

**Features, Categories and the Syntax of A-
Positions**

**Cross-Linguistic Variation
in the Germanic Languages**

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Features, Categories and the Syntax of A-Positions investigates various aspects of the distribution of nominal arguments, and in particular the cross-linguistic variation that can be found among the Germanic languages in this domain of the syntax. The empirical issues that are discussed include variable vs. fixed argument order, the distribution of subjects with respect to adjuncts, expletive constructions and oblique subjecthood. These and many other phenomena are analyzed within a theoretical framework which is based on the Minimalist Program. The book argues that the traditional theoretical devices accounting for the distribution of arguments in generative syntax (abstract Case, the Extended Projection Principle) should be eliminated from the grammar and that their apparent effects can be derived from the feature specifications of syntactic categories. Furthermore, it is argued that several aspects of the cross-linguistic variation found in the syntax of arguments can be directly related to variation with respect to verbal agreement morphology and case morphology.

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CHAPTER 1

INTRODUCTION

The aim of this book is to consider some aspects of the distribution of nominal arguments in the Germanic languages and in particular aspects of the cross-linguistic variation in this domain of the syntax. The central questions that will be addressed on the basis of the Germanic languages are: (a) What are the common underlying properties which determine the distribution of nominal arguments across languages? and (b) How can the considerable cross-linguistic variation be accounted for? With respect to these issues, two main claims will be made. First, it will be argued that the basic distributional properties of nominal arguments which hold across languages can be derived from the definition of syntactic categories and in particular from the interaction between nominal and verbal elements in this respect. And secondly, it will be proposed that several aspects of the cross-linguistic variation in the syntax of nominal arguments can be directly related to morphological properties which also differ across languages, i.e. to properties such as verbal agreement or case morphology. Both of these results will be obtained by developing certain proposals made within the Minimalist Program (cf. Chomsky 1993, 1995, 2000, 2001) and in particular by trying to restrict the inventory of syntactic features in a given language to features which play a role at least at one of the two interface levels. The goal of this chapter is to provide the theoretical basis for our discussion in the later chapters.

1. SOME BASIC THEORETICAL NOTIONS

1.1. Principles and Parameters

Work within the generative framework has been guided by two fundamental questions (cf. e.g. Chomsky 1986a:3): (i) What constitutes knowledge of language? and (ii) How is knowledge of language acquired? These two questions give rise to an important tension. On the one hand, to deal with question (i) a very complex system of rules seems to be required which describes the rich tacit knowledge speakers have of their language. On the other hand, from the point of view of question (ii), we can observe that this complex system seems to be acquired easily

and quickly by language learners and furthermore on the basis of input which is deficient in many respects ("poverty of stimulus") and which differs from one learner to the other. The main tension that arises is that the system of rules describing the tacit knowledge of a speaker can easily become too rich to account for acquisition.

The framework known as Government and Binding Theory or Principles and Parameters Theory (henceforth GB; cf. e.g. Chomsky 1981, 1986a, Chomsky and Lasnik 1993) deals with issues (i) and (ii) and the tensions that arise between them by factoring out general principles that underlie different rules and by attributing them to Universal Grammar (UG), i.e. the innate, genetically determined language faculty. The idea is then that linguistic phenomena are not the result of construction-specific rules but rather the result of interactions between the different principles of UG. In order to account for cross-linguistic variation, two types of UG principles are distinguished. First, there are invariant principles which hold across languages. Standard cases of such principles are the Binding principles which determine the interpretation of nominal elements or the Empty Category Principle which defines restrictions on non-overt elements but also the Theta Criterion, the Case Filter or the Extended Projection Principle which will all be discussed in more detail in section 2.1 below. Apart from the language-invariant principles, there are principles whose content is not determined universally but which allow variation among languages. The latter components of UG are referred to as parameters and it is generally assumed that parameters basically provide a choice among two options. Standard examples of parameters are the *pro*-drop parameter which determines whether pronouns have to be realized overtly in a given language or not (cf. e.g. English vs. Italian) or the directionality parameter which leads to the distinction of OV and VO languages. As for the tension between the two questions in (i) and (ii), the principles and parameters conception of the grammar avoids it by reducing the task of the language learner to a large extent to the fixing of specific parameter values for a given language.

Although some aspects of the Government and Binding framework have changed considerably within the more recent generative framework referred to as the Minimalist Program (henceforth MP, cf. e.g. Chomsky 1993, 1995, 2000, 2001), the basic principles and parameters approach has still been maintained. Thus, it is still assumed that certain aspects of the grammar are fixed universally and that certain other aspects are subject to parametric variation. I will return to some illustrations from the Minimalist framework in the discussion in section 2 which focuses more specifically on the syntax of nominal arguments.

1.2. The Model of the Grammar

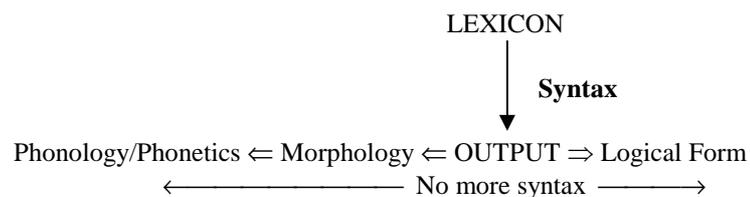
Within the generative framework, it is assumed that language has two main components, namely a lexicon and a computational system. The lexicon provides the elements on the basis of which the computational system then generates the

structural representations. Minimalist work is based on the assumption that the only conceptually necessary levels of structural representation are those which are related to "external" systems, i.e. the level which is related to the articulatory-perceptual system (PF) and the level which is related to the conceptual-intentional system (LF). As for the way in which a computation proceeds, it is assumed that the lexicon provides an initial set of elements (*lexical array, LA*). The computational system then derivationally builds up the structure by combining the elements contained in LA. The main processes in this derivational system are *Merge* which puts two elements together and *Move* which moves an element to a position which differs from the one in which it has been merged.

In the Minimalist literature, we can find different accounts of how PF and LF interface representations are derived from LA. In Chomsky's early Minimalist work (Chomsky 1993, 1995), the distinction between the PF and the LF representation is obtained under the assumption that at some point during the derivation (*Spell Out*) PF-relevant information contained in the structure built up so far is fed to the PF component. Thus, any syntactic operations that have been carried out before Spell Out are overtly visible. Finally, additional non-overt processes derive the structure which is fed to the LF interface. Thus, two structural representations are created in this model: A Spell Out representation which contains the information which is interpreted by the PF component, and a representation at the end of the derivation which contains the information which is interpreted by the LF component.

Bobaljik (1995) and Groat and O'Neil (1996) propose an alternative model of the grammar. Their model has been referred to as the Single Output Model because it postulates that a given input only leads to one single representation which is interpreted both by the PF component and by the LF component. This model can be represented as follows (from Bobaljik 1995:349).¹

(1) *Single Output Model*



Since the model in (1) only produces one structural representation, it eliminates syntactic processes which, within Chomsky's (1993, 1995) model, occur in a separate cycle, i.e. in the covert syntax.

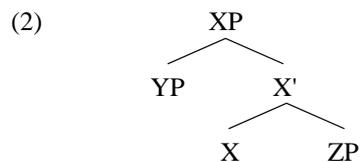
¹ Note that (1) is similar to purely representational approaches such as Brody (1995) in that only a single syntactic representation is produced. However, I will follow Bobaljik (1995) and Groat and O'Neil (1996) in assuming that this single representation is obtained through derivational processes and I will therefore continue using derivational terminology here (cf. also Chomsky 1995:222ff., 2000:98f.).

The absence of a non-overt cycle also characterizes the model of grammar proposed by Chomsky in more recent work (cf. Chomsky 2000, 2001). In this model, Spell-Out occurs at different stages in a derivation, i.e. at what Chomsky calls "phase" levels, and it is assumed that elements within a phase are to a large extent inaccessible to further syntactic processes after Spell-Out. Hence, as in (1), no derivational component for non-overt processes exists within this system.

