Syntactic change in contact: Romance

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Abstract

Language change as a result of language contact is approached in many different ways, and using a number of different methodologies. This article provides an overview of the main approaches to syntactic change in contact, focusing on the Romance language group. Romance languages are widely documented, both synchronically and diachronically; they have been in extensive contact with other language families, both in bilingual contexts (like Spanish and Catalan) and in creolization contexts. Furthermore, they present great microvariation, which allows us to control for changes in single features. Given the breadth of studies targeting Romance in contact, this article only deals with a small number of phenomena, namely *pro*-drop, Differential Object Marking, and deixis.

1. Introduction

1.1 Overview

No language is an island; this is particularly true in the case of the Romance languages, which spread across many continents and came into contact with several other language families. Precisely because of this privileged situation, the Romance languages have been the subject of many studies on language evolution and language change in contact. There are few other language groups that show the same breadth in contact and the same level of diachronic documentation. Romance is therefore one of the major focuses of contact studies.

Contact is not an unambiguous concept, as it is instantiated in a number of very different situations with different outputs. Change in contact (CIC henceforth) studies concerned with syntax traditionally revolve around three main lines of enquiry: contact studies proper, including studies on bi- and multilingualism; change in heritage language contexts; and creolistics. These areas of study have been kept quite separate from each other. It is not infrequent, however, to find observations like the following "However incomplete, this list of properties [of heritage languages] bears a striking similarity to recurring traits observed in creole languages and often associated with the underlying innate principles of language

structure" (Scontras *et al.* 2015:5). This paper will investigate the extent to which this statement is true, by considering some key outcomes of the study of syntactic CIC.

The division of labor between different approaches to contact studies is not completely balanced. For example, studies on multilingualism and heritage languages are mainly embedded within a psycholinguistic framework while diachronic studies are more typological/structural in nature. There is also no precise overlap in the languages studied, which makes it rather difficult to identify one common thread characterizing all CIC phenomena.

The main issue addressed in this paper is CIC from a structural viewpoint. The structural outputs of language contact will be compared without focusing on underlying cognitive factors, in order to show that the output is mostly uniform; it will also be demonstrated that a distinction should be drawn between contact situations among maximally different languages on the one hand, and contact situations between minimally different languages or dialects on the other. Heritage languages and languages in contact will be considered, together with creoles and dialects.

It is obvious that the situation in which contact arises, the extent of exposure to the languages involved, and the speaker's attitude to those languages are very important factors that influence the output (Andersen 1988; Thomason & Kaufman 1988; Aikhenvald & Dixon 2001; 2007; Ross 2001; Heine & Kuteva 2005); the degree of mastery of the contact language and its frequency of use also play a major role (Ferguson 1964; Appel & Muysken 1987; Berruto 1987). Furthermore, the contact situation of simultaneous bilinguals is not the same as that of sequential bilinguals or heritage speakers (Lambert 1955; Flynn 1983; Flynn *et al.* 2005).

This overview aims to highlight some basic structural considerations related to CIC: the import of structure itself on CIC, independent of other cognitive factors, is crucial, and can be observed primarily when the other conditions have been factored out; structural and microvariational explanations, based on the featural setup of the elements involved in CIC, have been abandoned too soon, and psychological, cognitive considerations, and indeed socio-historical considerations, have often overshadowed them. This frequently quoted statement by Thomason & Kaufmann (1988:35) is an example of this tendency: "it is the sociolinguistic history of the speakers, and not the structure of their language, that is the of primary determinant the linguistic outcome of language contact." The shift from a mainly structural to a mainly cognitive approach to contact studies as a result

of bi-/multilingualism probably corresponds to Hulk & Müller's (2000) and Müller & Hulk's (2001) articles. They propose that language change in bilingual children is favored in phenomena that involve the interfaces between syntax and pragmatics. This hypothesis was then very successfully developed by Serratrice, Sorace and many others, to which we will return below. Importantly, Hulk and Müller underline the importance of superficial structural similarity between the phenomena in contact. If two structures in two languages look similar, the child will transfer the analysis of one structure to the other more readily (see also Paradis & Genesee 1996 and Döpke 2000 on the impact of structural similarity on language change).

While typological similarity has often been taken into account as a cause of structural transfer, structural similarity between language phenomena has been almost entirely omitted from contemporary contact studies. A consequence of this is that most studies on language acquisition in contact situations (L2, bilingualism, heritage) offer no example of syntactic structure at all: researchers appear to be content to label a structure "dislocation" or "topic continuation" and then to simply list the occurrences of one specific phenomenon. This is an unfortunate outcome for anyone looking to study syntactic change in contact.

Given that change in contact involves every language phenomenon, to a greater or lesser extent, the general point needs to be illustrated using a selection of phenomena. In this paper, I have chosen to focus on null-subjecthood, Differential Object Marking, and indexicality (particularly in the case of demonstrative forms). This choice is motivated by the fact that novel data regarding these phenomena have just been collected through fieldwork on Italo-Romance languages in contact with Romance varieties in the Americas, carried out as part of the ERC project *Microcontact*.

The next section will provide an overview of the factors that make the Romance languages a fruitful testing ground for the study of CIC. Section 1.3 outlines an important distinction between the multilingual speaker and multilingual society. Section 1.4. focuses on L2 and L3 studies. Section 2 offers an overview of null subjects in macrocontact, while Section 3 discusses null subjects in microcontact; Section 4 offers an overview of Differential Object Marking in macrocontact, while Section 5 discusses the same phenomenon in microcontact. Section 6 presents a short summary of deixis in contact. The overviews are in no way comprehensive. The selection of references is based on the degree of comparability between the phenomena that they consider. For reasons of space, CIC in diachrony will not be discussed.

1.2 The Romance languages in contact

The Romance languages are particularly well suited to the study of CIC, as they show abundant structural microvariation but very little typological variation. Ledgeway (2012; in press) and Ledgeway & Roberts (2017) provide an overview of Romance macro-typological commonalities. According to Ledgeway (in press:3) the Romance languages share the following typological settings:

- (1) a Head-initiality: (S)VO, postnominal adjectives/genitives
- b Configurationality: grammatically fixed word order
- c Nominative-accusative alignment
- d Non-polysyntheticity
- e Subject prominence
- f Proliferation of functional categories: articles, pronominal clitic, auxiliaries, complementizers
- g Relatively rich inflectional agreement, null subjects (but cf. modern Fr.), subject clitics
- h Predominant finite complementation, notably que/che-clauses
- i Presence of periphrastic active/passive paradigms
- j Preverbal, discontinuous and/or postverbal negation

As we can see, there are some deviations, most notably French non null-subjecthood, to which we will return in Section 2.

Romance languages also offer what Kellerman (1978) calls "psychotypological similarity", a concept that underlies many core language transfer theories today. Not only are the Romance languages typologically almost equivalent: they are also perceived to be so, due to the fact that they share the majority of their vocabulary.

Furthermore, the Romance languages have also been in contact with most of the language families in the world, due to their worldwide spreading. There is however a significant difference in outcomes between contact within Romance and contact between Romance and other language families, a distinction that is rarely made in the literature.

In what follows I will provide an overview of change in contact (CIC) involving Romance languages, both standardized and non-standard, both as majority and minority languages. I will draw a distinction between *macrocontact*, i.e. contact between languages that belong to different families and are typologically distant; and *microcontact*, i.e. contact between languages that belong to the same family and are typologically identical. Within macrocontact I will also include the creole languages, which represent an extreme case of macrocontact between multiple varieties. The microcontact dimension will prove to be important in identifying the triggers of language change in contact that are sometimes overshadowed when multiple factors are involved.

1.3 Multilingual speaker vs. multilingual society

The study of language change in contact can be approached from different perspectives. This article will offer some reflections on only a selection of these approaches.

