

***Tough*-Movement and Nominalized Infinitives in French**

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1. Introduction

It has, at times, been claimed in the literature on Romance causatives that *Faire-par* embeds not a verbal infinitive but rather, a gerundive, verbal noun (for example by Guasti, 1990; Travis, 1992 and Folli and Harley, 2007). In this paper, we will show that if similar assumptions are made concerning the infinitive embedded under predicates of the *Tough*-class in French, a number of unexpected restrictions on French *Tough*-movement constructions (hereafter FTMs) discussed by Legendre (1986) follow naturally. We will also establish that, given their nominal character, FTM infinitives are closely related to retroactive gerunds in English.

2. Evidence for NP-movement

It has been known for some time (see e.g., Chomsky, 1982) that while English *Tough*-movement constructions license unbounded dependencies and parasitic gaps, as illustrated in (1a) and (1b), FTMs cannot contain more than one infinitive and do not support parasitic gaps, as can be seen in (1c) and (1d).

- (1) a. This book will be easy to tell the children to read ____.
b. This panel is impossible to swing ____ without unscrewing **PG** first.
c. *Ce livre serait difficile à empêcher ta sœur de lire ____.
this book would-be difficult to to-prevent your sister of to-read
d. *Ce climatiseur est emmerdant à nettoyer ____ sans démonter **PG** d'abord.
this air conditioner is annoying to to-clean without to-take-apart first

These properties of FTMs are expected under an A-movement analysis of the construction, an analysis that is, in fact, supported by a substantial body of evidence. First, passives and FTMs pattern alike with respect to object raising from VP idioms. For example, the idiomatic reading of *porter assistance* 'to lend assistance' is preserved in both constructions as can be seen in (2a) and (2b) but the idiomatic reading of *casser la croûte* 'to eat' is not as (2c) and (2d) illustrate.

- (2) a. Assistance sera portée aux victimes d'inondations.
assistance will-be carried to-the victims of flooding
'Help will be made available to flood victims.'
b. Assistance est difficile à porter aux victimes d'inondations.
'Help is difficult to make available to flood victims.'
c. La croûte a été cassée par les ouvriers à midi.
'The crust was broken by the workers at noon.'
*'A meal was eaten by the workers at noon.'

- (2) d. La croûte est difficile à casser à midi (quand on est serveur).
'The crust is difficult to break at noon (when you're a waiter).'
*'Lunch is difficult to eat at noon (when you're a waiter).'

Second, Kayne (1975) observes that predicate NPs cannot undergo raising in passives as seen in (3b) and that they behave in a similar fashion in FTMs, as (3d) illustrates.

- (3) a. Son fils deviendra ton meilleur ami.
his son will-become your best friend
b. *Ton meilleur ami sera devenu par son fils.
your best friend will-be become by his son
c. Il est facile de devenir ton meilleur ami.
'It's easy to become your best friend.'
d. *Ton meilleur ami est facile à devenir.
your best friend is easy to to-become

Third, while the impersonal French pronoun *on* is ambiguous between a referential first person plural reading and an existential reading when it is not a derived subject as in (4a), it can only be interpreted referentially when it undergoes object-to-subject raising in passives like (4b) and again, FTMs pattern with passives in this respect, as (4c) shows.

- (4) a. On a volé la moto de Cédric.
'We/someone stole Cedric's bike.'
b. On sera arrêté par la police.
'We/*someone will be arrested by the police.'
c. On sera impossible à satisfaire.
'We/*someone will be impossible to please.'

Fourth, as noted by Kayne (1975), in FTMs, *tous* 'all' can appear in the object position of the infinitive and be understood as modifying the surface subject of the *Tough*-predicate as shown in (5a). And this is, once again, also possible in passives as (5b) illustrates.

- (5) a. ?**Ces livres** ne seront pas faciles à mettre **tous** dans un seul carton.
these books will-be not easy to to-put all in one only box
b. ?**Ces livres** ont été mis **tous** dans un seul carton.
these books have been put all in one only box
'These books were all put in the same box.'