For reasons which will be discussed in chapter 2, I will base my analyses on the Single Output Model as illustrated in (1).

1.3. Clause Structure

Within pre-Minimalist generative syntax (Government and Binding (GB) Theory), it is assumed that at the beginning of a derivation (D-structure) lexical items are inserted into a given syntactic representation which is determined by what has been referred to as the X-bar format. This syntactic structure then provides the basis for further computational processes. The main idea of the X-bar format is that the constituents that build a clause are all of the same format which can be represented as follows (X'-schema):

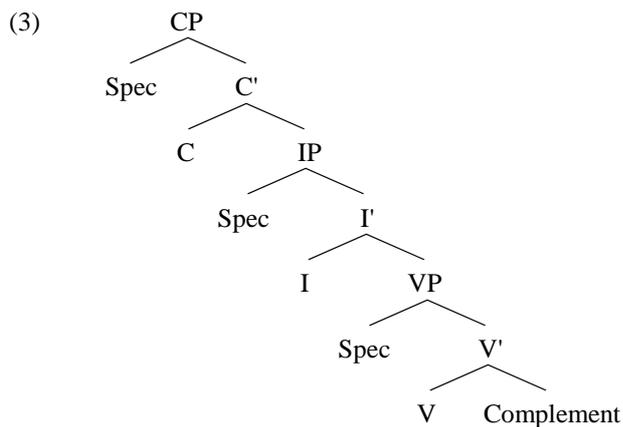


Each head X projects a larger syntactic unit (a phrase) and each phrase must be headed by one head (endocentricity). Within a given projection, the head first projects an intermediate projection (X') which allows X to be combined with a complement which is a phrase itself (ZP). X' then associates with another phrase (YP), the specifier, to form the maximal projection (XP). A standard assumption within the GB framework is that an additional phrase can sometimes be added on top of the XP through adjunction, thereby adding another XP-level in (2). Furthermore, it has generally been assumed that the order of the head and the complement is parametrised and that, as an alternative to (2), the complement ZP can also occur to the left in some languages or in some constituents (head-initial vs. head-final). However, both of these assumptions (XP-adjunction, variation in head-complement orders) have been challenged in the recent literature (cf. in particular Kayne 1994). Here, I will not pursue the issue of head-complement orders in any detail. For simplicity's sake, I will generally adopt the traditional approach according to which directionality variation is possible (but cf. chapter 3.4 for a brief discussion of issues that arise with approaches in which only one order for heads and complements is available cross-linguistically). As for XP-adjunction however, I will

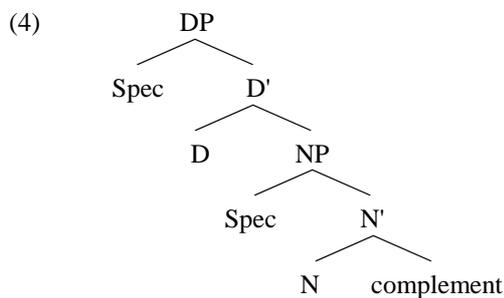
adopt more recent analyses which propose that the occurrence of such a structural configuration is restricted (cf. chapter 4 for discussion of this point).

The main structural configurations that have been used to express relations between elements in the structure in (2) are dominance and c-command. Dominance refers to a relation in which an element is higher in the structure than another one. Thus, XP in (2) dominates all other nodes (YP, X', X and ZP), X' only dominates X and ZP, whereas YP, X and ZP do not dominate any other element that is represented in (2). As for c-command, it expresses a relation between an element α and an element β in which α does not dominate β but every node that dominates α also dominates β . Thus, in (2), YP for example c-commands X, X' and ZP, or X c-commands ZP.

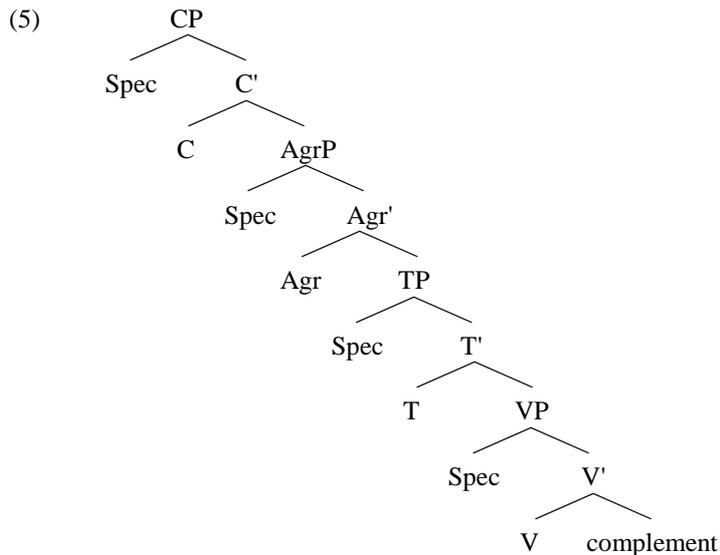
(2) provides a general format which is realized by different types of categories. Within the clause, three main types of heads have generally been assumed to project a structure of the type shown in (2), namely V (verb), I (inflection) and C (complementizer). Thus, we obtain the following basic structure for the clause:



As for the structure of nominal elements, it is determined by two main heads, N (noun) and D (determiner).



Work in the wake of Pollock (1989) suggests that the structures in (3) and (4) are richer. For example, it has been argued that IP should be split into its components T (tense) and Agr (agreement) as shown in (5).



Additional projections have been proposed within the VP (VP-shells, cf. e.g. Larson 1988) and for the domain between V and C, such as NegP, AspP or MoodP. Similarly, it has been argued that the CP domain also contains several different types of projections such as ForceP, TopP, FocP or FinP (cf. in particular Rizzi 1997).

Within the GB framework, it is assumed that structures of the type shown in (3) to (5) are available at D-structure already. As for the MP, it eliminates the D-structure level from the model of the grammar and this assumption also has consequences for the analysis of the clause structure. Instead of having an entire structure before the derivation starts, it is assumed within the MP that the clause structure is built up in a bottom-up fashion in the course of the derivation. Thus, at the beginning of a derivation a certain number of elements are drawn from the lexicon (forming the LA) and these elements and their projections are then combined to build up the clause structure in the course of a derivation. For example, in order to obtain a structure like (3), a verb is drawn from the LA, and it combines (merges) with a complement XP, with the verb projecting. Then, the structure built so far merges with another constituent (the specifier) and the verb projects again. The next step is that the verbal structure built merges with an inflectional head which is drawn from the LA and the inflectional head projects. This head further projects and finally C is merged and we obtain the structure in (3). Thus, the format of the structure is generally still along the lines of (2). However, since the creation of

syntactic structure in the MP system always involves merging two elements, the format in (2) does not necessarily get projected. Thus, if no specifier is merged after a head and complement have been merged, the head does not project any further. Instead the maximal projection is simply formed by the head and its complement. Unary branching is thus excluded. In the GB X'-system however, the three levels X, X' and XP are always projected, leading to unary branching if the complement or the specifier position are not filled. Another difference between the GB and the MP approaches to syntactic structure is that, whereas in the GB X'-schema in (2) there is a unique specifier position, it is possible to get two or more specifier positions within a given projection in the Minimalist system (cf. Chomsky 1995:286, Ura 1994). This option will be of some importance for the proposals made in the following chapters.

With respect to the inventory of categories, Chomsky (1995:349ff.) argues against the presence of the category Agr shown in (5) and instead adopts a clause structure with a single inflectional projection TP (corresponding to IP in 3). In the following chapters, I will use a structure which combines (3) and (5) to some extent. I will assume that the basic building blocks of the clause structure are indeed the elements shown in (3) but that additional projections such as agreement checking projections can be created in the course of the derivation through what Nash and Rouveret (1997) call proxy categories.