The first major division within CIC studies is between those studies that focus on syntax itself, i.e. grammatical structures, and those that focus on linguistic competence, i.e. the bilingual or multilingual speaker(s). The division of labor is not completely balanced: studies on bi-/multilingualism and heritage languages are mainly performed with a psycholinguistic slant, while studies on structural change are mainly typological in nature.

Research into contact as a result of multilingualism can be further divided into studies that target multilingual speakers, such as those on L2/L3 acquisition or heritage language competence, and studies that target the multilingual society (see for instance Clyne 1997). The latter are more concerned with the sociolinguistic situation of the community of speakers. While both approaches generally observe and analyze the changes introduced to one language because of the effect of contact with another, their perspectives are rather different: in the first type of study, the language is taken as a psychological reality, while in the other it is taken as a socially-determined object of study. The second approach therefore focuses on the social triggers for language change, such as language prestige or the attitude of the speaker, while the first focuses on the mental mechanisms of language learning: the extent to which acquisition is complete, exposure to the other language, time of first learning, attrition, and so on. Although they are intended to investigate the psychological reality of language structures, and are hence are more concerned with structure than their sociolinguistic counterparts, most cognitive studies on bilingualism and change focus on the speaker's psychological reality rather than on syntactic structures as mental representations. Emphasis is placed on whether

the speaker has started learning the language early on, or whether the input has been complete or incomplete, rather than on what happens to the structures involved in the change. In general, very few contact studies observe grammar by itself, independent of cognition and/or the conditions under which the change emerged. Typological studies are an exception in this regard. This article will try to extrapolate information about syntactic change from multiple types of study, but will not explore the cognitive, social, or psychological causes of language change. What I will try to show is that there is value in focusing on purely structural change, and that sometimes too great a focus on boundary conditions overshadows the general observations that we would otherwise be able to make regarding the grammar.

1.4 L2 and L3 acquisition

The term multilingualism usually refers to a phenomenon whereby a speaker masters more than one language. Change in contact clearly happens through multilingual speakers. A fertile area of study in the field of bi-/multilingualism regards second language (L2) acquisition. L2 acquisition studies usually focus on errors made by L2 learners, and often aim to draw an line of evolution in the acquisition of a second language, comparing it to L1 acquisition. We will report findings from L2 and L3 studies when appropriate, without focusing too much on the cognitive mechanisms underlying acquisition (for an overview of this field see Ritchie & Bhatia 1996; 2009; Thomas & Mennen 2014; de Houwer & Ortega 2018).

A rather original approach to L2 and L3 acquisition has been developed in recent years by Rothman (2010; 2011; 2013; 2015). Rothman outlines a model for the transfer (or block of transfer) of a phenomenon in contact, called the Typological Primacy Model (TPM). TPM is mainly designed to account for L3 acquisition, to establish from which language the transfer happens. Rothman studies L3 acquisition of speakers with an L1 or an L2 that is typologically similar to the L3, in order to ascertain whether transfer is determined by typological similarity, fluency in the language, or the status of L1 or L2 alone. He shows that if a language is typologically similar to another, transfer of syntactic structure will happen regardless of the similarity of the particular construction at issue and regardless of the order of acquisition. In a study on word order in the L3 acquisition of Brazilian Portuguese (BP) by speakers of Spanish with L2 English and speakers of English with L2 Spanish, Rothman (2010) observes that Spanish is the language whose word order and relative clause structure are invariably mirrored by L3 BP speakers; according to Rothman *et al.* (2015), this is due to the typological similarity of Spanish and BP, independent of whether Spanish is spoken by the L3 learner as an L1 or L2. An important point made by Rothman is that holistic

typological similarity between languages is the key factor for transfer, be it facilitating (i.e. bearing the "right" target) or non-facilitating (i.e. bearing the "wrong" target). In a study on French L3 learners with English and Spanish as L1 or L2, Rothman *et al.* observe that L3 French learners acquire *pro*-drop from Spanish, be it L1 or L2, rather than acquiring obligatory overt pronouns from English. French is considered typologically similar to Spanish, or at least more similar than English, despite the fact that the study involves *pro*-drop. Transfer is believed to happen at the precise point at which the speakers become conscious of some structural similarity between the languages (*psychotypological similarity*, in the spirit of Kellerman 1978; 1983; 1986).

While Rothman acknowledges the structure-by-structure effect in non-facilitating transfer, he maintains that transfer involves the typological similarity of languages as a whole, which overrides the single structural similarity. While the study of L3 acquisition does indeed offer valuable insights into the factors involved in grammatical transfer, this whole architecture is not of great help when considering microcontact between languages that are typologically identical, with some minor differences.

2. Null subjects in contact - macrocontact

2.1 Null subjects in Romance

Most Romance languages, with the notable exception of French, are null-subject, or *pro*-drop languages. *Pro*-drop in contact is a widely studied topic: in what follows I will list some of the most well-known generalizations regarding *pro*-drop in macrocontact, i.e. as a result of the contact between Romance languages and other language families.

2.2 Creoles

Romance-based creoles are mostly non *pro*-drop. In a situation of extreme contact among many different languages, with one or two languages dominant, overt argumental subjects tend to be used. For example, of 76 languages included in the *APICS* (Haspelmath and the APICS consortium 2013), 49 require an obligatory pronominal subject, while 18 have optional pronominal subjects. In general, many Romance-based creoles present null expletive subjects, but very rarely exhibit null argumental subjects. The creoles that exhibit expletive *pro*-drop include Chabacano, Kriyol, a Portuguese-based creole language spoken in Guinea-Bissau, and Saramaccan, an English-Portuguese-based creole spoken in Suriname.

Some creoles do allow argumental *pro*-drop, such as Ternate Chabacano, which allows *pro*-drop in coordination and topic-continuation structures, as in the following example:

(2) Ternate Chabacano, Sippola (2013)

Mútfo	péhro, kel		el	kompanyéro	de	mi	na	kása,
Many	dog	that	DEF	companion	of	1sg.poss	LOC	house
kabándu,	ta	le,	ta	sintáw ya		numá [].		
then	IPFV	read	IFPV	seated already		just		

^{&#}x27;Many dogs, they are my companions in the house. Then, I read, I just sit [...]'.

The *pro*-drop status of Cape Verdean Creole (Baptista 2002; Costa & Pratas 2012; Bayer 2013), as well as Haitian Creole (DeGraff 1993; Déprez 1994), has often been debated. Bayer (2013) presents an overview of *pro*-drop phenomena in Cape Verdean Creole, providing examples like the following:

(3) Cape Verdean Creole, Bayer (2013:69)

pro_i Ben ta subi, pro_i ben ta subi dos merés, pro_i ben subi tres, pro_i ben ta subi dja, ti ki pro_i ba aitura.

'pro came to rise, pro came to rise by two cents, pro came to rise by three, pro came to rise, until, pro went way high.'

Note that Bayer observes that argumental *pro-*drop obtains in topic continuation contexts.

2.3 Contact and bilingualism

In one of the first studies on bilingual children, Paradis & Navarro (2003) studied the realization of subjects in two Spanish monolingual children and compared them to one English-Spanish bilingual child living in the UK. They observed an overextension of overt pronouns in the bilingual child's Spanish to contexts in which monolingual children would not insert an overt subject; specifically, while the monolingual children produced 20% of overt subjects, in line with the other monolingual children in Spain, the bilingual child produced 35% of overt subjects.