Fifth, as first pointed out in Kayne (1975), French verbs of the *obéir* 'to obey' class are exceptional in having passives in which the derived subject corresponds to a prepositional/dative complement as shown in (6a-b). Given this, it is remarkable that FTMs with *obéir* as their infinitive, such as the one in (7b), allow their objects to raise, just as they do in passives.

- (6) a. Les soldats ont obéi aux ordres/*les ordres du capitaine.
the soldiers have obeyed to-the orders/*the orders of-the captain

- (6) b. Les ordres du capitaine seront obéis.
 the orders of-the captain will-be obeyed
- (7) a. Il est difficile d'obéir *(à) de tels ordres.
 it is difficult of to-obey *(to) some such orders
 'It is difficult to obey such orders.'
 b. De tels ordres sont difficiles à obéir.
 some such orders are difficult to to-obey
 'Such orders are difficult to obey.'

Finally, as observed by Déprez (1990), NP movement in passives allows optional reconstruction in French, as shown in (8a), while *wh*-movement does not, as (8b) illustrates. This test, applied to FTMs by Canac Marquis (1996), again shows that they exhibit A-movement properties, as can be seen in (8c).

- (8) a. [Cette photo de lui-même_i/Jean_i] lui_i a été transmise.
 this picture of himself/Jean to-him has been passed-on
 b. *[Quelle promotion de Paul_j]_j est-ce que le directeur lui_i a offert [e]_j?
 which promotion of Paul Q-particle the boss to-him has given
 c. [Cette photo de lui-même_i/Jean_i] sera difficile à lui_i transmettre.
 this picture of himself/Jean will-be difficult to to-him to-pass-on

3. Some problems for the NP-movement analysis

Contrasts such as (9a) versus (9b), which illustrate the fact that argument nominals but not predicate nominals can undergo *Tough*-movement in French, suggest that the motivation for this type of object-to-subject raising is Case.

- (9) a. *[Ton meilleur ami]_i est facile à devenir [e]_i
 your best friend is easy to to-become
 b. [Ton meilleur ami]_i est facile à berner [e]_i.
 your best friend is easy to to-con

This, however, raises the question of how the (accusative) Case associated with the infinitival form of the verb *berner* 'to con' in (9b) is suspended since similar forms of the same verb retain their Case-assigning properties outside FTM, as (10) illustrates.

- (10) Cédric est enclin à berner ses amis.
 Cedric is prone to to-con his friends

A second potential problem for the NP-movement analysis of FTMs involves some troublesome breakdowns in the nice parallel that otherwise exists between verbs that can passivize and infinitives that partake in *Tough*-movement. This problem, uncovered by Legendre (1986), is illustrated by the paradigm in (11) through (14).

- (11) a. Le camion a été chargé de tomates.
the truck has been loaded of tomatoes
'The truck was loaded with tomatoes.'
- b. Il sera facile de charger le camion de tomates.
it will-be easy of to-load the truck of tomatoes
'It will be easy to load the truck with tomatoes.'
- c. *Le camion sera facile à charger de tomates.
the truck will-be easy to to-load of tomatoes
'The truck will be easy to load with tomatoes.'
- (12) a. Le sapin a été décoré de guirlandes.
the tree has been decorated of garlands
- b. Il sera facile de décorer le sapin de guirlandes.
it will-be easy of to-decorate the tree of garlands
- c. *Le sapin sera facile à décorer de guirlandes.
the tree will-be easy to to-decorate of garlands
- (13) a. Cette grosse tringle a été enfilée de petits anneaux.
this big rod has been slipped-onto of small rings
I.e. 'Someone or other slipped small rings onto this big rod.'
- b. Il n'est pas facile d'enfiler cette grosse tringle de petits anneaux.
it is not easy of-to-slip-onto this big rod of small rings
- c. *Cette grosse tringle n'est pas facile à enfiler de petits anneaux.
this big rod is not easy to to-slip-onto of small rings
- (14) a. Ta secrétaire a été chargée d'une course urgente.
your secretary has been entrusted of-an errand urgent
'Your secretary was entrusted with an urgent errand.'
- b. Il sera impossible de charger ta secrétaire de cette course urgente.
it will-be impossible of to-entrust your secretary of this errand urgent
- c. *Ta secrétaire sera impossible à charger de cette course urgente.
your secretary will-be impossible to to-entrust of this errand urgent

