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Inflection in Lingua Franca:

from Haedo's *Topographia* to the *Dictionnaire de la langue franque*

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Abstract: The Mediterranean contact language Lingua Franca (LF), although usually categorized as a pidgin, is known to display a number of non-pidgin-like characteristics. A number of these pertain to its inflection, which shows (for a pidgin) an unusually high degree of retention of lexifier inflectional material. The present paper attempts to situate the inflectional categories of LF, as well as their exponence, between those that are generally found in pidgins and those that characterize LF's Romance lexifiers. In doing so, the paper contributes both to the descriptive analysis of LF and to the theoretical understanding of its place in the typology of contact languages.

Keywords: Romance lexifiers, contact languages, language contact, pidgins, inflection, Algiers, Mediterranean, Maghreb

1. Introduction

Lingua Franca (LF)[1] is a Romance-based contact vernacular that was used for interethnic communication in the Mediterranean area until the second half of the nineteenth century. Its inception is believed to predate, by one or more centuries, the late thirteenth- or early fourteenth-century poem *Contrasto della Zerbitana*, believed by a number of researchers to represent its earliest textual sample (Grion 1890-1892; Aslanov 2006; Castellanos 2007). About three more centuries would elapse before the publication of the first substantial textual sample of LF, contained in a work that was composed around 1580 but published several decades later as Haedo (1612) (Camamis 1977; Foltys 1984-1985; Arends 1998). The first scholarly description of LF did not appear until well after its demise, in the now classic article by Hugo Schuchardt (Schuchardt 1909; Swiggers 1991-1993).

The period following the publication of Haedo (1612) witnessed a steady trickle of published metalinguistic commentaries on and textual samples of LF. The majority of these emanate from the area of the Maghreb, and Guido Cifoletti has argued extensively and consistently in his works on LF (e.g. 1978, 1991, 2000, 2004) that this is not fortuitous but rather is connected with the special social and demographic conditions that existed in that area during the relevant period. For example,

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[1] The following abbreviations are used in this paper: 1 = first person, 2 = second person, 3 = third person, Ar. = Arabic, Cat. = Catalan, DO = direct object, DOM = differential object marker, DOM = differential object marking, Eng. = English, F / f. = feminine, Fr. = French, FUT = future, Gr. = Greek, IMPF = imperfective, IND = indicative, IO = indirect object, It. = Italian, L1 = first language, L2 = second language, Lat. = Latin, LF = Lingua Franca, lit. = literally, M / m. = masculine, MCA = Moroccan Colloquial Arabic, n. = neuter, NEG = negation, PF = perfective, PL / pl. = plural, POSS = possessive, PPLE = participle, PREP = preposition, PRES = present, PRO = pronoun, Ptg. = Portuguese, S / sg. = singular, SBJ = subject, Sp. = Spanish, TAM = tense-aspect-mood, TMA = tense-mood-aspect, Tu. = Turkish, VL = Vulgar Latin.

[…] ma sappiamo che la lingua franca poté diffondersi e mantenersi, a Tunisi e Algeri, grazie al particolare ambiente di pirati, rinnegati e schiavi cristiani di diverse nazioni, che è tipico della dominazione ottomana nel Maghreb. (Cifoletti 1978: 209)

[But we know that Lingua Franca was able to spread and thrive in Tunis and Algiers thanks to the special environment of pirates, renegades and Christian slaves from various nations that is typical of the Ottoman domination in the Maghreb.]

Though Cifoletti does not question the presumed existence of LF in other parts of the Mediterranean (e.g. 1991, 2000, 2004: 18-19), he believes that it was only in the Maghreb that this contact language was able to achieve sufficient independence from its lexifiers in order to acquire structural stability. He argues this by emphasizing the fact that in the other areas in which LF's use was reported, the linguistic situations were much more diffuse and LF was unlikely to function as a target of acquisition. For example, in Venice the more likely targets of acquisition would have been Italian or Venetian. In the Maghreb societies, on the other hand, the North Africans and Eastern Mediterraneans were in a superordinate social position with respect to the European captives and slaves, and their social superiority facilitated the imposition of this sociolinguistically inferior vehicular language on the subordinate population of Europeans:

Dunque la conoscenza della lingua di prestigio per la maggior parte dei Mediorientali e Magrebini si fermava allo stadio di pidgin: ma nei porti dei pirati barbareschi i Musulmani si trovarono ad avere un enorme prestigio sugli Europei capitati laggiù (che erano per lo più prigionieri o schiavi), per questo motivo poterono imporre anche a questi ultimi la variante pidginizzata che era a loro usuale, e così la lingua franca divenne bilaterale e si stabilizzò. (Cifoletti 2000: 16)

[Thus the knowledge of the language of prestige by most Middle Easterners and Maghrebis stopped at the pidgin stage, but in the ports of the Barbary pirates the Muslims came to have enormous prestige over the Europeans that happened to be there (most of them prisoners and slaves), and for this reason they were able to impose even on the latter the pidginized variety that was usual for them, and this way Lingua Franca became bilateral and was stabilized.]

In the literature on contact languages, LF is usually classified as a pidgin (e.g., Foltys 1984-1985: 1-2; Bakker 1994: 27; Thomason 2001: 162; Holm 2004: 15; Vellupilai 2015: 151). On the basis of a feature-by-feature comparison between the properties of LF and known cross-linguistic properties of pidgins, Couto (2002) concludes: "Enfim, por qualquer critério que o abordemos, a LF confirma a unanimidade reinante no meio crioulístico de que ela é um pidgin [In short, no matter which criterion we use, LF confirms the unanimous opinion prevailing in the creolist milieu that it is a pidgin]" (169). In the face of this apparent unanimity, the following reservations expressed by Jacques Arends and the cited authors are instructive:

Although Lingua Franca is traditionally categorized as a pidgin language, there is some reason to qualify this classification. As was already observed by Schuchardt

(1909), some of its linguistic features, such as the generalized use of the infinitive, suggest that Lingua Franca may perhaps be more accurately viewed as a form of Foreigner Talk. Other linguists (e.g. Minervini 1996) have claimed that it should rather be seen as a second-language variety of Italian. And since Italian and Spanish, the languages that formed the basis for Lingua Franca, were closely related dialects rather than separate languages five centuries ago, it might perhaps more appropriately be categorized as a koiné, i.e. the product of dialect convergence. (Arends 2005: 625)

The above reservations stem to a large extent from the ambiguous structural features of LF. While it undoubtedly shares with pidgins some of its structural characteristics and developmental tendencies, such as the loss of certain functional elements and categories of the lexifiers and the overall tendency toward analyticity, it is also known to possess a number of non-pidgin-like characteristics. These include the inherited definite and indefinite articles, rich inherited derivational morphology, inherited gender distinction and adjectival agreement, functional use of word order variation, a consistently used copula, and an uncharacteristically well-developed vocabulary (Bakker 2003; Parkvall and Bakker 2013; Operstein 2017b, forthc. a). In addition, LF lacks some of the features that are commonly found in pidgins, such as an all-purpose preposition (Arends 1997; Parkvall 2016).[2] This combination of pidgin- and non-pidgin-like characteristics makes it difficult to pigeonhole LF in the typology of contact languages.