If a null-subject language is in contact with a non-null subject language, and if the acquisition of null pronouns is influenced by the contact language (as also argued by Hulk & Müller

2000), we expect two possible outputs of bilingual acquisition: either the bilingual speaker produces more overt pronouns in the null-subject language than monolingual speakers, as in the case just discussed and reported in Paradis & Navarro (2003); or there can be a larger number of null subjects in the non-null subject language. In a widely-cited article, Serratrice et al. (2004) test the two possibilities by observing one English-Italian monolingual child compared with English and Italian monolingual children. They show that the first scenario, i.e. the insertion of overt subjects in contexts where monolingual children would not use them, is indeed what is found. There is no overuse of null subjects in the non-null subject language. They conclude that there is an asymmetry in the vulnerability of the contact languages: the language with the less economical system, i.e. Italian in this case, which displays both null and overt subjects, is more vulnerable than the language with a clear-cut, unambiguous system for the realization of subjects. Overt subjects in English are less specified than overt subjects in Italian, because their distribution does not depend on discourse information, such as whether the subject is a topic or a focus, like in Italian. This under-specification is transferred, according to Serratrice et al. (2004) to the language with a higher degree of specification, resulting in an overuse of overt subjects in the latter (structural priming, Branigan 2006; Ferreira & Bock 2006).

In a subsequent paper, Serratrice *et al.* (2009) examine both English-Italian and Italian-Spanish bilingual children, to ascertain whether the extension of overt subjects to pragmatically infelicitous contexts should be attributed to typological differences between the languages involved or to bilingualism itself. Serratrice *et al* examine 167 children, divided between English-Italian bilinguals living in the UK, English-Italian bilinguals living in Italy, Spanish-Italian bilinguals living in Spain, and monolinguals, both children and adults. The experiments show that Spanish-Italian bilingual children extend overt subjects to pragmatically infelicitous contexts exactly like English-Italian bilingual children, and that therefore the extension or overuse of overt pronouns should be attributed to the fact that the children are bilingual, and not to the specific languages in contact.

A very interesting study by Pinto (2006) shows that not all pronominal subjects are equal: while children acquire 1st and 2nd person subjects fairly early, 3rd person pronouns are acquired later; it is also in the 3rd person pronouns that errors, i.e. use in contexts in which they should be omitted, are most often found. Furthermore, Pinto examines pronoun omission in two bilingual children: one Dutch-Italian bilingual child, and one English-Italian bilingual child. 1st person overt subjects are attested in most cases, especially for the English-Italian

bilingual child. If structural similarity, and in particular feature overlap (following Serratrice et al. 2004), were relevant, we would expect Dutch-Italian bilingual children to have a more coherent pro-drop system than English-Italian bilingual children. English pronouns are in fact not pragmatically marked: they are used indifferently as foci, as topics, or in unmarked contexts. The distribution of Italian overt and null pronouns is instead largely determined by pragmatics. This pragmatic-based division of labor between pronouns is an option that Dutch shares with Italian, to the exclusion of English. Pinto argues that the data confirm this expectation.

In similar studies, Müller *et al.* (2002; 2006) observe 5 German-Italian bilingual children and find an appreciable overextension of overt pronouns to contexts where monolinguals use null subjects.

2.4 Interfaces

We have just seen that many studies on the bilingual acquisition of null subjects have been performed on the basis of macrocontact between a Romance language and usually English (or another Germanic language). The label "language change in contact", however, often refers not to children, but to adult language. Based on considerations similar to those above, adult L2 acquisition has been studied extensively, mainly to determine the factors involved in the systems that are "incomplete" or "deviant" compared to the baseline monolingual grammars. These studies have examined L2 acquisition resulting from both extended contact in a balanced situation (like that of Spanish and Basque, or Spanish and Catalan) and from a heavily unbalanced situation such as that found in creoles.

Sorace & Filiaci (2006), Sorace (2011) and many subsequent works investigate adult bilinguals (in particular L1 speakers undergoing attrition or L2 learners), and find that null subjects are again consistently replaced by overt subjects in pragmatically incongruent contexts. In a study on Catalan in contact with English, Helland (2004) presents evidence of erosion of null-subjecthood. Similar results are found in studies on Italian-English and Greek-English bilinguals by Tsimpli *et al.* (2004) and on Spanish-English bilinguals by Montrul (2004). The generalization that can be made is that language change in bilingualism contexts always moves in the direction of inserting overt subjects in contexts in which they would not be used by monolingual speakers.

To account for these facts, Sorace and Serratrice, in several studies (see Sorace 2011 and references therein), formulate the Interface Hypothesis (IH), following Hulk and Müller

(2000). According to the IH, change is more likely to happen in phenomena that involve more than one grammatical module. The conditions under which a subject can be left unexpressed are determined by the interaction of several modules: syntactic, morphological, and information structural. Limited mastery of all these modules results in the weakening of *pro*drop.

The IH has seen many reformulations, from more radical to more gradient (Sorace 2000; 2003; 2004; 2005; 2011; 2012; Montrul 2011; White 2011; Montrul & Ionin 2012): according to the original, radical, IH, L2 acquisition errors (that give rise to change, for our purposes) can be found in contexts that involve the external interface, i.e. the interface of core grammar with other systems, such as discourse. The concept of "the more modules involved, the more difficult to master" has remained. In particular, discourse conditions are the most difficult to master. The same concept underlies much of the L2 literature, where the CP, which is the part of the sentence encoding information structure, is recognized as being the part of structure that is more difficult to master. In this respect, the seminal paper by Hulk and Müller provided the first step in the development of the IH, both because it observed the vulnerability of the CP (see also Platzack 2001), and because it noted the difficulty in parsing complex structures, especially when they superficially rather similar.

While the L2 literature primarily discusses child language, and change in contact studies mainly examine adult language, it is clear that the generalizations regarding language change all consider the CP, hence the interface with discourse, as the part that is most vulnerable to change. Interestingly, the solution for L2 speakers seems to be to insert overt pronouns rather than drop them all. This differs to some extent from what happens in some creole languages, as we saw in Section 2.2, and from what happens in microcontact, as we will see in Section 3.

2.5 Heritage languages

The IH is also considered relevant in the case of heritage languages, as extensively argued by Aalberse *et al.* (2019). According to the work of Montrul (2004), Carvalho *et al.* (2015), and Polinsky (2018), *pro*-drop weakens in heritage varieties of Spanish in contact with English in the US. Montrul (2004) observed the behavior of 24 intermediate and advanced Spanish heritage speakers comparing them with monolingual speakers of Spanish. While the speakers all showed mastery of null elements, intermediate heritage speakers had difficulty with the pragmatics governing their distribution. These speakers in particular showed convergence

with English regarding the distribution of overt subjects. Montrul reports many examples of this overproduction, including the following (Montrul 2004:133-134):

(4) Había una vez una niña Chiquita que se llamaba Caperucita. Ella vivía con su mamá y *ella quería mucho a su abuelita. Y *ella le dijo a su mama, mami quiero ir a visitar a mi abuelita. . . . Y cuando llegó la Caperucita, *ella pensó que el lobo era su abuela. . . . Y cuando se levant o el lobo, *él tenía piedras dentro y no pudo caminar. (subject # 209, intermediate)

'Once upon a time there was a little girl whose name was Little Riding Hood. She lived with the mother and she loved her grandmother very much. And she told her mother, mommy I want to go visit my grandmother. . . . And when arrived the Little Riding Hood, she thought that the wolf was her grandmother. . . . And when the wolf got up, he had stones inside and could not walk.'

The insertion of overt pronouns where monolinguals would use a *pro* is calculated as pragmatically infelicitous in 8.7% of the cases.

Interestingly, Montrul (2004) also finds pragmatically illicit null subjects, in 15.5% of cases, as in the following sentence:

(5) Montrul (2004:133)

Entonces la Caperucita Roja encontró, *pro* fue a ver quién estaba en la cama, entonces *pro* encontró que era el lobo. ?*pro* estaba corriendo del lobo y entonces *pro* salió fuera, o **pro* se la comió, **pro* se comió a la abuelita y a la Caperucita. (subject # 209, intermediate)

'So, the Little Red Riding Hood found, *pro* went to see who was in the bed, so *pro* found that was the wolf. *Pro* was running away from the wolf and then *pro* went out, or *pro* ate her up, *pro* ate up the grandmother and the Little Riding Hood.'