1.4. Movement

Movement has played a central role in both GB and Minimalist work. Given that the following chapters will mainly be based on Minimalist assumptions, I will focus here on the properties of movement as proposed within the Minimalist framework.

1.4.1. Chomsky (1993, 1995)

In section 1.3, we described how the clause structure is built in a bottom-up fashion within Minimalism. In particular, we saw that structure can be built up by drawing an element from the LA and merging it with some other element (either another element from the LA or a larger constituent that has already been built independently). Merge integrates a new element into the structure. However, structure can also be built through another process, namely through rearranging elements that occur already in the structure (Move). Move takes an element contained within the structure already built and moves it to a structural position that is added as the result of Move. For example once I and the VP have been merged and I has projected, a subject in [Spec, VP] is moved out of the structure already built and is reinserted by combining it with the I-projection. Hence, the subject ends up in [Spec, IP] as the result of movement and the [Spec, IP] position thus is created derivationally.

As for the properties of movement, it is assumed within the Minimalist framework that movement represents a "last resort" in the sense that it must be triggered by requirements of certain features and thus only occurs if necessary. To obtain this result, Chomsky (1995) introduces a distinction between two types of features, namely interpretable features which are interpreted at the interfaces and uninterpretable ones which do not play a role at the interfaces and which therefore cannot be interpreted by them. In order to avoid interface representations containing features which cannot be interpreted, uninterpretable features have to be eliminated in the course of the derivation. And the way in which an uninterpretable feature can be eliminated within Chomsky's (1995) framework is by entering a local configuration (spec-head, head-head) with a feature of the same type. This process is referred to as feature checking. Feature checking deletes the uninterpretable feature and thus contributes to establishing an interface representation which only contains interpretable features. As for the trigger of movement, Chomsky (1995) proposes that movement occurs when a feature in the functional domain is uninterpretable and therefore has to be checked. In order to get checked, the uninterpretable feature attracts another feature of the same type from a lower position in the structure. Movement of the lower element then creates a checking configuration and allows the elimination of the uninterpretable feature(s).

One additional point should be discussed here briefly in connection with Chomsky's (1993, 1995) framework. The theory of feature checking used in Chomsky (1993, 1995) is based on the assumption that lexical elements are inserted into the derivation as fully inflected forms (stem plus inflectional affix(es)). Thus, for example a verb is inserted under V with its tense and agreement morphology and, hence, with T and Agr features. These features on the lexical head then play a role in feature checking. Here, I will not adopt this proposal. Although I will propose that certain morphosyntactic features are associated to other heads (e.g. Agr to T), I will adopt the standard pre-Minimalist assumption that lexical items pick up morphosyntactic features in the course of a derivation and thus only have obtained their full shape at the end of a derivation. Thus, for example T gets associated with V only in the course of a derivation.²

1.4.2. Chomsky (2000, 2001)

More recently, Chomsky (2000, 2001) proposes a system which differs slightly from the (1995) theory. Syntactic processes are still driven by uninterpretable features within this system. However, it is assumed that uninterpretable features can be checked in a less local way, i.e. without movement. Thus, an uninterpretable feature

² Note that in terms of such a framework the actual morphophonological shape of a lexical item is determined only in the PF wing of a model like (1) (morphology) in line with proposals made within Distributed Morphology ("Late insertion", cf. e.g. Halle and Marantz 1993). Cf. e.g. chapter 6 fn.5 for an illustration of this option in the context of agreement in Icelandic.

searches for the closest feature of the same type and, once such a feature has been identified, the uninterpretable feature(s) can be deleted (Agree). As for movement processes, they are triggered by an uninterpretable selectional feature which can occur on various heads. Chomsky (2000, 2001) calls this feature an EPP (Extended Projection Principle) feature and it has the property of requiring the presence of a specifier in the projection on whose head it occurs.

One important consequence of this revised system concerns the contrast between overt and non-overt movements. In the early Minimalist literature (Chomsky 1993, 1995), it is assumed that certain movements are triggered by what has been called strong features while other movements are triggered by weak features. The presence of a strong feature leads to movement in the overt syntax whereas a weak feature is checked non-overtly. In Chomsky's (1995) framework, non-overt movement is simply movement of features rather than entire constituents. This process, and hence also weak features, can be eliminated within Chomsky's (2000, 2001) system because feature deletion can be done in a less local way (Agree).

In this book, I will adopt the assumption on which both Chomsky (1995) and Chomsky (2000, 2001) are based, namely that syntactic processes are driven by the presence of uninterpretable features.³ As for the analysis of the elimination of uninterpretable features, I will base myself primarily on the system outlined in Chomsky (1995). In particular, I will assume that feature checking occurs in a local configuration and that specific uninterpretable features can attract other elements and thereby trigger movement. Hence, I will not adopt Chomsky's (2000, 2001) proposal that movement is only triggered by EPP-features.

There are two main reasons for this choice. First, as pointed out in the introductory paragraph of this chapter, a central goal that I will pursue in this book is to motivate the presence of features in a syntactic structure by restricting the inventory of features in a given language to features which play a role at least at one of the two interface levels (LF, PF). Thus, even though a feature F may be uninterpretable and thus drive syntactic processes in some contexts, I will assume that the existence of F should only be postulated if it is interpretable for the LF or PF interface at least in some other contexts. This restriction on the inventory of features is in line with the general Minimalist aim of reducing theoretical devices to what is minimally necessary. Chomsky's (2000, 2001) generalized EPP-feature immediately raises a problem for such an approach. The EPP-feature has no semantic content (LF), nor does it play any role in the morphophonological component of the grammar (PF). Thus, there does not seem to be any independent motivation for the existence of such a feature. A second problem that a generalized EPP-feature raises is that, although it allows the elimination of the strong/weak distinction made in Chomsky (1993, 1995), it simply introduces a different two-way distinction. Whereas some uninterpretable features can be deleted in a non-local relation

³ But cf. chapter 2.7 for a potential alternative way of motivating movement which is based neither on Chomsky (1995) nor on Chomsky (2000, 2001).

(agreement, Case), the uninterpretable EPP-feature has the special property of requiring a local checking configuration. But the simplest assumption with respect to feature deletion would be that it always takes place in the same way (i.e. either non-locally or, as in Chomsky 1993/1995, locally). I will avoid both problems mentioned in this paragraph by not adopting the EPP-feature as a theoretical device. This will have the additional advantage of allowing us to avoid a certain terminological confusion that could arise in our discussion. In chapter 2, an analysis will be presented whose goal is to derive the principle traditionally called the EPP, i.e. the requirement that every clause have a subject. By not extending the use of the notion EPP to any context in which a specifier is filled, we can continue using it to refer unambiguously to a specific aspect of the syntax of subjects.

Thus, I will not adopt Chomsky's (2000, 2001) analysis of movement in all details. However, I will follow Chomsky (2000, 2001) in assuming that pure feature movement (proposed in Chomsky 1995) generally does not exist. Furthermore, as the discussion in chapter 2 will show, certain aspects of Chomsky's (2000, 2001) system of feature checking will be incorporated into the framework developed here.

1.4.3. Different Types of Movement

A final point which will be important for our purposes is the distinction of different movement types that has generally been made within both GB and Minimalist frameworks. Two main types of movements can be distinguished: (i) head-movement, and (ii) XP-movement. Head-movement involves movement of an X° category to another X° category and it can be found for example in the context of verb movement (cf. sections 3 and 4 below). XP-movement affects an entire phrase.

