

SYNTACTIC DIFFUSION IN SPANISH AND PORTUGUESE INFINITIVAL COMPLEMENTS

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0. *Introduction*

Two of the dominant models of syntactic change at the present time are the parameters-based model (Lightfoot 1991, 1999, Kroch 1989, 1994, van Kemenade & Vincent 1997) and a competing model that is based on grammaticalization (Heine et al. 1991, Traugott & Heine 1991, Hopper & Traugott 1993, Ramat & Hopper 1998). However, the parameters-based model is not actually a theory of syntactic change, but rather it deals with the possible parametric differences between languages (or stages of a language). Syntactic ‘change’ is simply the result of the adoption of new parameter settings by speakers of a language. At least at the level of the individual, the shift between grammars is quite abrupt, as the parametric setting is changed between Grammar 1 to Grammar 2.

The grammaticalization model differs markedly in its approach. In this model, there is much more emphasis on the mechanisms and processes by which constructions evolve over time. Syntactic change is often seen as being the result of analogical extension from one lexical item to another or between related ‘surface-level’ constructions. In addition, the syntactic component is usually not seen as being autonomous from other semantic and pragmatic factors in the language, which often motivate change, and syntactic shifts are more on ‘the surface’, rather than representing fairly abstract changes in the underlying grammar.

In this study, we will consider the historical development of three constructions relating to infinitival complements in Spanish and Portuguese – clitic climbing (1a), subject raising (1b), and the causative construction (1c) – and see how they relate to basic questions regarding syntactic change.

- (1) a. *María*_i *quería* [PRO *comprar* ____i]
 Mary **it** wanted to buy
 “Mary wanted to buy it.”
- b. *Juan*_i *parece* [____i *estar enfermo*]
 John seems to-be sick
 “John seems to be sick.”
- c. *lalle*_i *dejaron* [____i *comprar el helado*]
 her let-3PL to-buy the ice-cream
 “They let her buy the ice cream.”

These three constructions have been the focus of research that I have carried out over the past decade (Davies 1992, 1995a, 1995b, 1996, 1997a, 1997b, 1997c, 1998, 1999a, 1999b). While these are not the only studies of diachronic change and dialectal variation with these constructions in Spanish and Portuguese, they are the only ones to rely on hundreds (and often thousands) of examples from a wide range of texts from Old Spanish and Portuguese to the modern time.¹

In the previous computer corpus-based studies, however, the focus has been on the data themselves. In this study, on the other hand, I will examine how the data from these three constructions shed light on more basic issues of syntactic change: the rate of change, the diffusion of syntactic change through a construction (lexically and otherwise), and the way in which new constructions emerge via intermediate, ambiguous constructions. I will demonstrate that although the changes can be accounted for in both models of diachronic syntax, depending on the precise methodological assumptions that we make, it is the grammaticalization model that most naturally and easily predicts and accounts for the syntactic shifts found in the three infinitival constructions in Spanish and Portuguese.

Although the focus of this study concerns a model of diachronic syntax that can correctly account for the data, this model is based on a rather robust set of corpora for older and modern Spanish and Portuguese, many of which are the largest and most comprehensive in existence. The corpora comprise over 5,300,000 words in 118 historical Spanish texts from the 1200s to the 1800s, more than 2,800,000 words in 122 historical Portuguese texts from the 1300s to the 1800s, 42,000,000 words of Modern Spanish (both spoken and written), and over 38,000,000 words of Modern Portuguese (both spoken and written; see Appendix 1 for more information on the specific texts.) Using

¹ See Wanner (1982) and Cano Aguilar (1989) for earlier Spanish, and Finneman (1982) and Myhill (1988) for modern.

these extensive corpora, we are able to map out in precise terms the historical shifts and the current state of dialectal and register variation with the three constructions. We can hopefully relate this to the more general issues regarding the two models of diachronic syntax.

1. *Gradual shifts*

As mentioned, the two models of syntax differ markedly on the issue of gradual vs. abrupt syntactic change. The parameters-based model suggests that at least at the level of the individual, there is an abrupt shift from Grammar 1 to Grammar 2. The grammaticalization model, on the other hand, predicts gradual change as the new feature spreads via analogical extension throughout the grammar (Traugott & Heine 1991:35-37). As we will see, it is the grammaticalization model that best accounts for the diachronic shifts with the causatives and clitic climbing.

1.1 *Spanish clitic climbing*

The first piece of evidence for very gradual shifts comes from the Spanish clitic climbing construction (Davies 1995a, 1996). The following chart, which is based on more than 12,500 tokens in the corpus texts, shows that there was a shift away from the norm of initial (2a) and medial (2b) placement towards increasing final placement (2c) in later centuries.