While Montrul's data do not contradict the IH directly, they do show that the insertion of overt subjects in pragmatically infelicitous contexts is not the only strategy for heritage speakers. In fact, the overextension of null subjects shows not only that the speakers can master them, or in Rizzi's (1982) terms, they have a *pro* in their lexicon, but that they also do not have difficulty in using silent elements, though their distribution differs from that of monolingual Spanish speakers. This contradicts the findings from other varieties, like Japanese and Korean in contact with English (see Polinsky 2006; Laleko & Polinsky 2016).

3. Null subjects in contact - Microcontact

The term microcontact is sometimes used in sociolinguistic or area studies to refer to a smaller or shorter instantiation of a contact situation. There can be micro-contact between two speakers only, which does not necessarily involve the whole community, or there can be contact between a larger number of speakers for a short time. The term microcontact will be used here with a very different meaning. Here, microcontact means "contact between two minimally different syntactic systems (grammars)." (D'Alessandro 2018). The idea behind microcontact is that if two languages are structurally very similar, at least with regard to the phenomena under investigation, it is possible to zoom in on the actual change feature by feature, rather like playing "spot the difference": everything is the same but for one detail. It is that detail that will prove crucial in explaining language change. If now we take three or more grammars that are identical but for that one little detail, and we observe all them in contact with each other, the direction of change with respect to that detail can tell us what influences what (if that influence exists at all). At the micro-level, holistic typological considerations fall short because they are too coarse-grained, while microcontact can tell us a great deal about grammar change. Microcontact between languages that are typologically very similar, or belong to the same family, does in fact result in outcomes that are rather different from those observed in situations of macrocontact between languages that are typologically divergent.

We have seen in Section 1.2 that the Romance languages are more or less typologically similar. We also know that topicality plays a very big role in Romance languages, where word order is much freer than in Germanic, for instance, as far as topicalization is concerned, but less flexible than in Latin (Ledgeway 2012, in press).

Null subjects in microcontact behave rather differently from those in macrocontact, but similarly, to some extent, to those in creole languages that have *pro-*drop.

In a study exploring Catalan and Spanish in contact in the Balearic Islands, de Prada Perez (2015) compares the percentage of null and overt subjects produced by Catalan-Spanish bilinguals as compared to monolingual Spanish and Catalan speakers. She shows that no significant difference can be found between bilinguals and monolinguals in the distribution of subjects. Furthermore, she shows that *pro* is heavily used in topic continuation contexts, both in bilinguals and in monolinguals, as expected.

A similar result is found by Carvalho & Child (2011) in a study on Spanish in contact with Portuguese on the border between Brazil and Uruguay. Interestingly, Carvalho and Child also observe that not only the distribution of null subjects, but also the distribution of overt subjects, is dependent on topic continuation: if a speaker uses an overt subject, they will continue using the overt subject in topic continuation; if they use a null subject, they will continue to use null subjects throughout. This shows that interface conditions are not in themselves an issue. Speakers can understand and master topics, but bilingual speakers tend to select only a subset of discourse conditions to determine null-subjecthood. Again, topic continuation is a determining factor for *pro*-drop, like in Cape Verdean creole.

Bilingual speakers of macro-typologically related languages do not only exhibit the same behavior in the production of null or overt pronouns, they also show, in some cases, monolingual (or native-like, in the case of adult L2 learners) ability to assign an antecedent to null and pronominal subjects. In a seminal paper on the resolution of null anaphora, Carminati (2002) shows that in sentences like the following native speakers tend to select the higher DP as an antecedent of *pro*, despite the fact that both DPs are equally able to license it¹:

(6) (Carminati 2002 in Filiaci 2010:172)

Quando Maria_i e andata a trovare Vanessa_i in ospedale, $\emptyset_{i(i)}$ le ha portato un mazzo di fiori.

'When Maria went to visit Vanessa at the hospital, she brought her a bunch of flowers.'

In a study of Italian elementary and advanced L2 learners of European Portuguese (EP), Madeira *et al.* (2012) show that these speakers master null subjects like monolingual EP speakers, and can also correctly resolve null-pronoun anaphora antecedents, in the way described by Carminati. Note, incidentally, that they also find that Chinese L2 speakers of EP do not exhibit the same level of mastery of null pronouns. Given that Chinese is a topic-drop language, and that superficially EP and Chinese might look similar with respect to *pro*-drop, these data are particularly telling regarding the relevance of structure over perceived typological similarity. Chinese and EP could arguably be perceived as similar, with respect to *pro*-drop, by the learners. The syntactic structures that host null subjects are rather different, however (see D'Alessandro 2015 for an overview), and therefore the speakers do not immediately transfer their own *pros* to EP.

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¹ Carminati (2002) formulates this generalization as The Position of Antecedent Strategy (PAS): "The null pronoun prefers an antecedent which is in the SpecIP position (or in the AgrS position under Pollock's split INFL hypothesis), while the overt pronoun prefers an antecedent which is not in the SpecIP position".

3.1 Heritage microcontact

Data from fieldwork research conducted in Argentina and Brazil on heritage Italo-Romance varieties in contact with Spanish and Portuguese show that the *pro*-drop status of these varieties does not disappear, but is in fact enhanced in some cases. While the behavior of these varieties in microcontact breaks down in seemingly different directions, the output of microcontact is not random, as would be expected in the case of microparameters (following Roberts 2019). The output of microcontact is instead rather consistently directed toward *pro*-drop. If microparameters in contact had to exhibit a random, lexicon-like behavior, we would not expect this consistency.

Frasson (in press) shows that subject clitics in heritage Veneto in Brazil are pronominal in nature by testing their behavior with respect to negation and presence in coordinated conjuncts. Interestingly, their development diverges from that observed in Italy (Casalicchio & Frasson 2018), where the younger generation of Veneto speakers tends to drop subject clitics, particularly in the 3rd person, in contexts in which they are obligatory for older speakers. Frasson (in press) attributes this difference to the contact language: BP is a partial *pro*-drop language, while Italian is a full *pro*-drop language.

In heritage Friulian in contact with Rioplatense Spanish in Argentina, subject clitics also have the tendency to behave like full pronominals with respect to negation, coordinated structures, and they are not sensitive to clustering restrictions imposed on clitic clusters (A. Frasson, R. D'Alessandro, B. Van Osch, in preparation). *Pro-*drop is very much alive in this variety, but it is conditioned by only a subset of the factors that are active in fully *pro-*drop languages. In particular, and once again under the same conditions that we find in other multilingual situations, the subject is dropped in topic-continuation contexts. Frasson *et al.* conclude that the change between baseline Friulian and heritage Friulian in contact with Rioplatense Spanish has taken place in two steps: subject clitics have first become real pronouns, and have then been dropped. Another interesting result is that, contrary to what happens (at least superficially) for heritage Veneto, speakers of heritage Friulian in contact with both Rioplatense Spanish and BP are more likely to produce 3rd person subject clitics than 1st person ones.

This might simply be the result of the nature of the elements involved, but in general it seems that 3rd person pronouns are omitted in Veneto in contact with Italian, while they are extended (or maintained) in the heritage varieties in Latin America. Once again, this appears to be an

instance of a microcontact effect – i.e. contact which is linked to micro-similarity between structures. Note that the languages involved are typologically identical: Veneto and Friulian differ only in that Friulian presents a full set of subject clitics while that in Veneto is incomplete. They are in contact with languages that are typologically identical as far as *pro-*drop is concerned, like Italian and Spanish, but react differently. This reaction is however not randomly or radically different: it is still quite consistently in the direction of keeping the *pro-*drop rather than consistently inserting overt pronouns.

