

SWISS RELATIVES

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1. MAIN FACTS ABOUT SWISS GERMAN RELATIVES

Swiss German relative clauses¹ are relatively atypical when one compares them with the relatives one finds in the other Germanic languages. They are introduced by an invariant marker, wo, there are no relative pronouns, and there is no wh-movement.² In most cases the position which is relativized is occupied by a resumptive pronoun, which is a normal personal pronoun in its weak form. Such pronouns are somewhat clitic-like in Swiss German. Some typical examples are:³

- (1) i. *de vrÜnd wo ich immer mit em gang go suuffe*
the friend that I always with him go (to) drink
'the friend that I always go drink with'
- b. *s auto wo du gsäit häsch das mer s ois nöd*
the car that you said have that we it us not
- chönd läische*
can afford
- 'the car that you said we cannot afford'

While other southern dialects of German use the same invariant marker wo for relative clauses, they do make use of relative pronouns which are moved into the position preceding wo. This is the case in Bavarian, for example; cf. Bayer (1984) from whose article the following sentence is borrowed.

- (2) *Mir song s dem Mõ den, wo da Hund [e], bissn hod*
we tell it the (dat.) man whom (acc.) that the dog bitten has
'We tell it to the man whom the dog has bitten'

In Swiss German such examples are systematically absent.

¹ Thanks are due to some of my Swiss relatives, in particular to my sister Metty, for discussing some of the judgments on the Swiss German, in fact, more precisely, Züritütsch data. I am also grateful to Josef Bayer and to Riny Huybregts for useful comments. For some early remarks on Swiss German relative clauses, see Van Riemsdijk (1975).

² None of this is true for free relatives, which are formed on the pattern of wh-questions.

³ There being no standard orthography for Swiss German, I use an impressionistic compromise between the High German spelling and a phonetic approximation.

One of the main characteristics of German clitics is that they optionally cliticize to a pre-subject (that is, post-complementizer) position. The resumptive pronouns show the same behavior, as is illustrated in (3).

- (3) *s auto wo du gsäit häsch das es sich de Peter nöd*
 the car that you said have that it himself the Peter
- chönti läischte*
 could afford
- 'the car that you said Peter could not afford'

Here the resumptive pronoun es has been cliticized (along with the reflexive clitic sich).

A further fact to be noted is that the resumptive pronouns are not island sensitive: they can occur inside complex NPs, wh-islands and many other contexts that resist ordinary wh-movement. Here are some examples illustrating this point.

- (4) i. *s huus wo sich all wundered w ?? s bewont*
 the house that (refl.) all wonder who it occupies
- 'the house that all wonder who occupies it'
- b. *en typ wo d schmier dene wo mit em*
 a type that the police those (dat.) that with him
- reded nöd trauf*
 talk not trusts
- 'a type that the police doesn't trust those who talk with him'

This is in sharp contrast with the corresponding wh-questions, in which wh-movement is subject to the usual island effects.

- (5) i. **Weles huus wundered sich all w ?? bewont?*
 which house wonder (refl.) all who occupies
- b. **Wem trauf d schmier dene wo mit reded nöd?*
 who trust the police those that with talk not

There is no reason, therefore, to assume that Swiss German relative clauses could be derived by means of wh-movement, either of an empty operator or of a later-to-be-deleted-in-COMP wh-element, with the subsequent spelling-out of the trace in the form of a resumptive pronoun.

These characteristics of Swiss German relative clauses, while rather unexpected for a Germanic language, are by no means unusual when we take the full range of languages into account about which sufficient data are available. In all examples discussed so far, there was a lexically realized resumptive pronoun. It turns out, however, that gaps do sometimes occur. More precisely, we find gaps rather than resumptive pronouns in the subject and direct object positions, but not in the indirect object positions of the immediate relative clause. By immediate relative clause I mean the relative clause minus any clauses embedded inside it. Furthermore, in these positions the gap is obligatory, not optional.⁴

- (6) i. *d vrau wo (*si) immer z spaat chunt*

⁴ For some speakers a gap in the indirect object position is sometimes acceptable. We will disregard this variant.

the woman that (she) always too late comes
'the woman who always comes too late'

- b. *es bild wo niemert (*s) cha zale*
a picture that nobody (it) can pay
'a picture that nobody can pay'
- c. *de bueb wo mer *(em) es velo versproche händ*
the boy that we (him) a bike promised have
'the boy that we promised a bike'