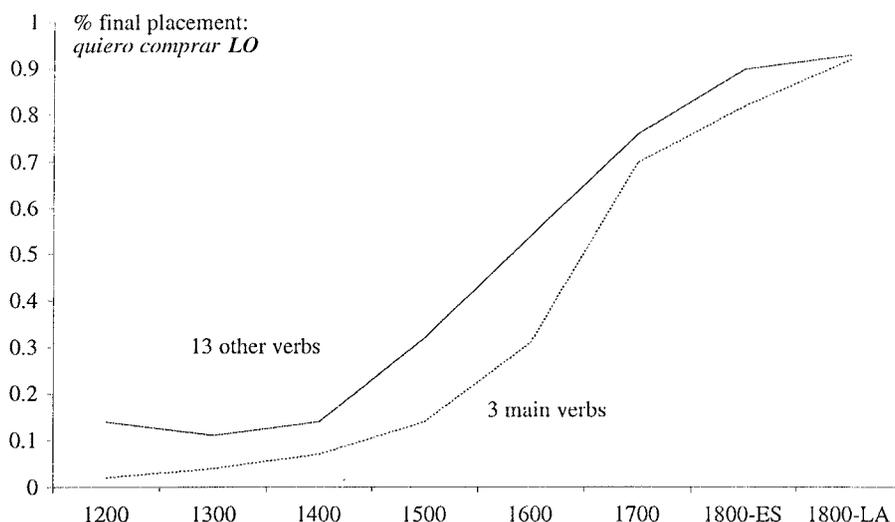


Fig. 1. *Percent of final placement (quiere comprarlo), 1200s-1800s*

- (4) a. *Deus me lhe leixe fazer tal serviço*
 God me to-him might-let-to-do such service
 "...that God might let me do such a service for him."
 (*Demanda* 221:3 [c1400]) [cl+cl]
- b. *E que podias fazer senão deixá-lo enganar-te*
 andwhat could-2SG to-do except to-let-him-ACC to deceive you
 "And what could you do except let him deceive you?"
 (*Pobres* 126:3) [cl-cl]
- (5) a. *como ja vi espantar alguns*
 since already saw-1SG to-become-frightened some
 "...since I have already seen some become frightened."
 (*Henriques* 87:2 [1500s]) [-se]
- b. *o via sentar-se perto dos arrais*
 him-ACC saw-3SG to-sit-REFL near of-the edge
 "She saw him sit down near the edge." (*Cegos* 116:2) [+se]
- (6) a. *nom deixes morrer tam fremeosa creatura*
 not let-2SG to-die such beautiful creature
 "Don't let such a beautiful creature as this die"
 (*Demanda* 374:8 [c1400]) [VSO]
- b. *[tem] dexadoos negros atuarem a vontade*
 have-3PL let the blacks to-act at will
 "They've let the blacks do as they want."
 (*BrazFal* 2:53:1480) [SVO]

Again, the syntactic shifts have taken place quite gradually. For example, the Spanish examples in (7a to 10a) below give examples of the innovative features for case marking, clitic placement, the use of *se*, and word order that are present already in much older stages of Spanish, while in Modern Spanish (7b to 10b) the older features are still found. This indicates that the changes were already underway several centuries ago, but after 500 to 800 years the construction has still not completely changed to the new features. This may present some problems for the parameters-based model, in which syntactic 'doublets' such as these should disappear within a short period of time (Kroch 1994:185, Lightfoot 1999:99).

- (7) a. *nunca los dexa tomar esfuerço*
 never them-ACC let-3SG to-take effort
 "He never lets them make the effort." (*Castigos* 57r [1292])

- b. *tratamos de hacerles sentir un poco de angustia*
 tried-1PL to-make-them-DAT to-feel a little of shame
 “We tried to make them feel a little bad.” (Caracas 110:1)
- (8) a. *dexame mirarte toda*
 let-me to-look-you all
 “Let me look you over.” (*Celestina* 249:1 [1499])
- b. *no me las dejan ver*
 not me them let-3PL to-see
 “They don’t let me see them.” (San Juan M2:53)
- (9) a. *mi miseria les hacía olvidarse de sí*
 my misery them madeto-forget-REFL of themselves
 “My misery made them forget about themselves.”
 (*Crotalón* 269 [1553])
- b. *eso me hizo sentir incomodísimo*
 that me made-3SG to-feel very-uncomfortable
 “That made me feel really uncomfortable.” (San Juan M19:338)
- (10) a. *la cobdicia faze a omne pedir*
 the coveting makes DOman to-ask
 “Coveting makes a man go begging.” (*Cient* 58:2 [1280])
- b. *que hacen sentir a la gente que están vivos*
 that make-3PL to-feel DO thepeople that are alive
 “...which makes people feel like they’re alive.” (Caracas 326:5)

