the syntax a distinctively functional dimension, and the need for a functional/lexical distinction. They perform complex semantic functions, of which it has behoved me to give at least an outline account. And, crucially, functors are functional.

Anderson (1997: 128) concludes concerning the functional categories: ‘each of the simple, functional classes [{D}], [{T}], and [{C}] is, then, a closed class specialization of the corresponding open class, with members that are denotatively desemanticized, more “abstract”, less specific concerning entity/event/quality type’, where the corresponding lexical categories are respectively N, V and A. This specialization is dictated by the needs of the semantic interface, specifically the need to be able to represent those aspects of a scene that I have distinguished as functional structures; and the character of the distinction thus prefigures the discussion in the chapter that follows, which looks at arguments that syntactic categories in general are notionally based. There too we shall consider work that aims to express in the notation developed there the relationship between these functional categories and the corresponding lexical ones, as well as the absence of a lexical category corresponding to functor, or ‘case’.

8.3 Kuryłowicz’s problem

An independent functor appears to be compatible with the co-presence of an ‘absorbed’ one, as in (2.3), for instance:

(2.3) In Graeciam pervenit
       in Greece-ACC s/he.arrived
       (‘S/he arrived in Greece’)

We apparently have two instances of the functor associated with the same argument. The articulation of the relation between the instances of the functor is what I have been referring to as ‘Kuryłowicz’s problem’ (recall §2.1.1). And, despite his efforts, it seems to me a problem that has remained unresolved.

The ‘problem’, then, is how to characterize constructions in which we have both a prepositional and a morphological manifestation of functor introducing the argument involved. Kuryłowicz himself (1949: 21) suggests
concerning the construction of Latin *extra urbem*, in opposition to the views that he is criticizing (recall again §2.1.1):

Une première dichotomie du tour *extra urbem* dégage d’une part la racine nue (ou le thème nu), de l’autre, la préposition *extra* avec la désinence de l’accusatif qui en dépend. C’est seulement une bipartition subséquente qui nous permet de décomposer le dernier morphème en un sous-morphème principal, porteur de sens (la préposition) et un sous-morphème complémentaire (la désinence d’acc.).

Thus (Kuryłłowicz 1949: 24) concludes:

La bipartition correcte est

\[
\begin{array}{ccc}
\text{extra} & \text{urb} & \text{em} \\
\text{II} & \text{I} & \text{II}
\end{array}
\]

But, though graphically unifying expression of the functional elements, such a suggestion runs contrary to the requirements of the syntax, in which *extra* and *urbem* function as independent syntactic units, words—whereas *-em* is not an independent syntactic unit but a suffix. It conflates the linearity of syntax with the linearity of morphology, which are governed by distinct regularities. This proposal thus anticipates other proposals that involve syntacticization of morphology, to which we shall come in §10.3.

8.3.1 A solution: the Latin accusative

Another possible way of addressing the problem would be to allow semantic relations to attach either to a functor or to {D} or to both, which avoids the apparent category reduplication. Just as {past} in English can be associated with {V} as well as with operands, for instance, as in (13), so for instance, {goal} might be said to occur on {D} as well as {F}:

(13)  a. Fred may/seems to have left
     b. Fred had left

*Have* in (13a) does not bear finiteness. Unlike the *had* of (13b), it is not an operative (though it may be an ‘auxiliary’) but a verb. But in both instances it signals a ‘relative past’.

We have already allowed, in (2c), for ‘absorption’ of the functor, as a functional category, into a {D} phrase rather than an independent expression. The present suggestion, that both the {F} and the {D} in (2.3) bear semantic relations, would merely provide an alternative way of associating expression of semantic relations with an item realizing nominal elements. However, secondary features like {erg} and {abs} do not sit very comfortably beside the number/person/gender-based content of {D}s. Moreover, positively, the need to appeal
to a functor dependent on another (‘absorbed’) functor, on the ‘absorption analysis’, invokes a property that Anderson (2005a) associated (on one analysis, at least) with [D]. Co-occurrence of an independent and an ‘absorbed’ determinative can be attributed to the men, with an ‘absorbed’ partitive (quantifier) determinative (like that in (11)) adjoined to another (definite) determinative. Further, it seems to be necessary to invoke this, anyway, in the case of functors, to allow some independent functors to take other independent functors as dependents, where both functors are indeed ‘analytic’. And this too seems to be replicated with the determinatives in the many men.

Consider the English example of (14a), in which we seem to find a sequence of functors:

(14) a. The crack extended to below the waterline
   b. The crack extended to the waterline

Thus, as well as taking a nominal complement, as in (14b), the functor to can apparently be subcategorized for a functor, as in (14a). The second functor of (32a) appears independently of to in (15), and itself directly satisfies the verbal valency:

(15) The crack is below the waterline

(15) suggests that below is a loc, satisfying, in this respect, the subcategorization of locative be. So the structure in which below in (15) occurs is provisionally representable as in (16):

(16) \{F[loc]\}
   \cdots
   \{D\}
   \cdots
   \: \: \:
below \quad \text{the waterline}

But below is a complex dimensional preposition which apparently ‘incorporates’ a spatial determinative, a representation for a spatial entity. The content of the latter might be represented graphically, as in (17), by \{sub\}; and it takes in turn a complement of its own, with a non-overt functor:

(17) \{F[loc]\}
   \cdots
   \{D\}
   \cdots
   \: \: \:
below \quad \text{the waterline}
As with the lower functor, the upper one takes a [D] as dependent. Let us look at some potential comparative evidence for this kind of structure.

The representation for the Finnish adposition *kanssa* of (1) makes more overt than in English (or, as we shall see, Latin) the structure of complex independent functors and the satisfaction of their valency. Both the upper and the lower functor are given morphological expression. The genitive on ‘boy’ marks an adnominal loc in this instance (cf. §6.4), introducing the reference point for the comitative environment, here seen as a space occupied by ‘boy’, ‘his company’. Here an inflected [D] takes an inflectionally marked [D] complex as its complement, shown as the joined dependent in (18):

\[
\begin{array}{c}
{\{F{\text{[loc]}}\}} \\
{\{D{\text{[com]}}/\text{[loc]}\}} \\
{\{F{\text{[loc]}}\}} \\
{\{D\}} \\
{\{N\}} \\
\text{kanssa pojan} \quad \text{‘with boy’}
\end{array}
\]

The dimensionality of the complex adposition is indicated by (secondary) features of the upper [D], here ‘com(itative)’). What is thus being suggested here (and in relation to (17)), in line with the proposals discussed in the previous chapter, is that ‘com’ is more appropriately taken to be a property of the upper [D] rather than of the functor.

Indeed, in general, distinctions beyond Hjelmslev’s primary dimension of ‘direction’—such as are indicated by [com] in (18)—are associated with [D]s designating spaces relative to a reference entity; it is this which characterizes what we might call ‘relative’ cases, or—more generally—relative functors. This kind of lexically complex category is one way of articulating Hjelmslev’s non-primary dimensions, those other than ‘simple direction’ (recall §5.4.2, and see further §8.4). As I have observed, these extra dimensions arise only with functors that are locative.

Most complex prepositions in English can serve as either (spatial) source or goal, when accompanied by an appropriate preposition. This might be represented as in (19), for (14a):
That is, directional prepositions can take as a complement, as well as \{D\}, another (complex) preposition. (19) seems to introduce a certain amount of redundancy for many complex prepositions in English, including \textit{below}.

However, the alternatives in (20) show that such complex prepositions can also figure as (inherently) either goal or simple loc, and require to be governed only when source is involved—as shown by comparing the long and short versions:

\begin{enumerate}
\item (20) Bert lives/has moved (from) beyond/below the river
\end{enumerate}

Without a preposition \textit{below} can be interpreted as a goal, or not:

\begin{enumerate}
\item (21) \{F\{loc\langle\textit{goal}⟩\}\}
\end{enumerate}

The fully expanded version of (21) gives the suggested representation for the \{goal\} use of \textit{below}, to compare with (19).

However, though (17), (19), and (21) may reflect something of the etymology of various English complex prepositions, there seems to be no synchronic motivation for the hierarchization of determinative and lower functor in their representations. Contrast here the Finnish (18), where both the adposition and the noun are inflected for case; case, and the functor involved, are to that extent independently expressed. In this instance the hierarchization seems to
be appropriate: we have a functor absorbed into a determinative that is subjoined to it.

A simplified structure for (21) such as is given in (22) seems to be more appropriate in the case of English complex prepositions, however:

\[
\begin{array}{c}
\{F\{\text{loc}<\text{goal}>\}\} \\
\{D\{\text{sub}\}, F\{\text{loc}\}\} \\
\vdots \\
\vdots \\
\vdots \\
\vdots \\
\text{below} \\
\text{the river}
\end{array}
\]

Here we have a category, the middle one, which is a simple combination of functor and determinative (indicated by the comma separating the categories). The complement is determinative as well as functor; it is a kind of ‘hybrid’. The representation containing the ‘hybrid’ in (22) continues to satisfy the requirements of the verb; but it also has the advantage that we do not have to modify our notion of the complementation of functors to allow them to take other independent (‘non-absorbed’) functors rather than determinatives, as in (19). Thus, the from below combination can be represented as in (23):

\[
\begin{array}{c}
\{F\{\text{loc}\{\text{src}\}\}\} \\
\vdots \\
\vdots \\
\vdots \\
\vdots \\
\vdots \\
\text{from} \\
\text{below} \\
\text{the river}
\end{array}
\]

Here the functor is satisfied by the determinative component of the ‘hybrid’, and the functor component is in turn satisfied by the dependent \{D\}.

Likewise, the second word in the many men seems to be a determinative/adjective ‘hybrid’: cf. for example the very many men, and more generally Carden (1973: ch. 2, §2). The suggestion being made here, indeed, introduces a kind of intra-categorial componentiality (‘hybridism’) that has been argued on other grounds to be necessary for the representation of syntactic categories in general. So that adjectives, for example, contain both a ‘noun’ and a ‘verb’ component. We look at such suggestions in Chapter 10.
Of course, there are some ‘complex prepositions’ in English that involve a distinct functor and determinative (in front of). We also find close to and the like, which are another kind of ‘hybrid’ (of adjective and functor, so we find X is very close to Y—Anderson (1997: §2.6.1)). However, there is no syntactic motivation for segmenting or hierarchizing below beyond what is shown in (22, 23).

The ‘hybrid’ proposal of course removes the support from apparent sequences of prepositions in English for the phenomenon of a functor being dependent on another functor. But we cannot conclude that the failure of two ‘analytic’ functors to show a dependency relation excludes the possibility that an ‘absorbed’ and an ‘analytic’ functor might co-occur, as do determinatives, apparently, according to Anderson (2004b). But it too involves a weakening of our characterization of functors; and we pursue this in §8.3.2. Let us return now, however, to the kind of Latin examples that triggered recognition of ‘Kuryłowicz’s problem’.

The Latin system involves a kind of inversion of the relationship between the functors in (23), as well as ‘absorption’ of the lower functor as a (morphological) case. It is the morphological cases that are non-complex, and indeed even not necessarily locational in some uses. This is well illustrated by the accusative.

Consider again examples (2.10) and (2.3), along with the construction illustrated by the well-known motto in (24):

(2.10) Rōmulus urbem Rōmam condidit
Romulus city:ACC Rome:ACC he.founded
(‘Romulus founded the city of Rome’)

(2.3) In Graeciam pervēnit
in Greece:ACC s/he.arrived
(‘S/he arrived in Greece’)

(24) Sic itur ad astra
thus it.is.gone to stars:ACC
(‘This is the way to the stars’)

The accusative marks the goal, either non-locative, as in (2.10) or locative, as in (2.3) and (24). But in the latter function it is usually supported by a preposition. On the basis of (2.3) one might attribute this to the inflection’s incapacity to express internal dimensionality, necessitating the presence of in. But even the non-dimensionality of (24) normally requires a preposition. This suggests that in these instances also the accusative is itself not locative at all, as in (25):
(25) *Latin accusative* = \{goal\}

It can satisfy the valency of any verb whose absolutive becomes \{goal\}, by virtue of (6.12b)—whose reformulation here as (26) merely accommodates to the developing notation:

(26) \[
\{V/\text{erg}\} \quad \{V/\text{erg}\} \\
\mid \quad \mid \\
\{F/\text{abs}\} \quad \Rightarrow \quad \{F/\text{abs}\{\text{goal}\}\}\]

But the accusative usually cannot by itself satisfy the valency of a verb that takes \{loc\{goal\}\}.

The specification for accusative in (25) can itself combine with locative in this way only in certain circumstances, ‘secondary uses’ (recall Kuryłowicz’s distinction of §2.1.3). One of these is illustrated by (2.1):

(2.1) Missi lēgātī Athēnās sunt
sent envoys:NOM Athens:ACC are

(‘Envoys were sent to Athens’)

As discussed in §2.1, Gildersleeve and Lodge ascribe this use of the accusative in (21) with ‘Names of Towns and small Islands’ illustrated by (2.1) to the absence with the latter of internal dimensionality, whereas ‘Countries and large islands being looked upon as areas, and not as points, require prepositions’ (1968: 213–14). That is, even in this non-prepositional use accusative cannot be used if internal dimensionality is potentially involved. At most, even in this ‘secondary’ use, the specification of the (non-absolutive) accusative in (2.1) can be said to include locative, so that it is \{loc\{goal\}\} in these circumstances.

We thus have a restriction to be built into the possible expansion of (25):

(25)’ *Latin accusative* = \{goal\}

\[\Rightarrow \{\text{loc}\{\text{goal}\}\} \iff \{\text{‘point name’}\}\]

Mostly, as we have seen, a preposition is required to introduce the locative element in accusative phrases. Thus, the preposition in (2.3) supplies locative (but not goal—*in* is not so specified), and the inflection supplies goal (and not locative). They complement each other in content. This refines the view of the Latin accusative offered in §6.1.3.

Otherwise, the accusative may occur prepositionless in a locative predication if locative is ‘incorporated’ into the verb, marked overtly by a prefix, as in (27):
(27) Vērum praetor ad-vēnit
        truth chief.judge to.came
        (‘The praetor arrived at the truth’)

In (28) the preposition is retained along with the prefix:

(28) Ad vos ad-veniens
        to you to.coming
        (‘coming to you’)

(Both examples are again from Lewis and Short (1879), in the verb entry.)

As a functor whose only feature is goal, the accusative cannot in itself satisfy the valency of a directional verb, specifically the requirement for a {loc{goal}}, except as allowed in (25)’. The valency is satisfied by the combination of preposition and case. Prepositions in Latin are thus apparently functors that govern morphologically expressed ‘absorbed’ functors, cases. In is a locative functor that can govern a goal, so complementing it. Ad, however, is a {loc{goal}} functor that governs a goal, i.e. accusative. Its combination with accusative thus introduces some redundancy in expression.

The other main uses of the accusative in Latin (see Gildersleeve and Lodge 1968: 334–6, 339–40) are either circumstantial—involving particular classes of noun, particularly ‘the accusative of extent’, involving (pro)nouns of quantity, space or time—or invoke two accusatives, one of them an absolutive goal, the other usually some sort of (abstract) spatial goal. I do not pursue any of this here. I want merely to acknowledge the schematic, indeed incomplete, character of what is being proposed.

We can represent the various possibilities we’ve looked at as in (29):

(29) a. \[V/\{\text{abs} \Rightarrow \{\text{goal}\}\}/\text{erg}\]
b. \{V\{abs\}\{loc => goal\}\{loc\{src\}\}\}

\{F\{loc\{goal\}\}/\{goal\}\}

\{F\{goal\}\}

\{D\}

\{N\}

---

... pertingit ad caelum (= (24))

c. \{V\{abs,erg\}\{loc\{src\}\}\{loc\{goal\}\}\}

\{F\{loc\{goal\}\}/\{goal\}\}\}

\{F\{goal\}\}

\{D\}

\{N\}

---

Verum... ad-venit (= (27))

These representations omit irrelevant elements. The double arrows point to the result, addition of goal, of applying (6.12c), the generalization of (6.12b)/(26) that includes locative as well as absolutive. In comparison with these structures, the accusative Athenä in (2.1) shows the \{loc\{goal\}\} accusative associated with ‘Names of Towns and small Islands’.

8.3.2 The Latin case system, and an alternative solution

As we have anticipated, other prepositions do not show the redundancy association with ad + accusative, where both the preposition and the case are goals. Rather, the preposition is unspecified as to goal, and it is the case that provides the goal element. It will perhaps clarify things if we complete our look at the Latin predicational cases, which has embodied a provisional proposal concerning the resolution of ‘Kuryłowicz’s problem’, and explore some of the consequences for this for a system of representation of
‘case’, by means of a brief look at the other predicational cases and their interaction with prepositions.

Consider *in* in Latin in a little more detail. *In Graeciam* (2.3) is a goal, but goal is expressed by the accusative inflection only; when *in* is accompanied by the ablative inflection, as in (30), the functor phrase is not a goal but a simple location:

(2.3) In Graeciam pervenit
     in Greece:ACC s/he.arrived
     (‘S/he arrived in Greece’)

(30) Copias in castris continent
     riches in forts:ABL they.keep
     (‘They keep riches in forts’)

(The latter is from the entry for *in* in Lewis and Short (1879).) Here it is the inflectional difference (as every schoolchild, as well as, latterly, viewers of *Life of Brian*, once learned) that differentiates between goal and non-goal.

Thus the representation in (31) of (the relevant parts of) (2.3) seems to be appropriate, where the preposition is a (dimensionally complex) functor/determinative ‘hybrid’, and the case inflection an ‘absorbed’ functor:

(31)

\[
\begin{align*}
\text{in} & \quad \text{Graeciam} & \quad \text{pervenit} \\
F[\text{loc}\{\text{dim}\}, \text{D}/\{\text{goal}\}] & : & \text{goal} \\
& : & \\
& : & F[\text{goal}] \\
& : & D \\
& : & N \\
\end{align*}
\]

(The ‘dim’ is a ‘place-holder’ for the different dimensions involved with various complex prepositions.) It is the goal ‘absorbed’ functor, required by the valency of the complex (‘hybrid’) preposition, that completes the satisfaction of the valency of the verb: satisfaction is a combined effort. There is no redundancy in this case: recall (29b). In (30) *in* is subcategorized for the ablative, which does not express goal.

The specification of *in* in (31) is apparently incomplete, as it stands; it allows for selection by *in* only of accusative, marking a goal. It is appropriate
only for the use in (2.3)/(31); it does not allow for the valency in (30). We must remedy this below. But first we must address the question of what the ablative expresses that allows for the range of prepositions it satisfies.

The Latin ablative case (without preposition) can signal simple location with the same place names as could constitute spatial goals in the accusative (recall (2.1)), as shown in (32), from Gildersleeve and Lodge (1968: §386):

(32) Tālis (Rōmae Fabricius), quális Aristēdēs Athēnīs, fuit such.a. one Rome:ABL Fabricius such.as Aristides Athens:ABL he.was
(Fabricius was just such a man at Rome as Aristides was at Athens’)

And this use extends to other places accompanied by tōtus, cūntus ‘whole’, omnis ‘all’, and mediūs ‘middle’, as in (33), from Gildersleeve and Lodge (1968: §388):

(33) a. Menippus . . . tōtā Asiā disertissimus
Menippus . . . all:ABL Asia.Minor:ABL the.most.eloquent
(Menippus, . . . the most eloquent man in all Asia (Minor’))

b. libro tertió
book:ABL third:ABL
(in the third Book’)

In (33b), it extends to cited books (Gildersleeve and Lodge 1968: §387).

However, elsewhere, the bare ablative expresses ‘path’ or ‘instrument’, as in (34a) and (34b) respectively (Gildersleeve and Lodge 1968: §389):

(34) a. Ėgressus est nōn viis sed trāmitibus
gone.out he.is not highways:ABL but crosscuts:ABL
(’He went out not by highways but by crosscuts’)

b. Vir manū laborat
man hand:ABL he.works
(’A/The man works with his hands’)

Elsewhere still, the ablative is associated, as in (35), with the complement spatial [src] of certain sets of verbs, i.e. a ‘secondary function’ (Gildersleeve and Lodge 1968: §405):

(35) [Dēmocritus] dicitur oculis sē prīvāsse
Democritus is.said eyes:ABL himself to.have.deprived
(Democritus is said to have deprived himself of his eyes’)

In (36) it introduces an adjunct of ‘cause’ (Gildersleeve and Lodge 1968: §408):
(36) Ödërunæ peccäre bonī virtūtis amōre
they hate to sin the good of virtue loveABL
(‘The good hate to sin from (their) love of virtue’)

These latter exemplify circumstances in which the ablative (unsurprisingly, given the label) can be interpreted as functioning as a (metaphorical) spatial source, complement or adjunct.

The ablative is also selected by various prepositions expressing source; and expression of source by prepositionablative is commoner than expression by the bare ablative. Consider the examples of the use of Ab ‘from’, Ex ‘out-of’ and De ‘down-from’ (from Gildersleeve & Lodge 1968: §390):

(37) Istum aemulum ab eā pellitō
that rival from herABL drive
(‘Drive that rival from her’)

(38) (Eum) exturbāstī ex aedibus?
him you hustled out out.of houseABL
(‘Did you hustle him out of the house?’)

(39) Araēneaēsd eīciam de pariete
cobwebs I will throw down from wallABL
(‘I will get down the cobwebs from the wall’)

But, as with the accusative and locative, the case inflection itself does not seem to be inherently necessarily source; the various prepositions in these examples are sufficient in themselves to satisfy a verb subcategorized for [loc|src|]. What does this, together with the previous example, suggest concerning the representation of the ablative? A survey of these various uses does not obviously reveal what is central to the general characterization of the case beyond not-goal. This is again not surprising, given the variety of historical uses it inherits as a result of the collapse of other cases with it, and the reduced system that results.

In various circumstances, this not-goal may be further specified as source, as in (35, 36); elsewhere it may be a ‘path’ (abstractly, ‘instrumental’), [loc|goal,src|]—a [loc] that is both source and goal (Anderson 1971b: §11.1), as in (34). With town names and some other items ablative may signal simple [loc]. I shall not attempt to deal with the various mechanisms underlying these various possibilities. The main conclusion seems to be that the ablative is perhaps inherently specified at most as in (40), where the maximal expansion represents a ‘path’, or ‘instrument’:

(40) Latin ablative = [loc<|src<goal>|>]}
Which, if any, of these expansions is appropriate is contingent on the context.

The ablative supplies a case-marked form to satisfy the subcategorizational requirements of the prepositions in (37–39) and (30). These requirements are formulated in (41–44):

\[(41) \quad Ab \quad \{F[\text{loc}]/\{\text{loc}\}\}\]
\[(42) \quad Ex \quad \{F[\text{loc}]/, D[\text{dim}]}/\{\text{loc}\}\]
\[(43) \quad Dê \quad \{F[\text{loc}]/, D[\text{dim}]}/\{\text{loc}\}\]
\[(44) \quad In \quad \{F[\text{loc}], D[\text{dim}]}/\{\text{loc/goal}\}\]

\[(42–44)\] differ from each other in the (‘dimensional’) content of {D}—though I have not attempted to express here whatever the ‘dimensional’ difference between ex and dê may be. The representation in (44) permits in to be satisfied by either simple locative (ablative case) or goal (accusative). The latter option allows for (2.3), as represented in (31), where the representation for in should be completed as in (44).

The ‘hybrid’ prepositions in (42–44) are ‘dimensionally’ complex; in this respect they differ from the preposition in (41). The presence of the determinative resolves ‘Kuryłowicz’s problem’ without having to propose that a functor can govern another functor: the case depends on it, not the functor element. Its absence in (41) leaves the problem unresolved, as it does in the representation for ad of (29b). Suppose, however, that ab and ad are also ‘hybrids’, but defective ones: they involve the combination of a functor and a determinative, but the determinative lacks a dimensional feature; its only secondary content is its subcategorization. That is, we have the representations in (41)’:

\[(41)’ \quad a. \quad Ab \quad \{F[\text{loc}]/, D}/\{\text{loc}\}\]
\[\quad \quad b. \quad Ad \quad \{F[\text{loc/goal}]/, D}/\{\text{goal}\}\]

In this all Latin prepositions differ from English: some English prepositions do not involve a determinative, and even in dimensionally complex prepositions the determinative is not subcategorized for a functor. The assumption of determinatives whose only secondary feature involves valency allows for the resolution of ‘Kuryłowicz’s problem’ and some account of its distribution in languages.

This characterization of ab can be extended to ‘causal’ adjuncts. Ab takes an argument that is an abstract source, the adjunct equivalent of the ‘source of the action’, as in the passive (45) (Gildersleeve and Lodge 1968: §§401):
In (45) we have a \{loc[src]\} with an abstract interpretation. I shall not attempt to incorporate this, either, any more fully into the account given here for the ablative. Clearly, a fuller account would have to give explicit recognition to this and to the \{src\} interpretation of the ablative itself that is associated with certain sets of verbs. The use of the inherited locative case in Latin is marginal, and I shall largely ignore it here. Synchronically, it essentially represents a specialization of the ablative. With ‘Names of Towns and small Islands’ the accusative can be used alone to signal \{loc[goal]\} (as in (2.1), repeated above). Similarly, the ablative can express \{loc[src]\} with a similar set of items (43a). Simple \{loc\} can also be expressed with such items by a simple inflection: this is the locative case, which enables us to differentiate between these three functions, in those circumstances where the locative is distinguished from the ablative.

But the dative requires some more attention. Gildersleeve and Lodge comment in a note (1968: §344): ‘if a Locative the Dative is a Sentient Locative.’ In (46) the dative introduces specifically a spatial goal, but one which is viewed as necessarily (though possibly metaphorically) ‘sentient’ (Gildersleeve and Lodge 1968: §348):

\[
\text{(46) Praedam miliæbus dönat} \\
\text{booty soldiers:DAT he.gives} \\
\text{('He gives the soldiers booty')} \\
\]

In present terms I suggest that we have here a case which is a goal experiencer, i.e. a combination of \{loc[goal]\} and ergative: the ‘sentient’ argument is a potential ‘source of the situation’ that is also the (spatial) goal of a movement initiated by an agent. Such a dative we can characterize, rather straightforwardly, as in (47):

\[
\text{(47) Latin dative } = \{F[\text{loc[goal]},\text{erg}]\} \\
\]

There is also an adjunct use of the dative which can be characterized in the same way (Gildersleeve and Lodge 1968: §356):

\[
\text{(48) Nēminī meus adventus labōri aut sümmtuī fuit} \\
\text{nobody:DAT my arrival burden or expense it.was} \\
\text{('To no-one was my arrival a burden or expense')} \\
\]
But the Latin dative can also signal non-goal location, especially in ‘possessive’ constructions:

(49) Viro vestis est
    man:DAT clothing it.is
    (‘The clothing belongs to the man’)

This suggests the characterization for such datives shown in (50):

(50) Latin dative = \{F\{loc,erg\}\}

This may be expanded lexically as in (51), if we incorporate (47):

(51) Latin dative = \{F\{loc<\{goal\}>,erg\}\}

Again I neglect some minor uses.

According to Gildersleeve and Lodge (1968: 246), ‘the Ablative is the Adverbial, as the Genitive is the Adjective case’. I have suggested that the ablative is, as well, the most complex of those that complement a verb, perhaps reflecting the many facets of being ‘Adverbial’. It collapses a range of ‘adverbial’ distinctions. Is the genitive, however, most appropriately thought of as ‘adjectival’? I’ve already suggested (§6.4) that in its non-partitive adnominal (‘adjectival’) aspect the genitive in (for instance) English involves a complex, dual-function, configuration. Let us look at something of the range of uses in Latin.

In some instances the genitive seems to be interpretable as distinctly partitive (Gildersleeve and Lodge 1968: §369):

(52) Satis eloquentiae, sapientiae parum
    enough eloquence:GEN wisdom:GEN too.little

This requires specification as a (first-order) adnominal source, given the localist interpretation of the partitive.

Gildersleeve and Lodge (1968) note other usages dependent on the character of the nouns involved. They distinguish (1968: §361), for instance, what they call the ‘Appositional Genitive.—Genitive after such words as, vōx, expression; nōmen, name, noun; verbum, word, verb; rēs, thing, etc.; illustrated in (55a), and the ‘Epexetegical Genitive.—Genitive after such words as genus, class; vitium, vice; culpa, fault, etc.; as in (54):

(53) nōmen amicitiae
    name friendship:GEN
    (‘the name of friendship’)

Modern Grammars of Case
virtūtēs continentiae, gravitātis, iūstitiae, fideī
virtues self-control:GEN earnestness:GEN justice:GEN honour:GEN
(‘the virtues of self-control, earnestness, justice and honour’)

These are then ‘secondary functions’.

Gildersleeve and Lodge’s traditional ‘adjectival’ label alluded to above seems to be intended to capture the following: the genitive marks attributive nouns. Gildersleeve and Lodge (and others) provide detailed attempts at classification of attributives. The Latin attributive genitive is on this view a ‘minimal’ morphological case, signalling ‘attributiveness’ rather than some positive semantic relation. §10.3 endeavours to make explicit the notion ‘attributive modification’; a fuller discussion of genitives, in Latin and elsewhere, will have to wait until then. At this point, I endeavour at least to point to some further distinctions manifested in Latin.

Gildersleeve and Lodge also regard the ‘possessive’ genitive of (55) as attributive:

(55) domus regis
house king:GEN
(‘the palace of the king’)

They point to the adjectival forms in (56) used for first and second person ‘possession’ (§362):

(56) amicus meus/tuus
friend:GEN.SG my/your:NOM.SG

The genitive here again marks attributive formation. And, again, it can be interpreted, in this respect, as the minimal case. Thus, the relation between the genitive and the preceding noun in amor Deī can be said to be merely one of attribution; the ambiguity (experiencer or absolutive) reflects alternative realizations of the covert argument structure of the base verb, not the purely nominal relation marked by the genitive.

But in these last instances of the genitive it also involves partitivity, as was suggested of the English equivalents in §6.4. Recall (6.51):

(6.51) Jim’s fork

Jim’s labels a subset of forks in a partitive relation with the other noun. We already noted at that point the double relation involved with such genitives. The partitivity in these instances goes in the reverse direction to attributiveness: in (55), for instance, regis governs domus as its partitive (despite the nominative inflection on the latter—and the genitive on the former); but regis
depends on *domus* as attributive modifier (in accordance with what seems to be signalled by the morphosyntax). An account of this, too, will have to be left until §10.3.3, when the appropriate structural notions will have been introduced.

Perhaps, then, leaving in abeyance the characterization of attributivization, we can, for the moment, represent the Latin genitive lexically basically as in (57a), the unmarked functor, which may be expanded by lexical redundancy of (57b):

\[(57)\]
\[
\begin{align*}
\text{a. } & \text{Latin genitive } = \{F\} \\
\text{b. } & \text{Latin genitive } = \{F_{\text{src}}\}
\end{align*}
\]

The option in (57b) allows for partitives, as exemplified by (52); as suggested above, the partitive is an adnominal non-locative source, as the ergative is the adverbal non-locative source. The genitive is thus with governing nouns the ‘minimal’ case, but it may also bear a distinctive source relation, when partitive.

This also leaves out of account the use of the genitive when governed by verbs and adjectives. These can mostly be seen, however, as involving metaphorical spatial sources, as with the so-called ‘impersonal’ verbs of (58) (Gildersleeve and Lodge 1968: §377):

\[(58)\]
\[
\begin{align*}
\text{a. } & \text{Suae quemque fortūnae paenitet} \\
& \text{his } \text{each-man:ACC fortune:GEN he.regrets} \\
& \text{('Each man is discontented with his lot')}
\end{align*}
\]
\[
\begin{align*}
\text{b. } & \text{Mē nōn sōlum piget stultitiae meae, sed etiam pudet} \\
& \text{me not only it.irks folly:GEN my but also it.makes. ashamed}
\end{align*}
\]

('I am not only irked by my folly, but actually ashamed of it')

Here the accusative of the ‘person affected’ and the ‘causal’ genitive of where the feeling comes from clearly signal a goal+source structure. These verbs require an accusative that is specifically \{F_{\text{loc|goal},\text{erg}}\}, and a genitive that is a spatial source, i.e. \{loc_{\text{src}}\}. We can thus treat many of these verb-governed genitives as specializations of the \{src\} specification that I have associated as optional with the genitive on the basis of the nominal patterns—specialization with verbs as a metaphorical locative source. So too with the genitive governed by adjectives involving ‘separation’ (Gildersleeve and Lodge 1968: §374, n. 8), while with other adjectives (such as *plēnus* ‘full’) the genitive requires to be given a partitive interpretation.
In summary, we can assemble the various basic representations for all these Latin cases as in (59):

(59) Latin cases
   a. accusative = \{F\{goal\}\}
   b. ablative = \{F/\{loc\langle\{src\langle\text{goal}\rangle\}\rangle\}\}
   c. dative = \{F\{loc\langle\text{goal}\rangle,\text{erg}\}\}
   d. genitive = \{F\{\langle\text{src}\rangle\}\}

This is not unlike Wüllner’s (1827) analysis of Latin, as interpreted by Hjelmslev (1935: 38–9). Hjelmslev provides the diagram roughly reproduced in (60):

(60) \[
\begin{array}{ccc}
+ & 0 \pm & - \\
A & D & G \\
0 & \pm & (\pm) | (\pm) \\
L & In & Ab \\
\end{array}
\]

(Ac = accusative, D = dative, G = genitive, L = locative, In = instrumental, Ab = ablative.) Recall that ‘+’, positive orientation with respect to the dimension of directionality, corresponds to goal; ‘−’ (which I have substituted for Hjelmslev’s ‘÷’), negative orientation, corresponds to source (including ergative); ‘zero’ corresponds to simple location; ‘±’ is complex. There is thus a close correspondence between the representations for accusative and genitive in the two notations embodied in (59) and (60). And in both notations both dative and ablative are complex, the ablative more so.

Hjelmslev, however, comments on the representation of the ‘Ab’ case in (60) as follows (1935: 38–9):

On peut dire que l’ablatif latin est à la fois complexe et neutre; c’est la conception neutre qui est à la base de sa signification, et son constituent complexe accuse alternativement le pôle négatif (Römä proficisci) et le pôle positif (quô perennisire). C’est une complexité du deuxième ordre; ce n’est pas une complexité simple, c’est une idée complexe qui insiste alternativement sur le pôle positif et sur le pôle négatif.

But his first example involves a usage associated with a restricted range of arguments, including those denoting towns and small islands (as observed
above—see (42a)). And the *quō* of the second is an adverb based on a dative or ablative, while ordinary nominal goal arguments with this verb are accusative after a preposition. Both verbs are directionals, so take \{loc\{src,goal\}. This suggests to me that the representation of ‘Ab’ in (60) is over-fussy. The major positive non-prepositional use of the ablative is to mark ‘paths’, which certainly are complex, involving source and goal. But otherwise ‘la conception neutre . . . est à la base de sa signification’, as it is in (59c).

As is apparent from (60), Hjelmslev also distinguishes among locative, instrumental and ablative. But the locative is distinguished only in some declensions in classical Latin, where it marks \{loc\} of towns and small islands without a preposition. It thus has (as I observed above) a rather marginal status in the case system, though we might distinguish it as in (61), which would correspond to Hjelmslev’s designation in (60):

\[(61) \quad \text{Latin locative} = \{F\{loc\}\}\]

Its marginality is also reflected in the fact that, unlike ablative, it is not governed by \[D\].

The ‘instrumental’, however, is simply not distinguished as a case form. And we can readily collapse the ‘instrumental’ use with ‘path’, as I suggested concerning (43a) and (43b). As observed, these uses, and potential distinctions in case, are largely collapsed as properties of ablative, and in part underlie its non-specificity with respect to a unique content.

We can conclude this brief survey of the Latin cases by observing first that the nominative, as marker of the subject, is necessarily fully routinized, insofar as it can mark either \{erg\} (‘agent’) or \{loc,erg\} (experiencer) or absolutive, in accordance with the hierarchy of semantic relations which determines subject choice. Simple \{loc,erg\} functors are generally eligible for subjecthood in Latin, unless they are an argument of *esse* ‘be’, as in the possessive in (52).

Secondly, I do not investigate further here the casual status of the controversial vocative.

I am outlining a framework here that assumes that each preposition is a ‘hybrid’ functor determinative, that each functor takes as the unmarked option a \[D\] complement, adjoined or subjoined, and that each argument is headed by a determinative (often ‘absorbed’ in Latin). The representations in (59) thus imply that arguments in Latin can undergo the alternative lexical expansions in (62):
Latin case redundancies

a. **accusative**

\[ \{F\{goal\}\} \]

\[ \{D\} \vdash \{D\} \]

b. **ablative**

\[ \{F\{loc\{src<goal>\}\}\} \]

\[ \{D\} \vdash \{D\} \]

c. **dative**

\[ \{F\{loc\{goal\}\},erg\}\} \]

\[ \{D\} \vdash \{D\} \]

d. **genitive**

\[ \{F\{src\}\}\} \]

\[ \{D\} \vdash \{D\} \]

If the genitive is adverbal rather than adnominal, the source is locative, though possibly abstract: we have \{loc\{src\}\}. This distinguishes genitive from nominative, as we shall now see.

We can add to the redundancies in (62) that in (63) to allow for the syntax of those arguments that can function as nominatives, where there is neutralization:

\[ \{F\{<erg><abs><loc>\}\} \]

\[ \{D\} \vdash \{D\} \]

The notation with interlocking angle brackets in (63) indicates that at least one of the features ergative and absolutive must be present, while locative is optional. However, as a result of subject formation (6.40), we can define the nominative, more simply than in (63), as in (64):

\[ \text{Subject formation} \]

\[ \text{absolutive} \Rightarrow \text{absolutive[erg]} \]

\[ \text{Latin nominative} = \{F\{erg\}\} \]

And we can add (64) to the set of morphological-case representations in (59).

These specifications in (62) and (64), alone or in combination with prepositions, satisfy the valencies of Latin predicators (and \{N\}'s, in the case of the genitive). As they stand, (62, 64) do not, of course, allow for case-marking on predicative nominals; nor do they specify, for instance, the 'mechanism'
whereby the expression of case is spread through the \{D\}-phrase, including
the component noun phrase.

Insofar as morphological cases have been identified in other languages,
their labelling has usually been guided by something like the characterizations
of the Latin cases given in (62) and (64), or an idealization of this, as
embodied in the traditional names—so that, despite its non-specificity in
Latin, it is typically applied to morphological forms that signal spatial source.
These thus, in a sense, represent notional ‘archetypes’ that have served as ‘field
guides’ for the those investigating other languages. It is not quite accurate to
say this in the case of the genitive, to whose deployment its adnominal
function is crucial. We return to this in §10.3.3.

8.3.3 Case in English

The observation that the situation in a language like English is rather different
would be a contender for a prize in non-originality. But let’s look at how
precisely we might characterize the difference.

In Latin each \{D\} must undergo one of the expansions in (62, 64),
whether or not it is accompanied in any particular predication by a
preposition. To the extent that there can be said to be any equivalents in
English to (62, 64), the consequences are not reflected in the morphology,
but in positional restrictions, except in the case of the ‘genitive’ and the
nominative of definite pronouns (if we assume that the ‘accusative’ is
simply the unmarked, uninflected form of the pronoun). Prepositionless
arguments can be associated with interpretations as ergative, absolutive, and
in some instances locative; and arguments expanded in this way are differen-
tiated positionally and semantically, not morphologically (except nomi-
native pronouns). A \{D\} governed by a preposition in English is
unexpanded; it lacks an ‘absorbed’ functor, a case. And ‘absorption’ of
\{loc\}, the equivalent of Latin (61), is not marked morphologically, and is
limited to semantically specific circumstances, as in (65a), with circumstan-
tial calendrical locative:

\[(65)\]
\[\begin{align*}
\text{a. I’ll call you } & \text{Friday} \\
\text{b. We worked } & \text{all night}
\end{align*}\]

\[(65b)\] can be interpreted as an abstract path (i.e. \{loc[src,goal]\}).

The nominative/’accusative’ distinction in English is marginal. Speakers of
English seem, indeed, to be uncertain whether the English equivalent of the
Latin ablative absolute is nominative or not, as illustrated by (66a)—compare
with this the Latin of (66c, d) (Gildersleere and Lodge 1968: §410):
The traditional prescriptive ruling for English—e.g. Fowler (1926: 6)—is in favour of the nominative, but Fowler does note that ‘there is little danger of the rule’s being broken except where a pronoun stands as a complement: though no-one would write me being the person responsible, the form the person responsible being I is likely to be shrunk from’. Elsewhere, too, as we have noted (in §6.1), and as Fowler also noted, there is some uncertainty: It is I/me, (You had no thought for) him and I/me (Fowler 1926: 249). Some speakers, on the other hand, allow Bill and me will sort it out.

The distinction is limited to pronouns, and the non-nominative form with pronouns shares most of the distribution of the bare (neither nominative nor non-nominative) form found with nouns; the nominative is increasingly limited to marking subjects of finites (and, for some speakers, government by a coordinating conjunction), and the non-nominative can be either governed by a preposition (to him) or not (I saw him, Him having abandoned the cat disturbed her). These are perhaps signs that the English nominative has become a marked form, rather than simply the form that, in traditional terms, is never governed, and that the ‘accusative’ has become a non-case. In such circumstances, ‘Kuryłowicz’s problem’ doesn’t manifest itself.

The English ‘genitive’ lacks a partitive function, as well as any metaphorical spatial source role in relation to semantic sets of predicators; such functions of the latter kind that we can associate with Old English predicators (see for example Wulffing 1894; Shipley 1903; Visser 1970: 355–85) are now not expressed overtly or are marked with of (historically a [loc{src}] preposition) and other independent functors. And, as we have seen, the genitive need not even be attached to a noun (as in The girl you love’s husband).

If we exclude from true case status the English ‘genitive’, given its phrasal positioning, then there are no case redundancies corresponding to (62–64) in
English, when the argument is non-pronominal. Instead, we have the positional redundancies in (67):

\[(67)\]

a. **English nominative**
   \[
   \text{[F\{erg\}]}
   \]
   \[
   {D} \Rightarrow {D}
   \]

b. **English locative**
   \[
   \text{[F\{loc\}] = adjunct}
   \]
   \[
   {D} \Rightarrow {D}
   \]

(67a) looks identical to (64) for Latin. But with nouns in English there is no corresponding case like that specified in (64); we have a positional subject and a morphosyntactic one rather than one marked by nominal inflection.

The position and morphosyntax associated with (67a) is specified roughly in (68)—a more precise account awaits the development of a more explicit syntax in the chapters that follow:

\[(68)\]

a. **English pre-{T} position**
   \[
   \text{= [F\{erg\}]}
   \]

b. **English agreement licensing**
   \[
   \text{= [F\{erg\}]}
   \]

Normally these coincide, but in (7.8), for example, they do not (recall §7.2, and see e.g. Anderson (1992: 100–01)):

\[(7.8)\]

a. There is a fly in my soup
b. There are flies in my soup

Here the positional subject is distinct from the agreement licenser. Again, we must await the development of other aspects before we can account for the apparent presence in (7.8) of two [F\{erg\}] elements. There is a Latin analogue to (68b) but not obviously to (68a).

(67b) is limited, without an accompanying preposition, to circumstantials and to certain classes of arguments among these, such as are illustrated in (65). In this case, the semantic relations involved are signalled primarily by the adjunct's lexical content.

And if a preposition governs a {D}, there is with English nominals, other than pronouns, no ‘absorbed’ semantic relation such as is allowed for by (64): with non-pronominals ‘analytic’ and ‘absorbed’ functor are incompatible. The {D} simply satisfies the requirements of the prepositional functor, and its position is determined by it (and some other regularities, as we shall see in Part III). There are thus no cases for English nominals like those
defined for Latin in (62) and (64). For pronouns we need the equivalent of (64):

(69) *English nominative pronoun* = \{F[src]\}

But, again, this does not capture all aspects of the distribution of the nominative in English.

8.3.4 Conclusion: functors and lexical structure

The apparatus introduced in this chapter in particular enables us to allow in principle for the similarities and differences between languages occupying rather different places on the ‘analytic/synthetic’ dimension, as well as providing some content to the traditional case labels. Obviously, the accounts of both English and Latin functors and cases is very schematic (see further, on Latin, for example Michaelis (1993)). But I have endeavoured to give enough detail to suggest that the potential for unified comparative analyses of disparate language types is promising.

However, more central to our main theme in this section is the proposed resolution of ‘Kuryłowicz’s problem’, as manifested in Latin. Functors, as a functional category, may be signalled by an independent item (adposition), or by the morphology of an element it has been ‘absorbed’ into, or by the position of such an element, or by some combination of these, as well as by concord. And combinations of independent and ‘absorbed’ functor can jointly satisfy the valency of a predicator, provided that the independent functor is combined with a determinative (in a ‘hybrid’) that is subcategorized for the ‘absorbed’ one. But, with the routinization associated with a defective \{D\}, presence of an ‘absorbed’ functor can become redundant, as in the combination of *ad* and the accusative in Latin. In English, redundancy has extended as far as loss.

The complexes associated with Latin (and other) adpositions are merely one manifestation of complex lexical structures which are to some extent regular, even though the components of the complex are not spelled out morphologically. Such lexical structures have an important part to play in the syntax that evolved within the ‘case grammar’ tradition we are mainly pursuing, in so far as their component parts remain individually accessible.

In (29c'), for example, the ‘hybrid’ functor ‘incorporated’ in the verb both satisfies the valency of the verb to which it is subjoined and itself takes an ‘absorbed’-functor (morphological) complement:
(29). c.

\[
\begin{align*}
&\{V/\{abs,erg\}/\{loc/src\}\}{\{loc/\Rightarrow\{goal\}\}} \\
&\quad | \\
&\quad \{F/\{loc/\{goal\}\},D/\{goal\}\} \\
&\quad | \\
&\quad \{F/\{goal\}\} \\
&\quad | \\
&\quad \{D\} \\
&\quad | \\
&\quad \{N\} \\
&\quad \vdots \\
&\quad \vdots \\
\end{align*}
\]

\[\text{Verum … } \text{ad-venit} \quad (= (38a))\]

(29c') completes the specification of \textit{ad}, in conformity with the revised, 'defective-\{D\}' analysis of (41b'). And the valency of the verb is exhaustively satisfied only through the medium of the complex category.

8.4 Complex cases: Hjelmslev on Tabasaran

I conclude this chapter with a look at the articulation of complex morphological case systems, systems that seem to go even further than Finnish beyond the inventory of semantic relations suggested in (6.11):

(6.11) abs source loc loc\{source\}

How can such morphologically expressed systems be accommodated? What follows is an extension of what was proposed in Anderson (1998), but it also reflects the discussion of complex categories in the preceding section—particularly, of course, of complex prepositions. The same structural elaborations seem to be appropriate to some systems of 'absorbed' functors, morphological cases.

Let us begin by attempting to make more explicit something like Hjelmslev's (1935/37) system of 'dimensions'; recall §5.4.2. Consider first again the structure of complex adpositions of the kind discussed in the previous chapter. Recall the provisional internal structure attributed to the Latin preposition \textit{in} given in §8.3.2 as (44), revised as (70), which now specifies the dimension of the \{D\}:

(70) \{F/\{loc\},D/int/\{loc/goal\}\}

Such 'hybridizations' are permitted centrally to independent functors which are \{loc\}, to allow for complex adpositions. An analogous potential internal complexity of morphologized rather than 'analytic' functors is also apparent
in various languages, confirming the unity of ‘functors’. Such a language is Tabasaran, with respect to most of its system of morphological cases. Here I follow Hjelmslev’s (admittedly dated) presentation and analysis. (For a more recent treatment see Kibrik (1985).)

Take as an example of multidimensional complexity in case morphology the cases of Tabasaran that Hjelmslev differentiates as the ‘instrumental-comitative’ and the ‘supracomitative’. These share a formative -ri which combines with distinct formatives to form morphological complexes. The expression of ‘instrumental-comitative’ is the bipartite item in (71):

(71) -f-ri—‘instrumental-comitative’

The -f-formative recurs in the ‘second conversive’ of (72), for instance:

(72) -f-indi—‘second-conversive’

Hjelmslev (1935: 156) recognizes that the individual formatives in such sequences (in Tabasaran and elsewhere, for example Lak, pp. 166–83)—what he terms ‘particules’—have independent semantic content: each is associated with a ‘cellule’. The second formative in the sequence looks as if it expresses distinctions associated with the dimension of ‘direction’, distinctions attributable to combinations of the semantic relations in (6.11); the first specifies the nature of the relative space invoked, involving further dimensions. Let me try to clarify this with some examples.

Consider first of all the (partial) paradigm of (73), involving subessives and second-inessives in Tabasaran, which illustrate further the internal complexity of the cases. Table 8.1 reflects combinations of either a ‘subessive’ or ‘second-inessive’ first-place ‘particule’ (horizontally) with all of the second-place distinctions (vertically). It uses Hjelmslev’s alternative, more transparent labels for cases rather than the traditional; the former make somewhat clearer the significance of the component parts displayed in the examples of the table.

<table>
<thead>
<tr>
<th></th>
<th>Subessive</th>
<th>Second-inessive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lative</td>
<td>-k-na</td>
<td>-f-na</td>
</tr>
<tr>
<td>Comitative</td>
<td>-k-ri</td>
<td>-f-ri</td>
</tr>
<tr>
<td>Directive</td>
<td>-k-indi</td>
<td>-f-indi</td>
</tr>
<tr>
<td>Ablative</td>
<td>-k-an</td>
<td>-f-an</td>
</tr>
<tr>
<td>Locative</td>
<td>-k</td>
<td>-f</td>
</tr>
</tbody>
</table>

Table 8.1 Some Tabasaran case complexes
Hjelmslev (1935: 141–4) distinguishes eight possibilities among the first-position formatives partially represented by -k and -f in (73): first-adessive, first-inessive, interessive, postessive, second-adessive, second-inessive, superessive, and subessive. These combine with the five-way distinction among second-place elements to generate forty of the complement of cases; the first-place formatives of relative space combine with the second-place to form relative cases, mediated by a ‘space’ associated with the reference object. Let us look at some individual combinations.

Hjelmslev glosses the lative second-inessive -f-na as in (73a):

(73) a. -f-na: allant à, pénétrant dans (1935: 156)
b. -h-na: un rapprochement, d’ordinaire sans pénétration (p. 155)
c. fu’ri-h-na: allant près de la voiture (p. 155)

And the lative second-adessive -h-na is glossed as in (73b). So that, for example, fu’ri-h-na is translated as in (73c).

We can contrast here, for example, the non-relative (i.e. simplex) at, to and from of English. Lindkvist, for example, says (1950: §602) of a central use of to:

To is used to indicate a movement directed towards an object apprehended as the goal of the movement and reaching it or a point in such immediate proximity to it as to admit of the conception of the object as reached by the movement.

And he comments (§204) on one use of at:

At is used with complements denoting areas, surfaces and spaces to represent them as points and indicate that something is located within an area or space or on a surface, but only with a view to localization, not to stressing their character as enclosing spaces or supporting surfaces etc.

What Lindkvist is describing are what I have been calling non-relative functor uses, which do not locate via an associated space. Compare with these descriptions of simplex prepositions his comments (1950: §2), for example, on the central use of in: ‘in is used to indicate the body in the interior of which an object is situated.’ The relative directional locatives in English are often, appropriately, overtly more complex: into, onto.

What Anderson (1998) proposes, on the basis of this, is that the distinctions introduced by the first-place formatives in the Tabasaran case system are distinct from the system of semantic relations and are not intrinsic to the functor category; they reflect, as elsewhere, combination with relational {D}s. That is, such case forms embody in themselves almost the combined adpositional and morphological structure of (74), which is abstracted from (41a)’ and (47c)’, which together represent the components of the Latin in+accusative construction:
Compare this with the schematic representation for a complex Tabasaran morphological case given in (75):

\[ \{F[\text{loc}], D[\text{dim}]\} \]

\[ \{\text{D}\} \]

\[ \{\text{N}\} \]

‘Dim’ in (75) is again a ‘place-holder’ for features of the upper [D] distinguishing the eight first-position possibilities for different spaces: first-adessive, first-inessive, interessive, postessive, second-adessive, second-inessive, superessive, and subessive. The ‘près de’ or ‘near’ component of (73c) is a morphological element realizing one of these ‘space’ features associated with this [D]. The functor component allows for different possibilities along the primary dimension of directionality. In the presence of the determinative, the functor must be [loc]; non-locative cases lack a combined determinative. The ‘allant à’ or ‘to’ component of (73c) realizes [loc[goal]], one of the possibilities for [loc]. Like the Latin prepositions, the locative cases of Tabasaran are all complex.

