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Abstract
It is a long-standing observation that cross-linguistic syntactic variation sometimes seems to correlate with variation in the inflectional morphology. An attractive consequence of this observation is that it may provide the basis for genuine explanations of certain aspects of syntactic variation and thereby replace accounts in which the variation is simply due to random differences in parameter settings. However, in many instances in which such a relation between the syntax and morphology has been postulated, occasional counterexamples to the generalization can be found and they shed doubts on its validity. In this paper, it is argued that, once we consider such counterexamples not just from a synchronic but also from a diachronic perspective, we are not necessarily forced to abandon the basic intuition behind the generalization. Taking data concerning the order of arguments ('free' vs. fixed) and the distribution of subjects and adjuncts in subject-verb inversion contexts as illustrations, it will be shown that apparently problematic cases can often be dealt with if we adopt a specific conception of how the syntax is related to inflectional morphology and of how grammars change.

1. INTRODUCTION

An important feature of generative syntax over the last three decades has been its comparative dimension. The goal of the comparative approach is to identify common properties and areas of variation across languages in order to determine the nature of Universal Grammar and, more specifically, its principles and parameters. Although most comparative work in generative syntax focuses on living languages, the comparative perspective has also contributed to a resurging interest in diachronic evidence, i.e. the comparison of a sequence of historically related synchronic grammars.

Considering the status of diachronic syntax within the comparative approach, the question might be raised whether a diachronic comparison is to a large extent equivalent to a comparison of any other set of grammars of living or not directly related dead languages, or whether the diachronic perspective can provide insights that could not be obtained from other types of comparative studies. The following point made by Kroch (1989:200) suggests that the latter may be true.

"… with information about the time course of language change … we may hope to learn how the grammars of languages change from one state to another over time and, from an understanding of the process by which they change, to learn more about their principles of organization. After all, perturbing a complex system and observing its subsequent evolution is often an excellent way of inferring internal structure." (Kroch 1989:200)

[1] I would like to thank the participants at the workshop on "Diachronic Clues to Synchronic Syntax" and the editors of this volume for helpful comments on earlier versions of this paper.

Thus, if we can observe for example that the grammatical system is perturbed by a change A and that A co-occurs with or is followed by a change B in another domain of the grammar and if the changes are not clearly related to some external factor such as language contact, it is plausible to conclude that the phenomena involved in A and B are underlyingly related. Diachronic change may therefore provide clues as to whether and how some aspects of the grammar are related to certain other aspects of the grammar.

It could be argued now that connections between different components of the grammar can also be identified on the basis of non-diachronic comparative evidence. If the grammatical properties before change A and B and those after change A and B systematically co-occur across languages, it would also be plausible to infer an underlying relationship between these properties. However, I will argue in this paper that synchronic snapshots can sometimes be insufficient when trying to determine the connections among different aspects of the grammar and that diachronic developments have to be taken into account in order to obtain a complete picture. Thus, diachronic considerations can provide us with clues for the analysis of the grammatical system which are not available on the basis of purely synchronic evidence.

The area I will be focusing on is the relationship between syntactic phenomena and morphological properties. More precisely, I will consider two cases for which a connection between syntax and morphology has been proposed, namely the relationship between the distribution of subjects and agreement morphology in the Germanic languages and the correlation between word order freedom and case morphology. The main point arising from the discussion of these phenomena is that certain apparent counterexamples to proposed relations between syntactic and morphological properties can be explained as intermediate stages of diachronic developments if we adopt the position that periods of linguistic change are characterized by what has been referred to as competing grammars (cf. e.g. Kroch 1989). Thus, correlations that may look problematic from a purely synchronic point of view can be strengthened if diachronic considerations are taken into account.

Before turning to these issues in more detail, let us briefly review the basic aspects of the analysis of syntactic variation within generative grammar and some of the proposals that have been made on the relationship between syntactic variation and morphological variation.

2. Syntactic Variation and Morphological Variation

Within the Principles and Parameters framework (cf. e.g. Chomsky 1981, 1986) and within the Minimalist Program (cf. e.g. Chomsky 1995), the innate language faculty (Universal Grammar) is assumed to consist of principles, i.e. grammatical properties holding across languages, and parameters, i.e. grammatical properties whose content is not determined universally but which allow variation among languages. A parameter is generally assumed to provide a choice between two options, and the task of the language learner is thus simply to determine the parameter setting that corresponds to the language she or he is exposed to.

If we look at some of the parameters that have been proposed to account for cross-linguistic variation in the literature, we can observe that for many of them it seems fairly arbitrary whether the parameter is set one way or the other in a given language. Consider for example one of the textbook cases of a parameter, the subjacency parameter. As observed by Rizzi (1982), Italian and English differ with respect to the movement options of *wh*-elements. This is illustrated in (1).

(1) a. tuo fratello, [a cui]$_i$ mi domando che storie abbiano raccontato t_i (*Italian*)
your brother to whom myself I-ask which stories they-have told

b. * your brother [to whom]$_i$ I wonder which stories they told t_i

The structures in (1a) and (1b) seem to be identical in the two languages, but whereas Italian allows extraction of a *wh*-element out of the embedded interrogative clause in the context of relativization, the same process leads to an ungrammatical result in English. This contrast has been accounted for in terms of the bounding theory. The central principle of bounding theory is the subjacency condition which postulates that movement cannot cross more than one bounding node. As a principle of Universal Grammar, the subjacency condition holds across languages. What gives rise to cross-linguistic variation is the notion of bounding node. It is proposed (cf. again Rizzi 1982) that while NP is a bounding node in both Italian and English, the two languages differ as to which projection counts as a bounding node at the clausal level. In Italian it is CP while in English it is IP. This explains the contrast in (1). In (1), [Spec, CP] of the embedded interrogative is occupied by a *wh*-constituent and the higher *wh*-element therefore has to move directly to the [Spec, CP] of the higher clause. Doing so, it crosses two IPs (the lower one and the higher one) but only one CP (the lower one). Thus, in a language like English in which IP is a bounding node the subjacency condition is violated because two bounding nodes are crossed and the structure in (1) is ungrammatical. But in a language like Italian where CP is a bounding node only one bounding node is crossed and subjacency is respected.

Thus, the contrast in (1) has been accounted for in terms of a parameter determining the categorial status of bounding nodes: IP or CP. However, no explanation seems to be available as to why a language chooses IP or CP. It could just as well be English that selects CP and Italian that chooses IP, or the parameter could be set identically in both languages. Cross-linguistic variation arising from the subjacency parameter therefore seems to be to a large extent random.

Another aspect of *wh*-questions provides a further illustration of this apparent arbitrariness with respect to parameter setting. As often observed, we can distinguish three main systems of *wh*-question formation: (i) one or more *wh*-constituents can be fronted (e.g. Bulgarian, cf. Rudin 1988); (ii) a single *wh*-constituent can be fronted (e.g. English); (iii) *wh*-constituents do not undergo overt movement (e.g. Japanese). This suggests that there is a parameter determining how many *wh*-constituents can be fronted overtly. The parameter setting in Bulgarian allows multiple fronting, the setting in English licenses only one movement process, and the setting in Japanese licenses no overt movement. Although proposals have been made to relate some aspects of this variation to morphological properties of *wh*-elements (cf. e.g. Cheng 1991, Grewendorf 2001), the choice of certain parametric options remain unexplained. For example, nothing seems to prevent Japanese from behaving like Bulgarian, or English from having the Japanese parameter setting. To a large extent, the parametric variation with respect to overt *wh*-movement thus appears to be arbitrary.