With respect to movement of an entire phrase, a distinction has to be made between (I) A-movement, and (II) A'-movement. The A/A'-distinction is made on the basis of the status of the landing site of the moved element and it plays a role for certain syntactic phenomena such as locality of movement (cf. e.g. Rizzi 1990) or binding (cf. chapter 3 for more details). In the early GB framework (cf. e.g. Chomsky 1981), this distinction was simply a distinction between positions in which a thematic role is assigned by a predicate (A(argument)-position) and positions in which no thematic role is assigned (non-argument or A'-position). However, later developments have made this distinction more complex. Given the proposal that subjects are generated VP-internally (cf. e.g. Kitagawa 1986, Koopman and Sportiche 1991, Sportiche 1988a), the [Spec, IP] position cannot be considered as a thematic position any more. The definition of the notion of A-position therefore has been extended to certain non-thematic positions in the functional domain which are typically occupied by arguments. Rizzi (1991) proposes that A-positions are either thematic positions or specifiers of Agr. Similarly, Chomsky (1993) introduces the notion of L-related position for referring to the standard A-position and defines it as a specifier or complement position of a feature of a given lexical head L. Thus, for example since T and Agr are features on V, [Spec, TP] and [Spec, AgrP] are L-

related positions. A-positions thus include thematic positions but also positions in the functional domain which are only occupied by arguments, such as agreement or case positions. As for A'-positions, they are positions in the syntactic structure which can be occupied by any element, i.e. by arguments but also by non-arguments. Typical A'-positions are positions related to operator features such as *wh*, Foc or Neg. But also non-operator positions like topic positions are A'-positions given that they again can be occupied by both arguments and non-arguments.

In this book, I will focus on A-positions. Issues related to head movement and A'-movement will therefore only be addressed occasionally and in no detail. For the time being, a descriptive characterization of A-positions as thematic, agreement and case positions will be sufficient. However, in chapter 2.5.1.2 and chapter 3.2.7, I will reconsider the definition of A-position within the framework that I will propose. Chapter 3 also provides illustrations for different syntactic tests which have been argued to be diagnostics for distinguishing A- from A'-positions.

1.5. Economy

Within the Minimalist framework, it is assumed that derivational processes as described in the previous subsections (Merge, Move) do not occur freely but are constrained by economy conditions. We can distinguish two main types of economy conditions, economy of derivation and economy of representation. Economy of derivation means that the interface representation(s) must be derived in a way which is derivationally as economical as possible. In section 1.4.1, we have already seen one manifestation of derivational economy, namely the requirement that movement should take place only when necessary ("Last Resort"). The idea is that each movement has to be motivated by some licensing requirement. Movements which are not triggered by such a licensing requirement are ruled out.

There is a second major restriction on movement, namely the condition that movements should always take the shortest route. This restriction has been expressed in different ways in the literature. The general way in which I will interpret the condition here is that movement of a given element should be as short as possible (Shortest Move) and that, if there is a choice among potential candidates with respect to movement, it is the element with the shortest movement "distance" which moves. The latter condition can be expressed in terms of Chomsky's (1995:297) Minimal Link Condition according to which an attracting uninterpretable feature always attracts the structurally closest element that can enter a checking relation with this feature. As for closeness, I will follow Chomsky's (1995:358, 2000:122) proposal according to which an element A is closer to an attractor than an element B if A c-commands B. The effect of this condition is comparable to Rizzi's (1990) Relativized Minimality condition.

Thus, we have seen the two main types of derivational economy conditions, Last Resort and the Shortest Move/Minimal Link Condition. As pointed out above, economy conditions also have been formulated for representations, i.e. for the

outputs of syntactic derivations. The basic idea here is to exclude the presence of irrelevant material in structural representations. One instantiation of economy of representation is the principle of Full Interpretation (FI) (cf. e.g. Chomsky 1986a:98ff., Chomsky 1991:418, 437ff.). This principle excludes the presence of uninterpretable material in the interface representations. It is therefore the driving force behind the process of feature checking because feature checking allows deletion of uninterpretable features.

2. THE DISTRIBUTION OF NOMINAL ARGUMENTS AND THE SYNTAX OF A-POSITIONS

Having considered some general theoretical notions that will be necessary for our discussion, let us now turn to some issues that are more specifically related to the main topic of this book, i.e. the distribution of nominal elements and the syntax of A-positions. I will divide the discussion into two parts. The first part summarizes the main principles that have been identified in the generative literature as determining the distribution of nominal elements within the clause. The second part then considers some areas of parametrization.

2.1. Principles Determining the Syntax of A-Positions

Although GB and the MP differ in the details as to how the principles determining the syntax of A-positions can be formulated, we can identify three central common aspects of the grammar which are related to the syntax of A-positions.

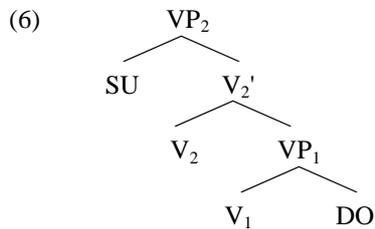
2.1.1. Theta Theory and Argument Structure

The source for the occurrence of arguments within a given clause is the predicate. Each predicate requires a certain number of elements, i.e. the arguments, which express the participants involved in the activity described by the predicate. For example the activity described by a verb like *dance* only involves one participant and the verb *dance* therefore only requires one argument. Or in other words, the predicate is said to assign one thematic (or theta) role to an argument. As for a verb like *invite*, it involves two participants, the person who makes the invitation (Agent) and the person that is invited (Theme). *Invite* therefore requires two arguments, an internal one (the Theme) and an external one (the Agent) or, expressed in terms of theta roles, it assigns two theta roles. There is always a one-to-one correspondence between theta roles and arguments within a given clause. In the generative literature, this property of the grammar has been expressed in terms of the Theta Criterion which requires that (a) each theta role of a predicate is assigned to one and only one argument and (b) each argument is assigned one and only one theta role.

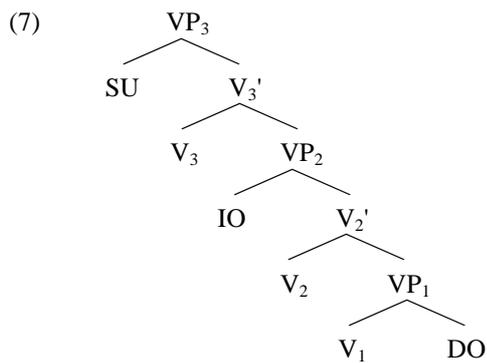
The role of the Theta Criterion is to determine the number of arguments which are required and allowed within a clause. But this aspect is mainly related to semantic properties of a verb. From a syntactic point of view, the crucial question that arises is where these arguments are inserted in the syntactic structure. Since the introduction of the VP-internal subject hypothesis (cf. e.g. Kitagawa 1986, Koopman and Sportiche 1991, Sportiche 1988a), the standard assumption within both GB and Minimalism has been that all arguments are inserted within the projection of their theta role assigner and that they occupy specific positions within this projection, depending on the thematic role that they are assigned. Thus, it has sometimes been proposed that the external argument of a transitive verb is generated or merged in [Spec, VP] whereas the internal argument occupies the complement position of V. More recent work has led to a richer VP structure with different layers within the VP. Larson (1988) first proposed a layered VP in the context of ditransitive verbs. The basic idea is that the two objects of a ditransitive verb occupy the specifier and the complement position of a lower V-head and the external argument then is generated in the specifier position of a higher VP shell whose head takes the lower VP as a complement. Hale and Keyser (1993) extend this VP-shell analysis to monotransitive verbs. In terms of such an analysis the internal argument of a verb occupies the complement position of a lower VP shell and the external argument is generated in the specifier position of a higher VP shell. Thus, each thematic role is related to a specific head, i.e. the internal theta role to the lower V-head and the external theta role to the higher V-head. The final step in this development is to also analyze ditransitive verbs in these terms, i.e. as structures involving a separate head for each argument (cf. e.g. Collins 1997:53ff. or Marantz 1993:115ff.). We therefore obtain a structure with three shells, each of them occupied by a different argument.