But what of the other second-place formatives distinguished by the rows in Table 8.1? Are they all only simple directionals, compatible with the proposed localist array of simple functor relations of (6.1)? Consider the glosses suggested by Hjelmslev (1935: 141), given in (76):

\[ a. \text{comitative: désignant accompagnement, ‘(ensemble) avec’...} \]
\[ b. \text{lative: exprimant le mouvement vers, et par conséquent un rapprochement net;} \]
\[ c. \text{directive: indiquant la direction vers, mais sens comporter nécessairement l’idée nette de rapprochement;} \]
\[ d. \text{ablative: désignant un éloignement qui est selon les circonstances plus ou moins vague;} \]
\[ e. \text{locative: désignant le ‘repos’, ni rapprochement ni éloignement net.} \]
Let us see if we can reconcile these descriptions with the range of possibilities involving locative allowed for by (6.11) and the combination of locative with absolutive. And let us consider the forms in (76) one by one, starting with the last. Here I continue to follow basically Anderson (1998), but take the opportunity to undo some mangling of the discussion there.

The locative of (76e) is simply (non-directional) \{loc\}, which combines with first-place distinctions to form relative cases (with locative getting no distinct expression); here there is no overt expression of \{loc\}. The ablative of (76d) is \{loc\{src\}\}, spatial source; Hjelmslev’s description in part reflects the frequent ‘abstract’ uses of the ‘particule’, particularly with the adessives. The directive of (76c) appears to contrast minimally with the lative of (76b): if we represent Hjelmslev’s ‘rapprochement net’ gloss of the lative, involving terminal inclusion in one of the relative spaces indicated by the first-place formatives, as being associated with an absolutive, i.e. as contactive, we can identify lative and directive as respectively \{abs,loc\{goal\}\} and \{loc\{goal\}\}. Similarly, we can differentiate the so-called ‘comitative’ of (76a) from the locative in terms of presence versus absence of absolutive. Hjelmslev (1935: 155) glosses the comitative second-adessive -h-ri as ‘étant près de, à côté de’. The comitative in this language is \{abs,loc\}.

This gives the categorizations shown in (77):

(77)  
\begin{align*}
  a. & \text{ comitative} & \{\text{abs},\text{loc}\} \\
  b. & \text{ lative} & \{\text{abs,}\text{loc}\{\text{goal}\}\} \\
  c. & \text{ directive} & \{\text{loc}\{\text{goal}\}\} \\
  d. & \text{ ablative} & \{\text{loc}\{\text{src}\}\} \\
  e. & \text{ locative} & \{\text{loc}\}
\end{align*}

In this way, the second-place formatives, unlike the first-place, can be said to realize the content of the functor category itself rather than a combined determinative. The determinative component is realized by a first-position ‘particule’, where the sequencing is given by morphological structure.

Tabasaran also shows two cases which look like specializations of combinations involving the ablative -an: the ‘temporal postessive’—better, I think, ‘temporal ablative’—lan ‘after’; and the ‘ablative-comparative’ -t’an Hjelmslev 1935: 147, 149. But Anderson (1998: 302) dismisses some other putative cases as derivational elements, or at least non-casual.

The other Tabasaran cases appear to be simplex, but some of them sometimes select a different stem from the complex cases illustrated in (73). One of these is a dative, interpretable, as commonly, as a directional \{erg,loc\}, as in (78a):
We don't see you

The brother hit the sister

(respectively from Hjelmslev (1935: 154) and Palmer (1994: 82), citing Kibrik (1985: 281)). But as it is also a marker of (at least some) directional contactives, such as (78b), it is generalized to express patient goals, {non-loc,loc\{goal\}}. It does not combine with first ‘particules’. The dative reflects something of the separation of the non-spatial source (ergative) subsystem from the spatial subsystem that is suggested in §13.2.3.

This completes the possible combinations of locative, given the set of relations in (6.11). But there is also a case, without overt marker, which is associated with absolutive, whether or not the absolutive is simultaneously an ergative—the so-called ‘nominative’—and another one that typically marks an ergative (that is not also a directional locative/experiencer), as in (78b) or (79a) (Palmer 1994: 82; Kibrik 1985: 279, 282):

(79) a. čuču či Rurčnu
   brother:ERG sister beat
   (‘The brother beat the sister’)

b. čuču čučuz Rigilnu
   brother sister:DAT look.at
   (‘The brother looked at the sister’)

The nominative-marking extends to the {abs,erg,loc\{src\}}, which is initial in (79b), with the following {abs,loc\{goal\}} marked, as expected, as dative. But the presence of the ergative in (79b) is recognized in verbal agreement, which is limited to first and second person. We basically have, as in Basque, an ‘ergative’ case system. The inflection glossed as ‘erg’ is also, however, an ‘instrumental’ marker (Hjelmslev 1935: 154), a not uncommon situation, and not surprising, given the cognitive affinities between agentive and ‘instrument’.

We can say that this most extensive of case systems does not provide us with motivations for attributing to the functor category content additional to that allowed for by (combinations of the features in) (6.11). The complexity of the system involves combinations of the locative semantic relations and dimensional {D}s, to give complex, relational functor complexes. Since the deployment of these determinative elements presupposes the presence of the locative functor, it is to be expected that the morphological presence of
Hjelmslev’s other dimensions, interpreted here as involving such determinatives, can in his terms be said to presuppose that of the first, funtoral one—Hjelmslev’s dimension of ‘direction’.

As Anderson (1998: 32) concludes, it is not possible to demonstrate that there are not phenomena in some language(s) which arguably involve cases—or, more generally, functors—and which require elaboration of the modified Hjelmslevian theory he defends there. But the proposed delimitation of the domain of semantic roles and the general applicability of the theory—together with the demonstration of particular applicability to potentially problematical systems such as that of Tabasaran—both make that unlikely and determine what would count as counter-evidence.

8.5 Conclusion and consequences

This chapter has been concerned with ideas concerning the categorial status of ‘case’, specifically its interpretation as a functional category. What I have described latterly is the potentially complex internal structure of the categories realized as ‘case forms’, morphological or lexical, only some of which complexity is reflected in the expression. One consequence of this is the observation that the parallel in internal structure between Latin prepositions and the cases of Tabasaran provides powerful support for the positing of the functional category functor that can be expressed in these different ways.

I have also noted one important property of the complex categorizations we’ve been looking at. Their component parts, or rather the valencies of these, are accessible to the syntax; in this respect the complexes are not ‘islands’ syntactically. The systematicity of such structures is an important factor in limiting the syntactic capacity of the grammar, in particular in the elimination of ‘mutational’ rules such as were assumed in early versions of ‘case grammar’. This is pursued in Chapters 11 and 12.

The description of complex prepositions and cases as involving spatial dimensions relative to a reference object in which location can take place reflects something of the large body of work on such notions that has accrued over the last few decades in particular. But this is not the place to explore the complexities and divergences of it (cf. for example Talmy 1983; Vandeloise 1986; Herskovits 1987; Aurnague and Vieu 1993; Svorou 1994; Bloom et al. (1996); Pütz and Dirven 1996; Aurnague 2004); what is suggested here remains relatively primitive and undeveloped.

In contrast with the proposal of functors of such complexity as we’ve looked at here, Starosta (1988), for instance, attributes no such complex lexical structure to ‘cases’, or to categories in general. The internal structure
of categories is seen there as simply bundles of binary feature values, and ‘case’ features are spread around various types of case form. One consequence of this is that the problem of the categoriality of ‘case’ simply does not arise: there is no unified category of ‘case’; what unites ‘case forms’ is the sharing of certain features. Consequently, ‘Kuryłowicz’s problem’ is not a problem in such a framework: (morphological) cases and adpositions belong to distinct categories that happen to share features; their morphosyntax is regarded as largely independent of this, and quite distinct.

But the device of featurization simply avoids here what are real issues; and this avoidance, and apparent simplicity, is bought at the cost of an apparently unlimited recourse to features. And it seems to me that such an impoverished view of lexical structure renders syntax more arbitrary than is warranted by the observations in the preceding discussion concerning the role of functors as a functional category, particularly the identification of internal structural parallels between (morphological) cases and adpositions illustrated in §§8.3–4. And recognition of the particular properties of functional categories renders unnecessary the apparently arbitrary fragmentation of the treatment of ‘case’.

Part of the fragmentation to be found in some treatments of ‘case’ is recognized (perhaps unwittingly) by the introduction of ‘macro-roles’ (Starosta 1988: §4.3), which ‘mop up’ clearly ‘case’-related phenomena which fall outside the ‘case relations’ and ‘case forms’ proposed in such treatments. I look at such suggestions in §9.1 below.

On the other hand, the groundedness in semantics that underlies the alleged categorial unity of functors, as displayed in this chapter, is argued by Anderson (1997) to be characteristic of syntactic categories in general, and to be implemented by complex lexical structures such as those discussed in what immediately precedes. We take this up in Chapter 10.

It should be acknowledged finally here that the recognition of different functional structures in §8.2 is paralleled by similar divisions in other approaches to grammar. Thus—to take just one example—the functional argument structure allowed for by functors and the valencies that require them corresponds roughly to Halliday’s (1994: ch. 5) notion of ‘Clause as representation’, while the functional referential structure articulated by determination has an equivalent in the inter-clausal manifestations of ‘cohesion’ described in his work (ch. 9). And the functional locutionary structure associated with the finiteness element combines Halliday’s ‘Clause as message’ (ch. 3) and ‘Clause as exchange’ (ch. 4).
The Lexical Structure and Syntax of Functors

Let us, in the light of the preceding chapter, examine further the kind of lexical structures we can associate with functors and their role in syntax. Various recent developments have carried us ever further from the conception of ‘cases’ as atomic labels like ‘O’ and ‘A’. Some of these are not compatible with—or at least are not necessary in addition to—some of the structural properties we’ve looked at in what precedes. Others provide an obvious extension of what precedes. Others still would seek to render ‘case’ unnecessary as a category, or at least as a primitive category. What follows attempts to sort out what is necessary to the characterization of the lexical structure and syntactic role of functors, and to examine the necessity of functors as such a category. This will take us into some diverse areas.

9.1 ‘Macroroles’

Starosta (1988: §4.3) argues for a distinctive kind of complexity in the characterization of ‘case’. He introduces a third ‘case-like’ category (beside ‘case relations’ and ‘case forms’), namely ‘macroroles’, of which there are two: ‘Actor’ and ‘Undergoer’.

The Actor is the ‘Agent’ of a transitive clause or the ‘Patient’ of an intransitive one. These ‘macroroles’ are ‘established to account primarily for morphosyntactic rather than situational generalizations’ (Starosta 1988: 145), and thus have a different alleged motivation from, for example, Pinker’s ‘patient’ (recall §7.2 above), and from Jackendoff’s ‘Actor’ and ‘Patient’ (see below), which are intended to characterize aspects of ‘conceptual structure’ (1990a: §7.1). Starosta maintains the one-instance-per-NP constraint concerning ‘cases’, and he also supports the idea of the universality of the absolutive in predications, what he calls ‘Patient centrality’. Thus all ‘intransitive’ subjects in English are ‘Patients’, whether they are semantically (also) agentive or not.
One might have expected ‘macroroles’ labelled as ‘Actor’ and ‘Undergoer’ to have been introduced to allow, perhaps, for the distinction between agentive and non-agentive Patients, just as others have allowed for this by attributing more than one ‘case relation’ (agent + absolutive, in this instance) to a single argument. However, this is not so, in line with their claimed purely syntactic role. This innovation cannot then be used to allow for the observation that prompted the ‘unaccusative hypothesis’: that some intransitive subjects share more (semantic and syntactic) properties with transitive subjects than others do. Rather, ‘it appears that Actor, like Patient, is present in every clause’ (Starosta 1988: 146). This means that all intransitive subjects will be both.

Thus, while the Patient the bookcase in (1a) is not an Actor, both the bookcase in (1b) and Bert in (c) would apparently be [+actr, +PAT], Actor Patients:

(1)  a. Bert has moved the bookcase
    b. The bookcase has moved
    c. Bert has moved

They share both the ‘macrorole’ [+actor] and the case relation [+PAT]. Despite the plausible interpretation of one sense of (19c) as involving Bert as both ‘moving entity’, so absolutive, and ‘source of the action’, agentive, the semantic distinction and its syntactic consequences remain intentionally uncaptured by such representations.

Starosta (1988: §4.3.2) acknowledges the problem, and suggests that while some intransitive verbs have a Patient that is an Actor, there are others whose Patient is an Undergoer. But this immediately undoes the claim that an Actor ‘is present in every clause’. This dilemma does not seem to be resolved. (We are referred to ‘section 6.3.3.6’ for further discussion, but there is no such section in the book.)

This oblique approach to semantics is associated with Starosta’s autonomist position on syntax. The autonomism is qualified only marginally by his statement (1988: 123):

I think that [lexicase case relations] are still meaningful, but in a quite abstract and general way, since all human perceptions of regent-noun relations have been apportioned among only a maximum of five categories.

It is also not clear here why, if ‘case relations’ are meaningful, miscellaneous ‘abstract’ interpretations of their meaning (as illustrated in what follows) are apparently thought to be somehow preferable to a properly grounded theory of ‘case’, except to appease autonomist tastes.

Starosta proposes the set of ‘case relations’ given in (2) and (3):
PATIENT: the perceived central participant in a state or event
AGENT: the perceived external instigator, initiator, controller, or experi-
ence of the action, event, or state

LOCUS:
inner: the perceived concrete or abstract source, goal, or location of the
Patient
outer: the perceived concrete or abstract source, goal, or location of the
action, event, or state
CORRESPONDENT:
inner: the entity perceived as being in correspondence with the Patient
outer: the perceived external frame or reference point for the action,
event, or state as a whole
MEANS:
inner: the perceived immediate affector or effector of the Patient
outer: the means by which the action, state, or event as a whole
is perceived as being realized

The last three, in (3) are each divided into an ‘inner’ and an ‘outer’ variant. We
return to the ‘inner’ versus ‘outer’ distinction, in another context, in the section
that follows; here I want to comment on the rest of the content of (2) and (3).
These characterizations of Starosta are no more effective as discriminators
than the Fillmorean and other atomistic characterizations of ‘case relations’;
and they lack internal coherence. They are not based on any theory of the
semantics of ‘case relations’; and they offer no principled delimitation of the
set of ‘case relations’. These proposals fail adequately to confront the issues
raised by (iii) in (3.11):

(3.11) iii) the identification of case and of individual case relations

A number of these issues are what occupied Chapters 5 and 6 under the
headings identified in (5.1):

(5.1) The identification of case(s)
   a) distribution of individual semantic relations
   b) contrast and complementarity
   c) the content of case

The set of semantic relations suggested, for instance, in the work surveyed in
Chapters 5 and 6 above, as given in (6.11), is even more compact than (2, 3),
but fully meaningful:

(6.11) abs source loc loc[source]
And the ‘cases’ are both unified and delimited by a theory of the meaning of ‘case’ itself. Moreover, the accounts they offer do not require recourse to ‘macroroles’.

It is unfortunate, too, that the macrorole Actor also does not seem to accord well even with the syntactic functions Starosta attributes to it, for reasons which will be familiar. Thus, for instance, ‘the actant which may be omissible in imperatives… is the Actor’ (Starosta 1988: 151). But not all intransitive Patients show unmarked imperativization: this is unavailable not only with (1b), which, after all, has a concrete inanimate Patient, but also with the (typically or, at least, often animate) Patients associated with verbs like stumble, wilt, blister, decay, under their normal (non-metaphorical) interpretation. The notion of ‘macrorole’ neither offers the benefits of the availability of multiple ‘case’ assignments to a particular NP nor secures the expression of otherwise resistant syntactic generalizations.

For similar reasons to those relating to Starosta’s ‘macroroles’, the positing by Jackendoff (1990a: § 7.1) of an ‘action tier’ of semantic relations is an elaboration without motivation. According to Jackendoff, ‘A notion missing from the theory of thematic relations in [Jackendoff 1983] and earlier sources (back to Gruber 1965/1976) is that of “affected entity”—the traditional role of Patient’ (1990a: 125). And he offers as ‘a rough-and-ready test for this role…the ability of an NP to appear in the frame [(4)]:

\[
(4) \begin{cases}
\text{What happened} \\
\text{What Y did}
\end{cases}
\]

But the semantic-relational status of the role associated with this criterion is in doubt, and its independence of (other) relations.

Insofar as this idea of ‘patienthood’ can be associated intrinsically with a particular subset of predicators, Jackendoff’s ‘Patients’ are apparently absolutive (‘theme’) arguments of translatives and contactive verbs, what were called ‘affected’ arguments in § 7.2 above. The ‘Patient’ in Jackendoff’s (1990a) example [(5)], for instance, is the absolutive in a translatives in (6.36; 6.37), all of which, with the exception of the ‘effective’ in (6.37a), seem to satisfy Jackendoff’s criterion:

(5) a. Pete hit the ball into the field
   b. What Pete did to the ball was hit it into the field
   c. *What Pete did to the field was hit the ball into it

The absolutive the ball in the directional (5a) but not the goal the field denotes a ‘Patient’. This is true too of the translatives in (6.36; 6.37), all of which, with the exception of the ‘effective’ in (6.37a), seem to satisfy Jackendoff’s criterion:
(6.36)  a. The cheque fell on the floor  
b. Percival threw the cheque on the floor 
c. The rat died  
d. Bill turned it from a slum into a palace  
e. The duckling turned nasty/into a swan

(6.37)  a. Bert built the shrine  
b. Conan demolished the shrine

Recall too that in §6.2 translatives were defined as the absolutive of a verb that is also subcategorized for a loc{src}, i.e. is directional, as formulated in (6.35):

(6.35)  \[ V/loc\{src\} \]

\[ Translative = \text{absolutive} \]

But it isn’t only translatives that satisfy the criterion (4).

Jackendoff (1990a: 126) claims that, for example, goals can also be ‘Patients’, and he cites examples like (6):

(6)  a. The car hit the tree  
b. What happened to the tree was the car hit it

where he takes the tree to denote a goal. If so, it is, like the ball in (5), (also) absolutive—as compared with the simple goal in Fred hit at his assailant. We have a contactive in (6), \{abs,loc\{goal\}\}. The contactives in (6.28b, 29b), the attic and the jar, also meet the criterion, as do the absolutes junk and money in the ‘translatives’ in (6.28a, 29a), particularly if made definite:

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

(7.29)  a. Jane emptied money out of the jar  
b. Jane emptied the jar of money

‘Patienthood’ in Jackendoff’s sense, then, seems to be intrinsically associated with the absolutive arguments of certain classes of verb, notably, for instance, translatives and contactives. As noted, it is precluded with certain translatives, notably (for obvious reasons) effectives, such as are exemplified by (6.37a). With them, the process undergone by the absolutive is ‘effective’ rather than ‘affective’.

Moreover, non-directional contactives like that in (6.20c) do not usually conform to the criterion:

(6.20)  c. The ferry occupies that berth \( \text{simple locative} \)
The criterion requires, whatever else, dynamic predications.

Some experiencers also perhaps meet the criterion, such as Bessie in (7):

(7)  Bill taught Bessie poker

But again the non-directional (8a), which is incompatible with the ‘dynamicness’ of the criterion, fails to satisfy it:

(8)  a. Bessie knows the rules of poker
     b. Bessie learned the rules of poker

The directional (8b) is better, suggesting that it is once more directional experiencers that most easily meet the criterion.

Jackendoff’s ‘Patient’ thus would seem to approximate to the dynamic subset of what was tentatively called ‘affected’ arguments in §6.2, i.e. patients (experiencers and contactives) and affective translatives, in the terminology adopted there. Where it can be applied consistently, it does not elicit a concept independent of these semantic roles. However, the relevance of non-functoral factors we are observing already begins to illustrate the familiar problems associated with criteria: what they elicit is often multifactorially based.

A Jackendoffian ‘Patient’ interpretation can be suppressed, or facilitated, even with predicators and semantic relations that are otherwise resistant, by appropriate manipulation of context. That is, apart from normally being associated ‘inherently’ with the designated directional ‘affected’ argument of a set of predicators, Jackendoffian ‘Patienthood’ is not a property of individual predicators, and thus not part of a system of participant semantic relations, as conceived of here. This is suggested, at least, by the ‘rough-and-ready test’ of (4).

Thus, as Jackendoff (1990a: 127) notes, the absolutive object of (9a), despite being ‘affected’, is perhaps a dubious ‘Patient’—cf. (9b), which is unhappy even with a definite determiner—as is the experiencer goal—cf. (9c):

(9)  a. Bill received a letter
     b. *What happened to a/the letter was Bill received it
     c. *What happened to Bill was he received a letter

But the absolutive object of (10a) is much better as a Jackendoffian ‘Patient’:

(10) a. Somebody else received John’s parcel
     b. What happened to John’s parcel was somebody else received it

So is the goal of (11a):

(11) a. Jack received a serious head wound
     b. What happened to Jack was he received a serious head wound
And even the non-subject, non-object goal of (12) permits a ‘Patient’ interpretation:

(12)  
   a. Arnold threw a bomb into the bedroom  
   b. What happened to the bedroom was Arnold threw a bomb into it

(cf. (6)). Even the agentive of (13a) is construable as a ‘Patient’ in Jackendoff’s sense:

(13) a. Pete attacked a man bigger than himself
    b. What happened to Pete?

The criterion of (4) identifies as ‘Patients’ arguments whose interpretation fulfils certain pragmatically-semantic requirements, to do, in particular, with affectedness that is made evident.

Much of the distribution of 'Patienthood' thus does not relate to particular (sets of) predications; insofar as it does, it involves directional 'affected arguments', i.e. a subset of absolutive arguments in directional predications (affected translatives and contactives and experiencers), which we can perhaps distinguish as 'categorial (Jackendoffian) Patients' versus 'contextual Patients'. Jackendoffian 'Patients', rather than constituting a further 'tier' of 'thematic relations', are not properly an independent part of the system.

Jackendoff also alleges that the 'Actor' role is independent of the '(other) thematic relations' (1990a: 126):

If we pick out Actors by the test frame [(14)], we find Actors in Source [(15a)], Theme [(15b)] and Goal [(15c)]

[(14)] What NP did was...
[(15)] a. The sodium emitted electrons
   (What the sodium did was emit electrons)
   b. Bill ran down the hill
   (What Bill did was run [Jackendoff = roll] down the hill)
   c. The sponge absorbed water
   (What the sponge did was absorb water)

But, whether or not the subjects in (15) are respectively Source, Theme, and Goal, they are also in each case the 'source of the action', i.e. bearers of the 'non-macro' relation Agentive, though those in (15a) and (15c) may not be central instances of such. (15b), indeed, is a paradigm case of the predicator with a subject which is simultaneously agentive and absolutive, as discussed here at various points in the preceding chapters, and as argued for roll by Jackendoff (1972: §2.3)—recall §5.2.
Thus, a verb like *run* or *roll* satisfies both the ‘Actor’ and the ‘Patient’ ‘tests’, as in (16) (Jackendooff 1990a: 127–8):

(16) a. Bill rolled down the hill
b. What Bill did was roll down the hill
c. What happened to Bill was he rolled down the hill

This merely reflects the fact that *roll* is subcategorized for (whatever else) an argument which is (translative) absolutive and (optionally) agentive. Agentivity is absent in (16c) and for one sense of (a).

The ‘Actor test’ selects Agentives, though, as in (15a, c), not necessarily central (human, volitional) ones. Thus, the human non-agentive of (17a) is not selected by the ‘Actor test’—cf. (17b), which is acceptable only as a piece of macabre humour, or the like:

(17) a. Audrey died (last week)
b. *What Audrey did (last week) was die
c. What happened to Audrey was she died

Whereas, as the absolutive with a de-existential (translative) verb, it is a (rather drastic) ‘Patient’, as (17c) is witness to. Curiously, despite this, Jackendooff describes *die* as a verb which takes ‘[-vol<ntional>] Actors’ (1990a: 129)!

I conclude that the positing of an ‘action tier’ of semantic relations is unwarranted. Indeed, it seems to me that the framework advocated by Jackendooff (1990a) is, not unlike some of the autosegmental (phonological) frameworks he invokes as providing a structural analogy, grossly overburdened, invoking as it does not only an ‘action tier’ of semantic relations, as well as a ‘thematic tier’, but also ‘traditional’ subcategorization in terms of ‘deep’ phrasal categories. His discussion, like Starosta’s, offers no motivations for departing from the more interesting position adopted within the ‘case grammar’ tradition that only a single ‘tier’ consisting of a restricted set of semantic relations is contrastive with respect to subcategorization and the syntactic and lexical consequences of subcategorization. The proposed elaboration is largely a failed attempt to remedy the undesirable consequences of adopting the ‘Θ-criterion’, rather than maintaining the Gruberian position of allowing combinations of semantic relations.

Likewise, the slightly different ‘macroroles’, of Foley and van Valin (1984) represent in this respect another unnecessary elaboration of the theory of semantic roles. Since for them both ‘macroroles’ and ‘cases’ are simply abbreviatory devices, their proposals are also subject to the objections to such attempts to eliminate independent functors brought forward in §5.3.
Before taking up, in §9.3, issues to do with still more radical proposals concerning, among other things, the dispensability of semantic relations, we must look at another aspect of the use of semantic relations which, it has been argued, requires an extension of the structural properties we have so far attributed to functors, an extension which has a role in evaluating the proposals considered in §9.3. But I think the proposed extension also involves much to interest us in its own right.

9.2 Participants and circumstantials

We have paid little attention so far to circumstantial arguments of the predicator, rather than participants, adjuncts rather than complements—where the latter include subjects and other (principal) grammatical relations such as are marked by the absolutive in ‘ergative’ systems and some instances of prime. Participants together satisfy the valency of the predicator; circumstantials are optional extensions of the predication. In this section we look at some of the ways in which the distinctiveness of circumstantials has been characterized within the ‘case grammar’ tradition. The accommodation of circumstantials introduces yet another sort of complexity into the categorization of functors, one that undermines more drastic proposed complications.

9.2.1 Circumstantials in ‘case grammar’

Fillmore (1968a) makes a distinction between two uses of certain ‘cases’ that he distinguishes as ‘inner’ versus ‘outer’. We find an instance of both an ‘inner’ and an ‘outer’ locative in (18):

(18) They keep their money under the mattress in Peebles

Only the ‘inner’ locative under the mattress is relevant to the subcategorization of the predicator; only it realizes a ‘propositional case’, in Fillmorean terms. See too Platt (1971). And, as we have seen, Starosta (1988) also draws an ‘inner’ versus ‘outer’ distinction with respect to some of his proposed ‘case relations’ (recall the list given here in (3) in §9.1), and he too relates this to subcategorizational status. Indeed, he makes no further structural distinction between them: ‘outer’ elements are simply not subcategorized for (1988: §§1.3.2.2, 4.2.1.4).

Fillmore (1966; 1968a) is more consistent with the transformational tradition concerning complements and adjuncts in recognizing also a hierarchical
distinction between the prepositional phrases in (18). Given the familiar
typical syntax of ‘outer’ elements—in being in English, for instance, position-
ally more versatile and, in post-verbal position, occurring to the right of the
predicator and, typically, of any subcategorized-for ‘cases’, as documented by
Starosta himself (1988: 129–31)—it has seemed appropriate to most recent
syntacticians to recognize such a structural difference:

(19) a. In Peebles they keep their money under the mattress
   b. *Under the mattress they keep their money in Peebles

(20) *They keep their money in Peebles under the mattress

Consider too what is suggested by (21):

(21) a. What do they do in Peebles?
   b. What do they do under the mattress in Peebles?

(18) and (19a) are a suitable answer to (21a); (21b), with two ‘outer’ locatives,
is looking for a quite different kind of answer. The ‘inner’ locative and
predicator appear to belong to a unit that doesn’t include the ‘outer’. Only
an aversion to the recognition of hierarchization as opposed to proliferation
of lexical features prevents Starosta from acknowledging this; and it is unclear
how this particular kind of restrictiveness that he adopts illuminates our
understanding of the nature of syntax.

Starosta also applies this thinking to the characterization of nominal
‘attributes’. He says of such pairs as (22) that they illustrate ‘special cases of
the general requirement . . . that inner constituents are generally required to be
closer to their regents than outer constituents’ (1988: 227):

(22) a. a student of physics with long hair
   b. *a student with long hair of physics

The ‘inner attribute’ is italicized. However, with nominal ‘attributes’, there are
two kinds of ‘outer’ elements, and they also show mutual order restrictions, as
illustrated by (23):

(23) a. a student of physics at Cambridge with long hair
   b. *a student of physics with long hair at Cambridge

Presence versus absence of subcategorization is not all that is involved here. If,
despite Starosta, there is hierarchical structure here, then the restrictions can
be interpreted as also revealing a preference for avoiding tangling, as shown
schematically in (24):
Fillmore (1966) associates ‘outer cases’ with the Modality node—though Fillmore (1968a: 234, n. 29) also regards many of them, in the spirit of ‘generative semantics’, as ‘introduced from superordinate sentences’. Recall, in relation to the earlier proposal, that the Modality constituent is attached, along with Proposition to the Sentence node (as shown in (2.2a)). Attribution of ‘outer cases’ to Modality (outside the Proposition) is appropriate hierarchically, perhaps; but it raises a range of questions about how such a suggestion fits otherwise with the syntax of ‘outer cases’. It leaves Modality as a rather amorphous construction, containing a variety of strange bedfellows, and with even less support as a syntactic unit than the notorious ‘Aux’ of Steele (1981)—see for example Anderson (1997: 60–61). The ‘superordinate’ source for circumstantial advocates in Fillmore (1968a) and, for example, Anderson (1977: §2.8.3), on the other hand, involves unwelcome abstractness. Let us now
look at the behaviour of ‘outer cases’ and their relationship to other categories in the light of more recent proposals.

I focus here on what I am calling ‘circumstantials’, roughly adjuncts, such as are exemplified by the final prepositional phrase in (18). Other ‘outer’ elements (‘conjuncts’, ‘disjuncts’, etc., in the terminology of, for example, Quirk and Greenbaum (1973)) display other properties. The structure of circumstantials is perhaps most explicitly characterized, within a ‘case grammar’ framework, in more recent discussions such as Anderson (1992: 66–9, 104–15; 1997: §2.8; 1998: §5)

Circumstantials, unlike participants, are not required by the valency of a predicator; predicators are not subcategorized for circumstantials. How then are we to characterize the syntax of the latter? They are a kind of ‘modifier’, in traditional terms, like nominal ‘attributes’ (traditionally other than the inmost argument in (24a)). As modifiers, circumstantials can be said to seek a head to modify: it is they who are marked for requiring a particular head, rather than the head being marked for them (by its subcategorization). Thus the last prepositional phrase in (18) is a locative that requires to modify a predicator. As modifiers, they can also be iterated.

We can characterize the categorial structure of the functor in this use as in (25), where ‘X’ is whatever predicators (verbs, nouns, adjectives) have in common (see again Chapter 10):

\[(25) \quad In = \{F[\text{loc}<\text{goal}>],D[\text{int}]\}^{X}\]

I am concerned at this point only with the role of the ‘backslash’ in (25); the essentials of the rest were discussed in §8.3. Thus, in is represented as a complex, multidimensional locative that is optionally a goal, but in addition here there is a specification to the right of a backslash, that for a predicator: the backslash is to be interpreted as ‘seeks to modify the following category of head’; whereas the (forward) slash of subcategorization said ‘seeks a complement of the following category’. Anderson (1997: §2.8) argues that this is the basis for the syntax of circumstantials—and indeed modifiers in general.

The syntax fulfills the expectations of the backslash notation by introducing, immediately above an instance of the category sought, a node of the same category; i.e. it introduces a node to which the former is subjoined, as shown by the pattern of subjunction under \{T\} in (26), which represents the relevant structure of (18):
Here the finiteness element is realized along with \{V\} rather than by a separate operative. (26) ignores the internal structure of the \[D\]-headed nominals and of the locatives; and it introduces on the left structural aspects to do with shared arguments that depend on developments discussed later. This involves the argument-sharing absolutive on the left: it is introduced by virtue of the requirement that every lexical predication must contain an absolutive, even if it is not subcategorized for one. These unsubcategorized-for absolutives either are realized by an expletive (It’s raining) or share the argument associated (typically) with a lower subject.

What I am focusing on here, however, is the substructure subordinate to and realized to the right of the upper \{V\}. Here the first two functor phrases (their money and under the mattress) satisfy the valency of the predicator they depend on, the lower \{V\}. But the presence of the last functor phrase is licensed by virtue of this lower predicator, here a verb, satisfying the modification requirements of this circumstantial locative, headed by in. The formulation in (26b) should not be interpreted as limiting in to modifying verbs; it is merely that in this particular example ‘\{V\}’ is the relevant possible head—it is the instantiation of ‘X’ in (25). The licensed circumstantial is made dependent syntactically on a node of the same category as the licensing predicator, to which node the latter is subjoined. This creates the hierarchical relation which is generally held to be appropriate as part of the characterization of the participant/circumstantial distinction.

The backslash notation introduces an important new aspect of the categorial structure of, in this case, functors. Notice that we need not include the specification to the right of the backslash in (25) in the lexical representation for at least a locative functor: optional presence of this possibility is unmarked. We can reduce the lexical specification for in to (27a), since it,
typically of locative adpositions, is subject to the optional lexical redundancy of (27b):

(27)  
   a.  \( in = \{F[\text{loc}<\text{goal}>],D[\text{int}]\} \)  
   b.  \( \{F[\text{loc}]\} \Rightarrow \{F[\text{loc}]\{X\}\} \)  

The capacity introduced by (27b) leads to an understanding of other aspects of the syntax of modifiers.

Some circumstantials can depend on a wide range of predicators, and we therefore scarcely need to elaborate on (27b) in their lexical characterization. But other circumstantials require that they depend on a rather specific category, and this should be built into their lexical specification. Consider, for example, the circumstantial in (28) (at this point I concentrate on modifiers of verbs):

(28)  He returned for the performance

This circumstantial expresses a 'purpose'; and, whatever else it involves, it selects an agentive verb as head, as suggested in (29):

(29)  \( for = \{F[\text{loc}\{\text{goal}\}],D[\text{irrealis}]\}\{V/{\text{erg}}\}\)  \(\) ('purpose')

The irrealis element is expressed as a feature on the determinative part of a 'hybrid' preposition. The \(\{\text{loc}\{\text{goal}\},D[\text{irrealis}]\} \) specification is at least part of what this use of \(for\) shares with some other uses, such as in (30a):

(30)  
   a.  George left for Chicago  
   b.  It rolled for twenty meters  
   c.  It lasted for a while  
   d.  It lasted for 50 kilometres

What differentiates (30a) from, say, the \(for\) of (30b), is the presence with the latter of a source with the goal, giving a 'path', and the absence of the restriction on the verb to agentive coupled with a requirement that it be directional, as well as the absence of the irrealis dimension. For all of (30b–d) the functor requires that its complement be a 'linear measure'. The predicator in (30c, d) imposes in addition a semantic restriction on its argument, which must be interpretable as a 'temporal', though it may be 'pseudo-spatial' (30d).

Ignoring this last restriction, we can envisage the representation in (31) for (30b–d):

(31)  \( for = \{F[\text{loc}\{\text{src},\text{goal}\}]\}\{V/\{\text{loc}\}\{\{\text{src}\}\}\} \)  \(\) ('simple path')

These suggestions, particularly the specification of the functors involved as locative, are already beginning to suggest some further observations about the
nature of circumstantial. But let us first illustrate still further the possibilities opened by the backslash notation.

9.2.2 Apposed circumstantial

Some circumstantial require not just a head of a particular valency but the presence of a certain internal structure for the head. Let me illustrate this with passives. I have already anticipated in §5.2 the analysis of the passive by-phrases in such as (32) as circumstantial, which has been argued for elsewhere from various theoretical perspectives:

(32) a. The door was opened by the girl
b. The door was opened by the key

Here I describe essentially the analysis of Anderson (1997: §3.5), allowing for notational differences.

There it is argued that the by-phrase selects a head that has ‘incorporated’ lexically the argument that is highest on the subject hierarchy; the by-phrase is ‘apposed’ to the ‘incorporated’ argument. In English the ‘incorporated’ argument must be a source, as expressed in (33), where the preposition is again interpreted as a path, here a ‘transit’ rather than a ‘linear measure’ path:

(33) \( By = \{F[\text{loc}^{\text{erg, goal}}]|\{V/\text{erg},\}\}\) ('agentive')
    \[
    \begin{array}{c}
    \{F[\text{erg}]\} \\
    \{D_i\}
    \end{array}
    \]

The subscripted ‘i’ indicates that the \{D\} of the apposed by-phrase is to be understood as co-referential with the ‘incorporated’ \{D\}. Typically the other argument of the V implied by the comma in its valency will be an absolutive, as in (32), but we do find, non-prototypically, locatives like that in (34):

(34) This bed has been slept in

We can remind ourselves here too that not all languages restrict the ‘incorporated’ functor to non-absolutive ergatives. I cite again the Dutch intransitive discussed in §4.2.1:

(4.20) a. De jongelei dansen hier vaak
     ('The young people dance here often')
     b. Er wordt hier door de jongelei vaak gedanst
        it is here by the young-people often danced
The equivalent of the \textit{by}-phrase is apposed to the ‘incorporated’ \{erg,abs\} in (4.20b).

Passive \textit{by} can be analysed as sharing its \{loc\{src,goal\}\} specification with the use of \textit{by} in (35a):

\begin{enumerate}[(a)]
\item It passed by the door
\item It’s by the table
\end{enumerate}

Relationally, (35a) is simply as in (36), i.e. a path:

\begin{equation}
\text{by} = \{F[\text{loc}\{\text{src,goal}\}\]} ('\text{path}')
\end{equation}

The ‘passive’ \textit{by} is an ‘abstract path’ that includes (36) in its representation, but renders the interpretation ‘abstract’ by virtue of the requirements of the apposition. (35b), on the other hand, doesn’t seem to involve a path, but a simple (complex) locative (perhaps a kind of ‘transit’ location rather than path), so a different role.

Despite the differences between different uses of these prepositions, however, one thing that emerges from these suggestions is that we are able here to impose more unity on the use of various prepositions than in traditional accounts. That is, we are closer in this area to satisfying what Anderson (1977: 64) and Mackenzie (1978) call ‘lexical naturalness’, which the former formulates as:

ceteris paribus, accounts which assign a unitary source to a particular lexical form will be preferred to those which require homonymy.

(and see too Zwicky 1968; Anderson 1973a). Though there are problems, as with any ‘functional’ assumption, in according such a principle predictive value (Mackenzie 1978), I suggest it offers a preferable research strategy to the assumption of massive homonymy.

9.2.3 \textit{A localist analysis of circumstantialls}

The characterization offered for the passive \textit{by}-phrase makes apparent its status as a specialization of a figurative extension of the notion of ‘path’, whose ‘concrete’ role is evidenced in (35a). This is in accord with the localist hypothesis. The figurative basis for localism is indeed particularly transparent in the expression of different kinds of circumstantial. Anderson (1998: §5) surveys a range of circumstantial types in English, based on Poutsma’s (1928) classification into ‘place’, ‘time’, ‘manner’, and ‘causality’, and he argues that even the most abstract, the ‘causality’ circumstantials, permit a localist interpretation, in many cases thereby enhancing lexical naturalness.
Thus, for example, Poutsma (1928) distinguishes between the ‘consequence’ circumstantial of (37a) and the ‘reason’ of (b):

(37)  a. Reginald sacrificed himself to no avail
      b. Selwyn betrayed her out of spite

Assumption of lexical naturalness suggests plausible localist analyses of these as respectively abstract locative goal and source. Moreover, the localist account is the only one to use concepts that have an alternative concrete realization: description in other terms involves increasing recursion into abstractness.

If, indeed, the localist interpretations involve metaphors, then the metaphors involved are what Lakoff and Johnson (1980) call ‘literal metaphors’, and Anderson (1984c; 1987a) distinguishes as ‘suppletive’ versus ‘supplementary’ metaphors; they have no ‘literal’ equivalents. These localist extensions of spatial interpretations represent the continuing creativity of language users in conceptualizing abstract domains in terms of the spatial relations that seem to be appropriate in relation to concrete space. Though some such ‘metaphors’ may seem to be ‘dead’ (though metaphor mortality is difficult to gauge—see for example Goatly 1997: §1.8.1), and some indeed may cease to be transparent, we witness in languages a constant renewal and extension of localist solutions to the capturing of abstract conceptual domains. And these have consequences for, and remain reflected in, lexical and syntactic structure, as we saw in the case of the localist interpretation of experiencers presented in §5.4.3.

The exercise of creativity can lead to different ‘solutions’ in different language systems, though within the constraints of the localist hypothesis. Thus, while in a number of languages the ‘passive circumstantial’ bears a path marker, such as by, elsewhere we find a marker associated with locative source, as with fram in Old English and similar forms in other languages discussed by Green (1914), including German von. Compare the passive and concrete sources in (38):

(38)  a. Alles ist von dem Feinde verwüstet worden
      everything is by the enemy laid-waste been
      (‘Everything was laid waste by the enemy’)

      b. Der Zug kommt von Hamburg
      The train comes from Hamburg

Linguistic creativity leads to diversity in language, within perceptually determined limits.
It seems to me to be a misuse of the term ‘creativity’, on the other hand, to attribute it to the ability for recursive application of routinizations. This is not to deny that the latter may play a part in the exercising of creativity in the usual sense, of which ‘poetic creativity’ is merely an extreme manifestation. Linguistic creativity does not reside in the principles of some ‘universal grammar’, or in the routinizations of individual grammars, but in linguistic innovation; to suggest the former would be like confusing the ‘rules’ of the double-sestina form with the creation of a poem.

Anderson (1986a; 1998: §5) suggests that the set of semantic relations to be attributed to circumstantialis is not merely constrained by the localist hypothesis, but is also restricted to functors that bear only the feature locative, and possibly its secondary features and/or a dimensional {D}. This is in itself a provocative hypothesis. But I think that using the mechanism just described we can offer locative-based analyses of circumstantialis that come closer to lexical naturalness than was achieved in Anderson (1998). Let me offer an example of this.

In §4.1 I discussed the examples in (4.16) in relation to the association of absolutive (then Objective) with ‘holisticness’. They were meant to illustrate that the three types of with-phrase illustrated in (c) are different types of functor:

(4.16)  

a. John smeared the wall with paint with a rag
b. John smeared the wall with paint with a friend
c. John smeared the wall with paint with a rag with a friend

The last functor phrase in (4.16c) is a ‘comitative’, the preceding is ‘instrumental’, in traditional terms, and the one preceding them is the absolutive ‘displaced’ from ‘object’ position by the complex {abs,loc} that precedes it in these sentences. The ‘displacement’ was said to be in accord with the subject selection hierarchy of (4.17):

(4.17)  

Subject selection hierarchy: A > O, > O

subsequently extended in §4.2.1 to include D(ative):

(4.17)’  

Subject selection hierarchy: A > D > O, > O

This was further modified in §6.3 to accommodate the notation associated with the new articulation of the case features proposed in that chapter:

(6.38)  

Subject selection hierarchy: erg > erg, > abs(.)

But we are now in position to reduce the lexical unnaturalness of with on the account just given, and to allow for the ‘displaced’ absolutive in such a way as
to recognize its typical optionality and to simplify the subject selection hierarchy as in (6. 38).

However, let’s look first at the ‘comitative’/’instrumental’ distinction, and then return to the ‘displaced’ absolutive. There seems no reason to distinguish these former two ‘uses’ in terms of functor features; what differentiates them is primarily the requirement that ‘instrumentals’ place on the predicator they modify, which must be agentive. Thus, say we represent the ‘comitative’ in English as in (39a), i.e. as a complex, ‘hybrid’ preposition, and also circumstantial:

\[(39)\]
\[
\begin{align*}
&\text{a. } with = \{F\{\text{loc}\}, D\{\text{com}\}\\backslash (V)\} & \text{('simple comitative')}
\end{align*}
\]
\[
\begin{align*}
&\text{b. } with = \{F\{\text{loc}\}, D\{\text{com}\}\\backslash (V\{\text{erg<abs>}\})\} & \text{('instrumental')}
\end{align*}
\]

The instrumental differs in making the requirement in (39b) of its modified predicator. The optional absolutive in the representation allows for the fact that, though intransitive agentives prefer other locutions, such as that in (40a), the simple *with*-possibility seems available to them (with or without lexical amplification), as indicated by the bracketing in (40b):

\[(40)\]
\[
\begin{align*}
&\text{a. } \text{Fred travels by car}
\end{align*}
\]
\[
\begin{align*}
&\text{b. } \text{He walks with (the help of) a stick}
\end{align*}
\]

(40a) has another instance of ‘path’ *by*, associated here with ‘instrumental’ modification of some actional ‘travel’ verbs. Though we may ‘intuitively’ want to conceive of (40a) as involving an ‘instrument’, this relation is not represented in English in the same way as the ‘instrumental’ rag in (4.16a). Again, particular circumstantial types may demand different classes of head to modify; metaphors may be applied in different ways.

(41) illustrates a comitative that is not an instrumental but is a simple ‘abstract comitative’, as represented in (39a):

\[(41)\]
\[
\text{He walks with a limp}
\]

Such additions to the simple circumstantial specifications that we find in (33) and (39b) encode the figurative extensions underlying the various uses of the functors.

Let’s now look at the ‘displaced’ {abs} of (4.16), *with paint*, repeated above, which is associated with contactives in general, including such as (6.26b) as well as holistics such as that in (4.16):

\[(26)\]
\[
\begin{align*}
&\text{a. } \text{John supplied the treasure to Bill}
\end{align*}
\]
\[
\begin{align*}
&\text{b. } \text{John supplied Bill (with the treasure)}
\end{align*}
\]
What we might envisage here is another ‘comitative’ circumstantial. The
circumstantial introduces a very common accompaniment to the action of
supplying in (6.26b). It too is, accordingly, as a comitative, marked with with;
but this comitative, like the ‘passive by’, is apposed to a predicator with whose
‘incorporated’ argument, in this case an absolutive, it is coreferential, as
represented in (42):

\[(42) \quad \text{With} = \{F[\text{loc}], D[\text{com}]\}\{V[\text{loc,abs}]\}
\]

These uses of with can be said to be homogeneously comitative in role, and
differing in what they select to accompany.

This analysis also removes the motivation apparently offered by contactives
for ranking \{abs,} above \{abs\} in the subject selection hierarchy, which was
incorporated into (6.38). The element analysed as an absolutive participant in
contactive predications is now treated as a comitative circumstantial. We can
apparently remove the bracketed comma, as far as such sentences are concerned.

Consider now, to complete the picture of circumstantial apposition, the
‘incorporations’ that such circumstantials are apposed to. The predicator
representations indicated in (33) and (42) are, in ‘process’ terms, the results
of lexical extensions of the lexical entries for certain classes of verbs, the effect
of which is to ‘incorporate’ an argument. Some such formulations as those in,
respectively, (43) and (44), are perhaps appropriate:

\[(43) \quad \text{Passive participle formation}
\]
\[
\{V/[\text{abs}]/[\text{erg}]\} \Leftrightarrow \{V[\text{pass}]/[\text{abs}]\}
\]
\[
\quad | \quad \{F[\text{erg}]\}
\]
\[
\quad | \quad \{\text{Di}\}
\]

\[(44) \quad \text{Contactive formation}
\]
\[
\{V/[\text{abs}]/[\text{loc}]\} \Leftrightarrow \{V/[\text{loc,abs}]\}
\]
\[
\quad | \quad \{F[\text{abs}]\}
\]
\[
\quad | \quad \{\text{Di}\}
\]
These are stated as bidirectional relations, in recognition of the independent lexical status of the categories at each of the ‘heads’ of the arrow. (43) adds the feature ‘pass(ive)’ to the verb, manifested morphologically. (44) applies to contactives where, with respect to the base form, there is a simple independent absolutive argument along with the locative (as in the partitive of holistic/partitive pairs). Not all contactives are ‘derived’, of course.

Again in process terms, the effect of (43) in English is to ‘detransitivize’ the verb. In the case of Dutch the ‘incorporated’ ergative may be part of either a ‘transitive’ or an ‘intransitive’ predication: recall the ‘agentive intransitive passive’ of (4.20b). If the verb is ‘transitive’, the effect is the same as in English; if it is ‘intransitive’, i.e. there is a \{abs,erg\} argument, then it loses as an independent element its only subject-eligible functor, and an absolutive has to be (re)introduced in response to the universality-of-absolutive requirement. This absolutive is filled by an expletive. We can formulate passive participle formation for languages such as Dutch as in (45):

\[(45) \text{ Passive participle formation (Dutch)} \]

\[
\begin{array}{c}
\{V/{\text{erg}}\langle{|}\text{abs}}\rangle\} \leftrightarrow \{V{\text{pass}}\langle{|}\text{abs}}\rangle\} \\
\{\text{F{erg}}\} \\
\{\text{Di}\}
\end{array}
\]

It is only if the ergative and the absolutive belong to different arguments, as indicated by the angle-bracketed braces on the left of (45), that a lexical requirement for an absolutive remains with the derived verb, as shown on the right.

With (44), if we take the partitive variant as basic (in being simpler), the verb loses the overt simple \{abs\}, but this is compensated for by the addition of absolutive to the locative—which ensures the universality of absolutive. Some otherwise eligible bases fail to undergo (44) and some derived forms have no available base, but are lexically marked as conforming to (44). I recall here the examples from Chapter 4 in (4.6):

\[(4.6) \quad \text{a. John spread/\text{*threw}/\text{covered} paint on the canvas} \]
\[(4.6) \quad \text{b. John spread/\text{*threw}/\text{covered} the canvas with paint} \]

Only \textit{spread} shows both possibilities.

As a result of (43), unlike with (44), the verb ceases to be eligible for the acquisition of finiteness; passive is indeed marked morphologically as a non-finite form. It fails to undergo the lexical rule that makes lexical verbs finite.
The passive form, (like the progressive in (8.5a), for instance), is marked lexically as not undergoing finiteness formation, (46), which creates the finite lexical verb configuration of (8.5b):

(46)  *Finiteness formation*

\[
\{T\} \\
\| \\
\{V\} \Leftrightarrow \{V\}
\]

And this exceptionality is reflected in the morphology (participle form). If the participle is to occur in a finite sentence it must be (ultimately) subordinate to an operative, such as that in (8.5a), but via one that is subcategorized for the ‘passive’ form, as shown in (47):

(47) \{T/[V{\text{pass}}]\}

\[
:\{V{\text{pass}}\} \\
:\hline \\
:\hline \\
:\hline
\]

\text{was} \quad \text{opened}

The circumstantials associated with the derived verb forms for which (46) is not blocked, such as are produced by (44), tend, like complements, to be present, unless they can be construed as indefinite; but there is much variation among individual verbs (compare the behaviour of \textit{load}, \textit{spread}, \textit{jam}, \textit{supply}, \textit{furnish}, etc.). This ‘complement-like’ behaviour reinforces the notion that we cannot reduce the complement/adjunct distinction to one of obligatory versus optional accompaniment of a verb.

Indeed, circumstantial status may be indicated in a variety of ways, including (but not necessarily) optionality, as well as availability with a wide range of predicators (but again not necessarily). Let us look at some more of this variety.

If each of the \textit{with}s in (4.16) is interpreted as a locational, as suggested in the preceding, and \textit{the wall} is also (absolutive) locational, and neither is a second-order source, then their co-occurrence, if they were complements, would involve (multiple) violations of the first part of Fillmore’s ‘theta-criterion’:

(4.16)  a. John smeared the wall with paint with a rag  
        b. John smeared the wall with paint with a friend  
        c. John smeared the wall with paint with a rag with a friend
Fillmore's proto-theta-criterion (1)

Only one (possibly coordinate) token of each case is permitted per proposition (p. 22).

Adjuncts with the same role, however, may be arguments of the same predicate.

Or adjunct status for an element may be signalled by the verbal morphology, as in (32):

(32)  a. The door was opened by the girl
    b. The door was opened by the key

Or it may be reflected merely positionally, as in (48):

(48)  Bill visited yesterday the girl he had met on the boat

I take occurrence to the right of the adjunct yesterday as an indication that the 'complex noun phrase' in (48) is also a circumstantial, even though this status is not marked on the verb or in the functor phrase containing it, or by optionality. It is in apposition to an incorporated (locational) absolutive.

9.2.4 Nominals and circumstantials

It is plausible, as various researchers have argued, to associate the 'complements' of deverbal nominalizations and other lexically complex nouns with circumstantial status. Let us look at what suggests this.

To start with, all these arguments of 'verb-based' nouns, not just with a lexically marked subset of nouns (as in the case of verbs), are uniformly optional. Thus, whereas (49a) is normally unacceptable, (49b) and (49c) are equally viable, with, indeed, (49c) being rather stilted:

(49)  a. *Bill murdered
    b. The murder was in the news
    c. The murder of the policeman by Bill was in the news

Also, the prepositional phrases in (49c) may appear in reverse order (and often the ordering can be related to discourse status of the phrases). I suggest that these observations are associated with the arguments in (49c) being 'indirect' manifestations of the valency of a verb that has been nominalized; the verb has 'absorbed' a noun category which blocks their expression as complements.

That is, the range of arguments shown in (49c) is associated with an internal structure that contains a subjoined verbal predicator, as, schematically, in (50):
However, subjunction to a noun head apparently blocks the normal satisfaction of the valency of the component verb: simple nouns do not take such complements; the latter are inimical to the discrete, non-relational character of nouns. Instead, the valency is satisfied internally; the complements are ‘incorporated’ into the verbal component. The arguments in (49c) are circumstantials in apposition to and coreferential with the ‘incorporated’ complements, and so quite generally optional. We return to such structures in the following chapter.

