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Syntactic Change in Contact: Romance

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Abstract

Language change as a result of language contact is studied in many different ways using a number of different methodologies. This article provides an overview of the main approaches to syntactic change in contact (CIC), 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 and in creolization contexts. Furthermore, they present great microvariation. They are therefore ideal to tackle language change in contact. Given the breadth of studies targeting Romance languages in contact, only a selection of facts is considered here, namely *pro*-drop, differential object marking (DOM), and deixis. The article shows that microcontact, i.e., contact between minimally different grammars, is a necessary dimension to be considered within contact studies, as it provides insights that are often radically different from those provided by the observation of contact between maximally different languages.

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 through the centuries. Few other language groups show the same breadth in contact and the same level of diachronic documentation. The Romance language group is therefore the optimal candidate for the study of language evolution and language change in contact (CIC) in all its forms: as heritage languages, as contact between standard varieties, as creoles, and as dialects in contact.

CIC is not an unambiguous concept. It is instantiated in a number of very different situations with different outputs. In particular, CIC studies concerned with syntax traditionally revolve around three main lines of inquiry: 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, though it is not infrequent 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, p. 5). This article investigates the extent to which this statement is true by considering some key outcomes of the study of syntactic CIC.

This article addresses CIC from a structural viewpoint. The structural outputs of language contact are compared without focusing on underlying cognitive factors to show that the outputs are mostly uniform. This review also demonstrates that a distinction should be drawn between contact situations among maximally different languages (macrocontact) on the one hand and contact situations between minimally different languages or dialects (microcontact) on the other.

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 microcontact 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 is 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 is crucial in explaining language change. Examining three or more grammars that are identical but for that one little detail, observing all of them in contact with each other, and noticing the direction of change with respect to that detail can help identify what influences what (if that influence exists at all). Interestingly, microcontact between languages that are typologically very similar or belong to the same family results in outcomes that are rather different from those observed in situations of macrocontact between languages that are typologically divergent. I highlight these differences systematically in this article.

1.2. Factors Influencing Change in Contact

CIC is influenced by several factors. The situation in which contact arises, the extent of exposure to the languages involved, and the speaker’s attitude to those languages are among the most relevant ones (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).

While recognizing these as key factors for CIC, I choose a structural focus for this article. Structural factors for CIC can be observed only when the other conditions have been factored out. Given how difficult it is to control for psychological, cognitive, and sociohistorical conditions at the same time, many scholars have been discouraged from looking into structure in contact. It is perhaps for this reason that structural and microvariational explanations for CIC have been mostly set aside to give place to psychological, cognitive, and sociohistorical considerations, each in its own right. This frequently quoted statement by Thomason & Kaufman (1988, p. 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 primary determinant of 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- and multilingualism started with Hulk & Müller’s (2000) and Müller & Hulk’s (2001) articles. They proposed 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, which I discuss below. Importantly, Hulk & Müller underlined 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 (for more on the impact of structural similarity on language change, see also Paradis & Genesee 1996, Döpke 2000).

Overall typological similarity has often been considered a cause of structural transfer (see Aikhenvald & Dixon 2007), while the attention on structural similarity between language phenomena has been declining in contemporary contact studies. Consequently, many studies on language acquisition in contact situations (L2, bilingualism, heritage) offer no data samples 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 without actually providing any example of the structure at issue.

This article takes a different, structural approach. Given that CIC involves every language phenomenon to a greater or lesser extent, the general point is illustrated using only a selection of phenomena. The three phenomena selected to illustrate CIC are null subjecthood, differential object marking (DOM), 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 European Research Council (ERC) project “Microcontact.”

The next section provides an overview of the factors that make the Romance languages a fruitful testing ground for the study of CIC. Section 1.4 outlines an important distinction between the multilingual speaker and multilingual society. Section 1.5 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 DOM 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.

1.3. 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, 2020) and Ledgeway & Roberts (2017) provide an overview of Romance macrotypological commonalities. According to Ledgeway (2020), the Romance languages share the following typological settings:

- Head-initiality: (S)VO, postnominal adjectives/genitives
- Configurationality: grammatically fixed word order
- Nominative–accusative alignment
- Nonpolysyntheticity
- Subject prominence
- Proliferation of functional categories: articles, pronominal clitic, auxiliaries, complementizers
- Relatively rich inflectional agreement, null subjects (but see modern French), subject clitics
- Predominant finite complementation, notably *quel/che-* clauses
- Presence of periphrastic active/passive paradigms
- Preverbal, discontinuous and/or postverbal negation

There are some deviations, most notably French non-null subjecthood (see Section 2). Mostly, however, the Romance languages are typologically uniform. Romance languages also offer what Kellerman (1978) calls psychotypical 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.