1.3 Accounting for gradual change

It might appear, then, that a model of abrupt, parametric shifts cannot account for the very gradual shifts seen in the clitic climbing and causatives. In response, however, some researchers argue that although there clearly is gradual change in the ‘social’ grammar as the new features spread from one speaker to another in the speech community, at the level of the *individual speaker* there is indeed an abrupt, parametric shift from Grammar 1 to Grammar 2. The gradualness seen in the speech community is somewhat of an illusion, masking the sudden, parametric shifts in individual grammars (Lightfoot 1999:77-87).

Yet even here, the data present some problems for this analysis. The following examples from both Spanish and Portuguese are cases in which the same author or text uses both the conservative (11a to 14a) and the innovative features (11b to 14b) with causatives, in terms of case marking (11), clitic placement (12), the use of *se* (13), and word order (14).

- (11) a. *que lhes fez quebrantar os mādados de seus senhores*
 that them-DAT made-3SG break the orders of their masters
 "...who made them disobey their masters' order."
 (*Cron1344* 117:3)
- b. *que o fez leixar a fe de Jhesu Christo*
 that him-ACC made-3SG to-abandon the faith of Jesus Christ
 "...which made him abandon the faith of J.C." (*Cron1344* 198:1)
- (12) a. *¡Gracias a Dios, que te me dexó ver!*
 thanks to God that you me let-3SG to-see
 "Thanks be to God, who let me see you!" (*Celestina* 60:10)
- b. *déxame mirarte toda, a mi voluntad, que me huelgo*
 let-me to-look-you all at my will that myself please-1SG
 "Let me look you over at will so I can be satisfied."
 (*Celestina* 249:1)
- (13) a. *no vos vea apartar de mi compañía*
 not you-PL might-see to-leave from my company
 "...to not see you go away from my presence" (*Amadís* 1101:4)
- b. *que le viera adelantarse de los suyos por*
 that him might-see step-forward-REFL from the his to
se con él encontrar
 himself with him to-meet
 "...who had seen him step forward from among the others to
 meet him." (*Amadís* 1099:1)
- (14) a. *luego el hermitaño abrió las puertas, e fizo entrar a todos*
 later the hermit opened the doors and made enter DOall
 "Then the hermit opened the doors and had everyone come in."
 (*Corbacho* 298:5)
- b. *que con miedos e amenazas fazen a las cuytadas errar*
 that with fears and threats make-3PL DO the careful to-err
 "...who with threats and intimidation make [even] the careful
 ones go astray." (*Corbacho* 262:12)

Such variation is also found in Modern Spanish. One of the main findings of Finneman (1982), which he supports by a large number of interviews with native speakers, is that individual speakers readily accept both the conservative and innovative forms with the four causative phenomena mentioned.

Once again, however, the argument is that the cases of variation, even now at the level of the individual grammar, are mainly an illusion and that

there are still two discrete grammars, in addition to abrupt, parametric shifts from Grammar 1 to Grammar 2 for a given speaker. To account for the variation, Lightfoot and others argue that it is simply a manifestation of ‘internalized diglossia’. The individual speaker possesses and uses two different grammars, one with the older parametric setting, and one with the newer setting, making them functionally bilingual as far as the two grammars are concerned (Kroch 1989, 1994, Lightfoot 1991:138, 1999:92-95).

The problem for the parameters-based model is one of falsifiability. If neither the evidence for gradual change in the speech community, nor evidence of variation between two grammars at the level of the individual can provide evidence against the theory, what possible evidence can researchers find, either in historical texts or in interviews with native speakers of the modern language, that will disprove the theory? Unless the theory can stipulate what kind of evidence this would be, one must accept the theory of abrupt, parametric shifts more on the level of faith rather than on the level of empirical evidence.

2. *Syntactic diffusion*

Another issue is whether or not syntactic change spreads or diffuses through the grammar (for example from one lexical item to another), as is predicted in the grammaticalization model, or whether it occurs with all of the relevant items at the same time. This is an issue that has appeared a number of times before. Lightfoot has argued, for example, that parametric shifts with modals in English occurred with all of the modals at the same time (1991:141-154), while his data have been vigorously disputed by other researchers (e.g. Warner 1990). Our data suggest that, at least in the case of Spanish and Portuguese causatives and subject raising, the changes did not occur with all of the relevant lexical items at the same time and that a model of syntactic diffusion can best account for the data.

