WH-Prefixes*

The Case of *wäisch* in Swiss German

Henk van Riemsdijk

In: Chr. Schaner-Wolles, J. Rennison & F. Neubarth (eds.) *Naturally! Linguistic Studies in Honour of Wolfgang Ulrich Dressler, Presented on the Occasion of his 60th Birthday,* pp. 423-431. Torino: Rosenberg & Sellier, 2000.

The problem

Syntactic processes are context-dependent. Much of syntax is concerned with the degree of specificity that is needed in defining the environments in which syntactic processes take place. From the point of view of the theory, and from the perspective of the language learner, we want to stipulate as little as possible. Ideally, then, context-sensitive properties of syntactic processes follow from general principles, especially when those processes are core phenomena in the syntax of a given language. But sometimes we cannot avoid including certain stipulations in the grammar of a particular language, for example if languages differ from one another ('are parametrized') with respect to that stipulation. The question then is: where do we put the stipulation? The obvious place to go for this is the lexicon, because that's where the language particular stuff is anyway.

But how lexical do we want to get? Take a common syntactic process like *wh*-movement. We know that there are languages with overt *wh*-movement and languages without (or with covert) *wh*-movement. Furthermore, we also know that there are languages in which (overt) *wh*-movement sometimes does and sometimes does not occur, depending on factors largely connected with the concept of D-linking.[1] Could this dependency be linked to some morpholexical element? Sure, if you allow yourself a reasonably rich array of functional heads, including phonetically zero ones, which can be endowed with a wide range of features, which do not necessarily have a direct morphological correlate. But even so, this would be a far cry from a language in which overt *wh*-movement would be triggered by certain predicates introducing questions but not by others. Overt *wh*-movement with, say, the equivalents in this hypothetical language of 'ask', 'question', 'uncertain' etc. and no (or covert) *wh*-movement with

* I would like to thank the audience of the workshop 'Perfection in Syntax' at the Collegium Budapest as well as Hans Broekhuis, Norbert Corver, Marcel den Dikken, Riny Huijbregts and particularly Joe Emonds for helpful discussion.

1 See in particular Obenauer (1994) on French.

'enquire', 'questionable', 'wonder' etc. That would be a type of language that we would not expect to discover.

This article is about a process, Verb Second or V-to-C-movement (V2), in a language, Züritüütsch[2] (ZT), which appears to exhibit precisely the type of individual lexical dependency that we just said we did not expect to find in a natural language. V2 in ZT by and large has the same properties that are found in the other Continental West Germanic languages: it takes place in root clauses and not in embedded contexts. But in ZT, V2 is sometimes triggered by specific complement clause introducing verbs or, in fact, even specific forms of those verbs. In what follows I will present some of the relevant facts and discuss some approaches to them as well as their relevance for current conceptions of syntactic theory.

Some syntactic properties of *wäisch*

There are exceptions to the root vs. non-root dichotomy for V2, that much is clear. Let us first review some of these exceptional contexts:[3]

- complementizer-less declarative complements under certain bridge-type verbs (German, not Dutch);
- complementizer-less conditional (or hypothetical) clauses (German and Dutch);
- complementizer-less concessive clauses (German, not Dutch);
- German comparative clauses of similarity with the complementizer *als*;
- Dutch concessive clauses with the complementizer *al*.

The latter two, exemplified in (1) and (2), are particularly significant in that they deviate from the 'normal' pattern in which the fronted verb is in complementary distribution with overt complementizers (cf. Den Besten 1977).[4]

(1) Er ist gerannt, als würde er von einem Schwarm Bienen verfolgt
he is run as were he by a swarm bees pursued
'He ran as if he was pursued by a swarm of bees'

(2) Al heb je erg veel gelezen, je begrijpt er toch niets van
though have you very much read, you understand there still nothing of
'Much as you may have read, you don't understand any of it'

---

[2] This is the variety of Swiss German spoken in Zurich and its surroundings. The data are based on the author's own competence. But the phenomenon described is documented in a number of other Swiss German dialects including those of St.Gallen and Lucerne. I was alerted to these facts by reading Manuela Schönenberger's (1998) dissertation. See also Van Riemsdijk (to appear b.) for discussion of contextual factors triggering overt *wh*-movement in ZT.

[3] Schönenberger (1998: 18ff) presents an overview of such cases as found in Swiss German. See also Penner & Bader (1995)

[4] See also Van Riemsdijk (1998a) for discussion.