In an attempt to resolve this taxonomic problem, Operstein (forthc. b) proposes to view LF as located on the pidgin-koine continuum. The approach adopted in that work consists of situating major structural features of LF against the background of the processes and outcomes that characterize pidginization and those that characterize koineization.[3] The present paper adopts a similar approach, and considers the issue of the taxonomic status of LF from the angle of its inflectional categories and their morphosyntactic expression. Previous studies of LF inflection consist of descriptive treatments and include Schuchardt (1909), Coates (1971), Collier (1977), Cifoletti (1980, 1989, 2004) and Arends (2005), among others. The present study distinguishes itself from the primarily descriptive orientation of these publications in that it aims to situate the inflectional categories of LF against those of its Romance lexifiers and of pidgins, subordinating the descriptive aspects to the larger issue of the taxonomic status of LF.

Before proceeding, it is necessary to briefly dwell on the sources of the data and the variety of LF to be described. In light of its immense temporal and geographical spread, not to mention its functional and theoretical importance, the documentation of LF is grossly inadequate. It comes mostly in the form of textual samples in pre-scholarly written sources, with some of the samples being as short as a few words or one sentence, and some supplied by authors who apparently had little or no firsthand knowledge of LF.

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[2] For example, according to Mann (1993), the preposition *fɔ̀* (< Eng. *for*) in Nigerian Pidgin translates such notions as 'for', 'of', 'at', 'in', 'on' and 'to'.

[3] The structural variation in LF caused by the first languages of its speakers, which forms the foundation of the proposal to view LF as a pidgin-koine, intersects with other kinds of variation, including those caused by the temporal and geographical shifts in the composition of its lexifiers, the first languages of its observers, the nature of the texts in which LF samples are reported, particularly the difference between literary and documentary sources, and the social status of its typical users. For a discussion of variation in LF caused by one or more of these factors see Cifoletti (1994, 2000), Dakhlia (2008), Selbach (2008) and Operstein (forthc. b).

The list of primary sources assembled by Arends (1998) is a useful indicator of how brief many of the samples are. Given this state of the documentation, Cifoletti has endeavored to show in much of his work on LF that the only temporal / geographical variety of this language that lends itself to a coherent structural description is the one that was used between the sixteenth and nineteenth centuries in the Maghreb (see 2004: 18-19). Camus Bergareche (1993) appears to express a similar view to Cifoletti's when he suggests that the textual samples in the plays of the Venetian playwright Carlo Goldoni, which are believed by some scholars of LF (e.g. Zago 1986; Santoro 1996) to represent LF from the Eastern Mediterranean, depict L2 varieties instead.[4]

From among the Maghrebi varieties of LF, the one "di gran lunga la più tipica, la meglio conosciuta e più coerente [by far the most typical, the best known and the most coherent]" (Cifoletti 2000: 16-17) is the Algerine variety. The cornerstones of its documentation are two descriptions with substantial textual samples produced by Romance language speakers who are likely to have been long-term residents of Algiers. The first, published as Haedo (1612), is estimated to have been composed between 1578 and 1581 by a Spanish priest who was a captive in Algiers during the period captured in his work (Camamis 1977: 140-150; see Figure 1). The second, published anonymously in Marseilles (Anonymous 1830; henceforth the *Dictionnaire*), is hypothesized to have been composed by speakers of Provençal and French who had limited knowledge of Spanish and good non-native knowledge of Italian (Cifoletti 1989, 2004; see Figure 2). The two sources are highly unequal in their coverage of LF: while Haedo (1612) offers less than twenty sentences in LF totaling about one hundred distinct lexical items, the *Dictionnaire* contains, in addition to an about three-page long outline of LF grammar, 141 sentences in its LF-teaching dialogues and about 2,000 lexical units in its glossary that uses French as the entry and LF as the exit language (Cifoletti 1989: 157-164; Cornelissen 1992: 220). Between them, these sources capture Algerine LF at the beginning and end of the most stable period of its existence, and, in combination, provide the fullest and most reliable record of any variety of LF.[5] For these reasons, they will form the basis of the study of LF inflection in this paper.

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[4] Camus Bergareche (1993) contends in his article that both *lengua de moros* (representations of the speech of Moors on the Spanish Golden Age stage) and Goldoni's "lengua de levantinos [language of Levantines]" represent imperfectly acquired L2 varieties of the respective Romance languages. Cifoletti (2000), by contrast, believes that the differences between Goldoni's samples and Maghrebi LF may be due to the existence of "una variante locale, un 'dialetto veneziano' della lingua franca [a local variant, a 'Venetian dialect' of LF]" (15). Cifoletti concedes, nonetheless, that the textual samples are not easy to interpret in taxonomic terms: "Non mi sentirei di affermare d'altra parte che la lingua franca di Venezia fosse soltanto una serie di casi di mancato apprendimento dell'italiano (o del veneziano): alcuni dei parlanti potevano avere imparato nel loro Paese il pidgin a base italiana, ed essersi fermati a quel livello; ma certo a noi che disponiamo solo di documenti letterari appare difficile separare nettamente la loro realtà da quella di stranieri che semplicemente difettavano nella padronanza della lingua locale [I would not assert, on the other hand, that the Lingua Franca of Venice was only a series of cases of failed acquisition of Italian (or Venetian): some of the speakers could have acquired the Italian-based pidgin in their land and stopped at that level; but certainly for us, who only have literary documents at our disposal, it appears difficult to clearly separate their reality from that of foreigners who simply lacked mastery of the local language]" (16).

[5] Cf. Camus Bergareche (1993: 418-419): "El conocimiento moderno de la lingua franca se basa fundamentalmente en dos textos de épocas muy diferentes. En primer lugar, disponemos de los datos que proporciona el fraile español Diego de Haedo en su *Topographia e Historia general de Argel*, de 1612. […] Además de la *Topographia* […] de Haedo, disponemos también del *Dictionnaire de la Langue Franque ou Petit Mauresque*, publicado en Marsella en 1830 para uso de los soldados franceses destinados a Argelia.