In terms of current syntactic theory, it is difficult to see how the cross-linguistic situation discussed above could be explained in a principled way. It may therefore very well be that, for certain parameters, no deeper reasons can be identified as to why the setting is one way or the other in a given language. However, this does not mean that all aspects of syntactic variation must be related to parameters whose setting seems to be random. Instead, there are areas of variation where plausible accounts can be given for the behavior of individual languages.

A good illustration for this observation is again provided by one of the early parameters discussed in the generative literature. The *pro*-drop parameter (cf. e.g. Rizzi 1982) has two attractive properties. First, it relates several aspects of cross-linguistic syntactic variation (*pro*-drop, *that*-trace effects, postverbal subjects) to a single source (the *pro*-drop parameter). Thus, we are not just looking at individual phenomena but at an entire cluster of properties,

and the cross-linguistic variation becomes slightly less random in the sense that there is not a different parameter for each area of variation. But the *pro*-drop parameter has a second attractive property which makes the cross-linguistic variation even less arbitrary. It is assumed that the setting of the *pro*-drop parameter is related to a different, non-syntactic property, namely the richness of the verbal agreement morphology. Thus, in languages with a sufficiently rich agreement morphology the *pro*-drop parameter is set positively (hence *pro*-drop, no *that*-trace effects and postverbal subjects) whereas in other languages it is set negatively (hence no *pro*-drop, *that*-trace effects and no postverbal subjects). More detailed research on *pro*-drop and the related phenomena has shown that the situation is more complex than just described, but for our purposes it is not essential to pursue this issue any further. The main point here is the spirit rather than the details of the *pro*-drop parameter, i.e. the hypothesis that parametric variation is sometimes by no means random but determined by other factors and more particularly by inflectional morphology.

Another illustration of this type of approach is the variation found with respect to the distribution of finite verbs. As often observed, certain types of adverbs can precede the finite verb in some languages (e.g. English) whereas they have to follow it in some other languages (e.g. French)

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

The way this contrast has been analyzed (cf. e.g. Emonds 1978, Pollock 1989) is that the verb stays in V in (2a) whereas it moves past the adverb into the inflectional domain in (2b). Thus, there seems to be a parameter determining whether a verb moves to I or not. As in the case of the *pro*-drop parameter, it has been proposed that variation in the setting of the V-to-I parameter is not entirely random but that it is the consequence of variation in the domain of verbal agreement morphology (cf. e.g. Holmberg and Platzack 1995, Pollock 1989, Roberts 1985, Rohrbacher 1994, Vikner 1995). Languages with a certain richness of agreement morphology have a parameter setting that triggers verb movement to I, whereas languages with an impoverished agreement system lack verb movement.

The two parameters just discussed (*pro*-drop and verb movement) are in principle very attractive because an attempt is made to provide genuine explanations for syntactic variation. Language X has the syntactic property A because it has the morphological property C, and language Y has the syntactic property B because it has the morphological property D. However, the occurrence of counterexamples sometimes sheds doubts on these types of correlations. For example, it has long been observed that there is a dialect of Swedish that seems to have verb movement despite an impoverished verbal agreement paradigm (cf. e.g. Platzack and Holmberg 1989:73-74).

The aim of this paper is to show that such counterexamples may not always be fatal to generalizations concerning the relation between syntax and morphology. This conclusion will be based on an examination of two areas of syntactic variation other than *pro*-drop and verb movement, namely the distribution of subjects and adjuncts in subject-verb inversion contexts and the order of arguments ('free' vs. fixed).[2] Both of these areas of syntactic variation can be argued to be related to variation in the inflectional morphology, and in both cases there seem

[2] For recent discussions of the status of counterexamples to the correlation between verb movement and verbal agreement morphology, see Alexiadou and Fanselow (2002) and Bobaljik (2002). See also Warner (1997:381-383) for an analysis of the diachrony of verb movement along very similar general lines as proposed below for other phenomena.

to be potential counterexamples to the correlation. But once we consider such counterexamples not just from a synchronic but also from a diachronic perspective, we are not necessarily forced to abandon the basic intuition behind the generalization. Apparently problematic cases can be dealt with if we adopt a specific view of how the syntax is related to inflectional morphology and of how grammars change.

3. 'XP-SUBJECT' ORDERS IN GERMANIC

The first phenomenon I would like to consider is the distribution of postverbal subjects in the modern Germanic Verb Second (V2) languages. As shown in Haeberli (1999, 2002a) and Vikner (1995), there is considerable variation as to whether a postverbal definite full DP subject has to be adjacent to the finite verb in C or whether a constituent can occur between the finite verb and a definite subject ('XP-subject' orders). Some languages accept 'XP-subject' orders, others do not. I will start my discussion by focusing on the West Germanic languages, and I will then consider some issues that the Mainland Scandinavian languages raise for the analysis of this phenomenon.

3.1. *'XP-subject' in West Germanic*

The following data show the variation with respect to 'XP-subject' orders in the West Germanic languages.[3]

(3) a. Wahrscheinlich **wird** (*später*) **Hans** dieselbe Uhr kaufen. (*German*)
b. Misschien **goa** (**loater*) **Jan** tzelfste orloge kuopen. (*West Flemish*)
c. Waarschijnlijk **zal** (*%later*) **Jan** hetzelfde horloge gaan kopen. (*Dutch*)
d. Wierskynlik **wol** (*letter*) **Jan** itselde horloazje keapje. (*Frisian*)
e. Waarskynlik **sal** (**later*) **Jan** dieselfde oorlosie gaan koop. (*Afrikaans*)
Probably will (later) John the-same watch (go) buy
'Probably, John will buy the same watch (later).'
f. Minastam **vet** (*shpeter*) **Moyshe** koyfn dem zelbikn zeyger. (*Yiddish*)
Probably will (later) Moyshe buy the same watch

Whereas an adjunct can intervene between the finite verb and a full DP subject in German, Frisian, Yiddish and (with some restrictions) Dutch, strict adjacency is required in West Flemish and Afrikaans. Given the traditional assumption that in asymmetric V2 languages (i.e. all languages in 3 apart from Yiddish) the complementizer in subordinate clauses is in the structural position occupied by the finite verb in main clauses, the pattern in (3) is reproduced in subordinate clauses. In other words, definite full DP subjects have to be adjacent to the complementizer in West Flemish and Afrikaans, while adjuncts can intervene between the complementizer and the subject in German, Frisian and Dutch.

A similar kind of restriction as in West Flemish and Afrikaans (3b/e) can also be found in Modern English residual V2 contexts. This is illustrated in (4) where the fronted auxiliary cannot be separated from the subject by another constituent.

[3] The intervening element in this example is an adjunct. German and Yiddish differ from Dutch and Frisian in that they also productively allow arguments in this position. However, this variation is not essential for the points made in this section and it will therefore be left aside. But see Haeberli (2002a: chapters 3 and 4) for a discussion of how argument order variation can be integrated into the analysis presented in this section.

(4) a. Under no circumstances **would** (**later*) **John** buy the same watch.
b. Why **did** (**yesterday*) **Mary** buy the same watch?