It is instructive, at this point, to look at these facts from the perspective of Keenan and Comrie's (1977) accessibility hierarchy for the primary relativization constraint. In their hierarchy, the subject is at the top, followed by the direct object, the indirect object, oblique NPs, genitives and finally objects of comparison: S < DO < IO < OBL < GEN < OCOMP. The idea is that a language's primary relativization strategy, generally some gap producing process, reaches certain positions on the hierarchy starting from the top. Those positions further down on the hierarchy which it cannot reach can only be relativized by means of a secondary strategy, if available. That second strategy is generally the use of resumptive pronouns. Note, now, that this hierarchy applies to positions within the immediate clause only. Following the logic of this line of reasoning, any position within a complement or adjunct clause embedded within the immediate relative clause should be even further down on the hierarchy and hence even more inaccessible.

If this is a correct extrapolation, we have an interesting contrast between Keenan and Comrie's approach and the predictions that arise within a framework such as the government binding theory (see Cinque (1981) for an interesting discussion of Keenan and Comrie's theory from this perspective). In such a framework, the distribution of gaps is determined by independent principles such as the empty category principle (ECP) and the binding theory. If subject gaps are freely permitted in a language, for example, we would expect subject gaps to show up both under short and long relativization. In terms of the hierarchy, one way of putting it would be to say that we would expect the hierarchy to operate cyclically. Consider Vata, the Kru language described by Koopman (1984). In this language gaps resulting from wh-movement are permitted in a great number of positions, but **not** in the subject position, a clear counterexample to the accessibility hierarchy. Accordingly, we find gaps when objects, indirect object and the like are relativized, but in the subject position we find a resumptive pronoun, regardless of whether this is the immediate subject or a more embedded one. Koopman argues convincingly that these facts can be accounted for in terms of the ECP.

Returning to the Swiss German facts, we have to conclude that they appear to confirm the extrapolated expectation derived from the Keenan and Comrie hierarchy and run against the predictions made by a wh-movement *cum* ECP approach: gaps are possible in the immediate S and DO positions but not in any other positions of the immediate relative clause nor in any position at all in embedded clauses of any type.

2. TOWARDS AN ACCOUNT

The first thing to notice is that it is unlikely that the gaps in examples like (6a) and (6b) could be the result of wh-movement. As noted above, if they were, the principles of grammar would have to be assumed to function in such a way that wh-traces are permitted in the subject and direct object positions. But if that were the case we would also expect these gaps to occur in embedded contexts, where resumptive pronouns are required. Moreover, we know from wh-questions that wh-gaps are much more widely distributed. Indirect object gaps, for example, are perfectly acceptable, as in the wh-question corresponding to (6c).

- (7) *Wem händ mer *(em) es velo versproche?*
whom have we (him) a bike promised
'Whom have we promised a bike?'

The puzzling property of the Swiss German relatives is the strict locality imposed on the gaps. The key to the solution is to be found in another syntactic process which is similarly constrained. This is the movement of clitics to the pre-subject (or post-COMP) position. This clitic movement is always clause-bound and it applies to subject, direct object, and indirect object clitics.⁵ Consider some examples.⁶

- (8)
- i. ...*das si am Peter es buech versproche hät*
 ...that she to Peter a book promised has
 '...that she has promised Peter a book'
 - b. ...*wil em d Regi es buech versproche hät*
 ...because him (dat.) the Regi a book promised has
 '...because Regi has promised him a book'
 - c. *Hät s d Regi am Peter versproche?*
 has it the Regi to Peter promised
 'Has Regi promised it to Peter?'

This process, as noted above, is strictly clause-bound.⁷ Suppose, then, that cliticization of the resumptive pronoun in the immediate relative clause moves the clitic into a position **which is close enough to the head of the relative clause to permit deletion**. This is the hypothesis⁸ which I will develop here. Its implementation immediately faces a number of tricky problems. The main ones are the following.

- (9)
- (1) Why is wh-movement prohibited?
 - ii. Why is the clitic movement obligatory here rather than optional,
 which is what it usually is?
 - iii. Why is clitic deletion obligatory for the subject and direct object clitics and prohibited
 for indirect object clitics?
 - iv. Why don't clitics delete elsewhere?