The rest of the paper is structured as follows. Sections 2 and 3 look at inflection in pidgins and in the Romance lexifiers of LF. Their purpose is to present the expected limits for the inflectional categories of LF and the means by which they are expressed. Section 4 looks at the inflection classes and inflectional categories of LF nouns and adjectives and their morphosyntactic expression. Section 5 does the same for LF verbs. Section 6 examines the expression of pronominal possessors and pronominal objects in LF. Section 7 contains a brief summary of the conclusions. In the sections that analyze primary data, the *Dictionnaire*'s LF is presented first, followed by Haedo's. Given the substantial disparity in the size and nature of the two sources, the description is inescapably dominated by the data from the *Dictionnaire*.

2. Inflection in pidgins

This section and the next explore the expected limits of variation in the inflectional categories of LF and their morphosyntactic expression by examining inflection in pidgins, on the one hand, and the Romance lexifiers of LF, on the other. The discussion of pidgin inflection is based on the cross-linguistic surveys of pidgins by Bakker (2003), Roberts and Bresnan (2008), Parkvall and Bakker (2013) and Parkvall (2016).

Bakker (2003: 11) and Roberts and Bresnan (2008: 270) identify three sources of inflections in pidgins: inheritance from the lexifier, borrowing from other languages in contact, and innovation, either via grammaticalization of lexical items or by copying of patterns from other languages in contact. Of these, retention of lexifier inflections constitutes the largest category and follows a cline, from full to partial retention, to partial or full lexicalization, and to complete loss (Roberts and Bresnan 2008: 270, 277-278). In his typological survey of inflection in about thirty pidgins, Bakker (2003: 23) has found that the inheritability of inflectional categories follows the hierarchies in (1).

(1)   number > case > gender   (nouns)
        TMA > valence > number > person > gender   (verbs)

Roberts and Bresnan (2008: 274-277), following Booij (e.g. 1996), separate inflection into inherent (syntax-independent) and contextual (syntax-dependent). Their examples of inherent inflection include TAM in verbs and gender and number marking in nouns; and their examples of contextual inflection include agreement markers in verbs and case markers in nouns. The typological survey of inflection in twenty-nine pidgins undertaken in that work has revealed that the inheritability of inflections correlates with their division into the inherent and contextual types in that the former are about twice as likely as the

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[…] Fuera de estos dos testimonios, los textos en lingua franca son pocos y muy breves. (Present-day knowledge of Lingua Franca is based mainly on two texts from very different periods. First, we have the data provided by the Spanish monk Diego de Haedo in his *Topographia e Historia general de Argel*, from 1612. In addition to Haedo's *Topographia*, we have the *Dictionnaire de la Langue Franque ou Petit Mauresque*, published in Marseilles in 1830 for the use of the French soldiers destined for Algeria. Aside from these sources, the texts in Lingua Franca are few and very short.)".

latter to be inherited by pidgins (278). The findings obtained by Roberts and Bresnan confirm the asymmetrical treatment of the two inflection types in other contact contexts, including inheritability of inflections in creoles (Plag 2008) and cross-linguistic borrowability of inflectional morphology (Gardani, Arkadiev and Amiridze 2015).

Parkvall and Bakker provide the following useful list of "[f]eatures typically absent from pidgins":

- in the area of morphology: inflection, derivation, reduplication, infixation, suprafixation, allomorphy, any synthetic structures;
- in the nominal realm: gender marking, case marking, number marking, definite and indefinite articles, large sets of demonstratives, adjectival agreement;
- in the verbal realm: person agreement, tense-mood-aspect marking, valence, voice and gender marking;
- in the area of functional categories: definite and indefinite articles, possessive pronouns, moderate or large sets of prepositions, more than one or a few question words, demonstratives, clause connectors (...) (Parkvall and Bakker 2013: 46)

Parkvall (2016) examines the behavior of three representative pidgins, Chinook Jargon, Français-Tirailleur and Yokohamese, with respect to the ten features summarized in Table 1 (this is Table 4 in the original publication). Although the summary is based on just three pidgins, Parkvall suggests that "the following typical configuration (...) also, by and large, applies to pidgins in general".

Table 1. Summary of the features considered in the three pidgins (from Parkvall 2016)

personal pronouns	usually three persons and two numbers, but little else
tense/mood/aspect	no grammaticalized markers at all
adpositions	often zero, sometimes extremely frequent use of one single item
articles	usually absent
demonstratives	usually no distance contrasts
gender/noun classes/ classifiers	neither grammatifal nor biological gender (or comparable systems)
copula	not inherited from the lexifier. For the most part absent, but sometimes grammaticalized from other material
negation	free and invariable particle, often preverbal
nominal number	not obligatorily marked
word order	few or no exceptions to whatever order is dominant

Finally, Bakker (2003: 13) and Parkvall and Bakker (2013: 36) make the interesting observation that some pidgins formally distinguish certain parts of speech. One of their examples is the verb in Tay Boi (Vietnamese Pidgin French), which ends in *-er* regardless of the infinitival ending in its lexifier French. We will revisit this observation, and this example, in Section 7.

3. Inflection in the lexifiers

Italian and Spanish, the principal lexifiers of LF, belong to the Romance linguistic type. It is customary to characterize the latter by simultaneously referring to the common synchronic typological features of Romance languages and the common diachronic processes that define their shared evolution from Latin (e.g. Kabatek and Pusch 2011). This section adopts a similar approach, with the emphasis on the interplay between the synthetic and analytic components of inflection in Romance languages.

3.1. Synchronic features

The synchronic inflectional categories of Romance languages may be illustrated by using examples from Italian; most observations below also apply to Spanish. The following description is based on Berretta (1992: 130-131), with additional sources cited as needed.[6]

   Italian nouns morphologically mark the categories of number and gender (Berretta 1992; Maiden 1997). These are expressed both via portmanteau endings on nouns and via agreement (i) between the noun and other elements of the noun phrase (articles, demonstratives, quantifiers, possessives, adjectives) and (ii) between the noun and selected elements of the verb phrase. The glossed and analyzed example in (2), from Berretta (1992: 131), illustrates the portmanteau marker of number and gender -*e* in the noun *amiche* '(female) friends' as well as agreement between the noun *amiche* and the definite article, possessive and adjective in the noun phrase *le tue simpatiche amiche* 'your nice (female) friends', and between the subject noun *amiche* and both elements of the verb phrase *sono partite* 'have left'.

(2)   *L-e*   *tu-e*   *simpatich-e*   *amich-e*
       the-F.PL   2S.POSS-F.PL nice-F.PL   friend-F.PL

       sono   *part-it-e.*
       be.PRES.IND.3PL.SBJ   leave-PAST.PPLE-F.PL
       'Your nice (female) friends have left.'