On Legendre's RG account, the ungrammaticality of the (c) examples results from a violation of a constraint on *Tough*-movement whereby only a nominal that bears a **2**-grammatical relation (i.e., direct object) on both the initial and the final strata can raise (strata being syntactic levels). For example *le camion* 'the truck' in (11c) is taken to head an initial LOCATIVE arc (due to the fact that it appears as a LOCATIVE in the related structure in (15)) and to subsequently head a final **2**-arc (due to the fact that it can undergo Personal Passive, as in (11a)). This nominal is therefore ineligible for *Tough*-movement, hence the illicitness of (11c).

- (15) Il a chargé les tomates sur le camion.
he has loaded the tomatoes onto the truck

This account, it seems to us, is cast into doubt when one considers the grammaticality of (16) since, by the same reasoning, *cette vieille péniche* 'this old barge' also undergoes LOCATIVE to 2 Advancement and should therefore be unable to undergo *Tough*-movement, contrary to fact.

- (16) Cette vieille péniche serait impossible à charger **avec** du minerai
this old barge would-be impossible to to-load with some ore
de plomb (sans la faire couler).
of lead without it to-make to-sink
'This old barge would be impossible to load with lead ore (without sinking it).'

What has gone unnoticed until now, however, is that the *Tough*-movement infinitives in (11) through (14) are ungrammatical only when they are followed by those complements that are disallowed in their corresponding argument-taking event nominals, as the paradigm in (17) through (19) illustrates.

- (17) a. Cette péniche serait impossible à charger ***de/avec** du minerai de plomb.
this barge would-be impossible to to-load *of/with some ore of lead
b. Le chargement de la péniche ***de/avec** du minerai de plomb va commencer.
'The loading of the barge with lead ore is going to begin.'
- (18) a. Cette tringle est difficile à enfiler ***de/avec des** petits anneaux
this rod is difficult to to-slip-onto *of/with some small rings
'It is difficult to slip small rings onto this rod.'
b. L'enfilage de cette tringle ***d'/avec des** anneaux prend deux minutes.
the-slipping of this rod *of/with those rings takes two minutes
'The process of slipping rings onto this rod takes two minutes.'
- (19) a. Notre sapin sera facile à décorer ***de/avec des** guirlandes.
our tree will-be easy to to-decorate *of/with some garlands
b. La décoration de notre sapin ***de/avec des** guirlandes a pris une heure.
'The decoration of our tree with garlands took two hours.'

What this paradigm suggests is that French *Tough*-movement infinitives have some nominal properties. A well-known difference between active verbal forms and nominal elements is that only the argument structure of the former requires a subject. As observed by Grimshaw (1990), while complex event nominals do take obligatory objects, they never require a subject and they function, in that respect, like passive verbal forms: In both cases the argument of a passive verb or a nominal that corresponds to the external argument of the active verbal base is suppressed in the argument structure and therefore not required when it comes to satisfying argument structure in the syntax. Thus, the argument corresponding to the external argument of an active verb may occur optionally in nominals and passives as a *by*-phrase (or a possessive in English) as illustrated in (20).

- (20) a. The (enemy's) destruction of the city (by the enemy).
b. The city was destroyed (by the enemy).