Starting with question iv., the obvious answer will be that this has to do with recoverability. Swiss German is not a pro-drop language; pronouns cannot be absent even in the subject position of relatively unequivocally inflected verb forms.⁹ Resumptive pronouns, however, are obligatorily coindexed with the head of the relative clause. We will leave open the question whether this coindexation is mediated by either wo or [Spec,C]. Coindexation alone, however, is quite obviously

⁵ The rule applies vacuously to subject clitics, of course, although the ordering of the clitics with respect to each other varies when there has been multiple cliticization. I will not be concerned with such cases here, though.

⁶ Recall that the finite verb in a main clause occupies the position (C) of the complementizer. Cliticization in (8c) is thus to the same position as in (8a) and (8b).

⁷ In verb raising constructions (a type of clause union), this is not, strictly speaking, correct. Such cases are irrelevant to the issue at hand, however, so I will not deal with them here.

⁸ On this hypothesis, Swiss German relatives would be rather close to (one type of) relative clauses in Modern Hebrew. There, too, a clitic-like resumptive pronoun is moved to the complementizer position. See Borer (1984) for discussion.

⁹ There is one rather marginal exception to this. The second person singular pronoun can drop under inversion, i.e. when it follows the verb, as in yes-no questions:

- (i) *(Du) chunsch mit
 you come along
- (ii) Chunsch (du) mit?
 Come you along
 'Are you coming along?'

insufficient to make deletion possible. As in the case of deleted *wh*-words, often referred to as null-operators in the recent literature, deletion seems to be essentially limited to the complementizer that introduces the relative clause. A theory of specified deletions to the effect that deletion is essentially limited to complementizer contexts was first formulated in Den Besten (1977).

Suppose that recoverability were determined by the context of the resumptive pronoun. More specifically, suppose the argument structure of the verb that the resumptive pronoun is (or is not) an argument of determines recoverability, together, of course, with the coindexing relation between that resumptive pronoun and the head of the relative clause. Not only would such a view yield wrong results in the case at hand, but it would also contradict in a certain sense the results of the heated debate of the late seventies about the existence of long distance deletion rules. The outcome of that discussion¹⁰ was that such rules do not exist. This was a theoretically desirable outcome, and one which received a considerable amount of empirical support. But if recoverability, a cornerstone of deletion, were to function in the manner indicated above, this would restore the essential long distance property of deletion and hence be in conflict with the theoretical desiderata. It thus follows from the discussion about the domain of deletion that recoverability, and hence deletion itself, must be limited to very local domains indeed.

This discussion presupposes that the pre-subject clitics end up in a position that can be characterized as "in COMP". Let us try to be more precise. Within the currently most common set of assumptions, the most straightforward analysis would be to say that the clitics are instances of N° and are adjoined to C. In that case they would be governed by C and the domain of recoverability would extend to all positions governed by the head of the CP that is the sister of the NP under indexical identity with which the deletion is triggered. This definition in turn presupposes a definition of government in which the head of a projection governs its specifier. Alternatively, one might assume that the specifier of C is accessible to the head NP of the relative clause (or whatever else triggers deletion). This is not implausible because that specifier position has to be accessible for purposes of coindexation and (sometimes) case assignment or case attraction anyway. I will not dwell here on the pro's and con's of the two definitions of government (the more liberal one vs. the more restrictive one) and opt for the latter alternative. Correspondingly, we are led to the following makeshift definition of recoverability.

(10) Deletion under recoverability

In a structure ...X.....Y..., Y may delete iff

- i. Y is a pronoun, and
- ii. Y is coindexed with X, and
- iii. Y is in a specifier position accessible to X or governed by the head of a specifier accessible to X

Since a full-blown theory of specifier accessibility is beyond the scope of the present article, I will limit myself to the statement that minimally the specifier of a CP which is a relative clause is accessible to the head of that relative clause.¹¹

¹⁰ See among other references Bresnan (1976) and Chomsky (1977).

¹¹ For reasons given elsewhere (Van Riemsdijk (1988)), I do not believe that the theory of grammar should allow the operation of adjunction to heads. I argue there that there are reasons to assume that all cases that appear to be genuine instances of adjunction to heads should be handled in terms of reanalysis, an operation which is independently necessary. If the line of reasoning proposed there is correct, then the text analysis cannot be maintained. Various lines could be pursued, but I will limit myself to a brief sketch of one of them. It can be argued, in fact, that Germanic clitics are full NPs rather than N° . This might account for the fact that unlike Romance clitics, which have to cliticize onto V, German and Dutch weak pronouns can occur in various normal NP positions and in many cases do not perceptibly cliticize onto any identifiable host. If this is correct, the pre-subject clitics can be assumed to end up in positions dominated by C', yielding structures like the following.