Notice we find in (49c) the path marker associated with a circumstantial appositive of an ‘incorporated’ ergative, as with ‘passive’ structures. This is consistent with lexical naturalness. On the other hand, (49c) is not a ‘passive’: passive, where ‘incorporation’ is determined by the subject selection hierarchy, is not relevant to nominalization structures. One sign of this is that we also find by as an option in (6b/c), as discussed in §6.4:

(6.6)  a. (the) death of Bill
       b. (the) flight by Bill (from the scene)
       c. (the) flight of Bill (from the scene)
       d. (the) rescue of Bill (by his wife)

The of marker of (6.6a, c, d) and (49c) apparently expresses neutralization of any functor containing an absolutive, whether agentive or not. It is thus in this respect an independent circumstantial marker that is equivalent in this respect to a morphological absolutive in an ‘ergative’ system (recall here §7.5), as is suggested in, for example, Anderson (1984c: 14–16).

Postulation of an absolutive circumstantial violates, however, the assumption we adopted concerning circumstantials, an assumption that otherwise has been substantiated. We associated circumstantials with locative only in the preceding subsection; all circumstantials were said to be varieties of locative—a severe instantiation of the localist hypothesis. We must now, it would appear, on the basis of (6.6), modify that generalization to provide for the fact that there are apparently absolutive circumstantials. We might at least be able to say that if the circumstantial is not a locative, it is neutralized: of marks any role that includes absolutive—a rather weak characterization. And we can say that absolutive circumstantials are limited to nominalizations, perhaps. But why should this latter restriction hold?
Anderson (2004b) discusses *of* as a marker of apposition of arguments to nominals, as in *the city of Birmingham*. There it is suggested that such an appositional element is headed by a functor which bears no semantic relation; it is a simple {F}. *Of* is a marker of this specific-relation-free functor in English that introduces nominal apposition. In (6.6) this simple-{F} phrase is adjoined to a nominal based on a verb, and it is apposed to the absolutive argument of that verb. So we can maybe retain the generalization that if a circumstantial bears any non-empty semantic role it will be a location, and the further generalization, not limited to de-verbals, that only appositives adjoined to nominals can bear the semantic-relation-free functor signalled in (8.24) by *of*.

As noted in §6.4, the neutralization involved with the English genitive is more ‘prime-like’, as compared with the ‘ergative’/‘active’ pattern of (6.6). This is displayed by the variety of relations associated with the genitives in (6.7):

(6.7)  
   a. his wife’s rescue (of Bill)  
   b. Bill’s death  
   c. Bill’s flight (from the scene)  
   d. Bill’s rescue (by his wife)  
   e. last night’s rescue (of Bill/by his wife)

But again all the arguments are optional: genitives may be replaced by a simple article.

9.2.5 Conclusion: circumstantials, incorporation, and absorption

My main concern here has been to outline the development of various ideas on the participant versus circumstantial distinction that arise rather directly out of the ‘case grammar’ tradition. What we arrive at is a view of circumstantial as functor phrases that seek to modify a certain category, and that may impose restrictions on the category if it is to satisfy the circumstantial as a head. This enables us to analyse various ‘abstract’ circumstantial as variants of ‘concrete’ in which the restrictions they imposed reflect the figurative extensions of ‘concrete’ locative interpretations that underlie their use. We thus achieve greater lexical naturalness, as well as (in principle) being able to limit the range of circumstantial to functor phrases that are uncombined locatives or, in the case of nominal circumstantial, semantic-relation-free.

Certainly, the confirmation of such a programme would require a much more thorough examination of the uses of circumstantial functor phrases than I have attempted here, but the results are at least suggestive of a
promising direction. If this promise is fulfilled, we shall have found further manifestations of localism, and evidence for the figurative basis for a number of morphosyntactic restrictions. Figures, however, are formulated neither universally throughout language nor consistently in the same language. This seems to me to offer an exciting challenge to our theory not just of lexical structure but also of morphosyntax.

As concerns lexical structure, the more explicit formulation of passive participle formation in (43) and of finiteness formation in (46) invites us to clarify a distinction I have been (for the most part tacitly) making between two different kinds of complex lexical structure, namely ‘incorporations’ and ‘absorptions’; I shall now try to justify removing the quotation marks.

The distinction reflects the relationship between the complex structure and the more simple one it includes. Consider again (43) and (46), and in particular the significance of whether the additional element(s) on their right-hand sides are subjoined, as in (43), or ‘superjoined’ (46). (43) is an ‘incorporation’: the category on the left has elements subjoined to it on the right. (47) is an ‘absorption’, the category on the left is itself subjoined on the right. Absorption thus involves ‘category change’ for the complex; each side of the double arrow has a distinct governing category, but the base form still appears as the core, or root, of the expression; a finite verb is verb-based, and its root is verbal. Many absorptions correspond to traditional derivational relations: finite and non-finite verbs belong to different primary syntactic categories. But absorption need not be signalled overtly by the morphology. Incorporations also may be covert, but they may be marked by inflectional morphology, as with the passive participle. They both ‘expand’ lexical structure relative to a simpler structure which itself may be ‘virtual’, in not being given lexical status; and they are not mediated by the syntax.

(43) oversimplifies the characterization of passives—and we shall return to this in what follows, particularly in §12.2.2. But this later discussion does not affect the drawing of the distinction between absorption and incorporation.

9.3 The ineluctability of semantic relations

The ‘lexicase’ approach (as described by Starosta (1988)) and the localist framework developed in Anderson (1971b; 1977) are both attempts to circumscribe the set of case relations, one based on limiting appeal to semantics, the other on semantic identification of the category. Elsewhere, there have been attempts not merely to circumscribe ‘cases’ but to eliminate them as independent morphosyntactic elements.
Certainly the distribution of case relations as markers of participant arguments is largely specified by the subcategorization associated with the class of the predicator on which they depend, as is apparent in any of the ‘case grammar’ predicational representations we have been looking at. Take, for instance, the predication in (18/26):

(18) People keep their money under the mattress in Peebles.

The function of the first three functor phrases seems to be merely to label the arguments that satisfy the valency of the verb. The circumstantial, however, is another matter, as will emerge from the discussion in §9.3.1.

Let us first, though, in the light of the apparently limited independence of ‘case’ in relation to participants of a predicator, pursue the potential for eliminating participant ‘cases’, as anything more than diacritic, from the morphosyntax and possibly from the semantics; indeed, let us look at one set of programmes to do just that.

9.3.1 The irrelevance of UTAH

An avenue towards this might seem to be offered by UTAH, as formulated in Baker (1988: 46):

Uniformity of theta assignment hypothesis

Identical thematic relationships between items are represented by identical structural relationships between those items at deep structure.

(Compare again its controversial predecessor in relational grammar, Perlmutter and Postal’s (1984) ‘universal alignment hypothesis’). We might interpret UTAH bi-directionally: there is a one-to-one relation between semantic relation and ‘deep structure’ configuration. If UTAH is interpreted in this way, such that each ‘thematic’ relation is associated with a unique configuration, then they can obviously be eliminated from the morphosyntax. On a weaker interpretation, UTAH requires that particular items sharing a semantic relation also share the same ‘deep structure’ relation, whatever their ‘superficial’ syntactic relation. So that, for example, the subject of passives and the corresponding complement in the active share a semantic relation; therefore, these elements occupy the same ‘deep structure’ position. We cannot, under this interpretation of UTAH, identify semantic relations from ‘deep structure’ configuration; but even under this latter interpretation, which seems to be that usually adopted, UTAH severely reduces the role of ‘cases’, along familiar lines—as argued in the initial responses to Fillmore (1968a), including S. R. Anderson (1971), and as implemented in Fillmore (1977)—recall §4.1.
But reasons for rejecting UTAH were already apparent at this earlier point in time that was under discussion in Chapter 4. UTAH depends on the positing of an autonomous ‘deep structure’, in terms of which we can formulate this invariant relationship. But the work surveyed in Chapter 4 is devoted to surveying the arguments against the presence of ‘deep structure’ in a grammar, and to the range of evidence for a syntactic and lexical role for ‘cases’, regardless of what syntactic position they come to occupy.

Recall the range of semantic relations associated with subjects that were illustrated by (5.31):

(5.31) 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

This variety makes it clear why UTAH (on the common interpretation) makes such a very weak claim: the same item shows a consistent relation between its semantic-relational array and the ‘deep structure’ positions it occupies. And it is not clear that even this weak position is tenable.

In traditional ‘deep structures’ the same semantic relation required by the same predicator can be associated with different positions, even in putative ‘deep structure’: the absolutive relation with, for example, move is ‘object’ in ‘transitive’ and subject in ‘intransitive’ sentences. This is avoided, apparently, only by the positing of the otherwise unnecessary and problematical ‘unaccusative hypothesis’, or by otherwise increasing the ‘abstractness’ of the syntax, such as by positing ‘abstract’ predications, or predicational elements, that are not given independent syntactic expression.

Consider further the sentences from Old English in (51a–c), involving the verb ofhreowan ‘pity’ (from Anderson 1986b: 170–71), and particularly the participant marked with a dative in (51a):

(51) a. Þa ofhreow ðam munece þæs hreoflan mægenleast	hen pitied:3SG the:SG.DAT monk:SG.DAT the leper’s weakness
    (‘Then the leper’s weakness caused pity in the monk’)

    b. ofhreowað þæs hreoflan mægenleast
    ‘pityed the leper’s weakness’
In (51a) the dative-marked ‘monk’ argument—an experiencer—seems to be an ‘object’, or at least some sort of complement, with the ‘weakness’ argument (whatever its semantic relation) marked with nominative, as presumably the ‘deep’ as well as ‘surface’ subject. But in (51b) the experiencer argument ‘the priest’ appears in the nominative and is presumably both ‘deep’ and ‘surface’ subject; and the argument corresponding to the subject in (51a) is in the genitive. Now, we might accommodate this, as we might deal with move, as involving (if we ignore ‘unaccusative’) increased ‘abstractness’ in the form of attributing to (51a) a two-clause structure with an upper ‘causative’ verb (as suggested by the gloss). This is undesirable enough (as will be discussed at greater length in the subsections that follow). But (51c) illustrates yet another pattern.

In (51c) neither argument is in the nominative, and the ‘concord’ on the verb is uniformly third-person singular; neither argument controls concord. Whether, on whatever grounds, the dative experiencer is taken to be a ‘deep’ subject or a ‘deep object’/complement, (51c) seems to represent a construction with a distinctive syntax not to be relegated to superficiality. The dative experiencer is in immediately pre-verbal position. Is it then a ‘positional subject’, rather than the ‘morphological subject’ of (51b)? And how does this relate to configurationality? It is not obvious that sentences like (51c) should be associated with the kind of ‘deep structure’ configurationality on which the definitions of the grammatical relations depend. Notice that there are also sentences of the (51c) pattern in which the dative-marked argument occurs in a straightforward complement position: this is what is illustrated by (51d) (from Denison 1993: 70).

These examples seem difficult to reconcile with the requirements of UTAH, particularly if the latter is applied to traditional ‘deep structures’. And even so, it makes a rather weak claim about the relationship between ‘deep structure’ and semantic relations. The case-grammar hypothesis makes it unnecessary,
given that ‘deep structure’ is unnecessary. UTAH becomes interesting and distinctive only if the determination also works the other way, so that each semantic relation is associated with a unique ‘position’. But this can be achieved only if ‘deep structure’ is made even more ‘abstract’.

Another line of approach to depriving semantic relations of an independent syntax (not to mention semantics) achieves a reduction of ‘case’ equivalent to the strong interpretation of UTAH, but involves abandonment of ‘autonomy of syntax’ in relation to ‘cases’: UTAH is supplemented with appeal to the semantic class of verb in differentiating among configurational definitions of semantic relations, along the lines proposed by Dowty (1989), van Valin (1993a), and others. Thus, an ‘agent’ can be said to be the ‘subject’ of an ‘actional’ verb. ‘Autonomy’ could be retained if the generalizations appealing to semantic class of verb can be consigned to semantics alone. But, again, Chapter 4 was concerned with evidence for the syntactic relevance of ‘case’—and this extends to whatever ‘case’ is reduced to.

Moreover, as already argued briefly in §5.3, this is surely to get it the wrong way round: what defines an ‘action’ is precisely the presence of an ‘agent’; no ‘agent’, no ‘action’. And it is the place of this semantic relation on the subject selection hierarchy that confers subjecthood (or whatever type of principal relation is involved). An ‘actional verb’ is necessarily and sufficiently defined as one that is subcategorized for an ‘agent’. The same situation may be described as an ‘action’ or not:

(52) a. Fred crumbled the bread in his fingers
    b. The bread crumbled in Fred’s fingers

What differentiates these ‘scenes’ is the invocation of an ‘agent’, which converts the verb to an ‘actional’.

Compare the situation with the copula. It takes a number of alternative complements, including locative, predicative, the progressive form of a verb, the passive form of a verb, as in (53a–d):

(53) a. James was in London
    b. James was large
    c. James was coming
    d. James was kidnapped

This doesn’t mean that the copula is different in these various cases except in its subcategorization. It is, for instance, not to the copula in (53c) that we attribute ‘progressiveness’; this can be expressed without recourse to it, as in (54a) vs. (54b), or, even as a non-complement, in (54c):
a. I saw her leaving
b. I saw her leave
c. He entered carrying a large cat

‘Progressiveness’ is a property of the dependent form in (53). The copula is merely subcategorized for this form, and is not independently ‘progressive’. In the same way the ‘actional’ verb is such only by virtue of its subcategorization.

Similarly, a ‘locational’ verb is defined as being complemented by a locative; and a directional verb, including ‘verbs of movement’ if dynamic, as presupposing a locative source and goal; and an ‘experiential’ verb as one subcategorized for an experiencer. These classes of verb are solely differentiated by the requirement, as dependents, of particular semantic relations. As we have seen, absolutive does not in itself select a class of predicator. The class of predicator is determined by the other functors in its valency and other distinctions in class that are independent of valency.

There are of course semantic classes not associated directly with valency. Thus the ‘stative’/”dynamic” distinction cuts across valency-defined classes, as illustrated by (55–57):

(55) a. The fog stretches from Birmingham to Nottingham
    b. The ball rolls from one end to the other

(56) a. Fred likes opera
    b. Fred enjoys opera

(57) a. Norah is careful with her money
    b. Norah cares for her money

Of course, there are correlations between this distinction and word classes. The prototypical verb is ‘dynamic’ and ‘actional’ (Chapter 10); so an adjective is preferred for the agentive ‘stative’ in (57a). The absolutive is compatible with a large range of such classes.

In discussing in §5.1 the sentences of (53), we looked at other considerations suggestive of a syntactic-categorial status for what later in the book were called ‘functors’:

(53) a. Bill performed (that)
    b. Bill laboured
    c. ?*Bill learnt (that)
    d. *Bill knew that
    e. *Bill expired

The argument basically involved the observation that the relevant ‘selectional restriction’ here holds between a manner adverb and not a noun or a verb but a functor. The adverb is associated semantically with an agentive. Agency is
not a property of the entities represented by nouns, or a property of verbs, though ‘potential agent’ may loosely be said to be a property of the former. *Very skilfully* is attributed not to the verb as such but to the manner of participation of one specific argument in the event denoted by the verb: agency—as opposed to ‘agentive’ (of nouns) or ‘actional’ (of verbs)—is a property of functors; and these properties of nouns and verbs are derivative of it. It was argued there that this suggests that semantic relations belong to a category that, like other categories, enters into ‘selectional restrictions’. That it is sometimes non-overt is consistent with its status as a functional category.

Locatives in English, usually with overt markers of the semantic relation in the form of a preposition, introduce another problem for configurational definitions, as emerged from my remarks in §2.2.3 on Chomsky’s ‘illustrative fragment of the base component’ (1965: ch. 3, §3); the ‘fragment’ effectively introduces, inconsistently, ‘semantic-relational’ categories. This problem can be resolved by the introduction of ‘cases’ and the elimination of configurational definitions for such grammatical relations as can be motivated. And, in the main transformational tradition, the introduction of ‘0-roles’, if consistently applied, could have had similar benefits.

However, the tradition emanating from Chomsky (1965) retained configurational definitions (with qualifications in some quarters) and failed to perceive the unity of the functional category of functor, or ‘case’. We end up having to say, misleadingly, that classes of prepositions ‘assign 0-roles’. But in a sentence like (18) the preposition *under* does not assign a 0-role to the following noun:

(18) People keep their money under the mattress in Peebles

This noun is not a [loc]; it is only the whole prepositional phrase that specifies a location. Prepositions do not assign 0-roles; they express them. They are independent functors, and belong to the same category as the ‘incorporated’ (lexically derived) functor associated with, for example, the subject in (18) and in (5.31) (which was used to illustrate further the range of neutralization associated with the functor ‘subject’). We have overt independent expression (as well as morphological) of semantic relations or 0-roles, as well as ‘positional’, as recognized by the classical tradition.

In some languages, indeed, all or almost all expression of (possibly neutralized) semantic relations is associated with an independent functor, as with the postpositions of Japanese, as roughly glossed in (58) (Shibatani 1978: 64):

(58) Taroo ga sensei ni aisatu o sita
    Taro NOM teacher to greeting ACC gave
    [erg],SUBJECT + [loc,goal] + [abs,OBJECT
    (‘Taro gave the teacher a greeting’)
If these relations are defined configurationally, then (58) would apparently have to involve extraordinary lexicalization. This is incompatible with any notion that the syntax is driven by the lexicon. Otherwise we have to posit entirely different mechanisms for the characterization of semantic relations in English and Japanese, and between English subjects and ‘objects’ and other manifestations of such relations.

Even in English, independent functors raise a problem for configurational approaches, as we have seen. As complements, all such functor phrases have a single configurationally defined grammatical relation—which was what led to the inconsistency involved in Chomsky’s (1965) ‘Place’ and ‘Time’ nodes. And the syntax of all these phrases is not equivalent. Again, any differentiation of these phrases configurationally would have to enhance considerably the ‘abstractness’ of the syntactic representation. In Japanese this would involve all complements (and possibly the subject—though its status raises a number of further issues).

Circumstantials, such as the final functor phrase in (26a), introduce yet another problem for this tradition, and for UTAH. This is in addition to the problem that, in English, for instance, they are mostly associated with an independent functor, a preposition, and (though configurationally distinguishable from complements) thus replicate among themselves the situation found with such complements. Circumstantials are not even subcategorized for; their syntax involves modification. It is they who induce the modificational structure that was shown in (26b) above. Modification may be distinguishable configurationally (from complementation), but the configuration is imposed by the circumstantial functor (or modifying categories in general).

It seems clear, on several grounds, that the utility of UTAH is diminished by adoption of the view of ‘deep structure’ envisaged in Chomsky (1965). The modest ‘abstractness’ of traditional ‘deep structure’ would have to be spectacularly increased in order to avoid positing instead even a traditional ‘case grammar’, which was roughly of the same order of derivational ‘abstractness’ (though not ‘abstract’ in the sense of ‘not grounded in semantics’) as the grammar it sought to replace. And this is indeed what has happened—several times. This is despite the fact that even the Aspects grammar and the Fillmorean were already too ‘abstract’. We turn to the undesirability of such developments in ‘abstractress’ in the subsections that immediately follow.

9.3.2 ‘Abstract syntax’ syndrome I: ‘generative semantics’

At various points in the development of transformational grammar there has been espoused an ‘abstract syntax’ involving some form of ‘lexical decomposition’, the attribution of internal syntactic structure to (the derivation of) lexical items. Such proposals offer another route for dispensing with semantic...
relations in the syntax. However, many of the same objections to this apply as are associated with ‘autonomous’ treatments lacking such ‘abstractness’. And they also introduce other unwelcome properties.

In the late 1960s and early 1970s the development of ‘abstract syntax’ was associated with the formulation of what came to be called ‘generative semantics’. Here I begin this brief look at ‘abstract syntaxes’ by concentrating on the ‘abstractness’ that resulted from the adoption at that time of the notion that there is a ‘pre-lexical syntax’ that is homogeneous in many of its properties with ‘post-lexical syntax’.

As is, or was, familiar, one area where such ideas were exploited most explicitly was in the description of lexical and converted ‘causatives’, such as are exemplified in (59a) and (b) respectively:

(59)  a. John killed Bill
      b. The girl opened the door

The verbs are distinguished by lacking or having an identical non-causative congener. But McCawley (for example 1970; 1971) and others nevertheless argued that these lexical items in sentences such as (59) share a syntactic derivation, and they label a tree structure dominated by a single node, as in the case (59a), shown in (60a):

(60)  a. 

```
      S
     / \  
    x   y
   / \
  /   \
Cause Become Not Alive
```

b. 

```
      S
     /  
   x   S
  /  /  
Cause Become S S
  / \
 /   
Not S
  / \
 /   
Alive y
```
‘x’ and ‘y’ would be represented by John and Bill respectively in (59a). (60a), where kill is inserted with respect to the single-rooted configuration whose terminal nodes are Cause, Become, Not, and Alive, is derived from (60b), which is unlexicalized. The derivation crucially includes three pre-lexical applications of ‘predicate raising’, which cyclically raises ‘predicates’ into the superordinate sentence. See, for example, McCawley (1970: fig. 8) for more details.

I do not attempt here to survey the range of such analyses that were offered in the 1970s and beyond; but one might note Kastovsky (1973) and Lipka (1976), who are critical of the alleged failure of ‘case grammar’ to allow a unified description of lexical and syntactic causatives. This kind of approach had an influence, however, on one strand of development in ‘case grammar’, such as is represented by Anderson (1972) or, perhaps to a lesser extent, Anderson (1977), criticized in this respect from a strongly ‘lexicalist’ perspective in Starosta (1981).

Structures like that in (60b) again essentially eliminate the discriminatory function of participant roles, since each predicate has only one (non-predicative) argument, whose role can be identified by the semantic class of the predicate. But post-lexically, at least, in such a framework, there remain the motivations we have just been looking at for the presence of semantic relations.

Moreover, it now seems clear that one can provide for the linguistically relevant properties of ‘causatives’ without recourse to the whole apparatus of transformational operations and abstract structures remote from the forms described. I shall argue that these properties can be characterized in terms of the notion of ‘complex categories’ whose development we have been looking at. But first let me comment on why I have described the properties of ‘causatives’ to be addressed as ‘linguistically relevant’.

The tree in (60b) is intended as a representation (of the structural aspects) of the meaning of (59a). As such it is couched in the notation of a ‘natural logic’ (Lakoff 1972), if it is to fulfil the envisaged requirements of a semantic representation. And its presence in the syntax must be accommodated not merely by means of conventional ‘transformational’ mutations but also, apparently, by adjustments of ‘logical’ categories in order to match the traditional distributionally established syntactic categories. There is a discrepancy in representation: the recurrent distributionally salient categories, such as verb, noun, and adjective, do not match the categories of the ‘logic’. This may be simply because a ‘natural logic’ serves not just language but also other mental functions, despite Lakoff’s attachment of it specifically to language; and this may be reflected in its character. Or it may be that there are ‘natural
logics' closer to the overt forms of language in the representations they provide. But it may be that a 'natural logic' is not part of grammar, though it is deployed in our use of it, and of other capacities.

This categorial mismatch meant, indeed, that the development of 'generative semantics' was accompanied by a range of papers entitled something like 'Xs as Ys', where X and Y are 'traditional' syntactic categories (for example Postal 1966; Bach 1968; Ross 1969a; 1969b; Lakoff 1965: app. A). It was argued that 'traditional' categorizations involved over- or ill-di
erentiation. This was argued on distributional grounds, but the effect was to render syntactic categorization closer to the demands of a 'natural logic'. However, the distributional motivations for these reshapings, and particularly 'conflations', have not generally been found to be convincing (see for example Schachter 1973), though Ross's (1969a) grouping of 'auxiliary' with 'verb' has some plausibility; in Chapter 10 we return to this and to the status of nouns, verbs, and adjectives.

The representations developed within 'case grammar' are not semantic, or 'logical' representations; they are constructed out of syntactic categories. These categories, it is argued in the work described in the next chapter, are not autonomous, however. They, like the 'cases'/functors (the only category we have looked at in any detail so far), are grounded in semantics; and their semantic character determines the syntax of the semantically prototypical members of the category. They are thus in principle closer to the demands of a 'natural logic', but they are not necessarily logical categories. The categories invoked are essentially the 'traditional' ones, though, as is already evident from the discussion in §8.2 on functional categories, some novel groupings and dependencies may be proposed. The representations in this respect are less 'abstract' than those advocated in 'generative semantics', in the sense of distinct from rather basic distributional observations, and increasingly have come to involve minimal syntactic apparatus.

In Chapter 11 we look at work which suggests another aspect of the absence of 'abstractness', that involving the invocation of 'transformations' or their equivalent, post-lexically as well as pre-lexically. At this point (in the next subsection), I want to look in a preliminary way at how we might accommodate 'pre-lexical' structure lexically, essentially via lexical representations and redundancies relating possibly complex categories of the kind we have already encountered. As a prelude to §9.3.3, as well as a conclusion to the present subsection, let us spell out something of the range of 'causative' constructions to be taken account of by any proposal in this area.

We can differentiate various classes of 'causative construction' in terms of how much of their content is lexically determined and covert. These range at
least from (59a) and then (59b), at one extreme, to the Turkish morphological (affixal in this case) ‘causative’ of (61b) to the French ‘periphrasis’ of (62) to the freely syntactic construction of (63), at the other; here I have ranged these together for convenience of comparison:

(59) a. John killed Bill  
    b. The girl opened the door

(61) a. Hasan öl-dü  
      Hasan die-PST  
      (‘Hasan died’)  
    b. Ali Hasan-I öl-dür-dü  
      Ali Hasan:ACC die-CAUS-PST  
      (‘Ali killed Hasan’)

(62) Je ferai lire le livre à Nicole  
      I make:FUT read:INF the book to Nicole  
      (‘I shall make/let Nicole read the book’)  

(63) John caused Bill to die

(59a) is a fully lexical causative: the causative component is part of its lexical entry, and there is no indication of a morphological relationship. In (59b) there is no overt marking of a derivational relationship, but it plausibly involves addition of a causative component to the base intransitive verb open; it involves conversion (‘zero-derivation’ in one regrettable tradition). In (61b) we have an overt morphological derivation: öl-dür- is overtly based on öl-. All the structures in (59) and (61) are lexical, and at most any lexical relationship involved needs only the apparatus of category-modifying redundancies, though the results of these have syntactic consequences, as we shall see.

(62) and (63) clearly involve syntax. However, whereas (63) is a apparently a straightforward infinitive construction dependent on a simple lexical causative verb, (62) shows distinctive properties. In particular, what would be the subject of the lower verb when not subordinate appears as a post-verbal à-phrase; and clitic pronominal equivalents of the post-verbal phrases appear before the upper verb:

(64) Je le lui ferai lire  
      I it to.him make:FUT read:INF  
      (‘I shall make/let him read it’)  

Such constructions have been cited as evidence for post-lexical ‘predicate raising’—i.e. as evidence that this process is a ‘real transformation’, and not
limited to pre-lexical application. Seuren (1974a: 20) points to the parallelism between (65a) and (65b):

(65) a. Je ferai voir la lettre à Jean
    I make:FUT see:INF the letter to John
    (‘I shall make/let John see the letter’)

b. Je montrerai la lettre à Jean
    I show:FUT the letter to John
    (‘I shall show the letter to John’)

There is a parallelism in the form and distribution of arguments.

However, in the case of the ‘periphrastic’, the ‘raising’ doesn’t seem to create a unit as ‘tight’ as a word; the sequence is readily interruptible, as illustrated in

(66) a. Je ne ferai pas partir Georges
    I not make:FUT not leave:INF George
    (‘I shall not make/let George leave’)

b. Je fais toujours partir Georges
    I make always leave George
    (‘I always make/let George leave’)

Of course, one could claim that this reflects a difference between ‘pre-lexical’ and ‘post-lexical’ application, to do, say, with the creation of an ‘island’ by lexical insertion. But this discrepancy then weakens any evidence for homology in what happens ‘pre-’ and ‘post-’lexically. And it seems no great advantage, anyway, to extend the unwarranted power of transformations to both these domains.

At any rate, from the point of view taken here, with (62) we seem to be in the syntactic rather than the lexical domain. There remains to be explained the untypical syntax, however. This is associated with a lexical restriction; so that the ‘periphrastic’ is ‘intermediate’ between lexicon and syntax. It is unnecessary to appeal to ‘post-lexical predicate-raising’ in French. I shall clarify this shortly.

9.3.3 A lexical account of causative constructions

Let us take as a starting-point the proposal concerning overtly morphological causatives made by Anderson (2005a). But for discussions leading to this see also Anderson (1971b: ch. 11; 1977: §2.7; 1992: §4.3; 1997: §3.5), Böhmer (1981; 1982: §3.3.4). Anderson (2005a) suggests that there are essentially two components to causative formation, which I shall spell out separately here in a
slightly modified form; this will be important when we come to look at ‘periphrastic’ causatives (not considered in that work). We can formulate the two parts, essentially, for the moment, after Anderson (2005a: §4), as (67):

\[
\begin{align*}
(67) & \text{ Causativization} \\
& \text{a. } [V/\{\text{ }\}] \Rightarrow [V\{\text{pat}/\{\text{loc}\}\}]
\end{align*}
\]

\[
[V/\{\text{erg}\}]
\]

\[
| \\
\]

\[
\begin{align*}
& \text{b. } [V/\{\text{loc}\}] \Rightarrow [V\{\text{pat}/\{\text{loc}\}\}]
\end{align*}
\]

where ‘\{\text{ }\}’ is highest role on the subject selection hierarchy

Part (a) adds locative to the hierarchically highest role of the verb and marks the verb as a ‘pat(ient)’ one, and (b) subjoins the base category to an agentive one, an absorption. (67) regards the agentive as ‘intransitive’.

(67) anticipates a syntactic connection in the form of appeal to the subject-selection hierarchy; it is not purely morphology-internal. This would make it rather exceptional. This property differentiates causativization from the typical derivational relationships considered in §4.2.2, which, though often analysed as involving distinctions between subject and ‘object’, are there analysed as ignoring distinctions in grammatical relation. (67a), however, envisages the development in the syntax of a principal relation, though it still doesn’t appeal to distinctions among grammatical relations. This appeal to the subject-selection hierarchy (or its equivalent) by lexical regularity may reflect the syntactic origins of morphological causative structures. However, in §12.2.3 I look at a reinterpretation of Anderson’s (2005a) proposal concerning causatives that eliminates this discrepancy. But let us now look at the application of (67).

In the case of (61b) the effect of (67a) is to produce an {abs,loc}. This is marked in (61b) by an accusative inflection, rather than being ‘bare’, as (61a) (Comrie 1985a); it is outranked as potential subject by the ergative. In the case of the Turkish ‘transitive’ in (68) the effect is to add locative to the {erg} of (68a), giving {erg, loc}, marked morphologically in (68b) as a dative, outranked as potential subject by the simple, causative ergative:

\[
\begin{align*}
(68) & \text{a. Kasap } \text{et-i kes-ti} \\
& \text{butcher meat- } \text{ACC cut-PST} \\
& \text{('The butcher cut the meat')} \\
\end{align*}
\]
b. Hasan kasab-a et-i kes-tir-di
Hasan butcher-DAT meat-ACC cut-CAUS-PST
(‘Hasan had the butcher cut the meat’)

The accusative-marked {abs}, also outranked here, is unchanged as a result of causativization.

In both cases the result is a ‘patient’ in the sense of §6.2, i.e. as defined by (6.33), which includes what I called contactives ({abs,loc}) and experiencers ({erg,loc}):

(6.33) \textit{Patient} = \textit{non-loc,loc}

Compare the simple and derived representations for the base verbs in (61) and (68) suggested in (69):

(69) Base Derived
\begin{itemize}
\item a. \{V/\{abs\}\} \quad \{V/\{pat\}/\{abs,loc\}\} \quad \textit{öl-(dür-)}
\item b. \{V/\{abs\}/\{erg\}\} \quad \{V/\{pat\}/\{abs\}/\{erg,loc\}\} \quad \textit{kes-(tir-)}
\end{itemize}

These seem to be semantically appropriate, and the addition of locative gives us representations that are consistent with the use elsewhere of the inflections that realize these roles.

With base transitives with an {erg,loc} valency such as the Xhosa (70) (Cooper 1976: 314), (67a) applies vacuously as far as addition of locative goes, since the highest argument is already {erg,loc}, and only patient is added:

(70) Ndi- bon-is-e umfundisi iincwadi
I-see-CAUS-pst teacher books
(‘I showed the teacher the books’)

I am assuming that \textit{umfundisi}, as with the corresponding item in the English gloss, occupies an {erg,loc} position, the following nominal being {abs}. In all these instances causativization (b) subjoins the category derived by causativization (a) to an agentive verb.

In a number of ways the situation is much more complicated than this (see for example the survey in Song (1996), and the contributions to Shibatani (1976)), as acknowledged by Anderson (2005a); but I think (67) identifies the core of causativization. We return to some of the complications later in this section.

This analysis of causativization extends straightforwardly to converted causatives, though in English causative conversions appear to be limited to intransitive bases such as non-agentive \textit{open} in (59b) and the agentive in (71a)—on which (71b) is based:
Lexical causatives, where we find a different range of possibilities, do not have a corresponding (unconverted) base form, but the configurations that would result from (67) are apparently appropriate for them too. That is, we can (for instance) associate the verb in (59a) with the lexical representation in (72):

(72)  \{V/\text{erg}\} \\
|  \\
\{V/\text{pat}/\{\text{abs,loc}\}\}

However, with such lexical causatives there are no subjoined agentive predicates, and subjoined ergative Vs are thus limited to \{\text{erg,loc}\}s, as in (3.8b), where addition of locative would be vacuous:

(3.8)  a. John gave the books to my brother 
       b. John gave my brother the books

These English limitations may reflect more general restrictions on complex verbal categories whose complexity is not signalled in overt morphology.

I’ve included (3.8a) here, given that it shares a verb and various restrictions with (3.8b). However, Anderson (1977: §2.7.3; 1978) argues that whereas the \{\text{loc}\} in (3.8.b) is also ergative, that in (3.8.a) is a simple \{\text{loc,goal}\}. A semantic consequence of this is not always apparent with all such verbs, and in all examples of these; we may have some ‘grammaticalization’ here. But the distinction is relatively transparent in (73b) vs. (73a):

(73)  a. She taught Greek to Bill 
       b. She taught Bill Greek 
       c. She taught Greek to an empty room 
       d. *She taught an empty room Greek

It is only in the (b) example here that the combination with ergative gives the (goal) \{\text{loc}\} represented by \text{to} in (73a) an interpretation as a patient, in this instance an ‘experimenter’. Only in (73b) is the \{\text{loc}\} necessarily ‘involved’, or ‘affected’ (cf. Green 1974; S.R. Anderson 1977). This emerges rather starkly from the contrary acceptabilities of the sentences in (73c, d): a sentence like (73d) can be made sense of only in some fairy-tale context. In (3.8a), for instance, the causative locative is added to the \{\text{abs}\} the books.

I want to move on to look briefly now at ‘causative’ constructions in syntax. But let me finally on lexical causatives comment on the non-causative sub-
parts of the representations in (60) suggested by McCawley. If there is linguistic motivation for components corresponding to the lower sentence nodes in this representation for *kill*, then the simple lexical mechanism I’ve illustrated for the derivation of causatives is again sufficient to allow for the inclusion of the equivalent of these in lexical representations. This mechanism does not involve transformational operations; it is simply inappropriate to use the massive power of such syntactic devices in the derivation of lexical structure.

Consider now the English syntactic ‘causative’ in (63) above. The ‘causative’ interpretation here is associated with the superordinate verb; and it governs an unexceptionable infinitive construction in the same way as other classes of verb. Certainly there are some ‘quirks’ to be found with the class of ‘causative’ verbs in English (Anderson 2005d), the most familiar of which is perhaps the difference in the infinitive forms in (74) and (75):

(74) a. He let the butler leave
   b. He made the butler leave
   c. He had the butler leave

(75) a. He allowed the butler to leave
   b. He caused the butler to leave
   c. He got the butler to leave

And even the individual verbs in these groups show idiosyncrasies, as illustrated by (76):

(76) a. He allowed the butler to be replaced
   b. He caused the butler to be replaced
   c. He got the butler *to be replaced

In (76c) both *be* and *to* must be absent on the obvious reading. However, there is nothing corresponding to the marked and generalized departure from clause structure associated with the French ‘periphrastic’ causative that is illustrated by (62) above. Particularly salient is the position and marking of the argument of *lire* that is highest on the subject-selection hierarchy.

I shall suggest here, in terms of Anderson’s (2005a) proposal concerning morphological causatives, that this results from the lower verb in such French sentences having undergone part (a) of (67) but not (b). Let us now look at the motivations for such a suggestion.

What I’m calling the French ‘periphrastic’ causative shares a number of properties with morphological causatives such as the Turkish. Compare with Turkish (61) and (68), respectively, the French of (62), just cited, and the
examples of (66)—if for the moment we ignore the interruptions of the causative sequence illustrated therein—or the sentence in (77):

(61) a. Hasan öl- dü
    Hasan die- PST
    ('Hasan died')

   b. Ali Hasan-ı öl-dür- dü
    Ali Hasan-acc die-cause- past
    ('Ali killed Hasan')

(68) a. Kasap et- i kes-ti
    butcher meat- ACC cut-PST
    ('The butcher cut the meat')

   b. Hasan kasap- a et- i kes-tir- di
    Hasan butcher- DAT meat- ACC cut- CAUS- pst
    ('Hasan had the butcher cut the meat')

(77) Il fait fondre la neige
    it makes melt-INF the snow
    ('It makes the snow melt')

The lower verb in (77) is ‘intransitive’, and, like ‘intransitive’-based (68), what would be its subject in an independent construction is ‘object’; the lower verb in (62) is ‘transitive’, and its finite subject bears a marker equivalent to the Turkish dative inflexion, as a marker of \{erg,loc\}—though (as already noted) à in French shows a lot of neutralization. The ‘dative-like’ status of such arguments is perhaps clearer in (64):

(64) Je le lui ferai lire
    I it to.him make:FUT read-INF
    ('I shall make/let him read it')

Lui, unlike à, is not also a manifestation of general goal locative. I’m not concerned here with the so-called ‘clitic-climbing’ evident in (64); this seems to be a feature of verbal ‘periphrases’ in French (and elsewhere).

This disposition of arguments is what we would expect if the lower verbs in (62), (64), and (77) have undergone part (a) of (67): the ‘object’ in (77) is \{abs,loc\}, and the hierarchically highest final phrase in (62/64) is \{erg,loc\}. These verbs are lexically derived verbs differing from their bases in the addition of locative to the role highest on the subject selection hierarchy. But they have not undergone part (b) of (67); they are not causative verbs.

Moreover, as with the dependent part of other ‘periphrases’ (such as passive participles—§9.2), these derived verbs have lost the capacity to undergo (47)
finiteness formation. This means that the (non-circumstantial) occurrence in a finite predication of these forms depends on the presence of some item which is subcategorized for such a form, such as the copula in the case of participles. This is what characterizes the French derived verbs in (62), (64), and (77), as reflected in their morphology.

As derived verbs, the French verbs have the extended representations in (78), for derived pat(ient) verbs:

\[
(78) \quad \{V[\text{pat}]/\{\text{non-loc,loc}\}\}
\]

A verb with such a specification cannot undergo (67b), the second part of causativization, either. Its occurrence depends on sanctioning by a finite verb or a subordinate of a finite verb. It is licensed only by verbs that are subcategorized for ‘\{V[\text{pat}]\}’, such as those in (62), (66) and (77):

\[
(79) \quad \text{Faire} = \{V/\{\text{erg}\}, \{V[\text{pat}]\}\}
\]

This gives, in the relevant respects, configurations like (80) as a representation for (77) and the like:

\[
(80)
\]

Various aspects of this representation again anticipate the developments discussed in the following chapters, such as the role of the unsubcategorized-for \{abs\} dependent on the \{T\}. What is important at this point is that it is only by virtue of satisfying the valency of faire that the derived verb represented by the infinitive can participate in the participant syntax. This is typical of ‘periphrases’.

As we have seen, Seuren (1974: 20) argues that the French sentences in (81a) and (81b), involving respectively a ‘periphrastic’ and a lexical causative, are
synonymous, and that on a ‘generative semantic’ account both ‘datives’ would have a transformational source:

(81) a. Je ferai voir la lettre à Jean
    I make:FUT see:INF the letter to John
    (‘I shall show the letter to John’)

b. Je montrerai la lettre à Jean
    I show:FUT the letter to John
    (‘I shall show the letter to John’)

But:

In terms of the Aspects-theory, however, one would be forced to maintain that, although the dative under faire voir is the result of a transformational process, the one under montrer occupies a selectional ‘slot’ defined in the lexicon for that verb. Since the situation is the same for a large number of verbs which take the dative and are semantically decomposable into ‘cause to . . .’ or ‘allow to . . .’, the Aspects-theory clearly involves a loss of generality in syntactic description. (Seuren 1974: 20)

Whatever the alleged consequences for the ‘Aspects-theory’, in terms of the present account, both ‘datives’ fill the same ‘slot’ in the valency of the verb. The only difference is that, though that in (81a) is associated with a derived ‘patient’ infinitive, like that in (80) (but with [V/erg,loc] as the specification for the lower V), that in (81b) is associated with a lexical causative of the (relevant parts of) structure (82):

\[
\begin{align*}
(82) & \quad \{V/\{\text{erg}\}\} \\
& \quad \quad \ | \\
& \quad \quad \quad \{V/\{\text{pat}/\{\text{erg,loc}\}\}\{\text{abs}\}\}
\end{align*}
\]

And this seems to me entirely appropriate: dative marking in both instances is associated with the structure resulting from (67a).

There is a further widespread phenomenon appertaining to causatives that should be accounted for by any theory of their structure. And this involves the recognition that some causative structures display incorporation and apposition. This is how I interpret the second of the French sentences in (83) (Hyman and Zimmer 1976: 199–200):

(83) a. J’ai fait nettoyer les toilettes au général
    I have made clean the toilets to the general
    (‘I made the general clean the toilets’)

b. J’ai fait nettoyer les toilettes par le général
    I have made clean the toilets by the general
    (‘I had the general clean the toilets’)

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Both (83a) and (83b) show the application of part (a) of causativization (67), but in addition in (83b) the causee argument has also been incorporated, as is the ‘agent’ in passives. Indeed, the final phrase in (83b) has the par that marks the apposed (‘agentive’) path phrase in French passives; and, as in the passive, this phrase is optional.

But (83b) is not a passive. As Cole (1983: 129–30) observes, the passive par phrase and the causative are not found with the same sets of verbs:

(84) a. Le capitaine lui a fait tirer dessus par les gardes
   the captain to.him has made shoot upon by the guards
   ('The captain had the guards shoot at him')

   b. *Il a été tiré dessus par les gardes
      He has been shot upon by the guards
      ('He was shot at by the guards')

(85) a. *Antoine fera voir ce film par les enfants
    Antony will.make see this film by the children
    ('Antony will have the children see this film')

   b. Le film a été vu par les enfants
      the film has been seen by the children
      ('The film was seen by the children')

(84b) is not a viable passive, while the causative of (84a) is; and, conversely, the passivizable ‘perception’ verb of (85b) cannot appear in a causative with a par-phrase. And there are languages, such as Finnish, which lack a passive, but have (in this case, morphological) causatives corresponding to the French par variant (Comrie 1976b: 273).

Such discrepancies are not surprising on the present account: the par-phrase of passives is simply apposed to a verb with an incorporated {erg} (which may also be locative—as in (85b)); while the causative par-phrase is apposed to a {pat} verb (with incorporated {erg,loc}). These are different constructions: passive verbs cannot be formed in French if the base takes only a complement with an overt functor, as in (84b); whereas the {patient} verb form cannot incorporate an {erg,loc} that is not the result of causativization, which excludes (85a).

This is not apparent from the representations of the apposed circumstantial functors, but it is signalled by the presence or absence of passive morphology that reflects the presence of {pass} and by the {pat} feature of the infinitive. Compare (33), formulated for English passive by, but generalizable to the par of the French passive, with causative par, whose requirements are formulated in (86):
Par = \{ F[\text{loc}\{\text{src,goal}\}] \}\{ V[\text{abs,}\{\text{erg}\}]\} \} \text{ (‘agentive’)}
\begin{array}{l}
\text{ F[\text{erg}] } \\
\text{ D_i } \\
\end{array}

Par = \{ F[\text{loc}\{\text{src,goal}\}] \}\{ V[\text{pat}/[\text{abs},\{\text{erg}\}]\} \} \text{ (‘causee’)}
\begin{array}{l}
\text{ F[\text{erg,loc}] } \\
\text{ D_i } \\
\end{array}

(87) illustrates the ‘ordinary’ concrete spatial path use of \textit{par}, which of course shares with the \textit{par} of (33‘) and (86) the basic functor specification and status as a circumstantial:

(87) Notre chemin passe par le bois
\begin{flushleft}
our way passes through the wood
\end{flushleft}
\begin{flushright}
(‘Our way lies through the wood’)
\end{flushright}

(For discussion of this usage see Aurnague 2000.)

The morphological causative of Turkish shows a similar option. The causativization of the ditransitive (88a) may be either (88b), with marking of the causee as dative, or (88c), with marking as oblique (Comrie 1985a: 340–41):

a. Müdür Hasan-a mektub-u göster-dı
\begin{flushleft}
director Hasan-DAT letter-ACC show-PST
\end{flushleft}
\begin{flushright}
(‘The director showed the letter to Hasan’)
\end{flushright}

b. Dişçi müdür-e mektub-u Hasan-a göster-t-ti
\begin{flushleft}
dentist director-DAT letter-ACC Hasan-DAT show-CAUS-PST
\end{flushleft}
\begin{flushright}
(‘The dentist made the director show the letter to Hasan’)
\end{flushright}

c. Dişçi Hasan-a mektub-u müdür tarafından göster-t-ti
\begin{flushleft}
dentist Hasan-DAT letter-ACC director by show-CAUS-PST
\end{flushleft}
\begin{flushright}
(‘The dentist made the director show the letter to Hasan’)
\end{flushright}

The word order in (88b), with two datives, where the first is the causee, reflects the hierarchization of the two verbal categories in (88b, c). The verb \textit{görə-t-} is a lexical causative; indeed it is an irregularly marked morphological causative, as shown in (89a), where the \{\text{erg,loc}\} is realized as the dative, the absolutive as accusative:
(89) a. \{V/\{erg\},\{V\}\}
   |   \{V/\{pat\}/\{abs\}/\{erg,loc\}\}\n
b. \{V/\{erg\},\{V\}\}
   |   \{V/\{pat\}/\{erg,loc\},\{V\}\}\n   |   \{V/\{pat\}/\{abs\}/\{erg,lov\}\}\n
The lower V in (89a) is marked as \{pat\}, and it is a directional (though I haven’t spelled this out) whose highest role has had locative added (vacuously) to it—
‘vacuously’ because as a perception predicator it is already an experiencer. The
representation in (89b) is for the derived causative (of the lexical causative) in
(88b). The causee \{erg,loc\} of the topmost verb is hierarchically superior to the
causee associated with the lexical causative of (89a), embedded in (89b); this,
as noted, is marked positionally in (88c), where the upper causee takes
precedence. In (88c), of course, since the upper causee had been ‘incorporated’
and has the tarafından-phrase apposed to it, the lower causee is not ‘displaced’.
(For further discussion see Anderson (2004a: §3.2).)

Recognition that the lexical domain is not governed by rules of syntax but
shows internal structure that may impinge on the syntax enables us to allow
for differences between lexical, including morphologically marked, causatives
and syntactic causatives, while not inhibiting the expression of what is in
common. Moreover, we are able in relation to ‘periphrastic’ constructions,
such as the French, to recognize the interaction between the two domains,
involving lexical blocking of syntactic possibilities compensated for by sub-
categorization of the ‘periphrastic’ governor.

9.3.4 ‘Abstract syntax’ syndrome II: ‘argument structure’

On various grounds, then, it seems to me that the account offered here of the
various causative constructions, based on the analysis of Anderson (2005a), is
preferable to the ‘abstract syntax’ approach to lexical causatives. It is also, for
many of the same reasons, to be preferred to another resurgence of a (perhaps
milder) form of ‘abstract syntax’ that came into circulation as the ‘clause
union’ or ‘clause merger’ analysis of causatives (for example Aissen 1979;
Rosen 1990). As with the developments associated with ‘generative semantics’,
such accounts involve undesirable and unnecessary mutilations of
syntactic structures in order to accommodate them to the dimensions of the
morphology.
'Abstract syntax' is a tenacious tempt(ess), however. Even in the tradition that emanates (obviously at some remove) from a fairly strong 'lexicalist' position (as espoused in Chomsky (1970) etc.), there have been recent serious outbreaks of 'abstractness'.

Consider the structures proposed by Hale and Keyser (2002: §5.1) in their analysis of 'causatives' (§5.5). They assign to sentences like (90) the relevant partial structure in (91)—for lower in (90c), in this instance:

(90) a. The storm broke hundreds of windows
    b. My fumbling at the keyboard cleared the screen
    c. Competition lowers prices
    d. Loose lips sink ships

(91) \[ \text{V} \] \[ \text{V} \] \[ \text{DP} \] \[ \text{V} \] \[ \text{A} \]

\[ \text{er} \]

\[ \text{low} \]

('DP' = 'determiner phrase'). Concerning (91) Hale and Keyser (2002: 176) say:

...the upper [= uppermost terminal—JMA] V is utterly empty, except for the morphosyntactic category (part of speech) V. It has no 'meaning'. It is not, for example a 'causative' verb like English make, cause or have. And it does not define a predicate that requires, suggests or implicates agency or volition on the part of its subject. On the other hand, it is obvious that a sentence using one of the transitive verbs in [(90)] involves the phenomenon of 'cause'. The entity denoted by the subject is in a clear sense 'the cause' of the eventuality described in the predicate; ... There is no sense of Agency here, only of 'cause'. ... We assume that this 'cause' interpretation is simply the normal interpretation of the configuration \[ [V_1, V_2] \], where \( V_1 \) heads the (a)-type configuration [head complement inside head complement-JMA] and is the unmarked empty verb, and \( V_2 \) is a verbal construction of one sort or another appearing as the complement of \( V_1 \).

The motivations for such a contorted analysis of 'causatives', involving a verb that is both phonologically and semantically void, are unclear.

Hale and Keyser go on to say (pp. 176–7):

... 'cause' is an interpretation assigned to certain structures and, hence, is unlike the 'agent' or 'instrumental' component of verbs like cut, stab, smear, and so on. Verbs of
the *break* class can of course take agentive subjects or instrumentals, but they differ from the *cut* class in that ‘agent’ and ‘instrument’ are not inherent components in their lexical entries.

But this represents a fundamental misunderstanding of the nature of ‘agency’. Certainly, both *break* and *cut* verbs can take prototypical (human, volitional) agents, as in respectively (92a) and (b):

(92)  
  a. The vandals broke hundreds of windows  
  b. The vandals cut the power lines  
  c. The storm cut the power lines

But non-prototypical agents such as those in (90) can also occur with *cut*-class verbs, as in (92c). There seems to be no motivation for recognizing what Hale and Keyser (2002: 177) call a distinctive ‘pure cause’ interpretation associated with the verbs in (90).

Of course, Hale and Keyser are correct in observing that there are distinctions to be made here. A verb like *cut*, which is normally used of actions employing a tool of a more or less suitable kind, will tend for that reason to favour prototypical agentives, particularly those denoting humans. And Roger Böhme has reminded me of a range of other differences among these verbs, apart from the ‘ergativity’ (in the Lyons sense) of *break*, but not of *cut*. But these various differences do not warrant proliferation of distinctions in semantic relation and the consequent loss of generalization.

Hale and Keyser (2002: 177–8), basing themselves on the work (and judgements) of Oehrle (1976) and Pesetsky (1995: 193–4), also invoke the ambiguity of (93a) as showing the relevance of a ‘causative’ versus ‘agentive’ distinction, a distinction that is lacking in the *to*-construction of (93b), which is ‘agentive’ only:

(93)  
  a. Nixon gave Mailer a book  
  b. Nixon gave a book to Mailer  
  c. The interview gave Mailer a book  
  d. *The interview gave a book to Mailer  
  e. The interview gave a boost to his career

They cite (93c) and (93d) as showing that ‘cause subjects go well in the double-object construction… but for many speakers they do not go so well in the *to*-dative construction’ (2002: 177). However, what they call the ‘causative’ sense of (93a, c) involves a figuratively based idiom, whose properties do not generalize to the non-idiom use of these constructions, as illustrated by (93e), with non-prototypical (‘causative’) subject. The ambiguity of (93a)
provides no support for the structures Hale and Keyser assign to these constructions.