At least three pieces of evidence suggest that Romance *Tough*-movement infinitives are like nominals and passives (and unlike active verbs) in this respect. First, as observed in Montalbetti and Saito (1983), Spanish *Tough*-movement constructions can sometimes be morphologically identical to passive infinitivals. This is illustrated in (21). Although such *Tough*-passives are only found in somewhat stilted written styles (Mario Montalbetti, p.c.), the fact that they do exist establishes an intriguing parallel between Romance *Tough*-movement constructions and passives.

- (21) a. Esta vocal es facil de ser nasalizada.
this vowel is easy of to-be nasalized
'This vowel is easy to nasalize.'
b. Esta enfermedad es facil de ser curada.
this sickness is easy of to-be cured
'This illness is easy to cure.'

Second, as noted in Kayne (1975) and Canac Marquis (1996), the understood subject of French *Tough*-movement infinitives cannot be quantified by *tous* 'all', as shown in (22c). Since this type of modification is normally available in other infinitives, as (22a and b) illustrate, it appears that French *Tough*-movement infinitives do not have a canonical, syntactically realized (and phonologically null) subject, a conclusion that accords with the hypothesis that they are, in fact, nominal in nature and therefore have a suppressed external argument.

- (22) a. Je dirai à ces garçons de (tous) partir (tous) en Italie.
I will-say to these boys of (all) to-go (all) to Italy
b. Il serait facile de (tous) contenter (tous) Jean-Jacques.
it would-be easy of (all) to-please (all) Jean-Jacques
c. Paul serait facile à (*tous) contenter (*tous).
Paul would-be easy to (*all) to-please (*all)

Finally, while French *Tough*-movement constructions do not easily license *by*-phrases, we have been able to find examples like (23), which are judged grammatical by a significant number of native speakers and show that *by*-phrases are not, in fact, incompatible with French *Tough*-movement constructions, as has often been assumed in the literature (see e.g., Kayne (1975: 337 n.73)).

- (23) a. Bien que ce saut soit difficile à exécuter par un débutant ...
although this jump is difficult to to-execute by a beginner...
b. Ces abstractions ne sont faciles à visualiser que par les grands peintres.
these abstractions are easy to to-visualize only by the great painters

4. FTM infinitivals as verbal nouns

The hypothesis that French *Tough*-movement infinitivals are verbal nouns immediately provides an answer to the question of why French *Tough*-movement constructions have

derived subjects, namely because gerundive, verbal nouns, like regular nominals, do not have Case marking abilities hence their direct object is attracted by the nominative inducing tensed T. There is no Minimality or Minimal Link Condition violation because there is no PRO subject of the verbal noun as shown in (22c), hence we are dealing with a movement akin to that found in passives, the only difference being that passive past participles are verbal while French *Tough*-movement infinitivals are nominal. It thus appears that in French, what is commonly referred to as an infinitive suffix (e.g., *-er*, *-re*, *-ir*, etc.) can sometimes be nominalizing as was proposed by Guasti (1990) in the context of *Faire-par* causatives in Italian. If a nominalizing suffix needs to attach to a lexical verbal root for it to acquire nominal properties then we predict that untensed perfective compounds of the form *avoir* 'have' + past participle should never occur in FTMs. This prediction is indeed correct as the paradigm in (24) illustrates. *Tough*-movement is impossible in (24c) because non-passive past participles like *battu* 'beaten' are verbs that bear an accusative Case feature, hence the raising of their direct object to the checking domain of tensed T is prohibited by the Last Resort Condition.

- (24) a. Aux Etats-Unis, ceci équivaut à **avoir obtenu** une Maîtrise.
at-the United States this amounts to to-have obtained a Master's
'In this US, this is equivalent to having obtained a Master's degree.'
- b. Il aurait été impossible d'**avoir battu** ce record
it would-have been impossible of to-have beaten this record
sur une piste mouillée.
on a track wet
'It would have been impossible to beat this record on a wet track.'
- c. *Ce record aurait été impossible à **avoir battu**
this record would-have been impossible to to-have beaten
sur une piste mouillée.
on a track wet

Still, some data appear to indicate that French *Tough*-movement infinitives behave more like verbs than nouns. Chief among those is the fact that they can host pronominal clitics as (25) shows.