The question that arises now is how the variation found in (3) and (4) can be accounted for. One possibility, proposed by Holmberg (1993) and Vikner (1995), would be to say that the different languages vary with respect to whether they license adjunction to the highest inflectional projection, say AgrP. Hence, in languages like German, Dutch, Frisian and Yiddish, AgrP is an adjunction site for adjuncts whereas in West Flemish, Afrikaans and English AgrP-adjunction is ruled out. This kind of parametric variation would be of the type discussed for subjacency in section 2. In the same way that it is not clear why CP is a bounding node in some languages but IP in others, there is no obvious reason why adjunction should be restricted in some languages but not in others. The variation with respect to the occurrence of 'XP-subject' orders would therefore remain entirely random. From the point of view of an adjunction analysis, we could not be surprised if some languages behaved differently from what is shown in (3) and (4) or even if the division among the West Germanic languages were exactly the opposite, with German, Dutch, Frisian and Yiddish requiring adjacency and West Flemish, Afrikaans and English allowing non-adjacency.

In Haeberli (1999, 2002a:chapter 4), I propose an alternative analysis of the data in (3) and (4), the main goal of which is to account for the variation in a less random fashion by relating it to other grammatical factors. The basic assumptions made for this analysis are the following:[4]

(i) Adjunction to inflectional projections is ruled out.
(ii) The occurrence of an adjunct in pre-subject position is evidence for additional structure above TP.
(iii) Additional structure above TP is related to AgrP.
(iv) The presence of verbal Agr features and, hence, of AgrP is related to verbal agreement morphology.[5] Agr is syntactically represented if a language has rich agreement morphology, where 'rich agreement' is defined as the co-occurrence of an agreement and a tense morpheme (cf. Bobaljik and Thráinsson 1998, Thráinsson 1996) or as consisting of more than a two-way (default/non-default) distinction.[6]

[4] What follows is meant to provide a very brief overview of the main aspects of the analysis. For a more detailed discussion of these points, I refer the reader to the sources cited (in particular Haeberli 2002a:chapter 4 for the most recent version of this approach).

[5] The distinction between Agr as a feature and AgrP is made here (and below) since in Haeberli (2002a) Agr is analyzed as a feature on T which then projects an independent projection above TP to establish a checking relation.

[6] The condition of co-occurrence of inflectional morphemes is based on the assumption that inflectional morphemes correspond to inflectional heads in the syntax. If a tense and an agreement morpheme co-occur, two inflectional heads must be available for these morphemes to be able to be inserted in the morphology. As for the second condition, which refers to distinctions going beyond a two-way agreement distinction, it has the effect of triggering the presence of AgrP even when there are no forms in which agreement and tense morphology co-occur. This proposal is based on the assumption that the syntax has to provide the morphology with the relevant information for spelling out the different inflectional heads. If agreement is a simple two-way distinction as in English (Ø vs. *–s*), T can simply be marked as non-default in a specific structural context (i.e. with a 3sg subject in its specifier if T is [+present]) and then spelt out as non-default *–s* in the morphology. However, if there is a third form, a simple default/non-default distinction is not sufficient any more. Instead, I propose that the relevant distinctions are made in terms of agreement features which have to be checked in the syntax (giving rise to an AgrP) and which then determine the spell-out form of the verb at PF. For a more detailed discussion of these points cf. Haeberli (2002a:209ff.).

Given these basic assumptions, the variation in the West Germanic languages in (3)/(4) can be analyzed as follows. First, with respect to 'XP-subject' orders, the languages that allow this word order all have rich agreement (as defined above) and they therefore have an AgrP-TP structure in the inflectional domain. Concerning the placement of the subject, we can assume that it moves to TP to be licensed (Case). Given that all the West Germanic languages with 'XP-subject' orders license empty expletives, the second step is then to propose that a subject can remain in TP because [Spec, AgrP] can be occupied by an empty expletive. And the final ingredient for the analysis of 'XP-subject' orders is to assume that the XP is merged "parasitically" on the presence of AgrP, either through Agr'-adjunction or insertion in the specifier of an independent adjunct projection whose presence depends on the presence of AgrP. Thus, we obtain the following structure for the 'XP-subject' orders in (3).

(5) $[_{CP}$ **C** $[_{Agr_SP}$ e *XP* $[_{TP}$ **SU** ....]]]

For verb-subject adjacency in (3) and (4), we have to distinguish two scenarios. The first scenario accounts for the absence of 'XP-subject' orders in Afrikaans and English. Both of these languages do not have rich agreement. Given point (iv) above, we may therefore assume that they also do not have Agr-features and an AgrP-level in the inflectional domain. Hence, once a subject has moved to be licensed in [Spec, TP], it is in a position adjacent to a verb or an auxiliary in C. The structural representation of this analysis is shown in (6).

(6) $[_{CP}$ **C** (**XP*) $[_{TP}$ **SU** ....]]

Finally, there is a second scenario giving rise to verb-subject adjacency. This scenario applies to West Flemish. West Flemish has rich agreement and therefore, in terms of (iv) above, an AgrP-TP structure. But what distinguishes West Flemish from the other West Germanic languages with rich agreement is that it does not license empty expletives.[7] We may therefore assume that subjects in West Flemish cannot stay in TP but have to move to AgrP so that the relevant features in AgrP can be checked. The absence of 'XP-subject' orders can thus be accounted for in the following way.

(7) $[_{CP}$ **C** (**XP*) $[_{Agr_SP}$ **SU**$_i$ $[_{TP}$ t_i ....]]]

The result we have obtained in terms of the above analysis is that the variation in (3) and (4) is not simply the result of the apparently random setting of a parameter. Instead it is the consequence of other properties of the different languages, in particular the richness of verbal agreement morphology and the licensing of empty expletives. The 'XP-subject' variation can therefore be considered as being of the type discussed for *pro*-drop and verb movement in section 2: A syntactic property is crucially linked to a morphological property.

3.2. *'XP-subject' in Mainland Scandinavian*

[7] The licensing of empty expletives has generally also been related to richness of agreement morphology (cf. e.g. Platzack 1987). The behavior of West Flemish therefore suggests that richness of agreement for the purposes discussed in the text (i.e. triggering the presence of AgrP) cannot be defined in the same way as for the purposes of the licensing of empty expletives. For some speculations on what determines the absence of empty expletives in West Flemish and on what the relevant morphological properties for the licensing of empty expletives are, see Haeberli (2002b:99ff.).

If the conclusions reached in the previous subsection are correct, then we would obviously expect this analysis to account for phenomena in other languages as well. In Haeberli (2000), it is shown that we indeed obtain the right results for Old English and for what seems to be a case of dialect variation in Middle English. However, once we consider the Mainland Scandinavian languages, the correlation between rich agreement morphology and 'XP-subject' orders appears to encounter some difficulties. In Swedish and Norwegian, we can find adjuncts occurring between a finite verb and a subject. This is shown in (8).

(8) a. Den här klockan **hade** (*senare*) **min gamle far** köpt (*Swedish*)
b. Denne klokka **hadde** (*seinere*) **min gamle far** kjøpt (*Norwegian*)
This watch had (later) my old dad bought

In terms of the analysis of (3)/(4) outlined above, the grammaticality of (8) is surprising at first sight. If 'XP-subject' orders are related to the presence of AgrP above TP and if the presence of AgrP is related to rich agreement morphology, we would not expect 'XP-subject' orders in Swedish and Norwegian because both languages lack verbal agreement.