The analysis in (91), as glossed by Hale and Keyser, does not seem to be appropriate. Nor does the description of lexical relationships—including overt morphological—in terms of syntactic operations, something that is made transparent in the lower part of (91), where ‘V’ dominates an affix. The formulation of lexical (and morphological) structure and relations does not need this powerful syntactic apparatus.

It is striking that for very different motives both ‘generative semanticists’ and latter-day exponents of ‘argument structure’ are led to assign lexical structure by syntactic operations. For the ‘generative semanticists’, ‘abstract syntax’ was driven by ‘natural logic’; for the recent ‘abstract syntacticians’, part of the goal is the elimination of reference in the syntax to semantics. Crucially, this again tends towards the relegation of semantic relations to a defined status, on the basis of some strong form of UTAH. And this analysis substitutes abstract configurations for semantically-grounded elements. However, it is the presence of these latter elements that permits much simpler generalizations to be made, both in the syntax and in the lexicon.

Consider further, for example, the structure in (94b) proposed by Hale and Keyser (2002: §5.1) for the ‘double-object’ construction, such as we find in (94a):

(94) a. i gave the baby its bottle

```
(94) b. 
    V
     \   /
      V1  V
           \ /
             DP V
             \ /
               V2 V
               \ /
                 V
                 \ /
                   DP1
                   \ bottle
                  /  
                  V3  give
                 /    /
                DP2  DP2
                  \    \ baby
```

This structure (Hale and Keyser 2002: 163) involves several ‘empty terminal nodes’. *Give*, which is ‘intransitive’ (it doesn’t assign ‘abstract case’ to its complement), undergoes ‘head movement’, twice—first to V₂, then to V₁.
‘Baby’ in DP₂ similarly ‘raises’ to the ‘empty’ DP, where it can receive ‘abstract case’ from give in V₁. Part of the motivation for this is the observation that in both (95) and (96) the ‘secondary (depictive) predicates’ (adjuncts) are predicated of the ‘theme’ rather than the ‘goal’ (Bowers 1993):

(95)  a. I gave the bottle to the baby full  
     b. I handed the baby to its mother crying  
     c. *I gave the bottle to the baby crying

(96)  a. I gave the baby its bottle full  
     b. I handed the mother her baby crying  
     c. *I gave the baby its bottle crying

But this means that the motivation for this syntactic analysis is semantic, predicational; specifically, it concerns which semantic relation ‘secondary predicates’ are associated with. And this can be directly formulated in terms of the semantic relations, without recourse to ‘abstract syntax’.

Hale and Keyser observe (2002: 160) that ‘if we take the to-dative construction to be correctly represented by [(97)], then the secondary predication at issue here is of the higher of the two arguments’:

(97)  

And they go on to propose, on the basis of the parallels in (95, 96), that the ‘double-object’ construction likewise involves ‘a configuration in which the theme is higher than the goal’, as in (94). But, as observed, the generalization here is simply that these particular circumstantials share their argument with the absolutive (‘theme’) of the verb they are apposed to. There is more than this to the analysis of such constructions, but it has no need to invoke abstract syntactic configurations.

This generalization concerning the role of absolutive holds of all of Halliday’s (1967: §3) ‘attributives’, which are predicators attributed to the clause
element that he labels 'pivotal' or 'affected' (Halliday 1968: §8.2), and which include 'depictive attributives'; but it does not hold of what Halliday (1967: §3.5) calls 'conditionals', which are not necessarily attributed to absolutives (as illustrated by *She learned that young*, where the 'secondary predicator' is associated with an experiencer). For a more refined discussion of 'secondary predications' within a notional grammar, see particularly Böhm (2001).

Syntactic formulations of lexical relations are symptomatic of 'abstract syntax' syndrome (I speak as a—hopefully, former—victim). Also indicative is the manifestation by sufferers of a sensation of seeing things as other things, the 'X as Y' symptom. We can add to the earlier instances cited such more recent cases as: 'It is at least intuitively appealing to think of the structure of a prepositional projection as involving a kind of predication' (Hale and Keyser 2002: 8). (Note the 'intuitive' again.) But also characteristic of a serious outbreak is the experience of visions concerning 'invisible' syntactic operations, such as those relating 'overt' syntax and 'logical form'. This goes along with the envisaging of an interaction between 'Lexical insertion', or what Hale and Keyser (2002) call 'Vocabulary Insertion', and syntactic operations; so that, for instance, 'Vocabulary Insertion' can 'block conflation' (2002: 82). These more recent 'abstract syntacticians' may (have) subscribe(d) to the autonomy of syntax, but it's no longer clear what that might mean; and in most other respects their analyses recapitulate the early developments of what were to lead to 'generative semantics'; and do not markedly differ in spirit and practice from the proposals of 'abstract syntax' embodied in G. Lakoff (1965) and R. Lakoff (1968). The latter mainly differ from more recent manifestations of 'abstract syntax' in overtly assuming a semantic basis for syntactic categories.

Harley (2002) even resurrects a version, with modifications, of the 'generative semantic' analysis of lexical causatives, and argues that 'there is no reason not to analyze “kill x” as “make x dead”' (p. 21). The argument is unsound. The idea is that, if we analyse *kill* as involving a 'stative' predicator, then we can allow for the fact that both 'kill x' and 'make x dead' fail Fodor's tests, without sacrificing decomposition. But sentences like *John made Bill dead* are anomalous anyway, independently of Fodor's test; it is the 'monomorphic' status of *kill* that saves *John killed Bill*; whatever the internal structure of *kill* may be, there is no reason to suppose that it is syntactically complex. And Harley misrepresents the situation: 'Fodor 1970 wanted (and still wants) to believe that monomorphic lexical items must represent monomorphic concepts, i.e. there's no decomposition of concepts' (2002: 20). But Fodor's (1970) arguments (whatever he might 'want' now, and whatever the validity of
the ‘tests’) were aimed not at ‘decomposition of concepts’ but at syntactic decomposition of lexical items.

Perhaps the only hope for a permanent cure for the ‘abstract syntax’ condition is a long course of regulated ‘substance abuse’ therapy (pace Hale and Reiss (2000)), such as is outlined in Chapter 10. But some improvement might come from more acknowledgment that the current bout of ‘abstract syntax’ is not unprecedented—the lack of which acknowledgment among the linguistic community, and the extent of what should be acknowledged, Pullum (1996) documents in some detail; and the lack of it has now become egregious. Aside from that, clearly the original antidote didn’t work.

9.4 Conclusion

What unifies the diverse concerns of this chapter is attention to what is necessary to the articulation of functional argument structure beyond the set of semantic relations and constraints on their combination. Much of the present chapter has been ‘negative’, in that we have been looking at some extensions of the kind of grammatical apparatus envisaged so far in this work that seem to be unnecessary and undesirable. The first of these (§9.1) involved the addition of a ‘tier’ of ‘macro-roles’ to that of the roles defined by semantic relations. I have suggested that these are unnecessary given a proper articulation of the semantic relations, including in particular the abandonment of the ’0-criterion’ in favour of allowing combinations of semantic relations to define particular roles: so that the role experiencer, for instance, is a combination of ergative and locative. This relates to the second part of what in §5.2 I called Fillmore’s (1968a) ‘proto-theta-criterion’, which restricts each argument to a single relation. The necessary distinction seems to be between ‘role’ (a possible non-unary combination of relations) and ‘relation’, where the range of semantic relations is constrained by the localist theory, rather than between ‘macrorole’ and (non-macro) role or relation. Let us consider why.

Now, at various points in the discussion it has also become clear that it is not obvious that we should maintain the first part of Fillmore’s ‘criterion’. Thus, for instance, equative sentences such as (4.13) arguably contain two absolute arguments:

(4.13) a. The guy over there is my lover
       b. My lover is the guy over there

However, the distribution of the other relations seems to be more constrained. It may be that we can maintain something like this part of the ‘criterion’ (leaving absolutive aside) for the semantic relations associated with
individual, simplex predicates. Consider the lexical-causeative representation of (82), as discussed in §9.3.3:

\[
\begin{align*}
(82) & \quad \{V/\text{erg}\} \\
     & \quad \mid \\
     & \quad \{V/\text{pat}/\{\text{erg,loc}\}/\text{abs}\}
\end{align*}
\]

Ergative recurs here, but it is associated with different component predicates, which singly conform to the ‘criterion’. It is an interesting question whether the first of Fillmore’s restrictions can be maintained in this form, however:

*Semantic relation criterion*

Only one token of each semantic relation (except absolutive) is permitted per simplex predicate.

The exceptional character of the absolutive here is but one more indication of its special status. \{\text{loc}\{\text{goal}\}\} and \{\text{loc}\{\text{src}\}\} must be taken to constitute distinct relations.

Moreover, the whole complex in (82) conforms to what Anderson (1997: 252) calls the ‘role criterion’—here reformulated to point up the similarities to and differences from the semantic relation criterion:

*Role criterion*

Only one token of each role (except { absolutive}) is permitted per (possibly complex) predicate.

\{\text{erg}\} and \{\text{erg,loc}\} can co-occur in (82) because a different role is defined by the combinations. One consequence of causative formation is to avoid replication of the same role in relation to a complex predicate, at least in causatives of agentive transitive, as we can see by comparing (68a) and (68b):

\[
\begin{align*}
(68) & \quad \text{a. Kasap et-} & \quad \text{i kes-ti} \\
     & \quad \text{butcher meat- } & \quad \text{ACC cut-PST} \\
     & \quad \text{('The butcher cut the meat')} \\
     & \quad \text{b. Hasan kasab-} & \quad \text{a et-} & \quad \text{i kes-tir-} & \quad \text{di} \\
     & \quad \text{Hasan butcher- DAT meat- } & \quad \text{ACC cut-CAUS-} & \quad \text{PST} \\
     & \quad \text{('Hasan had the butcher cut the meat')}
\end{align*}
\]

Attachment, by part (67a) of causative formation, of locative to an \{\text{erg}\} avoids the violation of the role criterion that would arise once the superordinate predicate is added by part (67b). It remains to be seen, however, how generally the role criterion can be maintained over a range of complex predicates (cf. for example (88b)).
Causativization (67b) illustrates one respect in which the account of causatives given in §9.3.3 is incomplete. The upper V there apparently lacks an absolutive in its valency, and we have not appealed to such in the discussion of causatives. This is anomalous on the assumption that absolutive is universal in predications. We take this up in §12.2.3 in the course of an examination of the status and role of absolutives that are not subcategorized for.

Discussion of causatives takes us on to the second of the 'negative' conclusions drawn in this chapter, namely that lexical structure should not be submitted to syntax-based configurational elaborations, and in particular to derivations involving 'abstract syntax' (§9.3). It is only thus that an interestingly restrictive version of UTAH might be maintained and tested (§9.3.1). 'Abstract syntax', of whatever kind, allows for the deployment of a range of powerful and unnecessary operations involving movement, constituency building, empty categories, etc. However, lexical structures are amenable to description in terms of simply the building of complex categories out of components organized in paths of subjunctive dependency, including nodes labelled with semantic relations.

Whereas ‘macroroles’ were intended to supplement the usual semantic relations (even in their syntactic role, in some of this work), part of the goal of ‘abstract syntaxes’ has been to eliminate the semantic relations from syntactic relevance. But the consequence of ‘abstract syntax’ is to introduce into the lexicon, unnecessarily, those powerful transformational devices that are unnecessary even to the syntax (as we shall see in the chapters that follow). Inclusion of syntactic transformations in the grammar underlies the inherent instability of the transformational tradition—so that outbreaks of ‘abstract syntax’ are liable to recur.

The ‘case grammar’ work that we have looked at assumes that the lexicon and the syntax share categorization and dependency. But the lexicon drives the syntax, and its representations and the relationships between them do not invoke syntactic operations that presuppose potential linearization. Lexical entries and lexical structures generally are not linear; the categories are not linearized with respect to each other, except in the course of their possible morphological expression. Whatever lexical linearization there is in the form of affixation or compounding is governed by distinct principles (even if these structures have historically a syntactic source). Syntactic ‘metaphors’ invoking ‘movement’ in lexical structure, for instance, are inappropriate, and unnecessarily powerful in their consequences.

§9.3.3 offered some positive suggestions concerning the role of complex categories, a role which will assume some importance in relation to the developments presented in Part III. And §9.2 was concerned, also more
positively, with surveying proposals within the ‘case grammar’ tradition for the accommodation of circumstantials of different types. Basically, in terms of recent suggestions, a circumstantial, like other ‘modifiers’, looks for a node of a particular category to modify, and projects and attaches itself to a node of the same category as this node and which has the original node subjoined to it, as illustrated by (26b) (where the representation ignores the internal structure of keep). But the circumstantial may impose quite detailed requirements on the node it modifies, examples of which were examined in §9.2.

The resulting mechanism of circumstantiality seems to offer a fruitful extension of the capacities of functors (and other categories). To the extent that it is appropriate, it also makes attempts to eliminate functors from the syntax even more difficult without recourse to even more abstract categorizations and operations. Recall here, for instance, derivations in which the adverbial sentence in (98a) is derived from the complex structure involving the corresponding adjective:

\[(98) \quad \begin{align*}
  \text{a. John hangs from trees recklessly} \\
  \text{b. John is reckless in hanging from trees}
\end{align*}\]

(Lakoff 1965: app. F2); see too e.g. G. Lakoff (1968), on ‘instrumental adverbs’). If the analysis underlying (26b) is appropriate, it avoids such abstractness. And evidence for the role of circumstantials assumed in §9.2 confirms the view that semantic relations are not simply labels for arguments: in the case of circumstantials we have further evidence of a syntactic role for the functors beyond those which can be associated with participant relations (as for example in the formulation of ‘raising’, to which we return in Chapter 11).

Derived verbs may involve lexical absorption into a circumstantial as well as a complement, as in He sawed the wood, She always motors, etc. And part of the discussion of causatives involved recognition that in some instances the causee is incorporated and the verb may be accompanied by an appositive circumstantial, as in (83b) and (88b). Both these phenomena illustrate the possible complexity of lexical representations.

A further consequence of the presence in the lexicon of complex predicates of the types we have been looking at is that the subject selection hierarchy of §6.3—that is, (6.38)—can be further reduced:

\[(6.38) \quad \text{Subject selection hierarchy: erg > erg, > abs(,)\}}\]

We have already observed that the with-phrase in contactives, illustrated by (4.8), is a circumstantial, apposed to the absolutive subjoined by (44) contactive formation:
There is thus no need in such cases to preserve the distinction between combined and simple absolutive in the last term of the hierarchy.

Notice now that, since the \{erg,loc\} (Bill) of (73b), for example, is attached to a different (simple) predicator from the simple ergative (she), the distinction made between the first two terms in the hierarchy is unnecessary, if we assume the selection takes place with respect to individual (simple) predicators:

(73) a. She taught Greek to Bill
    b. She taught Bill Greek

The component predicators take the arguments in (99):

(99) a. \{\{erg\} \{\{abs\},\{loc\}\}\}
    b. \{\{erg\} \{\{erg,loc\},\{abs\}\}\}

The two ergatives are not in competition; they are attached to different predicators.

The hierarchy of subject selection reduces to (100), where the relations specified may be combined with another or not:

(100) Subject selection hierarchy: ergative > absolutive

This again assumes the universality of absolutive.

(100) also continues to ignore the problem presented by contain and the like, where a simple locative seems to outrank an absolutive, as well as some related problems. Also problematical is (6.20c) and the like, where, on a non-agentive formulation, the simple absolutive appears to outrank the post-verbal \{abs,loc\}:

(6.20) c. The ferry occupies that berth  simple locative

However, this was also incompatible with the previous hierarchy (6.38), which ranked combined absolutes above uncombined. We take all this up in §13.2.2.

In chapter 10 we confront the wider consequences of the semanticity of ‘case’, of functors: the importance of recognizing the grounding of syntactic categories in general. Also crucial to the characterization of functors is prototypicality—a notion which has already arisen, for example, in the discussion of some putative participant ‘instrumentals’ as non-prototypical agents. We shall find that with other categories than ‘case’, too, attention must
be given to prototypicality. Specifically, we shall find, putting these notions together, that it is only by looking at the behaviour of the semantically prototypical members of categories that there emerges an understanding of the basic syntax of the category. The distribution of non-prototypical members can be misleading—as §10.1.1 tries to show in relation to the proposals embodied in the familiar ‘X-bar’ theory of syntactic structure.
Part III
Case Grammar as a Notional Grammar
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Groundedness: The Typicality of Case

Grounding involves the assumption that the distribution of syntactic elements in the sentence and the distribution of sound elements in phonological units reflects the substance of these elements. The functor, like the ‘phoneme’ (or whatever one chooses to call the minimal contrastive unit in the phonology), is a grounded category: its prototypical members are semantically well defined, for example by the localist hypothesis. And its distribution reflects its semantic function as labeller of a role.

Confrontation with this brings us up to the third of our questions arising from the ‘case grammar’ developments, as introduced in Chapter 5:

(5.49) Consequences of case grammar
   \(\alpha\) the question of content
   \(\beta\) the question of category
   \(\gamma\) the question of consistency
   \(\delta\) the question of derivationality

The question is: is the functor, the category of ‘case’, unusual in this respect, in being grounded? Are syntactic categories consistently grounded? Work developing from the ‘case grammar’ tradition suggests that the function is not unusual in this respect; syntactic categories in general are grounded. And syntactic categories cannot be established purely on distributional grounds. What is relevant, and defining, is the distribution of semantically prototypical members of the category (cf. for example Anderson 2004a).

Of course, in particular languages the groundedness of syntactic elements may decline, both ontogenetically and phylogenetically. This emerges clearly from our look at neutralization and routinization of ‘case’ in Chapter 7. ‘Case’ is not isolated in this respect, though its role in the articulation of functional predicational structure makes it particularly susceptible to functionally inspired routinization (particularly the development of a grammatical relation). Other syntactic classes are associated with routinized patterns,
and they, particularly the lexical, also acquire non-prototypical members, of course.

If we regard the noun as prototypically an ‘entity’ label, a label for denotata that are perceived as discrete and stable, it is clear that nouns like war, fog, and power are scarcely fully stable and discrete. But the ontological properties of the classes impose themselves on even such as these untypical nouns: items that are distributionally nouns are perceived as entities, no matter how far they are from the prototype; and this is manifest in the syntactic restrictions on their occurrence, though their non-prototypicality may be associated with some deviant distribution, as we shall see.

Of course, grounding is not limited to the identification and basic syntax of the word classes. Some linear orderings of syntactic elements, for instance, seem to be rather obviously grounded in semantic distinctions not directly associated with a class as a whole. Thus, as is familiar, and as we have already observed (§2.2.3), in German comitative adverbs normally precede instruments (recall (223)). Such semantically grounded discriminations in word order are not uncommon.

As again already observed, one can simply choose to exclude such word order generalizations from the sphere of syntax. In this case, the syntax could treat these normal orders and any abnormal reversals of them as of equivalent status; and they would be distinguished in status by semantic interpretation. But the exclusion of these regularities is arbitrary, aside from satisfying the equally arbitrary assumption of the autonomy of syntax. Insofar as we find plausible the traditional circumscription of syntax as concerned, among other things, with the relative order of words, this strategy is suspect; it looks like a device to avoid disconfirmation of the syntactic autonomy principle. If syntax is defined solely by a theory that assumes autonomy, then the theory is irrefutable as an account of syntax in the sense in which alternative theories account for it, as well as in any traditional sense; we are responsible to, among other things, agreed understandings of what syntax comprises.

However, the area we are concerned with here—the identification and basic distribution of word classes—is resistant to all but the most desperate appeals to such an avoidance strategy. The category functor is not untypical of primary categories and word classes in terms of the necessary groundedness of any explanatory account of its distribution. What follows describes the kind of framework developed in various work published over the late 1980s and beyond, from Anderson (1989a; 1989b; 1991; 1992) through Anderson (1997) and Böhm (1998a; 1998b; 1999; 2000; 2001) to Anderson (2003; 2004a; 2004b 2004c). The presentations in §10.2, which try to render more explicit the conclusions concerning the groundedness of syntactic categories
The groundedness of word classes

What I have to describe here is from the general viewpoint not new; it is in the spirit of ‘traditional’, ‘notional’ grammars, a tradition now millennia old. The earlier grammars of case alluded to in Chapter 2 are notional grammars. Their notional assumptions were discounted by the ‘new grammarians’ (such as Fries (1952), in particular) as part of a general discrediting. But it is possible to escape some of the problems with the practice of many of these grammars, which seem to me to have principally to do with inconsistency and a vagueness coming from a failure to recognize non-prototypicality, rather than notionalism as such. Indeed, it can be argued that both the kinds of inflection associated with syntactic classes and their basic syntax—the properties on the basis of which we establish the different classes—are semantically grounded: they reflect the semantic character of prototypical members of the classes.

As anticipated in §9.3.2, we can usefully contrast the idea of ‘grounding’ with the ‘semantically based’ analyses emanating from ‘generative semantics’ (see especially such work as Lakoff 1971; 1972; McCawley 1970; 1971; 1972). These developments constituted what can be seen as an overreaction to autonomy; they did not just reject the autonomy of syntax, they also sacrificed even the distinctiveness of language that structuralism sought to establish. This distinctiveness, or ‘autonomy’, is formulated by Hjelmslev (1948a: p.v):

La linguistique structurale est un ensemble de recherches reposant sur une hypothèse selon laquelle il est scientifiquement légitime de décrire le langage comme étant essentiellement une entité autonome de dépendances internes, ou, en un mot, une structure.

The position adopted by the notional grammar developments of ‘case grammar’ is that the assumption of the autonomy of language must be tempered by recognition of groundedness of both phonology and syntax; but the categories invoked in linguistic descriptions are not themselves necessarily part of a system of logic, and they must reflect (particularly distributional) properties internal to language.

On the other hand, it is perhaps worth observing, or rather recalling and extending earlier discussion (cf. §§2.1.4, 2.2.3, Chapter 3 introduction), that the assumption that grammar is in general semantically grounded, as with the assumptions of a grammar of case, has more in common with views expressed...
in the tradition of 'philosophical grammars' which flowered particularly in the
seventeenth and eighteenth centuries than with the 'generative semanti-
cists'. A typical example is James Harris's *Hermes* (1751), where he attributes
semantic properties to the word classes: 'substance' for nouns, 'energy' for
verbs, combined with 'assertion' in the case of finite verbs, etc. Such ideas can
be traced back, particularly through Renaissance 'philosophical grammarians'
to the philosophers of classical Greece.

Lyons reasserts the viability of notional grammars in a form not too far
removed from the formulation of Jespersen (1924: 55) that he quotes in the
following passage (Lyons 1966: 210):

Notional grammar starts from the assumption that ‘there are some extra-lingual
categories which are independent of the more or less accidental facts of existing
languages’ and are ‘universal in so far as they are applicable to all languages, though
rarely expressed in them in a clear and unmistakable way’.

Lyons’s discussion assumes a transformational framework which makes a
distinction between ‘deep’ and ‘surface’ structure. But these assumptions are
not necessary to his argument; indeed, the argument is (it seems to me)
enhanced by the adoption of a more restrictive framework that does not
incorporate such assumptions.

Lyons distinguishes ‘two questions’ that tend to be confounded in discus-
sions of the identification of the ‘parts of speech’: ‘the first of these may be
described as the question of class-membership; and the second as that of
labelling the classes’ (1966: 210). The former question, he suggests, is resolved
distributionally, but the latter appeals to notional appropriateness of the label.
For instance, the label ‘noun’ is applicable in any language to that distribu-
tional class that includes elements denoting ‘things’, though the ‘thingness’ of
some members of the class may be in doubt. Subsequent discussions have
related the labelling as ‘noun’ to the existence of members that denote
prototypical ‘things’.

But, though in line with this recognition of groundedness, the work I shall
be looking at here makes a rather stronger claim than Lyons. There it is also
claimed that these prototypical members define a prototypical distribution
for nouns, for instance, one that may be departed from by non-prototypical
members, such as the derived nouns in (1) discussed by Jespersen (1924: 91–2):

(1) He moved astonishingly fast
    He moved with astonishing rapidity
    His movements were astonishingly rapid
    His movements astonished by their rapidity
    The rapidity of his movements was astonishing
The rapidity with which he moved astonished us
He astonished us by moving rapidly
He astonished us by his rapid movements
He astonished us by the rapidity of his movements

The distribution of nouns like *rapidity* and *movement* differs from that of basic nouns, like *boy*, in various ways, such as in showing, in the case of *movement*, verb-like complementation (recall the discussion in §9.2.4). Jespersen comments: ‘this is an extreme example’—associated, put in more recent terms, with non-prototypical members of these classes. And these are not necessarily morphologically marked as such.

Also relevant here, in relation to recent scepticism concerning notional grammar, is also McCawley’s observations concerning pairs like *like* and *fond*, which belong to different word classes despite being notionally similar. He suggests (1985: 670):

This particular example is . . . consistent with the possibility of general principles which use meaning to predict the part of speech, except that lexical items can differ idiosyncratically with regard to how they resolve conflicts among these principles.

The conflict here is between the preference of ‘two-place predicates’ for verbal status and of stativity for expression as an adjective. *Like* and *fond* resolve the conflict in different ways.

Both these sets of observations involve the recognition that not all members of a class will necessarily display to the full the notional character and the distributional restrictions of those core members which can be taken as most distinctive of the class. This means that distribution alone, though reference to it is necessary, is insufficient to establish not only the identity of the word class but also the defining distributional properties. Thus, distributional criteria are often carefully chosen to give the results wanted by syntacticians, which reflect, I suggest, notional intuitions; on the other hand, unconstrained use of distribution results in arbitrary analyses, and indeed in incompatible analyses which cannot be evaluated with respect to each other, because they depend on different distributional observations. I now want to illustrate the consequences of such claims.

10.1.1 Verbs and nouns
Let’s take the most obviously agreed-on syntactic categories, verb and noun, which seem to be distributionally distinguishable in all languages. It is inappropriate to assume that all the notional distinctions associated with different languages are universal; speakers of different languages may conceptualize aspects of experience in different ways. The categoriality of the verb/
noun distinction, and of the differential prototypical semantic properties, is apparently general, however. Languages recognize the syntactic categories 'noun' and 'verb' even if it is argued that the distinction is not lexically recognized in the form of different word classes with different members, such that some items are limited to occurrence as one category or the other (see §10.2.2 on the 'universality of noun/verb' controversy). The syntax of languages is based on the argument versus predicator distinction, N versus V.

It is also rather uncontroversial to say that the prototypical verb represents an event, the prototypical noun an entity, where 'entity' and 'event' are cognitive categories. Prototypical verbs are go, strike, give; prototypical nouns are girl, rock, sky. Events are inherently dynamic and relational; entities are stable and discrete (Anderson 1997: §2.1). Prototypical nouns belong to what Lyons (1977: 442) calls 'the class of first-order entities': 'physical objects are what we will call first-order entities.' These 'are such that they may be referred to, and properties may be ascribed to them, within the framework of what logicians refer to as first-order languages'.

He continues, on the subject of different orders of 'entities' (1977: 443):

The ontological status of what we will call second-order and third-order entities is more controversial... By second-order entities we shall mean events, processes, states-of-affairs, etc., which are located in time and which, in English, are said to occur or take place, rather than to exist; and by third-order entities we shall mean such abstract entities as propositions, which are outside space and time.

Nominal items denoting second-and third-order entities are not prototypical nouns. Often, indeed, they are overtly marked as being based on verbs, and sometimes adjectives.

These ontological properties associated with nouns and verbs relate directly to the morphosyntactic behaviour of members of these classes. It is thus not surprising that verbs attract morphological categories such as tense and voice, for instance: tense depends on dynamicness; voice on relationality, specifically variation in how the relations between verb and arguments are expressed; discreteness and stability of entities are associated with the classificatory morphology of nouns, i.e. systems of gender. Tensing of nouns and classification of verbs are not the norm.

The same holds for the distributional behaviour of verbs and nouns, with the different types of construction that they invoke: the relational verb takes complements, participants, the stable, discrete noun attracts 'attributes'. This is why McCawley’s ‘two-place predicates’ prefer verbal status, for instance.

A consequence of this is that the assumption of semantic grounding eliminates a wide range of possible analyses of syntactic structure that can be shown
to be incompatible with grounding, whatever other arguments are adduced in their favour. The arguments in invoking non-prototypical members of the classes involved, misanalyse the syntax of the class. Semantic grounding is thus highly discriminatory. It excludes analyses that might be seen as plausible on the basis of a selective (including indiscriminate) view of the distributional phenomena involved. It predicts that any analysis which fails to respect the semantic properties of the classes will prove to be inadequate on other grounds, too. And, as observed, the adequacy of such analysis in relation to others which similarly fail to do so will be ultimately undecidable.

As with the establishment of sounds as co-allophones in the phonology, i.e. as alternative manifestations of a minimal contrastive category of phonology, it is not enough to look for distributional relationships—which are, anyway, so much more complex in the syntax. Distributional phenomena need to be interpreted in terms of knowledge of what is semantically prototypical for the various classes. Not just any noun, for instance, will display the basic syntax of the class. Thus, inspection of the brute distribution of nouns as a whole can be misleading: what is important is what nouns in general share in their distribution with the semantically typical. In this way syntax embodies concepts of ontology.

We can, for instance, on the basis of semantic grounding, as suggested in Anderson (2004a: §4), immediately discount the X-bar theory of syntactic structure, which assumes parallelism in the structures projected by the different syntactic categories, such as noun and verb. Let me be clear that what is being questioned is not the notion of headhood attributed by X-bar theory (and others) to syntactic constructions. What is incompatible with grounding is the assumption of parallelism between the constructions of which categories like verb and noun are the ultimate heads. Parallelism cannot be reconciled with the divergent semantic properties of the categories verb and noun. Insofar as X-bar theory can be said to make any distinctive empirical claim (cf. Kornai and Pullum 1990), it is false.

The divergence in syntactic behaviour between verbs and nouns is relatively transparent (see further Anderson 2005a). Thus, verbs are subclassified in terms of the participant arguments they inherently take, manifested as complements and subjects. Verbs differ in the number and type of arguments they take, as illustrated in (2) and (3) respectively:

(2) a. John wept  
   b. John read the book  
   c. Mary gave John the book
(3)  
   a. *The stone wept  
   b. *The stone read the book  
   c. *The stone gave John the book  
   d. *Mary gave the stone the book

*The stone in (3) is normally inappropriate as an animate absolutive (3a), an agent (3b, c) or ‘recipient’ (3d). This variety in argument number and type reflects the relationality associated with representation of an event.

Prototypical nouns do not have an inherent argument structure. Girl and stone and sky are not subclassified in terms of the arguments they require. There are a few ‘relational’ nouns—typically, though not always, ‘part–whole’—which require a complement:

(4)  
   front (of the box), side (of the box), end (of the line), …

But these depart from prototypically; they are not prototypically discrete, though some of them may be isolable as component parts. Otherwise, we can associate argument structure only with nouns that are based on verbs. This is made overt morphologically in a noun like student—which has, of course, been a favourite example to illustrate noun–verb parallelism. But even here the parallelism is not exact, as we shall see.

We find the parallels in distribution of (5) between the noun and its base verb, where the two arguments of the verb are participants:

(5)  
   a. Bill is a student of French  
   b. Bill studies French

The noun also allows the optional modifiers that we find with the base verb, such as the (last) prepositional phrase in (6):

(6)  
   a. Bill is a student of French at Nottingham (University)  
   b. Bill studies French at Nottingham (University)

The derived noun thus seems to show the same complements and adjuncts that we can associate with the base verb. There is a difference, though.

Although with many verbs complements must be overtly expressed, with derived nouns this is never the case:

(7)  
   a. Percy murdered *(Douglas)  
   b. Percy is the murderer (of Douglas)

Indeed, I suggested in §9.2.4 that even the nominal ‘complements’ in (5–6a) are circumstantial, apposed to an incorporated argument. Moreover, the nominal and verbal structures are routinized in different ways: predications in English are subject-forming; nominal structures are prime-forming.
But more striking still, in the present context, is the observation that nouns allow a distinct kind of modification from the adjuncts that they share with base verbs. As in (6), the noun modifier in (8a) is matched by an adjunct in (b):

(8) a. Bill is a diligent student of French  
    b. Bill studies French diligently

But the modifiers in (9a) have no verbal equivalent:

(9) a. Bill is a foreign/pubescent/rotund student of French  
    b. *Bill studies French foreignly/pubescently/rotundly

The noun modifiers in (9a) are not adjunct equivalents; they belong to a distinct distributional class that we might refer to as attributives. In English, attributives normally occur ‘outside’ both adjuncts and complements:

(10) a. a rotund Nottingham University French student  
    b. a student of French at Nottingham University of large girth

The elements associated with the base verb, the equivalents of the verbal complement and adjunct, come closer to the noun head than the attributive; and the ‘complement’ comes closer than the adjunct.

Attributives are also available to prototypical nouns, though the latter lack complement and adjunct equivalents:

(11) a foreign/pubescent/rotund girl

As we might expect, then, the derived noun combines aspects of the syntax of noun and verb. But the prototypical non-derived noun allows only attributives, absent with verbs. Use of attributives provides for more detailed classification; they are to be expected with a category like noun, which is semantically inherently classificatory by virtue of the stability and discreteness of what it prototypically represents. On the other hand, verbal arguments, particularly participants, reflect the relationality of verbs, their role in integrating the representation of a scene.

The syntax of verbs and nouns is thus not at all parallel, except where the noun is complex; where it involves a verbal component, and even then the parallelism is not exact. Certainly, verbs and nouns can both be predicative, as can adjectives:

(12) a. Bill studies French  
    b. Bill is a student  
    c. Bill is studious
This is associated with a feature present in the componential representation of all of these classes (as outlined below in §10.2). But typically in languages non-verbal predications can be predicative only indirectly, via an overt copula, as in (12b, c); exceptions have been studied under the rubric of ‘nominal’ (Hjelmslev 1948b) or ‘non-verbal’ (Stassen 1997) predications. This dependence is much less common with verbal predications, though there are systems with obligatory operatives (in the sense of §8.2). Otherwise, the syntax of nouns is universally very different from that of verbs, reflecting basic distinctions in grounding. And this will not be revealed in the distribution of just any noun: the distribution of the semantically prototypical is crucial. The non-groundedness of ‘X-bar theory’ leads to incorrect predictions (of parallelism) in the syntactic behaviour of nouns and verbs.

10.1.2 The syntactic consequences of lexical structure

Of course, the verbal basis of some nouns that show ‘verbal’ argument structure may not be marked overtly in the morphology. Lexical structure may be overtly expressed only partly or not at all. But even covert lexical structure plays a role in the syntax of non-prototypical items.

Take (13a), for instance, the head noun in which is overtly based on the noun in (13b):

(13) a. Lisa’s pilgrimage to Santiago
   b. pilgrim
   c. Lisa went on pilgrimage to Santiago
   d. Lisa made a pilgrimage to Santiago
   e. Lisa went as a pilgrim to Santiago

There is no single verbal lexical item to serve as the base for either of the nouns. All we do have are verbal ‘periphrases’ involving these same nouns, as illustrated by (13c–e). Nevertheless, the non-prototypicality of pilgrimage we can associate with a verbal base unrealized as such: it is the verbal component included in pilgrimage that requires the complement-equivalent filled by to Santiago. Pilgrimage represents an entity which is an event with a particular kind of participant; pilgrim represents an entity which takes part in such an event—it represents a kind of traveller (this last being a noun where the derivational relation is made overt). Unprototypically for nouns, the entity represented by pilgrim is defined by the event(s); there is, however, no independent representation of the event as such by a single item, no verb.

Such a suggestion is incompatible with an austere view of the position adopted by Bloomfield and his successors. He can be interpreted as adopting a restricted view of what constitutes the equivalent of Hjelmslev’s content.
plane, which for Hjelmslev and de Saussure comprised all of lexical and syntactic structure. Bloomfield’s restriction is a consequence of his assumptions concerning access to meaning:

The meaning of a morpheme is a sememe. The linguist assumes that each sememe is a constant and definite unit of meaning, different from all other meanings, including all other sememes, in the language, but he cannot go beyond this. There is nothing in the structure of morphemes like *wolf, fox, dog* to tell us the relationship between their meanings... (1933: 162).

Sememes are thus unanalysable ‘on the basis of our science’. What this involves is that, in Hjelmslevian terms, there is no aspect of content form that is not signalled by expression form. Linguistic content form = morphosyntax (Anderson 2004f; 2005c), thus essentially outlawing from grammar reference to lexical semantics.

But de Saussure, for instance, did not reject relations between lexical items that are not signalled as related. This underlies his distinction (1931[1916]: 181) between ‘relatively motivated’ and ‘unmotivated’ signs (*dix-neuf ‘nineteen’ vs. *vingt ‘twenty’). Both kinds of sign are involved in ‘associative’ relations, whether or not these are signalled morphologically.

It is in accord with the tradition defined by Saussure’s work to recognize that there is a place in grammar for lexico-syntax. This involves the recognition that there are aspects of syntax that appeal to (categories within) lexical structure without that lexical structure being made overt morphologically. It is in that spirit that we looked at the structure of complex categories in preceding chapters. And it is in that spirit that we might suggest that *pilgrimage* is a categorially complex item in other ways than are made overt by the suffix attached to it; and *pilgrim*, its overt base, is itself complex in a like way. It is this complexity that is reflected, in particular, in their non-prototypical, verbal syntax.

The same kind of complex categorial structure may or may not be overtly signalled in the morphology. Consider the Old English verb in (14):

(14) He Gode þancode
    he God:DAT thanked (‘He thanked God’)

The verbal form is a causative; its derived status as such is signalled in this case by the -o- in the ending (which is followed by tense and person–number inflections). In this instance the causative is based ultimately on a noun, which appears in (15):

(15) Gode ic þanc sece
    God:DAT I thanks say
In the terminology of Chapter 9, this noun absorbs a verbal category to derive the verb in (14). Notice too that in both sentences the ‘recipient’ is marked with the dative case. This is another indication that (14) is a lexical (but not syntactic) ‘reduction’ of the structure made linear in (15); it involves the lexical derivation of the verb from one of its arguments.

In present-day English there is no morphological indication of this internal structure for the verb descended from the Old English verb in (16a), though the derived form retains the phonological expression of its base, as is usual (in some form) with absorptions:

\[
(16) \quad \begin{align*}
  a. \text{He thanked God} \\
  b. \text{He gave thanks to God} \\
  c. \text{He gave God thanks}
\end{align*}
\]

There is no indication in the morphology or syntax of (16a) of the relation signalled by the dative in (15). The sentence in (16c) has a bare ‘recipient’, and is indeed somewhat more stilted than (16b), where, unlike in (16a), we have the general goal marker to. Nevertheless, there are signs that the object in (16a) is a goal experiencer; the object in (17) is not normally suitable as such, for instance—unless used figuratively:

\[
(17) \quad *\text{He thanked the stone}
\]

This is not just an animacy requirement, though animacy is normally implied; but also participation as a ‘recipient’ (\{erg,loc\{goal\}\}), not merely a goal. A ‘recipient’ implies a ‘received entity’, which is distinctly overt in (16b, c), but not (16a). The ‘received entity’ in (16a) is covert, but it identifies the nominal base of the derived verb. The verb still has the complex lexical structure I’ve associated with the Old English verb in (14), where the noun absorbs a verbal category.

Obviously, the derived verbal category is not to be identified with the lexical verbs in the ‘periphrases’ of (15) and (16b, c). This is already suggested by the selection of different verbs in the ‘periphrases’ in Old English and present-day English. Rather, what is involved in (15) and (16a) is a verbal category with the argument structure of the verbs of (15) and (16b, c), except that the requirement for a ‘received entity’ is satisfied internally, by an element which serves as the base for a lexical conversion to verb.

In other instances there is no indication at all of the derivation—unlike with English thank(s), with shared phonological expression. Compare again the morphological causative in the Turkish of (9.61b) with the verb in the bracketed English translation, which bears no overt relation to the corresponding verb in the translation of the non-causative (a):
(9.61)  a. Hasan öl-dü
         Hasan die-pst
         ('Hasan died')

    b. Ali Hasan-ı öl-dü r-dü
         Ali Hasan-acc die-caus-pst
         ('Ali killed Hasan')

But this does not disguise a systematic associative lexical relationship between
kill and die that is parallel to that found with overtly related forms; and this
relationship depends on the categorial complexity of kill.

Categorially complex forms like kill and pilgrim are thus distinguished from
öl-dür and the verb thank by disappointing any expectation that expression of
a complex item retains in some respect the form of the 'base'. The complex
category is either independently lexicalized from its associated 'base' (kill
versus die) or the 'base' is not lexicalized, has no independent expression, as
with pilgrim.

Consider now, in a little more detail, a slightly more complex case. The
causative relation is again made overt in the Tamil sentences in (18), with
overt marking of a causative relation between the two verbs (from Kandiah
1968):

(18)  a. pillay sooRu unțaan
        child rice:acc ate
        ('The child ate rice')

    b. ammaa pillaykku sooRu uuțunaal
        mother child:dat rice:acc caused.eat
        ('The mother fed rice to the child')

And compare the verbs used in the English translation suggested in brackets:
there is no expression in the translation of the relationship between the two
verbs. But the syntactic disposition of the arguments is the same in the Tamil
and in the translation (give or take language-particular differences like pres-
ence or absence of case inflections).

Present-day English feed, however, has a reminiscence in shape, if now only
a vague one, of a nominal base, namely that corresponding to the noun food.
The relationship is no longer transparent. Compare the Old English ancestors
in (19) and (20):

(19)  And þam he forgifð þone gastlican fodan
        and them:dat he gives the:acc spiritual:acc food:acc
He fedde hie mid godcundum wordum 
he fed them:DAT with sacred words

The *fod*/fed-alternation here is part of a general pattern in phonological realization of morphological distinctions associated with causatives and their bases.

The causative in (20) does not reflect the syntax of the ‘periphrasis’ in (19), however. The ‘source of the sustenance’ in (20) is expressed in an adjunct introduced by *mid* ‘with’. The lexical structure of (20) is thus unlike both the syntactic structure in (19) and the lexical structure in (18b), where the ‘sustenance’ is in both instances marked with accusative; the latter are structurally similar. And the verb in (20) is a contactive in form, with appositive circumstantial. We have differently structured verbs in these causatives in Tamil and Old English, and different bases.

Present-day English *feed* shows both syntactic possibilities:

(21) a. George fed lies to us/George fed us lies
b. George fed us with lies.

There are two different lexical structures for *feed*. Neither a causative status of *feed* in relation to *eat* nor status as a causative based on a nominal is transparently signalled (any more). But this should be no bar to recognition of the systematicity of the complex structures associated with even underived items.

I stress that this is not to suggest, in any of these instances, that the syntax of lexically complex items is identical to the syntax of ‘periphrases’: this was one of the major problems associated with the transformational (syntactic) derivation of such lexical items that was proposed by the ‘generative semanticists’. However, the recognition of the syntactic relevance of covert categorial structure for lexical items, as well as that of overtly marked structure (via derivational morphology), is important in the explication of the divergent distribution of semantically non-typical members of a word class.

### 10.2 The syntactic-categorial structure of words

Anderson (2004c: §2) suggests that the internal categorial structure of words needs to allow for at least the following set of syntactic properties:

(22) *Requirements on syntactic categorization*

(a) to facilitate an account of the distributional differences among the classes

(b) to facilitate the expression of recurrent cross-classes
(c) to facilitate the expression of differences in accessibility (markedness) among the classes
(d) to facilitate the expression of gradient relationships among the classes
(e) to facilitate expression of the relationship between primary and secondary categories

I shall not give equal attention to all of these here, but concentrate on the most relevant, (a), (b), and to some extent (c). I shall outline the responses to these demands that have been elaborated within a theory of notionally based grammar that generalizes from what the study of ‘case’ has shown us.

10.2.1 Requirements on syntactic categorization
Crucial to a discussion of requirement (a) in (22) is the observation made in §10.1 that the defining distributional properties of the syntactic classes are not semantically arbitrary. It is not arbitrary that it is a subset of a particular class that figures as typical vocatives like those in (23):

(23) Porter! Mary! Mummy!

Nor that a subset of a different class is what figures as imperatives:

(24) Leave! Repent! Smile!

The typical vocative is drawn from that syntactic class whose prototypical members denote (what are most easily perceived as) entities, the class of nominals; in particular (non-figurative) vocatives tend to involve animate, particularly human entities. Imperatives crucially involve members of the syntactic class, the class of verbals, that prototypically denotes (what are perceived as) events, particularly (in the case of imperatives) actions.

As argued in Anderson (2004c), and following on from §10.1, it appears that, if we are to come to an understanding of distributional differences among syntactic categories, we need to appeal to their notional content—just as in the phonology:

...if we represented lexical items by means of an arbitrary feature notation, we would be effectively prevented from expressing in the grammar the crucial fact that items which have similar phonetic shapes are subject to many of the same rules.

(Chomsky and Halle 1968: 295; see for example Anderson 2004c; 2004e.) And even non-prototypical items are interpreted as far as possible in accordance with the notional characteristics of their category. Thus, for instance, ceremony may not be a prototypical nominal, in that its denotatum is not
obviously more stable or less relational than that of many verbals, but its usual syntax is interpreted as conferring on it the status of a perceived entity. Requirement (a) of (22)—surely a minimal requirement—is met in principle by a theory of syntactic categories which attributes to them notional, ontological content. But satisfaction of the requirement is not compatible with ‘abstract’ categories, i.e. with the ‘autonomy of syntax’. They have nothing to say about the bases for such differences in distribution that is not a priori (for example ‘given by universal grammar’).

However, the system of (25), based on autonomous syntactic features, is specifically designed to meet requirement (b) of (22), ‘cross-classification’, as argued for by, for example, Radford (1988: 146–8), in presenting the by-then-familiar binary-featural representations in (25):

(25)  *Chomskyan primary categories*

\[
\text{Verb} = [+V, -N] \\
\text{Noun} = [-V, +N] \\
\text{Adjective} = [+V, +N] \\
\text{Preposition} = [-V, -N]
\]

And, certainly, we seem to want to allow for both a noun-adjective ([+N]) and a verb-adjective ([+V]) cross-class, as the system allows. And perhaps we don’t want to provide for a verb-noun cross-class, excluded in terms of (25). However, though the cross-class adjective-preposition is also excluded by (25), the cross-class noun-preposition is allowed. The basis for this difference is unclear. Moreover, the motivation of the verb-preposition cross-class provided in (25) is rather shaky. It is again not enough in these cases to show gross distributional similarities. These may be contingent upon more fundamental differences. Let me spell this out, in the case of verbs and prepositions, in the light of the development of ‘case grammar’.

Prototypical prepositions, or adpositions, are universally complemented by a noun phrase, as the unmarked possibility, at least. Overtly, verbs in English may or may not be complemented by a noun phrase; they may be complemented by a prepositional phrase. In some other languages verbs are more uniformly complemented by either a noun phrase or a prepositional phrase. As we have seen, Anderson (1997) interprets this as showing that prototypical verbs are complemented by a phrase type that may be manifested as either adposition-containing or not: functor phrases. The member of the functor category that heads a functor phrase may be manifested by an independent adposition, or inflectionally, or only indirectly, by position of the phrase. This diversity of expression has long been recognized. Recall, for instance, the quotation from Chomsky (1966: 44–5) concerning the Port-Royal *Grammar* cited in §§2.1.4. Such a distribution takes functors outside the system of lexical categories, into the realm of functional categories (recall §8.1). This is, again
as we seen, not to deny that there are complex prepositions, which incorporate (for instance) nominal elements (beside and the like). But a prototypical adposition, such as at, is a simple functional category. And it does not enter into any cross-class relationships with the other categories allowed for by (25). Adpositions are not a happy lexical category (cf. e.g. Vincent 1999; Baker 2003: app.).

Such observations would be consistent with a preliminary system of grounded categories based on simplex features such as that in (26), where functors are distinguished as the null combination of the notional features P and N:

(26) Notionally based primary categories I

\[
\begin{align*}
\text{Verbal} &= \{P\} \\
\text{Adjectival} &= \{P,N\} \\
\text{Nominal} &= \{N\} \\
\text{Preposition/Functor} &= \{\} 
\end{align*}
\]

The braces enclose the categorial representations. A feature may be present or absent. Adjectivals combine the two features that individually characterize verbals and nominals. In lexical entries, ‘\{P\}’ means ‘containing P and only P’. It is only when expressing morphosyntactic regularities that we need to distinguish between \{P\}, the class of verbals, and the class sharing P, i.e. the class of verbals and adjectivals in a system such as that in (26). The cross-class can be referred to by suppressing the curly brackets: verbals and adjectivals belong to the cross-class P, and nominals and adjectivals to the cross-class N, whereas the class \{P\} is verbal, and \{N\} nominal The functor category belongs to no cross-classes.

The ‘simplex-feature’ aspect of the representations in (26) relates to a number of the requirements of (22), as illustrated in Anderson (2004c). Here I continue to focus on requirement (a). In accordance with satisfaction of requirement (a) of (22), the features of (26), P (= ‘predicable’) and N (= ‘referentiable’), have notional content. P is associated with the capacity to form a (optimally independent) predication, N with the capacity to refer. P thus requires that its prototypical denotata be relational and dynamic, and N discrete and stable, which enhance these respective capacities. Adjectivals, prototypically associated with attributes rather than events or entities, have denotata that fall between the denotata of verbals and nominals in terms of relationality versus discreteness and dynamicness versus stability, and this is reflected in their morphosyntax.

Now, it may be that (26) represents a stage in the acquisition of the syntactic categories of a language like English (cf. for example Anderson (2000a), where it is assumed that the syntactic categories are not given as part of ‘universal grammar’, but must be acquired). But the system of (pri-
mary) categories appropriate to the adult system is clearly more complex. And the recognition of the distinctive character of functors is an indication of where a major complication lies. We have to distinguish in adult systems between a set of lexical categories and a set of functional categories, the latter of which the functor is a paradigm example. Functional categories are characterized not by their sharing some substantive property, which would be a notional interpretation of the content of Radford’s (1997a: §2.9) ‘+F’, but by their relative poverty of content compared with lexical categories; there is no feature corresponding to [±F]. This assumption underlies the system of (adult) primary categories proposed in Anderson (1997).

This is essentially as laid out in (27):

(27) *Notionally based primary categories 2*

- **Functional categories:**
  - Operative = \{P\}
  - Comparator = \{P,N\}
  - Determinative = \{N\}
  - Functor = \{

- **Lexical categories:**
  - Verb = \{P;N\}
  - Noun = \{N;P\}
  - Adjective = \{P;N\}
  - = \{P;N\},(N;P)

- **Some cross-classes:**
  - Verbal = \(P >\)
  - Nominal = \(N >\)
  - Adjectival = \(P = N\)
  - Adjective-verb = \(P;N\)
  - Adjective-noun = \(N;P\)
  - Lexical = ;

Here the functional categories as a whole are differentiated from the lexical in terms of their involving only simple combinations of P and N (including the null combination). The lexical categories all involve combination of P and N, but always involving asymmetries. This is indicated in the representation for the cross-class ‘lexical’ in (27c), where the semi-colon specifies asymmetry; the presence of this represents their ‘non-simplicity’. The period in the representation of the functional category comparator insists on this being a simple combination (not involving asymmetries). In the representation for verbs in (27b) P, to the left of the colon, is predominant over N; in the representation for the noun, the reverse is the case; and the adjective involves a combination of asymmetries, abbreviated as \{P:N\}. The ‘;’ notation is simply a more compact category-internal expression of a dependency relation.

The poverty of notional substance associated with the functional categories underlies, of course, the ‘reduced’ semantics often attributed to ‘non-contentives’, which largely comprise the functional categories, but also the variety of ways in which they can be expressed: their expression does not
require an independent lexical class. Thus, as we have seen (§8.2), finiteness in English can be expressed by an independent operative word form, as in (28), or as part of a lexical category, as in (29):

(28) John may leave

(29) John left

Functors are no exception in showing a variety of expression.

Returning to (c) in (27), we can group operatives and verbs together as verbals, now interpreted as categories showing a preponderance of P, represented P>, where ‘>’ includes both ‘;’ and ‘feature uniquely present’, as respectively in the representation for verb in (27b), and that for operative in (27a). Similarly, determinatives group with nouns as N>. And comparators group with adjectives as showing equal proportions of the two features, with ‘≡’ generalizing over ‘:’ (in the comparator representation) and ‘:’ (in the representation of adjectives). Of the functional categories, only the functor, as the null combination, has no corresponding lexical category. (27c) also offers the specification for the adjective-verb and adjective-noun cross-classes, and, as indicated, that for lexical categories. All the lexical categories have P and N in asymmetrical relationships; this underlies their varyingly strong capacities to be either predicators or anaphoric antecedents (cf. Anderson 2003; 2004b).