- (25) Cette bague serait difficile à lui voler sans qu'elle s'en aperçoive.
this ring would-be difficult to to-her to-steal without that-she of-it notice
'This ring would be difficult to steal from her without her noticing.'

However, as noted in Haïk (1985), who attributes the observation to Luigi Rizzi, there exists an unexpected difference between subcategorized and non-subcategorized clitics: Only subcategorized clitics can attach to *Tough*-movement infinitives as the contrast between (25) and (26b) shows.

- (26) a. Il sera facile d'y obtenir ce manuscrit.
it will-be easy of-there to-obtain this manuscript
'It will be easy to obtain this manuscript there.'

- (26) b. *Ce manuscrit sera facile à y obtenir.
'This manuscript will be easy to obtain there.'

We add to Haïk's paradigm the case of affected dative clitics, which cannot attach to *Tough*-movement infinitives either as shown in (27). Such dative clitics are not subcategorized and offer a nice contrast with their subcategorized counterpart in (25).

- (27) a. Il serait facile de (leur) endommager ces toiles.
it would-be easy of (to-them) to-damage these paintings
'It would be easy to damage these paintings (on them).'
b. Ces toiles seraient faciles à (*leur) endommager.
'These paintings would be easy to damage (on them).'

A possible explanation for such contrasts is that the subcategorized dative clitic in (25) is an agreement marker affixed to the gerundive, verbal noun in the lexicon rather than an independent functional head that amalgamates with a verb in the course of the syntactic derivation. On a movement analysis of Clitic Climbing in restructuring contexts we then expect clitics subcategorized by *Tough*-movement infinitives in say, Italian, to be unable to climb to the tensed verb. This is, in fact, what happens, as shown in (28).

- (28) *Il libro gli fu difficile da offrire.
the book to-him was difficult of to-give
'The book was difficult to give to him (as a present).'
(example attributed to Luigi Rizzi by Haïk (1985:408))

Also consistent with the view that French *Tough*-movement infinitives are gerundive, verbal nouns is the fact that, unlike verbs, they cannot co-occur with adverbs of quantification such as *always*, as illustrated by the contrast in (29). Further, as shown in (30b), French *Tough*-movement infinitives are incompatible with floated quantifiers that correspond to their raised object, again contrasting with their verbal counterparts, as illustrated by the passive in (30a).

- (29) a. Il est impossible de **toujours** gagner cette course.
it is impossible of always to-win this race
b. *Cette course est impossible à **toujours** gagner.
this race is impossible to always to-win

- (30) a. Ces livres ont été **tous** mis dans un seul tiroir.
these books have been all put in a single drawer
b. *?Ces livres seraient faciles à **tous** mettre dans un seul tiroir.
these books would-be easy to all to-put in a single drawer
(example from Kayne (1975:48, n.55))

French *Tough*-movement infinitives are, however, compatible with manner adverbs, as (31a) shows, but this cannot be used as an argument for their verbal status since event nominals can be modified by such adverbs as well, as shown in (31b).

- (31) a. Cette manœuvre est impossible à exécuter lentement.
this maneuver is impossible to to-execute slowly
b. Le nettoyage du canon lentement est nécessaire
the scrubbing of-the barrel slowly is necessary
(afin d'enlever les résidus de poudre.)
in-order of-to-remove the residue of powder

5. FTM infinitivals and English retroactive gerunds

Huddleston (1971), Hantson (1984), and Clark (1985) discuss a type of English gerunds known as Retroactive Gerunds whose properties are strikingly similar to those displayed by FTMs. Retroactive Gerunds (RGs) occur in sentences like (32).