Here, I will adopt the above proposals according to which arguments are merged in different structural positions within a layered structure. As for the status of the different heads within such a structure, different proposals have been made in the literature. Chomsky (1995, 2000, 2001) for example proposes that the head which is related to the external argument (i.e. the highest head) is a hybrid lexical/functional head which he labels as *v*. Other labels have been proposed for the head related to the external theta role, such as Voice (Kratzer 1994), Act(ive) (Holmberg and Platzack 1995) or Tr(ansitivity) (Collins 1997). Although different heads related to different thematic roles may indeed have a substantially distinct content, I will assume here that categorially they are identical. Thus, I will adopt Larson's system in which the different shells within a layered structure are simply different VPs. As for the properties which distinguish these V-heads, we can assume that they are expressed in terms of features that are associated with these heads.

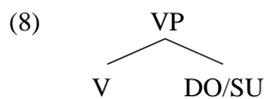
Given these assumptions, we obtain the following structure for a transitive verb (SU = subject; DO = direct object):



In Minimalist terms, the situation in (6) is obtained derivationally in the following way. First, the lower V-head (V_1) and the DO merge, and V projects. Then, the higher V-head merges with the projection headed by the lower V-head and the higher V-head projects. And finally, the subject merges with the projection headed by the higher V-head and this head again projects. As for ditransitive verbs, they have the structure shown in (7) (assuming that indirect objects (henceforth IO) precede DOs; cf. chapter 3).



The structure in (7) is built as in (6), except that an additional V-head is merged for the additional argument. Finally, consider the status of unaccusative verbs within this system. Given that unaccusatives are verbs which do not assign an external theta role and given that external theta role assignment in (6)/(7) is related to the highest V head, it would be plausible to assume that unaccusatives simply lack a higher VP-shell. Following a suggestion made by Chomsky (1995:316), I will therefore assume that unaccusatives are simple VPs as shown in (8) (DO/SU = the underlying DO which will be promoted to subject during the derivation) (cf. also Holmberg and Platzack 1995:22 for the proposal that unaccusatives are simple VPs).



I will assume here that the analysis in (8) can also be extended to passives. Passivization has the effect of absorbing the external theta role. This property can be captured within the system illustrated in (6) to (8) under the assumption that the V-head associated with external theta role assignment is simply not present in passives. Thus, passivization of a transitive verb as shown in (6) leads to deletion of VP₂ and hence to the structure shown in (8). As for passivization of a ditransitive verb, VP₃ is omitted and we obtain a structure as shown in (6) except that it is the IO which occupies the specifier position of the higher VP-shell.

In summary, the position in which an argument is inserted in the structure is determined by its thematic role. Thematic information thus is converted into structural information within such a system. In addition to thematic factors, there are two main additional components of the grammar which have been argued to determine the distribution of nominal elements, namely Case Theory and the Extended Projection Principle.

2.1.2. Case Theory

Ever since Rouveret and Vergnaud (1980) and Chomsky (1981), the notion of case has played a central role for the analysis of the distribution of nominal elements within the generative literature. However, the notion of case as used within GB or Minimalism is independent of morphological manifestation because it is assumed that every nominal element has to bear case regardless of whether this case can be represented morphologically or not. The crucial concept is therefore the notion of abstract Case. The exact role that abstract Case plays is not identical within GB and Minimalism. But the basic assumption is shared by both frameworks, namely the assumption that every overt nominal element has to bear abstract Case. Here, I will simply provide a short introduction. More details concerning the notion of abstract Case will be given in chapter 2.

In the GB framework, the assumption that an overt nominal element has to bear abstract Case is expressed in terms of the Case Filter which requires that every overt NP has to be assigned Case. Case assignment is obtained in a configuration of government involving a Case-assigning head and an NP. In later GB work (cf. e.g. Sportiche 1988b), Case assignment is analyzed as involving either government or specifier-head agreement. Given the Case Filter, the distribution of nominal arguments is determined by whether the position they occupy is an abstract Case position or not. For example the complement of V is licensed because V assigns abstract Accusative Case and governs its complement. The Case Filter is therefore satisfied. Furthermore, a subject in [Spec, IP] of a finite clause is licensed because it is assumed that finite I assigns Nominative and that it governs its specifier or, alternatively, that Nominative is assigned by I by virtue of specifier-head agreement. Note that, given the assumptions made in the previous section, Case assignment in IP means that a VP-internal subject as shown in (6) to (8) has to move out of the VP to IP in order to be assigned Case. However, there are also contexts in which no

abstract Case is assigned. For example, non-finite I is considered a head which does not assign Case to an overt NP. Overt NPs are therefore generally banned from the subject position of a non-finite clause because they violate the Case Filter. Similarly, it is assumed that adjectives and nouns do not assign structural Case and nominal constituents are therefore excluded in complement positions of adjectives and nouns.

Within the MP, the role of abstract Case is reinterpreted in terms of uninterpretable features (cf. section 1.4 above). The basic idea is that every nominal element bears an uninterpretable abstract Case feature and that this Case feature has to be deleted through checking with a Case feature on a head. In terms of Chomsky's (1995) feature checking system involving attraction, this means that an uninterpretable abstract Case feature on a head such as T or V has to attract a nominal element with the same uninterpretable Case feature so that a checking relation between the two elements can be established. Checking relations are generally obtained in specifier-head relations. Every nominal constituent therefore has to move to a specifier position in which its abstract Case feature can be checked. Subjects for example move from their VP-internal base position to Agr_SP (cf. e.g. Chomsky 1993) or TP (cf. e.g. Bobaljik and Jonas 1996, Chomsky 1995) in order to check their Nominative Case feature against the Nominative feature of finite I or T. As for objects, they leave the complement position of V and move either to Agr_OP (cf. e.g. Chomsky 1991) or to the outer specifier of vP (cf. Chomsky 1995) in order to check their Accusative Case feature against the Accusative feature of V. Within Chomsky's (2000, 2001) version of Minimalism however, Case features have a slightly different status. As discussed in section 1.4, movement is only triggered by EPP-features and not by features like Case. Instead Chomsky proposes that the role of a Case feature is basically to "activate" a nominal element so that it can participate in some syntactic operation (Agree or Move; cf. 2000:123, 2001:6).

In conclusion, Case Theory plays a central role within GB and Minimalism for determining the distribution of overt nominal arguments. Overt nominal arguments have to be licensed by abstract Case (where "licensing" is understood in different ways in GB or Minimalism) and they are banned from contexts in which no abstract Case is available.

2.1.3. The Extended Projection Principle

Another component of the grammar which has an influence on the distribution of nominal elements is what has been referred to as the Extended Projection Principle (EPP). This principle requires that every clause must have a subject, or more specifically that [Spec, IP] has to be filled. Thus, the EPP singles out one specific A-position, namely the subject position in the functional domain. As we will see in more detail in chapter 2, the main motivation for postulating such a principle is the occurrence of semantically empty subjects (expletives). Within the GB framework, the subject requirement is expressed by a principle which has to be satisfied within a given structural representation. In Minimalism as outlined by Chomsky (1995), the

EPP is reformulated in terms of an uninterpretable categorial D-feature on I (T) which has to be checked by the subject.

Within Chomsky's (2000, 2001) Minimalist framework, the term EPP is used for a feature which is responsible for filling any non-thematic specifier position. However, as pointed out in section 1.4 already, I will not adopt this proposal and I will therefore continue using the term EPP in the traditional, more restrictive sense referring to the presence of a subject within a clause.

2.2. Parameters Determining the Syntax of A-Positions

The three properties discussed in the previous subsections (Theta Theory, abstract Case, EPP) are generally assumed to hold universally. They therefore can be considered as UG principles determining the syntax of A-positions. But, as discussed in section 1.1, UG is assumed to provide not only principles that hold universally but also aspects of the grammar for which there is a choice among (generally) two options. These components of UG, called parameters, account for cross-linguistic variation. In the following subsections, I will discuss a few illustrations of parameters that have been proposed for the syntax of A-positions. The discussion will by no means be exhaustive but I will simply focus on three aspects which will be relevant for the later chapters. The first parameter that I will discuss is a traditional parameter introduced already in early GB Theory, whereas the two additional phenomena are related to analyses of parametric variation that have been proposed in Minimalist frameworks.