If we want to maintain that the fronted finite verb substitutes for the complementizer position (C^o), we will have to assume that these complementizers in these particular uses occupy the Spec,CP position[5] and that, furthermore, they contain a feature which is responsible for triggering V2. In that sense we can say that these are exceptional instances of V2 tied to specific lexical items, *als* and *al* respectively. But these lexical items squarely belong in the inventory of functional elements, and hence these phenomena do not strike us as particularly surprising.

There is, however, a case, which is truly surprising. The verb *wüsse* ('know'), or more particularly a specific form of this verb (*wäisch* 'you-know'), can trigger embedded V2. Alongside this pattern, the regular pattern with the verb in final position is always also possible.[6]

(3) a. Wäisch (du) wän chunt de Hans hüt aabig? (V2)
know-you when comes the Hans today evening
'Do you know when Hans is coming tonight?'
b. Wäisch (du) wän de Hans hüt aabig chunt? (V-Final)

There is a specific semantico-pragmatic flavor associated with the V2-pattern as illustrated in (3a). This will be discussed below. First, let us turn to the restrictions on the occurrence of this pattern. I will list these as a series of conditions.

➢ *Condition 1:* embedded V2 (EV2) occurs only with the verb *wüsse* ('know'):

(4) *Fröögsch (du) wän chunt de Hans hüt aabig?
ask-you when comes Hans tonight

➢ *Condition 2:* the matrix (containing the verb *wüsse*) has to be a yes/no question:

(5) *Du wäisch wän chunt de Hans hüt aabig
you know when comes Hans tonight
(6) *Warum wäisch wän chunt de Hans hüt aabig?
why know-you when comes Hans tonight

---

5 Such an assumption is perfectly in line with the fact that both these complementizers can actually cooccur with another complementizer element: *ob* ('if') as in *als ob* and *hoewel* ('though') as in *al hoewel* (note in passing that standard Dutch spelling conventions require *al* and *hoewel* to be written as one word: *alhoewel*). *Ob* and *hoewel* can be assumed to be inserted in the C^o position. And, as expected, when these complementizers are phonetically realized, the finite verb remains in its final position. That is, the embedded clauses in (1) and (2) have the following variants: *als ob er von einem Schwarm Bienen verfolgt würde, al hoewel je erg veel gelezen hebt*. Accordingly, the overgeneralization of the embedded V2 phenomena in language acquisition is attributed by Schönenberger (1998) to the misanalysis of various complementizers as XPs which are inserted in Spec,CP rather than C°.

6 Depending on the specific dialect in question, embedded V2 is sometimes found in a wider array of syntactic contexts. This appears to be particularly true for Bernese (cf. Penner & Bader 1995). Furthermore, as shown extensively in Schönenberger (1998), embedded V2 is quite dominant in the acquisition of complement structures in Lucernese until the age of about five years, when the verb final pattern takes over.

➢ *Condition 3:* the verb *wüsse* has to occur in the second person singular, preferably with pro-drop:

(7) *Wäiss si wän chunt de Hans hüt aabig?
knows she when comes Hans tonight
(8) *Wüssed er wän chunt de Hans hüt aabig?
know you$_{PL}$ when comes Hans tonight
(9) Wäisch (??du) wän chunt de Hans hüt aabig?
know you$_{SG}$ when comes Hans tonight

➢ *Condition 4:* the question embedded under *wüsse* is not a yes/no question:

(10) *Wäisch (öb) chunt de Hans hüt aabig?
know-you (if) comes Hans tonight

➢ *Condition 5:* *wüsse* must be in the indicative:

(11) *Wüstisch wän chunt de Hans hüt aabig?
would-you-know when comes Hans tonight

➢ *Condition 6:* negation blocks V2 as well:

(12) ?*Wäisch nöd wän chunt de Hans hüt aabig?
know-you not when comes Hans tonight

➢ *Condition 7:* *wüsse* cannot be embedded:

(13) *Mir isch nöd klar öb du wäisch wän chunt de Hans hüt aabig?
to-me is not clear if you know when comes Hans tonight

➢ *Condition 8:* no doubly-filled COMP allowed with EV2:[7]

(14) a. *Wäisch wän das chunt de Hans hüt aabig?
know-you when that comes Hans tonight
b. Wäisch wän das de Hans hüt aabig chunt?

This is an impressive list of conditions. Suppose we wanted to say that taken together these conditions translate into morphosyntactic features, which, in turn, trigger EV2, we would have our job cut out. We could, of course, invent a specific feature, which would do the job, but then it would be that feature whose occurrence is subject to a complex array of contextual constraints. Right at the outset, then, it seems that it is the specific choice of one form of the verb *wüsse* from the complete paradigm, viz. *wäisch*, which is responsible for the triggering of EV2. This, then, seems to be the preliminary conclusion: EV2 is triggered by one specific form from the paradigm of one specific verb.