2.1 *Spanish and Portuguese causatives*

The first evidence for syntactic diffusion comes from diachronic shifts with Spanish causatives and related structures. The shift from ‘uniclausal’ or ‘reduced’ structures to ‘biclausal’ or ‘non-reduced’ structures did not occur with all of the relevant main verbs at the same time. Rather, it occurred with the verbs of perception (*ver*, *oír/ouvir*, etc.) before it did with the permissive verb *dejar/deixar*, and only at the end of the process has it reached the ‘core’ causative *hacer/fazer*.

The historical evidence for this diffusion comes from Davies (1995a, 1996), in which I present evidence for each of the surface features (case marking, clitic placement, the use of *se*, and word order), showing that the shifts occurred with verbs of perception before they did with *dejar/deixar*, and that in many cases the shifts are still incomplete in Modern Spanish (and to a lesser degree in Portuguese) with *hacer/fazer*. To take the use of *se* as an example, we see in the following examples from Spanish that *se* already appeared with the verb *ver* by the 1400s (15a), then spread to *dejar* by the 1700s (15b) (quite common in ModSp), but it does not occur with *hacer* until the 1900s (15c), where it is still unacceptable for many speakers.

- (15) a. *muchos veo quexarse y a mi ver sin causa*
 many see-1SG to-complain-RF and to my view without reason
 “I see lots of people complain for no reason.” (*Varones* 87 [1486])
- b. *que la dexase ausentarse de la corte*
 that her might-let-3SG to-be-absent-REFL from the court
 “...that he let her leave the court.” (*Rodrigo* 281 [1793])
- c. *que los hacen ponerse así a la mayoría*
 that them make-3PL to-act-REFL that-way to the majority
 “...that they let them act that way towards everyone else.”
 (Santiago M40:207)

2.2 Spanish and Portuguese subject raising

Additional support for syntactic diffusion comes from diachronic Spanish and Portuguese subject raising. In Modern Spanish and Portuguese, subject raising can occur with a wide range of main verbs.

- (16) *A Mariaparece [estar doente/saber o nome /o ter ofendido]*
 Mary seems [to-be sick / know the name/him to-have offended
 “Mary seems [to be sick/to know the name/to have offended him].”

In the earliest stages of the construction in Spanish and Portuguese, however, there was a much more narrow range of main verbs, and in the earliest stages it occurred primarily with the verb *ser*, as in these examples from Spanish and Portuguese.

- (17) a. *nin parece ser synón cosa fea e espantable*
 nor seems to-be except thing ugly and scary
 “It just seems to be an ugly and scary thing.”
 (*Corbacho* 329 [1438])

- b. *que lhe nom pareceria seer mui razoado*
 that to-him not seems to-be very reasonable
 "...that it didn't seem very reasonable to him."
 (Nuno 41[c1431])

For example, in Spanish *ser* was the main verb with subject raising in 100% of the examples in the 1200s, 70% in the 1300s, 37%, in the 1400s, and 27% in the 1500s. By the 1800s, it accounted for only 2% of all cases (Davies 1997b). Likewise, in Portuguese *ser* was the main verb in 100% of the examples in the 1300s, but only 33-48% in the 1400s-1600s, and had decreased to 2% of all cases in the 1800s (Davies 1999b).

In other words, subject raising started first with certain verbs, and only gradually spread to the range of verbs that allow it today. Why was this? In the earliest stages, *parecer* occurred quite commonly with adjectives (18a). The semantic or pragmatic difference between *parecer*+ADJ and *parecer*+*ser*+ADJ (18b) was slight, and therefore this is where subject raising started. Once it had become possible with *ser*, it then spread to other 'semantically simple' verbs such as *estar* and *haber/haver*, and then to the full range of verbs (18c), as in these examples from Portuguese.

- (18) a. *na ymsola estaua huu castell que pareçia fremoso*
 on-theisland was a castle that seemed beautiful
 "On the island there was a castle that looked quite beautiful."
 (Arimatea 240 [1300s])
- b. *a fortuna lhes parece seer contraira*
 the fortune to-them seems to-be unkind
 "Fate seems to be unkind to them." (Conselheiro 362 [1430s])
- c. *uma dessas estátuas que parecem orar sobre os sepulcros*
 one of-those statues that seem to-pray over the graves
 "one of those statues that seem to pray over the graves"
 (Monasticón 152 [1844])

In addition to the diffusion from one lexical item to another, there has also been diffusion based on the person of the subject, whether first, second, or third. In English, subject raising can occur with all types of subjects.