2.2.1. The Pro-Drop Parameter

One of the standard parameters within the Principles and Parameters framework is the parameter which accounts for the following cross-linguistic variation.

- (9) a. (Lei) parla inglese *Italian*
 (*She*) speaks English
 b. *(She) speaks English

In English, a subject pronoun has to be overtly realized, as shown in (9b), whereas in a language like Italian a pronominal subject can be omitted (9a). This type of contrast has been accounted for in terms of the *pro*-drop parameter, a parameter which regulates the distinction between languages which allow subjects to be non-overt and languages which do not allow non-overt subjects (cf. e.g. Taraldsen 1980, Rizzi 1982, 1986). In English, this parameter is set negatively, which means that subjects have to be realized overtly. In Italian however, the *pro*-drop parameter is set positively, and empty subjects in finite clauses are therefore licensed. In addition to languages like Italian, which license empty subject pronouns, and languages like

English, which do not license empty subjects, a third main group of languages has been identified, namely languages which, like English, do not license empty referential pronouns but which, like Italian, do license empty expletives. For our discussion, it is this type of property (i.e. the licensing of empty expletives) which will be of some importance (cf. in particular chapter 4).

2.2.2. Presence vs. Absence of Object Movement

Another instance of parametric variation is related to a property of the syntax of nominal arguments which has received a lot of attention within the Minimalist framework, i.e. the movement of a nominal object to the left of VP-peripheral elements such as negation. This option is available in some languages (cf. 10a) but not in others (10b) (examples from Bobaljik and Jonas 1996:205/6).

- (10) a. Jólasveinninn borðaði **hattinn**_i ekki t_i *Icelandic*
The-christmas-troll ate the-hat not
 'The Christmas troll didn't eat the hat.'
- b. * Johan läste **boken**_i inte t_i *Swedish*
Johan read the-book not

In Icelandic, it is possible for a nominal object to occur in a position preceding negation. This word order option has been analyzed in terms of object movement out of the VP past negation. In Swedish however, a non-pronominal object is ungrammatical in a position preceding negation. Instead the object has to occur in a position to the right of negation, i.e. in what can be analyzed as a VP-internal position.

Within the Minimalist framework, different analyses have been proposed for the variation shown in (10). What most of these analyses have in common is that they relate (10) to the concept of abstract Case. Thus, in Chomsky's early Minimalist work (1993, 1995), it is assumed that in (10a) the object moves out of the VP in order to check Accusative Case in Agr_{OP}. In (10b) however, object movement for Accusative checking does not occur in the overt syntax but covertly. The distinction between overt and covert movement is expressed in terms of a distinction concerning the strength of features on Agr_O. Whereas a strong Agr_O feature triggers overt object movement, a weak Agr_O feature only is checked non-overtly. Thus, the relevant parameter distinguishing the two languages in (10) determines whether Agr_O is strong or weak.

An alternative way to parametrize the variation in (10) is proposed by Bobaljik (1995), Thráinsson (1996) and Bobaljik and Thráinsson (1998). What these authors suggest is that overt object movement in Swedish is not possible simply because Agr_{OP} is not present in this language. In Icelandic however, Agr_{OP} is present and objects therefore can move overtly to this position. Thus, the parameter involved in

(10) determines whether Agr_OP is present or not. I will return to these approaches in section 3.

Finally, within Chomsky's (2000, 2001) framework, the difference between Icelandic and Swedish is expressed in terms of the availability of an EPP-feature on *v*. In Icelandic, such a feature is available and it triggers object movement in (10a). In Swedish, however, EPP on *v* is not available and object movement is therefore impossible. The issue of object movement will be discussed in more detail in chapters 2 and 3.

2.2.3. Transitive Expletive Constructions

Another type of cross-linguistic variation that has given rise to a lot of discussion within the Minimalist framework and that is related to the syntax of A-positions is the construction referred to as Transitive Expletive Construction (TEC) as illustrated in (11) (from Bobaljik and Jonas 1996:196/208).

- (11) a. **Það** borðuðu sennilega **margir jólasveinar** bjúgun *Icelandic*
There ate probably many Christmas-trolls the-sausages
'Many Christmas trolls probably ate the sausages.'
- b. * **Det** har **någon** ätit ett äpple *Swedish*
There has someone eaten an apple

Whereas the occurrence of an expletive is legitimate with a transitive verb in Icelandic, expletive constructions are ruled out in Swedish when a verb takes more than one argument. Assuming that subjects of transitive verbs always move out of the VP (cf. Bobaljik and Jonas 1996:212ff.), this contrast has generally been interpreted within the Minimalist framework as a contrast with respect to the subject positions that are available in the functional domain. In Icelandic, two subject positions are available and this allows an expletive and the thematic subject to co-occur in (11). In Swedish however, only one subject position is available in the functional domain. Hence, only an expletive or only a thematic subject could occur in the functional domain but not both and TECs are therefore ruled out in Swedish.

This variation has been formalized in different ways within the Minimalist framework. One proposal is that, while both AgrP and TP are present in the two types of languages, [Spec, TP] is only available in some languages (cf. Bobaljik and Jonas 1996). Thus, the relevant parameter distinguishing the two languages in (11) leaves a choice with respect to whether [Spec, TP] is a subject position in a given language or not. An alternative to this proposal is suggested by Bobaljik (1995), Thráinsson (1996) and Bobaljik and Thráinsson (1998). These authors account for the difference with respect to available subject positions in terms of a distinct structure. A language which has two subject positions in the functional domain has a clause structure with a split IP, i.e. with AgrP and TP, whereas a language with a

single subject position has an unsplit IP. Thus, the relevant parametric variation that leads to the contrast between (11a) and (11b) determines whether IP is split or not. I will again return to this type of approach in section 3 below. Finally, Chomsky (1995:354) argues that TECs are the result of a multiple specifier configuration in which the expletive occupies an outer specifier position of TP while the thematic subject occupies a lower [Spec, TP]. In this system, it is the multiple specifier option which is parametrized.

3. MORPHOLOGY AND THE SETTING OF PARAMETERS

In the previous section, I introduced some parameters that have been proposed to capture cross-linguistic variation with respect to the distribution of nominal arguments. This section discusses some further aspects of the notion of parameter, and, more particularly, I will consider the question as to what determines specific parameter settings. In the generative literature, parameters have generally been assumed to be related to specific elements in a structure, and more precisely to functional elements (cf. e.g. Borer 1984 and much subsequent work). Chomsky (1995:222) suggests that the locus of the variability of the computational procedure is in the "formal-morphological features of the lexicon". Thus, "[v]ariation of language is essentially morphological in character" (Chomsky 1995:7). However, the term "morphological" is not to be understood here as referring exclusively to properties which have an overt morphological reflex. Consider for example the case of object movement discussed in section 2.2.2. As pointed out there, a standard Minimalist analysis of the variation found in this domain has been in terms of feature strength of Agr_O . In languages with overt object movement, Agr_O can have a strong feature and thus trigger overt movement, whereas in languages without overt object movement Agr_O is always weak. Thus, cross-linguistic variation is due to a parametric choice with respect to whether Agr_O can have a strong feature or not. However, this variation has no overt morphological reflex. Instead, morphological variation here means that an entirely abstract morphological entity (Agr_O) can be realized in two ways which are determined by the abstract property of feature strength. Thus, the "formal-morphological features of the lexicon" which determine cross-linguistic variation can be entirely abstract features.