In Spanish, the expression of plural marking in nouns and adjectives is more transparent than in Italian:

(3)   <u>Spanish</u>   <u>Italian</u>
       hij-o buen-o   figli-o buon-o   'good son'
       hij-o-s buen-o-s   figl-i buon-i   'good sons'
       hij-a buen-a   figli-a buon-a   'good daughter'

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[6] This description focuses on modern standard varieties of Italian and, where applicable, Spanish. The purpose here is not to downplay the historical, geographical, dialectal, social and other kinds of variation in the Romance lexifiers of LF over the roughly two and a half centuries that separate Haedo (1612) from the *Dictionnaire*, but merely to use the standard varieties as useful reference points for introducing the Romance inflectional categories ("the *kinds* of categories which are expressed in the grammar") and their exponence ("the *means* by which a given grammatical category is expressed") (Maiden 1995: 236).

hij-a-s buen-a-s   figli-e buon-e   'good daughters'

In both Italian and Spanish, nouns are divided into several inflection classes. This division is rooted in their diachrony, and will be addressed in §3.2.

Both Italian and Spanish possess the category of case only in personal pronouns, e.g. It. *io ~ me*, *mi* / Sp. *yo ~ me*, *mí* 'I' ~ 'me'. The object pronouns distinguish between stressed (tonic) and unstressed (clitic) forms. In the examples in (4), from Patota (2006: 191), (4a) and (4b) show the stressed pronoun, and their equivalents in (4a') and (4b') show the corresponding clitic pronoun.

(4)   a.   *Carla   guarda   me.*
             Carla   look.PRES.IND.3S.SBJ   1S.DO
             'Carla is looking at me.'

       a'.   *Carla   mi   guarda.*
             Carla   1S.DO   look.PRES.IND.3S.SBJ
             'Carla is looking at me.'

       b.   *Carla   parla   a   me.*
             Carla   speak.PRES.IND.3S.SBJ   PREP   1S.IO
             'Carla is speaking to me.'

       b'.   *Carla   mi   parla.*
             Carla   1S.IO   speak.PRES.IND.3S.SBJ
             'Carla is speaking to me.'

Clitic pronouns may function as possessors (see 5a). Such constructions may be equivalent to constructions with dedicated possessives (see 5b) (both examples are from Cordin 2001: 621).

(5)   a.   *Ti   sarò   sempre   amica.*
             2S.IO   be.FUT.1S.SBJ   always   friend
             'I will always be your friend.'

       b.   *Sarò   sempre   tua   amica.*
             be.FUT.1S.SBJ   always   2S.POSS.F.S friend
             'I will always be your friend.'

In both Italian and Spanish, the verb morphologically marks the categories of TAM and person/number of the subject (e.g., in 4 and 5 above). Parts of the verb paradigm contain a semantically empty vowel between the lexical root and inflectional markers (Savoia 1997); this vowel -- the theme vowel -- is used as the basis for dividing the verbs into inflection classes. This aspect of the verbal morphology is rooted in diachrony, and will be discussed in §3.2.

Some of the Italian inflectional markers, such as the markers of the past participle, imperfect and future tenses, are transparent, while others display a high degree of fusion,

as was seen in the portmanteau number/gender marker *-e* in (2) as well as in the expression of TAM, person and number marking on the verbs in (2), (4) and (5). There is also a high degree of allomorphy in both lexical and inflectional morphemes; compare, for example, It. *ved-o* / Sp. *ve-o* 'I see' with It. / Sp. *vis-to* 'seen' (Berretta 1992: 131). In Italian, additional complexity is introduced into the verb morphology by the clitic pronouns. As seen in (6a), the past participle *visto* 'seen' agrees in number and gender with the object expressed by a clitic pronoun. The sentence in (6b) shows that no agreement is required when the object is expressed by a noun (both examples are from Berretta 1992: 131).

(6)   a.   *L-e*   *ho*   *vis-t-e.*
                       PRO.DO-F.PL   have.PRES.IND.1S.SBJ see-PAST.PPLE-F.PL
                     'I have seen them (= the female friends).'

           b.   *Ho*   *vis-t-o*   *l-e*   *amich-e.*
                     have.PRES.IND.1S.SBJ   see-PAST.PPLE-M.S the-F.PL   friend-F.PL
                     'I have seen the (female) friends.'

The above interplay between the synthetic and analytic components is shared by the inflectional systems of all Romance languages and is part of their common inheritance and evolution from Latin. Some of the principal diachronic processes that have led to the formation of the Romance inflectional systems are briefly surveyed in §3.2.

3.2. Diachronic features[7]

3.2.1. Drift toward analyticity
The evolution from Latin to Romance in the area of inflection is characterized by a drift from a synthetic toward a more analytic linguistic type. In the verb system, this drift is manifested in the use of auxiliary verbs to express such categories as tense, mood, person and voice: compare, for example, Lat. *amor* (synthetic passive voice) with It. *sono amato* / Sp. *soy amado* 'I am loved'. In nouns and pronouns, the drift toward analyticity is manifested in the reduction or loss of morphological case distinctions and growing reliance on word order and prepositions to express grammatical relations. Thus, the synthetic expression of possession via the genitive case of the possessor was replaced in spoken Latin with the more analytic construction using the preposition *de* and the ablative case of the possessor, as in *caballus de Petro* 'horse of Peter' for *Petris equus* 'Peter's horse'. The analytic possessive construction is used in both main lexifiers of LF, e.g. It. *il cavallo di Pietro* / Sp. *el caballo de Pedro* 'Peter's horse'. In a later but related development involving personal pronoun possessors, polysemy of the third-person possessive – e.g. in Spanish *su* can mean 'his', 'her', 'their (m.)', 'their (f.)', 'your (sg.)' or 'your (pl.)' – has led to the use of prepositional phrases with *de* to supplement and/or replace the dedicated possessives, as in Sp. *su casa de él* 'his house of him' > *la casa de él* 'the house of him = his house' (Penny 2002: 142-143; Orozco 2012: 206-207). In Italian, *la sua casa* 'his/her house' is ambiguous with respect to the gender of the

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[7] The relevance of selected Romance diachronic drifts to the structural features and developmental tendencies of LF is also discussed in Operstein (forthc. b).

possessor, whereas *la casa di lui* 'the house of him = his house' and *la casa di lei* 'the house of her = her house' are explicit in this respect (Rohlfs 1968: 122; Cordin 2001: 620). The dative case was replaced with the preposition *ad* followed by the accusative case, as in *litteras ad te mitto* 'I am sending letters to you' for *litteras tibi mitto* 'I am sending you letters' in Cicero's correspondence (Grandgent 1927: 128; Korletjanu 1974: 162, 166-168). The preceding example also illustrates the fact that the analytic constructions were initially used side by side with and as stylistic variants of the synthetic forms. This point is stressed by Vincent (1997: 103), while Blake (2001: 9) speaks of Latin as possessing two layers of case-marking elements, synthetic (case suffixes) and analytic (prepositions). Other changes leading to greater analyticity of the Romance linguistic type include the development of articles, clitic pronouns, complementizers and analytic comparatives (Schwegler 1990; Vincent 1997).