The functional categories are typically complemented by the corresponding lexical category, as represented in (30), which express defaults:

(30) a. {P} \Rightarrow \{P/P;N\} 
    b. {N} \Rightarrow \{N/N;P\}

(31) a. {P} \Rightarrow \{P/\}
    b. { } \Rightarrow \{ /N\}
    c. {N} \Rightarrow \{N/\}

And this is true of the non-independent expression in (29) as well as where the functional category has independent expression. (30b), however, defines only generic nominals; typically [N] takes a partitive. Functor has no corresponding lexical category, but {P} also heads a hierarchy of functional categories in terms of subcategorization, in which functor participates, as expressed in (31). This articulates the central position of {P} in sentence structure, {P} and {N} participate in the two hierarchies: {P} normally takes both a {P;N} argument (30a) and a functor phrase (31a), reflecting its relationality. Non-generic {N} is limited in (30c) to either governing another {N}, as with definites, or { } (partitives)—recall §8.2.2.
So that, for instance, we can represent (28) and (29) respectively as in (32) and (33) (recall (8.5)):

\[(32) \quad \{P/\{P;N\}\} \]
\[\quad : \quad \{P;N\} \]
\[\quad : \quad : \]
\[\quad \text{may leave} \]

\[(33) \quad \{P\} \]
\[\quad {\{P;N\}} \]
\[\quad : \quad : \]
\[\quad \text{leave} \]

(33) contains a complex, lexically derived category associated with application of the lexical redundancy of (9.46), updated as in (34):

\[(34) \quad \text{Finiteness formation} \]
\[\quad \{P\} \]
\[\quad {\{P;N\}} \leftrightarrow \{P;N\} \]

(34) essentially allows verbs in English to have a finite function, though it may be blocked by other factors.

10.2.2 Parts of speech versus categories

Some distinctions among primary categories have a basic lexical status; they differentiate between word classes or ‘parts of speech’, i.e. lexical classes with a distinctive (though possibly overlapping) membership. As discussed in Anderson (1997: §2.1.4), there are other categorial differences that do not encode a difference in word class; and these differences are realized by different forms of the same word, as with the categorizations in (32) and (33), each of which can be associated with manifestations of, for example, leave, with that in (32) being lexically basic and (33) derived (by absorbing a [P] by finiteness formation). The representations in (32) and (34) are associated with different word forms—in this case, the morphologically non-finite and finite forms of the verb, which in this particular instance are syncretized.

It may be that in some languages some of the distinctions drawn in (27a, b) are not given word-class status. This is recognizably the case with adjectives,
which are not universal as a word class (for some references see Dixon (1977), Anderson (1997: §2.3.1)). In such languages there is no lexical class \{P:N\}. But systems even more deficient in primary lexical class distinctions have been proposed for some languages.

Specifically, it has been argued that there are languages to which we can attribute a lexical system, in the present notation, like that in (26), but interpreted rather differently, as in (35):

(35) Notionally based primary categories

a. Functional categories
   Operative = \{P\}, Determinative = \{N\}, Functor = \{\}

b. Lexical categories
   Contentive = \{P,N\}

These are languages which not only lack adjectives but also are alleged to lack a basic lexical verb/noun distinction (for references, see Mithun (1999: §2.3), as well as the rather inconclusive discussion in Anderson (1997: §2.1.4)); lexical predications are not further differentiated. Compare Boas (1911) on Kwakiutl: ‘all stems are neutral, neither noun nor verb.’ The existence of such languages remains controversial, and the issues are delicate (see again Mithun (1999: §2.3), as well as Jacobsen (1979); Kinkade (1983); van Eijk and Hess (1986); Jelinek and Demers (1994); Demirdache and Matthewson (1995); Broschart (1997); and contributions to Vogel and Comrie (2000), for example). And generally, even in languages for which (16) may seem appropriate, one can talk of particular items having a propensity to occur as one category rather than the other, i.e. preferably to occur as one category or the other. And this is unsurprising, given the ontological basis for the verb/noun distinction. Moreover, description of the syntax of such languages depends on the making of a categorial (even if not lexical) distinction between noun and verb. So at most what one might claim is that the ontological distinction can be grammaticalized as a category difference without being lexicalized (as a difference in word class).

Even then we would have to be sure that our use of distributional evidence is in accord with looking for the behaviour of semantically prototypical potential members of the (potential) classes. If only items that are prototypical in their semantics (with respect to verb or noun) share some morphosyntactic behaviour or restrictions on that behaviour, then we have a case for talking about basic and converted nouns or verbs, and so for a lexical distinction. Thus, Straits Salish, for instance, which has been cited as a language lacking a (lexical) distinction between noun and verb (see Jelinek and Demers 1994),
may be such a case, given that, as Jelinek and Demers observe, ‘some Salish roots can co-occur with possessive pronouns’ (1994: 698).

{N} in a ‘contentive-only’ language, if such there be, may be realized, as in other languages, as a pronoun, or a name, as in Nootka (Swadesh 1936–8): names are grouped by Anderson (1997) with pronouns as non-complemented determinatives. The operative, {P}, may similarly appear as an independent word, like the ‘copula’ in Inland Olympic Salish (Kinkade 1976: 19). But it would also be the determinative and the finiteness element that allow contentives to occur as respectively arguments and (finite) predicators, via the derived categories in (36) and (37), alternative expansions (absorptions) of {P,N}:

(36)  
| {P} 
| {P,N}

(37)  
| {N} 
| {P,N}

The functional categories, including functors, would provide for the variable syntax of contentives; the categories in (36) and (37) are distinguished by distribution and also usually morphologically. For we would not be saying that such languages lack the syntactic categories ‘verb’ and ‘noun’, but merely a lexical class difference between such categories (cf. on this distinction Lyons (1977: §11.2)).

As Mithun says of Swadesh’s famous examples illustrating the syntactic versatility of Nootka lexical items, two of which are replicated in (38), ‘there is no question that the first words . . . are functioning syntactically as predicates, and the words that follow as arguments’ (1999: 61):

(38)  

a. mamo-kma  qa-ʔasʔi
   he. is. working the. man
   (‘The man is working’)

b. qa-ʔasma  mamo-ʔi
   he. is. a.man the. working(.one)
   (‘The one working is a man’)

In such a system, however, it has been argued that, despite the variation in derived categorization, basic lexical categories are apparently reduced to one, the only possibility in the system involving combination of the two features.
However, as I have anticipated, it may be that the alleged absence of a lexical distinction in such languages is again based on paying too much attention to ‘brute distribution’. It may be that we should recognize that use as a noun or verb is for some alleged ‘contentives’ highly marked, even if attested, and possibly manifested as such in frequency of occurrence. In that case we could argue that there are some items that are basically, lexically, either verb or noun, and that their use as the other is derived, though (as with converted items in English) not marked morphologically.

To the extent that such ‘contentive-only’ languages, or at least adjective-less languages, are attested, we have now introduced another requirement on syntactic categorization: that syntactic categorizations should facilitate the characterization of systems of varying complexity, after the manner of (27) vs. (35) (and without appeal to the mystical ‘feature magnetism’ of van Riemsdijk (1998), or to ad hoc ‘neutralizations’, as in, for example, Stowell (1981)). And this capacity is desirable anyway, whether or not there are ‘contentive-only’ languages. It is clearly related to requirement (c) of (22), that syntactic categorization should ‘facilitate the expression of differences in accessibility (markedness) among the classes’.

For instance, the absence of adjectives from the languages just discussed, as well as others which display a robust lexical distinction between noun and verb, together with its marginal status as a lexical class elsewhere (for references see again Anderson (1997: §2.3)), suggest that this category is marked, relatively inaccessible. In terms of the notation of (27b), this is expressed by the complexity of the representation of adjectives, which are the only category there to involve two asymmetrical combinations, {P;N} and {N;P}. If we assume that the presence of more complex representations in a system presuppose the simpler ones, then the inaccessibility of adjectives, including their ontogenetic tardiness (see Anderson 2000a), is accounted for. Anderson (1993) makes explicit this assumption in terms of a principle of ‘category continuity’, but I do not pursue this here. I merely note at this point the appropriateness of systems involving categorial representations of inherently varying complexity to the expression of markedness—without recourse to arbitrary meta-notations such as that proposed in Chomsky and Halle (1968: ch.9).

‘Contentive-only’ languages will emerge from the notation as less marked than languages with lexically distinct nouns and verbs, however. How is this to be reconciled with their rarity, or possible non-existence? It is clear, with respect to this, that considerations of relative simplicity and accessibility must be complemented with the demands of the need to provide adequate expressive differentiation for our conceptualizations to be represented satisfactorily.
This cannot be an absolute measure; but it may be that such languages (almost) fall below the general threshold of adequacy; and certainly absence of the categories (as opposed to lexical classes) noun and verb does so. Or, if such languages do not (almost) fall below a viable level of word-class differentiation, then nevertheless their scarcity depends on the necessary presence in the languages of certain ‘compensatory’ properties (properties less commonly available in other languages).

Jelinek and Demers (1994: 702), for instance, suggest that ‘for a language to lack a noun/verb contrast, it must have only pronominal affixes or clitics in A-positions (i.e. argument positions)’. That is, in terms of the kind of representations we have been looking at, the apparent ‘participants’ dependent on contentives in such languages are, rather, circumstantialals apposed to such pronominals. The apposed elements are contentives themselves. But it may be that this property merely accounts for the low salience in the marking of the verb/noun distinction, rather than the lack of it (if the remarks made above on possessive affixes in Straits Salish, for example, have any force). Whatever, the specificness of such properties might be taken to account for the relative uncommonness of languages where this distinction is in doubt, despite the simplifying effect of the absence of the distinction.

More important, perhaps, is the recognition that there is no universal set of categories of the word or of (lexical) word classes. They are not universal, so that sets of different cardinality may occur in different languages. But they are also not universal in the sense that there is no linguistic principle that sets a limit to them. The notional notation described here allows us to describe different systems, as well as individual categories, as of varying complexity. The relative complexity of categorial representations correlates with markedness of the category, as revealed in acquisitional studies. But, also, increasing complexity of system beyond the bounds of (26) correlates with uncommonness among languages: the occurrence of a system of lexicalized primary categories larger than that in (26), which would involve yet more complex combinations of the notional features, is, it seems to me, at best marginal. But this is an empirical question; and if there are no such languages, they are presumably excluded by limitations on the conceptual complexities that can be encoded in this way, not by some stipulated requirement of universal grammar. Likewise, as indicated, the lower limit is likely to be set by conceptual considerations to do with what degree of complexity is sufficient for (natural) language to manifest itself. The lower and upper bounds of complexity (whatever they are) delimit the area in which categorization is sufficiently differentiated but not over-complex. And, just as the character of the maximal and minimal boundaries constitutes an empirical question, so too
the set of word classes appropriate to each language is to be established empirically.

10.2.3 Conclusion
This section has illustrated ways in which it has been argued that at least some of the legitimate demands on a system of syntactic categorization are met, in principle, by a theory comprising combinations, symmetrical and asymmetrical, of simplex notional features. The articulation of these combinations allows us to transparently characterize empirically supported cross-classification and relative complexity (markedness). And the ontological basis of the features permits us to give some account of the differences in distribution associated with different categories (such as whether and how much they are associated with complementation versus modification, and of why certain secondary features are typically (though not necessarily exclusively) associated with certain primary categories (such as gender and noun). Neither of these sets of correlations is arbitrary.

The same systemic characteristics also enable us to avoid the arbitrariness and the associated deficiencies of some putatively universal system that demands external markedness measures and recourse to language-particular ‘neutralizations’ of categorial distinctions and, despite this, unwarranted attribution of homogeneity to the syntactic categories to be found in different languages. Instead, the system allows an extensible range of representations of varying complexity whose limits are presumably set by cognitive needs, and which are yet to be empirically demonstrated: it seems to me that we are yet to establish the range of combinations of categories required. An instance of this is provided by the discussion of ‘hybrid’ functional categories, like the functor/determinative combinations invoked in the discussion of ‘complex’ functors in Chapter 8. If such as these are well motivated, then we need to broaden the kinds of combination envisaged in Anderson (1997), for example.

Likewise, the system itself leaves open the question of what is the minimal set of syntactic categories and of word classes, as discussed in §10.2.2. It was suggested there that this boundary is established by requirements set on the system by its role in the adequate representation and differentiation of scenes. Since deficiencies in this area can be offset by other syntactic capacities, such a boundary is inevitably, in principle, approximate. Again, empirical considerations are paramount.

These problems, or unsettled questions, are analogues to those delineated by Hjelmslev in relation to delimiting the set of cases (1935: 104–5):
On sait que d’après l’hypothèse de Wundt le système casuel minimum comporte 4 cas. C’est une hypothèse qu’il y aura lieu de mettre à l’épreuve. Mais au problème du minimum doit être ajouté celui du maximum: quel est le plus grand nombre de cas qui puisse entrer dans un seul système? Et ce système maximum comment est-il organisé? Un troisième problème, non moins important, est celui de l’optimum du système casuel: il faut examiner quelle est la situation quantitative et extensionelle qui est préférée pour le système casuel.

And he goes on (p. 138), concerning the ‘maximum absolu’, which he regards as set by the possible combinations allowed by the articulation of his system of ‘dimensions’ (recall the brief presentation in §5.4.2):

...le maximum absolu est difficile à fixer parce que à l’état actual de nos connaissances le principe dirigeant la fixation du maximum absolu est inconnu. Nous nous bornerons par conséquent ici à signaler le problème sans le résoudre. D’autre part il est toujours possible de fixer le maximum empirique, qui n’est rien que simplement l’effectif quantitatif comporté par le système le plus riche que l’on connaisse.

Not much has changed since this was formulated by Hjelmslev, except that I, for one, am rather less sanguine about establishing the ‘empirical maximum’ of primary categories, or even of word classes—i.e. of establishing ‘le système le plus riche que l’on connaisse’, let alone the ‘absolute maximum’. And the same applies to systems of ‘case’, once we move outside Hjelmslev’s primary dimension of directionality.

10.3 Nominal structure

The development of the notation of §10.2 enables us, in conjunction with the discussion of circumstantials in §9.2, to be more precise now about the structure of nominals than was possible in §10.1.2. An outline of the structure of nominal phrases and its notional bases is the object of this section.

Apparent complements to nouns are marginal outside nominalizations and other verb-based forms; but we shall give some attention to them in §10.3.2. Noun modifiers, on the other hand, are a very characteristic property. They include attributives of various sorts: nouns and adjectives, and morphologically non-finite verbs, as well as prepositional phrases and sentences. But we must also recognize genitives as another possibility. As far as attributives are concerned I shall concentrate here on adjectival and prepositional modifiers; the description of the others does not differ as far as their role as attributives is concerned. Let us return first, then, in the light of the apparatus of categor-
ization whose development we have been looking at, to look more carefully at the structures associated with the nominals discussed in §10.1. After that I shall take up, in §§10.3.1 and 10.3.2, the description of genitives, invocation of which has occurred at various points in the preceding.

§§10.3.1 and 10.3.2, then, are concerned with the structure of noun phrases proper, with apparent dependents of head nouns. Consideration of genitives in English involves the determinative phrase: ‘adnominal’ genitives are, whatever else, determinatives that govern the noun phrase. They also, however, as ‘adnominals’, depend on the noun. This is the already acknowledged complexity that we confront in §10.3.3.

10.3.1 Attributive modifiers

In §10.1 we looked at derived nominals which allowed themselves to be accompanied by the equivalents of verbal participants and circumstantials, as in (7):

(7) a. Bill is a diligent student of French
    b. Bill studies French diligently

Some nominal modifiers, however, have no verbal equivalent, and can be associated even with prototypical nouns, though they lack modifiers equivalent to verbal participants and circumstantials:

(9) a. Bill is a foreign/pubescent/rotund student of French
    b. *Bill studies French foreignly/pubescently/rotundly

(11) a foreign/pubescent/rotund girl

These noun dependents in (9a) and (11) are not complement or even adjunct equivalents; they belong to a distinct distributional class of attributives. We observed too that in English attributives normally occur ‘outside’ the others:

(10) a. a rotund Nottingham University French student
    b. a student of French at Nottingham University of large girth

The dependents whose presence is associated with the base verb, the equivalents of the verbal complement and adjunct, come closer to the noun head than the attributive, just as the equivalent of the participant comes closer than the circumstantial. Attributives, like circumstantials, are not required by subcategorization: they too are clearly modifiers.
It was suggested in the discussion of circumstantials in §9.2 that we can associate with them such structures as (39) (recall (9.26)):

As expressed by the ‘\’ notation, the circumstantial seeks a verb to ‘superjoin’ a head to, a head to which the circumstantial is itself adjoined.

We can associate the same mechanism with nominal attributives such as (40a), as shown in (40b):

Here the locative attributive seeks a head that is a determinative which takes a partitive (source) complement (recall §6.4). The \{N\} here is not given expression as an independent word but underlies the number marking: (51) assumes count nouns are plural unless they are governed by a singular determinative, such as a(n).

Compare with (40b) the prenominal attributive in (41):
The complemented attributive in (50) follows the noun; the uncomplemented
precedes. A prenominal is not necessarily simplex; consider e.g. (42):

(42) very rotund girls

It is, however, uncomplemented. We return to the determination of such
word orders in §11.2.

Deverbal nouns may be accompanied by the equivalents of participants and
circumstantial. In §9.2.4 it was suggested that these equivalents are all
circumstantial, modifiers. Any participant equivalent is a modifier aspossed
to an incorporated participant. With deverbal nouns like student there is thus
a subjoined verbal complex to which non-attributive modifiers are attached:

(43)  

\[
\begin{array}{l}
\text{students} \quad \text{of} \quad \text{physics} \quad \text{at} \quad \text{Bath} \quad \text{with} \quad \text{freckles}
\end{array}
\]
(43) assumes that the of physics ‘participant’ of the nominalized verb is a modifier apposed to (an incorporated complement of) the verbal base. Likewise, the circumstantialial at Bath modifies the base verb. So that there are two higher \{P;N\}s, one inserted by the circumstantialial locative, the other by the circumstantialial which is coreferential with the incorporated absolutive of the verb. The source-of-the-action role of the verb is manifested morphologically in the shape of the suffix. The configuration terminating in the first two {N}s in (54) is a device to indicate that both the incorporated participants are dependents of the verb but are not linearized, a relationship difficult to express in two-dimensional graphic representations. Such linearization as we find in students is one function of morphological rules. With freckles modifies the root {N}. (43) presents the various modifiers in their normal linear order in English: variation from this leads to ‘tangling’.

10.3.2 Noun complements
As we observed in §10.1, there are some non-prototypical but apparently simplex (non-derived) nouns that take complements, so-called ‘relational’ nouns. There I mentioned examples like (4):

(4) front (of the box), side (of the box), end (of the line),

There are also some animate ‘relational’, typically kinship terms and other nouns of relationship:

(44) father of the bride, overlord of this place, enemies of the state,

The former involve a part–whole relation; in the latter the head and complement are discrete. It is the former type, which include ‘body-part’ terms such as those in (45), that is discussed in Fillmore (1968a: §5) as involving, in traditional terminology, ‘inalienable possession’:

(45) a. Claire’s knee, my left foot, 
    b. the left hand of God, the eye of the storm

These last usually are expressed by the genitive in English, as in (45a); examples such as those in (45b) tend to be figurative. In this they contrast with the (4) sub-type, which strongly prefer the of-construction. Both possibilities are generally available with the ‘kinship’ type of (44).

In other languages all of these types are marked in the same way as distinct from (particularly) ‘alienable possession’. Also, in the Chumashan languages, for instance, both of the ‘part–whole’ types and ‘kinship’ terms are obligatorily accompanied by a possessive prefix (Mithun 1999: 251, citing work of Applegate). In other languages, only the ‘part–whole’ relations of (4) and (45)
are marked as distinctively ‘inalienable’ (Mithun pp. 253–4). Mithun also describes the even more complex situation found in Yuchi (pp. 254–5), in which different sets of ‘kinship’ terms are assigned, by their prefixation, to one of four classes of ‘inalienables’ also associated with other types. Nichols (1988) provides a survey of possessive-marking in North American languages.

These languages also illustrate something of the extent to which the interpretation of what is ‘inalienable’ can vary: instances from Chumashan include words for ‘head louse’, ‘earring’, ‘breath’. Fillmore (1968a: 62) regards this variability as indicating that ‘the features in question are “grammatical” rather than purely “notional”’; but it is not in conflict with the view of grounding and its loss that we have looked at here. Moreover, though there may indeed be simple idiomatization in some instances, in a number of such languages ‘inalienability’ may be attributed to some entity only in certain situations, as a temporary (?figurative) extension, illustrating the accessibility of the notional basis for the grammatical marking, as discussed by Dunn (1998). Thus, Mithun (1999: 256) describes one of his examples (recorded by William Beynon), involving a tale told in Sm’algyax:

A canoe is normally considered a distinct possession . . . , but when people were described crouching down into their canoes to become inconspicuous to their enemies, they became one with the canoe, and the canoe was portrayed as inalienable.

This is a nice example of groundedness in action.

What characterizes ‘inalienability’ itself syntactically seems to be simply that ‘inalienable possession’ involves complementation, whereas ‘alienable possession’ involves modification. These relational nouns take attributives which, exceptionally, are not modifiers; they are ‘attributive complements’. Fillmore suggests a rather different analysis, where ‘possessive’ attributives are distinguished as de-sentential (‘alienable’) or as adnominal cases (‘inalienable’). The suggestion of a de-sentential source is, it seems to me, unnecessarily ‘abstract’; but I come back below to the details of the latter suggestion. Whatever the structural difference, ‘inalienables’ have, as a result, distinctive syntactic properties, some of which are surveyed in Fillmore (1968a: §5). Mostly Fillmore’s illustrations belong specifically to the ‘part–whole’ type, and indeed mostly to the ‘body-part’ sub-type. As an illustration of general ‘part–whole’ syntax, Fillmore (1968a: 64) cites Frei’s example of (46a) (1939: 188), where the construction permits an ‘inalienable’ but not an ‘alienable’, as in (b):

(46) a. Sylvie est jolie des yeux
    Sylvie is pretty of.the eyes
b. *Elle est bien faite des vêtements
   she is well made of the clothes

See for example Anderson (1971b: §7.36) and particularly Mithun (1999: §4.6) for references to other earlier studies of the morphosyntax of ‘inalienable possession’.

But what is the basis for the difference between the ‘part–whole’ type and the ‘kinship’ type? These complements are all typically expressed by functor phrases, involving adpositions or morphological case. And so too is ‘alienable possession’. These functor phrases are also used in predicational structure for obvious locatives, either synchronically or at an earlier stage in the development of the language. Anderson (1971b: 107) points to the Finnish of (47), where the ‘possessor’ in predication (b) is inflected in the same way, with the adessive, as the locative in (a):

(47) a. Kirja on pöydällä
   book is table:ADS
   (‘The book is on the table’)

b. Minulla on kirja
   me:ADS is book
   (‘I have a book’)

We should observe that ‘possession’ does not necessarily imply ‘ownership’, which introduces other factors.

The dative in many languages is also used for some sort of locative, typically a (goal) experiencer. It is also used in the Latin ‘possessives’ in (48) (Lyons 1966: 392), again suggesting a locative interpretation of these:

(48) a. Est Johanni liber
       is John:DAT book
       (‘John has a book’)

b. Liber est Johanni
   book is John:DAT
   (‘The book is John’s’)

On such locative analogues see particularly Lyons (1967) and other references in Lyons (1977: 722).

Fillmore suggests, indeed, that ‘inalienables’ involve an adnominal Dative. This, however, seems to be too specific, given characterizations of Dative such as (3.10):

(3.10) *Dative (*D), the case of the animate being affected by the state or action identified by the verb. (Fillmore 1968a: 24)
This doesn’t appear to apply obviously to the ‘part–whole’ examples of (4). And in this definition Dative is associated directly with verbs only. Moreover, if ‘inalienables’ and ‘alienables’ differ in complement versus modifier status, as suggested above, the refinement introduced by invoking Dative is apparently unnecessary. They are both simply locatives. But if this applies to all ‘inalienables’, we come back to the question of how the types are differentiated. What differentiates the ‘non-kinship’ type is the ‘part–whole’ relation. Consideration of this invites us to look closer at whether a reformulation of Fillmore’s suggestion might be applicable to them, after all, if we ignore the animacy requirement embodied in the above formulation.

In §5.4.3 we looked, in pursuit of localist analyses, at the reinterpretation of many Datives, including the subset that had been renamed Experiencers by Fillmore, as a combination of locative and ergative (non-locative source). Now, ‘possessors’ in general, including ‘inalienable’ possessors, seem to be locatives. Perhaps the presence of source is what characterizes the ‘part–whole’ relation of the ‘inalienables’. Recall that, according to the proposals discussed in §6.4, adnominally, source as a primary feature (rather than a kind of location) is what introduces partitive constructions such as (49), involving a noun subordinate to a determinative, and (6.48), where two nouns are (overtly) related partitively:

(49) many (of the) men

(6.48) a. une carafe du rouge
   a carafe of the red

   b. une carafe de rouge
   a carafe of red

(6.48) involves, indeed, a new type of ‘relational’ noun, again with a noun complement, but not so far considered.

Now, carafe obviously doesn’t always require a complement, in English or French. But it does in the sense of ‘measure’ associated with (6.48). The head noun in (6.48) is a derived measure noun which is subcategorized for a partitive, i.e. a non-locational source, as shown in (50):

(50) \{N;P/\{src\}\}

   \{N;P\}

The basic noun found elsewhere than in measure phrases has absorbed a noun with a partitive valency. Sometimes the derivation is made overt, as in (51):

(51) a cupful of water
And there are simplex nouns of various sorts that are specialized as dedicated partitive-takers, as illustrated in (52).

(52) litre of, mile of, measure of, group of, pride of, . . .

The nouns in (4) and (45) are not simply partitives, however. Partitives are measure constructions whose composition is homogeneous, such that the ‘part’ has the same composition as the ‘whole’. In (4) and (45) the ‘parts’ are not homogeneous with the whole; but they belong to the composition of the whole, they are located within the whole. Thus, the characterization \{src,loc\}, involving both ‘partitivity’ and ‘location’, seems to be rather appropriate for these ‘part–whole’ relational nouns.

What of the ‘kinship’ relational nouns? These apparently involve locational relationships of varying kinds, as has been intensively studied in anthropological approaches to kinship systems. The relationship, as with (53a), may be symmetrical (barring sex difference, in the second case):

(53) sibling, brother

The relationship is analogous to beside in that respect. It may be asymmetrical, but with a converse (again, in some instances, barring sex difference), as in (54):

(54) parent, father, mother—child, son, daughter

These are analogous to above and below. Other relations combine these in various ways (uncle, niece; cousin) or duplicate one of them (grandmother, grandson; ancestor, descendant).

As implied by my analogies, this is the kind of structuring we associate with complex locational functors (§8.3). Of course, many of these ‘kinship’ items have alternative (related) lexical representations. Child, for instance, can also be a ‘chronological’ noun: She was only a child. Mother may be interpreted as event-based, associated with giving birth (Anderson 1968b), sometimes distinguished as natural mother; father has an analogous sense. ‘Kinship’ terms can also become (be converted to) names. But the basic ‘kinship’ relations can be expressed as variants of locative (but see further Wallace and Atkins (1960); Lounsbury (1964); Romney and D’Andrade (1964)). The locational relations involved are between animates, but this need not be attributed to the functor. Moreover, this doesn’t seem to be a necessary feature of more peripheral ‘kinship’ terms: the dependent in king of that country, for instance, can be construed as involving animacy only in a rather complex way.

This means that we can distinguish these various attributive complements as in (55):
These involve combinations of the primary features locative and source. The ‘kinship’ nouns take multi-dimensional locatives.

Finally, we can add to the various adnominals we have looked at in our discussions, viz. attributive modifiers (§10.3.1), and to the attributive complements just given representation in (55), the ‘appositive’ construction alluded to in §9.2.4 and discussed in Anderson (2004b), and exemplified by (56a):

(56) a. the city of Birmingham

b. \[N\]
   \[\{N\mid\{\text{city}\}}\]
   \[\{\text{of}\mid\{\text{Birmingham}\}}\]

Recall that names are analysed as determinatives. City, as a common noun, is not usually interpreted as such, but as part of a complex name it is accompanied by a functor, limited to appositives, bearing no specific relation (cf. §9.2.4) whose name argument is coreferential with the head it seeks, as shown in (56b). The whole configuration is a name, part of the onomastic lexicon. The details of the structure offered in (56b), justified in Anderson (2004b), is not important for our present concerns. I add it here simply to fill out this sketch of the attributives. It does, however, lead on to a further observation, prompted by the presence of of.

Noun complements typically show a lot of neutralization in the expression of functors: consider the role of of in English as marker of the ‘empty’ functor. There are exceptions: secretary to, . . . But of or the genitive are overwhelmingly present. It may be that this reflects the limited argument structure available to (simplex) nouns: each of the constructions in (55) and (56) involves a noun head with one dependent, and these are of a limited variety, in necessarily involving
locative and/or source and no other combinations (55) or no distinctive relation in the lexicalized name (56). Only attributive modifiers, such as were discussed in §10.3.1, show a range of categorizations, and then not primarily in terms of functors but in the variety of primary categories that can modify a noun.

In some languages (such as Latin and Old English—see respectively Gildersleeve and Lodge (1968: §§361–72) and Mitchell (1985: §§1280–1337), where also still other ‘uses’ are distinguished) all of the constructions in (65, 66), as well as ‘alienables’, may be expressed by the genitive; but in modern English, (55a) is not so expressed, and the sub-types of (b) differ in their availability for such expression, while a genitive usage equivalent to (56) is obsolete, but retained in such as (57), for example:

(57) Dublin’s fair city

On other complexities associated with the ‘part–whole’ relation see for example Lyons (1977: §9.8). We conclude this chapter with a brief look at some of the complexities of the genitive as such.

10.3.3 Genitival constructions

As observed in §6.4, adnominal genitives such as (6.51) conflate two relationships:

(6.51) Jim’s fork

Jim’s is simultaneously a partitive head with respect to fork and expresses a possibly abstract location, termed ‘possession’, for the referent of fork. As a location, Jim is a modifier—not a complement like arguments of the inalienables of §10.3.2.

In languages lacking genitives, we find constructions where the relations are separately signalled. Thus, Italian alternates between determiner + N + ‘possessive’ prepositional phrase and determiner + ‘possessive’ (de-pronominal) adjective, as respectively in (58) (involving, in this instance, an ‘inalienable’ complement:

(58) a. la madre di Giovanni
the mother of John

b. la tua madre
the your mother

In Greek we have a separate determiner and a (in this instance) post-nominal ‘genitive’:

(59) a. i mitera tu Niku
the mother of.the.of.Nikos
(‘the mother of Nikos’)

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b. imitera su
   the mother your
   (‘Your mother’)

I have referred to the ‘possessive’ inflection in (59) as ‘genitive’, but its ‘uses’ cover those elsewhere associated with typical dative and genitive.

The two relations associated with the English genitive can, in other circumstances in English also, be given independent expression, as in the determiner + ‘possessive’ modifier constructions in (60):

(60) a. the/a governmental decision
    b. the/a government decision

The determiners signal partitivity, directly (a) or indirectly (the), and the modifier involves ‘possession’. The modifiers are in apposition with the agent argument of the verb base of decision. The determiner, which may be definite or indefinite, is associated with, indeed governs, decision. The modifier is vague with respect to definiteness: it can be construed either way, depending on the context.

Contrast these with (61a), in the first instance:

(61) a. the government’s decision
    b. a government’s decision

(61a) is not interpretable in the same way as (62a), but only as is (62b):

(62) a. a decision of the government
    b. the decision of the government

Both nouns in (61a) are definite. (61b) can be interpreted as is (63a), in line with what we found with (61a):

(63) a. a decision of a government
    b. the decision of a government

However, (63b) is also a rendering. Important, though, is the observation that the the in (63b) is cataphoric; it is identified internally, not outside the nominal phrase. ‘Externally’, the structure is indefinite.

We find the same situation with the plural in (64b):

(64) a. the governments’ decisions
    b. governments’ decisions

It may be paraphrased by either (65a) or (b):

(65) a. decisions of governments
    b. the decisions of governments
But again the *the* in (65b) is cataphoric. Again, the whole phrase is ‘externally’ indefinite. This parallelism is a nice confirmation of the appropriateness of assigning to ‘simple’ plurals an ‘absorbed’ determinative structure, parallel to that associated with overt determinatives (as in §8.2.2).

What emerges from these considerations overall, though, is the unsurprising conclusion that the determiners at the beginning of these phrases in (61) and (64) are those of the genitive phrase, not the phrase as a whole. That the genitive occupies a separate position from the other nominal, trivial enough as that might seem, suggests that the determination of the whole phrase is definite, given that the genitive seems to be associated with the position of a definite determiner, and that indefinites do not consistently occupy such a separate position (indefinites are often ‘absorbed’). So the overall phrases in both of (61) and (64) are definite, as is semantically appropriate, though in (61b) and (64b) they are only cataphorically so.

The same things hold with genitives with simple nouns like that in (66):

(66) a. the woman’s purse  
    b. a woman’s purse  
    c. women’s purses

The whole phrase is definite, cataphorically in the case of (66b, c); but the evident determination reflects the (in)definiteness of the genitive *woman/women*.

The respective kinds of structure in (67) seems to be involved in the case of (66):

(67) a. \[\left\{N/\{N/\{\text{src}\}\}\right\}\]

\[\left\{N/\{\text{loc}\}\{N;P\}\right\}\]

\[\{N/P\}\]

\[\{\text{src}\}\]

\[\{\text{loc}\}\]  

\[\{N/P\}\]

\[\text{the} \quad \text{woman’s} \quad \text{purse}\]
b. \{N/\{N/\{src\}\}\}
   \{N/\{src\}\}
   \{\{src\}\}
   \{N;P\}
   \{\{loc\}/\{N;P\}\}
   \{N;P\}
   \{N/\{src\}\}
   \{\{src\}\}
   \{N;P\}
   a  woman's  purse

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c. \{N/\{N/\{src\}\}\}
   \{N/\{src\}\}
   \{\{src\}\}
   \{N;P\}
   \{\{loc\}/\{N;P\}\}
   \{N;P\}
   \{N/\{src\}\}
   \{\{src\}\}
   \{N;P\}
   women's  purses
The representations in (67) are built out of the components discussed in §8.2.2 (on determination); the various components are as in (68) (which update the representations given there):

(68) a. \[
\begin{array}{l}
[N/[N/\{\text{src}\}]] \\
\quad : \\
\quad : \quad [N/\{\text{src}\}] \\
\quad : \quad | \\
\quad : \quad \{\{\text{src}\}\} \\
\quad : \quad | \\
\quad : \quad \{N;P\} \\
\quad : \quad : \\
\quad : \quad : \\
\text{the} \quad \text{trash/review(s)}
\end{array}
\]

b. \[
\begin{array}{l}
[N/\{\text{src}\}] \\
\quad : \\
\quad : \quad \{\{\text{src}\}\} \\
\quad : \quad | \\
\quad : \quad \{N;P\} \\
\quad : \quad : \\
\quad : \quad : \\
\text{some/a} \quad \text{review(s)}
\end{array}
\]

c. \[
\begin{array}{l}
[N/\{\text{src}\}] \\
\quad | \\
\quad \{\{\text{src}\}\} \\
\quad | \\
\quad \{N;P\} \\
\quad : \\
\quad : \\
\text{reviews/trash}
\end{array}
\]

(68a) shows a definite determiner, characterized as requiring (in this instance) partitive (covert) further determination; (68b) involves an overt partitive (indefinite) determiner; the determination in (68c) is indefinite and absorbed (covert).

All of (67) are headed by the definite determiner configuration shown in (68a); and in all of them this is associated with the locative modifier of the noun. The noun is subjoined to the partitive configuration dependent on the topmost definite determiner. The representations differ in what comes below the locative: in the case of (67a) it is again the definite determiner configura-
tion of (68a); in the case of (67b) it is the overt indefinite (partitive) structure of (68b); in (67c) we have the covert determination of (68c).

What all of (67) add to individual configurations like (68) is the linking of the upper (definite) determiner with the lower one via {{loc}}. This is apparently an association given by the lexicon. So that we can give the genitive the basic lexical specification in (69a):

(69)  a. 'attributive' genitive = \{ N/[N/[src]] \}
      :   \{ loc \}; \{ N;P \}
      |   \{ N \}

b. 'attributive' genitive = \{ N/[N/[src]], loc/[N;P] \}
      |   \{ N \}

The genitive is a lexically complex entity which has been absorbed into an element of determination (the lowest \{ N \}). It is crucially the definite and locative component in (79a) that is spelled out by the genitive ‘inflection’ attached to the end of the phrase which is its argument. The upper part of the representation in (69a) is equivalent to a ‘hybrid’ category (cf. §8.3.1), as shown in (69b), in the absence of evidence of internal dependency between them.

The structures for (61) and (64), involving a derived noun, are slightly more complex. I give the suggested characterization of (64) in (70):

(70)  \{ N/[N/[src]] \}
      :   \{ N/[src] \}
      \{ [src] \}
      \{ N;P \}
      \{ loc \}; \{ N;P \}
      \{ N;P \}
      \{ P;N/[abs,erg] \}
      \{ [abs,erg] \}
      \{ N;P \}
      \{ N;\}
Here the locative is marked as requiring to modify a noun based on a verb (the configuration to the right of the backslash after \{loc\}), and the argument of the locative is required to be coreferential with the incorporated argument of the verb. (70) assumes that the incorporated argument is in this instance a \{\{abs,erg\}\}, ‘intransitive agent’.

I should emphasize again that the internal verbal structure need not be signalled by the morphology. Any verbal ‘base’ for the noun in (6.52), from §6.4, for instance, is obscured in present-day English:

(6.52)  Jim’s picture

The genitive here may involve a simple locative (‘possession’) argument, but, as well as ‘owner’, it may also, via a verbal component like that in (70), be the ‘creator’ (\{\{erg\}\}) or the ‘subject’ of the picture.

There is obviously much more than this to genitives—in English and elsewhere. We have already seen that what can constitute a genitive in English is quite varied, though with its limitations, as was illustrated by (6.5) and (6.7). And, as we’ve already observed (at the end of the previous subsection), there is considerable cross-linguistic variation across languages in what is a viable genitive, despite the recurrence of patterns that justify us in labelling a particular inflection as genitive. We find in Latin, for instance, that many of the deverbal genitives associated with present-day and/or Old English recur, as illustrated in (71a) (Gildersleeve and Lodge 1968: §§362, 363, 369, 361):

(71)  a. amor dei
      (‘love of god’, ‘god’s love’)
   b. domus regis
      (‘king’s house’)
   c. multi militum
      (‘many (of the) soldiers’)
   d. nomen amicitiae
      (‘name of friendship’)

(71b) shows the simple locative (‘possessive’, or ‘proprietory’) genitive. For (b), however, English also has the of-construction. And only the latter is available as an equivalent of the partitive in (71c) and the appositive of (d), though Old English retains partitive and appositive genitives (Mitchell 1985: §§1296–1303, 1290). And there are other differences (see again, for example, Gildersleeve and Lodge 1968: §§361–72). And there are elsewhere, indeed, even uncertain instances of genitive identification, as noted above for Greek. And variation is such that, even within Germanic, English and German differ in
what can constitute a genitive and in its syntax: for some discussion see for example Anderson (1987b; 1990). Clearly this will greatly complicate the basic characterization of genitives attempted here, despite what is shared.

I suggested in §8.3.2 that something like the representations of the Latin cases in (8.59) and (8.64) served as templates for those studying other languages with morphological case. I noted there, however, that the representation for the genitive in (8.59d) did not take account of its attributive function in nominal uses:

\[(8.59)\]
\[
d. \text{genitive} = \{F[<\text{src}>]\}
\]

In relation to nominal structure, (8.59d), as it stands, represents the partitive use, as the adnominal variant that requires the full expansion. But we must add to that the attributive characterization of (69b):

\[(69)\]
\[
b. \text{‘attributive’ genitive} = \{N/[N/[\text{src}]],\{\text{loc}\}\}\{N;P}\}
\]

\[(72)\] updates the representation for the partitive genitive:

\[(72)\]
\[
\text{partitive genitive} = \{[\text{src}]\}
\]

It too at least involves the source relation. Perhaps it is this which unifies the uses of the genitive. This unity becomes more apparent if we incorporate into (72) the recognition that the role \{[\text{src}]\} is interpreted as partitive only if governed by a nominal subcategorized for a \{\text{src}\}, as shown in (73):

\[(73)\]
\[
\text{partitive genitive} = \{[\text{src}]\}/ \ldots
\]

(where the dependency relation may involve either adjunction or subjunction). The \{N/[\text{src}]\} element is central to both (69b) and (73). But it is certainly the use represented by the complex in (69b) that has formed the ‘template’ for the deployment of the term ‘genitive’ by linguists.

The terms ‘accusative’ and ‘genitive’ are derived from apparent Latin misnomers for Greek terms, Latin accūsātīvus and genetīvus. We are not concerned with the former here (but see §6.1.3). The latter is derived from Latin gigno ‘beget, bear, bring forth’. But genus and its Greek equivalent were used by ancient Greek and Latin grammarians and logicians to refer to class terms of various sorts, including gender, and general terms versus particulars. And the Greek yenikī ptoṣis is the ‘general case’. Insofar as this ‘general case’ is, as proposed here, involved in the introduction, via the partitive, of what is seen
in the context as a more general term, the traditional Greek term is perhaps not inappropriate in relation to the proposals looked at in this subsection.

10.3.4 Conclusion: apologia

There is, of course, much more not just to genitives but more generally to nominal structure. But much of it is not directly relevant to the pursuit of our history of specifically ‘case grammar’ developments. I have tried to give here a sufficient overview of a notional grammar, including nominal structures, to show its relationship with the consequences of the ‘case grammar’ hypothesis. This means that large portions of the grammar, such as non-‘case’-based nominal structures, have been relatively neglected in the preceding; the present brief survey is can only be a partial compensation. For more extensive discussion of such matters see Anderson (1989a; 1997; 2003; 2004b).

10.4 Conclusion: ‘notional grammar’

For most of the history of linguistic theorizing and language describing in Europe, use of the adjective ‘notional’ in ‘notional grammar’ would have been supererogatory: grammar was notional. From the writings of the Greek philosophers and grammarians, through the scholastics and the philosophical as well as the pedagogical grammars of the Renaissance and the Enlightenment and the comparative grammarians of the nineteenth century to the European structuralists, it is generally assumed that syntactic categories distinguish semantic substance and that this content is relevant to their syntax.

This is quite well illustrated in Householder’s (1972b) succinct survey of the main outlines of the history of the study of syntax. Householder cites the translation that follows of a passage from the Peri syntaxeos of Apollonius Dyscolus, who, according to Householder, ‘started the chain of influence into which virtually all later syntacticians fit’ (1972a: 8–9). The bracketed interpolations in the quotation are Householder’s:

The indivisible matter of the phonemes [apparently ‘indivisible’ here means ‘not further analysable’] accepted this constraint long before [implying perhaps the logical priority of phonology], which prevents it from making combinations at random, but requires that phonemes be put together according to rule, whence comes the word ‘syllable’—almost [etymologically a syllable is a ‘taking together’]. The syllable itself, the next higher unit, accepted the same restriction, since only when these are put together according to rule do they complete a word. And it is obvious at the next level, the level of words, which are the components of complete sentences, that the grammar here too accepts co-occurrence restrictions on putting (words) together. For the senses which are respectively coordinated with individual words (i.e. one to each
word, roughly Saussure’s concept) are the elements of which sentences are made, and as phonemes make syllables in combination, so also the putting together of senses fulfills the syllable by combining them into words. [A puzzling sentence, but Priscian had the same text.] And as the word is made of syllables, so the independent sentence is made from the appropriate co-occurrence of senses.

The last interpolation refers to a translation into Latin by Priscian. There are some uncertainties here. But there are also a number of important suggestions that have modern resonances, such as the notion of ‘rule’, or the logical priority apparently accorded to phonology (cf. the tradition documented in Joos (ed.) 1958), or the proposed analogy in structure of phonology and syntax. This last, as has already been alluded to here, is reflected in a number of places in twentieth-century linguistics (see for example Anderson 1987c), and particularly in the structural parallels between phonology and syntax embodied in dependency phonology and recent notional grammar alluded to above. But what is most significant in the present context is the rather clearly expressed assumption that syntax involves the combination of ‘senses’; it is, in the terms introduced above, semantically grounded. And this assumption persists through the subsequent history in Europe of grammatical studies of almost all types.

Now, certainly, interpretations of what constitutes ‘syntax’ have varied somewhat, partly owing to discrepancies in grammatical structure between the classical languages and the modern Western European vernaculars. Householder himself distinguishes four definitions associated with different approaches to syntax. The first two of these arise from different aspects of Apollonius’s description and from (different parts of) later descriptions of the classical languages, as an instance of which Householder cites Smyth (1956). The approaches listed by Householder (1972a) are:

1. Syntax . . . is the study of the meaning and function of the various inflections (cases of nouns, moods of verbs, etc.) and of the different parts of speech (especially prepositions and subordinating conjunctions). (p. 10)
2. Syntax is the study of rules for combining words into sentences (or ‘into phrases, clauses and sentences’). (p. 10)
3. Syntax is the study of the devices by which a language expresses the semantic (or logical, or psychological) relations between and among the various parts of the sentence. (p. 11)
4. What are the illocutionary sentence-types of a given language, and how are they distinguished? (p. 16)

Definition 3 too arises principally from the treatment of subordinate clauses in books like Smyth’s. The question that constitutes the fourth way of looking
at syntax Householder traces back to Aristotle’s discussion in the *Poetics* (1456b9) of *schemata tês lexeōs* (‘command, wish (= prayer), narration, threat, question, reply, etc.’—1972: 15). But in all of these grounding can be said to be implicated if not central—even in 2 as far as Apollonius is concerned, where the ‘combinations’ involved are explicitly of ‘senses’.

For syntacticians the foremost moral of notional grammar is that descriptively adequate and explanatory categories are not arrived at on the basis of an arbitrary selection of observations concerning distribution; and arbitrariness is not disguised by the attribution of the selection to ‘universal grammar’. There is no motivation for supposing that this latter, if it is at all non-vacuous, contains any categorial information.

Almost all of the selection of mid-twentieth-century papers on syntax in Householder’s collection (1972b) can be described as ‘notional’ to some extent. With a few exceptions, it is only in the work of the ‘post-Bloomfieldians’ and their transformationalist successors that notionalism is explicitly eschewed (see further Anderson 2005c). This attitude finally coalesces in the principle of the ‘autonomy of syntax’ (recall §4.3). This is familiar from such as Radford’s (1988: 31) formulation, which is derived ultimately from Chomsky (1977a):

**AUTONOMOUS SYNTAX PRINCIPLE**

No syntactic rule can make reference to pragmatic, phonological, or semantic information

What recent work in notional grammar has endeavoured to show is that such a principle is untenable, and leads to an unnecessarily ‘abstract’ conception of ‘syntactic rule’ and syntactic structure. This takes us into the subject-matter of the following chapters.
Argument-Sharing I: Raising

I want to confront in this and the following two chapters our last question (for the moment) arising from the ‘case grammar’ tradition. Recall again:

(5.49)  *Consequences of case grammar*

δ) the question of derivationality

One consequence of ‘case grammar’, it has been suggested in work of the last two decades, is the provision of notions of syntactic structure which can be interpreted as permitting us to eschew the kind of derivationality or abstractness associated with the central ‘transformational’ tradition. Crucial here is the assumption of notionalism, of groundedness, presented in the previous chapter. But also crucial, more specifically, is the role of semantic relations, especially that of an absolutive that is not subcategorized for.

Obvious extensions of the ‘case grammar’ framework whose evolution we have looked at allow us to maintain inalterability (as introduced in §3.1.2):

*Inalterability condition*

The relations of dependency and sequence assigned to an element are inalterable.

Sequence is derivative of other aspects of structure, including discourse structure, and it is inalterable: it doesn’t change in the course of the syntactic description of a sentence. This has been maintained in the preceding discussion. What we shall be looking at here, to begin with, is the mechanism whereby dependency relations also can be maintained as inalterable. Dependency links can be created but not destroyed.

In this chapter we shall be looking at two kinds of phenomenon whose description in the past has invoked transformations and has not (for the most part) invoked semantic relations. On the basis of some recent work on ‘case grammar’ it is possible to suggest that the conjunction of these two facets is not merely coincidental. Indeed, involvement of the categorial apparatus provided by ‘case grammar’ renders recourse to transformations unnecessary. The first phenomenon is ‘ectopicity’, where an element seems to belong
(semantically, and in terms of valency satisfaction) to a construction in whose interior it does not appear overtly. This is illustrated in (1a), where the subject of *seems, John*, is interpreted as a participant of the *like*-predication, rather than as a participant of the *seems*-predication:

(1) a. John seemed to like Rasselas  
    b. John tried to read Rasselas

In (1b), on the other hand, *John* is a participant in both predications, but seems also to be absent from the second, as in (1a). *Try* as well as *read* imposes semantic restrictions, including a valency requirement on the referent of the initial nominal. In (1b), we cannot associate the presence of *John* in the upper clause with simple ‘ectopicity’, given that *John* ‘belongs’ in the upper predication; but its ‘absence’ from the lower clause, to which it also ‘belongs’, involves some other, or additional factor. So much is familiar, well supported and relatively uncontroversial.

At one time, both of these structures were analysed as showing application of (different) transformations, in the first case of ‘raising’ of the subject of the lower verb into the upper clause, in the second of ‘deletion’ of the lower subject under identity with a ‘controller’ (*John*) in the main clause—‘Equi-NP deletion’. Latterly, the derivation of (1b) prevalent in transformational grammars, rather than appealing to deletion, has involved ‘control’ by the ‘controller’ of an ‘empty category’ in the apparently empty position in the lower clause, a category with no phonological realization. And developments in accounts of (1a) have resulted in the postulation of the presence of another kind of ‘empty category’ to mark the source position of the moved element. Under either account, former or latter, we have two rather different interpretations of the two sets of phenomena involved in (1a) and (1b), more recently a ‘movement’ versus ‘non-realization (under control)’.

The syntactic representation of neither of these constructions, it has been argued in recent work in the ‘case grammar’ tradition, need be formulated in these ‘syntactic-derivational’ (and ‘empty-category’-invoking) terms; and (1a) and (1b) can be shown to involve a similar ‘case’-based apparatus. Specifically, both raising and control involve argument-sharing: semantic relations in different predications share their argument. This kind of analysis is anticipated in Anderson (1972), which introduces the notion of ‘quasi-predication’, where these are predications wherein one relation is satisfied by sharing the argument of a relation in a lower predication. Here, however, I follow the more recent treatment in Anderson (2001a), where the role of an unsubcategorized-for absolutive in sharing is central (and the framework is generally more constrained). In terms of this analysis, the structures of (1a) and (1b) are...
as similar as their overt similarity suggests. Let us consider ‘ectopicty’ in a slightly larger context.

Elements that are syntactically topical are what we might call radically ectopic: they lie outside the basic clause structure containing non-topical arguments of the verb, participant or circumstantial; they are extracausal, in this sense. And they may indeed bear no argument relation to the verb. They may be ‘ectopics’ with no corresponding non-ectopic argument status. Li and Thompson, for instance, illustrate the claim (1976: 461) that ‘an important feature of the topic is that it need not have a selectional relation with any verb in a sentence’. And a topic need not even be said to ‘correspond to’ even a circumstantial function, though it may.

Li and Thompson cite examples (1976: 462) where a topic ‘corresponds to’ an adnominal (2a) and such as (2b) (both from Mandarin) where any syntactic relation within the clause ‘corresponding to’ the topic is difficult to discern:

(2) a. Nei-xie shûmu shû-shên dû
those tree tree-trunk big

(‘Those trees, the trunks are big’)

b. Nei-chang huǒ xìngkuì xiàofang-duì lái de kuaî
that-CL fire fortunate fire-brigade come ADVERBIAL.PARTICLE quick

(‘That fire, fortunately the fire-brigade came quickly’)

(2b) is an ‘ultra-radical’ ectopic, which ‘matches’ no potential element in the basic clause.

Also, the topic does not participate in syntactic relationships that depend on routinization (recall the discussion in Chapter 7). As, once more, Li and Thompson put it (1976: 465), ‘the subject but not the topic plays a prominent role in such processes as reflexivization, passivization, Equi-NP deletion, verb serialization, and imperativization’. They cite here Keenan (1976b). Now, the participation of subjects, as such, in some of these syntactic phenomena is not as widespread as the list suggests; it can be argued that control of ‘Equi’, for instance, involves allusion to semantic relations, not subjecthood as such (see Chapter 12). But the general point remains valid. The syntax of subjects, but not topics, depends on routinization.

In Chapter 7 I associated the prime relation with a more direct routinization of topic than subject involves. The German prime comprises, like the subject, elements that bear an argument relation to the verb, but this relation may be circumstantial as well as participant, and the prime is not determined, routinely, by a hierarchy of semantic relations. We can associate its initial position with routinization of the typical position of the topic. In Tagalog, on
the other hand, the prime does not occur in a topical, i.e. initial or final position. This is, then, a routinized ectopicity, and not ‘radical’, in that the prime is not positioned outside the clause structure, but just in a form that such an argument does not normally assume when not a prime. Tagalog shows the further routinization of having the semantic relation of the prime reflected in the shape of the verb, as the principal relation is in many languages. And the prime plays a part in various syntactic regularities that is elsewhere associated with subjects.