Furthermore, the Romance languages have been in contact with most of the language families in the world due to their worldwide spreading, which makes them ideal to study CIC. There is, however, a significant difference in outcomes between contact within Romance languages and contact between Romance languages and other language families, a distinction that is rarely made in the literature but that will be made here extensively.

1.4. Multilingual Speaker Versus Multilingual Society

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 or 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.

CIC obviously happens through bi-/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 a line of evolution in the acquisition of a second language, comparing it to L1 acquisition. I 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). I return to this topic in Section 1.5.

Research into contact as a result of multilingualism can be further divided into studies that target multilingual speakers, such as those on L2 or 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 in 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, whereas 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 approach focuses on the mental mechanisms of language learning: the extent to which acquisition is complete, exposure to the other language, age of onset, attrition, and so on. Although intended to investigate the psychological reality of language structures and, hence, 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 the age of onset or the completeness of input 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 extrapolates information about syntactic change from multiple types of studies but does not explore the cognitive, social, and psychological causes of language change.

1.5. Second- and Third-Language Acquisition

A rather original, and widely accepted, approach to L2 and L3 acquisition has been developed in recent years by Rothman (2010, 2011, 2013, 2015), who outlines a model for the transfer (or block thereof) of a given phenomenon in contact, called the Typological Primacy Model (TPM). Rothman studies L3 acquisition of speakers with an L1 or an L2 that is typologically similar to the L3 to ascertain whether transfer is determined by typological similarity between languages, 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 happens 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) observed 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 et al. is that holistic typological similarity between languages is the key factor for transfer, be it facilitating (i.e., bearing the right target) or nonfacilitating (i.e., bearing the wrong target). In a study of French L3 learners with English and Spanish as L1 or L2, Rothman et al. observe that L3 French learners copy *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 to it than English, despite the fact neither French nor English have *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 nonfacilitating transfer, he maintains that transfer involves the typological similarity of languages as a whole, which overrides the single structural similarity. The study of L3 acquisition does indeed offer valuable insights into the factors involved in grammatical transfer, but this whole architecture is not of great help when considering microcontact between languages that are typologically identical with some minor differences.

1.6. Interfaces

Many studies on bilingual acquisition have been performed on the basis of macrocontact between a Romance language and English (or another Germanic language). The label "language change in contact," however, often refers not to children's language, but to adult language. Based on considerations similar to those presented in Section 1.4, 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 the realization of null subjects in adult bilinguals (in particular L1 speakers undergoing attrition or L2 learners). They find that null subjects are consistently replaced by overt subjects in contexts that monolingual speakers would consider pragmatically odd. 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 & Müller (2000). According to the IH, change is likelier 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 language change.

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 most commonly accepted version of 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 Hulk & Müller (2000) paper 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 are superficially rather similar.

While the L2 literature primarily discusses child language and CIC studies mainly examine adult language, it is clear that the generalizations regarding language change all consider the CP, and 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 discussed in Section 2.2, and from what happens in microcontact, as discussed in Section 3.

This section closes the overview of CIC studies, which serve as a basis to illustrate the three phenomena selected. I start with null subjects in contact.

2. NULL SUBJECTS IN MACROCONTACT

2.1. Null Subjects in Romance Languages

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

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), one would expect two possible outputs of bilingual acquisition: Either the bilingual speaker produces more overt pronouns in the null-subject language than monolingual speakers produce, or there can be a larger number of null subjects in the non-null-subject language. The following sections

demonstrate that the outputs of microcontact and creoles on the one hand and macrocontact on the other often go in different directions.

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 *Atlas of Pidgin and Creole Language Structures* (Haspelmath & APiCS Consort. 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 do they exhibit null argumental subjects. The creoles that exhibit expletive *pro*-drop include Chabacano, a group of Spanish-based creoles spoken in the Philippines; 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:

Ternate Chabacano

- (1) *Múfjo pébro, kel el kompanyéro de mi na kása,*
 Many dog that DEF companion of 1SG.POSS LOC house
kabáandu, ___ ta le, ___ ta sintáw ya numá [...].
 then *pro* IPFV read *pro* IPFV seated already just
 ‘Many dogs, they are my companions in the house. Then, I read, I just sit [...].’
 (Sippola 2013)

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:

Cape Verdean Creole

- (2) *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.’
 (Bayer 2013, p. 69)

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) investigated the realization of subjects in two Spanish monolingual children and compared them to one English-Spanish bilingual child living in the United Kingdom. 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, 20% of the subjects the monolingual children produced were overt, in line with the other monolingual children in Spain, while 35% of the subjects the bilingual child produced were overt.