(i) [_{CP} Spec,C [_C [_C [_C C NP_{clitic}]_C NP_{clitic}]_C IP]_{CP}

We now turn to the two remaining questions in (9): ii. and iii. Before attempting an answer, let us examine in more detail what is involved here. First, clitic movement into the pre-subject position is optional in the normal case. The following examples illustrate this.

- (11) i. ...*wil d Regi s versproche hät*
 ...because the R. it promised has
 '...because Regi has promised it'
- b. ...*wil s d Regi versproche hät*
- (12) i. ...*wil d Regi em das buech versproche hät*
 ...because the R. him (dat.) that book promised has
 'because Regi has promised him that book'
- b. ...*wil em d Regi das buech versproche hät*
- (13) i. ...*wil d Regi em s versproche hät*
 b. ...*wil em d Regi s versproche hät*
 c. ...*wil s d Regi em versproche hät*
 d. ...*wil em s d Regi versproche hät*

The same thing is true for the case of indirect object relatives in which, as noted, deletion of the clitic does not apply.¹²

- (14) i. ...*de bueb wo d Regi em es velo versproche hät*
 the boy that the R. him a bike promised has
 'the that Regi promised a bike'
- b. ...*de bueb wo em d Regi es velo versproche hät*

As is to be expected in such cases, not all orders are equally felicitous, conditions having to do with such factors as heaviness and phonological context. The main generalization, however, remains that cliticization is optional. In the case of relative clauses with a gap, the gap is obligatory. What, then, forces clitic movement in relative clauses? The answer, I suggest, is to be found in considering this question jointly with the first part of question iii. It is tempting to relate the obligatoriness of deletion to the Avoid Pronoun Principle (APP) introduced in Chomsky (1981). The APP was introduced, among some other considerations, to account for the fact that in an example like (15) his must be disjoint in reference, or, to put things differently, that his must be absent on the coreferential reading.¹³

- (15) i. John would much prefer his going to the movie
 b. John would much prefer going to the movie

Such cases are not entirely identical to the relative clause case, but are sufficiently similar to warrant a comparison. We would have to say, in effect, that his is accessible to its antecedent John. That does not appear to be unreasonable to the extent that predication and control do seem to be intimately

The definition of deletion under recoverability can be maintained under such an approach.

¹² In a sentence like this, the sequence wo em contains a vowel clash which is phonologically broken up by the insertion of an epenthetical n. Here and elsewhere such phonological effects have been disregarded.

¹³ Cf. Chomsky (1981:65).

related, as argued in Williams (1980). The cases Chomsky discusses differ from the cases at hand in that the subjects in question have not undergone any kind of movement to some A-bar position. We may ask, therefore, how the APP would apply in situations in which deletion would be irrecoverable before, but recoverable after movement. Suppose, then, that the APP is a global principle in that it applies to complete derivations. This would account for ii. and iii. simultaneously: the pronoun has to move because only by moving can it be deleted; and it must be deleted because there is a way to get it into a position where deletion is recoverable. This interpretation of the APP is quite close in spirit to the status that Chomsky suggests: the APP "might be regarded as a subcase of a conversational principle of not saying more than is required,..." (Chomsky 1981:65). At the same time, of course, Chomsky notes that the principle "functions as a principle of grammar" (*ibidem*).

Assuming this to be correct, we are left with the second part of question iii., viz. why don't the indirect object resumptive pronouns delete. There is a factual question to be cleared up first here. As observed in footnote 4, there are speakers for whom deletion is possible or even obligatory. Dialectal differences probably play a role here. Bernese informants, for example, report that for them deletion is obligatory. What I believe is probably involved here is the syntactic status of dative NPs. The Swiss German case system is rather impoverished compared to the High German one. There is no genitive, there is no difference between nominative and accusative, except in the pronominal system, only the dative has a separate form. But even the dative paradigm is virtually identical to the corresponding paradigm with the locative preposition *a*, meaning "at". The following schema illustrates this.¹⁴