There is a limited extent to which we can describe subjects as ‘ectopic’, as involving departure from the positioning of other arguments, particularly participants. In languages like English it is true that participants otherwise follow their predicator: complements follow the predicator, though circum-stantsials not necessarily; and the complements form a unit with the predicator. We have modest ectopicity. But there are languages in which the subject intervenes between the predicator and other participants (as in VSO and OSV). Thus, though subjects may have a routinized position within the verb–complement complex, ectopicity of some sort is not a necessary property. But it seems, as far as I can tell, to be associated only with morphosyntactically primitive primes, such as that of German. Modestly ectopic primes can also play a rather different part in the syntax of other languages, including ones that have morphosyntactic subjects but no prime-marking otherwise than in a particular subsystem: recall here the discussion of the English genitive in §6.4.

There is no compelling evidence for saying that the kind of ectopicity we’ve just been looking at necessarily involves movement, in the absence (in the case of subjects, for instance) of the extreme abstract assumption of there being a universal ‘underlying word order’. In these particular languages, subjects, primes, and topics occur in their usual position—for subjects, primes, and topics. Examples like (1a), however, have been a paradigm example of a ‘movement’. This is their interest here. So much as preamble on ectopicity; let us now briefly take up ‘non-realization’.

As I’ve observed, non-realization has been associated in transformational approaches not just with examples like (1b), which exhibits just one kind of ‘empty’ category. The ‘movement’ associated with (1a), for instance, allegedly leaves behind a ‘trace’, another variety of ‘empty category’. Non-realization adds another kind of abstractness to such descriptions. In the next section I shall look at suggestions that this is an even more undesirable abstractness than that associated with movement. What these devices share is status as a consequence of the assumption of the autonomy of syntax.

We are involved in this chapter in looking at some phenomena involving ectopicity and non-realization that may appear to be ‘austerely’ autonomous.
But it has been argued that these too can be seen as partial routinizations of semantically and pragmatically based phenomena, and that they retain groundedness, as well as lacking ‘transformationality’ or appeal to non-realization. Let us first, before considering further these constructions, look more carefully at the nature of autonomy—the denial of groundedness to syntax as a whole, not just syntactic categories. The section that follows is based largely on Anderson (2004f; 2005c).

11.1 Autonomy and transformations

In the previous chapter I looked at arguments that the categories of syntax are grounded in semantics. We can oppose this to a notion of ‘radical categorial autonomy’, applied to the syntax, taking ‘semantics’ to be extralinguistic, for these purposes at least:

_The thesis of radical categorial autonomy_

Linguistic categories are identified solely by intralinguistic relationships.

This characterizes the intentions of the ‘new grammarians’ (discussed in §2.2.1). It is less radical than an assumption that all linguistic elements are autonomous in this way. Most structuralists agree that the basic units established by the sign are not autonomous: the sign involves a sound–meaning correlation that almost all linguists have accepted as definitional. It may be arbitrary what chunks of phonetic and semantic substance are correlated (if we ignore iconicity), but identification of individual signs involves reference to the substances that are correlated.

But even the thesis formulated above has been regarded as too strong by many scholars—at least when applied to the phonology. Phonological categories—‘phonemes’, ‘features’—are typically assumed to be phonetically grounded, and the members of ‘phonemes’ phonetically ‘similar’. Distributional and phonetic categories are assumed to coincide in the unmarked case. We do find, however, non-prototypicalities (as with non-vowel syllabics) and routinizations (see for example Fudge (1967), where, for instance, he points to the failure of the nasals in Tswana to align themselves on distributional grounds with the (other) ‘consonants’). This does not deter most phonologists from regarding phonological categories as ‘natural’, as phonetically grounded (though see e.g. Hale and Reiss (2000), who argue for the autonomy from grounding of both syntax and phonology).

Given grounding, we must apparently weaken the above thesis in relation to phonology and add an assumption of grounding:
The thesis of categorial autonomy

Linguistic categories must be manifested in intralinguistic relationships.

Categorial grounding of content form

Categories must be grounded in substance.

The preceding chapter looked at arguments that suggested that these latter formulations apply to the syntax as well as the phonology. The argument is that categorial autonomy must be complemented by grounding in both planes: internal distribution and groundedness are individually insufficient to fully account for the behaviour of linguistic categories—specifically syntactic categories in the present instance.

As observed in §4.3, appeals in syntactic formulations to ‘cases’, or semantic relations, are anomalous in frameworks that are allegedly autonomous. And such a view has gained some recognition. Thus, for instance, Wilkins (1988b) assigns conditions on reflexivization to the semantics, in that they involve ‘0-roles’ and ‘coreference’, and presents this suggestion as strengthening autonomy. Within the ‘case grammar’ tradition and developments influenced by it, recognition of the anomaly has taken at least two forms, as we have observed. On the one hand Starosta (for example 1988) and associates have argued for a view of case relations that is minimally sensitive to semantic distinctions, thereby allegedly offering superior syntactic generalizations, so that, for instance, both agentive and non-agentive absolutes are labelled simply as ‘Patients’. A similar motivation underlies the rather different strategy of Foley and van Valin (1984: ch. 2), which consistently relegates semantic relations to the status of a semantic epiphenomenon. The thrust of the work presented in the previous chapter here, however, is towards recognizing that the syntactic relevance of semantic relations is not anomalous, but characteristic of syntactic categories: syntactic categories are grounded. In the present chapter we are concerning ourselves with the role of semantically grounded categories in the description of further syntactic phenomena that have usually been regarded as autonomous.

Note too that the introduction of the transformation into accounts of ectopicity has entailed a still more radical claim to autonomy. Recent transformational accounts also appeal to ‘empty’ categories. These are categories that are not associated with a sign: they belong (in Hjelmslevian terms) to units of content form that do not enter into a ‘sound–meaning correlation’; there is no correlated unit of sound. They involve recognition of a new unit of form, one that is not correlated with form in the other plane. They thus weaken the role of the sign in regulating the establishment of units: there are units of content that are uncorrelated.
Moreover, though the ‘empty’ categories may play a role in semantic interpretation, they are allegedly established independently of this role; they are autonomous. Thus, there are signs that are not identified by content (semantic or phonetic). Given the absence of such a sign relation, they belong to—or are—units of content form (syntax) that involve the ‘(absolute) radical autonomy’ of Anderson (2004f; 2005c), rather than merely radical categorial autonomy. Compare (absolute) radical autonomy with the categorial autonomy introduced above:

The thesis of radical autonomy

Linguistic elements are identified solely by intralinguistic relationships.

‘Elements’ here includes not just particular categories, but the unit identified by the poles of the sign: radical autonomy assumes that not just categories of syntax but basic units of the syntax—what are for de Saussure the content-poles of sign relations—can be established purely internally to the linguistic system. The ‘empty’ categories are established independently of any sign relation; neither sound nor meaning is invoked. In this respect, the adoption of ‘empty’ categories goes beyond any notion of autonomy that we can associate with Bloomfield or de Saussure. It represents a major innovation in the development of twentieth-century linguistics. However, it is a change that is unnecessary, as well as being incompatible with grounding and with the Saussurean restrictions on sound–meaning correlation embodied in the concept of the sign.

We are in part concerned in this chapter with exemplification of characterizations of syntactic phenomena that invoke semantic relations and do not invoke, contrary to the transformational tradition, ‘empty’ categories. Thus, as well as pursuing the relevance of grounded categories here, the other main aim is to show that reference to the apparatus of semantic relations we have established enables us to avoid appeals to such undesirables as ‘movements’ and ‘empty’ categories.

In this respect, in the eschewing of both these, the proposals we are about to look at converge with those of Starosta (1988), as anticipated in §5.5. However, the latter depend on diminishing the distinctiveness of the content of ‘case relations’, and on a massive use of syntactic features of varying semanticity. The proposals we are about to look at involve rather argument-sharing, and thus tangling (of lines in the representations) as well as double motherhood (dependency of a node on more than one other). Most linguists have regarded the latter as undesirable, as increasing the ‘power’ of the grammar. But the refusal to contemplate these properties and to confront what exactly they might entail has become merely dogma.
Projectivity (‘no-tangling’) restrictions are a product of the study of formal grammars in the mid-twentieth-century (as surveyed by for example Marcus (1967)). And their transfer to the study of ‘natural’ languages can be said to have been seen as necessitating the introduction of the transformation. However, as is familiar, that innovation introduced to grammars the sort of problem of ‘power’ that is associated with grammars that allow unlimited tangling—and the rest is history, with the problem still unresolved in anything like a consensual view. On the other hand, in the absence of transformations, the necessary tangling to be allowed to the structures associated with grammars of ‘natural’ languages can, I am going to suggest, be readily constrained: it is occasioned only by argument-sharing involving a particular configuration containing a free absolutive.

Moreover, since the syntactic representations constructed on the basis of lexical information are unordered, the question of tangling arises only when linearity is finally imposed on the basis of the interaction between language-specific word-order preferences and valency and modification. There are thus no rules of ‘scrambling’, merely ‘de-scrambling’. And the amount of ‘de-scrambling’ that depends on predicational structure rather than discourse or stylistic considerations is variable across languages. In these terms, so-called ‘free word-order’ languages (cf. again e.g. Staal 1967) show minimal predication-driven ‘de-scrambling’. Their grammar does not, on the other hand, perversely permute elements in such a way as to destroy constituents previously established by the grammar, as follows from appeal to a ‘scrambling’ analysis.

11.2 The role of the absolutive

This and the following chapter incorporate and comment on the analyses argued for in Anderson (2001a). We begin §11.2 with a consideration of the status of the unsubcategorized-for absolutive that has been invoked at various points, including in the subsection devoted to a preliminary look at the ‘case grammar’ treatment of raising (§4.2.3). I shall refer to this functor as a ‘free absolutive’. I want to look more carefully at its role in a non-mutative syntax that assumes not merely that serialization is derived and inalterable but also that inalterability applies to (dependency) attachment (recall again §3.1.2).

11.2.1 The status of free absolutive

As already observed (cf. §§5.5, 6.3, 9.1), it has been proposed in various places (for example, Anderson 1968a; 1971b; Starosta 1978), that, universally in language, (the semantic relation equivalent to) absolutive is present in all predications: all predicators are accompanied by, take as a dependent, an
absolutive. Anderson (1997: 166) terms this the ‘universality of absolutive’ requirement on predicational structure:

**Universality of absolutive**

Every predication contains an absolutive.

As implied by the brief discussion of the role of absolutive in raising in §4.2.3, this requirement corresponds in a sense to part (b) of Chomsky’s (for example, 1981) projection principle:

**Projection principle**

(a) Representations at each syntactic level (i.e., LF, and D-and S-structure) are projected from the lexicon, in that they observe the subcategorization properties of lexical items.

(b) Every clause must have a subject.

Part (a) of this proposed principle is satisfied trivially in a non-mutative framework; while (b) itself, though arguably appropriate to English, is untenable in general (cf. for example, Anderson (1997: §3.1), and Chapter 7 here), except as a parochial manifestation of a ‘soft’ constraint (to do with obligatoriness of the principal grammatical relation, of which ‘subject’ is a possible manifestation). It is the absolutive relation that is universal to clauses.

However, there is a discrepancy between this universality requirement on predications and the subcategorization of predicators: though the overwhelming majority of predicators are subcategorized for an absolutive, not all of them are (unless this is required by fiat, as in Starosta (1988)). Anderson (1997: §3.3) suggests that, in such cases of the lack of a subcategorized-for absolutive, the universality requirement triggers the introduction of an unsubcategorized-for, or free, absolutive. Predicators not subcategorized for absolutive nevertheless have a dependent absolutive assigned to them. I take this to be an extended manifestation of the relationality of verbs: even verbs not subcategorized for a functor require a default absolutive. As a member of the functor category, this absolutive must (in the unmarked case in language) be accompanied by a dependent argument, a determinative, a {D}, or rather {N} in terms of the notation introduced in Chapter 10; it is the role of this {N} in the predication that the functor signals. Recall (10.31b):

(10.31) b. { } ⇒ { /[N]}
But since the absolutive is not subcategorized for, the predicator does not impose any selectional restrictions on this argument. It is satisfied by syntactic means.

As a consequence of this status, an unsubcategorized-for absolutive displays a range of distinctive properties. The argument dependent on a free absolutive may be manifested by an expletive word, as in (3):

(3)  a. It rained, It grew late
    b. They lived it up, Fred blew it

The subjects in (3a) and the objects in (3b) (on the appropriate interpretations) are not subcategorized-for arguments; they reflect the presence of free absolutive with verbs not subcategorized for absolutive. In the senses involved, no alternative subject or object is possible. I am assuming that the subjects in (3b) are (idiomatically, if you like) simply ergative; ordinary agentive intransitives (as in John worked in the holidays) have a subject which is simultaneously ergative and absolutive, as simultaneously source of the action and undergoer of the process involved; whereas the predicators in (3b) are not subcategorized for absolutive, only ergative: as suggested, it manifests a free absolutive supplementing the absolutive-defective subcategorization of the verb.

The presence of free absolutive may be manifested in marking for a morphological category, as in the person-number marking of Italian (4a) or Greek (4b):

(4)  a. Ha piovuto
     ‘(It) has rained’
     b. Fisai
     ‘(It)’s-windy’

Again, we have a non-subcategorizational absolutive, in these instances incorporated.

But the requirement of a complement for a free absolutive may also be satisfied by an argument which at the same time has a role in a (non-finite) predication that itself directly constitutes a subcategorized-for argument of the predicator with which is associated the free absolutive; the free absolutive shares its argument with a role of a predicator dependent on the absolutive’s own verb. It is parasitic upon another semantic role with which it participates in argument-sharing. This is the case of raising (as illustrated by (1a)), to which we now turn.
11.2.2 *The basic syntax of raising: raising with operatives*

Anderson (1997: 227–8) suggests that the auxiliary in (5a) is just such a predicate that is not subcategorized for absolutive and takes a predicate as a direct (functor-free) argument:

(5)  

a. John may read Rasselas

\[
\begin{array}{c}
\textbf{b. } \{P/\{P;N\}\} \\
\textbf{abs} : \{P;N/\{\text{abs}\}{\text{erg}}\} \\
\textbf{erg} : \{\text{abs}\} \\
\text{N} : \text{N} \\
\text{John may read Rasselas}
\end{array}
\]

The valency of its free absolutive may thus be satisfied by that argument of the dependent predicate that is highest on the subject-selection hierarchy—i.e. that would otherwise occupy subject position (when linearized) with respect to the lower predicate. Conversely, the unsaturated status of the free absolutive makes it a suitable host for the raisee; moreover, the raisee cannot appear as the regular subject of a morphological non-finite of which it is an argument, for reasons we shall come to. The argument may, and indeed must, be shared. The result of this is shown in (5b).

Here, \{P\}, the category containing only the finiteness element, is realized by a finite word; in English it is associated lexically, as a simplex item, with the category of operatives; \{P;N\} is associated lexically in English with non-operative verbs, and with non-modal ‘auxiliaries’—which latter are both \{P\} and \{P;N\}. *Read* is subcategorized as requiring two arguments, one an absolutive, the other an ergative, and these requirements are satisfied by the two \{N\}-phrases, with absorbed functors. *May* is subcategorized for a verb, which may be either a non-operative (a lexical verb) or a non-modal auxiliary. Here the valency is satisfied by *read*, which is thus made dependent on *may*.

However, by virtue of absolutive universality, *may* also governs a free absolutive, whose valency must be satisfied, given the requirements of the default syntactic redundancy for functors (10.31b). Every functor has a dependent \{N\}.
Functor valency is satisfied in this case by virtue of the free absolutive sharing the argument of the functor in the dependent predication which is highest on the subject-selection hierarchy, here, in the case of *read*, the {erg}. This is raising, a widely attested structure-building operation, which we might express, informally, as in (6):

(6)   **Raising**

Associate a free absolutive with the highest functor of a co-dependent {P;N}.

This results in the configuration associated with *John* in (5b). In the present context, ‘highest’ here relates, of course, to the subject-selection hierarchy, which characterizes languages or subsystems which display subjecehood (Anderson 1997: §3.3.1). We can in principle associate (6), however, with other principal relations in other language systems.

Word order in (5b) follows from the dependency relations between categories. In general, structures in English, and many other languages, are subject to (7a), which places the dependent (at the arrow point) on the right of its governor (with ‘verb-final’ languages or subsystems the linearity relation is reversed):

(7)   a. **Dependent serialization**

    \[ \text{WORD}_i \rightarrow \text{WORD}_j \Rightarrow \text{WORD}_i < \text{WORD}_j \]

    b. **Simplex dependent serialization**

    \[ \text{WORD}_{SM/k}, \text{WORD}_k \Rightarrow \text{WORD}_{SM/k} < \text{WORD}_k \]

This provides for the ordering *may + read + Rasselas* in (7). However, in terms of linearization the free absolutive argument here is eligible, in the unmarked instance, for (7b), where SM = ‘simplex modifier’—a term I must now explain, via some further illustration, before showing its relevance to free absolutes.

This formulation also regulates the order of the first elements in (8) and the like:

(8)   a. very large

b. right to the top

c. much more beautiful

The initial elements in (8) are inherent specifiers, uncomplemented elements which are not themselves complements of a particular category but rather, like (other) modifiers, seek a particular category to modify (see again Anderson (1997: §2.8.1)). Specifiers are distinctive of the heads they modify; and they are adjoined to the left of their heads.
We can associate them with configurations such as that in (9):

\[\text{(9)}\]

\[\begin{array}{c}
\text{right} \\
to \\
\text{the top}
\end{array}\]

To is a locative, specifically a goal locative, functor, with complement the top; and right is specified as needing (as expressed elsewhere, by the notation ‘\') such an element to modify: in order for this to be achieved, the specifier right is required, as with other modifiers, to project, as well as its own syntactic node, a further node above its target (to be modified) category, as shown in (9), a node to which the to node is subjoined but which does not change the category of the to construction.

Because of these observations, Anderson (1997: 228–9; 2001b) calls this regularity ‘specifier serialization’. I have maintained a more general formulation here in order to allow for the similar sequencing, in English at least, of other uncomplemented modifiers than specifiers, such as those in (10.11) or (10a) versus (10.51a) or (10b):

\[\text{(10.11)}\]
a foreign/pubescent/rotund girl

\[\text{(10.51)}\]
a. girls with freckles
b. It slowly collapsed
b. It collapsed with no warning

In Chapter 10 pre- versus post-position of the nominal modifier was associated with complemented versus uncomplemented status of the modifier. Analogous respective structures can be associated with (10). The relevance of all this to our concern with the free absolutive can be seen in the suggestion that the free absolutive qualifies as an uncomplemented, or simplex, modifier by virtue of its unsubcategorized-for status (it is not lexically a complement) and in the fact that it does not itself freely select a complement but is supplied with one, as a default. It is a simplex modifier of may.

We can express its status as in (11):

\[\text{(11)}\]

| abs/P-abs |
By (11) absolutive seeks a predicator lacking an abs in its valency, where (recall) P and abs are any combination containing that respective feature. Other absolutes are licensed by valency.

Given the double dependency of John in (4), its positioning in terms of the orderings in (7) poses, then, an apparent conflict: as a dependent of read it should follow it (by (7a)), but as a simplex modifier of may it must precede the latter (by (7b)). This is resolved by a general condition, which I give here in the form suggested by Anderson (1997: 313):

**Ectopicity**

The sequencing of an item realizing a pair of associated syntactic nodes must satisfy the requirements of both nodes, unless one is a simplex modifier and one not, in which case the position of the former is prescribed.

This condition also applies to, for instance, wh-elements, as in (12a) and (12b):

(12) a. Who(m) did you see?
    b. Who(m) do you think I saw?
    c. Did John read Rasselas?

They too have their position determined by a free absolutive to which they are attached; and this again overrules their role as arguments of see/saw, and, as in (7), licenses the non-projectivity (tangling) involved (Anderson 1997: 269–75).

Word order thus again follows from the categorial and syntactic structure; and I assume that there is no reordering. There is no need to postulate categories with no phonological association; whatever role in the syntax might be played by a trace is accommodated by the double dependency relation (see Anderson 2004a). And, as has been suggested, departures from projectivity are licensed by particular configurations of categories, notably those involving simplex modifiers, including the free absolutive.

11.2.3 *Raising with ‘intransitive’ verbs*

With non-operative raising verbs, the syntactic structure is constructed in the same way, except that if they are to constitute the head of a finite clause there is an ‘extra’ stage to compensate for their non-operative lexical status.

This is occasioned by the fact that non-operative verbals, being lexically \{P;N\}, are subject to the redundancy finiteness formation (10.34), which enables them to occur in finite position, and this must apply if they are to occur in such a position. This redundancy ensures that non-operatives occur as
finites only when \( \{P\} \) and \( \{P;N\} \) can coincide, since the categories involved constitute a complex category, parts of a single word, as in (13):

\[
(13) \quad \{P\} \\
\quad \mid \\
\quad \{P;N\}
\]

The configuration in (13) does not occur in finite (main-clause) questions in English, such as those in (12). The pre-subject element must be only a simplex \( \{P\} \), to allow \( \{P\} \) and \( \{P;N\} \) to occur in two different places. But finiteness formation is not inhibited in (1a).

We can thus associate with (1a) the structure in (14), where I ignore the status of the infinitival to for the moment:

\[
(14) \quad \{\{abs\}\} \mid \{P\} \\
\quad \mid \{P;N/\{P;N\}\} \\
\quad \mid \{\{abs\}\} \mid \{P;N/\{abs\}\{erg,loc\}\} \\
\quad \mid \{\{erg,loc\}\} \mid \{\{abs\}\} \\
\quad \mid \{N\} \mid \{\{abs\}\} \\
\quad \mid \{N\}
\]

As before, John and Rasselas satisfy the valency of like, in this case involving an experiencer rather than an agentive, and John also fills the free absolutive dependent on the \( \{P;N\} \) associated with seemed. However, the result of finiteness formation means that there is another, superordinate predicator category, \( \{P\} \), associated with seemed that also itself introduces a free absolutive. The \( \{P\} \) is not subcategorized; its redundant requirement for \( \{P;N\} \) (not specified in (14)) is satisfied internally, but it introduces a free absolutive. And this free absolutive slot too is filled by John. We have multiple sharing. This last association corresponds to syntactic subject formation. And Anderson (1997: §3.3.4) does indeed argue that (syntactic) subject formation is an instance of raising: it is raising, in the unmarked case, to the free absolutive of a governing simple \( \{P\} \) category. With may in (6), subject formation and traditional raising are in effect conflated.
Recall that §7.2 introduced a distinction between positional and morphosyntactic subject. In (7.8) the two do not coincide:

(7.8)  a. There is a fly in my soup  
b. There are flies in my soup

The positional subject, normally filled by the raising of the hierarchically highest argument of a dependent predicator, here is filled by an expletive. Syntactic subject formation normally requires an upper {P}, to whose free absolutive the hierarchically highest argument of the lower predicator raises if it is to be a positional subject. This is why the prospective subject of non-finites must raise if they are to be overtly expressed; there is normally no position for subjects in the non-finite clause.

Morphosyntactic subjects, based on the hierarchy, are usually positional subjects, but if the former are already attached to a finite, then they needn’t, and they won’t, raise, as in (15a), representing (7.8):

(15)  a. {P/{loc}}  
{((loc),abs)} {P/{ abs}{loc}}  
{N} : {{abs}} {{loc}}  
  : :  :  :  
  : :  :  :  
  : :  :  :  
  there is/are a fly/flies in my soup  

b. {P/{loc}}  
{P/{abs}{loc}} \Rightarrow {P/{abs}{loc}}

The verbal configuration in (15a) is created by the redundancy in (15b); and the {((loc),abs)} of the upper {P} is filled by a locative expletive.

11.2.4 Raising with ‘transitive’ verbs

This second subject-forming raising in the main clause that is illustrated in the derivation of (1a) in (14) is not conferred on the raised agent of read in (16a); rather, in the case (16a), ‘subject-forming’ raising applies to a subcategorized-for argument that outranks the free absolutive introduced by {P;N}, as shown, for expect, in (16b):
(16) a. Kate expected/caused John to read Rasselas

Kate undergoes ‘subject-forming’ raising. Again, however, John is raised to fill the free absolutive introduced with respect to the [P;N] of expected. But this predicator already has a {{erg, loc}} argument, Kate, which (as indicated) outranks the {{abs}} of John and thus, as we have seen, fills the free absolutive of the finiteness element.

This account qualifies the former statement concerning the simplex modifier status of free absolutive: it undergoes simplex modifier serialization (7b) only if not outranked in subject selection. Derived simplex modifier status is associated only with subjects, free absolutes dependent on a [P]. If a free absolutive is outranked with respect to subject selection, it is linearized in accordance with (7a), ordinary dependent serialization. A free absolutive is linearized as a simplex modifier only if it is attached to an operative or it is the highest free absolutive (or is associated with the highest) attached to a complex predicator—that is, if the crucial free absolutive depends on [P] in a complex created by finiteness formation. The free absolutive associated with John in (16) is not the highest, and it is outranked by another participant of read as far as being associated (by raising) with the highest free absolutive is concerned; John thus emerges as the ‘object’ of expected, an ordinary dependent, having been outranked by Kate as specifier of that verb as a whole. The same is true of the expletive absolutes in (3), which are outranked by the subcategorized-for ergative. I differ here from the treatment in Anderson (2001a), in line with the interpretation of ‘simplex modifier’ given here.

The dependency relations in the raising structure in (16b) are such that in this case the shared argument John can occupy a position which is compatible both with its modifier status vis-à-vis expected—and so placed to its right (modifier serialization)—and with its status as a complement to read, without
there being ‘tangling’ of dependency arcs. That is, with ‘raising-to object’, both linearity requirements are met, in the position dictated by John's simplex modifier relation to read. In many word-order types such a compatible position cannot be provided: it depends on the shared argument in question being able to occur between and adjacent (barring circumstantials) to the two verb forms (here expected and to read). This accounts at least in part for the restricted distribution of ‘raising-to-object’. Horn (1985) observes that this condition of juxtaposition of the shared element to both heads cannot be met in VSO structures, for instance—which, of course, is not to say that ‘raising-to-object’ cannot occur in languages where the unmarked order is VSO).

The capacity to avoid ‘tangling’ avoids the need for reference to the ectopicity condition, and thus for interpretation of raisees as simplex modifiers; in (16b) John behaves as any other dependent, in this case of expected. Status of raisees as a simplex modifier is contingent on ectopicity.

The restriction of unalloyed specifier status for free absolutes to those dependent on {P} raises interesting questions, questions that, however, lead us away from our ongoing story. I therefore mention only one. The free absolute is (derived) specifier to a functional category, {P}. Both heads in (8b, c) are also functional, respectively functor and comparator. On the other hand, it is not obvious what might be the identity of the specifiers to be associated with the lexical categories nouns and verbs (a continuing point of disagreement). Of the lexical categories only adjective commonly has a specifier attributed to it, illustrated by (8a). Could it be that the positive of gradient adjectives, as well as the comparative, involves a comparator, in the former case absorbed rather than independent (more) as in (8c)? This comparator, like the overt one in (8c), is absent with non-gradient adjectives. In that case, we could associate specification uniquely with functional categories.

What is relevant to us at this point, however, is the recognition that it is the absolutive that may be free, or unsubcategorized-for, and thus the ‘host’ for raising, rather than (only) subjects. This eliminates, by virtue of the ‘sharing’ property of the free absolutive, the need for recourse to ‘exceptional case-marking’ and the like in accounting for the syntax of such ‘raising-to-object’ sentences. Nor, of course, are we led to a proliferation of ‘functional categories’ parasitic upon {P} (or ‘Infl’).

11.2.5 The category of the infinitive
The representations in (14) and (16) lack any indication of the category status of the infinitival word to: the categorization given is that for the following verb. This now requires our attention, even though it too is not central to our
main concerns here. I present one analysis that is compatible with the framework we have been adopting.

Anderson (2001a) again follows Anderson (1997)—and ultimately Pullum (1982)—in regarding this to as a verb which, like seem, takes another verb as its only argument but differs from other verbs in being an exception to finiteness formation: it is always non-finite, and by virtue of its categorization is transparent to the requirements of a governing predicador. It is thus a kind of necessarily non-finite ‘auxiliary’. Both the to and the non-finite auxiliary are transparent to the demands of the upper (‘control’) verb in Roger persuaded Bertram to be patient. In particular, the expectation that the non-auxiliary verb subordinate to persuade involves some kind of ‘agency’ is not interfered with by the intervening superordinate to (as well as the be).

Anderson (2001a) assumes that to is introduced by a ‘syntactic redundancy’ that applies above all {P;N} that depend on another (non-modal, but possibly non-verbal) predicator—i.e. on P, any combination with P (except simple {P}). Let us refer to this as ‘ininitivization’:

\[
\begin{array}{ccc}
\text{P} & \text{P} \\
\mid & \mid \\
\{P;N/{P;N}\}^* & \\
\{P;N\} & \{P;N\}
\end{array}
\]

(where ‘\{P;N/{P;N}\}^*’ = infinitival to, with the asterisk indicating its incapacity for finiteness formation). This is, according to Anderson (2001a), the unmarked redundancy involving dependent \{P;N\} in such circumstances: participles, for instance, involve a more complex specification, as discussed in, for example, Anderson (1992: chs. 5, 7).

In present terms, however, we can characterize what is going on here more straightforwardly, and less particularistically, in terms of the mechanism of ‘periphrasis’ discussed in, for instance, §8.2. Recall the role of the be auxiliary in allowing the progressive form to satisfy a valency and thus gain access to finite predications (among other things). The infinitival to can be seen as performing a similar function. In most circumstances in English the ‘bare’ form of the verb has to be accompanied by an element, realized as to, that allows it to be part of the valency of an upper verb.

Suppose we do indeed characterize what I shall refer to as the ‘bare infinitive’ as in (18a), i.e. as simply having the lexical categorization of non-operative verbs:
Say ‘infinitive-taking’ verbs (if we ignore other predicator types, for simplicity of exposition), are subcategorized in the lexicon as ‘/{P;N}’, as on the left of (18b). However, these normally undergo (18b) to give a derived representation on the left. Their valency will thus not be satisfied by the ‘bare infinitive’ of any verb, which is simply ‘{P;N}’. To is the ‘go-between’ here: its categorization and subcategorization as in (18c) means that it, trivially, satisfies the valency given on the right of (18b), but also that it has a valency itself that can be satisfied by the bare infinitive. The construction as a whole is a ‘periphrastic infinitive’.

If this characterization is appropriate, the representation in (16), for instance, should be expanded as in (19)—where the specification of expect shows the application of (18b), infinitive complementation:

$$\text{(19)}$$

$$\text{Kate} \quad \text{expected} \quad \text{John} \quad \text{to} \quad \text{read} \quad \text{Rasselas}$$

John is ‘raised’ twice, so that read shares its ergative argument with the free absolutes of to and the {P;N} component of expected, while the latter shares the argument of its {{erg,loc}} with the free absolutive of the {P}. Again, the position of John with respect to expected is determined by its failure to undergo subject formation with respect to that verb. John is a dependent of both expected and to, as well as of read; and in the case of the former two there is no ‘tangling’ whatsoever. There is ‘tangling’ of dependency arcs and association lines above to, but this ‘tangling’ involves the association attached to
the ‘transparent’ periphrastic infinitive marker. And, crucially, John occupies
simplex modifier position in relation to to; thus, the ectopicity condition
determines its position in relation to to and read.

The modal in (5) is not accompanied by an overt infinitive marker. As is
familiar, this is also characteristic of verbs of perception (20) and some ‘direct
causatives’ (21):

(20) Bert saw/heard Kate leave
(21) Bert made/let Kate leave

These classes of verb are also exceptions to the requirement embodied in
(18b), and they must be marked as such in the lexicon:

(22) Infinitive complementation exceptions
\{P;N[^{(18b)}]\}

As well as the verbs in (20) and (21), modals and periphrastic to are also such
exceptions, of course: this seems to involve a generalization that infinitive-
taking ‘periphrasts’ are exceptions to (18b), and need not be included in their
lexical entry. It can be argued (Anderson 2005d) that the exceptional lexical
verbs at least form two semantically natural classes (though not all causative
verbs are exceptional).

For many speakers ought is a modal that in taking a to-infinitive is an
exception to the exception, i.e. an exception to (22). However, other speakers
regularize the verbal (Ought she leave?) or make it non-operative (She didn’t
ought to leave) or don’t use it.

We can, on the basis of the preceding, associate the structure in (23) with
causative sentences (21):

(23) \begin{align*}
&\quad \{P\} \\
&\quad \{\{\text{abs}\}\} \quad \{P;N/\text{erg}\}\{P;N[^{(18b)}]\}\}
&\quad \{\{\text{erg}\}\} : \quad \{\{\text{abs}\}\} : \quad \{P;N/\{\text{abs, erg}\}\}
&\quad \{N\} : \quad \{\{\text{abs, erg}\}\} : \quad \{\{\text{abs, erg}\}\}
&\quad \{N\} : \quad \{\{\text{abs, erg}\}\} : \quad \{\{\text{abs, erg}\}\}
&\quad \{N\} : \quad \{\{\text{abs, erg}\}\} : \quad \{\{\text{abs, erg}\}\}
&\quad \{N\} : \quad \{\{\text{abs, erg}\}\} : \quad \{\{\text{abs, erg}\}\}
&\quad \{N\} : \quad \{\{\text{abs, erg}\}\} : \quad \{\{\text{abs, erg}\}\}
&\quad \{N\} : \quad \{\{\text{abs, erg}\}\} : \quad \{\{\text{abs, erg}\}\}
&\quad \{N\} : \quad \{\{\text{abs, erg}\}\} : \quad \{\{\text{abs, erg}\}\}
&\quad \{N\} : \quad \{\{\text{abs, erg}\}\} : \quad \{\{\text{abs, erg}\}\}
&\quad \{N\} : \quad \{\{\text{abs, erg}\}\} : \quad \{\{\text{abs, erg}\}\}
&Bert \quad \text{made/let} \quad kate \quad \text{leave}
\end{align*}
Make is marked as an exception to (18b), so retains its lexical specification; it can therefore be satisfied by the bare infinitive form. Kate fills the free absolutive of made, as well as the intransitive agent of leave. Whereas we can say in general that between a predicator and a dependent \{P;N\} there must appear an overt infinitive marker, the classes of verbs that we have identified are exceptional in this regard.

11.3 Conclusion

A consideration of the category of the infinitive has taken us away somewhat from the main theme of this chapter, which concerns the characterization of raising and control and in particular the role of free absolutes in this. But this diversion has allowed us not just to flesh out the structure of the subordinate clauses that occur in raising constructions but also to extend a little further our elaboration of the lexical apparatus underlying syntax.

Chapter 12 returns to the main theme, and is again based initially on the discussion in Anderson (2001a). The main conclusion to be drawn from the present chapter is the crucial role of free absolutes in the syntax of raising sentences. Their capacity to share an argument with subcategorized-for arguments in lower predications provides the licensing environment for representations that involve tangling, and thus avoid reference to ‘movement’ and ‘empty categories’. The next chapter looks at suggestions that this role can be extended to control structures. So that the same limited apparatus can allow for phenomena that have been regarded as involving ‘movement’ and phenomena that at one time were considered to involve deletion (cf, for example, Rosenbaum 1970) but more recently have been described in terms of a particular type of ‘empty’ category, different from the ‘traces’ left by ‘movement’. These latter too are an unnecessary enrichment of syntactic theory.

As suggested in §11.1, such ‘empty categories’ weaken the role of the sign in regulating the establishment of units: there are units of content that are uncorrelated. Given absence of grounding, they are also units of content form (syntax) that involve radical autonomy, rather than merely categorial autonomy. In this respect, as I have indicated, their adoption pushes the notion of autonomy beyond anything previously contemplated—and, I suggest, beyond anything that warrants being contemplated.
Argument-Sharing II: Control

We now turn to control, against the background of the discussion of raising in Chapter 11. Anderson (1977: §3.4; 1992: §4.4) and Böhm (1982: §3.1), indeed, suggest that the syntax of ‘obligatory control’ verbs such as those in (11.1b), renumbered for convenience simply (1b), and in (2b) involves ‘raising’:

1. a. John seemed to like Rasselas
   b. John tried to read Rasselas

2. a. Roger believes John to be a fool
   b. Roger persuaded John to escape

In each instance the John element is an argument of the escape verb—and indeed is its designated ‘subject’—which is also, by virtue of raising, an argument of the finite verb. Let us see how this can be reconciled with the (motivations for the) traditional distinction drawn between the constructions in (1b) and (2b), on the one hand, and the typical raising constructions illustrated by (1a) and (2a).

12.1 The role of the absolutive

Traditional raising, interpreted as in Chapter 11, is to the absolutive argument position, which is subject in intransitives (1a), object in transitives (2a): the subject functor phrase of the infinitive is associated, via raising, with the absolutive of the raising verb. In control structures, on the other hand, the ‘subject’ of the lower predicator has commonly been considered to be related in some way to an argument of the upper that, in ‘case grammar’ terms, bears a relation other than absolutive: in the case of (1b), an agentive, in (2b) an experiencer. And this relation can impose restrictions on its argument, of course. So that (3a) and (3b), for instance, require heavy contextualization for viable interpretations to be achieved:

3. a. Bertrand tried to be a younger son
   b. Roger persuaded Bertrand to be a younger son
This is so even though in both cases Bertrand is quite acceptable as a ‘subject’ of the embedded predication.

‘Traditionally’ (at least since the time of McCawley (1967), Rosenbaum (1967)), the distinction between the (a) and (b) examples in (1) and (2) has not been attributed to variants of raising. The two arguments related by the control relation in the (b) examples are both subcategorized for. Thus the analysis of these has not been taken to be parallel to that appropriate for the (a) examples. The former have been associated with the occurrence of two coindexed positions—one in the upper predication, the other corresponding to the ‘subject’ of the lower—either in both the (b) examples (for example Rosenbaum 1967) or even only in (1b), with the (2b) instance showing in this case neither distinct positions nor raising. The superficially rather similar constructions in the (a) and (b) examples thus involve rather different syntactic descriptions. This requires substantial motivation, motivation not immediately apparent, except on the basis of severely theory-internal assumptions. What motivations there are for differentiating between these constructions are semantic, with minimal syntactic consequences.

Such a traditional view also does not suggest any account of a salient distinction among control structures. The verbs in the above (b) examples specifically require their coindexed argument—the ‘controller’ (whether agentive or experiencer)—to be matched with an argument in an embedded predication which is also agentive, so that (4a) is strange (unless construed, say, as an elliptical reference to some experiment whose desired result was a hangover):

(4)  a. *Muriel tried to suffer a hangover
    b. Muriel expected to suffer a hangover
    c. Muriel expected to be famous/late/in London/a grandmother

The experiencer control verb in (4b) (also a raising verb, as exemplified in §11.2.4), however, imposes no such requirement. This is shown particularly by (4c), wherein the subordinate predication doesn’t even involve an experiencer. Expect is compatible with any subordinate predication in which the ‘null’ ‘coindexee’ is human (given pragmatic constraints on what one can plausibly expect to be the case with Muriel). The extent of control is variable, in accordance with the semantics of the control verb.

In this section we look at an analysis of (obligatory) control constructions (based on Anderson (2001a)) which is also (like that suggested for raising) non-mutative and in which the free absolutive also plays a crucial role. We start, in §12.1.1, with a consideration of experiencer control, beginning with verbs (like expect) that allow either a raising or a control derivation. It is
suggested that a free absolutive may be introduced either independently or in association with a subcategorized-for semantic role: the latter situation characterizes control. §12.1.2 explores the relationship of experiencer and agentive control to the agentive controller condition underlying the strangeness of (31a), as well as making note of a distinction between control structures that involve a mediated infinitive (contracting a labelled semantic role) and a direct infinitive, as in the examples discussed above. And §12.1.3 ascribes some of the traditional problems in specifying selection of controller to the internal (lexical) argument structure of different control verbs, particularly those which convey an illocution or perlocution. The discussion of the suggestions of Anderson (2001a) concludes in §12.1.4 with an overview.

No attempt is made, any more than in Anderson (2001a), to survey the large literature on control (large even in relation to English): see, for a sample, Sag and Pollard (1991), Pollard and Sag (1994: ch. 7); Panther (1994); Jackendoff and Culicover (2003); and see also, for example, (contributions to) Wilkins (1988c), and Anderson (1992: §§3.5, 4.4), for discussion of some earlier work, including other studies invoking semantic relations. But, though the focus is on the role of free absolutive, I attempt here to present what Anderson (2001a) regarded as an account of some of the basic distinctions involved in ‘obligatory’ or ‘unique’ control. Jackendooff and Culicover (2003) offer a different, much fuller account of different control types that also assumes a semantic-relational basis for control. We cannot establish within the confines of the present work to what extent all of their description, couched in a highly stratified framework, is compatible with the proposal offered by Anderson (2001a) described in what follows, with its more restricted focus. However, some extension of his proposal is offered in §12.1.3, and particularly in §12.2, concerned with control by locatives.

Some recent accounts within a ‘minimalist’ framework have also proposed a more unified approach to raising and control. Hornstein (1999), for instance, argues that obligatory control structures, as well as raising structures, are formed by movement. He too argues (1999: 71) that, as traditionally conceived, ‘the distinction between raising and control multiplies the inventory of empty categories’. Hornstein’s account involves an abandonment of the ban on movement into ‘0-positions’. Likewise, the proposal concerning control structures offered in Anderson (2001a) requires sharing of an argument which has a semantic role in two clauses. Regarding control as involving movement is argued against by Jackendooff and Culicover (2003); however, from the perspective of Anderson (2001a), neither does raising involve movement.
On Anderson’s account, the selection of controller is made on semantic-relational grounds: although the shared argument can, in its function as ‘controller’, be characterized as (potential) ‘subject’ of the lower clause (and thus, in any one of a variety of neutralized semantic relations to its verb), the controller is specified by its semantic relation (agent, experiencer)—see too, for example, Pollard and Sag (1994: §7.2). This is in accord with the (derivationally based earlier) ‘case grammar’ hypothesis that grammatical relations are derived cyclically, so not available in the cyclic clause. In terms of a non-derivational framework, the control relationship illustrates the role of (potential) subject as designated identifier of ectopic shared arguments: we know that the shared argument is (potential) subject of the lower clause, despite its ectopic placement. In the upper clause, the shared argument bears (whatever else) an absolutive relation to its verb, whether control or raising is involved. This absolutive is not part of the subcategorization frame of the control/raising verb; it is free, and present by virtue of a universal requirement that every predication contain an absolutive.

Control thus differs from raising, on Anderson’s (2001a) account, in the free absolutive’s being associated with a subcategorized-for semantic relation (|erg|, in the case of (1b), for instance). This argument bears both a free absolutive and a lexically specified relation or relations. The discussion of how this might be more precisely formulated begins with the familiar observation of an overlap in the classes of raising and control verbs.

12.1.1 Raising versus control

Compare with the raising structures in (5) the control variants in (6), with the same verbs:

(5)  
   a. Bert expected Kate to have (had) a good time  
   b. Bert remembered Kate to have had a good time  

(6)  
   a. Bert expected to have (had) a good time  
   b. Bert remembered to have (had) a good time  

In (5), on the analysis of §11.2.4, Kate realizes the argument shared between the subject of the lower verb and the free absolutive of the upper predication; Bert is a subcategorized-for experiencer in the latter. In (6) Bert corresponds to both this experiencer and the subject of the lower predication, both of them subcategorized-for. Otherwise, we have structures parallel in syntax and interpretation.

Anderson (2001a) concedes that with various verbs there are, to be sure, constraints involving temporal reference and other factors limiting
these parallels. This is illustrated by the necessarily perfect form of the subordinate in \((5b)\). Thus too the control structure \((7a)\), for example, is ‘paralleled’ in temporal profile not by \((7b)\) but by the lexical causative in \((7c)\):

\[(7)\]

\begin{enumerate}
  \item Bert remembered to take his duck
  \item *Bert remembered Kate to take her duck
  \item Bert reminded Kate to take her duck
  \item Bert reminded Kate to have taken her duck
\end{enumerate}

\((7c)\), however, obviously adds a dimension absent from \((7a)\) and \((5, 6)\). All of these last, however, are again sufficiently like each other in interpretation and syntax as to prompt a consideration of whether an analogous analysis is in order.

The differences in temporal profile associated with the main verbs in \((5)\) and \((6)\), illustrated further by the viability of \((7d)\) as against \((7b)\), whereas both the parallels with expect are viable, relate to what a person can reasonably be conceived of as remembering to be necessary and possible future undertakings. And we can relate this, as well as to the meaning of the verbs, also to the difference between control and raising structures proposed by Anderson \((2001a)\), as will emerge in what follows. And this should not be allowed to obscure the basic similarities between these structures.

We associated a free absolutive with the raising construction exemplified in \((5)\), on the assumption that the subcategorized-for arguments of the raising verbs in \((5)\) are \{erg,loc\} and \{P;N\}; these verbs are not subcategorized for absolutive. In \((6)\), too, there is no obvious candidate for being a subcategorized-for absolutive argument of expected/remembered; these verbs too take an experiencer and a verb. Suppose, then, all these verbs are uniformly—in both pairs—lacking in a valency involving absolutive.

With the sentences in \((5)\) the absolutive introduced as a consequence of the universality of absolutive requirement is filled by the hierarchically highest argument of the infinitive: Kate in \((5)\) is shared by the free absolutive and the lower subject relations. Suppose, further, that this also occurs in the building of structure associated with the \((6)\) sentences: a free absolutive is introduced (in the absence of a subcategorized-for absolutive) which shares its argument with the lower subject. But in \((6)\) there is no overt argument present distinct from Bert. This would lead us to the conclusion that Bert in \((6)\) is simultaneously the \{[erg,loc]\} argument of the finite verb and (by default) the filled absolutive, i.e. the free absolutive argument filled by the subject argument of the infinitive.
This could arise if we were to say that free absolutive can be introduced either independently, as in raising structures, or in association with a functor required by the predicator—which Anderson (2001a) suggests is appropriate to control structures such as are exemplified by (6). That is, we have in (5) and (6) with respect to free absolutive the two possibilities represented schematically in (8):

(8) a. **Raising**

\[ \{P;N\} \rightarrow \{\text{erg,loc}\} \leftarrow \{\text{abs}\} \]

b. **Control**

\[ \{P;N\} \rightarrow \{\text{erg,loc}\} \leftarrow \{\text{abs}\} \leftarrow \{\text{abs}\} \]

Choice between (8a) and (8b) is associated with absence versus presence of assumed coreferentiality of the controller and the subordinate (potential) subject. *Bert* in (5) is \{\text{erg,loc}\} only, as is the first role in (8a); the distinct (free) absolutive shares its argument, *Kate*, with the lower subject. But in (8b) an \{\text{erg,loc}\} and a free absolutive linked by an association line jointly share an argument with a lower ‘subject’. The sharing is again licensed by the free absolutive.

As in (5), the upper predicator in (6) takes a \{\text{erg,loc}\}, but, in the latter instance the association of that role with the free absolutive requires that it not be filled as usual (for a subcategorized-for role) by a distinct dependent \{N\}, but that the filling of the functor phrase be in accord with raising, the unmarked possibility for free arguments: the controller must share the argument of the subject of the subordinate \{P;N\}, even though it bears a subcategorized-for role. This is the structure Anderson (2001a) attributes to the upper predication in (6).

The finite predicators in (6) impose on the raised filler of their \{\text{erg,loc}\} functor only the requirement that they be suitable as experiencers in the upper clause, though not necessarily that they be such in the subordinate predication. There they are merely ‘subjects’; but again, as with other arguments undergoing raising, they cannot be expressed as such in the morphologically non-finite clause. As I observed concerning (4b, c), such experiencer controllers do not impose any constraint on the semantic role in the subordinate predication of the argument they share with it.

Thus, Anderson (2001a) takes the syntactic structure of (6a) to be as in (9):
For notational convenience, I have abbreviated the associative structure ‘{erg,loc} ....... {abs}’ of (8b) as ‘{{(erg,loc),abs}}’. Bert realizes successively, moving upwards, the {{erg,loc}} argument of have and the free absolutive of to, the free absolutive of expected, together with the {{erg,loc}} of expected (by virtue of its association with the free absolutive), and the free absolutive of the finiteness element {P}; and the structure-building involved is the same in its composition as that I described in relation to the raising variant. The only elaboration is the association of the free absolutive of expected with its subcategorized-for {erg,loc} relation in the main clause.

Again, Anderson (2001a) suggests that, in the absence of a controlled raisee, we can find expletive arguments realizing the free absolutive: i.e. there are expletive control structures. This is illustrated by (10a) and (b), respectively from French and Greek:

(10) a. Il fait froid
    It makes cold (‘It is cold’)

    b. Kani krio

Anderson (2001a) takes these to involve a verb (fait, kani) which takes a non-verbal predicator (froid, krio) and an {erg} marked as unsatisfied by virtue of being associated with a free absolutive (i.e. there is no unscategorized-for absolutive). That is, the subject of (10a), for instance, is associated with the configuration in (11):
None of the absolutive relations in (11) is subcategorized for; each predicator has a free absolutive. The lowest one is satisfied by an expletive, the intermediate by the lowest one, and the highest one by the \{((\text{erg}),\text{abs})\}; and the ergative of \{P;N\} is marked as a controller by the free absolutive associated with it.

As I have mentioned, there exist various restrictions on the viability of the raising versus control variants. We can associate the difference in temporal expectations between (5b) and (6b) with whether or not the experiencer is also, via sharing, a participant in the lower predication: if it is, then that person can remember to carry something out; but if the experiencer does not share with the lower ‘subject’, this is ruled out. Other differences seem to be more subtle. I do not explore such restrictions further here. Despite them, experiencer verbs that take an infinitive are generally associated with both possibilities, as illustrated by (5, 6).

Modals instantiate another kind of variation. Say we attribute to the modal in (11.5a), repeated here, the categorization \{P/\{P;N\}\}, with the subcategorization given by redundancy (10.30a):

\[
(11.5) \quad \text{a. John may read Rasselas}
\]

\[
(10.30) \quad \text{a. } [P] \Rightarrow [P/\{P;N\}]
\]

This of course induces a free absolutive, as was shown in the representation in (11.5b):
May is represented in (11.5b) as a raising verb. However, there is an interpretation for May in (11.5a) which correlates better with a control structure, namely where it is understood as involving ‘permission’ rather than simply ‘possibility’, as is associated with the raising structure of (11.5b).

As is familiar, the ‘permission’ interpretation is virtually eliminated in the perfect:

(12) John may have read Rasselas

Under a ‘permission’ interpretation John is an \{\{\text{erg,loc}\}\} (experiencer), associated with a free absolutive, and may is a control verb; (12) is not usually interpreted as a control structure. And the absence of a control reading for (12) is again associated with temporal limitations on (in this instance) what can be given permission: past events present a problem in this respect. To overcome this, a control reading for (12) would have to involve a strained ‘future perfect’ component.

We can thus associate may and the other modals with a lexical specification such as (at least) (13), where the angles indicate optionality:

(13) \{P</\{\text{erg,loc}\}>\}

(13) is expanded to (14) again by lexical redundancy (11.30ia):

(14) \{P/\{P;N\}</\{\text{erg,loc}\}>\}

(14) allows for the dependency structures in (15), which go with the ‘permission’—(a)—versus ‘possibility’—(b)—readings:

(15) a. \{P/\{P;N\}\{\text{erg,loc}\}\}  \quad b. \{P/\{P;N\}\}\{\text{abs}\}\{P;N\}
'Permission' may involves \{\text{erg,loc}\}, so control; 'possibility' may involves simple raising. Such a distinction characterizes the 'root' versus 'epistemic' uses of the modals in general.

The modals do not show, on the other hand, a variant with free absolutive as a distinct dependent of the modal, i.e. a 'raising-to-object' variant, as with \textit{expect} etc. There is no parallel to (5). I associate this with a syntactic restriction on the subcategorization of operatives:

\begin{equation}
(16) \quad \text{Operative subcategorization}
\end{equation}

\[ [P/\text{abs,erg,loc}] \Rightarrow [P/\{\text{erg,loc},\text{abs}\}] \]

Operatives—indepedent elements of the \{P\}category—do not have distinct experiencer and absolutive arguments; the syntactic valency pattern containing the three features must be as on the right of (16). An \{\text{erg,loc}\} and an \{\text{abs}\} dependent on \{P\} are thus necessarily associated, not independent. This reflects a general property of operatives: they do not assign semantic relations ('\(\emptyset\)-roles') which are not associated with a free absolutive.