3.2.2. Reduction of noun inflection classes

Latin nouns were divided into five inflection classes (declensions). The first three declensions were large and robust, whereas the fourth and the fifth were small, and nouns from these declensions began to migrate to one of the first three already in Latin; cf. fourth-declension Lat. *socrus* 'mother-in-law' > first-declension Sp. *suegra* / It. *suocera*, fifth-declension Lat. *rabies* 'rage' > first-declension Sp. *rabia* / It. *rabbia* (Korletjanu 1974: 163-165). As a result of this drift, both Romance lexifiers of LF have only three noun inflection classes; as Grandgent (1927: 125) puts it, "[o]f the five Latin declensions, the three big ones absorbed the two little ones". In both Italian and Spanish, first-declension nouns end in *-a* (e.g. It. *figlia* / Sp. *hija* 'daughter'), second-declension nouns end in *-o* (e.g. It. *figlio* / Sp. *hijo* 'son'), and third-declension nouns end in *-e* in Italian (e.g. *mente* 'mind', *luce* 'light') and either *-e* or a consonant in Spanish (e.g. *mente* 'mind', *luz* 'light') (Maiden 1995: 97-98; Penny 2002: 126-127).

3.2.3. Hypercharacterization of gender

In both Italian and Spanish, there is a strong correlation between the noun word marker[8] *-a* and the feminine gender, and the noun word marker *-o* and the masculine gender. Penny (2002: 124) observes that this correlation was even stronger in Old Spanish, with only two nouns, the feminine *mano* 'hand' and the masculine *día* 'day', being exceptional in this respect. As a consequence, third-declension nouns in both languages have the tendency to migrate to the first or second declensions based on their gender; in the specialist literature, this process is sometimes labeled "hypercharacterization of gender" (Lloyd 1987: 156-157; Penny 2002: 125). Examples from Spanish include *infante* (f.) > *infanta* 'princess', *señor* (f.) > *señora* 'lady' and *cuchar* (f.) > *cuchara* 'spoon' (Malkiel 1967: 239; Penny 2002: 125). Hypercharacterization of gender is also attested in adjectives. The adjectives that descend from Latin adjectives of the type *bonus* (m.) / *bona* (f.) / *bonum* (n.) distinguish gender in their endings (It. *buono* / *buona*, Sp. *bueno* / *buena* 'good') whereas those that descend from the type *grandis* (m. / f.) / *grande* (n.) are gender-neutral (It. / Sp. *grande* 'big'). Shifting of *grandis*-type adjectives to the *bonus* type was not unknown in Latin, with the *Appendix Probi* recording *pauper mulier non paupera mulier* and *tristis non tristus* (Penny 2002: 128). The outcomes of this process are language-specific, cf. Lat. *pauper* > Sp. *pobre* versus It. *povero ~ povera* 'poor'; Lat.

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[8] See Harris (1991) regarding this term.

tristis > Sp. *triste* versus It. *triste* / *tristo* ~ *trista* 'sad' (Grandgent 1927: 127; Malkiel 1967: 239; Patota 2006: 75).

3.2.4. Reduction of verb inflection classes

Latin verbs are divided into inflectional classes (conjugations) based on the theme vowel in the present active infinitive (see Table 2).

Table 2. Latin verb classes

Inflection class	Inflection class marker	Example	Gloss
I conjugation	*ā*	*voc-ā-re*	'to call'
II conjugation	*ē*	*val-ē-re*	'to be strong'
III conjugation	*ĕ*	*vinc-ĕ-re*	'to conquer'
IV conjugation	*ī*	*ven-ī-re*	'to come'

Among the four Latin conjugations, only the first (*-āre*) and the fourth (*-īre*) "were genuinely productive" (Penny 2002: 171). In the evolution from Latin to Romance, the number of the verb classes was consequently reduced (see Table 3). The forms illustrated in Table 3, the infinitive and past participle, are "the main loci of retention of conjugational distinctions" (Maiden 2011: 208).

Table 3. Verb classes in Italian and Spanish

Italian infinitive	cant-a-re	vend-e-re	dorm-i-re
Italian past participle	cant-a-to	vend-u-to	dorm-i-to
Spanish infinitive	cant-a-r	vend-e-r	dorm-i-r
Spanish past participle	cant-a-do	vend-i-do	dorm-i-do

The processes leading to the reduction of the verb classes included merger of the second (*-ēre*) and third (*-ĕre*) conjugations, migration of second- and third-conjugation verbs to the first or fourth conjugations, and growth of the latter through absorption of verbs from other sources, including verbs from the other classes, derived and borrowed verbs (Grandgent 1927; Korletjanu 1974; Napoli and Vogel 1990; Penny 2002; Maiden 2011, 2016). Some of these processes were underway already in Latin, as seen in *fugere et non fugire* recorded in the *Appendix Probi* (Korletjanu 1974: 194). In Italian, only the *-are* verbs and the *-isc-* subclass of the *-ire* verbs are synchronically productive (Schwarze 1999: 3). In Spanish, only the *-ar* conjugation is synchronically productive in the sense that new verbs are accommodated to the morphology of this conjugation (Stovicek 2010: 31).

3.2.5. Copularization of Latin *stare*

Another relevant process is gradual grammaticalization of Lat. *stare* 'to stand' and its intrusion into the functional territory of Lat. *esse* / VL **essere* 'to be'. This pan-Romance development has reached different degrees of completion in different Romance languages. In Italian, *stare* has evolved some copular and auxiliary functions; for example, Italian uses this verb to form the continuous tense, as in *sto correndo* 'I am running'. In Spanish

and Portuguese, *estar* has reached the most advanced degree of copularization (Pountain 1982; Hengeveld 1992). In Spanish, further copularization of *estar* is known to be accelerated in contact settings (see, e.g., Lipski 1993: 224 and the references therein).

4. Nouns and adjectives

4.1. Noun classes

In the *Dictionnaire*'s LF, nouns end in [a, o, e, i, u] or a consonant. Nouns ending in [a] and [o] form the majority, or about 67%, of the total of just over a thousand nouns.[9] A little over 400 nouns (about 40% of the total) end in [a], and a little over 270 nouns (about 27% of the total) end in [o]. Etymologically, these groups consist of nouns that end in [a] or [o] in the source languages (see 7a-b) and a small number of European, mainly Romance, nouns that end in [e] or a consonant in the source languages and are adapted to LF morphology via one of these markers ("hypercharacterization of gender") (see 7c-d). Cifoletti (1989: 46, 2004: 38) notes that consonant-final words of non-European, mainly Arabic, origin remain consonant-final in LF, except when they become vowel-final due to the loss of word-final pharyngeals (see 7e-f).

