Clitic Climbing in Romance: "Restructuring", Causatives, and Object-Control Verbs *

Seth Kulick

Institute for Research in Cognitive Science University of Pennsylvania Suite 400A, 3401 Walnut Street, Philadelphia, PA 19104-6228 skulick@linc.cis.upenn.edu

Introduction

"Restructuring" in Romance refers to constructions which appear to violate standard locality constraints, thereby presenting a challenge for syntactic theory. One of the most well-studied cases of restructuring1 is that of clitic climbing. This is illustrated in the Italian example (1a), in which the clitic lo, the apparent object of leggere, appears on the higher verb vuole. As shown in (1b), it can even move past more than one verb.

- (1)Mario lo vuole leggere 'Mario wants to read it'
 - Mario lo vuole poter b. leggere Mario it wants to be able to read 'Mario wants to be able to read it'

Such clitic climbing is possible only with certain verbs, such as voler and poter in (1), which I will refer to as the "trigger" verbs, following Aissen and Perlmutter (1983). Bleam (1994) argued in detail that clitic climbing causes problems for

TAG, and that set-local multi-component TAG is required. In previous work (Kulick 1997), I have proposed that due to the limited nature of the trigger verbs (aspectuals, motion verbs, modals) they can be treated as "adjunct predicates" that adjoin into a TAG tree, as if they were raising verbs, taking advantage of their semantic "weakness". An advantage of this approach is that the apparent unboundedness of clitic climbing, as in (1b), can be *I would like to thank Tonia Bleam, Robin Clark, Robert Frank, Heidi Harley, Aravind Joshi, Alexandra handled in TAG by repeated adjoinings of these trigger verbs. There are also several aspects of "restructuring" other than clitic-climbing (e.g., long reflexive passive, long tough-movement, Italian auxiliary change, etc.) which I cannot comment on here. The case of the long reflexive passive is discussed in Kulick (1997)².

However, this "adjunct" predicate" approach to clitic climbing in TAG is clearly insufficient for two other major cases of clitic climbing: the Romance causatives, and object-control verbs in Spanish such as permitir (Strozer 1977, Moore 1991). In this work I extend the analysis to handle these two cases. The relation of these cases to the "restructuring" trigger verbs has long been a matter of debate, and I argue that it is desirable that TAG enforces a sharp distinction between them. Still, an analysis must be given in TAG for these cases, and I propose a treelocal multi-component TAG analysis for both cases. This raises again the issue of the unboundedness of clitic climbing with these verbs.

2 Causatives

The Romance causative, as illustrated by the French example (2), of course has a number of unusual features which have been the focus of much research³. As illustrated in (2), the word order and Case marking of the causee in the lower clause is strikingly different than the usual. Of particular interest here is that when the lower object is cliticized, as in (3),

Kinyon, Tony Kroch, Miriam Meyerhoff, Paolo Monachesi, Beatrice Santorini, two anonymous reviewers, and the members of the Xtag project for comments on various aspects of this work. I would also like to thank Filippo Beghelli, Claudia Brovetto, Alexandra Kinyon, Marisel, Zoe Lacroix, Paoia Merlo, and Carmen Rio-Rey for native speaker judgements. This work is supported

by grant NSFSTC89-20230.

I am using "restructuring" as a descriptive term only, and not to refer to the particular analysis proposed in Rizzi (1982).

²Cinque has proposed that clitic climbing and other transparency effects can he handled by treating the trigger verhs as being "directly inserted in the extended projection of a lexical verb", according to the abstract for a talk. This depends on the trigger verbs being limited to modal, aspectual, and motion verhs, which for Cinque correspond to functional heads, and so can be so inserted into the extended projection. Clearly, this proposal seems to have much in common with that in Kulick (1997). However, I have not seen Cinque's full analysis, and so I cannot currently comment further on the connection.

³I am putting aside here the faire-par causative

it appears on a fait rather than with the verb that it is semantically associated with, manger.

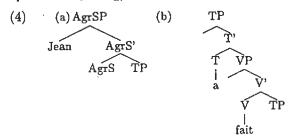
- (2) Jean a fait manger ce gateau à Jean has made eat the cake to Pierre Pierre
- 'Jean made Pierre eat the cake
 (3) Jean l'a fait manger à Pierre
 Jean it has made eat to Pierre
 'Jean made Pierre it'

Clearly, the approach taken for the "adjunct predicates" is insufficient here. Adjoining fait or a fait into a tree which has both Jean and Pierre is absurd, since the latter tree would be a radical violation of the most basic principles of what constitutes an elementary tree.