Such a formulation is preferable to any assertion (reflected in such textbook treatments as Radford (1997b: 165–6)) that 'auxiliaries' do not assign '\(\emptyset\)-roles'. This latter generalization illustrates the 'discomfort' of making reference to semantic relations in an allegedly autonomous framework. It makes no semantic sense to deny a semantic-relational ambivalence to the modals. The selection of what semantic distinctions are to be given a syntactic role is again dependent on an arbitrary limitation of what constitutes 'syntax'. The restriction exhibited in operative subcategorization (16) is apparently not considered a matter for 'syntax', while that illustrated by (17a), vs. (17b), is:

\begin{equation}
(17) \quad \text{a. 'There tries to be a hole in his head}
\end{equation}

\begin{equation}
(17) \quad \text{b. There seems to be a hole in his head}
\end{equation}

But the basis for the restriction is in both instances semantic, and in both instances it has syntactic consequences.

Let me try to sum up, so far, before moving out of the area of simple experiencer control structures.

With \textit{expect}, \{\text{erg,loc}\} is constant, unlike with the modals, and so no variant parallel to (12.5) and (12.6), with 'raising-to-subject', is available. But in its different way it shows both control and raising ('to-object'), as illustrated by (5). 'Raising-to-subject', however, occurs only with experiencer verbs with incorporated experiencer, as is arguably the case with \textit{seem}. We can associate with (18a) the structure in (19a), as compared to the simple (non-experiencer) 'raising-to-subject' verb in (18b)—cf. (19b):

\begin{equation}
(18) \quad \text{a. She seems (to me) to be careless}
\end{equation}

\begin{equation}
(18) \quad \text{b. She tends to be careless}
\end{equation}
Seem is a lexically complex intransitive, whose categorization contains an incorporated (goal) \{erg,loc\}. Once again, the indexed argument in (19a) indicates acceptance of a coreferential apposed circumstantial, as appears, optionally, in (18a). In (19b) Tend shows no such coreferential apposition possibility; it instantiates a simple 'raising-to-subject' verb.

Both the experiencer verbal expect and the modal may allow either control or raising ('raising-to-object' in the case of the experiencer), though structures involving control are ruled out with some experiencer verbs (such as believe). With such verbs, the derived combination \{(erg,loc),abs\} is not allowed.

With may, as we have just seen, given the requirements of operative subcategorization (16), no variant parallel to (5), with 'raising-to-object', is available. Any accompanying \{erg,loc\} must be combined with a free absolutive. This is the reverse of the restriction associated with verbs like believe.

However, with a typical agentive raising (causative) verb such as cause, the raising structure of (20)—wherein the absolutive Kate is outranked for subjecthood in the main clause by a simple ergative rather than \{\{erg,loc\}\} argument—is apparently not paralleled by control equivalents with the same verb:

(20) a. Bert caused Kate to resign
   b. Bert caused the wall to crumble

Only agentives such try, with no causative equivalent, show control and no raising. Agentive control structures introduce, indeed, some new considerations which are the main concern of the subsection which follows. This is one reason why analyses of control need to make reference to semantic relations. Only after some more general discussion of distinctions involving semantic roles can we return to causatives as such, and particularly the relation between the complex internal structure of some of them and the familiar problem of selection of controller.

### 12.1.2 Agentive control and the agentivity requirement

Agentive controllers such as those associated with manage or decide normally require an agentive predication as complement; and usually the victim of control—the 'origin' of the shared argument—is the agentive argument of this predicator, as illustrated by the typical examples in (21):
(21) a. Bert managed to leave town in time
b. Kate decided to read Rasselas

(22) *Bill managed/decided to feel unwell

Interpretation of (22) would require some play-acting, or some other infringement of normal expectations. A passive 'subject' is acceptable only if a suitable pragmatics attributing some degree of agency to the 'subject' can be provided, as in (23):

(23) a. Bert managed to be dismissed again
b. Kate decided to be re-interviewed

But even here a get-passive, which allows more generally an agentive interpretation, is often preferred.

The examples in (21) differ from (20) not merely in showing control rather than raising, but also in demanding an agentive infinitival predication. This means that, if (21a) and (21b) are typical of agentive control, we can associate free absolutive with an agentive argument only if the predicate involved demands an agentive complement verb, as in (21). If there is no such requirement, then an agentive infinitive-taking verb apparently involves raising rather than control, as in (20) (cf. here Rudanko (1989: esp. §2.5.4)). Of course, the causative of an agentive control verb such as those in (21) retains the capacity to demand an agentive complement, as in (24):

(24) His attitude decided her to be re-interviewed

But causatives in general are not subject to the requirement that they take an agentive predicator. As indicated, we take up the structure of causatives in §12.1.3; here I merely observe that they, unlike non-causative agentive controllers, do not require an agentive complement.

These observations concerning agentive control contrast with the situation with the experiencer verbs described in §12.1.1, where the same verb may appear in both raising and control structures, as in (5, 6), and there is no demand under control for an agentive, or experiencer, or whatever, complement to the subcategorized-for predicator. We can thus apparently restrict the systematic occurrence of agentive control as follows, then:

(25) Agentivity requirement

A free absolutive is associated with a simple ergative only if the latter is necessarily co-complement of an agentive predicator.

And normally the control victim is the agentive argument of this co-complement. The major exception to the agentivity requirement is expletive
constructions such as those illustrated in (10), where the controller is a free absolutive realized by an expletive, as shown in (11). But we also have to recognize the ‘surrogate’ agents constituted by the subject of passives such as those in (23).

The distribution of free absolutive allowed by the agentivity requirement (25) can be illustrated by the syntax of ‘Aktionsart’ verbs like begin:

(26)  
   a. It began to rain  
   b. John (deliberately) began to ruin the crops

(26a) shows a straightforward raising variant, and (26b), on one interpretation at least, agentive control, with the victim usually, as here, being the agence of the subordinate predicator. This variation with a single predicator between ‘raising-to-subject’ and agentive control parallels the variation between ‘raising-to-subject’ and experiencer control we associated with may.

Further, an experiencer control modal normally also imposes the agentivity requirement, as with the ‘permission’ sense of (11.5a). The agentivity requirement is a grammatical reflection of the logical constraints on what an agent can exercise control over. Here the agent is the implied ‘permission-giver’. However, there are ‘root’ modals where there is no external ‘implied agent’, but where there is nevertheless an agentivity requirement associated with control by an experiencer, as with the ‘ability’ use of the modal in (27):

(27)  
   John can read Sanskrit

Here the ‘implied agency’ is that of the experiencer; the experiencer role in this instance introduces a ‘potential agent’. There are also such experiencer-control lexical verbs that, contrary to what has been assumed above, normally have some kind of agentivity requirement, as in (28a), even if indirect, as in (28b):

(28)  
   a. John intends to read Rasselas  
   b. John intends to be famous

This class of experiencer-control verbs interacts with other dimensions discussed by Anderson (2001a), including the class of control verbs that take an infinitive mediated by a semantic role.

However, what precedes completes the basic picture provided by Anderson (2001a) of what seem to me the ‘traditional’ central (obligatory) control phenomena. The relevant distinctions are incorporated and exemplified in Table 12.1. What is relevant to our present concerns is the extent to which, besides the identification of controllers by semantic relations and the characterization of other distinctions (such as mediation) in such terms,
the groupings arising from the table have a semantic, and particularly semantic-relational, basis, even where this may not be immediately obvious. For instance, the agentivity requirement is general with agentive control; but it is associated with only some experiencer controllers, such as experiencers with deontic modals. However, what unites the experiencer verbs associated with the requirement is a capacity or commitment to attempt an action, to irrealis agency. So that we might roughly characterize intend to V as ‘having it in mind to try to V’. That is, a little more explicitly, intend is a complex predicator that includes an agentive component subjoined to the experiencer predication. And it is with this component that we can associate the agentivity requirement. It looks as if the agentivity requirement is always associated with an agentive.

Concern with agentivity, and with complex internal lexical structures, takes us on to the topic of the next subsection. We turn now to what appears to be a class of causatives that, unlike the simple raising verbs of (20), involve control, and which introduce a traditional problem with the description of control. What follows modifies the analysis of Anderson (2001a) in the light of Anderson (2005a).

### 12.1.3 Causatives and control

Anderson (2001a) recalls that apparently problematical for the preceding analysis of control are such familiar examples as (29a)—involving one of Panther and Köpcke’s (1993) ‘perlocutives’, which seems to show phenomena associated with an agentivity requirement:

(29)  
\begin{itemize}
  \item a. Bert persuaded Kate to leave/*feel unwell
  \item b. Bert persuaded Kate to be examined by a specialist
\end{itemize}
The subordinate predication is agentive, and normally its subject is the agentive. Even the (again familiar) passive of (29b) involves imputation of subordinate agency to the shared argument. If the subordinate predication in (29) involves an agentivity requirement, why is the initial agentive Bert not the controller, given the tight association between the agentive control and an agentivity requirement established in §12.1.2? The controller is unequivocally Kate, a ‘patient’ rather than agentive. We can at least say that, as with other experiencer-control verbs with an agentivity requirement, ‘implied agency’ seems to be involved in this case. However, we are still confronted with the all-too-familiar and long-standing ‘selection of controller’ problem, apparently.

Crucial here is the observation that the control verb in (29) is itself a lexical causative as well as a verb exerting external control; categorically it is internally complex. Compare the a Yx-derived and converted causatives of (30), where categorial complexity is reflected in the overt morphology or a change of valency with a lexical constant (conversion):

\begin{align*}
(30) & \quad a. \text{Bert encouraged Kate to go abroad} \\
& \quad b. \text{The consequences of the storm decided Kate to go abroad}
\end{align*}

This causative complexity has two consequences. These derive from the fact that morphological and lexical causatives involve an internal structure which includes a superordinate predicator, analogous (in meaning and valency) to make, a causative component, which, like it, raises the subject of a lower predicator; the subordinate predicator in both instances (subjoined, as part of a lexical complex, or subjoined, as with a syntactic causative), may be of a variety of argument structure types, including agentive or experiencer.

The first consequence, the simple internal complexity, accounts for Bert’s non-viability as a controller of Kate: the infinitive predication is not dependent on the causative (sub-)predicator, but on the subjoined (sub-)predicator, where the role given to Kate is an experiencer with an agentivity requirement. The second consequence, the presence of this particular instance of a variety of subjoined predicicators, allows for the internal dependent predicator in the complex associated with persuade to be interpreted as an agentive-requirement experiencer verb of the intend type; and it is its experiencer, the internally subordinate experiencer realized as Kate, that controls this shared argument.

Schematically, the internal argument structure of persuade-type verbs includes the components in (31):
The ‘agentivity-implying’ experiencer imposes the agentivity-requiring control on its adjoined \{P;N\}. The syntactically active internal (causative) structure of persuade helps explain the apparent anomaly in controller selection.

Kate in (31) is both ‘patient’ of the causative complex and agentive of leave. The \{\{\text{erg,loc},\text{abs}\}\} has vacuously undergone part (a) of causativization, based on the analysis of causatives presented in §9.3.3. There causativization was formulated as (9.67), which is updated here as in (32):

(32) Causativization

\begin{align*}
\text{a. } & \{P;N/\{ \}\} \Leftrightarrow \{P;N/\text{pat}/\{\text{loc}\}\}\} \\
& \{P;N/\text{erg}\} \\
\text{b. } & \{P;N/\{\text{loc}\}\} \Leftrightarrow \{P;N/\text{pat}/\{\text{loc}\}\}\}
\end{align*}

where ‘\{ \}’ is highest role on the subject selection hierarchy

The potential subject of a predicator that is being causativized is marked as locative. This is added to whatever specification it might already have; so, an \{\text{erg}\} verb becomes \{\text{erg,loc}\}, an \{\text{abs}\} becomes \{\text{abs,loc}\}, i.e. ‘patients’ in both instances. Presumably this is also the case with items of the class of persuade, though application in this instance is vacuous. ‘Patient’ will be attached to the lower predicator of the causative complex, however.

Anderson (2001a) discusses another set of lexical causative control predicates that are known to complicate further the controller selection problem. This is because, on his account, they introduce a further dimension of internal
structure the differing orientation of which accounts for why (33a), involving a ‘commissive’ verb (Panther and Köpcke 1993), appears to violate what has just been said about lexically complex causatives:

(33)  
   a. Kate promised Bert to leave/*feel unwell  
   b. Kate told/asked Bert to leave/*feel unwell

Here the causative agent apparently exercises control. However, other intrinsically communicational verbs—such as Panther and Köpcke’s (1993) ‘directives’—pattern like that in (33b). Anderson suggests that crucial to an understanding of these is their communicational, indeed specifically locutionary, character. This introduces yet further internal structure between the causative component and the infinitive clause; and it is the orientation of these ‘locutionary’ components that determines control.

I do not pursue the analysis of these complex control predications here, however. The investigation of control relations internal to complex predications introduces substantial distinct, if often familiar, issues. Part of what is involved is a detailed implementation of Comrie’s (1985b) claim that ‘any explanatory account of the subject/object control distinction must be grounded in the pragmatics of speech acts, although in at least some languages, including English, these pragmatic principles have become grammaticalized’. See also Anderson (1992: §4.4) and Pollard and Sag (1994: ch. 7) for some suggestions along these lines. Rather, I merely want here to indicate factors that might in principle account for the apparent aberrancy of complex predications with respect to the generalizations established for core control predications in the previous subsections. We return in §12.2.3, however, to a reconsideration of the analysis of causatives in the context of suggestions made earlier in §12.2.

12.1.4 Conclusion

I have presented here an attempt (mainly due to Anderson (2001a)) to extend the non-mutative analysis of raising based on the free absolutive whose presence is attributable to the principle of absolutive universality to a core of traditional control structures. This involved us also in distinguishing between control predications where the requirements of control are minimal (as with expect and want) and those which demand agentivity of their infinitives (as with try or persuade). Furthermore, some of the traditional problems in identifying the controller are attributed by that analysis to the internal structure of some control predications, though this, among other things, remains to be substantiated in relation to a broader empirical base.
12.2 Locative control: tough-movement, passives, and causatives

§12.1 was concerned with some recent attempts to characterize agentive and experiencer control in English. These thus involve controllers that are respectively \{\text{erg}\} and \{\text{erg,loc}\}. This raises the obvious question of whether there is a third controller type involving simple \{\text{loc}\}. Or is control limited to arguments contracting an ergative of some sort? In this section I look at some different phenomena, all of which invite consideration of them as involving control by a simple locative. These share some distinctive properties that distinguish locative control from the others involving ergative. First we return, in §12.2.1, to the ‘tough’/‘easy’ construction alluded to in §7.3, before returning, in §12.2.2, to passives, and finally to causatives, in §12.2.3.

12.2.1 Tough

In §7.3 I suggested that the phenomena that were illustrated there by the examples in (7.15) involve control but not by an ergative of any sort:

(7.15) a. The lock was easy to pick
    b. Methoni is easy to get to
    c. The route is easy to remember

There has, however, long been controversy over the analysis of this construction. And it is not difficult to see why (see Anderson (1977: 283, n. 42) for reference to some early contributions to the debate).

We find alongside (7.15a) the construction in (7.17a):

(7.17) a. It was easy to pick the lock

This is reminiscent of the alternation in (34):

(34) a. She seems to have picked the lock
    b. It seems that she picked the lock

(34a) shows simple raising. Why not (7.15)?

There are familiar but crucial differences between the two sets of phenomena: differences in syntax and in semantics. The subordinate in (51b) is finite, in (7.17a) it is not; those in both (7.15a) and (7.17a) are non-finite. And whereas (7.17a) can be interpreted as a variant of (35a) where the lower predication has failed to undergo subject formation, there is no subject-forming variant with (34b):
(35)  a. To pick the lock was easy  
     b. *That she picked the lock seems

Also, the putative raisee in (51a) is the highest argument of the lower predic- 
ator; that in (7.15) is anything but.

Recall too that Lasnik and Fiengo (1974) note that, though the adjective in 
(7.15) also appears in the construction in (7.17a), this is not the case with the 
predicators in (7.16)—cf. (7.17b, c):

(7.16)  a. This problem is a hornets’ nest to deal with  
        b. Mary is pretty to look at

(7.17)  b. *It is a hornets’ nest to deal with this problem  
        c. *It is pretty to look at Mary

Occurrence in the construction of (7.15) does not guarantee that the predic- 
tator will also appear in that of (7.17). There are two different interpretations of 
*easy that correlate with two different constructions. One of these senses is 
lacking in the case of the predicators in (7.16). The different interpretation 
that *easy shares with the predicators in (7.16) is one in which the predicator 
‘attributes a property’ to its subject; this is scarcely compatible with simple 
raising, where the subject of (51a), for instance, bears no semantic relation to 
its predicator. We are dealing with control rather than raising.

One of the anomalies vis-à-vis raising cited above concerning the construc- 
tion of (7.15) and (7.16) recurs, however, in relation to the tough-construction 
versus (other) control structures. The controllee in these sentences is not the 
highest argument of the lower predicator; in the (other) instances of control, 
as well as raising, that we’ve looked at so far, the controllee is the potential 
subject. But we can associate this difference with another difference between 
control in (7.15, 7.16) and these other instances of control: those we have 
looked at involve roles which contain an ergative, with its associated prefer- 
ences (for animacy etc.). Ergative controllers require ‘subject’ controllees, i.e. 
the neutralization represented by ergative as a result of subject formation 
(6.40). And there is, on the other hand, no motivation for attributing an 
ergative to the controller in (7.15, 7.16). It is attributed to a property, rather— 
in the case of the lock in (7.15a), of ‘having been easy to pick’. This all makes 
sense if in this variety of control it is a simple locative (locating the property) 
that has the free absolutive associated with it.

We can associate with (7.15a) the representation in (36) (which, as usual, 
ignores much that is irrelevant):
Only the lowest absolutive in the path above the lock is subcategorized for; it is required by the valency of pick. The others are free: associated, in ascending order, with to, with easy, whose locative it attaches to, and, lastly, with the copula. The [erg] valency of pick is satisfied internally, by an incorporated argument whose reference is indefinite or assigned contextually. The highest argument of a non-finite lexical predicator can be syntactically overt only by virtue of raising (including control raising) to the free absolutive of a superordinate predicator; it will be a subject if the predicator that the lexical predicator depends on is [P]. Otherwise the valency is satisfied syntactically, as in (36), by incorporation.

Constructions like those in (7.15, 7.16) also serve to introduce another aspect of argument sharing. Consider the kind of representation necessitated by (7.15b); I suggest (37):

(37)
We have here ‘preposition-stranding’, which is subject to different kinds of restriction in different languages. In English it is widespread with ectopic elements which have an overt functor, as in (37). However, in some instances, as illustrated by (38), where the ectopic element is not a subject, ‘stranding’ is optional:

\[(38) \begin{align*}
&\text{a. To whom did she give the bouquet?} \\
&\text{b. Who(m) did she give the bouquet to?}
\end{align*}\]

What is of interest here is the variability in argument-sharing type: the shared argument is accessed by the free absolutive either via the overt (subcategorized-for) functor of that argument, as in (38a), or directly, as in (38b), and (7.15b, 37). The latter possibility seems to be highly restricted in languages.

12.2.2 Passives and argument-sharing

I return here to passives, in that they appear to manifest properties we can associate with locative control. As in the construction looked at in the preceding subsection, the raised argument is not the potential subject of the lower predicator; and passives show ‘preposition-stranding’ of overt functors, as in (39):

\[(39) \text{John is usually listened to}\]

\[(40) \text{‘strands’ an apparently circumstantial preposition:}\]

\[(40) \text{This bed has been slept in}\]

Further, there are in some instances, at least, signs that more than just simple raising is involved. (40) is likely to be uttered on the basis of observing, with respect to the bed, some result of being slept in. In many cases this sense is attenuated, suggestive of routinization; and the word-order difference afforded by the passive may serve simply discourse purposes.

There are other differences from the locative control structure of §12.2.1, of course. Choice of raisee is hierarchically determined, as in (41):

\[(41) \begin{align*}
&\text{a. The medal was given to Dick} \\
&\text{b. *Dick was given the medal to}
\end{align*}\]

Contrast these with (42), where two possibilities are available:

\[(42) \begin{align*}
&\text{a. The present is easy to fit into the box} \\
&\text{b. The box is easy to fit the present into}
\end{align*}\]

But the passive hierarchization too looks like a sign of routinization.
Any element of ‘affectedness’ associated with the passive subject is stronger in the get-passive:

(43)  
  a. Beryl got mugged  
  b. Bob got sacked

Get basically seems to be a goal-subject verb (as well as agentives based on this):

(44)  
  a. Bob got a present  
  b. Bob got the sack

I suggest that this is also the case with the passives in (43): passive get is a locative goal verb whose free absolutive is attached to this locative. We have a variant of locative control. But it is control by a goal; so that, rather than a property simply being attributed, there is an ‘effect’ signalled. Anderson (1972: 26) notes that the passive constructions in a number of languages involve a passive verb that otherwise takes locative, and indeed goal, subjects. These include verbs otherwise denoting ‘receive’ or ‘get’ or ‘suffer’ or even ‘eat’ (Caldwell 1875: 358).

Accordingly, we might associate with (43a) the (slightly simplified) structure offered in (45):

(45)  
{[P]}
|  
{[abs]}
|  
{[P;N/loc{goal}],{P;N}}

:  
{[{loc{goal}},abs]}
:  
{[P;N{pass}/abs}{erg]}

:  
{[abs]}
|  
{[erg]}

|  
{N}
|  
{N₁}

:  
:  
:  

Beryl  got mugged

The representation for mugged has an updated version of the passive participle configuration that was formulated as (9.43). (45) thus shares with the tough-construction incorporation of the highest argument as well as locative control.

In some languages passive is expressed morphologically. In such cases the passive predicator is absorbed into the basic predicator, as in (46a):

Modern Grammars of Case
(46) a. \[\text{[P;N/loc\{goal\}]}
\]
\[\quad \text{[P;N/abs,erg]}
\]
\[\quad \text{[erg]}
\]
\[\quad [N_i]
\]

b. *Passive participle formation (English)*

\[
\begin{array}{l}
\text{Required by get} \quad \text{Required by be}
\\
\{P;N/loc\{goal\}\} \\
\quad \{P;N/abs,erg\} \\
\quad \{erg\} \\
\quad [N_i]
\end{array}
\]

I suggest that English too has such a configuration, as an elaboration of the participial structure in (45), shown in (46b); but in English, unlike in languages with finite morphological passives, this configuration blocks finiteness formation. Accordingly, a ‘periphrasis’ is required; this is one of the functions of *be*. We can represent (47a) as in (47b):

(47) a. Beryl was mugged

b. 

```
\text{Beryl} \quad \text{was} \quad \text{mugged}
```
Be does not otherwise function as a locative-subject verb; but then it isn’t one here either, but merely a periphrasis allowing the goal–subject configuration in (45) to be finite. The locative-control stage accounts for why in the case of the passive raising appears (unusually) to take the next highest argument of the base verb. However, the relative lack of transparency associated with (47b) may be one factor favouring routinization of the be-passive, and weakening of the sense of ‘affectedness’.

We should note finally here languages, such as German, where (at least the ‘dynamic’, or verbal) passive verb of the construction in (48a) is of the ‘become’, ‘come-to-be’ type—cf. the ‘statal’ passive of (48b):

(48)  a. Die Kleider werden gewaschen
     (‘The clothes get/are getting washed’)

b. Die Kleider sind gewaschen
     (‘The clothes are washed’)

In contrast with (43a) the verb in (48a), not the subject, is viewed as goal. This situation reflects the well-known ambivalence of directionality with ‘abstract’ directionals: ambivalence in what is seen as moving object, or ‘trajector’, and what is seen as goal.

12.2.3 Causatives revisited

The analyses just outlined for the different construction types in §§12.2.1 and 12.2.2 involve locative control. Here we look at whether a related analysis might resolve some questions concerning causative constructions that are not answered by the proposals of Anderson (2005a) presented in §9.3.3.

Morphological causatives such as the Turkish form in (9.68b), compared with (9.68a), show the effects of causativization, formulated as (32) in §12.1.3:

(9.68)  a. Kasap et- i kes-ti
        butcher meat-ACC cut-PST
     (‘The butcher cut the meat’)

b. Hasan kasab- a et- i kes-tir- di
    Hasan butcher-DAT meat-ACC cut-CAUS-PST
     (‘Hasan had the butcher cut the meat’)

The dative in (9.68b) is an {erg} to which locative has been added by causativization part (a).

In some instances, as Anderson (2004a) notes, and as recalled in §12.1.2, part (a) of causativization will operate vacuously. This is the case if the causee is an experiencer: it is already {{erg,loc}}. But in some languages a causee that is an inherent experiencer causee is differentiated morphologically from
experiencers derived by causativization. Consider the Bolivian Quechua pair in (49) (Cole 1983: 117–19):

(49) a. nuqa Fan-ta rumi-ta apa-či-ni
   I Juan-ACC rock-ACC carry-CAUS-1SG
   ('I made Juan carry the sack')

b. nuqa wawa-man yaca-či-n
   I child-DAT know-CAUS-1SG
   ('I taught the child it')

The experiencer, with ‘inherent’ locative, is marked by the dative; the agent that acquires locative by virtue of causativization bears an accusative: despite both being {{erg,loc}}, they are marked differently.

There is also an anomaly with causatives based on predications with no ergative valency, i.e. without a non-absolutive highest argument. With simple locative (including directional) verbs, addition of a locative to an absolutive argument of such a verb would create an anomalous valency, with too many locatives. The same simple predicator would have both an {{loc}} and an {{abs,loc}} participant, thus violating the semantic relation criterion of §9.4:

\[\text{Semantic relation criterion}\]

Only one token of each semantic relation (except absolutive) is permitted per simplex predicator.

This criterion has otherwise a lot of support.

But it is perhaps more appropriate, particularly in relation to the semantic relation criterion, to regard the ‘affectedness’ that we have associated with causatives with the presence of another component predicator in the causative configuration. This component involves locative control. Let us look at how this might be implemented. At the same time we must finally acknowledge the role of the free absolutive associated with the upper predicator in causativization (32b), what I shall call the causative free absolutive.

This view of causativization will thus crucially differ from the formulation in (32) in that each part of it introduces a predicator, as shown in (50):

(50) Causativization revised

\[
\begin{align*}
   a. & \quad \{P;N/\{loc\}\} \quad \text{(patient)} \\
   & \quad \upharpoonright \quad \{P;N\} \Leftrightarrow \{P;N\} \\

   b. & \quad \{P;N/\{erg\}\} \quad \text{(causative)} \\
   & \quad \upharpoonright \quad \{P;N/\{loc\}\} \Leftrightarrow \{P;N/\{loc\}\}
\end{align*}
\]
The complex category constituted by causatives involves two component predications above the base; the lower one introduces (above the base in (50a)) the patient, a \{[(loc),abs]\} argument, and the upper introduces (by (50b)) an ergative and a free absolutive, the causative free absolutive. If the head of the tough-construction is limited to adjectives and nouns, then we needn't specify (50b) any further (since passives are \{[loc,goal]\}).

(50) underlies the structure in (51), representing the Turkish (9.68b), repeated above:

\[
\begin{array}{c}
\text{\{P\}} \\
\text{\{abs\}} \quad \text{\{P;N/{erg}\{P;N\}\}} \\
\text{\{erg\}} \quad \text{\{abs\}} \quad \text{\{P;N/{loc}\{P;N\}\}} \\
\text{\{N\}} \quad \text{\{[loc,abs]\}} \quad \text{\{P;N/{abs}\{erg\}\}} \\
\text{Hasan} \quad \text{kasaba} \quad \text{eti} \quad \text{kestirdi}
\end{array}
\]

The dative marks the locative-controlled \{[erg]\} argument, the accusative the raised \{[abs]\}. We return to this in a moment.

In §9.3.2 I distinguished syntactic causatives like that in (9.63) from the periphrastic causative in (9.77), as well as, of course, from morphological and lexical causatives:

(9.63) John caused Bill to die

(9.77) Il fait fondre la neige

\(\text{it makes melt:INF the snow}^\prime\)

(‘It makes the snow melt’)

(9.77) was interpreted as undergoing the first part of the lexical causativization rule. Thereby the lower verb is subjoined to a locative control structure, where the argument highest on the subject-selection hierarchy in the basic predication is marked with locative (as in Turkish), marked by the å, and the verb loses its capacity to undergo finiteness formation. It therefore requires to satisfy the valency of the superordinate causative (\(faire\) in (9.77)) if it is to occur in a finite clause.
There is no sign of this locative-marking with the syntactic causative in (9.63): the highest argument of the base predicator is apparently eventually raised, not marked with locative, and (unlike in Turkish) becomes available for passive. But the element between the two verbs in (9.63) can nevertheless be said to be a 'patient', as was suggested with respect to lexical causatives in English in §12.1.3. This lack versus presence of locative marking relates to the variable role of the free absolutive associated with the upper predicator in (50a), which we have so far neglected in our consideration of causatives.

Let us look at how the revised analysis accommodates such English syntactic causatives, where the head of the construction is lexically specified for the configuration produced by (50). English cause etc. form a construction by taking a predicator as an independent argument. We can thus attribute to (9.63), or the causative variant in (11.16a), a structure that (as with morpho-logical causatives) shows not just raising associated with the causative free absolutive but also control by a locative free absolutive in the subjoined predicator:

(11.16) a. Kate expected/caused John to read Rasselas

This is represented in (52) (thus differentiated from the representation (11.16b) which is associated with the experiencer variant in (11.16a)):

(52)

```
      |  [P]
{|abs}   |  [P;N/{erg}]
      |  
{|erg}   |  [P;N/{loc}{P;N}]
      |  [abs]
{N}    :  {{{loc},abs}}  [P;N/{abs}{erg}]
      :    :    :     :
      :    :    :     |
      :    :    :     |
      :    :    :     |
      :    :    :     |
      :    :    :     |
      :    :    :     |
      :    :    :     |
      :    :    :     |
```

Here the lower free absolutive is, as in causativization, attached to {{loc}}, and hosts the 'subject' of the lower clause. But, unlike in the Turkish causative of (51), it is available for passivization, since it is also raised to the {{abs}} argument of the causative verb.

The de-transitive representation in (51) differs from that in (52) in which role undergoes causative raising—i.e. shares its argument with the causative verb.
free absolutive. In English, this is \{[(loc),abs]\}, in Turkish it is the subcategorized-for absolutive of the lowest predicator. This variation is allowed for by the fact that both the ‘patient’ and the ‘non-patient’ argument in (51), as absolutes, are equally available as raisees to the causative free absolutive. Turkish chooses the non-patient argument. This account of variable raising assumes that, despite the hierarchical difference between the two candidates for raising, the crucial property is that both are arguments of the complex predicator headed by the (simple) patient predicator. In English syntactic causatives there is no choice but to raise the causee; it is only if the lowest predicator is subjoined to the causative complex (as in causative and lexical causatives) that there is a choice.

This difference in choice of raisee indeed underlies a much-discussed typological distinction which is reflected in lexical causatives as well as these morphosyntactic ones. English lexical causatives like give show the same preference as the syntactic, even though the same configuration as in (51) is available to English lexical causatives; they still choose the ‘patient’ to raise not the other absolutive:

\[(53)\]

a. She gave Bill that advice
b. Bill was given that advice

In (54) the ‘patient’ is the absolutive in the base directional, and to marks a non-patient simple locative:

\[(54)\]

a. She gave that advice to Bill
b. That advice was given to Bill

English raises the ‘patient’ to the absolutive of the causative predication in both these instances.

Similarly, lexical causatives in Turkish share with the morphological the selection of causative raisee, that is, the other possibility from English. Raising to the causative absolutive makes passive available (other things being equal) to the raised argument. Only the accusative-marked subcategorized-for absolutive in Turkish lexical causative (55) passivizes:

\[(55)\]

| Müdür-e resimler-i vereceğim |
| director-DAT pictures-ACC I.will.give |
| (‘I will give pictures to the director’) |

Similarly only the passive in the morphological causative (56b) is available to (56a), again with the subject ‘corresponding to’ the accusative in the active:

\[(56)\]

| Müdür-e resimler-i vereceğim |
| director-DAT pictures-ACC I.will.give |
| (‘I will give pictures to the director’) |
(56) a. Mehmet Hasan-a bavul- u aç- tir- di
   Mehmet Hasan-DAT suitcase-ACC open-CAUS-PST
   ('Mehmet had Hasan open the suitcase')

   b. Bavul (Mehmet tarafından) Hasan-a aç- tir- il- di
      suitcase (Mehmet by) Hasan-DAT open-CAUS-PASS-PST
      ('The suitcase was caused (by Mehmet) to be opened by Hasan')

(Aissen 1979: 15; Rosen 1990: 225). This pattern doesn’t always correlate with morphological causativization, however.

Contrast with Turkish the situation in Chi-Mwi:ni (examples from Baker (1988: 412)). Both lexical and morphological causatives pattern like English lexical (and syntactic) causatives. So that in Chi-Mwi:ni it is the patient {{(loc),abs}} argument that passivizes in both cases. (57) involves a lexical causative:

(57) a. Ja:ma - pel- a: kuja na: mi
    Jama AGR-gave-PASS food by me
    ('Jama was given food by me')

   b. *kuja i- pel- a: Ja:ma na: mi
      food AGR-gave-PASS Jama by me
      ('Food was given Jama by me')

Compare the passive of the morphological causative from the same language in (58):

(58) a. wa:na wa- andik-ish- iz- a: xati na mwa:limu
    children AGR-write- CAUS-ASP-PASS letter by teacher
    ('The children were made to write a letter by the teacher')

   b. *xati a- andik-ish- iz- a: wa:na na mwa:limu
      letter AGR-write-CAUS-ASP-PASS children by teacher
      ('The letter was made to be written by the children by the teacher')

In Kinyarwanda either the patient or the other argument may be passivized, as illustrated for lexical causatives in (59):

(59) a. igitabo cy-a- haa-w- e umugóre (n’umugabo)
    book it- PST-give-PASS-ASP woman (by man)
    ('The book was given to the woman (by the man)')

   b. umugóre y- a- haa- w- e igitabo (n’umugabo)
      woman she-PST-give-PASS-ASP book (by man)
      ('The woman was given the book (by the man)')
Compare the passives of a morphological causative in (60):

(60) a. inzu i- r- úubak-iish- w- a abákozi n’ûmugabo
    house it-PRS-build- CAUS-PASS-ASP workers by man
    (‘The house is caused to be built by the workers by the man’)

b. Abákozi bá- r- úubak-iish- w- a inzu n’ûmugabo
    workers they-PRS-build- CAUS-PASS-ASP house by man
    (‘The workers are made to build the house by the man’)

(Kimenyi (1980:170–71); Rosen (1990: 228); ‘PRS’ = ‘Present’.) Either pattern is available.

How does all this relate to the discrepancy in Bolivian Quechua between inherent and derived experiencer ‘causes’ (recall (49))? What characterizes this situation is that, whereas in the morphological causative of (49a) it is the ergative that has raised by (revised) causativization (50a) that also raises to the causative free absolutive provided by causativization (b), as in Turkish, in the lexical causative construction of (49b) it is the other argument ({{abs}}) of the basic predicator that is shared with the causative free absolutive (as in English). This seems to resolve that particular problem raised by Anderson’s (2004a) analysis.

In French, however, there is no passivization. This seems to relate to the ‘periphrastic’ structure involved. Consider the representation of (10.62) given in (61):

(9.62) Je ferai lire le livre à Nicole
    I make-FUT read-INF the book to Nicole
    (‘I shall make/let Nicole read the book’)

\[
\begin{array}{c}
\text{ je } \quad \text{ ferai } \quad \text{ lire } \quad \text{ le livre à Nicole}
\end{array}
\]
Lack of passivization would follow from the requirement that the causative absolutive can be satisfied only by an argument of a predicator that is part of the same complex predicator, as in the lexical, syntactic, and morphological causatives in (51), (52), and (56). In (61) this is not possible. A raising structure is thus ruled out for the causative; and instead an unsubcategorized-for absolutive is attached to the causative ergative, as shown there; it is desiratively an intransitive agentive. This is resolved only by full morphologization.

We have been able to eliminate from causativization the reference to the ‘highest argument’, in that the \{loc,abs\} created as a result of (50a) will necessarily be associated with the highest argument of its dependent verb, as with raising and agentive and experiencer control. It is only if the ‘highest argument’ is incorporated that the free absolutive is not associated with it. This eliminates an anomalous anticipation of syntax in the formulation of a lexical regularity.

However, this means that, though causativization (50a) is, like the other locative control constructions, not associated with the preferences (to do with animacy etc.) found with agentive and experiencer control (which both involve a controller which is an ergative), it differs, as I have just indicated, in identification of the controllee, where it groups itself with agentive and experiencer control and simple raising. On the other hand, causativization does render the ‘highest argument’ unavailable for subject formation and thus (ultimately) passivization in Turkish, as well as French.

Moreover, in both languages there is a variant construction which does show incorporation of the ‘highest argument’. Thus (9.88c), from Turkish and (9.83a), from French, show a circumstantial in apposition with the incorporated argument. Thus in causativization incorporation of the ‘highest argument’ is an alternative to locative control with some inputs (recall the discussion of such forms in French in §9.3.2).

12.3 Conclusion

This chapter complements the account of raising in Chapter 11, in presenting recent attempts to show that the apparatus of ‘case grammar’ can allow, without structural mutation, for further phenomena that have been seen as necessitating appeal to transformations and ‘empty’ categories, notably those involving control. The analysis of raising of Chapter 11 is basically that of Anderson (1997: §3.6), while the raising account of control phenomena (§12.1) is drawn from Anderson (2001a). Both accounts involve argument-sharing based on the free absolutes which are introduced to satisfy the universality
of absolutive requirement. And, in both, the participation of semantic relations is crucial to the formulations suggested. One consequence is thus an extension of non-autonomy to such systematic aspects of syntax, to parallel the arguments for the notional grounding of syntactic categories in general (rather than merely of functors) surveyed in Chapter 10. Another is the elimination of various powerful devices from the syntax in favour of recognition of severely constrained ‘tangling’, crucially involving the free absolutive.

§12.2 extends this kind of analysis, invoking now locative rather than agentive or experiencer control, to the tough-construction, passives and causatives, which are characterized by distinctive semantic and syntactic properties, notably the role of ‘patienthood’ and at least some ‘disfavouring’ of the ‘highest argument’ of the dependent predicator. Also introduced in that section was a second type of argument-sharing, ‘direct’ (manifested in ‘preposition-stranding’) rather than via the semantic relations.

Thus control can be exercised by any of {erg}, {erg,loc}, and {loc}—i.e. all the combinations of the non-absolutive first-order primary categories. We take this up in Chapter 13. In each instance of control the controller is associated with the free absolutive of its predicator and thereby ‘hosts’ an argument of the lower clause. This apparatus is a natural extension of the ‘case grammar’ framework whose history we have traced.

The lexical basis for syntax is enhanced by such developments. It is not just that, as Ackerman and Webelhuth express it, ‘only the lexicon, i.e., not the syntactic component, forms new predicates and new morphological words’ (1998: p. xi). The erection of syntactic structure itself is a projection of the lexical categorization of lexical elements. Crucial here are the categorization and the valency of items, and also their requirements as circumstantial—or modifiers in general. Also vital is the recognition that the potentially complex internal categorial structure of items—involving possibly several predicators, for instance—is accessible to the syntax, as we saw in the case of causatives. The need for a rich theory of lexical categorial structure is explored a little further in the concluding chapter.
Epilogue: Case, Notionalism, Creativity, and the Lexicon

Where have we got to, then, finally? What have modern grammars of case contributed to our understanding of language, and what might they contribute? Let me begin by recapping a little, to help build up the momentum towards an attempt at eliciting some of the essentials that have emerged, in my view. The reader may at least be encouraged to disagree, constructively, with that view.

13.1 Retrospect

Part I of this book was concerned, on the one hand, to relate those developments in the late 1960s and 1970s that came to be called ‘case grammar’ to a long-standing tradition—indeed the major tradition—in the study of language in Europe that saw case, and specifically the relations that are the content of cases, as central to the grammatical enterprise. Almost all grammars before the twentieth century were ‘grammars of case’ in this sense. On the other hand, this part sought to recall what was original in these ‘case grammar’ proposals, and to defend them against criticisms some of which have wrongly been assumed (as far as one can tell) to be decisive, even by the leading pioneer of ‘case grammar’, Charles Fillmore. It was argued that, on the contrary, subsequent history has shown an often unacknowledged adoption of the main tenets of the ‘case grammar’ hypothesis, especially the syntactic relevance, and indeed fundamental syntactic status of ‘case relations’, and the irrelevance of a syntactic ‘deep structure’ of the kind defended throughout the 1960s to the 1980s. In this perspective, the major innovation of ‘case grammar’ was the insistence on the syntactic basicness of semantic relations and the (at best) derivative status of grammatical relations.

The close of Part I and the following Part are linked by a concern with the content of ‘case’—in the wide sense of the term, which includes expressions of semantic and grammatical relations by means other than nominal
morphology. This has been, unsurprisingly, a persistent and contentious focus of attention. But even in the early work that is reviewed in Part I attention was drawn to the most consistent attempt that had been made to identify the content of the category of ‘case’ itself, namely the ‘localist hypothesis’ whose earlier history is charted by Hjelmslev (1935/7). Chapter 6 is concerned with the motivations for an inventory of localist semantic relations such as is presented in (6.11):

(6.11) abs source loc loc{source}

These representations are expanded to introduce the second-degree feature [goal], also clearly localist, in relation to absolutive and the simple locative in (6.11). Concern with the content of ‘case’ and the identification of ‘cases’ is also essential to the other developments looked at in Part II, which are mainly of a more recent provenance than those discussed in the first part of the book. These fall into three main strands. In the first place, there is work that endeavours to establish the major options for ‘grammaticalizing’ semantic relations, for subjecting them to what I’ve called ‘routinizations’, deriving from reduction in semantic grounding; subject-based systems represent just one type of these. Secondly, there are studies concerned with the ‘category’ of ‘case’: what kind of category is it? Concerning this it has been argued that ‘case’ is a ‘functional category’ that, as such, may be expressed in various ways, including as an independent word, or an affix or by position: the category was labelled ‘functor’ in the work looked at. The third concern of these developments was with the internal structure of functors—their secondary features (spatial distinctions, in accordance with the ‘localist hypothesis’)—but also, in one tradition, with the complex categorial structures that functors can head, structures that provide for ‘complex’ adpositions and morphological cases, and with the distinction between participant and circumstantial arguments. The second part of the book closes with a look at the kind of defences that have been offered for the fundamental, non-derivative status of semantic relations, in the face of attempts at ‘reduction’. These discussions lead on appropriately to the concerns of Part III.

The ‘reductionist’ strategies that have been offered involve increases in the power and abstractness of the syntax at the expense of the lexicon (despite the flurry of ‘lexicalism’ in the 1970s). The undesirable consequences of this underline the importance of the developments presented in Part III, which involved a dismantling of the transformational apparatus in which the earliest ‘case grammars’ were embedded. This was fundamental to the development by Starosta and associates of the ‘lexicase’ framework from the 1970s on. This
framework involved a ‘minimalist’ (in the non-political sense) view of syntax and widespread appeal to syntactic features that different syntactic categories could have in common.

A rather different path was taken by Anderson and Böhm in their generalization of the semantically grounded character of ‘cases’/functors to other syntactic categories. This involved a reassertion of another fundamental aspect of the European grammatical tradition, the assumed notional basis of grammar and syntactic categories in particular. The argument here was not only that grounding is relevant (in, say, cross-linguistic identification of categories, as Lyons (1966) argued), but that syntactic categories cannot be established on purely distributional grounds. The relevant distribution is that of semantically prototypical members of the class. Part of the aim of this work, chronicled in Chapters 11 and 12, was to show, in familiar and well-documented areas, that this notional basis, and particularly the presence of the semantic relations, render unnecessary any appeal to transformations and ‘empty’ categories.

Parts II and III were structured internally by looking successively at responses to what I listed as a set of consequences of ‘case grammar’, which should be familiar to the reader by now:

\[(5.49) \text{Consequences of case grammar}
\]
\[
\alpha) \text{ the question of content}
\beta) \text{ the question of category}
\gamma) \text{ the question of consistency}
\delta) \text{ the question of derivationality}
\]

But these ‘consequences’, it seems to me, have themselves ‘consequences’, which it might be useful to spell out here.

What emerges to my sight in this history is first of all what I called the ‘ineluctability’ of ‘case’ (§5.3) or, to identify its categorial status, of functors (§9.3): semantic relations are basic both to our understanding of sentences and to their syntax. More generally, there is the groundedness not just of ‘case’ but of syntax, and of syntactic categories in particular. Much remains to be (re-)explored from this perspective.

Notably, the structure of nominals demands renewed attention. This has been rather neglected here (except sporadically, as in §10.3), so that, for instance, while both the functional category of functor and, to some extent, that of finiteness have received some depth of attention in the preceding chapters, determination has been only sketchily presented, except in interaction with functors to define ‘complex cases’ (‘hybrids’). Partly this discrepancy reflects the history of ‘case grammar’, where concern with the internal
structure of nominals has not been prominent. But it also has to do with the limitations of a single volume (as well as the patience of the reader). Moreover, the present work can be seen as complemented by some other recent work (especially Anderson 2003; 2004b) and by another volume in preparation devoted to the grammar of names, which to some extent redress the balance. Even more egregious is the neglect here of the grammar of adjectives. I have little to offer by way of excuse or palliative. I shall have to be content to say that this work is already over-long, and at least some of the missing discussion emerges incidentally in sections principally devoted to other matters.

Another, complementary ‘consequence’ of the discussion follows from the conclusion that lessening of grounding (‘autonomization’, if you prefer) is best understood in terms of routinizations and idiomatizations of relationships that are grounded in meaning and communicative function (for example Chapter 7): attention to this gives a particular focus to the diverse studies and understandings of ‘grammaticalization’.

In the course of this history we have also confronted, unfortunately, how little sense of responsibility there is in much of the linguistic community towards the traditions that we (often unwittingly) build on or (to our loss) ignore. The extent of this is merely glimpsed in the preceding (in for example much of part I and in §9.3). This state of affairs is both unethical and to the disadvantage of those who maintain it.

As a further illustration, consider here again Pullum’s documentation of his observation concerning the collection edited by Hale and Keyser (1993) that ‘if the text of the articles tend to instantiate nostalgia, the biographies tend more towards amnesia’ (Pullum 1996: 137). The situation is even worse than this suggests. For Pullum (1996: 144) is led to offer the following remarks on Halle and Marantz’s contribution to the volume, which attack’s Stephen Anderson’s (1992) defence of ‘extended word-and-paradigm’ morphology:

They falsify history, using the term ‘the traditional approaches’ for the structuralist and transformationalists morpheme-based ideas opposed by Anderson (112), as if the post-1930 American structuralist excursion had the four-thousand-year history of the word-and-paradigm model .

And in commenting on Chomsky’s contribution to the collection, he spells out just part of the consequences of such behaviour (1996: 140):

I stress the many failures of appropriate citation not because of the ethical point that generative semanticists are being cheated of credit that is their due (though they are); my concern is to avoid wasteful and repetitive patterns of scientific exploration. If someone is going to propose a reversion to a decades-old position, it should be done
explicitly. If we know that a position is being revived from years ago, we can save time by referring back to contemporaneous arguments for or against it. If the antecedents are denied or the reference to the earlier literature suppressed, linguists may waste a lot of time, not just reinventing the wheel but reiterating attempts to square the circle.

This last clause describes exactly, I think, the history of ‘abstract syntax’ that is recounted here in §9.3.

The prevalence of what Pullum describes is something that seriously threatens the health of present-day theoretical linguistics. Without attention to it there seems little prospect of rescuing the field from the cataractous malaise with which it has been afflicted since the mid-twentieth century. I perhaps differ from Pullum in setting its incubation at a much earlier period than the work he is reviewing; it is already associated with the cultural matrix of what Halle and Marantz (1993) describe as the ‘traditional approaches’ to morphology, i.e. American structuralism.

Perhaps, on a more positive note, most striking as a ‘consequence’, and a challenge, deriving from pursuit of the ‘case grammar’ hypothesis is the need for the development of a theory of lexical structure including semantic relations as basic. This is not a novel realization: as I have observed, concern with the lexicon has been a major impulse to the work of Fillmore in particular, continuing beyond his involvement in the ‘case grammar’ enterprise. And it is superfluous to document in any detail that the recognition of the importance of understanding the lexicon as more than a repository of idiosyncrasies is not unique to ‘case grammar’; some work in this direction is surveyed in Pustejovsky (1995), for example. I want to consider in what follows this and other ‘consequences of the consequences of case grammar’.

13.2 Lexical structure

The implementation of an explicit theory of lexical structure becomes increasingly urgent as we uninstall the powerful syntactic mechanisms that dominated the study of grammar in the latter half of the twentieth century, and were part of the culture in which early ‘case grammar’ developed. And the feasibility of this enterprise is enhanced by the recognition that not just the relations signalled by ‘case’ (in the wide sense) but syntactic categories in general are semantically grounded.

Much of lexical structure remains the magnum mysterium, however. It is uncontroversial that the morphosyntactically relevant part of lexical entries is ‘componential’ in some sense. The work surveyed in what precedes in this work, for instance, assumes that there are component (simplex) features, of
two sorts (as in dependency phonology), as illustrated in Chapters 8–12: primary features, which define primary categories that in turn define basic distribution, and some of which represent distinct word classes (§10.2.2); and secondary features, which refine distribution and partake in processes of selection, agreement, and rection. To what extent do we need to appeal to further structure? We can perhaps at least set a limit to the kind, if not the extent, of further complexities it should entertain.

For instance, though one complexity that has been argued for at various points in the preceding (such as in Chapter 10) is that the lexical representation of items may be categorially complex, it is unnecessary to suppose that these components are linearized: linearity is not a lexical property, but is imposed (externally) by syntax and (internally) by morphology. Lexical representations are dependency trees whose nodes are not linearized with respect to each other. Decomposition into simplex predicates with their own valency requirements enables the expression of the interaction between lexicon and syntax, without recourse to the radical syntactic decomposition of lexical items associated with 'abstract syntax'. What follows explores different aspects, and (at least implied) limits, of the lexical representations whose evolution was described in the preceding survey of 'case grammar'.

13.2.1 Complex predicates

Much of lexical representation may involve simply a path of dependencies, as in the representation in (1), for the (Turkish) morphological causative in (9.61b), repeated here:

(9.61) a. Hasan oð-ðü
   Hasan die-PST
   (Hasan died)

   b. Ali Hasan- oð- dür- dü
   Ali Hasan-ACC die-CAUS-PST
   ('Ali killed Hasan')

(1)  [P;N/{erg}]
     | [P;N}/{loc}]
     | [P;N}/{abs}]

The structure of causatives is regulated by the morphological redundancy of causativization, formulated in its final version as (12.50). Causativization (a) introduces above the base \{P;N\} a \{P;N\} subcategorized for \{loc\}, and (b) subjoins this complex to a causative verb:
Causativization revised

a. \{P;N/\{loc\}\}
   \{P;N\} ⇔ \{P;N\}

b. \{P;N/\{erg\}\}
   \{P;N/\{loc\}\} ⇔ \{P;N/\{loc\}\}

Causativization involves the ‘addition’ of distinct superjoined categories with their valencies. No further apparatus than sub-and super-junction (incorporation and absorption) and their local consequences seems to be required in addition to feature addition here or elsewhere in the lexicon.

Moreover, such a lexical representation as (1), and the resulting derivation, can fairly plausibly be associated also with converted causatives such as (9.59b); and lexically the structure is also appropriate for lexical causatives such as (9.59a), which allow the same inferences to be made and share crucial syntactic properties:

(9.59) a. John killed Bill
    b. The girl opened the door

There are thus lexical structures that are not made overt by morphological marking or shared form (in the case of conversions). In §10.1.2 we looked at a defence of the Saussurean notion that not all lexical structure and relationships are ‘(partially) motivated’, made morphologically overt.

It is moreover necessary to extend anyway the scope of conversion, which has tended to be regarded as involving items differing in word class (table) or valency (open). Colman and Anderson (2004) argue, along these lines, that metonymic relations in general, which often preserve word class, are word-forming and result in derivationally related (converted) forms rather than in polysemy—which latter notion they dismiss as vacuous (though this does not, of course, involve non-recognition of the capacity of items to interact and be specified by context): items are related or homonymous. I return shortly to a further ‘consequence’ of this.

At this point, let us recall that such lexical structures, including the ‘unmotivated’ ones associated with the likes of (9.59a), though not affected by the syntax except in terms of agreement—a further kind of restriction—can be accessed by the syntax. This is illustrated by the syntax of lexical causatives such as those in (3.8a, b), which involve three component verb categories:
(3.8) a. John gave the books to my brother  
   b. John gave my brother the books

(Cf. §§1.2, 1.3, 12.2.3, and, for example, Anderson 1971b; 1992: §4.4; 2005a.) Let me first, however, prompted by some comments of Roger Böhm, offer a simplification suggested by the observations that, in English at least, simple ergative arguments are not patients of lexical causatives and the ‘patient’ in (3.8b) is {{erg,loc}} without the presence of the patient predicator associated with causativization. On this basis I suggest that examples such as (38b) lack the patient predicator in their lexical structure.