A possible explanation for the situation in Swedish and Norwegian can be found if we consider the status of 'XP-subject' orders in Danish and in particular its diachronic development. Modern Danish behaves like West Flemish, Afrikaans and English in that postverbal subjects have to be adjacent to the finite verb. Thus, the equivalent of (8) with an intervening adjunct is ungrammatical in Danish.

(9) Dette ur **vil** (**senere*) **min far** købe (*Danish*)
This watch will (later) my dad buy

The ungrammaticality of non-adjacency as in (9) follows from the analysis presented above for the West Germanic languages. Just like Afrikaans and English, Danish lacks rich subject-verb agreement. The adjacency requirement in Danish can therefore be analyzed as in (6), i.e. in terms of the absence of AgrP.

What is interesting for our purposes now is the observation made by Vikner (1995:128) that there is "evidence which indicates that the difference between Danish and Swedish … is a rather recent difference." Vikner provides references to Mikkelsen (1911) and Diderichsen (1962) for examples showing adjuncts in a position between the finite verb and a postverbal subject in Danish. The change to a grammar which does not license 'XP-subject' orders thus does not seem to have been completed before the 20th century. So what about verbal agreement morphology? As shown by Vikner (1997:206), the verbal agreement paradigm is already extremely impoverished in the 14th century. There is no evidence for the co-occurrence of tense and agreement morphology at this time any more. So from this point of view, there would be no need to postulate verbal Agr features and AgrP. However, if, as suggested under point (iv) above, an agreement distinction which goes beyond a simple two-way (default/non-default) distinction is sufficient to trigger the presence of Agr features, then the paradigm given by Vikner could still be argued to entail the presence of AgrP in the clause structure of 14th century Danish because we can distinguish three different morphemes which seem to have no other function than to mark agreement (*-ær* present singular and imperative plural, *-æ* present plural, and zero for imperative singular). I have to leave it for further research to determine exactly when these distinctions were further reduced to the point where Danish did not meet the requirements for rich agreement defined in (iv) above any more, but it is very likely that this happened well before the 20th century.

Returning to the correlation between 'XP-subject' orders and rich verbal agreement, the conclusion with respect to the history of Danish thus is that the loss of the syntactic phenomenon occurred very recently, whereas the impoverishment of the morphology seems to have occurred considerably earlier, possibly several centuries before the syntactic change. At first sight, this, like the modern Swedish and Norwegian data, may appear to undermine the hypothesized link between syntax and morphology in the context of verb-subject non-adjacency. This conclusion can be rejected, however, if we take a closer look at the mechanisms of diachronic change.

3.3. *Morphology, syntax and diachronic change*

In this subsection, I will show that a delay between a morphological change and a related syntactic change as discussed for Danish is not entirely unexpected if we adopt a certain conception of the relation between morphology and syntax and a certain conception of how syntax changes.

First, with respect to the relation between morphology and syntax, it is important to point out that the analysis of the variation in (3)/(4) outlined above does not suggest that there is a direct relation between a morphological property and a syntactic phenomenon. Instead, the relation is mediated by a syntactic feature and the syntactic structure this feature projects, an assumption which is also at the heart of the approach discussed in Bobaljik (2002), Bobaljik & Thráinsson (1998) and Thráinsson (1996). The basic idea is thus that there is a close link between morphology and a syntactic feature/structure, and a close link between this syntactic feature/structure and a syntactic phenomenon. Represented schematically, we obtain a relation like (10b) rather than one like (10a).[8]

(10) a. * morphology → syntactic phenomenon
b. morphology ↔ syntactic feature/syntactic structure ↔ syntactic phenomenon

From the point of view of language change, the distinction in (10) has the following consequences. In terms of (10a), the loss of a morphological property would have to entail the immediate loss of the syntactic phenomenon. If the morphology is not available, the syntactic property cannot exist, either. In terms of (10b), however, the loss of the relevant morphology does not necessarily lead to the loss of the related syntactic phenomenon because the mediating syntactic structure can be maintained on the basis of the evidence provided by the relevant syntactic phenomenon. Instead of (10b), we then get (11).

(11) ~~morphology ↔~~ syntactic feature/syntactic structure ↔ syntactic phenomenon

(11) explains why a morphological change does not have to be immediately followed by a change in the syntactic property that seems to be related to the morphology. However, a different issue arises now. The question is not any more why there is a delay between the morphological change and the syntactic change but rather why the change would ever occur

[8] As suggested by the bi-directional arrows in (10b), the links between the different properties are mutual. The syntactic feature and the structure projected by this feature license a certain syntactic phenomenon, and this syntactic phenomenon then is a manifestation of the presence of the syntactic feature/structure. Similarly, the morphology triggers the presence of a certain syntactic feature/structure, and the syntactic structure also has an influence on the morphology in the sense that for example a simple IP-structure makes the co-occurrence of two inflectional morphemes impossible in the morphology.

given that the syntactic phenomenon could be sufficient to maintain the syntactic structure for any generation to come. As discussed by Bobaljik (2002), a strong interpretation of a scenario like (10b) indeed means that the lack of morphology does not necessarily make any predictions with respect to the future of the related syntactic structure.[9] If there is one related syntactic phenomenon, the morphology is one among two pieces of evidence suggesting the presence of the relevant syntactic structure to the language learner, i.e. the morphology is one among two of what Lightfoot (1999) calls cues. If there is more than one related phenomenon, the morphology is one among several cues. The loss of the morphology therefore simply means that there is one fewer cue to the next generation of learners, but the grammar with the relevant syntactic structure may remain perfectly learnable on the basis of the syntactic evidence.

The diachronic developments that have been observed in contexts of a hypothesized relation between morphology and syntax and, more particularly, the loss of a syntactic phenomenon after the loss of the related morphological property thus cannot be immediately explained on the basis of the scenario represented in (10b)/(11). One way to deal with this problem might be to question the assumption that all types of cues are of equal importance. Instead, it could be argued that the morphology is the more relevant cue in the acquisition process, and that once this cue is lost the related syntactic structure is too weakly motivated to be maintained. However, such an assumption may be problematic. In his discussion of V-to-I movement, Bobaljik (2002:26) is very sceptical as regards the relevance of verbal morphology as a cue for the acquisition of verb movement. He cites evidence suggesting that children acquire verb movement in French before they fully master the verbal morphology that has been related to the presence of verb movement. Although, as Bobaljik points out, various open questions concerning the interpretation of the acquisition data remain, these data nevertheless seem to shed doubts on an approach which would want to attribute to the morphology the crucial role in (10b).

But the opposite conclusion, i.e. that the syntactic cues are more important than the morphological ones, does not seem to be warranted, either. In the case of V-to-I movement in French, the relevant syntactic phenomenon is very salient in the primary linguistic data the child is exposed to. Given that negation is generally used as a diagnostics for V-to-I movement, each negative declarative clause with a verb preceding the negator provides evidence for the occurrence of verb movement, and so do numerous other declarative clauses with certain adverbs. In other cases, however, the syntactic phenomenon might not be as salient. For example the phenomenon discussed in this section, 'XP-subject' orders in Germanic, is no doubt much rarer in the language learner's input. In main clauses, this phenomenon is restricted to cases with subject-verb inversion, a word order pattern which is already considerably less frequent than subject-initial V2. Furthermore, adjunct XPs can generally also occur to the right of the subject and, although I am not aware of any statistical data on this at the moment, there is no doubt that the 'subject-XP' order is more frequent than the 'XP-subject' order. So in this case where we have a fairly marked construction, it is less likely that children start using the relevant syntactic phenomenon before they have acquired the morphological property that I have related to it above (i.e. rich agreement).[10] What this

[9] As Bobaljik (2002) points out, the only strong prediction that something like (10b) makes concerns the case when the relevant morphological property is present. If it is (e.g. rich agreement), a syntactic structure which does not reflect the morphology (e.g. an unsplit IP) is impossible. But the absence of morphology does not necessarily entail the absence of the related syntactic structure.