The setting of an abstract parameter such as feature strength on Agr_O depends on the syntactic manifestation of the parametric choice. Thus, it is only on the basis of the word order which is derived on the basis of strong Agr_O (i.e. overt object movement) that the language learner can determine the correct parametric choice for the Agr_O parameter. Although such a scenario may indeed be necessary for certain aspects of parametric variation, several attempts have been made in the literature to relate certain parametric choices to other properties than to simple syntactic surface manifestation and thus to provide a genuine explanation for why some languages choose one parameter setting rather than the other one that would be available. In particular, it has been argued that certain aspects of cross-linguistic syntactic

variation are directly related to overt morphological variation. Such approaches attempt to pursue the idea that "[v]ariation of language is essentially morphological in character" in a very concrete way, namely by assuming that the morphophonological realization of certain elements has a direct influence on parameter settings. Several proposals made in this book will be in line with this type of approach and, in the remainder of this section, I will therefore introduce some issues related to the connection between syntax and morphology in more detail. I will start by considering two standard examples for which it has been argued that syntactic properties can be derived from morphological properties, namely the *pro*-drop parameter and the parameter determining verb movement.

As discussed in section 2.2.1, languages vary with respect to whether a pronominal subject has to be realized overtly or not. We saw that in a language like English pronominal subjects must always be realized overtly but that in a language like Italian a pronominal subject can remain non-overt. This variation has been related to the *pro*-drop parameter. As already pointed out in early GB work (cf. e.g. Taraldsen 1980, Rizzi 1982, 1986), the setting of this parameter seems to be closely related to the status of verbal agreement morphology in a given language. Thus, Italian has rich verbal agreement distinguishing forms for each person whereas English has very impoverished agreement inflection which only marks 3rd person singular distinctly. It has therefore been proposed that verbal agreement plays a crucial role for the setting of the *pro*-drop parameter.

The syntax of verb movement provides a second illustration for the interaction between overt morphology and syntactic variation. Consider for example the following contrast between French and English.

- (12) a. Jean (**mange**)*souvent* (***mange**) du chocolat *French*
 John (eats) often (eats) chocolate
 b. John (***eats**) *often (eats) chocolate*

In French, a finite verb obligatorily precedes an adverb like *souvent* ('often'). In English however, the finite verb has to follow this type of adverb. If we assume that an adverb like *often/souvent* occurs in a VP-peripheral position (cf. Jackendoff 1972, Emonds 1978, Pollock 1989), then we can conclude that in (12a) the finite verb occurs in a position outside the VP whereas in (12b) it remains in a VP-internal position. More precisely, (12a) involves V-movement to I, whereas in (12b), the verb is still under V. Similar contrasts can be found among the Germanic languages as shown for the Icelandic and Danish embedded clauses in (13) (from Vikner 1997:189).

- (13) a. Að Jón (**borðar**) *oft (*borðar) tómata (kemur flestum á óvart) Ic.*
 That John (eats) often (eats) tomatoes (surprises most people)
 b. At Johan (***spiser**) *ofte (spiser) tomatere (overrasker de fleste) Da.*
 That John (eats) often (eats) tomatoes (surprises most people)

The contrast between Icelandic and Danish is exactly the same one as that shown in (12) between French and English. In Icelandic the verb has to precede the VP-peripheral adjunct, whereas in Danish it has to follow it. Apart from the syntactic contrast between the languages in (12) and (13), the languages also exhibit a difference with respect to their inflectional morphology. French and Icelandic both have relatively rich verbal agreement morphology whereas English and Danish only have impoverished or no subject-verb agreement. Following proposals by Roberts (1985) and Kosmeijer (1986), many authors therefore have proposed that the option of verb movement to I is related to the richness of the morphological agreement paradigm (cf. e.g. Holmberg and Platzack 1995, Pollock 1989, Roberts 1993, Rohrbacher 1994, Vikner 1995, 1997). In languages with what has been referred to as strong verbal agreement, the verb moves to I whereas in languages with weak agreement morphology verb movement does not take place.⁴ As for the precise formulation of this correlation, various proposals have been made in the literature (cf. Vikner 1997:192ff. for a survey). Vikner (1997) argues that the hypothesis which captures the widest range of phenomena is that V-to-I movement occurs if a language has productive person agreement morphology across tenses.

The role of agreement morphology with respect to cross-linguistic variation has been extended to other phenomena in work by Bobaljik (1995), Thráinsson (1996) and Bobaljik and Thráinsson (1998). These authors propose that, apart from verb movement, additional phenomena such as those discussed in sections 2.2.2 and 2.2.3 above, i.e. object movement and TECs, can also be related to the status of verbal inflectional morphology. However, their claim is not that inflectional morphology directly determines syntactic phenomena, instead they propose that syntactic structure has a mediating role. The basic assumption of their analyses is that whether IP is split into Agr_SP/TP/Agr_OP is subject to parametric variation. If IP is split, then we get object movement out of the VP, TECs are licensed and V-movement occurs. The reason for this is that object movement out of the VP depends on the presence of Agr_OP, TECs depend on the two subject positions in Agr_SP and TP and, according to Bobaljik and Thráinsson's system of head movement, the presence of Agr_OP forces V to move out of the VP to check a V-feature on T. Languages without a split IP, on the other hand, have neither object movement, nor TECs, nor V-movement. This is because they lack Agr_OP for object movement, they lack the two subject positions in the functional domain required for TECs, and V-feature checking on T can be done by V *in situ* since no Agr_OP intervenes. As for the role of inflectional morphology, Bobaljik and Thráinsson's proposal is based on the assumption that inflectional morphemes correspond to inflectional heads in the syntax. As a consequence, a language which has verb forms in which inflectional morphemes can co-occur (e.g. tense plus agreement) must have more than one inflectional head and hence a split IP. This analysis accounts for the occurrence of

⁴ This type of richness of agreement morphology is not the same as in the case of the *pro*-drop parameter. V-movement is possible in languages like French or Icelandic which do not have referential *pro*-drop. V-to-I therefore can be triggered by a weaker form of rich agreement than *pro*-drop.

object shift, TEC and verb movement in languages with rich agreement morphology. However, as Bobaljik (2000) stresses, no strong predictions are made with respect to languages with impoverished or no agreement morphology in this system. Such languages do not require a split IP from the point of view of morphology. They therefore often lack a split IP and phenomena such as verb movement. Yet, a split IP would not be incompatible with impoverished or no agreement morphology. This result seems to be desirable since we can find occasional cases where for example verb movement occurs despite an impoverished verbal agreement paradigm (cf. e.g. the Kronoby dialect of Swedish (Platzack and Holmberg 1989:73-74) or stages in the history of Danish (Vikner 1997:205ff.)).

In summary, we have seen that certain syntactic phenomena which are subject to cross-linguistic variation have been linked to cross-linguistically variable morphological properties. Such correlations suggest that overt morphology can determine the setting of parameters. This conclusion is attractive because it allows us to provide genuine explanations for aspects of syntactic variation. In this book, the correlation between syntactic variation and morphological variation will be explored in the domain of the syntax of nominal arguments. Although I will not adopt the details of Bobaljik and Thráinsson's analyses in the later chapters, I will follow their basic idea according to which inflectional morphology can have a direct influence on the format of the clause structure.

4. THE GERMANIC LANGUAGES

The languages of the Germanic language family provide the empirical basis for this book and, more particularly, I will focus on the cross-linguistic variation that can be found among them. Two important syntactic domains of variation in the Germanic languages have already been introduced above in sections 2.2.2 and 2.2.3 (occurrence of object movement and TECs). Additional phenomena that I will analyze will be introduced in the later chapters, such as freedom of argument order, the distribution of subjects with respect to the C-position, expletive constructions and oblique subjects. The purpose of this section is to briefly introduce two central issues of the clausal syntax of the Germanic languages which I will not deal with in any detail but which will nevertheless be referred to in our discussion at several points.

One of the characteristic properties of all the Modern Germanic languages apart from English is the Verb Second (V2) phenomenon. This phenomenon has the effect that any type of maximal projection can be fronted to the initial position in a clause but that the verb generally has to occur right after this initial constituent. Illustrations of the V2 phenomenon are given in (14) (SU = subject, DO = direct object, XP = some other constituent).