Two provisos are in order here. First, by picking the form *wäisch* we automatically satisfy some of the conditions listed above but by no means all of them. Second, the *wäisch*+EV2 construction has a specific semantico-pragmatic correlate, which may be responsible for at least part of its properties.

The conditions which follow straightforwardly are 1 (only the verb *wüsse*), 5 (only in the indicative), and part of 3 (2nd person singular). The other part of condition 3, the pro-drop factor, is not, or not in any obvious sense, a property

[7] Doubly filled COMPs are permitted quite freely in ZT. The fact that they are not under EV2 is not much of a surprise on the assumption that the complementizer, generally *das*, occupies the C^{o}-position and hence makes substitution of the finite verb impossible.

of the word form itself. On the other hand, it is not too hard to see how we can deal with the remaining conditions. Take condition 8 (no doubly filled COMP violation). This simply follows from saying that *wäisch* triggers EV2 since EV2 can only take place if C^o is empty. More interestingly, conditions 2 (matrix must be a y/n-question), 7 (*wäisch* must be in the root), and the rest of 3 (pro-drop) are closely linked. The common factor is verb-subject order: if the matrix is a question, you get V-to-C movement without the subject being moved into Spec, resulting in verb-subject order. This takes care of 7 and part of 2. Part only because a *wh*-question or topicalization of a non-subject would also yield inversion. Second, only in the inverted order can a second person singular pronoun be dropped. One way to get the remainder of 2 would be to stipulate that the Spec,CP preceding the fronted *wäisch* must be empty. That leaves us with conditions 4 (complement must be a *wh*-question) and 6 (negation blocks EV2). For want of an explanation, we could deal with this in a manner analogous to the inversion problem by stipulating that the Spec,CP immediately following *wäisch* must be filled (by a *wh*-element). Note that the negation would intervene and is therefore excluded. Summarizing this, we can say that the environment for the *wäisch*+EV2 construction is the following.[8]

(15) $[\ \varnothing\ ]_{Spec,CP}$ $[\ wäisch_i\ ]_{C^\circ}$ pro_i $[\ +WH\ ]_{Spec,CP}$

1. Some semantico-pragmatic properties of *wäisch*

At this point, let us turn to the conditions under which the *wäisch*+EV2 construction is used. The typical situation is one in which the sentence gets a flavor somewhere between a rhetorical question and an exclamation. Take the following pair:

(16) a. Wäisch wän de Hans geschter häi choo isch? (V-Final)
know-you when Hans yesterday home come is
'Do you know when Hans came home yesterday?'
b. Wäisch wän isch de Hans geschter häi choo? (EV2)

(16a) is a regular question. As such it can be used as a rhetorical question and, with the appropriate intonation it can also be used as an exclamation. It is reasonable to say, however, that the interpretation as a regular yes/no question, which in view of the choice of the matrix predicate (as in the case of English *you know*) is pragmatically construed as a *wh*-question asking the interlocutor when Hans came home yesterday, is the primary one. That is, it would be semantically correct to answer (16a) as in (17a) or (17b) but it would be pragmatically more felicitous to give an answer along the lines of (17c).

---

[8] In this formulation, the choice has been made to restrict the construction to pro-drop. As mentioned above, the variant with the overt second person singular pronoun *du* is not fully ungrammatical and judgments are subject to considerable variation. In more liberal variants, then, the formulation in (15) would have 'pronoun' (overt or phonetically empty) instead of 'pro'.

(17) a. Ja, das wäiss ich
yes, that know I
'Yes, I know that'
b. Ja ja, dɛɛ spinnt
yes yes, he is crazy
c. (Ja,) öppe-n-am elfi
(yes,) about at eleven

The situation is different for (16b). While it is not impossible to use this question with the intention to elicit a true answer along the lines of (17a) or, preferably, (17c), this is by no means the most easily accessible interpretation. (17b) is much closer to the mark. Indeed, the most common way to use questions like (16b) is to express a certain amount of surprise or dismay about the answer to the *wh*-question. If the interlocutor already knows the answer, as in a truly rhetorical question, that is straightforward, but if he/she does not, then the answer is generally supplied immediately by the speaker, as observed by Schönenberger (1998: p137). Thus a typical way to complete a question like (16b) is as in (18).