[10] Note however that things are a bit more complex than suggested in the text. When looking at relations of the type shown in (10b), we may not be dealing with a single syntactic phenomenon that is related to a morphological property and a certain syntactic structure, but with two or more, and each of them would

example thus shows is that the salience of syntactic cues can vary considerably to the point that the morphological cue may turn out to be more salient. In other words, the issue in (10b) may not be whether morphological cues are more, equally or less important than syntactic ones to determine the presence of a syntactic feature/structure, the issue may simply be one of relative salience of different cues for the language learner, and the relative salience may vary from one context to another. Sometimes the syntax may be crucial in the acquisition process, sometimes the morphology may be more important.

To return to our diachronic issue of the connection between morphological and syntactic change, the above observations may lead us to the following hypothesis: A morphological change leads to a related syntactic change whenever the morphological cue is the most salient one for the language learner. Below, I will argue that this hypothesis is not correct, but let us suppose for the moment that it is. Reconsider now the status of 'XP-subject' orders in Germanic. If, as suggested above, 'XP-subject' is a relatively infrequent construction, the morphological property (rich agreement) that is related to the syntactic feature/structure licensing 'XP-subject' (Agr) may be more salient than the syntactic phenomenon. Therefore, when rich agreement is lost, the status of Agr is considerably weakened. But how can we express this weakening formally? I propose that this can be done by adopting the view, put forward by Kroch (1989) and further developed in much subsequent work (cf. Kroch 2001 for an overview), that syntactic change involves a transitional phase where different grammars are in competition. The loss of rich agreement means that a grammar without Agr would become a possibility. Assuming that languages learners postulate the most economical grammar and that a grammar with fewer features and less structure is more economical, they start introducing an Agr-less grammar once rich agreement is lost. However, even though 'XP-subject' orders may not be very frequent, their occurrence would still require a grammar in which Agr is postulated. Hence, a situation arises in which two grammars compete: one grammar with Agr producing 'XP-subject' orders and one grammar without Agr not being able to derive 'XP-subject' orders. Schematically, this situation can be represented as shown in (12).

(12) Grammar A:
~~morphology ↔~~ syntactic feature/syntactic structure ↔ syntactic phenomenon
Grammar B:
~~morphology ↔ syntactic feature/syntactic structure ↔ syntactic phenomenon~~

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contribute some weight to the syntactic evidence. For example, V-to-I movement may be related to 'XP-subject' orders in Germanic (cf. Haeberli 2002a:284). Yet, V-to-I is not as salient in Germanic as in French. If we assume that all V2 clauses involve V-to-C, including subject-initial ones (cf. e.g. Vikner 1995), there is actually no evidence for independently triggered V-to-I in Germanic main clauses. And even in subordinate clauses, the evidence can be extremely limited (only embedded questions in Icelandic) or unavailable (in Yiddish) (cf. e.g. Bobaljik and Thráinsson 1998:45, 48ff. for discussion). So V-to-I may not (or at least not always) contribute a frequent cue for the presence of AgrP in Germanic.

Bobaljik and Thráinsson (1998) also relate object shift and transitive expletive constructions to the presence of AgrP. However, in terms of the approach developed in this section, where the presence of AgrP derives 'XP-subject' orders, object shift and transitive expletive constructions can only be indirectly related to AgrP (cf. Haeberli 2002a:280ff. for discussion). Nevertheless, there may be other syntactic properties that are related to Agr in this framework, as discussed in Haeberli (2002a). For example, Agr plays an important role for deriving Nominative-Dative inversion in Dutch (2002a:225ff.) and it allows the promotion of both objects of a ditransitive verb to the status of subject in Swedish and Norwegian (2002a:239ff.). However, I will not pursue these issues any further here. As we will see below, an exact measure to determine the importance of the syntactic and the morphological cues may not be required for a satisfactory analysis of the issues raised in this section.

The two grammars remain in competition for some time, and the old grammar A is finally driven out. As for the reasons for the loss of grammar A, it would be plausible to assume that grammar B wins out because it is more economical and eliminates an apparent conflict between the morphology and the syntax.

An important question that arises in this context is what the expected time-scale for the elimination of grammar A is. It seems impossible to give a precise figure here, but for our purpose it is sufficient to point out that long periods of competition are attested. For example, Ellegård's (1953) curve, which represents the rise of do-support and which Kroch (1989) reinterprets in terms of competing grammars, covers about 300 years and at the end of the curve the change is not actually completed yet. Similarly, Santorini's (1993) discussion of the rise of Infl-initial clause structure in the history of Yiddish suggests that the Infl-initial grammar and the old Infl-final grammar were in competition for around 400 years.

Before reconsidering Mainland Scandinavian 'XP-subject' orders in the light of the above observations, let me just briefly point out that the scenario outlined before can also account for cases where the syntactic phenomenon is arguably a more salient cue for the syntactic structure than the morphological property. As discussed above, V-to-I movement may be relevant here. Suppose that, as suggested by Bobaljik (2002) children acquire V-to-I movement in French mainly on the basis of syntactic evidence rather than on the basis of the relevant verbal morphology. This may very well be true, but it does not mean that the morphology plays no role at all. Instead, I propose that the role of the morphology is to confirm the syntactic structure postulated on the basis of the syntactic evidence or to disconfirm it. The latter case can be argued to give rise to grammar competition. As Kroch (2001:722f.) points out, grammar competition can be viewed as a kind of bilingualism with the learner acquiring two grammatical systems. In the case of bilingualism, the acquisition of the two grammars obviously does not have to coincide. One grammar can be acquired earlier than the other. The same thing could be argued to happen in cases where grammar competition emerges. The child might acquire a certain syntactic structure first on the basis of the syntactic evidence. But once the relevant morphological distinctions are acquired, the syntactic structure can be reassessed, and if the syntactic structure contains elements that are not required by the morphology a second, more economical grammar is postulated. Thus, I propose that even if the morphological cues and the syntactic cues differ in terms of salience to the language learner, they are both ultimately taken into account. If the two types of evidence match, a single grammar is acquired. If there is a mismatch, grammar competition emerges which, over time, leads to the elimination of the mismatch. In short, we obtain the result we were looking for at the beginning of this subsection: An account of how a morphological change gives rise to a delayed syntactic change.

3.4. *'XP-Subject' in Mainland Scandinavian revisited*

Let us now return to the issue of 'XP-subject' orders in Mainland Scandinavian. Given the observations made in the previous subsection, a possible scenario for the loss of 'XP-subject' in Danish looks as follows:

Stage (i): Rich agreement and Grammar A in which Agr is syntactically represented. 'XP-subject' orders are licensed due to the presence of AgrP.

Stage (ii): Loss of rich agreement.