(7)   a.   amigo   'friend'   (< Sp. amigo)[10]

(7)	a.	amigo	'friend'	(< Sp. amigo)[10]
		imago	'image'	(< Lat. imago)
		martello	'hammer'	(< It. martello)
		dginokio	'knee'	(< It. ginocchio)
	b.	germana	'sister'	(< Cat. germana)
		bouriqua	'donkey'	(< Sp. borrica)
		camischia	'shirt'	(< It. camiscia)
		agouilla	'needle'	(< Ptg. agulha / Cat. agulla)
	c.	verro	'glass'	(< Fr. verre)
		tigro	'tiger'	(< Fr. / Sp. tigre)
		ventro	'belly	(< Fr. / It. ventre)
	d.	gratzia	'thanks'	(< It. grazie)
		scoura	'axe'	(< It. scoure)
		fébra	'fever'	(< It. febbre / Cat. febre)
		biera	'beer'	(< Fr. bière)
		bagueta	'stick'	(< Fr. baguette)
		flinta	'platinum'	(< Eng. flint)

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[9] All calculations were done manually and are to be taken as indicating only the order of size of each word class.

[10] The source language for many of the LF words is uncertain, and multiple Romance sources for some of the words are likely (see Schuchardt 1909; Cornelissen 1992; Castellanos 2007; Operstein 2017a). Heath (1989: 152) comments on a similar issue concerning Romance loans in MCA: "In some cases […] we may not know which Romance form was the immediate prototype (and […] it is quite possible that the MCA form has a multiple Romance source)". The language labels in the brackets merely indicate that the LF word is compatible in form with the Romance word listed there.

	mouchéra ~ moukera	'woman'	(< Sp. mujer)
e.	rouss	'rice'	(< Ar. /rûz/, /ruzz/)
	tout	'mulberry'	(< Ar. /tût/)
f.	taba	'seal'	(< Ar. /ṭa:baʕ/)
	roubié	'spring'	(< Ar. /rbi:ʕ/)

Several nouns ending in [o] in the source language display a final [u] in LF (see 8a). The [o] > [u] shift has been explained as assimilation to the vowel systems of the Berber and/or Arabic substrate or adstrate in LF (e.g. Schuchardt 1909; Cifoletti 2004; Castellanos 2007); variation in the height of the final vowel is seen in the personal pronoun *ello ~ ellou* 'he'. The [u]-final noun group also includes nouns that end in [u] in the source language (see 8b).

(8)	a.	mouchachou	'boy'	(< Sp. muchacho)
		bakalaou	'cod'	(< Sp. bacalao)
		riou	'stream'	(< Sp. río / Cat. riu)
	b.	vertou	'virtue'	(< It. virtù)
		servitou	'slavery'	(< It. servitù)
		dgioventù	'youth'	(< It. gioventù)

Nouns ending in [e] form slightly over 11% of the total number of nouns. This group is composed of nouns that end in [e] in the source language (in 9a); see also the Arabic-origin *roubié* 'spring' in (7f). Several nouns in [e] are etymolgically plural but are glossed as singular in the *Dictionnaire* (see 9b). The word for 'bread' appears in both the *e*- and the *o*-final forms, *pané ~ pano*. The *-e ~ -o* variation is also seen in *salouté* 'health' ~ *salouto* 'salute' and *mariniére* 'rower' ~ *mariniéro* 'sailor'.

(9)	a.	barbiéré	'barber'	(< It. barbiere)
		colatzioné	'lunch'	(< It. colazione)
		païsé	'country'	(< It. paese)
		paché	'peace'	(< It. pace)
		sangré	'blood'	(< Sp. sangre)
	b.	scarpé	'shoe'	(< It. scarpa, pl. scarpe)
		cortiné	'curtain'	(< It. cortina, pl. cortine)
		ové	'egg'	(< It. uovo; see Rohlfs 1968: 36-38)

A small number of nouns (under 3% of the total) end in [i]. This group is composed of nouns that end in *-i* in the singular in the source language (in 10a) and those that end in *-e* in the singular and *-i* in the plural in the source language (in 10b). While the change from *-e* > *-i* seen in these nouns may be in part phonetic – motivated by the same tendency toward mid-vowel raising as the aforementioned change from *-o* > *-u* – the fact

that the majority of these nouns refer to objects or body parts that are either paired (feet), come in large sets (teeth) or are likely to be seen in bulk quantities (fish, partridges), suggests that they are etymologically plural. This conclusion is also suggested by the adaptation of the plurals in (10c-d) and the sense differentiation between the etymologically singular *dolche* 'sweetness; sweet' (< It. *dolce*) and etymologically plural *dolci* 'jam' (< It. *dolci*).

(10) a.

	martédi	'Tuesday'	(< It. martedì)
	mercolédi	'Wednesday'	(< It. mercoledì)
	tobgi	'gunner'	(< Ar. tobgi < Tu. topçu)[11]
	piskéri	'porter'	(< Ar. biskri)[12]

b.

	piedi	'foot'	(It. piede, pl. piedi)
	denti	'tooth'	(It. dente, pl. denti)
	genti	'man, people'	(It. gente, pl. genti)
	pechi	'fish'	(It. pesce, pl. pesci)
	pernichi	'partridge'	(It. pernice, pl. pernici)

c.

	mobili	'furniture'	(< It. mobile, pl. mobili)
	forbichi	'scissors'	(< It. forbice, pl. forbici)

d.

	gouanti	'glove'	(It. guanto, pl. guanti)
	piselli	'pea'	(It. pisello, pl. piselli)
	fagioli	'bean'	(It. fagiolo, pl. fagioli)
	datoli	'date'	(Gr. δάκτυλος)[13]

Consonant-final nouns constitute about 18% of the total number of nouns. Nearly half are Romance nouns ending in the suffixes *-tzion ~ -ion*, such as *permitzion* 'permission', and *-tor ~ -dor ~ -or*, such as *peskador* 'fisherman'. Other word-final consonants in Romance-origin nouns include /l/ (e.g. *sol* 'sun'), /s/ (e.g. *portuguès* 'Portuguese'), /t/ (e.g. *moskovit* 'Russian'), /d/ (e.g. *nord* 'north') and /k/ (e.g. *esbinac* 'spinach', ultimately from Arabic). Two of the final /s/s are due to the Spanish plural marker; these are *douros* 'piaster' (< Sp. *duro*, pl. *duros*) and *tapétos* 'carpet', an apparent cross between It. *tappeto* and Sp. *tapetes*. Words of Turkish and Arabic origin enrich the inventory of word-final consonants with /b/ (e.g. *cherub* 'drink'), /f/ (e.g. *carchouf* 'artichoke') and /ʃ/ (e.g. *bakchich* 'gift').