The output of microcontact is different than that of macrocontact, and therefore microcontact deserves its own label as an independent element in contact studies (both in heritage and balanced bilingual situations).

4. Differential Object Marking in contact - Macrocontact

Some Romance languages, most notably Spanish, Catalan, Romanian, and Southern Italo-Romance languages, display Differential Object Marking (DOM, Bossong 1985), which is also known as the prepositional accusative in the Romance literature (Diez 1882; Tekavčić 1972). Some objects, the most prototypically animate such as 1^{st} and 2^{nd} person pronouns, animates/humans, and sometimes animals, are given a dedicated marker, which is mostly a in Romance (with the exception of Romanian, which uses pe).

Like *pro*-drop, DOM is also heavily determined by information structure: DOM is often found with topics or dislocated elements, even in those Romance languages that do not usually display it, such as Italian (Nocentini 1985; 1992; Benincà 1986; Berretta 1989, 1991). In Italian, the dislocation of a 1st or 2nd person object triggers DOM. Observe that the construction without DOM is not felicitous:

- (7) a. A me non mi ha invitato
 to me NEG me has invited
 'As for me, s/he hasn't invited me'
 - b. *Me non mi ha invitato

 me NEG me has invited
 - c. A te non ti ho visto

 to you NEG you have seen

'As for you, I haven't seen you'

These DOM-marked objects are avoided in the written form, as the clash of the two pronouns *a me mi, a te ti* is considered bad Italian in classical grammars; they are however the only possibility in spoken Italian.

Focus and animacy, and to some extent definiteness, are all "interface features", which means that they are predicted to reduce or disappear in contact as they involve the mastery of interface conditions. Once again, Romance languages in contact do not form a homogeneous category with respect to DOM.

4.1 Creoles

It not clear whether or not creoles display DOM or not, because many Romance-based creoles tend to use a generalized object marker. One creole that has been claimed to show DOM is Chabacano, which uses the object marker *kon* or *kung* (Steinkruger 2008). The distribution of this object marker, which sounds very similar to that found in other Luso-Asiatic creoles such as Ternateño, Zamboagueõ, or Malacca, is restricted to animate objects or to inanimate topics. This group of Luso-Asiatic languages constitutes an exception among the Romance-based creoles, but the question remains of how this exception can have possibly emerged.

4.2. Contact and heritage contexts

DOM in macrocontact has mostly been investigated in heritage studies.

Heritage speakers of languages with DOM have been shown to display a good mastery of object and indirect object clitics. Silva-Corvalán (1994) and Luján & Parodi (1996) eported for example very few cases of object omission in Spanish-English bilingual speakers in Los Angeles; likewise, Polinsky (1997) showed that direct and indirect argument pronouns (i.e. accusative and dative clitics) are mastered much better than subject pronouns by Russian heritage speakers in the United States. However, when the marking of the object also requires other features to be considered, such as definiteness or animacy, or topicality, the marking of the object becomes more difficult for heritage speakers.

The DOM marker for Spanish is *a*, which is also used for datives and locatives. Silva-Corvalán (1994), Luján & Parodi (1996), and Montrul (2004) all observe that the DOM

marker tends to be omitted both by bilingual Spanish-English speakers and by heritage Spanish speakers in the US. In a follow-up article, Montrul & Bowles (2009) examine the possible causes of this loss. They identify several factors that could have triggered this change; Aalberse *et al.* (2019) reformulate the first cause in the terms of Polinsky's (2011) Indeterminacy Hypothesis:

(8) Indeterminacy Hypothesis

Form X is suitable for multiple syntactic contexts, and the same syntactic context allows for more than one form

(Polinsky 2011 in Aalberse *et al.* 2019:151)

A in Spanish covers several functions, and heritage speakers tend to avoid indeterminacy by selecting only one of the uses and dropping the others. Other factors that Montrul & Bowles (2009) consider are the input received by the speakers (which is also studied by Montrul & Sánchez-Walker 2013, who also checked the language background of the learner's caretaker) and the acceleration of endogenous change. We leave all these factors, and the age of acquisition, aside, and concentrate on the grammar-internal factors that they discuss. The first of these is grammatical complexity and the other is the influence of English. With regard to grammatical complexity, DOM is an obvious candidate for the IH: it requires knowledge of syntax as well as discourse conditions, in particular when it involves topics. The contact language is also relevant, given that English does not have DOM in any context, and might have therefore influenced its non-realization in Spanish.

The generalization that macrocontact studies can offer regarding DOM is fairly robust from a purely structural viewpoint: the DOM marker tends to be dropped, for one reason or the other.

The observation of microcontact situations can help to determine which of the factors carries more weight. In fact, microcontact studies reveal rather different results: not only does DOM not disappear, but it is extended to contexts in which it was not previously found.

5. Differential Object Marking in contact - Microcontact

On the basis of macrocontact studies such as those by Montrul and Polinsky, we have seen that heritage languages, like creoles, are mostly claimed not to feature DOM. Historically, it has been claimed that Upper-Southern varieties of Italo-Romance, most notably Neapolitan (Sornicola 1997; Formentin 1998; Fiorentino 2003; Ledgeway 2009) reinforced their use of DOM as a result of extensive contact with Spanish rather than acquiring it from scratch from the contact language.

In Standard Catalan, the DOM marker *a* is obligatory with pronouns and with dislocated DP objects, but is usually dropped with full DPs when they are adjacent to the verb (Benito 2017:13). According to Escandell-Vidal (2007; 2009), Catalan DOM is sensitive to definiteness; it is obligatory with topics as well as with foci and in several other contexts (see also Irimia & Pineda 2019), including when disambiguation between an inanimate subject and an animate object is required.

In non-standard Catalan, however, especially in areas in contact with Spanish, some uses of DOM are found that are not present in the standard language (Sancho 2002). For instance, the DOM marker is used to mark a DP that is immediately adjacent to the verb, as in the following example:

- (9) Non-standard Catalan (Benito 2017:16)
- a. Esperant a la mare.
- 'Waiting for the mother.'
- b. Coneixies a la seva família.

'You knew his/her family'

[Corpus Oral de Conversa Col·loquial]

Benito reports that this overextension of Spanish DOM to Catalan is perceived by bilingual speakers as a Hispanism, and is in fact referred to as *castellanisme* (Moll 1991; Badia Margarit 1994). Note that Moll (1991) claims that DOM in Catalan is entirely borrowed from Spanish, as it did not exist in old Catalan, but this has been proven wrong by Irimia & Pineda (2019).

Returning to microcontact: unlike what happens to Spanish and Russian in contact with English, Catalan in contact with Spanish overextends the contexts of application of DOM. Not only does DOM not decrease, but it actually increases.

5.1 Heritage languages

Similar behavior is observed in heritage Italo-Romance varieties in contact with Rioplatense Spanish. As in the case of Catalan and Spanish, the Italo-Romance varieties that feature DOM (both Upper-Southern and Southern ones) present it in a reduced number of instances; other Italo-Romance varieties (such as Northern varieties) do not exhibit any form of DOM.

Sorgini (2019) selects three Italo-Romance varieties: a northern one, Friulian, with no DOM in the baseline grammar; an Upper-Southern one, Eastern Abruzzese, with person-driven DOM in the baseline grammar (D'Alessandro 2017), and an Extreme Southern variety, Sicilian, with Spanish-like DOM in the baseline grammar: animate and definite objects are marked with *a*. The behavior of these varieties in contact is rather interesting, both because it varies according to the contact language, and because it contradicts the generalizations we just saw that were made on the basis of macrocontact.

Sorgini investigates the behavior of the varieties in contact with respect to four variables that have been universally identified as triggering DOM (in those varieties that have it): animacy, definiteness, topicality, and a "human" feature. On the basis of spontaneous speech and a forced choice test, she observes the following:

Friulian, a language that has DOM in the baseline grammar only occasionally with topics, introduces DOM with topics more widely in contact with Rioplatense Spanish, but shows no change in this respect in contact with French. Specifically, Friulian heritage speakers use DOM with 68.8% of objects, compared to 46.67% for 1st generation speakers.