Stage (iii): Competition between the old Grammar A and a new Grammar B in which Agr is absent. Grammar A can still derive 'XP-subject' orders if we assume that abstract (i.e. morphologically redundant) Agr may remain syntactically weak in the sense of not overtly

attracting the subject to its specifier (cf. Haeberli 2002a:239).[11] Grammar B, however, rules 'XP-subject' orders out, as shown in (6) above. Possible evidence for grammar competition would be a gradual decrease in the frequency of 'XP-subject' orders, a decrease in the frequency of potentially related phenomena,[12] and variation among speakers (see discussion below).

Stage (iv): Loss of Grammar A, possibly after several centuries of competition.

Given this diachronic analysis of Danish, we can now reconsider the problem raised by modern Swedish and Norwegian, i.e. the occurrence of 'XP-subject' orders despite the absence of rich agreement (see example 8). What I propose is that Swedish and Norwegian are still at stage (iii) of the changes that Danish has undergone. The grammar with syntactically represented Agr and 'XP-subject' orders is thus in a state of decline, but, contrary to Danish, Swedish and Norwegian have not reached stage (iv) of the diachronic development yet. As discussed in Haeberli (2002a:242-245), the conclusion that Swedish and Norwegian are in a diachronically unstable state may be supported by the fact that there is considerable variation among speakers with respect to the acceptability of 'XP-subject' orders. In Swedish, at least three types of speakers can be identified. The first one accepts 'XP-subject' orders in main and subordinate clauses. The second one has the same judgements, but requires some degree of contrastive focus on the subject (Holmberg 1993). Finally, for the third type of speakers (as a matter of fact the large majority consulted), 'XP-subject' is possible in main clauses, but virtually impossible in subordinate clauses. In Norwegian, we find similar variation. Some speakers accept 'XP-subject' in both main clauses and subordinate clauses, some others reject this order in subordinate clauses, and others reject it in subordinate clauses and find it highly marginal even in main clauses. In terms of the proposals made here, the variation among speakers of Swedish and Norwegian can be interpreted as evidence for the decline of the grammar in which Agr is syntactically represented, with some speakers licensing additional structure related to Agr only in main clauses but not in subordinate clauses.

3.5. *Summary*

Let us now sum up the main points of this section. The variation among the West Germanic languages with respect to 'XP-subject' orders suggests that the richness of verbal agreement morphology plays a role in the licensing of this word order. However, the Mainland Scandinavian languages seem to raise a problem for this generalization because Swedish and Norwegian show 'XP-subject' orders despite the absence of agreement morphology. So from a purely synchronic perspective, the Mainland Scandinavian languages would look fatal for the generalization relating 'XP-subject' to rich agreement. However, once we assume that the relation between the syntactic phenomenon and the morphological property is not a direct one but mediated by a syntactic feature and the structure it projects, and once we take diachronic issues into account, the generalization does not have to be abandoned. A morphological loss does not immediately give rise to the loss of a related syntactic feature/structure because the

[11] Following e.g. Bobaljik (1995) and Groat and O'Neil (1996), I assume here that this option involves movement of the subject to AgrP with its phonological features staying behind in [Spec, TP]. The analysis proposed for German, Dutch, Frisian and Yiddish in section 3.1 (i.e. 'XP-subject' as the result of the insertion of an empty expletive in [Spec, AgrP]), would presumably not be available at this stage given that, as pointed out in footnote 7, the licensing of empty expletives has also been related to richness of agreement morphology.

[12] Based on evidence from modern Swedish and Norwegian, Haeberli (2002a:239ff.) proposes that additional phenomena that depend on the presence of AgrP are the promotion of both objects to subjecthood in passivized ditransitives and long object shift.

syntactic evidence for this feature/structure remains available. Instead, the morphological change introduces a competing grammar which then drives the old grammar out, possibly after a considerable time span of grammar competition. On the basis of this observation and on the basis of the diachronic developments in Danish, I have argued that the situation in Swedish and Norwegian with respect to 'XP-subject' orders actually reflects such a stage of grammar competition during which there may be a mismatch between the morphology and the relevant syntactic phenomenon. Swedish and Norwegian therefore do not provide conclusive counterevidence against the intuition behind the analysis presented for the West Germanic languages in section 3.1. From a diachronic point of view, apparently problematic cases for a synchronic generalization concerning the relationship between syntax and morphology are thus not unexpected.[13]

4. WORD ORDER FREEDOM AND CASE MORPHOLOGY IN THE HISTORY OF ENGLISH

In this section, I will briefly consider another syntactic domain where a correlation between inflectional morphology and a syntactic property has been proposed in the literature, and I will argue that an examination of the diachronic developments in English in this domain provides some support for the conclusions reached in the previous section. The relevant domain is the order of arguments. According to a long-standing observation, rich case morphology on nominal constituents tends to go together with freedom of argument order. Furthermore, this link between morphology and syntax has also been observed in the context of diachronic change. Sapir (1921:168) for example refers to "the drift toward abolition of most case distinctions and the correlative drift toward position as an all-important grammatical method".

As proposed by Haeberli (2001, 2002a) and Weerman (1997), the relation between case morphology and argument order can be obtained along the lines of the schema in (10b) above (i.e.: morphology ↔ syntactic feature/syntactic structure ↔ syntactic phenomenon). The link between the two phenomena is not a direct one, but it is mediated by a syntactic feature or the syntactic structure. This result can be obtained by assuming, in contrast to standard generative syntactic theory, that case is not a universal property. Instead, case has to be syntactically represented in languages with a rich case morphology, but it can remain absent in other languages. In Haeberli (2002a), this approach is implemented in terms of the following basic proposals.[14]

(i) Phenomena traditionally related to the concept of abstract Case are captured in terms of the interaction of categorial feature matrices.

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[13] It should be pointed out that Icelandic raises an additional potential problem for the analysis of the 'XP-subject' variation presented in this section. The problem is the opposite of what we have seen for Swedish/Norwegian. Icelandic has rich verbal agreement morphology but no 'XP-subject' orders. At first sight, this seems problematic for the correlation between agreement morphology and 'XP-subject' orders. According to (10b) and assumption (iv) in section 3.1, Agr would have to be represented in Icelandic. Given furthermore that empty expletives are licensed in Icelandic, we would expect that 'XP-subject' orders can be derived as in German, Dutch, Frisian and Yiddish (see the discussion of representation 5 in section 3.1). An analysis of this unexpected situation in Icelandic is presented in Haeberli (2002a:chapter 6). The main proposal there is that Agr is indeed syntactically represented in Icelandic, but in a more complex way than in West Germanic. Whereas West Germanic has a single subject agreement feature, Icelandic distinguishes between person and number agreement. It is proposed that this distinction interferes with the derivation of 'XP-subject orders and also contributes to the occurrence of other unexpected syntactic properties of Icelandic.

[14] For a more detailed discussion of these points see Haeberli (2002a), in particular chapter 2 for point (i) and chapter 3 for points (ii) and (iii).

(ii) Case features are syntactically represented in languages with rich case morphology, where richness of case morphology is defined as a case system with more than a two-way (default/non-default) distinction.[15]

(iii) Case features on verbal heads (V, T) are uninterpretable at LF and PF and therefore have to be checked. They project independent projections in order to establish a checking relation and the order of these projections is variable. This variation gives rise to argument order freedom.