- (32) a. Your leg needs amputating.
b. Your book deserves translating into several languages.

As noted by Hantson (1984), Retroactive Gerunds are often replaceable by a passive infinitive, as (33) illustrates.¹ We thus have a first intriguing parallel between Retroactive Gerunds and Romance *Tough*-movement since, as shown in (21), the infinitive in Spanish *Tough*-movement constructions can also sometimes be replaced by a passive form.

- (33) a. Your leg needs to be amputated.
b. Your book deserves to be translated into several languages.

Just like FTMs, Retroactive Gerunds are selected by a small class of predicates. Predicates that can appear in FTMs include *facile* 'easy', *difficile* 'difficult', *emmerdant* 'tough', *impossible* 'impossible' but not, for example, *possible* 'possible', as shown in (34). Predicates that select Retroactive Gerunds, called "predicates of requirement" by Clark (1985), include *need*, *want*, *deserve*, *merit*, *require*, *bear* but not, for example, *escape*, as shown in (35).²

- (34) a. Il est maintenant possible de traiter ces cancers.
'It is now possible to treat such cancers.'

¹ In some dialects, one finds past participles in the place of RGs, mostly under the predicate *need* (i). The question of whether or not these are elliptical passives is beyond the scope of this paper.

- (i) a. Your hair needs cut.
b. This bridge needs worked on.
c. *Your book deserves translated into several languages.

² RGs can also appear with a determiner (i), in which case their status as nominal gerunds is obvious. Such RGs have been called "retroactive nominals" by Clark (1985). They are selected by exactly the same class of predicates as determinerless RGs and display all of the same properties discussed in the text.

- (i) a. John could use a good talking to (by a competent psychiatrist).
b. These ideas merit some working on.
c. This problem bears a good deal of thinking about.

(34) b. *Ces cancers sont maintenant possibles à traiter.
these cancers are now possible to to-treat

(35) *The prisoner escaped torturing.

The similarities do not end there, however. Just like FTMs, Retroactive Gerunds do not license unbounded dependencies as shown in (36a), nor do they license parasitic gaps, as shown in (36b), which suggests that they are not a case of *wh*-movement either. In this respect, Retroactive Gerunds contrast sharply with English-type *Tough*-movement induced by *worth*, as illustrated in (37).

(36) a. *His leg needs persuading that surgeon to amputate.
b. *This book does not need praising ___ without reading PG.

(37) a. His leg is worth persuading that surgeon to amputate.
b. This book is not worth praising ___ without reading PG.

Further, Retroactive Gerunds and French *Tough*-movement infinitivals present striking similarities when it comes to the syntactic realization of the source of the event they denote as a *by*-phrase. This can be seen by comparing the examples in (38) with those in (23).

(38) a. That point needs stressing by any linguist.
b. This problem bears thinking about by everybody in the class.
(examples taken from Hantson (1985))

In fact, Retroactive Gerunds, just like French *Tough*-movement infinitivals, are, in many ways, parallel to passives. For example, neither Retroactive Gerunds nor French *Tough*-movement infinitivals can occur with non-passivizable verbs, as the paradigm in (39) illustrates, and Retroactive Gerunds that involve "preposition stranding" are grammatical only with those prepositions that license passive movement, as shown by the contrast between (40) and (41).³

(39) a. *The required credentials were had by John.
b. *These credentials need having (by all applicants).

³ Hantson (1984:103, n.3) explicitly objects to Huddleston's (1971:153-154) analysis of RGs as involving raising on grounds that RGs are impossible with idiom chunks. He gives the following examples:

- (i) *Headway needs making.
- (ii) *? Tabs need keeping on his operation.

It is not clear to us, however, that all idioms are thus excluded from the construction. As is often the case, "breaking up" idioms via raising leads to subtle and variable (along dialectal/idiolectal lines) judgments. Nevertheless, it seems to us that the example in (iii) is much more acceptable, thereby casting doubt on Hantson's argument as a whole.