In a widely cited article, Serratrice et al. (2004) tested *pro*-drop acquisition in one English-Italian monolingual child in the United Kingdom, compared with English and Italian monolingual

children. They found that the bilingual child inserted overt subjects in contexts where the monolingual children would not use them. There was no overuse of null subjects in the non-null-subject language. They concluded 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 underspecification 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. This is known as structural priming (Branigan 2006, Ferreira & Bock 2006).

In a subsequent paper, Serratrice et al. (2009) examined 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. examined 167 children, divided between English-Italian bilinguals living in the United Kingdom, 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. As discussed in Section 1.6, adult language learners extend overt subjects to contexts that are infelicitous for monolingual speakers. Sorace (2000, et seq.) attributes this to the IH.

A study by Pinto (2006) shows that not all pronominal subjects are equal. While children acquire first- and second-person subjects fairly early, third-person pronouns are acquired later. It is also in the third-person pronouns that errors, i.e., use in contexts in which they should be omitted, are most often found. Furthermore, Pinto examined pronoun omission in two bilingual children: one Dutch-Italian bilingual child and one English-Italian bilingual child. First-person overt subjects were attested in most cases, especially for the English-Italian bilingual child. If structural similarity, and in particular feature overlap (see Serratrice et al. 2004), was relevant, one 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 overt and covert 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) observed five German-Italian bilingual children in Germany and found an appreciable overextension of overt pronouns to contexts where monolinguals use null subjects.

2.4. 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 United States. 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:

- (3) 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 levantó 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.’

(Montrul 2004, pp. 133–34)

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:

- (4) 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.’

(Montrul 2004, p. 133)

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 also that they 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).

To sum up, most Romance languages in macrocontact witness an overuse of overt subjects in contexts in which the baseline grammar uses a *pro*. Creoles constitute a partial exception.

3. NULL SUBJECTS IN MICROCONTACT

3.1. Romance Null Subjects in Contact

Section 1.3 has shown that the Romance languages are more or less typologically similar. We also know that topicality plays a big role in Romance languages where word order is much freer than in Germanic languages, as far as topicalization is concerned, but less flexible than in Latin (Ledgeway 2012, 2020).

Null subjects in microcontact, i.e., contact between typologically identical and minimally structurally different languages, behave rather differently from those in macrocontact. They behave, to some extent, similarly to those creole languages that exhibit *pro*-drop.

In a study exploring Catalan and Spanish in contact in the Balearic Islands, de Prada Pérez (2015) compares the percentage of null and overt subjects produced by Catalan-Spanish bilinguals to the percentage produced by 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 & Child also observe that not only the distribution of null subjects but also the distribution of overt subjects are both 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 macrotypologically 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 her dissertation 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 it:¹

- (5) Quando Maria_i è andata a trovare Vanessa_j in ospedale, $\emptyset_{i(j)}$ le ha portato un mazzo di fiori.

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

(Carminati 2002, cited in Filiaci 2010, p. 172)

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 EP and Chinese might look superficially 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 (for an overview, see D’Alessandro 2015), and therefore the speakers do not immediately transfer their own *pros* to EP. Note that this nontransfer can also be explained by the TPM: Chinese and EP are typologically different and perceived to be so. Structural difference also plays a role, however, as I explain in the next section.

3.2. Heritage Microcontact

Data from fieldwork 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

¹Carminati (2002, p. 33) formulates this generalization as the Position of Antecedent Strategy: “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.”

breaks down in seemingly different directions, the output of microcontact is not random, as would be expected in the case of microparameters (see 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, one would not expect this consistency.

Frasson (2020) shows that subject clitics in heritage Venetan 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 Venetan speakers tends to drop subject clitics, particularly in the third person, in contexts in which they are obligatory for older speakers. Frasson (2020) 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 and coordinated structures, and they are not sensitive to clustering restrictions imposed on clitic clusters (A. Frasson, R. D'Alessandro, and B. Van Osch, manuscript 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 observed in other multilingual situations, the subject is dropped in topic-continuation contexts. Frasson and colleagues 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 Venetan, speakers of heritage Friulian in contact with both Rioplatense Spanish and BP are more likely to produce third-person subject clitics than first-person ones.