Sicilian, a language that has very extensive DOM, using it for all objects except inanimates and indefinites, displays DOM in 100% of cases in contact with Rioplatense Spanish. These data, surprising as they may look, need to be taken with a grain of salt, given that it was not possible to check the distribution of DOM in the original varieties spoken in Italy, where microvariation is huge. The correct generalization that we can draw from these data is that DOM has certainly not been lost from Sicilian in contact with Rioplatense Spanish. Like Friulian, there is no change in the extent of DOM use holds for Sicilian in contact with Quebecois French.

An extension of DOM in contact with Rioplatense Spanish is also registered for Eastern Abruzzese, at least as far as 3rd person pronouns and full DPs with the feature [animate] are concerned. Eastern Abruzzese spoken in Italy does not exhibit DOM in the 3rd person, but heritage speakers do extend it to these contexts. DOM with 1st and 2nd person also does not disappear in contact with Quebecois French.

To sum up, the generalization that we can draw from Sorgini's (2019) data is that DOM, in contact with Rioplatense Spanish, a language with heavily extended DOM, is enhanced in some varieties that have very restricted DOM in the baseline grammar (like Friulian); it is slightly enhanced in varieties that display some restrictions in DOM (like Eastern Abruzzese)

and certainly retained in varieties with a very extended DOM in the baseline grammar (Sicilian). In contact with French, a non-DOM language, DOM does not increase but also does not disappear; there are no signs of decrease or erosion in any variety, contra what is reported in macrocontact. There are however 5 instances of DOM omission observed with kinship terms in Sicilian heritage speakers in contact with Quebecois. It is not yet clear whether these are due to contact with French or with English (given that all speakers are bilingual).

In general, perceived typological similarity can explain why these varieties in contact with Spanish expand or retain DOM. However, if the lack of similarity or the heritage status of the languages were the cause of loss, as predicted, we would expect DOM to be eroded in contact with languages that do not have it. The data show that this prediction is not borne out.

This mismatch between the micro and the macrolevel is particularly interesting when considering the featural models proposed for syntactic parametric variation. Macroparameters are coarser-grained generalizations regarding given linguistic phenomena, and the output of macroparametric contact is more homogeneous, on the whole, than that of microparametric contact. However, within microcontact a certain homogeneity can also be found. We can say that within the Romance macro-grammar, microcontact situations result in outputs that are radically different from the outputs given by contact between typologically distant languages.

6. Deixis in contact - Macro- and microcontact

That structures are important in determining the output of contact is demonstrated by the fact that not all structures react to contact in the same way, which is obvious, but also by the fact that some elements are not affected by contact at all, even though they in theory could be.

We have seen that person features can be involved in change; for instance, 3rd person pronouns seem to be affected by the change in *pro*-drop in Veneto; 3rd person pronouns are also involved in the DOM change, to some extent. Some other features, like topicality, respond very strongly to contact (as largely predicted by Hulk & Müller, Polinsky, and many others). One category, however, seems to be resilient to change, namely deixis. Indexicality is expected not to react quickly to contact (see Polinsky 2018 for a long discussion of that). An interesting generalization that has emerged from the study of demonstratives and person pronouns in microcontact is that they in fact behave exactly as they do in macrocontact, i.e. they are very resistant to change.

On the basis of fieldwork data on Italo-Romance varieties in contact with Quebecois French, Rioplatense Spanish and BP, Terenghi (2019) shows that the only change that can be observed is the shift from a ternary system to a binary system in demonstratives. This change is also attested in diachrony.

Some Romance varieties use a binary system for demonstratives, in which they specify the position of the referent with respect to the speaker (close to the speaker, *this*; far from the speaker: *that*). Some others however use a ternary system, i.e. they specify the position of the referent with respect to the speaker and the addressee (roughly: close to the speaker, close to the addressee, far from both). Not many studies have investigated demonstratives in contact. When referring to indexicality, however, we know that macrocontact studies report that one demonstrative is usually selected as a definiteness marker or determiner (in creoles, McWhorter 2018); or that in general the system is not affected (Polinsky 2018). After investigating Romance ternary and binary systems in microcontact, Terenghi (2019) concludes that they are not in fact affected by contact. Specifically, they may change, but only in the same direction that they would be expected to follow diachronically: the ternary system can be reduced to a binary system, but nothing more.

We can observe an important difference in CIC between deixis and the two other phenomena explored here: while microcontact and macrocontact have different outputs for *pro*-drop and DOM, demonstrative systems are completely unaffected by contact; all contact can do is accelerate the diachronic change (that we witness- historically- in some varieties that once displayed a ternary system and now exhibit a binary system, such as Neapolitan, Ledgeway 2019).

7. Conclusions

This review has adopted a structural approach to syntactic change in contact. It brings together the main results with respect to two well-studied phenomena, which were selected to exemplify the various approaches and methodologies used in the study of CIC. The review attempts to show that microcontact and macrocontact result in different but coherent outputs, and that the distinction between the two should certainly be drawn in future contact studies.

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Literature Cited

Aalberse S, Backus A, Muysken P. 2019. *Heritage languages. A language contact approach*. Amsterdam: John Benjamins.

Aikhenvald AY, Dixon RMW, eds. 2001. *Areal diffusion and genetic inheritance: problems in comparative linguistics*. Oxford: Oxford University Press

Aikhenvald AY, Dixon RMW, eds. 2007. *Grammars in Contact: A Cross-Linguistic Typology*, Oxford: Oxford University Press

Andersen H. 1988. Centre and periphery: adoption, diffusion and spread. In *Historical dialectology*, ed. J Fisiak, pp. 39–85. Berlin: Mouton de Gruyter

Appel R, Muysken P. 1987. Language contact and bilingualism. London: Arnold

Badia Margarit A. 1994. Gramàtica de la llengua catalana. Barcelona: Proa

Baptista M. 2002. The Syntax of Cape Verdean Creole: The Sotavento Varieties. Amsterdam;

Philadelphia: John Benjamins

Bayer R. 2013. *Null subjects in creole languages*. Undergraduate Honors Thesis Linguistics Department, University of Michigan, Ann Arbor

Benincà P. 1986. II lato sinistro della frase italiana. The ATI Journal 47:57-85

Benito R. 2017. Differential Object Marking in Catalan. Contexts of appearance and analysis. MA thesis, Universitàt de Barcelona

Berretta M. 1989. Sulla presenza dell'accusativo preposizionale in italiano settentrionale: note tipologiche. *Vox Romanica* 48:13-37

Berretta M. 1991. Note sulla sintassi dell'accusativo preposizionale in italiano. *Linguistica* 31:211-232

Berruto G. 1987. Sociolinguistica dell'italiano contemporaneo. Roma: Carocci

Bossong G. 1985. Empirische Universalienforschung. Differentielle Objektmarkierung in den neuiranischen Sprachen. Tübingen: Narr

Branigan H. 2006. Syntactic priming. Language and Linguistics Compass 1:1-16

Carminati MN. 2002. The processing of Italian subject pronouns. PhD Diss., University of Massachusetts at Amherst

Carvalho AM, Child M. 2011. Subject pronoun expression in a variety of Spanish in contact with Portuguese. In *Selected Proceedings of the 5th Workshop on Spanish Sociolinguistics*, ed. J Michnowicz, R Dodsworth, pp. 14-25. Somerville, MA: Cascadilla Press

Carvalho AM, Orozco R, Shin N, eds. 2015. Subject Pronoun Expression in Spanish: A Cross-Dialectal Perspective. Washington, DC: Georgetown University Press

Casalicchio J, Frasson A. 2018. Cambiamenti nell'uso dei soggetti clitici veneti: il ruolo del contatto con l'italiano. In *Capitoli di morfosintassi delle varietà romanze d'Italia: teoria e dati empirici*, ed. A De Angelis, A Chilà, pp. 117-133. Palermo: Centro di studi filologici e linguistici siciliani

Clyne M. 1997. Multilingualism. In *The Handbook of Sociolinguistics*, ed. F Coulmas, pp. 301-314. Oxford: Blackwell

Costa J, Pratas F. 2012. Embedded null subjects in Capeverdean. *Journal of Linguistics* 49:33-53

D'Alessandro R. 2015. Null Subject. In Contemporary Linguistic Parameters, ed. A Fábregas, J Mateu, M Putnam, pp. 201-226. London: Bloomsbury Press

D'Alessandro R. 2017. When you have too many features: auxiliaries, agreement, and clitics in Italian varieties. *Glossa: A Journal of General Linguistics*, 2:50

D'Alessandro R. 2018. Microcontact. What it is and what it does. Paper presented at UiL-OTS Colloquium, 15 March 2018.