- (iii) ? They didn't seem at all concerned that justice needed rendering in this case.

- (39) c. Il est difficile d'avoir les qualifications requises.
'It is difficult to have the requisite qualifications.'
d. *Les qualifications requises sont difficiles à avoir.
the qualifications requisite are difficult to to-have
- (40) a. This plan deserves thinking about.
b. This plan was carefully thought about (by the committee).
c. These black marks on the wall need painting over.
d. These black marks were painted over.
- (41) a. *Washington D.C. was gone to (by most of the students).
b. *Washington D.C. requires going to (to obtain this type of clearance).
c. *This soaking rain was worked after (by all the farmers).
d. *This soaking rain definitely needs working after.

In view of these facts, we would like to propose that FTMs and Retroactive Gerunds involve the lexical selection of gerundive, verbal nouns by a restricted class of predicates. These have the argument structure of nominals and cannot be associated with a Case feature. As a result, their object must be Case-checked by the closest available Case bearing element, which can be tensed T, as in (42), a higher V associated with objective Case, as in (43), or even French prepositional conjunctions such as *avec* 'with', as in (44).

- (42) a. The roast needs carving.
b. Ce gigot d'agneau est difficile à découper.
'This leg of lamb is difficult to carve.'
- (43) a. She found the proposal to merit thinking about.
b. Elle a trouvé Jérôme difficile à convaincre.
she has found Jérôme difficult to to-convince
- (44) Avec mes amis si difficiles à contenter, ma vie n'est pas drôle.
with my friends so difficult to to-please my life is not fun

References

- Canac Marquis, Réjean. 1996. The distribution of *à* and *de* in *tough* constructions in French. In *Grammatical theory and Romance languages*, ed. by Karen Zagana, 35-46. Amsterdam: John Benjamins.
- Chomsky, Noam. 1982. *Some concepts and consequences of the theory of government and binding*. Cambridge, Mass.: MIT Press.
- Clark, Robin. 1985. *Boundaries and the treatment of control*. Ph.D. Dissertation, UCLA.
- Déprez, Viviane. 1990. *On the typology of syntactic positions and the nature of chains*. Ph.D. Dissertation, MIT.
- Folli, Raffaella and Heidi Harley. 2007. Causation, obligation, and argument structure: On the nature of little *v*. *Linguistic Inquiry* 38: 197-238.

- Grimshaw, Jane. 1990. *Argument structure*. Cambridge, Mass.: MIT Press.
- Guasti, Maria Teresa. 1990. The 'faire-par' construction in Romance and in Germanic. In *Proceedings of the Ninth West Coast Conference on Formal Linguistics*, ed. by Aaron Halpern, 205-218. Stanford, Calif.: CSLI Publications.
- Haik, Isabelle. 1985. *The syntax of operators*. Ph.D. Dissertation, MIT.
- Hantson, André. 1984. Towards an analysis of retroactive gerunds. In *Sentential complementation*, ed. by Wim de Geest and Yvan Putseys, 95-103. Dordrecht: Foris.
- Huddleston, Rodney. 1971. *The sentence in written English*. London: Cambridge University Press.
- Kayne, Richard. 1975. *French syntax: The transformational cycle*. Cambridge, Mass.: MIT Press.
- Legendre, Géraldine. 1986. Object raising in French: A unified account. *Natural Language and Linguistic Theory* 4:137-183.
- Montalbetti, Mario and Mamoru Saito. 1983. On certain (tough) differences between Spanish and English. In *Proceedings of the Thirteenth Annual Meeting of the North East Linguistics Conference*, ed. by Peter Sells and Charles Jones, 191-198. Amherst: Mass.: GLSA publications.
- Travis, Lisa. 1992. Inner aspect and the structure of VP. *Cahiers Linguistiques de l'UQAM* 1:130-146.

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