In general, it seems that third-person pronouns are omitted in Venetan in contact with Italian, whereas 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 that is linked to microsimilarity between structures. Note that the languages involved are typologically identical: Venetan and Friulian differ only in that Friulian presents a full set of subject clitics while the set in Venetan 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 MACROCONTACT

Some Romance languages, most notably Spanish, Catalan, Romanian, and southern Italo-Romance languages, display DOM (Bossong 1985), which is also known as the prepositional accusative in the Romance literature (Diez 1882, Tekavčić 1972). The most prototypically animate objects (such as first- and second-person pronouns, animates, humans, and sometimes animals) are often given a dedicated marker, which is mostly *a* in Romance languages (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 first- or second-person object triggers DOM. Observe that the construction without DOM is not felicitous, as shown in the following examples:

- (6a) A me non mi ha invitato
 to me NEG me has invited
 ‘As for me, s/he hasn’t invited me’
- (6b) *Me non mi ha invitato
 me NEG me has invited
- (6c) A te non ti ho visto
 to you NEG you have seen
 ‘As for you, I haven’t seen you’
- (6d) *Te non ti ho visto
 you NEG you have seen

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 weaken 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 creoles display DOM because many Romance-based creoles tend to use a generalized object marker. Creoles that have been claimed to show DOM are Chabacano, which uses the object marker *kon* or *kung* (Steinkrüger 2008), and some Luso-Asiatic creoles such as Ternateño, Zamboaguenõ, and Malacca. In these varieties, DOM 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. For example, Silva-Corvalán (1994) and Luján & Parodi (1996) report very few cases of object omission in Spanish-English bilingual speakers in Los Angeles. Likewise, Polinsky (1997) shows 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 another feature to be considered, such as definiteness, 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 United States. 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, converging toward what Aalberse et al. (2019) reformulate as the Indeterminacy Hypothesis (following Polinsky 2011):

(7) Indeterminacy Hypothesis

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

(Polinsky 2011, cited in Aalberse et al. 2019, p. 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. I leave all these factors and the age of acquisition aside and concentrate on two grammar-internal factors that they discuss.

The first of these is grammatical complexity and the second 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 nonrealization 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 weakened.

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

5. DIFFERENTIAL OBJECT MARKING IN MICROCONTACT

5.1. Romance Differential Object Marking in Microcontact

Macrocontact studies such as those by Montrul and Polinsky show 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 during the Spanish domination of southern Italy from the sixteenth century onward 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 it is usually dropped with full DPs when they are adjacent to the verb (Benito 2017). 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 nonstandard 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:

- Nonstandard Catalan
- (8a) Esperant a la mare.
'Waiting for the mother.'
- (8b) Coneixies a la seva família.
'You knew his/her family' [Corpus Oral de Conversa Colloquial]
(Benito 2017, p. 16)

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).

Looking at 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, in fact, it increases.

5.2. Differential Object Marking in 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, where 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 made on the basis of macrocontact, as shown in Section 4.

Sorgini (2019) 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 first-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 to 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 for Sicilian in contact with Quebec French.

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

To sum up, the generalization to 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 it is 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, five instances of DOM omission observed with kinship terms in Sicilian heritage speakers in contact with Quebec French. 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, one 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 macro level 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. One can say that within the Romance macrogrammar, 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.

As discussed above, person features can be involved in change. For instance, third-person pronouns seem to be affected by the change in *pro*-drop in Venetan; third-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 (for an extensive discussion, see Polinsky 2018). An interesting generalization that has emerged from the study of demonstratives and personal 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 Quebec 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 other varieties, however, use a ternary system, i.e., they specify the position of the referent with respect to the speaker and the addressee (roughly translated: close to the speaker, close to the addressee, far from both). Not many studies have investigated demonstratives in contact. When referring to indexicality, however, 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.

One 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 [witnessed historically in some varieties, such as Neapolitan, that once displayed a ternary system and now exhibit a binary system (Ledgeway 2009)].

7. CONCLUSIONS

This review has adopted a structural approach to syntactic CIC. 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 a distinction between the two should certainly be drawn in future contact studies.

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