Thus, in the (schematic) representation of (2a) given in (3a), the uppermost (causative) {P;N} provides a free absolutive to host the locative absolutive that has in turn hosted the argument of the base verb that is highest on the subject hierarchy, and makes that argument available for the passive (2b):

(2) a. Susie sold Bill the Lada  
   b. Bill was sold the Lada (by Susie)

(3) a.  
   \[
   \begin{array}{|c|c|c|}
   \hline
   \text{{abs}} & \text{{P;N/\{erg\}}} \\
   \hline
   \text{{erg}} & \text{{P;N/\{erg,loc\{goal\}\{abs\}}} & \text{{abs}}} \\
   \hline
   \text{Susie} & \text{sold} & \text{Bill the Lada} \\
   \hline
   \end{array}
   \]

b.  
   \[
   \begin{array}{|c|c|c|}
   \hline
   \text{{abs}} & \text{{P;N/\{loc\{goal\}\}}} \\
   \hline
   \text{\{loc\{goal\},abs\}} & \text{{P;N/\{erg\}}} \\
   \hline
   \text{Bill} & \text{was} & \text{sold the Lada} \\
   \hline
   \end{array}
   \]
This is indicated in (3b), in which the causative \{erg\} is incorporated and the highest argument of the base verb satisfies all of the higher free absolutes, which of course are associated with different components of the complex verb as well the \{P\}. The structure of passive participles such as that in (3b) is regulated by the redundancy given in (12.47b). (For simplicity, throughout this chapter diagrams omit the \{N\}s satisfying functors where their presence is not in focus.)

(3b) also illustrates that not all lexical subjunction paths are simple. Both the ‘second lowest’ \{P;N\} there and the \{erg\} incorporated in passive participle formation depend on the causative \{P;N\}. This is what is imperfectly indicated, given the limitations of two-dimensional presentation, by the notation surrounding the causative \{P;N\}: the lower \{P;N\}s are shown dependent ‘to the left’, while the dependent \{erg\} is shown attached ‘to the right’ of the causative predicator; these are both non-linearized dependents of the causative component, both subjoined not adjoined. A similar situation arises with the nominalization discussed in §6.1.1, repeated here again:

\[(6.5)\]
\[
a. \quad \text{His wife’s rescue (of Bill)}
\]
\[
b. \quad \text{Bill’s death}
\]
\[
c. \quad \text{Bill’s flight (from the scene)}
\]
\[
d. \quad \text{Bill’s rescue (by his wife)}
\]
\[
e. \quad \text{last night’s rescue (of Bill/by his wife)}
\]

\[(6.6)\]
\[
a. \quad \text{(the) death of Bill}
\]
\[
b, c. \quad \text{(the) flight of/by Bill (from the scene)}
\]

Some of these have multiple incorporated participants with potential appositional arguments, as represented in (10.54).

Thus, internal lexical structure is both accessible to the syntax and may involve unlinearized (‘wild’) trees; they may not involve a simple chain of dependencies, but also branching. The complexity of chains is subject to cognitive constraints. But the composition of the chains is locally determined by relations of complementation and modification consistent with semanticity.

13.2.2 Argument-linking
There is a further aspect of lexical structure which is absent from (3a), and which was not directly addressed in preceding chapters. The lower \{P;N\} there is a directional predication. It contains a goal, Bill, but I have not specified the
source which we expect with directionals. Now, the source is in this instance not merely unspecific, or otherwise incorporated (and acceptable of an appositional circumstantial): with give and sell, use of on behalf of, for instance, introduces a ‘remote’ source, not the immediate one or a phrase in apposition to it. The agentive Susie of (2, 3a) is normally understood as also the directional source, just as with, say, buy the agentive is usually identified with the directional goal, as in (4a):

(4)  a. Bill bought the book from Richard
    b. Bill bought the book for Bella/his new library/a bet/the future

In (4b) we have again, in the for-phrase, not a participant goal or an apposed circumstantial, but an independent circumstantial, a more ‘remote’ goal. In each of (2a) and (3a) the agentive is identified lexically with one or other of the directional participants in the lowest predication.

We can represent this relationship in the lexical structure of sell and buy as in (5a) and (5b) respectively:

(5)  a. {P;N/...........{erg}} (causative)
    |    :
    {P;N/{abs}.loc{src}},{erg,loc{goal}} (directional)
    : sell

    b. {P;N/...........{erg}} (causative)
    |    :
    {P;N/{abs}},{erg,loc{goal}},{loc{src}} (directional)
    : buy

That is, in (5) the two ‘cases’ are associated in the lexicon, rather than syntactically via hosting by a free absolutive. The links are semantically determined.

(5a) eventuates in the structure in (6a) (in which, for simplicity, I have not marked the lexical linking, only the resulting syntactic associations).

With buy, however, the linking of the agentive to the experiencer goal is not obligatory, as shown by (5.39):

(5.39) Bill bought Bella the book

Here the upper {erg} is not linked to the lower {erg,loc{goal} }; we have a distinct ‘benefactive’. This is again given a localist interpretation: recall the discussion in §5.4.3 of what is shared by traditional locatives, experiencers, and benefactives. We thus get (6c) rather than (6b).
Susie sold the Lada to Bill.

Bill bought the Lada from Susie.

Bill bought the Lada from Susie to Ben.
Such linking as we find in (5) may have further syntactic consequences. Consider the problematical character of apparent ‘locative-subject’ verbs like contain or include (alluded to in §5.4.3). Contrary to the predictions of the subject-selection hierarchy, with such verbs the locative seems to outrank the absolutive argument and appears in subject position:

(5.42)  

b. That box contained them

But there are independent reasons for not merely concluding that the hierarchy needs some rethinking. Such ‘locative-subject’ verbs are not common in subject-forming languages. And in English they are all, with the exception of have, loanwords, ultimately from Latin. In Latin the simple locative sense is apparently also a late development, with the verbs being agentive to begin with, so that contineó involves ‘holding’ or ‘keeping back/together’ or ‘restraining’, as in English (5.43b):

(5.43)  

b. Two armoured divisions contained them

And English have has a similar history, to begin with.

Such verbs do not show a ‘standard’ passive (when non-agentive), as was illustrated by (5.42a):

(5.42)  

a. They were contained in that box

We find the ‘normal’ passive with such items only when they have an incorporated ergative, to which a circumstantial may be apposed, as in (5.43a), where the verb has an agentive interpretation, equivalent to (5.42a):

(5.43)  

a. They were contained by two armoured divisions

The kinds of lexical structure we have been looking at offer a means of accommodating such ‘container’ verbs, and expressing their peripheral status.

Along the lines of the analysis of give in (5a), we might characterize the verb of (5.43b) with the causative structure in (7), such that the division in (5.43b) is both agent and container (obviously the nature of the {{loc}} would have to be made more specific in a fuller representation):

(7)  

a. \{P;N/............[erg]\} (causative)  
   | :  
   \{P;N/[loc]\} : (patient)  
   | :  
   \{P;N/[abs]...[loc]\} (locative)
b.  

\[
\begin{array}{c}
\text{two arm. divs.} \\
\text{contained} \\
\text{them}
\end{array}
\]

The syntactic structure of (5.43b) is represented in (7b). The link between \{[(loc),abs]\} and the lowest \{abs\} is of course a matter of control; it is syntactic, as is the raising link between the topmost \{[abs]\} and \{[erg]\}. But the link between \{[erg]\} and \{[loc]\}, as with sell, is given in the lexicon, as shown in (7a).

The verb in (5.43b) would then be a historical dilution of this, perhaps as presented in (8), where the locative of the lower \{P;N\} remains lexically linked to the (null) valency of the upper verb:

(8)  

\[
\begin{array}{c}
\text{P;N/.........} \\
\text{P;N/loc}/\text{abs}
\end{array}
\]

The missing ‘case’ is supplied by the free absolutive of the upper verb, as in the representation of (5.42b) given in (9):

(9)  

\[
\begin{array}{c}
\text{that box} \\
\text{contained} \\
\text{them}
\end{array}
\]

The locative of the lower verb is linked upwards in the lexicon, and achieves subjecthood by virtue of being associated with the free absolutive of the upper \{P;N\}. Again, this relationship between arguments is made available only in lexical representations, and is not developed syntactically. This constitutes one part of the exceptionality of these verbs.
Invocation of lexical linking with these exceptional verbs enables us to maintain a determinate hierarchy for the selection of subjects on the basis of the semantic relations contracted by arguments in a predication. At the end of §9.4 the subject selection hierarchy was reduced to (9.100), where the relations involved may be combined or uncombined:

(9.100) Subject selection hierarchy: ergative > absolutive

As we saw, this obviously correctly predicts the selection of subject in (4.8a), and since in (4.8b) the with-phrase is circumstantial, the {abs,loc} holistic becomes subject:

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

But there are still other predication types that present a problem.

I have in mind here particularly (6.20c) and the like, where, on a non-agentive formulation, the simple absolutive appears to outrank the post-verbal {abs,loc}, a selection not determined by (9.100):

(6.20) c. The ferry occupies that berth

However, this was also a problem for the earlier subject selection hierarchy, which ranked combined absolutives above uncombined (on the convention that the longer expansion takes precedence):

(6.38) Subject selection hierarchy: erg > erg, > absolutive(s)

Now, one response to this would be to reverse the ordering for combined and simple absolutives given in (6.38). But this would re-complicate the hierarchy. And the problem (and its diachronic origin—occupare is again in origin an agentive verb) is reminiscent of that introduced by contain.

Say that this is indeed another case of linking; and we continue to assume, in accordance with (9.100), that the choice of subject between two absolutives is indeterminate (even if one is combined with another relation, as with these once more exceptional verbs), as it is in equatives like those in (4.13):

(4.13) a. The guy over there is my lover
    b. My lover is the guy over there

In the case of (6.20c) the indeterminacy would be overcome lexically (rather than by discourse) by linking of arguments, once more resulting from the kind of ‘dilution’ we associated with (5.42b)/(8).
This supposes some entry such as (10b) for the non-agentive *occupy* of

(6.20c), again a dilution of the agentive *occupy* in (10a):

(10) a. \{P;N/................[erg]\}
    |    :
    \{P;N/[loc]\}   :
    |    :
    \{P;N/[abs,loc][abs]\}

b. \{P;N/... \}
    |    :
    \{P;N/[abs][abs,loc]\}

c. \[P\]
    |    :
    \{[abs]\}   \{P;N/... \}
    :    |    :
    \{[abs]\}   \{P;N/[abs][abs,loc]\}
    :    :    :
    \{[abs]\}   :    \{[abs,loc]\}
    :    :    :
    :    :    :

*the ferry occupies that berth*

(10c) provides a representation for (6.20c), where the position of the lowest (subcategorized-for) absolutive is determined by the (free) \{abs\} of the upper \{P;N\} to which is linked lexically.

And a similar kind of analysis seems appropriate for 'symmetrical' predicators discussed briefly in §5.3, such as that in (11a):

(11) a. Bill resembles/is like his brother
    b. Bill is similar to his brother
    c. Bill differs/is different from his brother

The selection of prepositions in (11b, c) suggests (given ‘lexical naturalness’—recall the end of §9.2.2) that these sentences are directional (Anderson 1973b), and the linear expression of directionality is reversed between the first two and the third. Each of the subjects is presumably an absolutive, and in the last two this appropriately outranks the post-verbal locative, whether goal or source. But it looks as if the less formal equivalents to (11b) in (11a) also have an absolutive (locative) post-verbal complement. We have two absolutives in (11a).
Again, we can provide for the choice of subject (between two absolutes) by linking, as in (12):

\[(12) \{P;N/......\}
\]

\[\mid \]

\[\{P;N/[abs,loc{erg}]\{abs,loc{goal}\}\}\]

In this and the immediately preceding cases, linking would thus be a means to resolve an indeterminacy brought about by the availability of two absolutes in one predication. In the case of simple equatives this is not resolved lexically, but with reference to discourse; not only do they contain two absolutes, but these absolutes are not otherwise distinguished.

This facility of lexical linking of elements in the valencies of predicators that form part of a complex category, as in (8), (10), and (12), also suggests a way of characterizing ‘idioms’ such as that illustrated by (4.40a):

\[(4.40)\]

\[a. \text{ She fell apart}\]

\[b. \text{ The crystal fell apart}\]

If the subject in (4.40b) is a simple absolute, then the most obvious interpretation of that in (4.40a) seems to add something to this which deconcretizes the ‘concrete spatial’ interpretation that we find in (4.40b), i.e. it adds an experiencer relation; a new role is added to the absolute in (4.40b).

One way, then, of beginning to capture something of the relationship between ‘idiom’ and base might lie in a representations for the (figuratively) derived verb of (4.40a) of the character of (13):

\[(13) \{P;N/[erg,loc]\}
\]

\[\mid \]

\[\{P;N/...[abs]{loc{goal}}\}\}\]

I am assuming that apart is some kind of locative; the idiomatic predicator also limits the choice of locative, however. As is typical, the idiom has other semantic effects.

Likewise, (14) represents one ‘idiomatic’ version of (4.38a), suggested by the bracketed phrase:

\[(4.38)\]

\[a. \text{ He froze (to avoid detection)}\]

\[b. \text{ The lake froze}\]

\[(14) \{P;N/[erg,abs]\}
\]

\[\mid \]

\[\{P;N/...[abs]{loc{goal}}\}\}\]

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These structures preserve the expression of the ‘concrete image’ that is the basis for the idiomatic formation. (14) assumes that freeze, as a ‘change-of-state’ verb, is also directional (involving ‘movement’ from one state to another).

Of course, as idioms, the internal structure of such items as these may be lost to individual mental lexicons; but it remains potential, and can be reactivated, as in (15), which restores the ‘concrete image’ in the case of (4.40a), cited above, by juxtaposing another idiom based on the image:

(15) She fell apart, and we’re still picking up the pieces


(4.34a/35a) involves suppression of arguments compared with the (b) examples:

(4.34) a. John threw a fit
   b. John threw the ball

(4.35) a. *John threw a fit to his friend
   b. John threw the ball to his friend

The presence of the apposed locative in (4.35a) undermines the conventional idiomatic interpretation.

If we interpret this ‘suppression’ as the blocking of any apposed locatives, then we can formulate the lexical structures of the throw idiom as in (16), where the ‘∗’ argument cannot be apposed to:

(16) | {P;N/|{abs,erg}} |
    | : |
    | {P;N/...{erg}} |
    | | {P;N/|{loc}} |
    | | {P;N/|{abs}|{loc{goal}}}} |
    | | {{loc{goal}}}} |
    | | | {N}|

Throw is interpreted as based on a causative, such as is manifested in (4.34b). For the idiom the ergative of the causative is shown as linked to the {abs,erg} of the {P;N} added by the idiom. This assumes an agentive interpretation of the idiom; an experiencer interpretation would obviously be {abs,erg,loc}. 
Unlike the preceding, (4.39) involves lexical linking of non-subjects, i.e. arguments that don’t undergo subject formation, as in (17a):

(4.39) Fred put that on me

(17) a. \[
\text{Fred put } that \text{ on me}
\]

b. \[
\text{The idiom is based on a causative, as represented in (17a). The idiom in (17b) displaces the expected patient } that \text{ by introducing above it another patient predicator whose locative is linked to the locative, } on, \text{ and (upwards) to the causative valency, and so in (17c) to the causative free absolutive. Here there is no blocking: rather, overriding of the expected development of a causative.}
\]
Of course, as observed, the ‘idioms’ may involve other semantic changes than described above; what is represented here is only the modifications to argument structure brought about by the added predicator that introduces the ‘idiomatic’ interpretation; and even these proposals are even more speculative than the rest of this section. But these suggestions may illustrate an important source of creativity (and productivity, as distinguished in Chapter 1), a topic to which we shall revert shortly, in §13.3. I turn now to other considerations that have arisen from our look at the role of complexes of categories in lexical structure.

13.2.3 Constraints on valency

Clearly, the kind of analyses of (particularly) causative verbs that we have been considering here changes the status of the lexical evidence—specifically from subcategorization—for the ‘fundamental concepts of case grammar’ that was put forward in the earlier work discussed in the introduction to §4.2. One argument was based on the ‘transparency’ of the ‘case frame’ in (3.3), compared with the subcategorization frame of (4.18):

(3.3) Open O (A) (4.18) Open (___ NP)

The representation for ‘transitive’ open now envisaged is more complex, but the two lexical representations for open still crucially share an O, or absolutive:

(18) a. \{P;N/{abs},\ldots\} b. \{P;N/{erg}\}
    | \{P;N/{loc}\}
    \{P;N/{abs},\ldots\}

But this is now seen as part of a more general derivational pattern which acknowledges the internal structural complexity of the representation of causatives, both lexical and morphological, something lacking in both (3.3) and (4.18).

Lexical structure thus shares with syntactic structure the same constraints on dependency paths (what particular categories can serve as the head of certain other categories). But, as observed, the lexical structure of categories lacks linearity—though the morphological affixes correlating with certain derivational and inflectional relationships are linearized by the morphology, independently of the syntax. On the other hand, lexical relationships typically involve a change, or difference of category (or subcategory); whereas in the syntax categories are not created or changed, and the syntax simply establishes
dependencies and sequencing between categories given by the lexicon, guided by valency and modification requirements. The introduction of the free absolutive is apparently an isolated instance of the syntax introducing a category—but even that is in response to a lexical lack, the absence with a predicator of a subcategorized-for absolutive. It is essentially ‘valency extension’—which then has syntactic repercussions, including argument-sharing. Whereas argument-sharing based on lexical entries takes the form of the linking that we have just been looking at, in the syntax it depends entirely on ‘defective’ lexical entries being enriched by the introduction of a free absolutive.

Such a description of lexical structure, in concentrating on the structures and relationships which are most obviously relevant to the syntax, obviously neglects many of the traditional concerns of lexical semantics (such as the characterization of antonymy). Here I have at least enumerated the main demands on lexical structure that seem to need to be made on the basis of studies in the ‘case grammar’ programme, and I have pointed to some of the salient similarities and differences between syntactic and lexical structure. There are also, of course, various restrictions on lexical structure associated with the ‘cases’ themselves, such as we have encountered throughout the discussion. The subject-selection and other grammatical hierarchies (Chapter 7) are one kind of constraint on the distribution of ‘cases’. But there are more substantive limitations, such as are embodied in variants of the ‘θ-criterion’.

Thus, here we have been able to maintain a modified version of the first part of what in §5.2 I called ‘Fillmore’s proto-theta-criterion’:

*Fillmore’s proto-theta-criterion*

Only one (possibly coordinate) token of each case is permitted per proposition.

Each NP is associated with only one case label, such that in any proposition there is a one-to-one matching of C<case> R<relation>s and NPs.

We have looked at suggestions that the absolutive relation be exempted from the first constraint, to the extent of allowing two manifestations of absolutive, notably in equatives. This is associated with the special status of absolutive. The second part of the criterion is apparently not tenable at all: arguments may participate in more than one relation simultaneously. But this is not surprising, or very significant as a weakening, if we adopt the limited set of semantic relations advocated by the localist theory. And the restricted set of semantic relations triggered a reformulation of the first criterion. This was discussed in §9.4, in which a distinction was made between relations and roles, where a role is the set of relations borne by a particular argument to a particular predicator.
There I presented two criteria (from Anderson 1997) corresponding to the first of those proposed by Fillmore:

*Semantic relation criterion*

Only one token of each semantic relation (except absolutive) is permitted per simplex predicator.

*Role criterion*

Only one token of each role (except \{absolutive\}) is permitted per (possibly complex) predicator.

The first applies to simplex predicators, including the simplex components of complex predicators. The role criterion applies, but not the relation criterion, to the whole complex we’ve associated with causatives such as *sell* and *give*, as was represented schematically, for *sell*, in (5a). The upper \{erg\} has a different role from the lower \{erg,loc\}, though it shares a relation; and the latter differs from other locatives by presence of a (different) second-order feature.

The enrichments of lexical structure envisaged here may well lay bare violations of the role criterion. In this case, what will be of interest is the extent to which there is some principled basis for the occurrence of such exceptions. Are they systematic in some way? Or marginal, on other grounds?

However, it seems that the set of possible valencies is even more limited, in a different way, than required by these criteria. This has to do with the range of roles available to a simple predicator. It has been suggested, for instance, that the presence of one of \{loc\{goal\}\} or \{loc\{source\}\} implies that of the other. But there also seem to be restrictions on the combinations available to the first-order features, absolutive, ergative, and locative (of whatever kind). Thus the ergative source combines with absolutive, as in (19a), as well as constituting a separate role from it, as in (b):

\[(19)\]

| a | Algernon works hard |
| b | Algernon reads novels |

And locative appears combined with absolutive, as in (20a), as well as separately, as in (20b):

\[(20)\]

| a | The basement flooded (with water) |
| b | Water flooded into the basement |

But the former possibility seems available only with items that are complex either by incorporation, as in (20a) or require linking, as in (6.20c)—recall the entry in (10b). To this extent, it is marked.
Also, while locative and ergative source combine straightforwardly to form a single role, they do not otherwise co-occur within the valency for a simplex predicator. This is indeed implied by the formulation in (6.12)', repeated here for convenience.

\[(6.12)'
\[
\text{neutral} 
\begin{array}{c}
\text{source} \\
\text{goal}
\end{array} 
\begin{array}{c}
\text{locative} \\
\text{goal}
\end{array} 
\]

Here source and locative are not represented as co-argumental, co-dependents of the same (simple) predicator (which is indicated by the two-way arrows), provided this dependency relation is not transitive.

That is, we appear to have two subsystems of semantic relations, each of which contains neutral/absolutive, a locative subsystem, wherein locatives bearing a different secondary feature may co-occur, and a non-spatial source system. And the two systems overlap only when the non-spatial source shares a single role with locative, i.e. we have some kind of experiencer, involving an ergative source combined with a simple locative or goal or source. We can represent this schematically in Figure 13.1. The necessarily 'abstract' ergative-source system on the left is isolated from the locative, which may be 'concrete'. The former can intrude into the locative domain only by ‘capturing’ locative into the same role, thus rendering it 'abstract', as an
experiencer. On the basis of Chapter 9, we can formulate the further generalization that the relations borne by circumstantials are limited strictly to the locative subdomain.

Figure 13.1 also indicates, by the arrows, the dependence of the second-order feature {goal} on the presence of a source. And the figure represents absolutive as lying in a domain that includes the two subdomains, but also as standing outside them: thus it may participate autonomously from either domain in processes or states. The two major zones occupied by the other semantic relations in each of which absolutive may be included are the domain of action and that of location: absolutive may be acted upon or located. The prototypical other participants in these subdomains are, respectively, the (prototypically second-person) volitional agentive which presents the most palpable causal source in the representation of a scene, on the one hand, and, on the other, the concrete spatial location that forms the perceptually most accessible ground in a representation. These prototypes define the endpoints of (respectively) ‘animacy hierarchies’ (for example Silverstein 1976; DeLancey 1981) and a dimension of relative concreteness and dimensional differentiation. The experiencer, {{source,locative}}, unites the two subdomains, and such a participant is prototypically first-person.

On the different prototypicalities of first and second person, Wierzbicka (1981: 46) comments:

The speaker is more interested in what other people are doing to him than in what he is doing to other people; he is more sensitive to the ways in which other people’s actions affect him than to the ways in which his actions affect other people. The speaker regards himself as the quintessential ‘victim’ or the quintessential experiencer.

Whatever the status of this, the distribution emerges from various typological observations concerning ‘animacy hierarchies’.

Once more, however, as concerns the criteria we have been looking at, they have a reduced significance in the context of a restricted set of semantic relations. More important for lexical structure as a whole is the fact that the constraints on it are ‘local’ requirements associated with the semantic-relational categories and their arguments: they are imposed by valencies and modifications, signalled by ‘/’ and ‘\’, respectively. This is indeed a property shared with the syntax; but syntax differs in that it builds structures relating different lexical items and it imposes linearity on them, at least partially.
13.2.4 Lexical structure and morphology

Given these differences, syntactic structure, as well as being built on the basis of valency and modification, also involves interaction among secondary features of different items, in particular (in traditional terms) agreement and rection; and these are expressed morphologically. Rection involves determination of features by a particular primary category. The classic traditional example in English is the determination of pronouns as accusative when governed by a preposition or verb—though, as we have seen, the situation is more complex than that. This represents an extreme routinization of the interaction between predicator, complex functor, and morphological case that we find in Latin, or Finnish (as described in Chapter 8). Simple agreement involves a matching of the features belonging to particular secondary categories—in procedural terms, copying of features from one category to another. With verb agreement, for instance, this may rather reflect incorporation of an argument.

More complex in terms of morphosyntax are the Basque systems of agreement, where, for instance, in the predominant ‘analytic’ (rather than ‘synthetic’) verbal construction, the categories associated with the incorporated arguments of a verb are expressed on the governing operative:

\[
\begin{align*}
(7.34) & \text{a. Aitak ogia jaten du} \quad \text{father: SG.DEF.ERG} \quad \text{bread: SG.DEF.ABS eating} \quad 3\text{SG.ABS;3SG.ERG} \\
& \quad \text{‘(My) father is eating the bread’}
\end{align*}
\]

\[
\begin{align*}
& \text{b. Amak aita maitatzen du} \quad \text{mother: SG.DEF.ERG} \quad \text{father: SG.DEF.ABS loving} \quad 3\text{SG.ABS;3SG.ERG} \\
& \quad \text{‘(My) mother loves (my) father’}
\end{align*}
\]

I suggest that, as with the apparent ‘complements’ of complex (deverbal) nouns, the (optional) nominals here are in apposition with incorporated arguments.

In (21a) there are three agreeing incorporated arguments, but all expressed on the operative rather than on the lexical verb to which they bear semantic relations:

\[
\begin{align*}
(21) & \text{a. Eman diozkat} \quad \text{given} \quad 3\text{PL.ABS;3SG.DAT;1SG.ERG} \\
& \quad \text{‘gave her/him them’}
\end{align*}
\]

\[
\text{b.} \quad \{P\} \quad \{\text{erg}\} \quad \{\text{abs}\}
\]

\[
\begin{align*}
& \{\text{P;N}\} \\
& \{\text{erg}\} \\
& \{\text{abs}\} \\
& \{\text{N[1SG]}\} \quad \{\text{N[3SG]}\} \quad \{\text{N[3PL]}\}
\end{align*}
\]
We can indicate the incorporated arguments in (21), schematically, as in (21b), where the co-dependent incorporated functors are not linearized. These dependents are replicated on the operative, roughly indicated by the double-headed arrow; and they are expressed there. So we also have again non-expression of incorporated arguments in the case of the verb—though they are expressed elsewhere, on the operative.

Morphology thus expresses secondary features ‘inherited’ by agreement, as well as inherent features such as gender on nouns. Expression may involve internal modifications (including the drastic form of this known as suppletion) or affixation. In the latter case, of course, linearity is imposed by the morphology. Determination of linearity is a property shared with syntax. But, as we have noted, lexical structure in general has a capacity not permitted to the syntax: it can change syntactic categories, or, rather, subjoin the category of a base to a distinct derived category. This involves both primary and secondary features.

Anderson (2003) offers the notation in (22) to represent instances of this capacity and the role played by affixes:

\[
\begin{align*}
(22) & \quad \text{a. } \{P:N\} & \quad \text{b. } \{N:P\} \\
& \quad \{N:P\} \quad \{N:P\} \quad \{N:P\} \\
& \quad \{N:P\} \quad \{N:P\} \quad \{N:P\}
\end{align*}
\]

\[
\begin{align*}
\text{beauty} & \quad \text{ful} & \quad \text{man} & \quad \text{hood}
\end{align*}
\]

*Ful* is an affix that seeks to modify a noun (‘\’) which is converted (‘\’) to an adjective; *hood* is associated with change of subclass (to what might be glossed as ‘abs(tract)’). But with conversions, such as those in (23), involving the derived noun *walk*, the derived verb *table* and the derived count noun (*a*) *beauty*, no such affixation is deployed:

\[
\begin{align*}
(23) & \quad \text{a. } \{N:P\} & \quad \text{b. } \{P:N\} & \quad \text{c. } \{N:P\{\text{count}\}\} \\
& \quad \{P:N\} & \quad \{P:N\} & \quad \{N:P\{\text{abs}\}\} \\
& \quad \{N:P\} & \quad \{N:P\{\text{goal}\}\} & \quad \{N:P\{\text{abs}\}\}
\end{align*}
\]

\[
\begin{align*}
\text{walk} & \quad \text{beauty} & \quad \text{table}
\end{align*}
\]

The lexical entries in (23) are nevertheless categorially complex (though the representations are obviously incomplete as they stand), and show a relationship to the relevant base. This is no more than to say that we have both overt derivation and conversion.
One proposed restriction on lexical structure that can’t be supported is that made concerning conversions by Beard (1998: 62), who claims:

For every conversion to dry, to wet, to empty, we find an equal number of affixed derivates with the same relation: to shorten, to normalize, to domesticate. Moreover, precisely those stems which affix are precluded from conversion (to *short, *normal, *domestic), and precisely those which convert are precluded from affixation: to *endry, *wetten, *emptify.

However, Sanders (1988) has shown that the existence of equivalent overt marking—what he calls the ‘overt analogue criterion’—cannot be maintained in general, given the relative paucity of overt derivational morphology in various languages (see too Colman and Anderson 2004). And such an assumption underestimates the productivity of conversion in English, for instance. We still have a long way to go in the study of such expression-based constraints as Beard aims at.

Conversions typically involve ‘changes’ in category, and absorption, which are directly responsible for other changes (in valency, for instance). A number of affixations add a particular component of meaning that doesn’t entirely follow from the category or valency change, as with the -able formations mentioned in §4.2.2, and illustrated by the (b) examples in (4.26) and (4.27):

(4.26)  a. The meeting day can be changed/varied
       b. The meeting day is changeable/variable

(4.27)  a. The weather can change/vary
       b. The weather is changeable/variable

Here the suffix adds a very particular component of interpretation, one specifically associated with the presence of the suffix. We might represent this, crudely, as in (24), where ‘pot(ential)’ abbreviates whatever (modal/aspectual) specification(s) might be appropriate:

(24)     [P:N]
     |     {{pot}\{P;N}\{P;N}}}{{pot}\{P;N}\{P;N}}
     |     :
     <\{erg\}>     :
     |     :
     <\{N\}>     :
     :     :
     :     :
     vary     able
Any ergative argument of the base verb is incorporated. Conversions typically involve simple change in (primary or secondary) category and its consequences. There is thus also a difference in the character of the typical derivations involving conversions and affixation.

Notice too that, despite being associated with a difference in syntactic category, the affixes in (22) are not syntactic heads; indeed, they are not heads of anything (pace Williams 1981). They are not independent syntactic elements, and as morphological (syntactic-category-free) elements, i.e. items that express (among other things) the presence of certain syntactic categories, but are not such categories themselves, they are optional—a word need not contain them. They occupy, like most dependents in the syntax of English, the post-head position as the unmarked possibility—they are preponderantly suffixal.

Also, as we have observed, syntactic categories may be ‘changed’ in the absence of an affix (as in conversions). Obviously, the suffix in an -able word has to be present to signal the additional component of meaning beyond the category change (and possible incorporation). But it does not itself embody the overall category of the derived word. Such affixes are like such syntactic specifiers as the daβ in the German non-finite (38a), where non-finiteness is marked by final position of the verb (compare the verb-second finite main clause in (b)):

(25) a. Er sagte, daß er ihn gesehen hätte
   he said that he him seen had
   (‘He said that he had seen him’)

   b. Ich hatte den Hut vergessen/Den Hut hatte ich vergessen
      I had the hat forgotten
      (‘I had forgotten the hat’)

   c. Er sagte, er hätte ihn gesehen
      he said he had him seen
      (‘He said he had seen him’)

The specifier is associated with (morphologically finite) syntactically non-finite verb-final subordinates; it is absent in the verb-second (and so finite) subordinate in (25c). -Able is associated with a change in category, but does not itself realize that ‘new’ category.

13.2.5 Absorption, incorporation, and ‘constructions’
All of the forms in (22–24) involve what I’ve been referring to as ‘absorptions’ (elaborated on in §9.2.5). A category is related to a more complex categoral
structure which is traditionally said to be ‘derived’ from it; there is ‘addition’ of a superordinate category; compared with the base forms, there is a ‘change’ in category, even if only secondary—as with the concrete count ‘derivative’ of beauty in (23c). In the case of absorptions it is the form expressing the base that is the head of the morphological structure expressing the complex (‘derived’) structure. This reflects overtly the derivation, even (in a sense) in the absence of affixation. But in other instances the absorption structure is associated with a different form from any putative base, as in kill, the causative ‘corresponding to’ die, but not overtly based on it. This is perhaps even plainer with pilgrim, on the assumption that it is verb-based (see §10.1.2). This involves the recognition that lexical structure may be syntactic-categorially complex without this necessarily being signalled overtly, and that this categorial complexity (covert or overt) may have syntactic consequences.

Thus, to take a simple example, the {P} that is associated with finiteness formation, whose presence need not be signalled morphologically, provides a free absolutive that hosts subject formation, as in, say, (3a). (3a) also provides a more complex example of the syntactic relevance of (possibly covert) internal categorization, in the form of the structures associated with causatives, lexical or morphological, and their interaction with raising and control, as discussed in Chapters 11 and 12 and above in the present section.

I have distinguished these structures and relationships from ‘incorporations’, which may also involve relationships between a simpler and a more complex (‘derived’) categorial structure. In this case the category of the base has subjoined to it a substructure in the ‘derived’ structure, and it doesn’t ‘change’ its category. The discussion of incorporated arguments in the preceding chapters has illustrated these properties. With them what is expressed as the morphological head is also the same as with the base. Thus the passive participle in (3b), for instance is still a verb. Often, incorporations are not overtly signalled morphologically, however, as with contactive formation (9.44) (updated), associated with (9.26b) and (13.28):

(9.44)’ Contactive formation

\[
\{P;N/{\text{abs}}/{\text{loc}}\} \Leftrightarrow \{P;N/{\text{loc,abs}}\}
\]

\[
\mid \{\text{abs}\}
\]

\[
\mid \{N_i\}
\]
(9.26)  a.  John supplied the treasure to Bill  
       b.  John supplied Bill (with the treasure)

The two verb forms are identical. Both incorporations and absorptions are 'extensions' of lexical structure, unmediated by the syntax.

Absorptions such as we have been looking at provide us with a straightforward way of accommodating the kind of example that has been used to argue for 'constructionist' approaches to relations between lexicon and syntax (as in Goldberg 1995; Goldberg and Jackendoff 2004). Examples such as those in (26) and (27) can be interpreted as absorptions involving a 'derived' causative directional verb based on an argument that is in an instrumental relation to it, either a verbal (a) or nominal (b) argument:

(26)  a.  The professor talked us into a stupor  
       b.  Bill elbowed his way through the crowd

This is indicated schematically in the lexical, so unordered, representation in (27):

(27)  \[
\begin{array}{l}
   \{P;N\} \\
   \quad \{P;N/{\text{erg}}\} \quad \{N/{\text{com}}, {\text{loc}}\} \quad \{P;N/{\text{erg<abs>}}\} \\
   \quad \{P;N/{\text{loc}}\} \\
   \quad \{P;N/{\text{abs}}/{\text{loc}}/\{\text{erg}}\} \\
   \quad \text{:} \\
   \quad \text{:} \\
   \quad \text{:} \\
   \quad \text{:} \\
   \quad \text{talk/elbow}
\end{array}
\]

The 'instrumental' ('hybrid' functor) configuration on the right and the lower {P;N}s joined to the left are subordinate to the highest {P;N}, which is there because of the requirements of a circumstantial, the 'instrumental'; and the {P;N}s and the 'instrumental' are not ordered linearly with respect to each other. The 'instrumental' is a comitative ([com]) locative that requires an agentive verb (recall §9.2.3, and particularly (9.39), updated here as part of (27)). The upper {P;N}s on the left are a causative configuration and the lowest a directional.

Thus, in the syntactic structure representing (26a) in (28) the professor satisfies the agentive requirement of the causative, and is hosted by the free absolutes above:
And the \{\text{abs}\} of the directional (whose spatial source argument is not expressed) is hosted by the (locative) free absolutive of the patient sub-predicate within the causative complex and the free absolutive of the causative ‘action’ predicate itself.

The configuration in (28) corresponding to (27) remains unserializable. And the whole complex in (27) is based on (or ‘derived from’) the ‘instrumental’ argument (not specified here, as its categories varies, but \textit{talk} or \textit{elbow} in the present instances); that is, (27) appears on the right-hand side of an absorption relation on the left of which is the lexical representation for \textit{talk} or \textit{elbow}; in the case of (26).

And the whole complex is expressed by the base form, as in other absorptions. We have a complex conversion. There is no need to appeal to ‘constructions’ with their own meaning. This is a relationship between atomic lexical items.

Likewise, there is no need to associate the alleged ‘unaccusativity’, or the ‘telicity’, of (29b) versus the ‘unergativity’ (‘atelicity’) of (29a) (cf. German (4.22)) with the distinct contribution of the ‘construction’ in (29b) as such:

(29)  
\begin{align*}
\text{a. & John danced/ran/walked} \\
\text{b. & John danced/ran/walked to the other side of the room}
\end{align*}

(29b) involves a directional verb ‘derived’ from a simple (‘activity’) agentive intransitive which is, again, in an ‘instrumental’ relation to it. The ‘unaccusativity’/‘telicity’ is associated with the directional verb (recall Keller and Sorace 2003). And again, and as is normal, the base of the absorption, i.e. in this instance the root of the non-directional ‘activity’ verb, is what is expressed overtly. It is unnecessary to attribute to ‘constructions’ properties that belong to the category that projects the ‘construction’. I do not here try to show this on a wider basis. Böhm (2001) offers a much fuller discussion of such phenomena, and a rather different interpretation of them, which does
not appeal to an ‘instrumental’ relation (and its apparent problems, related to those discussed by Wunderlich (1997)), but which nevertheless also avoids the ‘constructionist’ conclusion.

It is unsurprising if particular kinds of derivational relationship are absent from particular languages, particularly those which are more complex, more marked. Once more, we do not have to associate this with languages having different ‘constructions’, which seems to be an unnecessary complication of the conceptual apparatus of grammar. Languages may have different lexical relationships; there is no need to impose on linguistic variation the complication of ‘constructional’ variation. ‘Constructional’ differences follow from the lexical characterizations of individual lexical items.

This is not, of course, to deny that there are multi-word lexical items; many idioms are such. Consider as an example the *fell out with* verbal sequence in (33), which may be given either an agentive or experiencer interpretation:

(30) Colonel Sentence fell out with General Principle

The lexical item involved might be represented as in (31), assuming, for illustration, an agentive interpretation:

(31) \[
\begin{array}{c}
\{P;N/\{\text{erg}\}\} \\
\{P;N/\{\text{abs}\},\{\text{loc}\{\text{goal}\}\}\} \\
\{N/\{\text{com}\},\{\text{loc}\}\{P;N\}\} \\
\{\{\text{loc}\{\text{goal}\}\}\} \\
\{\{\text{loc}\{\text{goal}\}\}\} \\
\end{array}
\]

From this the syntactic structure in (32) is projected:

(32) \[
\begin{array}{c}
\{P\} \\
\{\{\text{abs}\}\} \\
\{\{\text{abs}\}\} \\
\{\{\text{abs}\}\} \\
\{\{\text{abs}\}\} \\
\end{array}
\]

Col. Sentence fell out with Gen. Principle
Fall out with is an agentive verb formed on the basis of a directional verb and its goal argument together with a comitative; the agentive argument of the derived verb is linked lexically with the absolutive of the directional. In (34b) the \{\{erg\}\} is hosted by the free absolutive of the agentive, and the directional \{\{abs\}\} by the free absolutive of the circumstantial predicator; the circumstantial comitative is hosted by the free absolutive of the agentive predicator. It is only such totally idiosyncratic ‘constructional’ properties, as in (31), that need be entered as part of a lexical item.

13.3 Creativity and notionalistm

The types of lexical relationship we have been looking at, including the linking mechanism of (10) etc., contribute to linguistic creativity, in enabling metonymic and metaphoric formations. And they thus take us back to a theme of the Prologue, the unacceptability of the pervasive notion of ‘creativity’ voiced by Foley and van Valin as ‘the ability of native speakers to produce and understand an (in principle) infinite number of sentences’ (1984: 319) and the inappropriateness of how Chomsky’s (1976) distinction between ‘rule-breaking’ and ‘rule-governed creativity’ is drawn. There are distinctions to be drawn here, to be sure: to do with relative routinization or lexicalization, different dimensions of figurativeness (which is not just a feature of ‘literature’), or what we might distinguish (again following Anderson (1984c; 1987a)), though scarcely sharply, as ‘suppletive’ versus ‘supplementary’ formations. The latter provides alternative means of representing some scene; they are thus usually obviously ‘figurative’ (in a sense, ‘rule-breaking’ or ‘rule-supplanting’), and can lead to ‘idioms’. But the alternative, figurative means of expression can reveal something distinctive about the scene represented; it is to an extent ‘suppletive’, and its content cannot necessarily be identified with any ‘literal equivalent’, even when the metaphor is apparently ‘dead’. The fully suppletive formation provides us with a means of representing a scene for which there is no prior representation (it is ‘rule-creating’, or ‘rule-extending’)—as with the deployment of the localist relations in the representation of abstract as well as concrete ‘spaces’ etc. These localist relations provide ‘literal metaphors’, in another terminology (Lakoff and Johnson 1980, and much subsequent work).

As implied, the literal/suppletive/supplementary distinctions are fragile. Many ‘literal’ expressions are ‘dead’ metaphors (Finally, they understood). And something that might be identified as an idiomatized ‘supplementary’ metaphor is merely more recent, and perhaps more transparent, at least vis-à-vis its non-literal status, if not in the interpretation of the metaphor (Finally, the
penny dropped). There are often alternative suppletive (or ‘literal’) metaphors that ‘supplement’ each other, as in the spatial expression of temporal relationships (cf. the tradition of work that includes Traugott (1975)).

It was suggested in §9.2.3 that renewal of such metaphors is crucial to the development and use of language. On the other hand, we should not overestimate the role of recursive routinized formulas in any of this. It is imaginative flexibility that characterizes creativity, not mere infiniteness of product. And these considerations lead us back again to groundedness, which they depend on: ‘creativity’ is meaningless without meaning.

What emerges most strongly from this history, as far as I’m concerned, is the fundamental, inescapable status of grounding in grammar. ‘Case grammar’ and its developments within a more general notional grammar involve a rejection of the ‘autonomy of syntax’ principle. This is, of course, not unique to this tradition; but the history we’ve looked at illustrates particularly forcefully the illusory character of any assumption of ‘autonomy of syntax’. What emerges in particular from the work looked at is that descriptively adequate and explanatory categories are not arrived at on the basis of an arbitrary selection of observations concerning distribution; and arbitrariness is not disguised by the attribution of the selection to some abstract ‘universal grammar’, or ‘language faculty’.

There is no autonomous formal or substantive property that has been shown to be unique to language. In these circumstances, the important question concerning ‘universality’ is this: which of those linguistic properties that recur universally reflect the result of continuing interaction, during acquisition, of cognitive capacities with the partly routinized structures of the individual languages being learned? And which of them are genetically transmitted linguistic routinizations—that is, properties that have lost grounding, are autonomous to the extent of being unlearnable as such? The set consisting of the latter properties constitutes ‘universal grammar’, or perhaps ‘the faculty of language in the narrow sense’ (Hauser et al. 2002). It is not clear that this set is non-empty, apart from its including an impulsion ‘to pay attention to speech’. That even the most plausible candidate for (further) membership of the set, recursion, is unique to language is very doubtful. And there are certainly no grounds for attributing the linguistic categories discussed here (or elsewhere, for that matter) to ‘universal grammar’.

Nor are categories and their syntax to be established or recognized by giving equal weight to any and all distributional properties or to all potential members. Only the properties of the prototypical use of semantically prototypical members of the category are relevant to identifying the basic distribution of the category. Other aspects of distribution correlate
with various sorts of non-prototypicalities of membership or use. What we have looked at suggests that what I called in §11.1 ‘categorial autonomy’ must be complemented by grounding: internal distribution and groundedness are individually insufficient fully to account for the behaviour of linguistic categories—specifically syntactic categories in the present instance.

Ultimately, one’s position on ‘autonomy’ and ‘universal grammar’ depends on how one interprets the undeniable mismatches between semantics and syntax. Some mismatches are lexically based, so that (for instance) the membership of syntactic classes may include non-prototypical examples; but others are structural. Syntax shows what I have called ‘routinizations’, syntactic generalizations that are not obviously grounded.

One reaction to these latter is to assume, despite the evident groundedness of much of morphosyntax, that syntax must be studied as autonomous. Given this, analyses of the syntax of individual languages and of its acquisition will have to appeal to formal devices of such abstractness that the positing of ‘universal grammar’, as the source of such unlearnable ‘abstract principles’, becomes plausible (Anderson 2004a; 2004f).

But there is a suspicious circularity here, or at least a question-begging mutual dependence, involving ‘autonomy’ and ‘universal grammar’, as well as there being so far no systematic account in such terms of the prevalence of groundedness, or of the distribution between and within languages of matches and mismatches between syntax and semantics. And maintenance of ‘autonomy’ involves both contraction of the traditional bounds of syntax—where it most obviously involves reference to semantics (recall the introduction to Chapter 10), or to phonology—and expansion (via ‘Logical Form’) to include aspects of semantics that apparently frustrate the contraction strategy and so must be redesignated ‘syntax’.

Suppose, on the other hand, that one regards the mismatches with semantics that occur in syntax as parasitic upon a syntactic system that is grounded in semantics. These mismatches are then evidence of language-particular routinizations imposed on a syntax based on groundedness. The question then arises: why are some of these routinizations, such as subject formation, so prevalent, if not universal? Do they not, after all, reflect an ‘autonomous’ ‘universal grammar’? But this prevalence may simply reflect the recurrence in languages of the same (grounded) circumstances that favour the development of the routinizations. Thus, subject formation is favoured by the frequent coincidence of ‘agents’ and ‘topics’, as well as by the functional utility of there being a designated argument that can be identified as ‘victim’ of, for example, ‘raising’ and ‘control’. The favouring circumstances are grounded and functional, not ‘autonomous’. And subjechange itself is not universal—though
most sentence types in most languages display a principal relation of some sort. These relations are all functionally motivated routinizations of topics, however.

Apart from principal formation (formation of subjects, primes, etc.), the routinizations that have been appealed to in the preceding are the role of free absolutes and the determination of some linearizations. The presence of the latter is dictated by, among other things, the phonetics interface, which must accommodate expression through time; sequencing is not in any way 'autonomous'. And the clustering of the linearizations in many languages, or at least subsystems, around sequences which consistently reflect the head-dependent relation—‘head before dependent’ or ‘dependent before head’—facilitates parsing (for example in lessening the likelihood of ‘garden paths’); so it too has a functional basis.

But what about the (apparently syntactic, not lexical) requirement that every predicator (with only marked exceptions) has a dependent absolute (whatever else)? In default of a subcategorized-for absolute, a free absolute is introduced in the syntax. This was expressed in §11.2.1 as:

*Universality of absolute*
Every predication contains an absolute.

As implied by the brief discussion of the role of absolute in raising in §4.2.3, this requirement corresponds in a sense to part (b) of Chomsky’s (for example 1981) projection principle:

*Projection principle*
(a) Representations at each syntactic level (i.e., LF, and D-and S-structure are projected from the lexicon, in that they observe the subcategorization properties of lexical items.

(b) Every clause must have a subject.

But here it is the absolute relation that is being claimed to be universal to clauses, not subjecthood. Every language may have a principal relation (subject being one variety thereof), though particular subsystems may lack them. In existential sentences in Tagalog, for instance, there is no prime present (Schachter 1976: 502):

(33) May liham (para sa iyo)  
    exist letter (for you)  
    (‘There’s a letter for you’)

Recall (7.5), with a prime:
(7.5) a. Lumapit ang ulap sa araw
   approach:AT T cloud D sun
   (‘The cloud approached the sun’)

   b. Linapitan ng ulap ang araw
   approach:DT A cloud T sun
   (‘The cloud approached the sun’)

In (7.5) the prime argument is marked (in Schachter’s (1976) terminology)
with ‘T’, and the role of the prime is marked on the verb: ‘AT’ in (7.5a) and
‘DT’ in (7.5b). Both of these markings are missing in (33). This is unsurprising
in an existential sentence, given the source of primes in topics, something
reflected in their ‘definiteness’ in Tagalog. In English, the sentences in (7.8),
corresponding to (33), have only an expletive positional subject (§11.2.3):

(7.8) a. There is a fly in my soup

b. There are flies in my soup

Nevertheless, principals fulfil a functional role in most subsystems in language.
However, the existence of principals depends on the universality of abso-
lutive, which must participate in any form of principal formation.

We might formulate the syntactic requirement that ensures universality of
absolutive as in (34), where ‘/*{abs}’ denotes absence of an absolutive valency
for a head:

(34) Predication default
   P/*{abs} ⇒ P/{abs}

Notice in the first place that (34) seems to be a condition on predicators rather
than predication, and specifically lexical predicators. It does not apply to the
‘superjoined’ predicators introduced by circumstantial, as was assumed in
(9.26), (10.39) and (13.28):

(10.39)  Bill was reading Waverley on Tuesday

Modern Grammars of Case
Predicators introduced syntactically are ‘defective’ in this respect; there is no motivation for presence of a free absolutive in their case.

Such a requirement as (34) is a putatively universal routinization of the relationality of the $P$ feature associated with predicators, ultimately based on their cognitive character. The development of the routinization is also favoured by functional considerations, basically the provision of a mechanism that permits argument sharing and the consequent ‘compacting’ of the syntax. But, given this, is (34) nevertheless still to be conceived of as part of an autonomous ‘universal grammar’, whatever its phylogenetic source in grounding (semantic relationality) and its functional utility?

However, it is possible that, as with subjects, this requirement emerges in the acquiring of individual languages, as a result of interaction (in this case) between the expectations engendered by the relationality of predicators and confrontation with linguistic phenomena, particularly phenomena that invite the positing of shared arguments. Thus, the interpretation of (11.1b) requires attribution to the two predicators of an argument that fulfils the valency of both and which is patently shared:

(11.1)  

a. John seemed to like Rasselas  
b. John tried to read Rasselas

In (11.1a) the putative shared argument is not required by the valency of the upper predicator; it is nevertheless the subject of this predicator—canonically more so than it is the subject of the lower predicator, from which it is separated by the other predicator. If subjects are neutralized semantic relations, and if arguments appear in predicators by virtue of bearing a semantic relation (as is semantically appropriate), then the question of the identity of the relation borne by the subject of $seem$ arises, as does that of the subjects in (11.3a)—and the objects in (11.3b)—rather naturally:

(11.3)  

a. It rained, it grew late  
b. They lived it up, Fred blew it

The obvious choice is absolutive, the default ‘case’.

The role of absolutive in the scene depicted by the predication it appears in is determined by the predicator rather than being inherent: it is located, moved, described, assigned attributes, acted on, experienced, etc. Absolutive has only this content. In the absence, in the case of $seem$ and these others, of a subcategorization requirement for an apparent argument, the predicator acquires the ‘neutral’ absolutive relation. The predicator imposes no content on the relation (and, indirectly, argument) introduced by (34); the absolutive remains contentless, as it transmitted to its argument none of the selectional
requirements associated with being subcategorized-for. It is required only by
the relational character of predication that is articulated by the semantic
relations and their mediation between predicator and argument(s). All of
this is cognitively salient.

The rough scenario just outlined remains highly speculative, of course. But
in this and other putative instances of ‘autonomous universals’, such alterna-
tive stories deserve detailed attention before contemplating a plunge into
abstractions which ensure their own unlearnability and bring with them as
a consequence—or perhaps rather as a reciprocation—a doctrinaire perspec-
tive on language and mind.

In the course of the present survey, we have come quite a long way, in one
respect, from concerns that started off with attempts to understand how to
talk about the role in the classical languages of those variations in the nominal
paradigm that seemed to signal something other than gender, number, or
person (or declension class)—what came to be labelled, none too transpar-
ently, ‘case’. But we have kept coming upon further support for the traditional
convictions, now based on a wider range of evidence, from a range of
languages, concerning the syntactic importance of these relations expressed
by morphological case and alternatives to it, as well as their grounded
character, their notional basis. Of course, following this evidence has taken
us in a number of different directions, some of the more important of which
this final chapter has touched on.

The present book has endeavoured to present something of a history, one
based on the consequences of the ‘case grammar hypothesis’, embodying what
I called a case grammar of level 3. I find it a piquant history. On the one hand,
at an early stage in the development of transformational grammar there was
formulated, and embedded within such a grammar, a sub-theory whose
consequences would render transformations superfluous and autonomous
syntax untenable. On the other hand, a view of syntax as ‘autonomous’ and
transformational would have been rendered superfluous and undesirable if
there had been acknowledged more generally at the inception of transfor-
mational grammar the legacy of the tradition of grammars of case.

This last chapter, however, as well as casting an eye back on this history, has
also sought to introduce further consequences of the ‘case grammar’ view,
most of them largely still to be developed. This is as it should be. Every
epilogue is also a prologue.
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