In summary, from among the nouns recorded in the *Dictionnaire*, those ending in [a] constitute about 40%, those ending in [o] about 27%, and those ending in [e] or a consonant about 29% of the total. Only slightly under 4% of the nouns end in [i] or [u].

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[11] Due to the absence of vowel harmony in *tobgi*, Cifoletti (1980: 35) entertains the possibility that this is "una formazione autonoma dell'arabo [an autonomous formation of Arabic]" rather than a direct loan from Turkish; this point is further addressed in Cifoletti (2004: 59 fn. 7).

[12] According to Cifoletti (1980: 35, 2004: 144 fn. 4), this is an ethnonym deriving from the city name Biskra.

[13] On the form *datoli*, see Baglioni (2010: 432-433). In connection with the forms in (10d), the loans /liga/ 'glove' (< Fr. *les gants* 'the gloves') and /liba/ 'stocking' (< Fr. *les bas* 'the stockings') in MCA are of interest (Heath 1989: 127).

Upwards of 80% of all nouns end in a vowel, and of these, nouns in [a] and [o] predominate numerically (they constitute about 82% of all vowel-final nouns). The [i]- and [u]-final nouns continue in part the minority noun classes of the Romance lexifiers and in part also result from the effects of language contact, including mid vowel raising, borrowing of non-Romance nouns in [i] and [u], and adaptation of Romance nouns in their plural form.

The LF nouns documented in Haedo (1612) are assembled in Table 4, which is based on Cifoletti's (1989: 163-164) glossary of the LF lexical items appearing in that work. As reflected in the table, Haedo does not record nouns ending in [i] or [u]. As in the *Dictionnaire*'s LF, there is a clear preference for vowel-final nouns, with 94% of the nouns ending in a vowel; among these, the nouns in [a] (48% of the total) and [o] (33% of the total) predominate.

Table 4. Nouns in Haedo's LF

Nouns in [a] (16 nouns)	Nouns in [o] (11 nouns)	Nouns in [e] (4 nouns)	Nouns in a consonant (2 nouns)
bastonada	barbero	cane	Papaz
boca	Christiano	Fe	patron
cabeza	diablo	febre	
campaña	Dio	niçarane	
carta	forato		
casa	Iudio		
cosa	mundo		
fantasia	pecato ~ pecado		
hora	perro		
manera	tempo		
parola	vellaco		
terra			
testa			
tortuga			
ventura			
volta			

In both main lexifiers of LF, only the *-a* and *-o* noun classes are synchronically productive (Harris 1992: 68; Thornton 1996: 90; D'Achille and Thornton 2003: 227; Acquaviva 2009: 51). These classes are also numerically predominant. For Spanish, Harris (1991: 33) indicates that the *-a* and *-o* nouns (the "inner core" in his classification) outnumber the *-e* and consonant-final nouns (his "outer core") by about two to one. For Italian, D'Achille and Thornton's calculation (2003: 213) indicates that from among 4557 non-compound nouns in the basic vocabulary of Italian, 38% end in *-o*, 35.7% in *-a*, and 20.8% in *-e* (see Table 5; the percentages for Italian have been rounded off). Even taking into account the incomplete nature of our documentation of LF, the LF noun classes in Haedo (1612) and the *Dictionnaire* still show remarkable continuity with the noun declension classes of its major lexifiers.

Table 5. Noun classes in LF

Nouns ending in …	Anonymous (1830)	Haedo (1612)	Italian basic vocabulary
-a	40%	48%	36%
-o	27%	33%	38%
-e / -C	29%	18%	21%

4.2. Adjective classes

The adjectives listed in the *Dictionnaire*, about 190 in total, fall into three unequal groups. The largest group (about 73%) end in *-o* in the masculine and *-a* in the feminine, with one adjective, *locou / loca* 'crazy' (< Sp. *loco / loca*), ending in [u] in the masculine form due to mid vowel raising. Variation with respect to the height of the final vowel is recorded in *bono ~ bonou* 'good'. Though the feminine counterpart is provided for only a minority of the *-o / -a* adjectives, the fact that the *-o* adjectives have a feminine counterpart is explicitly stated in the *Dictionnaire*'s preface, with *bono / bona* 'good' given as an example ("[l]es adjectifs en *o* ont seuls un féminin [only the adjectives in *-o* have a feminine]"), and is also evident in the syntactic agreement features to be examined in §4.3. The *Dictionnaire* normally uses only the masculine form of the adjective as the citation form (in 11a); in some cases, the feminine form is supplied as well (in 11b).

(11)　a.　haut　　　　　　　alto　　　　　　'high'
　　　　　juste　　　　　　　dgiousto　　　　'just'
　　　　　riche　　　　　　　rico　　　　　　'rich'
　　　　　sale　　　　　　　sporco　　　　　'dirty'

　　　b.　bas, basse　　　　basso, bassa　　'low'
　　　　　sec, sèche　　　　séco, séca　　　'dry'
　　　　　beau, belle　　　　bello -la　　　　'beautiful
　　　　　rond -de　　　　　roundo, da　　　'round'

　　The next largest group of adjectives, about 20.5% of their total number, end in *-e*; as in the lexifiers, these are gender-neutral. Included in this group are two adjectives that end in *-e* in the lexifier but *-i* in LF, due either to mid vowel raising or to having been adopted in the plural form (see 12b). Variation with respect to the final vowel is seen in *grandé ~ grandi* 'big, vast'. The consonant-final adjectives, under 5% of the total (see 12c), include the Arabic-origin *maboul* 'crazy', which stands out in having a feminine counterpart, *maboula*. Given that the feminine gender marker *-a* is shared by Arabic, Spanish and Italian (Cifoletti 2004: 41), its specific source in *maboula* is unclear. The adjective *blou* 'blue' (< It. *blù*) is in a group by itself.