(18) Wäisch wän isch de Hans geschter häi choo – am elfi !
know-you when is Hans yesterday home come – at eleven
'Do you know when Hans came home yesterday? – At eleven.'

This particular use of *wäisch* seems to be related to another context in which it occurs: *in situ* exclamatives. Take the following example.

(19) De Hans hät wäisch wie vil gäld uf sim konto!
Hans has know-you how much money in his account
'Hans has an enormous/remarkable amount of money in his account'

In this use *wäisch* seems to belong in the class of what I will call *wh*-affixes. English has examples like the suffixes *the devil*, *the hell* as in 'what the hell have you done?', and prefixes like *God knows* as in 'John has God knows how much money in his account'. In the latter case, the interpretation seems to be something like 'I don't know exactly how much but undoubtedly a lot'. This example is interesting for another reason as well in that it can also serve as a matrix question introducer much like *wäisch*, as in (20).

(20) God knows how much money John has in his account?!

What such examples seem to indicate is that question-introducing expressions like *wäisch*, *God (only) knows*, can be grammaticalized to a specific syntactic context[9] such as (15) and have a concomitant specialized meaning and use. Not

[9] It is interesting to note, for example, that the Dutch and German equivalents of *God knows* differ with respect to inversion in that Dutch (like English) has the order subject-verb while German has the order verb-subject. Hence the translations of (19) are:
Hans heeft God weet hoeveel geld op zijn rekening
Der Hans hat weiss Gott wieviel Geld auf seinem Konto

every aspect of the syntactic restrictions needs to be stipulated, of course. Take for example the fact that these *wh*-prefixes are more felicitous with some *wh*-words than with others:

(21) He has God knows how many operas on CD
?*He has God knows which opera on CD

This contrast follows straightforwardly, it seems, from the fact that exclamatives of this type can express surprise, dismay etc. at quantities or qualities but not at identities.

2. More on *wh*-prefixes

It seems to be a general property of *wh*-prefixes that together with the *wh*-word they must, when used in isolation, constitute a well-formed sluice. That is, the *wh*-prefixes in (21) correspond to the sluices in (22).

(22) a. He has lots of operas on CD – God knows how many
b. He is listening to some opera – God know which (one/opera)

In these examples the constraints imposed by exclamative contexts do not apply, hence, if appropriately used, (22b) is felicitous.[10]

Why would we call this a sluice? And, what do we call the sluice in (21a)? From a semantico-pragmatic point of view it seems as if (21a) is an amalgam of a statement and a sluice, where the sluice is used to add the exclamative element. From this perspective, the sluice is *God knows how many*, not *God knows how many operas*. That is, the sluice is like an inserted adjunct.

More generally, these constructions seem to be a particular instantiation of a class of constructions, which show what we might call 'clause-internal RNR effects.' This class minimally includes parasitic gaps (at least of the Dutch type, cf. Huijbregts & Van Riemsdijk 1985) and what Wilder calls 'transparent free relatives' (cf. Wilder 1998). One of the many interesting questions attending this construction is whether the shared (RNRd) element is primarily a part of the matrix or of the insert. The predicate AP of an attributive (prenominal)

Furthermore, *der Teufel* ('the devil') can be substituted for God in German but not in Dutch though Dutch does allow the substitution of *Joost*, which is a euphemistic name for the devil.
Der Hans hat weiss der Teufel wieviel Geld auf seinem Konto
Hans heeft Joost mag (may) weten (know) hoeveel geld op zijn rekening
All these facts underline the highly idiomatic, grammaticalized nature of such expressions.

[10] It was pointed out to me by David Pesetsky that cases with inverted prepositions, which are frequently found with sluices, are ungrammatical in the *in situ wh*-prefix use:
John left – I wonder who with
*John left God knows who with
This ungrammaticality could be plausibly attributed to the factors discussed in the main text that make examples like (21b) bad. Note that the case corresponding to (21a) cannot be constructed by way of a test of this claim since the corresponding sluice is also ungrammatical due to a more general prohibition against *wh*-phrases consisting of more than a simplex *wh*-word in the inversion pattern:
(iii)*John left – I don't know how many (girls) with

transparent free relative in Dutch, for example, seems to be external because it inflects (cf. (23b)) and because it follows the verb, which it cannot normally do (cf. (23c)).

(23) a. Zij heeft wat ik zou willen noemen roodbruin-e ogen
she has what I would want-to call red-brown eyes
b. Ik zou deze ogen roodbruin(*-e) willen noemen
c. *Ik zou dit willen noemen roodbruine ogen
c'. Ik zou dit roodbruine ogen willen noemen

While a similar test cannot readily be constructed for *wh*-prefixes of the type discussed above, it seems reasonable to assume that they too pattern like this. In other words, the structure of (21a) is taken to be as in (24).