DeGraff M. 1993. Is Haitian Creole a Pro-Drop Language?. In Atlantic Meets Pacific: A Global View of Pidginization and Creolization (Selected Papers from the Society for Pidgin and Creole Linguistics), ed. F Byrne, J Holm, pp. 71-90. Amsterdam; Philadelphia: John Benjamins

De Houwer A, Ortega L. 2018. *The Cambridge Handbook of Bilingualism*. Cambridge: Cambridge University Press

De Prada Pérez A. 2015. First person singular subject pronoun expression in Spanish in contact with Catalan. In Subject pronoun expression in Spanish: A cross-dialectal perspective, ed. AM Carvalho, R Orozco, NL Shin, pp. 121–142. Washington, DC: Georgetown University Press

Déprez V. 1994. Haitian: A pro-drop language?. *Journal of Pidgin and Creole Languages* 9:1-24

Diez F. 1882. Grammatik der romanischen Sprachen. Bonn: Weber

Döpke S. 2000. The inter-play between language-specific development and cross-linguistic influence. In *Cross-linguistic Structures in Simultaneous Bilingualism*, ed. S Döpke, pp. 79-103. Amsterdam: John Benjamins

Escandell-Vidal V. 2007. Acusatiu preposicional i dislocació amb clític. Caplletra 42:1-24

Escandell-Vidal V. 2009. Differential Object Marking and topicality: The case of Balearic Catalan. *Studies in Language* 33:832-884

Ferguson, CA. 1964. Diglossia. In *Language in culture and society*, ed. D Hymes, pp. 425-439. New York: Harper International

Ferreira V, Bock K. 2006. The functions of structural priming. *Language and Cognitive Processes* 21:1011-1029

Filiaci F. 2010. Null and Overt Subject Biases in Spanish and Italian: A Cross-linguistic Comparison. In Selected Proceedings of the 12th Hispanic Linguistics Symposium, ed. C Borgonovo, M Español-Echevarría, P Prévost, pp. 171-182. Somerville, MA: Cascadilla Proceedings Project

Fiorentino G. 2003. Prepositional Objects in Neapolitan, In *Romance Objects. Transitivity in Romance Languages*, ed. G Fiorentino, pp. 117-151. Berlin: Mouton de Gruyter

Flynn, S. 1983. A study of the effects of principal branching direction in second language acquisition: The generalization of a parameter of Universal Grammar from first to second language acquisition. PhD Diss., Cornell University

Flynn S, Foley C, Vinnitskaya I. 2005. *ISB4: Proceedings of the 4th International Symposium on Bilingualism*, ed. J Cohen, KT McAlister, K Rolstad, J MacSwan, pp. 768-774. Somerville, MA: Cascadilla Press

Formentin V, ed. 1998. Loise De Rosa, Ricordi. Roma: Salerno

Frasson A. In press. Clitics are not enough: on agreement and null subjects in Talian. Linguistic Analysis

Haspelmath M, APiCS Consortium. 2013. Expression of pronominal subjects. In *The atlas of pidgin and creole language structures*, ed. Michaelis SM, Maurer P, Haspelmath M, Huber M, ch. 62. Oxford: Oxford University Press.

Heine B, Kuteva T. 2005. *Language contact and grammatical change*. Cambridge: Cambridge University Press

Helland C. 2004. The interpretable—uninterpretable feature distinction and attrition in Catalan. Paper presented at GLOW 2004 in Thessaloniki.

Hulk A, Müller N. 2000. Bilingual first language acquisition at the interface between syntax and pragmatics. *Bilingualism: Language and Cognition* 3:227-244

Irimia MA, Pineda A. 2019. Differential object marking and Scales: Insights from Romance diachrony. *Proc. Ling. Soc. Amer.* 4. 57:1-15

Kellerman E. 1978. Giving learners a break: Native language intuitions as a source of predictions about transferability. *Working papers on Bilingualism* 15:59-92.

Kellerman, E. 1983. Now you see it, now you don't. In *Language transfer in language learning*, ed. S Gass, L Selinker, pp. 112–34. Rowley, MA: Newbury House

Kellerman, E. 1986 An eye for an eye: crosslinguistic constraints on the development of the L2 lexicon. In Crosslinguistic influence in second language acquisition, ed. E Kellerman, MS Smith, MS, pp. 35-48. New York: Pergamon

Laleko O, Polinsky M. 2016. 2016. Between syntax and discourse: topic and case marking in heritage speakers and L2 learners of Japanese and Korean. *Linguistic Approaches to Bilingualism* 6:396–439

Lambert, WE. 1955. Measurement of the linguistic dominance in bilinguals. *Journal of Abnormal and Social Psychology* 50: 197-200

Ledgeway A. 2009. Grammatica diacronica del napoletano (Beihefte zur Zeitschrift für romanische Philologie Band 350). Tübingen: Max Niemeyer Verlag

Ledgeway, A. 2012. From Latin to Romance: Morphosyntactic Typology and Change. Oxford: Oxford University Press.

Ledgeway A. In press. From Latin to Romance Syntax: The Great Leap. In *The Oxford Handbook of Diachronic and Historical Linguistics*, ed. P Crisma, G Longobardi. Oxford: Oxford University Press

Ledgeway A, Roberts I. 2017. Principles and Parameters. In The Cambridge Handbook of Historical Syntax, ed. A Ledgeway, I Roberts, pp. 581-628. Cambridge: Cambridge University Press

Luján M, Parodi C. 1996. Clitic-doubling and the acquisition of agreement in Spanish. In *Perspectives on Spanish linguistics (vol. 1)*, ed. J Gutiérrez- Rexach, L Silva Villar, pp. 119–138. Los Angeles, CA: UCLA, Department of Linguistics.