- (19) *he / they / you / I seem(s) to have offended her*

This has not been the case in Spanish and Portuguese, however. There are no cases of subject raising with first- and second-person subjects before the 1900s, and there are only six tokens in the corpus of Modern Spanish (20a) and five tokens in the 25,000,000 word corpus of Modern Portuguese (20b).

- (20) a. *Únicamente ellos y yo parecíamos haber quedado en la casa*
 just they and I seemed to-have stayed at the house
 “Just they and I seemed to have stayed at home.”
 (México 2: Tario: 128)
- b. *que parecemos nunca saber quantas coisas existem*
 that we seem never to know how-many things exist
 “...that we seem to never know how many things there are”
 (*Gazeta do Povo* 1997.03.25)

If there is a shift towards subject raising with all subjects (as in English), this shift did not start until quite recently. Therefore we have seen that subject raising did not increase equally with all subjects, but rather there has been diffusion from third-person subjects to first- and second-persons, which may continue into the future.

In summary, the grammaticalization model predicts that new constructions and features enter into the grammar gradually and spread from one lexical item or environment to another. The parameters model suggests that all of the relevant lexical items (e.g. the main verb with the causatives, or the embedded verbs with subject raising) or other features (e.g. subject number with subject raising) would undergo the same parametric shift at the same time. Therefore the data from at least the Spanish and Portuguese causatives and subject raising tend to support the grammaticalization model of diffusion.

3. *The role of intermediate, functionally-ambiguous constructions*

The grammaticalization model hypothesizes that there are ‘clines’ or gradient differences between constructions, and that new constructions gradually arise from pre-existing ones (e.g. Hopper & Traugott 1993:32-63). In the parameters-based model, on the other hand, there are no necessary ‘construction chains’, and the language can quickly and easily change from any Grammar 1 to any Grammar 2 so long as they both obey the constraints of Universal Grammar and there is new input data to lead speakers to set the parameters for Grammar 2 (Lightfoot 1979:4-21). In this last section, we will consider some evidence that shows the importance of intermediate, ambiguous constructions that help to facilitate the shift from the older to the newer con-

structions. The evidence for these intermediate, ambiguous constructions will come from Spanish and Portuguese causatives and subject raising.

3.1 *Spanish and Portuguese causatives*

As discussed in Davies (1992:223-227), there was a morphological merger in Late Latin between the active and passive infinitives of most verbs, which led to a situation in Old Spanish and Old Portuguese in which a very high percentage (60-80%) of all causatives lacked a subject (21a). This was true for Old French and Old Italian as well (Pearce 1990:205-206). Sentences with explicit subjects were possible (21b), but they were not the norm (see Davies 1995a, 1996). In Modern Spanish and Portuguese, the situation is reversed. While there are still cases of causatives without explicit subjects in the embedded clause (22a), the majority of cases do have an explicit subject (22b), as in these Portuguese examples:

- (21) a. *fez coroar seu filho Titus emperador*
 made-3SG to-crown his son Titus emperor
 “He had his son Titus crowned emperor.” (*Vespesiano* 8 [1300s])
- b. *fez perecer a su muy famosa cavallaria*
 made-3SG to-perish DO his very famous horsemen
 “He made his famous horsemen perish.”
 (*Cron1344* 2:290 [c1344])
- (22) a. *O próprio Deus, acrescentou, é quem faz erguer o edifício*
 the himself God added-3SG is who makes to-build the building
 “God himself, he added, is who had this building built.”
 (*Público* 97-10-14)
- b. *A ideia do Huguinho casado quase fez rir Leonor*
 the idea of Hugo married almost makes to-laugh Leonor
 “The idea of little Hugo married almost made Leonor laugh.”
 (*Corça* 112)

Therefore, there has been a diachronic increase in the percentage of sentences containing an explicit subject in the embedded clause, which I have argued is the main motivation for a number of functionally-motivated shifts in case marking, clitic placement, the use of *se*, and word order (Davies 1992).

What is interesting, however, is the way in which lower clause subjects began to appear more frequently in Old Spanish and Portuguese. In addition to object noun phrases, which were the norm in Old Spanish and Portuguese (23a), and subject noun phrases, which are the norm in Modern Spanish and

Portuguese (23d), there are also constructions in which the noun phrase can be interpreted as either object or subject, as in the Spanish examples (23b-c).

