

On the correlation between morphology and syntax: the case of V-to-I

Several authors have proposed that verb movement to Infl takes place when the morphological paradigm of the verb is 'rich', the term 'rich' having received several interpretations (see e.g. Roberts 1993, Rohrbacher 1994, Sola 1995, Thrainsson 1995, Bobaljik 1995, Bobaljik 1997, Bobaljik & Thrainsson 1998, Vikner 1997). For instance, if one compares Italian, Icelandic and Danish, one observes that in Italian and Icelandic, but not in Danish, verbs precede adverbs that mark the left edge of the VP, while in Danish verbs follow such adverbs (see Vikner 1997, Holmberg & Platzack 1995 among many others):

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| (1) | a. | Gianni mangia <u>spesso</u> pomodori | <i>Italian</i> |
| | | Gianni eats often tomatoes | |
| | b. | *Gianni <u>spesso</u> mangia pomodori | |
| | | Gianni often eats tomatoes | |
| (2) | a. | at Johann <u>ofte</u> spiser tomater | <i>Danish</i> |
| | | that Johann often eats tomatoes | |
| | b. | *at Johann spiser <u>ofte</u> tomater | |
| | | that Johann eats often tomatoes | |
| (3) | a. | Ég spurði af hverju Helgi hefði <u>oft</u> lesið þessa bók | <i>Icelandic</i> |
| | | I asked why Helgi has often read this book | |
| | b. | *Ég spurði af hverju Helgi <u>oft</u> hefði lesið þessa bók | |
| | | I asked why Helgi often has read this book | |

The above placement facts correlate with properties of the inflectional system in the languages under discussion: verbs inflect for agreement in Italian and Icelandic, but Danish verbs show no inflection whatsoever. This correlation has led several authors to propose that V-movement is 'triggered' by the presence of 'rich' inflection.

In this paper we argue against the logic behind such accounts of correlational tendencies for V movement to Infl. First of all, the existence of such a correlation between rich morphology and movement is not observed in any other domain of grammar: the overt nature of phrasal movement (wh-movement, NP-movement) is not predictable from any overt morphological property of the moved phrase or the attractor. Even scrambling is not strictly correlated with overt morphology as the examples of Icelandic (absence of scrambling in the presence of morphology) and Bulgarian (presence of scrambling in the absence of overt morphology) show. Moreover, V-to-C movement is again not correlated with the presence of overt morphology. Thus, V-to-I movement would be the only process for which a link between the overt nature of displacement and rich morphology would hold.

Furthermore, the apparent correlation does not hold universally: there are languages such as Irish that show V-movement to I (McCloskey 1996) in the complete absence of morphology. The correlation also breaks down even in the Germanic languages: Faroese is a language with fairly rich morphology, but there is a dialect not showing V-movement to I. The Kronoby dialect of Swedish, on the other hand, lacks rich verbal morphology but has V-to-I movement (Rohrbacher 1994:113). These observations suggest that there can be no grammatical reason for the correlation one observes in examples (1-3). Instead, we propose that the logic of the historical development of grammatical systems makes the co-occurrence of certain grammatical patterns more or less likely.

Let us first consider the tendency that rich morphology implies V-to-I movement. Trivially,

rich agreement morphology of the verb must have arisen in a historical change of grammar. It is a well known fact that person-number agreement morphology on the verb (of the suffixation type) develops from pronominal subjects that have cliticized on the verb. For this cliticization (and the later reinterpretation of the clitic as agreement morphology) to be possible, the verb must be able to move in front of the subject. Therefore, the acquisition of inflectional morphology presupposes V-to-I or V-to-C movement.

Such a process can be observed in Modern Irish, the Italian dialects of Trentino and Fiorentino, and varieties of Arabic and Berber, but also e.g. in Bavarian. When verb fronting is combined with subject-cliticization a situation arises first which looks as if inflection was restricted to subjectless (=pro-drop) constructions, but which in fact reduces to the question of whether a subject pronoun was cliticized or not (see McCloskey & Hale 1984). If clitic-doubling is possible for topicalization structures, a situation will arise in which the sequence Verb + overt (non-pronominal) subject shows no agreement on the verb, whereas the order Subject – Verb seems to require agreement – but in fact, we really have the sequence topic (=subject) verb-clitic (this seems to be the traditional analysis for Standard Arabic, see Aoun, Benmamoun & Sportiche 1994). Obviously, this constellation is unstable and will easily get re-analyzed as subject agreement, which is then generalized to all subject positions (that is e.g. the situation we find in Moroccan Arabic, see Ouhalla 1988).

Thus, we see that rich (agreement) inflection arises in a context of verb preposing. If a language still has rich agreement morphology, it is very likely just a few developmental steps (however these may translate into physical time scales) away from the stage when it acquired this morphology. Even if there is no intrinsic correlation between agreement morphology and verb movement to Infl, it is therefore also not very likely that a loss of verb movement has occurred. We thus predict there to be a tendency by which richness of morphology implies verb movement to Infl – a tendency that is well-supported but –being based on probabilities of historical changes- is not refuted by the Faroese dialects that do not respect it.

On the other hand, there is nothing that excludes V-to-Infl movement in the absence of agreement morphology in our account. This is a very positive aspect of it, given at least the situation in Irish and the other Celtic languages and Standard Arabic (see also Roberts 1999). The SVO patterns in the Celtic VSO-languages without morphology then show that there is not even reason to assume that lack of agreement implies absence of verb movement in the SVO languages. Note also that the languages that seemed to support this implication are all Germanic (English and Mainland Scandinavian) – and they have undergone other dramatic changes (loss of Case inflection) that may be related to the word order change (Trosterud 1989).