Madeira AM, Xavier F, Crispim ML. 2012. Uso e interpretação de sujeitos pronominais em português L2. In *Textos Selecionados do XXVII Encontro da Associação Portuguesa de Linguística*, ed. A Costa, C Flores, N Alexandre, pp. 376-397. Lisbon: Associação Portuguesa de Linguística

McWhorter J. 2018. The Creole Debate. Cambridge: Cambridge University Press

Moll F B. 1991. Gramàtica Històrica Catalana. València: Universitat de València

Montrul S. 2004. Subject and object expression in Spanish heritage speakers: A case of morpho-syntactic convergence. *Bilingualism: Language and Cognition* 7:125–142

Montrul S. 2011. Multiple interfaces and incomplete acquisition. *Lingua* 121:591-604

Montrul S, Bowles M. 2009. Back to basics: differential object marking under incomplete acquisition in Spanish heritage speakers. *Bilingualism: Language and Cognition* 12:363–83

Montrul S, Ionin T. 2012. Dominant language transfer in Spanish heritage speakers and L2 learners in the interpretation of definite articles. *The Modern Language journal* 96:70-94

Montrul S, Sánchez-Walker N. 2013. Differential object marking in child and adult Spanish heritage speakers. *Language Acquisition* 20:109–32

Müller N, Cantone K, Kupisch T, Schmitz K. 2002. Zum Spracheneinfluss in bilingualen Erstspracherwerb: Italienisch–Deutsch. *Linguistische Berichte* 190:157–206

Müller N, Hulk A. 2001. Cross-linguistic influence in bilingual language acquisition: Italian and French as recipient languages. *Bilingualism: Language and Cognition* 4:1-21

Müller N, Kupisch T, Schmitz K, Cantone K. 2006. *Einfürhung in die Mehrsprachigkeitsforschung*. Narr Verlag

Nocentini A. 1985. Sulla genesi dell'oggetto preposizionale nelle lingue romanze. In: *Studi Linguistici e Filologici per Carlo Alberto Mastrelli*, pp. 299-311. Pisa: Pacini

Nocentini A. 1992. Oggetto marcato vs. oggetto non-marcato: stato ed evoluzione di una categoria nell'area euro-asiatica. In *L'Europa linguistica: contatti, contrasti, affinità di lingue. Atti del 21º Congresso internazionale di studi (Catania, 10-12 settembre 1987)*, ed. A Mocciaro, G Soravia, pp. 227-246. Roma: Bulzoni

Paradis J, Genesee F. 1996. Syntactic acquisition in bilingual children: autonomous or independent? *Studies in Second Language Acquisition* 18:1-25

Paradis J, Navarro S. 2003. Subject realization and crosslinguistic interference in the bilingual acquisition of Spanish and English: what is the role of input? *Journal of Child Language* 30:1–23

Pinto M. 2006. Subject pronouns in bilinguals. Interference or maturation?. In *Acquisition of Syntax in Romance Languages*, ed. L Escobar, V Torrens, 331-352. Amsterdam: John Benjamins

Platzack C. 2001. The vulnerable C-domain. Brain and Language 77: 364-377

Polinsky M. 1997. American Russian: language loss meets language acquisition. In Formal Approaches to Slavic Linguistics, ed. W Brown, E Dornisch, N Kondrashova, D Zec, pp. 370–407. Ann Arbor, MI: Michigan Slavic Publications

Polinsky M. 2006. Incomplete acquisition: American Russian. *Journal of Slavic Linguistics* 14:161–219

Polinsky M. 2011. Reanalysis in adult heritage language. *Studies in Second Language Acquisition* 33:305–328

Polinsky M. 2018. *Heritage Languages and Their Speakers*. Cambridge: Cambridge University Press.

Ritchie WC, Bhatia TK. 1996. *Handbook of Second Language Acquisition*. New York: Academic Press

Ritchie WC, Bhatia TK. 2009. The New Handbook of Second Language Acquisition. Leiden: Brill

Rizzi L. 1982. Issues in Italian Syntax. Dordrecht: Foris

Roberts I. 2019. *Parameter Hierarchies and Universal Grammar*. Oxford: Oxford University Press

Ross M. 2001. Contact-induced change in Oceanic languages in North-West Melanesia. In *Areal diffusion and genetic inheritance*, ed. AY Aikhenvald, RMW Dixon, pp. 134–166. Oxford: Oxford University Press

Rothman, J. 2010. On the typological economy of syntactic transfer: word order and relative clause attachment preference in L3 Brazilian Portuguese. *International Review of Applied Linguistics* 48:245–273

Rothman, J. 2011. L3 syntactic transfer selectivity and typological determinacy: the typological primacy model. *Second Language Research* 27:107–127

Rothman, J. 2013. Cognitive economy, non-redundancy and typological primacy in L3 acquisition: evidence from initial stages of L3 Romance. In *Romance Languages and Linguistic Theory 2011*, ed. S Baauw, F Drijkoningen, L Meroni, M Pinto, pp. 217–248. Amsterdam: John Benjamins

Rothman, J. 2015. Linguistic and cognitive motivations for the typological primacy model of third language (L3) transfer: timing of acquisition and proficiency considered. *Bilingualism:* Language and Cognition 18:179–190

Rothman J, Alemán Bañón J, González AJ. 2015. Neurolinguistic measures of typological effects in multilingual transfer: introducing an ERP methodology. *Front. Psychol.* 6:1087.

Sancho P. 2002. La preposició i el sintagma preposicional. In *Gramàtica del català contemporani*, ed. J Solà, MR Lloret, J Mascaró, M. Pérez Saldanya, pp. 1698-1796. Barcelona: Empúries

Scontras G, Fuchs Z, Polinsky M. 2015. Heritage language and linguistic theory. *Front. Psychol.* 6:1545

Serratrice L, Sorace A, Paoli S. 2004. Subjects and objects in Italian-English bilingual and monolingual acquisition. *Bilingualism: Language and Cognition* 7:183–206

Silva-Corvalán C. 1994. Language contact and change: Spanish in Los Angeles. Oxford: Oxford University Press

Sippola E. 2013. Ternate Chabacano. In: *The survey of pidgin and creole languages. Volume* 2: *Portuguese-based, Spanish-based, and French-based Languages*, ed. Michaelis SM, Maurer, P, Haspelmath M, Huber, M. Oxford: Oxford University Press

Sorace A. 2000. Syntactic optionality in non-native grammars. *Second Language Research* 16:93–102

Sorace A. 2003. Ultimate L2 attainment. In Handbook of second language acquisition, ed. M Long, C Doughty, pp. 130-151. London: Blackwell.

Sorace A. 2004. Native language attrition and developmental instability at the syntax–discourse interface: data, interpretations and methods. *Bilingualism: Language and Cognition* 7:143–45

Sorace A. 2005. Syntactic optionality at interfaces. In *Syntax and variation: reconciling the biological and the social*, ed. L Cornips, K Corrigan, pp. 46-11. Amsterdam: John Benjamins

Sorace A. 2011. Pinning down the concept of interface in bilingualism. *Linguistic Approaches* to Bilingualism 1:1-33

Sorace A. 2012. Pinning down the concept of interface in bilingualism. A reply to peer commentaries. *Linguistic Approaches to Bilingualism* 2:209-216

Sorace A, Filiaci F. 2006. Anaphora resolution in near-native speakers of Italian. *Second Language Research* 22:339–368

Sorace A, Serratrice L, Filiaci F, Baldo M. 2009. Discourse conditions on subject pronoun realization: Testing the linguistic intuitions of older bilingual children. *Lingua* 119:460–477

Sorgini L. 2019. Expansion and Retention: What DOM shouldn't be doing. Paper presented at the Graduate Student meeting, Utrecht University, 16 December 2019

Sornicola R. 1997. L'oggetto preposizionale in siciliano antico e in napoletano antico. Considerazioni su un problema di tipologia diacronica, Italienische Studien 18:66–80

Steinkrüger P. 2008. The puzzling case of Chabacano: creolization, substrate, mixing and secondary contact. *Studies in Philippine languages and cultures* 19:142-157

Tekavčič P. 1972. Grammatica storica della lingua italiana. Bologna: Il Mulino

Terenghi S. 2019. Romance ternary demonstrative systems as a probe into the architecture of person features. Invited seminar, Leiden University, 26.11.2019

Thomas EM, Mennen I. 2014. Advances in the Study of Bilingualism. Bristol: Multilingual Matters

Thomason SG, Kaufman T. 1988. *Language contact, creolization and genetic linguistics*. Berkeley and Los Angeles: University of California Press

Tsimpli IM, Sorace A, Heycock C, Filiaci, F. 2004. First language attrition and syntactic subjects: a study of Greek and Italian near-native speakers of English. *International Journal of Bilingualism* 8:257–277

White L. 2011. Second language acquisition at interfaces. Lingua 121:577-590.