- (23) a. *fizo* *fazer* *un gran palácio*
 made-3SG to-build a great palace
 “He had the castle built.” (*Engaños* 8 [1253]) [OBJ]
- b. *fizo* *ayuntar* *todos los rreys*
 made-3SG to-bring/come-together all the kings
 “He had all of the kings brought together / come together.”
 (*Sumas* 67v [1300-50]) [OBJ/SUBJ]
- c. *conuidaua* *los e* *fazie* *los assentar*
 invited-3SG them and made-3SG them to-sit/seat
 “He invited them in and had them seated / sit down.”
 (*GenEst* 29v [1272-80]) [OBJ/SUBJ]
- d. *que hace a la paciente olvidarse de sí misma*
 that makes DOthe patient to-forget-REFL of herself
 “...which makes the patient forget about herself”
 (*Tiempo* 130) [SUBJ]

It is significant that these intermediate constructions (23b-c) were extremely common in Old Spanish and Portuguese – at a much higher rate than they are found in the modern stages of the language. We might hypothesize that in the older stages of the language, as the language was beginning to move towards increased lower clause subjects with causatives, these intermediate constructions, which were ambiguous in terms of the role of the noun phrase, served as a type of ‘syntactic bridge’ between the older and the newer construction.

3.2 Spanish and Portuguese subject raising

An even clearer case of ambiguity serving as a ‘syntactic bridge’ is with Spanish and Portuguese subject raising. As explained above, there has been a diachronic increase in subject raising – the non-raised construction (24a) was the norm in Old Spanish and Old Portuguese, but raising is quite common in the modern languages (24c). The data show, however, that there was an interesting ‘intermediate’ construction (24b), (25a-c) that was quite common precisely at the period in which the degree of subject raising started to increase. In this construction there is ambiguity between raising and non-raising, since the subject moves to the main clause, but still triggers agreement in the lower clause.

- (24) a. *parecía que* [*los hombres estaban enfermos*]
 seemed that the men were sick NO RAISING
- b. *los hombres parecían* [*que estaban enfermos*]
 the men seemed-3PL that were sick PARTIAL
- c. *los hombres parecían* [*estar enfermos*]
 the men seemed-3PL to-be sick FULL
 “The men seemed to be sick.”
- (25) a. *ca muchos parescen que fazen buenas obras*
 because many seem-PL that do-3PL good works
 “...because many seem to do good works.” (*Lucanor* 257 [1330])
- b. *grandes humos que parecían que querían*
 great smokes that seemed-3PL that wanted-3PL
abrasar todo el campo
 to-consume all the field
 “...great clouds of smoke that seemed to consume the entire
 countryside.” (*Clareo* 160, 1552])
- c. *a ella le pareciesen que eran de los más aprovechados*
 to her to-her seemed-3PL that were-3PL of the most appropriate
 “...[which] to her seemed to be just right.” (*Rinconete* 68 [1612])

The data show that ‘partial’ raising sentences such as these were nonexistent in the 1200s, the century before subject raising became common. Then in the 1300s, precisely when subject raising began to increase and we would expect to see such sentences, there are five examples. In the 1400s and 1500s there are two examples each, and the last example of partial raising is found in 1612; there are no examples from the 1700s or 1800s. In Modern Spanish as well, such sentences are almost uniformly rejected by native speakers (Davies 1997c). In terms of the data, the ambiguous ‘bridge’ construction appears just when the more general shift gets underway, and then it disappears once the new construction becomes established in the grammar.

In Portuguese, the same thing happened with a very similar construction. In the shift towards raising (26c), there is again an intermediate step in which the subject raises to the main clause, but still triggers agreement in the lower clause, this time in the form of the Portuguese inflected infinitive (26b), (27):

- (26) a. *parecia que* [*os homens estabam doentes*]
 seemed-3SG that the men were sick NO RAISING
- b. *os homens parecia* [*estarEM doentes*]
 the men seemed-3SG to-be-3PL sick PARTIAL

- c. *os homens pareciam [estar doentes]*
 the men seemed-3PL to-be sick FULL
- (27) a. *leerom epistolla e avangelho queme pareceo*
 read-3PL epistle and gospel that to-me appeared-3SG
gram parte fazerem a meu proposito
 great part made-3PL to my purpose
 “They read some scriptures that to me seemed to support my position.” (*Conselheiro* 309 [1430s])
- b. *homens e mulheres e moços... que parecia serem ali mortos*
 men and women and children who seemed-3SG
 to-be-3PL there dead
 “...men, women, and children...who seemed to be dead.”
 (*Henriques* 151 [1500s])
- c. *os corpo bem feitos... que parecia estarem na primeira inocência natural.*
 thebodies well formed that seemed-3SG to-be-3PL in the
 first innocence natural
 “...the well-formed bodies ...which seemed to be in their natural, innocent state.” (*João* 263 [1631])