(24) He has |God knows how many| operas on CD

Conclusion

To the extent that anything can be concluded from these tentative observations, it is that *wäisch* has a specific, specialized use in which it expresses a kind of rhetorical exclamation. In this use, its syntactic property is that of a *wh*-prefix. As such it can be prefixed to some XP, as in (19), or to the fronted *wh*-phrase in a *wh*-question as in (18). In the latter case, its insertion is contingent on V2. But on this interpretation V2 is expected since the *wh*-question in question is the matrix clause, while *wäisch* is an insert, which is prefixed to the *wh*-word/ phrase.

From this perspective, the question that arises is whether the form *wäisch* has a true syntactic environment associated with it when used as a *wh*-prefix. I see two reasons for assuming that a structure roughly corresponding with (15) above is associated with *wäisch* in this use. First, other inserts of this type (*God only knows*, *Joost mag weten*, as well as transparent free relatives) clearly have internal structure which is determined by the rules of the grammar. Second, as is the case with most idioms, *wäisch* can still be construed with its 'normal,' literal, meaning, as noted above in connection with (16b).

Two overall analytical strategies emerge from these considerations. Either we assume that the *wh*-prefix is generated independently as a (partial, sluiced) clause which is then merged with (or inserted into) some other clausal structure as a *wh*-prefix. This insertion process could then be interpreted as being on a par with the late (or surface) lexicalization rules envisaged by Emonds (1987, 1994) for grammatical (or functional) formatives. In this case the special meaning would be associated, as expected, with this particular grammaticalized lexical formative, but then we have to assume that the literal meaning, which can persevere, is subsumed under the lexical entry in question. Alternatively, we could assume that the complex structure is simply built up according to the usual rules of syntax and that there is a kind of second pass of the lexicon, also at some late moment in the derivation, in which idiomatic and other specialized

patterns are recognized and interpreted. But in this latter case the embedded V2 pattern would have to be stipulated as a special filter on this idiom recognition process. My tentative conclusion would be that the former strategy holds more promise.

References

Besten, Hans den. 1977. 'On the Interaction of Root Transformations and Lexical Deletive Rules', unpublished paper, reproduced in Groninger Arbeiten zur *Germanistischen Linguistik* 20, I-III and 1-78 (1981).

Emonds, Joseph E. 1987. "The Invisible Category Principle." Linguistic Inquiry 18, 613-632.

Emonds, Joseph E. 1994. "Two Conditions of Economy." In G. Cinque et al. (eds.) Paths towards Universal Grammar: Studies in Honor of Richard S. Kayne. Washington DC: Georgetown University Press, 155-172.

Emonds, Joseph E. 1999. "How Clitics License Null Phrases." In H.C. van Riemsdijk (ed.) Clitics in the Languages of Europe. Berlin: Mouton de Gruyter, 291-367.

Huijbregts, Riny & Henk van Riemsdijk. 1985. "Parasitic Gaps and ATB." Proceedings of the 15th Annual Meeting of NELS. Amherst, Massachusetts: GSLA, 168-187.

Obenauer, Hans-Georg. 1994. Aspects de la syntaxe A-barre: Effets d'intervention et mouvements des quantifieurs. Thèse de doctorat d'état. Université de Paris VIII.

Penner, Zvi & Thomas Bader. 1995. "Issues in the Syntax of Subordination: A Comparative Study of the COmplemenizer System in Germanic, Romance and Semitic Languages with Special Reference to Bernese Swiss German." In Z. Penner (ed.) Topics in Swiss German Syntax. Bern: Lang, 73-289.

Riemsdijk, Henk van. 1998 a. "Head Movement and Adjacency." Natural Language and Linguistic Theory 16, 633-678.

Riemsdijk, Henk van. 1998 b. "Syntax Driven (Crazy) by Morphology: Morphological Effects in the Choice of Relativization Strategies in Zurich German." In A. Bruyn & J. Arends (eds.) Mengelwerk voor Pieter Muysken. Amsterdam: Publikaties van het Instituut voor Algemene Taalwetenschap 72, 67-74.

Schönenberger, Manuela. 1998. The Acquisition of Verb Placement in Swiss German. Doctoral Dissertation, University of Geneva.

Wilder, Chris. 1998. "Transparent Free Relatives." ZAS Papers in Linguistics 10, 191-199.