Within this framework, the presence of a rich morphological case system generally entails argument order variation.[16] But as in section 3, the question arises as to what the predictions of this approach are for languages that lack rich case morphology. Would a language exhibiting argument order variation despite the absence of rich case morphology undermine the generalization linking syntax to morphology? As we will see, a stage in the history of English may indeed have had the properties of such a language. But, by analogy to the argument presented in section 3, I will propose that such a stage is not problematic for the traditional correlation between morphology and syntax. It only looks problematic from a purely synchronic perspective, but can be explained once we consider diachronic issues.

As is well known, Old English allows the two DP objects of a ditransitive verb to occur in both possible orders (example from Koopman 1994:104/5)

(13) a. þæt he [*ðam adligan menn*] [*his hæle*] forgeafe (ÆLS (Swithun) 120)
that he the sick man (DAT) his health (ACC) granted
'that he would grant the sick man his health'

b. he ageaf [*þone cnapan*] cucenne [*his meder*] (ÆLS (Martin) 1027)
he returned the boy (ACC) alive his mother (DAT)
'he returned the boy alive to his mother.'

In (13a) the indirect object precedes the direct object whereas in (13b) the order of the two objects is inverted. Koopman's (1994) statistical evidence suggests that the two orders are almost equally frequent in Old English. In his corpus consisting of nearly 2000 clauses with two full DP objects, Koopman found frequencies of 54% for the order 'indirect object-direct object' and of 46% for the inverted order. Given the hypothesis that argument order freedom is related to the presence of rich case morphology, Koopman's findings are not surprising. Old English had a rich morphological case system distinguishing between four (or possibly five) cases. In terms of (ii) above, case therefore has to be represented syntactically, and case feature checking then gives rise to argument order variation. But the rich case system starts eroding towards the end of the Old English period. Furthermore, within the 300 years after the Old English period, the inverted order 'direct object-indirect object' seems to be lost as well. Referring to the inverted order, Allen (1995:419) observes: "By the late fourteenth century,

[15] The motivation for this requirement is as given above for the syntactic representation of agreement (see fn. 5). In the case of a two-way distinction, one form can simply be marked as default and a structural context can be defined in which the default form is spelt out. If more than two forms are distinguished, a simple default/non-default distinction is not sufficient, and case features are introduced to make the relevant distinctions (see Haeberli 2002a:144ff., 181ff. for discussion).

[16] As in the case of 'XP-subject' orders (cf. fn. 13), Icelandic raises a potential problem for this generalization in that it has rich case morphology and therefore licenses case features, but argument order variation is restricted to object inversion. An analysis of this property of Icelandic can be found in Haeberli (2002a: chapter 6) where it is argued that the restrictions on free argument order are part of a cluster of properties including oblique subjecthood, the absence of 'XP-subject' orders and a strict definiteness effect and that these properties are all underlyingly related.

the construction seems to have disappeared completely; I have found no convincing examples with two nominals in texts written after 1340."

Given these general diachronic developments in early English, let us consider the loss of object order variation and its connection to the loss of case morphology a bit more closely. Unfortunately, the amount of data available for the crucial period is very limited, but some observations can nevertheless be made. Polo (2002) examines the First and the Second Continuation of the *Peterborough Chronicle*. For the First Continuation (1070-1121), she finds that the case morphology on full DPs is already lost to a large extent but 'direct object-indirect object' orders with full DP objects still occur. However, there may still be some evidence for a rich morphological case system as defined under (ii). 3rd person pronouns in the First Continuation show a three-way distinction Nominative/Accusative/Dative.[17] Case features may therefore still be required to make these distinctions at this stage. However, in the Second Continuation, Accusative and Dative have become identical even with 3rd person pronouns. In terms of the criterion in (ii) above, case would therefore not have to be represented syntactically any more because what is left is a simple default/non-default distinction. Nevertheless, the order 'direct object-indirect object' can still be found in the Second Continuation. Yet, the quantitative evidence in support of this observation is very slim unfortunately. In the entire Second Continuation, there is only one example involving two DP objects in a double object construction and the order of the arguments in this example is 'direct object-indirect object' (Polo 2002:138). Even though we have to treat this conclusion with some caution in view of the small amount of data, Polo's finding nevertheless suggests that the Second Continuation of the *Peterborough Chronicle* may represent a grammar in which object inversion occurs despite the absence of rich case morphology.

Some further indications concerning the development of the loss of object inversion and the loss of case morphology can be found in Allen (1995). With respect to some 13th century Early Middle English texts, Allen makes the following observations. First, in the Southeast Midlands dialect (represented by *Vices and Virtues* in Allen's corpus) the change has not made much progress yet because "the old case marking system is fairly well preserved" (1995:185) and both orders of objects can still be found in double object constructions. A bit more interesting is the situation in the West Midlands dialect (represented by *Ancrene Wisse* and the *Katherine Group* in Allen's study). The two objects in a double object construction are not formally distinguished any more, but their order is not fixed yet (Allen 1995:182/3). However, there are some suggestions that the case system is not impoverished enough to make syntactically represented case features entirely redundant from a morphological point of view. For example, the Accusative/Dative distinction in the pronominal system is still occasionally made, but only with 3rd person singular masculine pronouns and only very rarely (1995:183). Allen suggests that these remaining instances may simply be due to a scribe who copied the work of someone whose grammar still did make the pronominal Accusative/Dative distinction productively.[18] Even if we discard this evidence, there still remain two additional

[17] I am leaving possessives aside in the discussion of the decline of the case system in English. Possessive pronouns may best be analyzed as determiners rather than case-bearing elements. As for full DP possessors, I assume that they also do not provide evidence for maintaining a syntactically represented case system. For example, modern English possessive *'s* could be argued to be the manifestation of a licensing element rather than an instance of a case on the possessor in the theoretical system outlined in (i) to (iii) above (cf. Haeberli 2002a:74, fn. 49).

[18] This point obviously raises an important issue here, namely the difficulty of reliably dating the loss of morphological distinctions on the basis of written sources. Apart from scribes copying the work of other scribes, there is the more general possibility that distinctions made in the spelling simply reflect spelling conventions rather than the actual spoken language of that time. But of course, the question whether written sources are good representations of the spoken language at a given point in time also arises when we consider syntactic

traces of a morphological case system in the West Midlands dialect (Allen 1995:182/4). First, the old Dative ending *-e* still occurs fairly frequently in the West Midland texts. But its use has been restricted considerably and nouns inflected with *-e* can mainly be found as objects of prepositions but also, more rarely, as complements of adjectives. And secondly, although such constructions seem to be rare, verbal complements still can bear Genitive sometimes. The occasional occurrence of the Dative and Genitive inflection on nouns together with the pronominal Nominative/Accusative distinction with subjects and objects would require the presence of syntactically represented case features in terms of condition (ii) above. Variation in the order of objects would then be a consequence of this case feature system. Of course, if an earlier manuscript may have had an influence on the use of case distinctions with 3rd person singular masculine pronouns, as suggested by Allen, then similar interference may also have played a role for the occurrence of the *–e* Dative and of verbal complements in the Genitive. However, on the basis of the textual evidence available, we cannot safely conclude that a syntactically represented case feature system is not required by the case morphology in the West Midlands dialect even though the case system is certainly considerably weakened.