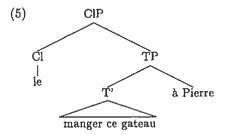
There have been two basic approaches taken in TAG to handling the problem of non-local movement in the French causative. (Abeillé 1991, Abeillé 1993) treated faire as a co-anchor of an elementary tree headed by the infinitival verb. Then the clitic movement is local to an elementary tree, and there is no problem. Santorini and Heycock (1988) argue, however, that the French causative must be considered bi-clausal, and therefore two separate TAG trees, since the complement object is not able to passivize (unlike the case with the Italian causative). However, they did not discuss how to handle the clitic movement.

There are arguments for both approaches, but in this work I follow Santorini and Heycock (1988), and adopt a bi-clausal analysis. I extend Santorini and Heycock (1988)'s analysis to handle the clitic movement by using a tree-local multi-component TAG, which allows a tree set for Jean and a fait to wrap around le in le manger à Pierre. This depends on the clitic moving to the top of the manger tree⁴

One way to work this out is to use the tree set in (4ab) for the matrix clause, and the tree in (5) for the embedded clause. The derivation proceeds by (4b) adjoining at the TP node, while (4a) adjoins at the root of (5) to produce the tree (6) (this requires that the AgrSP node be treated as a TP node for purposes of adjoining).



⁴In work-in-progress, I propose using this same approach to handle long-distance-scrambling in German (Rambow 1994), thus hopefully unifying the machinery needed for these two cases of non-local movement.



There are obviously some issues here concerning the Case marking and word-order which require further discussion. For now, I am assuming that the dative Case on á *Pierre* is assigned by the causative verb, and that if the lower verb was intransitive, it would get accusative Case⁵.

However, just as with the restructuring Case, it becomes a crucial question as to how unbounded such clitic movement is. For the causatives, this relates to the issue of how recursive causative forma-

⁵I am also assuming that the causee is a structural subject, as opposed to being generated as an indirect object. As a reviewer notes, Abeillé et al. (1996) argue that the causee is a true indirect object or direct object, depending on the transitivity of the lower verb. They note that when the lower verb takes a dative argument, it is possible for the accusative causee to appear between the lower verb and its dative argument:

Maire fera parler Jean à Paul Marie will make Jean speak to Paul

Thus, the arguments of the causative and embedded verbs follow the unmarked ordering of clausal arguments in French. This is not expected given the type of analysis as in (6). However, these facts are not new, and were discussed in Santorini and Heycock (1988), in which they suggested, following Burzio (1986) that there are "late reordering rules" to fix up the order. I follow Santorini and Heycock (1988) in this regard, although such rules of course are somewhat undesirable.

Most of the arguments in Abeillé et al. (1996) point out that the causative construction acts differently from a control construction, in terms of how the arguments of the two verbs can be reordered. While this is correct, I don't see how it's an argument against a structure as in (6) (again, assuming the existence of reordering rules), which is clearly not a control structure.

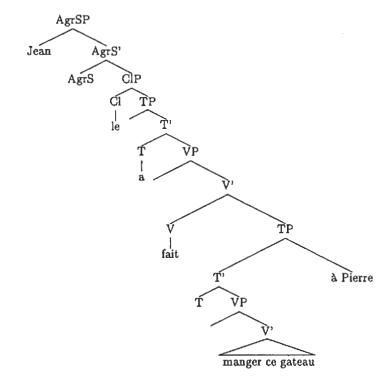
They also note that since quantitative en can be extracted out of an accusative causee, as in (2), this shows that it must be a structural object. However, since such extraction can also take place out what might be analyzed as a small-clause subject (3), it's not clear to me how strong this argument is.

- (2) Il en fera courir trois He will make three of them run
- (3) a. Paul entend 3 femmes chanter

h. Paul en entend 3 chanter

Their strongest argument, I think, concerns the ability of "tough movement" to take place across the causative in French. Clearly, for the approach taken here, this deserves further study.





tion is. There has been very little discussion of this issue in the literature⁶, and the data is somewhat murky, but it seems to be the case that sentences with lower unaccusative verbs are acceptable⁷. For example, (7b) has an additional causative verb on top of the causative construction in (7a). In such a case, it is possible to place a clitic for the causee (lui for à son fils) and for the object (le, for le pont), on a fait, as shown in (7c).

- (7) a. Son fils a fait sauter le pont
 His son made blow up the bridge
 His son made the bridge blow up
 - b. Elle a fait faire sauter le pont
 She made make blow up the bridge
 à son fils
 to her son
 She had her son make the bridge blow
 up
 - c. Elle le lui a fait faire sauter
 'She made him make it blow up' or
 'She had it blown up by him'
 - d. Elle me l'a fait faire sauter She me it made make blow up 'She made me make it blow up' or 'She had it blown up by me'

I discuss the consequences for TAG of the possibility of sentences such as (7c), which appear to

⁶Kayne (1975) is an exception.

require the use of set-local MCTAG. However, there is a "trick" that can be done to allow a tree-local derivation for (7c), although space prohibits here any explanation of what I'm talking about. This approach, however, will not work for the case in which the clitics are in a different order, as in (7d), and I discuss the consequences of that.