This ambiguous ‘partial raising’ construction occurs 67% of the time (as opposed to the normal ‘raising construction’) in the 1400s, 85% in the 1500s, 70% in the 1600s, and 67% in the 1700s (Davies 1999a). Then full raising (26c) increases markedly in the 1800s, and since that time the ‘partial raising’ construction has dramatically decreased in use, especially in Brazil (Davies 1999a, 1999b). Again, it is as though the construction flourished during the period in which it served to facilitate the shift towards raising, and once it had fulfilled that role, it was dropped from the language.

In summary, both the causatives and subject raising in Spanish and Portuguese show the importance of intermediate, functionally-ambiguous constructions in syntactic change. Taking for a moment the ‘partial subject raising’ facts, it might be difficult for the parameters-based account to motivate this intermediate construction, since one parametric setting would prevent raising, while the newer setting would allow it. But there is nothing in the theory that would predict the need for the intermediate construction, and it might be difficult (even with a model of internal diglossia) to formulate the parameters in such a way that there would be a logical progression from ‘no raising’ to ‘partial raising’ to ‘full raising’. The grammaticalization model, on

the other hand, is based on the idea that there is diffusion and ‘bleeding’ between constructions, and that new grammatical constructions gradually evolve from pre-existing ones. In this sense, the historical data from the Spanish and Portuguese infinitival complements again provide support for the predictions of the grammaticalization model.

APPENDIX

Corpora of historical and modern Spanish and Portuguese

(Note: A detailed listing of all of the texts in Tables 1-4 can be found online at <http://mdavies.for.ilstu.edu/personal/texts.htm>.)

	# texts	# words
1200	14	776,700
1300	10	744,200
1400	15	765,200
1500	19	745,300
1600	16	701,100
1700	17	669,800
1800-ES	13	425,500
1800-LA	14	550,600
Total	118	5,378,400

Table 1: *Spanish – Historical*

	# texts	# words
1300	7	479,300
1400	12	463,400
1500	14 texts + 2 anthologies (16 authors)	465,900
1600	9 texts + 2 anthologies (26 authors)	452,200
1700 (LUS/BRAZ)	12 texts + 1 anthology (13 authors)	416,900
1800 (LUS/BRAZ)	17	574,100
Total	126 texts	2,851,800

Table 2: *Portuguese – Historical*

Country	Corpus	# texts/conv	# words
Spoken			
Latin America	<i>Habla Culta</i> (Bogotá, Buenos Aires, Caracas, Havana, La Paz, Lima, Mexico City, San Jose [Costa Rica], San Juan [P.R.], Santiago [Chile])	385	2,193,000
Spain	<i>Habla Culta</i> (Madrid, Sevilla)	72	328,000
Spain	Corpus oral de referencia de la lengua española contemporanea	498	948,000
Written			
LtAm, Spain	Novels	15	1,327,000
LtAm, Spain	Short stories (same countries as those in the <i>Habla Culta</i> corpus)	356	1,054,000
Argentina	Corpus lingüístico de referencia de la lengua española – Argentina	22	1,913,400
Subtotal		1350	7,763,000
Latin America	Web-based newspapers (1,000,000 from each of 20 Spanish-speaking countries; at least two newspapers per country)	55 newsp.	20,000,000
Spain	Web-based newspapers	8 newsp.	15,000,000
Total			42,763,000

Table 3: *Spanish– Modern*

Country	Corpus	# texts/conv.	# words
Brazil	Linguagem Falada [Recife, São Paulo, Rio de Janeiro, Salvador]	85 convers.	570,800
Brazil	Borba-Ramsey Corpus [Essay, Novel, Journal, Technical, Drama]	102 blocks	1,670,300
Brazil	Short Stories	26 authors	75,100
Portugal	Novels	11 novels	239,000
Subtotal		224	2,555,200
Brazil	Web-based newspapers (written)	12 newsp.	15,000,000
Brazil	Transcripts of interviews extracted from five Web-based newspapers		625,000
Portugal	Web-based newspapers (written)	8 newsp.	10,000,000
Portugal	Transcripts of interviews extracted from three Web-based newspapers		383,000
Total			38,562,000