(16)	nominative	dative	locative	gloss
masc. def.	de maa	em maa	am maa	'man'
indef.	en maa	emene maa	amene maa	
fem. def.	d vrau	de vrau	a de vrau	'woman'
indef.	e vrau	enere vrau	anere vrau	
ntr. def.	s chind	em chind	am chind	'child'
indef.	es chind	emene chind	amene chind	
pl. def.	d mane	de mane	a de mane	'men'
indef.	mane	mane	a mane	

It turns out that there are only two differences between the dative and locative paradigms. First, the preposition-like element shows up as schwa in the dative, and second, it is absent altogether in the definite feminine and plural forms. It would not be surprising, then, to find that indirect objects have the status of PPs in certain varieties of Swiss German. If this is correct, we have an immediate answer for the undeletability of the dative pronouns. The pronouns *em* (masculine and neuter) and *ere* would be analyzed as amalgamations of the locative preposition *a* followed by the NP pronoun. And the deletion of the preposition would be prohibited by virtue of the recoverability condition.

Turning finally to the last remaining question of (9), question i., observe that this is a much more general issue. The same problem arises in languages that lack overt wh-movement altogether. So, for example, what prevents wh-movement from moving question words in Chinese? No interesting answers

¹⁴ The letter "e" is to be interpreted as "schwa" throughout this schema.

have been advanced, to my knowledge.¹⁵ For the case at hand, I will assume that C=wo either has no Specifier position ([Spec,C]) at all, or has one that is incapable of containing wh-phrases. Such an approach does not seem unreasonable in view of the fact that the complementizer itself (wo) is homophonous with the locative wh-word. Using fashionable terminology, we might say that wo has absorbed the morphological wh-feature of its specifier. While this approach, needless to say, is stipulative, this fact points to a weakness in the theory rather than to one in this particular analysis.¹⁶

3. CONCLUSION

I have argued that wh-movement is not involved in the derivation of Swiss German relative clauses but that those that contain a gap involve the movement of the resumptive clitic to COMP followed by obligatory deletion. The deletion is subject to a local condition of recoverability. A global 'Avoid Pronoun Strategy' forces those clitics that can move to COMP to move and then to be deleted.

If the analysis presented here is on the right track it enhances the plausibility of the existence in grammar of similar principles such as the global 'Least Effort Condition' discussed in Chomsky (1988).

It should be borne in mind, however, that the Avoid Pronoun Principle as developed here is far too strong as it stands. What blocks deletion of wh-words in Dutch relatives, for example, and what makes deletion optional rather than obligatory in English? The tackling of these problems will, regrettably, have to be deferred to a future occasion, but a few points are clear from the outset. The deletion of wh-words cannot be assumed to be subject to the Avoid Pronoun Principle, for if it were we would not expect English to have that-relatives alongside wh-relatives. More generally, the variation among the various types of relative clauses, in particular in the Germanic languages, offers quite a challenge to any theory that aims at some degree of generality. But whatever the ultimate typology, it should be clear that Swiss German is at one extreme of the spectrum in that no wh-movement is involved in the derivation of relative clauses.

¹⁵ Fukui's (1986) proposal that languages like Japanese and Chinese lack functional projections and hence do not have a landing site for wh-movement has a rather brute force character to it as well. Furthermore, the proposal is controversial among those working on Japanese. Honda (1988), for example, argues that functional projections do play a role in Japanese syntax.

¹⁶ It turns out that there may be a potential answer to this question along the line of reasoning adopted above in dealing with questions ii. and iii. which may offer a more principled answer than the stipulative one offered here. The proposal above was that the Avoid Pronoun Principle is a global condition. What exactly does that mean? In other words, which aspects of a derivation must be taken into account? Suppose, now, that the choice of the correlative word (wh-word or resumptive pronoun) is also subject to the principle, even though each choice initiates a different derivation, one via wh-movement, the other via cliticization and deletion. One might say, perhaps, that this interpretation of the principle is a transderivational one. At any rate, on this interpretation the choice in favor of a resumptive pronoun is forced. Unfortunately, this approach is not entirely waterproof since it fails to apply to those cases in which cliticization followed by deletion is unavailable. One possibility would be to say that the Least Effort Principle of Chomsky (1988) discussed below is responsible for this: in languages that have a resumptive pronoun strategy, the resumptive pronoun that remains *in situ* must always be chosen over the wh-word, which requires the additional derivational step of movement. What remains unclear, however, is why the resumptive pronoun strategy is not available in all languages.

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