3 Spanish object-control verbs

An example of clitic climbing with permitir is shown in (8ab), in which (b) shows that la can optionally move from arreglar to permitio⁸.

- (8) a. Juan le permitió arreglarla a
 Juan him permitted to repair it
 Pedro
 Pedro
 Juan permitted Pedro to repair it
 - Juan se la permitió arreglar a
 Juan him it permitted to repair
 Pedro
 Pedro
 Juan permitted Pedro to repair it

Similar issues arise here as with the causatives. Again, the "adjunct predicate" analysis is inadequate, and a tree-local TAG analysis seems appropriate. Following the approach of Bleam (1994) and

⁷For sentences with lower intransitive verbs, I have gotten mixed reactions from native speakers.

⁸ le in (8a) is a clitic double of a Pedro, and a morphological rule changes le la to se la in (8b).

others (e.g., Moore 1991), I adopt a "reduced complement" analysis.

The question of unboundedness is quite interesting, since it seems to be the case that clitic climbing over these verbs is much more constrained than with the "adjunct predicate" trigger verbs, and speakers are very reluctant to accept even a highly simplified sentence such as (9b). This is true even for speakers who can accept clitic climbing over two or even three "adjunct predicates" without any hesitation.

- (9) a. Juan ordenó permitir comprarla
 Juan ordered to permit to buy it
 Juan ordered someone to permit
 someone to buy it
 - b. * Juan la ordenó permitir comprar

Since tree-local TAG can clearly handle such cases as (8b), it might be appropriate to say that the increased difficulty of clitic climbing in cases such as (9) is a reflection of the need to move to set-local TAG. However, the force of this argument is weakened if the same approach for clitic climbing out of two embedded clauses with the causatives (as in (7c)) can be applied in this case.

More interesting is the question of why the object-control verbs that allow clitic climbing in Spanish are limited to those that take dative, not accusative, controllers. I offer the tentative suggestion that the complements of accusative controllers such as *forzar* are not "defective" enough, since they take a preposition which takes a sentential complement, as in (10): (example from Bordelois (1988))

(10) *Se lo forzó a hablar her-DAT him-ACC he forced to speak 'He forced him to speak to her

For this argument to go though, of course, the a in (10) must be fundamentally from the a that follows some of the "adjunct predicate" trigger verbs which do allow clitic climbing. It also depends on a correlation between the accusative controller taking prepositional complements, while the dative controllers do not. I am currently unsure whether this correlation holds fully, and of course it leaves open the question of why such a correlation might exist.

However, it is very interesting to note that the same facts concerning which object-control verbs allow long movement appear to hold for long-distance scrambling in German. Bayer and Kornfilt (1989) suggest that this is because all German verbs with accusative controllers can take "prepositional adverbs", while those with dative controllers do not. Thus, if the Romance data cooperates, it appears promising that there can be a unified explanation for the similar behavior of the object-control verbs in Spanish and German.

References

- Abeillé, A. (1991) Une grammaire lexicalisée d'arbres adjoints pour le français, Doctoral dissertation, University Paris 7.
- Abeillé, A. (1993) Les Nouvelles Syntaxes: grammaires d'unification et analyse du français, Armand Colin, Paris.
- Abeillé, A., D. Godard, P. Miller, and I. A. Sag (1996) "French Bounded Dependencies."
- Aissen, and Perlmutter (1983) "Clause Reduction in Spanish," in *Studies in Relational Grammar*, University of Chicago Press.
- Bayer, J., and J. Kornfilt (1989) "Restructuring Effects in German," in Parametric Variation in Germanic and Romance: Proceedings from a DYNA Workshop. Center for Cognitive Science, University of Edinburgh.
- Bleam, T. (1994) "Clitic Climbing and The Power of Tree Adjoining Grammar," in Symposium on Tree Adjoining Grammar. To Appear.
- Bordelois, I. (1988) "Causatives: From Lexicon to Syntax," Natural Language and Linguistic Theory 6, 57-93.
- Burzio (1986) Italian Syntax, D. Reidel.
- Kayne, R. S. (1975) French Syntax, The MIT Press.
 Kulick, S. (1997) "Generalized Transformations and Restructuring in Romance," in Proceedings of the Eastern States Conference on Linguistics.
- Moore, J. (1991) Reduced Constructions in Spanish, Doctoral dissertation, University of Santa Cruz.
- Rambow, O. (1994) Formal and computational aspects of natural language syntax, Doctoral dissertation, University of Pennsylvania.
- Rizzi (1982) Issues in Italian Syntax, Foris Publications.
- Santorini, B., and C. Heycock (1988) "Remarks on Causatives and Passive," Technical Report MS-CIS-88-33, University of Pennsylvania.
- Strozer, J. R. (1977) Clitics in Spanish, Doctoral dissertation, UCLA.