The next set of data Allen (1995) considers is from the early 14th century. At this stage, the morphological case system seems to have disappeared entirely, and we are left with the pronominal Nominative/Accusative distinction familiar from modern English. Hence, in terms of condition (ii) above, the morphology does not require syntactically represented case features any more because the case system has been reduced to a two-way (default/non-default) distinction. Variation in the order of two object DPs can nevertheless still be found in Allen's data. However, a potential problem that arises here is the type of data that is considered. Given the scarcity of sources from the late 13th/early 14th century, Allen includes verse texts in her sample, and verse data are potentially less reliable sources for determining syntactic properties. Nevertheless, some of Allen's data are quite suggestive. Thus, she observes (1995:418) that in *The Metrical Chronicle of Robert Gloucester* 9 'direct object-indirect object' orders occur and 33 'indirect object-direct object' orders (21.4% vs. 78.6%). A frequency of more than 20% for object inversion seems to be rather high if this word order were simply a stylistic poetic device. Thus, it may not be implausible to conclude that object inversion was possible in early 14th century Middle English despite the loss of the morphological case system. However, the total decline of this word order was imminent since, as pointed out earlier, the last attested example of the order 'direct object-indirect object' that Allen has been able to identify dates from 1340.

In summary, it is relatively difficult to obtain a complete and precise picture of how object order variation and rich case morphology were lost in the history of English. This is to a large extent due to the very limited textual evidence that is available from the crucial period. An additional complicating factor is the fact that there is dialect variation and that we do not have an uninterrupted sequence of texts from a single dialect. Nevertheless, Polo's (2002) work on the Second Continuation of the *Peterborough Chronicle* and Allen's study of early 14th century texts suggest that there may have been a period (or different periods in different dialects) in the history of English when variable argument order was still available even though the relevant morphological case distinctions had been lost.

If we looked at such a stage from a purely synchronic point of view, we would have to conclude that the generalization relating the syntactic phenomenon to a morphological property cannot be maintained because variable argument order occurs independently of rich

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constructions. So if there is a delay until a completed morphological change appears clearly in the written records, there may very well also be a delay in the related syntactic change. But whether the delays are of equal length would obviously remain uncertain. Any conclusion concerning the chronology of a morphological change and a related syntactic change therefore often has to remain rather tentative.

case morphology. However, once diachronic aspects are taken into account, we can explain the occurrence of such a stage without abandoning the generalization. Object inversion after the loss of rich morphological case is the manifestation of a transitional period. This transitional period can again be analyzed in terms of competing grammars along the lines discussed in the previous section. The competition is schematically represented in (12) above, repeated here as (14).[19]

(14) Grammar A:
~~morphology ↔~~ syntactic feature/syntactic structure ↔ syntactic phenomenon
Grammar B:
~~morphology ↔ syntactic feature/syntactic structure ↔ syntactic phenomenon~~

In the context discussed in this section, Grammar A has case features that are syntactically represented. The presence of these case features is not motivated by morphological evidence any more but by syntactic phenomena, and more particularly by argument order variation. But the loss of case morphology gives rise to an alternative, more economical Grammar B in which case is not syntactically represented any more. Over time, the case-less grammar wins out, and argument order becomes entirely fixed.

In summary, the points made above provide some additional support to the conclusions reached in the previous section. The observation that rich case morphology and argument order variation are related phenomena is a traditional one in the literature. Although this correlation generally seems to be correct, an examination of the developments in the history of English suggests that there may be a transitional period during which argument order variation is maintained even after the loss of a rich morphological case system. A synchronic study of this transitional period would shed doubts on the adequacy of the generalization. But once we take diachronic issues into account, the apparent counterexample to the generalization can be explained.

5. CONCLUSION

Work within generative grammar has identified various parameters that account for syntactic variation across languages. For a large number of these parameters, the cross-linguistic variation seems to be fairly random in the sense that it remains unexplained why one language sets the parameter in one way and why another language sets it the other way. However, for some areas of the grammar, attempts have been made to provide systematic explanations for syntactic variation by relating syntactic properties to aspects of the inflectional morphology. More precisely, proposals have been of the type that if a language has a certain morphological property M it also has the syntactic phenomenon S. The natural extension of this is then to say that if a language does not have M it also does not have S. Although such correlations seem attractive from the point of view of systematically accounting for syntactic variation, certain

[19] If the West Midlands text discussed above indeed reflects the grammar of a speaker of Early Middle English, it might add another potential aspect of competition to this picture. In a transitional period, speakers might vary as to whether they use case morphemes in certain contexts or not. In particular, the use of the *–e* Dative, which gives rise to a third distinction apart from the pronominal Nominative/Accusative distinction, does not seem to have been systematic in the Early Middle English West Midlands dialect. Thus, while in (14) the relevant morphological property is represented as lost, there could be a slightly earlier stage in which there is also competition in Grammar A with respect to the presence of the morphological property, i.e. a competition leading to inconsistent use of inflectional endings.

counterexamples seem to undermine their validity. In particular, it has often been observed that the absence of M does not always entail the absence of S.

On the basis of two case studies, the variation with respect to 'XP-subject' orders in the Germanic languages and argument order variation in the history of English, I have argued in this paper that apparent counterexamples to generalizations relating morphology and syntax do not necessarily force us to abandon the basic intuition behind the generalization. To obtain this result, a first important assumption to be made is that the link between M and S is not a direct one but that it is mediated by syntactic features or syntactic structure that license S. This assumption is also an important aspect of the analyses developed in Bobaljik (2002), Bobaljik & Thráinsson (1998) and Thráinsson (1996). In terms of such an approach, the center stage is taken by the syntactic feature/structure, and both M and S motivate the presence of this syntactic feature/structure. Once M is lost, S can still provide evidence to the language learner for the presence of the syntactic feature/structure, and the absence of M therefore does not necessarily entail the absence of S. Bobaljik (2002) concludes from this that relations between morphology and syntax are one-way entailments. If M is present, it entails the presence of syntactic structure which then licenses the occurrence of S. As for the case when M is absent, no synchronic predictions are made. S could be attested or not.

Nevertheless, there seems to be a tendency for the related entailment (i.e. if M is absent, S is absent) to hold and for the loss of M to be followed by the loss of S. Thus, a generalization might be lost if the relation between morphology and syntax were limited to an entailment involving the presence of M and if nothing was said about the absence of M. In this paper, I have proposed that once we take a closer look at the mechanisms of diachronic change we can indeed include the absence of M in our picture of the correlation between morphology and syntax. More precisely, what I have proposed is that the loss of M does have a syntactic consequence in that it introduces a new, more economical grammar in which the syntactic feature/structure related to M is eliminated. This grammar enters into competition with the old grammar in which the syntactic feature/structure is still maintained due to the evidence provided by S. Thus, the change caused by the loss of M is not a dramatic one from the point of view of the surface syntax. But after a period of competition which can be of considerable duration, the new grammar drives the old grammar out, as in other cases of grammar competition discussed in the literature. The result is the complete loss of S.

In the two case studies discussed, I have related one syntactic phenomenon ('XP-subject' orders) to rich verbal agreement morphology and a second syntactic phenomenon (object order variation in double object constructions) to rich case morphology. In both cases, there is evidence that the syntactic phenomenon can occur despite the absence of the relevant rich inflectional morphology. These counterexamples look problematic from a purely synchronic point of view. However, once we consider them from a diachronic point of view, we can show that they do not invalidate the basic generalizations. Mismatches between the syntax and the morphology can be analyzed as periods of transition in which two grammars are in competition. The generalizations discussed here which relate a syntactic phenomenon to a morphological property can therefore be maintained, even in a rather strong form which makes reference to both the presence and the absence of the relevant morphological property.

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