Table 4: *Portuguese – Modern*

REFERENCES

- Cano Aguilar, Rafael. 1989. "Construcciones factitivas e innovación léxica en español". *Beiträge zur Romanischen Philologie* 28.317-328.
- Davies, Mark. 1992. *The Diachronic Evolution of Causative Constructions in Spanish and Portuguese*. Ph.D. Dissertation, University Texas at Austin.
- Davies, Mark. 1995a. "The Evolution of the Spanish Causative Construction". *Hispanic Review* 63.57-77.
- Davies, Mark. 1995b. "Analyzing Syntactic Variation with Computer-based Corpora: The case of modern Spanish clitic climbing". *Hispania* 78.370-380.
- Davies, Mark. 1996. "The Diachronic Evolution of the Causative Construction in Portuguese". *Journal of Hispanic Philology* 17.261-292.
- Davies, Mark. 1997a. "A Corpus-based Approach to Diachronic Clitic Climbing in Portuguese". *Hispanic Journal* 17.93-111.
- Davies, Mark. 1997b. "The Evolution of Subject Raising in Spanish". *Bulletin of Hispanic Studies* 74.399-411.
- Davies, Mark. 1997c. "A Corpus-based Analysis of Subject Raising in Modern Spanish". *Hispanic Linguistics* 9.33-63.
- Davies, Mark. 1998. "The Evolution of Spanish Clitic Climbing: A corpus-based approach". *Studia Neophilologica* 69.251-263.
- Davies, Mark. 1999a. "The Historical Development of Subject Raising in Portuguese: A corpus-based approach". *Neuphilologische Mitteilungen* 100.95-110.
- Davies, Mark. 1999b. "A Computer Corpus-based Study of Subject Raising in Modern Portuguese". *Investigationes Lingvisticae* 21.379-400.
- Finnemann, David A. 1982. *Aspects of the Spanish Causative Construction*. Ph.D. Dissertation, University of Minnesota.
- Goodall, Grant T. 1987. *Parallel Structures in Syntax*. Cambridge: Cambridge University Press.
- Heine, Bernd, Ulrike Claudi & Friederike Hünemeyer. 1991. *Grammaticalization: A conceptual framework*. Chicago: University of Chicago Press.
- Hopper, Paul & Elizabeth Closs Traugott. 1993. *Grammaticalization*. Cambridge: Cambridge University Press.
- Kemenade, Ans & Nigel Vincent. 1997. *Parameters of Morphosyntactic Change*. Cambridge: Cambridge University Press.
- Kroch, Anthony. 1989. "Reflexes of Grammar in Patterns of Language Change". *Language Variation and Change* 1.199-244.
- Kroch, Anthony. 1994. "Morphosyntactic Variation". *Variation and Linguistic Theory* ed. by Katherine Beals, 2.46-60. Chicago: CLS.
- Lightfoot, David. 1979. *Principles of Diachronic Syntax*. Cambridge: Cambridge University Press.
- Lightfoot, David. 1991. *How to Set Parameters: Arguments from language change*. Cambridge, Mass.: MIT Press.
- Lightfoot, David. 1999. *The Development of Language: Acquisition, change, and evolution*. Walden, Mass.: Blackwell.
- Myhill, John. 1988. "The Grammaticalization of Auxiliaries: Spanish clitic climbing". *BLS 14* ed. by Shelley Axmaker, 352-363. Berkeley: BLS.

- Pearce, Elizabeth. 1990. *Parameters in Old French Syntax: Infinitival complements*. Dordrecht: Kluwer.
- Ramat, Anna Giacalone & Paul Hopper. 1998. *The Limits of Grammaticalization*. Amsterdam & Philadelphia: John Benjamins.
- Traugott, Elizabeth Closs & Bernd Heine. 1991. *Approaches to Grammaticalization*. Amsterdam & Philadelphia: John Benjamins.
- Wanner, Dieter. 1982. "A History of Spanish Clitic Movement". *BLS* 8 ed. by Monica Macauley et al., 135-147. Berkeley: BLS.
- Warner, Anthony. 1990. "Reworking the History of English Auxiliaries". *Papers from the 5th International Conference on English Historical Linguistics* ed. by Sylvia Adamson & James Thorne, 537-558. Amsterdam & Philadelphia: John Benjamins.
- Zubizarreta, María Luisa. 1985. "The Relation Between Morphophonology and Morphosyntax: The case of the Romance causatives". *Linguistic Inquiry* 16.247-289.