- (14) a. Hans liest diese Zeitung jeden Tag (SU-V-DO-XP) *German*
John reads this newspaper every day
 'John reads this newspaper every day.'
- b. Diese Zeitung liest Hans jeden Tag (DO-V-SU-XP)
 c. Jeden Tag liest Hans diese Zeitung (XP-V-SU-DO)
 d. * Hans jeden Tag liest diese Zeitung (SU-XP-V-DO)
 e. * Diese Zeitung Hans liest jeden Tag (DO-SU-V-XP)
 f. * Hans diese Zeitung jeden Tag liest (SU-DO-XP-V)

In (14a) to (14c), different XPs are fronted but the verb always occurs in second position. In the examples in (14d) to (14f) however, the verb occurs in third or fourth position and the sentences are ruled out. In the analysis of this phenomenon, the contrast between (14) and the examples shown in (15) has played a central role.

- (15) a. * dass Hans liest diese Zeitung jeden Tag (SU-V-DO-XP)
 b. * dass diese Zeitung liest Hans jeden Tag (DO-V-SU-XP)
 c. dass Hans diese Zeitung jeden Tag liest (SU-DO-XP-V)

The contrast between (14) and (15) shows that in a language like German there is an asymmetry between main and subordinate clauses with respect to whether V2 holds. V2 only occurs in main clauses but not in subordinate clauses in German.⁵ Given this asymmetry, it has generally been assumed, following den Besten (1983), that the verb in main clauses is fronted to the same position that the complementizer occupies in subordinate clauses and that the absence of V2 in subordinate clauses is therefore due to the fact that the V-fronting position is already filled by the complementizer. Thus, (14a) to (14c) illustrate V-movement to C. As for the fronted constituent in (14), it thus must occur in [Spec, CP] (or [Spec, TopP] in terms of e.g. Müller and Sternefeld's 1993 or Rizzi's 1997 systems).

One issue that has given rise to some discussion in the literature is the status of subject-initial V2 clauses as in (14a). The standard analysis of these cases treats such clauses in the same way as non-subject initial ones, i.e. in terms of movement to the CP domain (cf. e.g. Vikner 1995 for a recent analysis along these lines). However, other authors argue that subject-initial V2 clauses are simply IPs (or Agr_sPs) (cf. Travis 1984, Zwart 1993a, 1997). Although I will not address this issue in much detail here, we will see in chapter 5.1 that the former option (i.e. an analysis in terms of movement to CP) has some advantages for the analysis of expletives.

A second issue which has been controversial in the literature on V2 is related to the fact that the asymmetry shown in (14) and (15) is not found in all Germanic V2 languages but only in some (e.g. German or Dutch). There are indeed languages in

⁵ More precisely, V2 is ruled out in subordinate clauses containing an overt complementizer. Subordinate clauses whose complementizer is dropped do allow V2 (cf. e.g. *Er sagte [morgen sei er wieder hier]* – He said tomorrow is he again here – 'He said he would be here again tomorrow')

which V2 occurs much more generally, i.e. in particular also in subordinate clauses (e.g. Icelandic and Yiddish). Examples are given in (16) (from Vikner 1995:72).

- (16) a. Jón efast **um að** á morgun **fari** María snemma á fætur *Ic.*
John doubts on that tomorrow will Mary get up early
 b. Jonas tsveyfelt **az** morgen **vet** Miriam fri oyfshteyn *Yi.*
John doubts that tomorrow will Miriam early up-get
 'John doubts that tomorrow Mary will get up early.'

Some authors have analyzed (16) in terms of a recursive CP and hence in terms of a syntactic process which corresponds to that described above for main clauses in German (cf. e.g. Vikner 1995). However, other authors propose that (16) involves topicalization to [Spec, IP] and hence V-movement only to I (cf. e.g. Diesing 1990, Santorini 1989). Again, I will not deal with this controversial issue in any detail here, but the proposals I will make seem to favor the former option (i.e. movement to the CP domain; cf. chapters 4 and 6).

Apart from the syntax of V2, there is another issue which has received a lot of attention within the literature on the clausal syntax of the Germanic languages but which I will not consider in much detail here, namely the SOV/SVO issue. Consider for example the following contrast (17b cf. Vikner 1995:47).

- (17) a. dass Peter am Morgen oft **Kaffee getrunken hat** *Ge.*
that Peter in-the morning often coffee drunk has
 b. at Peter ofte **har drukket kaffe** om morgenen *Danish*
that Peter often has drunk coffee in the-morning
 'that Peter often drank coffee in the morning.'

When, as in subordinate clauses, V2 does not apply, the finite verb or auxiliary occurs in clause-final position in German. Similarly, non-finite verbs follow their complements. In Danish however, a finite verb or auxiliary does not occur in clause-final position in non-V2 contexts. Instead, a finite auxiliary precedes the main verb (as in 17b) or a finite main verb precedes its complements. Similarly, a non-finite verb precedes rather than follows its complement in Danish. Given these contrasts, German has generally been described as an SOV language whereas Danish is considered as an SVO language.

In order to obtain the correct order of auxiliaries, main verbs and complements, SVO languages can simply be analyzed in terms of a clause structure in which each head takes its complement to the right. As for SOV languages, their status has given rise to some discussion within the recent literature. The traditional analysis of SOV languages assumes that SOV languages have a clause structure in which IP and VP are head-final. This assumption explains why complements precede the main verb or main verbs precede auxiliaries. However, given Kayne's (1994) universal base hypothesis according to which projections are always head-initial, the standard

analysis of SOV has been challenged in the recent literature (cf. e.g. Zwart 1993a, 1997). In terms of such a framework, the correct word orders have to be derived through leftward movement of individual constituents (cf. Zwart 1993a, 1997) or potentially of larger pieces of structure along the lines of Kayne's (1998) proposals (cf. Haegeman 2001, Koopman and Szabolcsi 2000). Again I will not deal with the issues that arise in this context in any detail, and I will generally assume that SOV languages do have head-final projections. Some additional observations concerning head-initial approaches to SOV will be made briefly in chapter 3.4.

5. OUTLINE

The previous sections have introduced the main aspects of this book. Based on a Minimalist framework of syntactic theory, I will investigate aspects of the distribution of nominal arguments. More precisely, I will focus on the syntax of non-pronominal arguments. My discussion will mainly be based on data from the Germanic languages, and I will pursue an approach in which aspects of cross-linguistic variation are closely related to morphological variation.

The book is divided into two main parts. The first part (chapter 2) reconsiders two of the principles of the syntax of A-movement, namely Case Theory and the EPP. It is argued that the stipulative nature of these principles makes it desirable to eliminate them from the grammar. I then propose that abstract Case and EPP phenomena can be derived from the categorial licensing properties of nominal and verbal elements.

The second and considerably longer part (chapters 3 to 6) deals with aspects of variation among the Modern Germanic languages with respect to the syntax of A-positions. In chapter 3, I propose that the elimination of abstract Case in chapter 2 provides the basis for explaining the traditional observation that there seems to be a correlation between argument order freedom and the presence of morphological case. Based on an analysis of German and Dutch, it is argued that argument order variation is related to syntactically represented case features whose presence is related to morphological case. Chapter 4 starts by exploring some additional consequences of the proposals made in chapter 3 for the analysis of German. The proposals made for German are then extended to other Germanic languages, and it is argued that the considerable cross-linguistic variation that can be found with respect to the occurrence of an adjunct in a position immediately preceding the subject can be related to a large extent to the status of agreement morphology and to the related structural subject position in Agr_sP. Chapter 5 considers some issues that arise with respect to the syntax of expletives within the framework proposed in the earlier chapters. Finally, in chapter 6, I consider Icelandic, a language which does not seem to have the properties that would be expected on the basis of the proposals made in chapters 3, 4 and 5. I argue that the behavior of Icelandic is related to a morphologically motivated syntactic distinction between person and number agreement and to a parametric variation concerning the status of case features.