(12)　a. LF adjectives in *-o ~ -ou*
　　　　　　dgialo　　　'yellow'　　　　　(< It. giallo)
　　　　　　nouovo　　　'new'　　　　　　(< It. nuovo)
　　　　　　flaco　　　　'thin'　　　　　　(< Sp. flaco)

locou	'crazy'	(< Sp. loco)

b. LF adjectives in -e ~ -i

verdé	'green'	(< It. / Sp. verde)
dolche	'sweet'	(< It. dolce)
forti	'strong'	(< It. forte)
pésanti	'heavy'	(< It. pesante)

c. Other LF adjectives

blou	'blue'	(< It. blù)
natural	'natural'	(< Sp. natural)

Hypercharacterization of gender, noted previously for LF nouns, is also attested in some of the adjectives:

(13) simplo 'simple' (< Sp. / Fr. simple)
      tristo 'sad'   (< Sp. / It. / Fr. triste, unless from It. tristo)

In summary, LF shows the same major classes of adjectives as its lexifiers, the substantially larger *-o / -a* class and the smaller *-e* / consonant-final class; in the latter, the adjectives ending in *-e* are numerically predominant. The proportion is similar in LF's Romance lexifiers; for example, Harris (1991: 34) indicates that most adjectives in Spanish are "prototypical inner core words with *-o* in the masculine and *-a* in the feminine". With the exception of *maboul / maboula* 'crazy', the only adjectives to show gender differentiation are the *-o / -a* group. In this feature, LF similarly agrees with its lexifiers: for example, in Spanish the subtype of adjectives with no gender marker in the masculine and *-a* in the feminine, like *español / española* 'Spanish', is similarly small (Harris 1991: 34-35). The handful of adjectives in Haedo's (1612) examples fall into the same categories as the *Dictionnaire*'s, with all but one, namely *gran ~ grande* 'big', belonging to the *o- / a-* class (e.g. *bono* 'good', *vivo* 'alive', *malato* 'sick'). In its nouns and adjectives, LF thus shows continuity with its main lexifiers both with respect to the morphological classes and in terms of the prototypicality of the classes ending in *-o / -a* (Harris 1991, 1992).

4.3. Gender

In the *Dictionnaire*'s nouns, the gender distinction can be expressed lexically or morphologically, or be left unexpressed. A lexically expressed gender distinction is seen in nouns referring to humans:

(14) padré   'father'   madré   'mother'
      fratello 'brother' germana   'sister'
      oumbré   'man'   mouchéra   'woman'

Morphologically expressed gender distinctions are illustrated in (15) with nouns referring to humans and animals. These examples additionally illustrate the correlation between the

noun ending *-a* and the feminine gender, and the noun ending *-o ~ -ou* and the masculine gender. The use of an (etymological) diminutive suffix to express the feminine gender in *gallo / galina* continues a similar lexifier pattern (Serianni 1989: 124-126).

(15)　mouchachou　'boy'　　　mouchacha　'girl'
　　　zio　　　　'uncle'　　　zia　　　'aunt'
　　　nipoté　　'nephew'　　nipota　　'niece'
　　　cavalo　　'stallion'　　cavala　　'mare'
　　　gallo　　　'rooster'　　galina　　'hen'

Some animal names are listed in only one, presumably gender-neutral, form. These comprise *bouriqua* 'donkey', *cabra* 'goat', *camello* 'camel', *lépéro* 'hare', *moulo* 'mule', *okia* 'goose', *porco* 'pig' and *vitello* 'calf'. The examples in (16) show that, just as in the lexifiers, the word markers *-o / -a* also may reflect non-gender related lexical distinctions, both with and without semantic contiguity between the words so distinguished.[14] The latter case is illustrated, e.g., by the pair *païo / païa* (< It. *paio / paglia*).

(16)　lampo　　'lightning'　　lampa　　'lamp'
　　　porto　　'harbor'　　　porta　　'door'
　　　pianto　　'tear'　　　　pianta　　'plant'
　　　païo　　　'pair'　　　　païa　　　'straw'

Morphological expression of the gender distinction is also found in the third person singular personal pronoun (*ello ~ ellou* 'he' / *ella* 'she'), demonstratives (*qouesto / qouesta* 'this', *qouello / qouella* 'that'), adjectives (e.g. *séco / séca* 'dry'), definite article (*il / la*) and indefinite article (*oun / ouna*).

(17)　oun cortello　'a knife'　　　ouna palabra　'a word'
　　　il fratello　　'the brother'　la palabra　　'the word'

In the verb, the gender distinction is recorded in the perfective form deriving from the Italian past participle; in the *Dictionnaire*'s preface, it is described as "le participe passé en *ito* ou *ato*, fém. *ita*, *ata* [the past participle in *ito* or *ato*, feminine *ita*, *ata*]". The French-LF glossary supplies the feminine form for selected verbs (see 18), however, due to the (apparently, deliberate) absence of textual examples with female participants, the use of the feminine form is not illustrated.

(18)　Fr. baiser, baisé -ée　　　LF bachiar, bachiato -a　'kiss'
　　　Fr. assassiner, assassiné -ée　LF assassinar -ato -ata　'murder'

Several kinds of evidence point to the unmarked status of the masculine gender in the *Dictionnaire*'s LF. They include the use of the masculine forms of the demonstratives as neutral demonstrative pronouns (in 19a), the use of the masculine forms of the adjectives as adverbs (in 19b), and the use of the masculine forms of nouns when these are

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[14] Pertinent examples in the lexifiers include It. *panno* 'cloth' / *panna* 'cream' and Sp. *manzano* 'apple tree' / *manzana* 'apple' (Serianni 1989: 112; Harris 1991: 36 fn. 13).

employed generically (in 19c). The functionally unmarked status of the masculine gender in LF continues its unmarked status in the lexifiers (see, e.g., Prado 1982 and Harris 1991 for Spanish, and Sabatini 1993, Maiden 1995 and Thornton 2003 for Italian).

(19)   a.   *qouest-o   star   vér-o.*
                this-M   be.IMPF   true-M
                'Cela est vrai.'[15]
                'This is true.'
                (Anonymous 1830: 93)

        b.   *star   mouchou   bon-ou.*
                be.IMPF   very   good-M
                'Il se porte fort bien.'
                'He is very well.'
                (Anonymous 1830: 94)

        c.   *qué   poudir   counchar   il   Françis*
                what   be.able.IMPF do.IMPF   the.M   French

                contra   di   Algieri?
                against   of   Algiers
                'Que peuvent faire les Français contre Alger?'
                'What can the French do against Algiers?'
                (Anonymous 1830: 98)

Outside morphology and lexicon, gender is signaled via syntactic agreement. For example, (20a) and (20a') show that the attributive adjective *bonou / bouona* 'good' agrees in gender with the noun it modifies. The sentence in (20a') additionally shows that the third person singular pronoun agrees in gender with its antecedent noun. (20b) illustrates gender agreement between the noun *mangiaria* 'lunch', the definite article *la* and the predicative adjective *pronta* 'ready'. (20b') shows gender agreement between the masculine noun *fratello* 'brother' and the definite article *il*.

(20)   a.   *star   bouon-a   genti.*
                be.IMPF good-F   man.F
                'C'est un brave homme.'
                'He is a good man.'
                (Anonymous 1830: 94)

        a'.   *mi   tenir   thé   mouchou   bon-ou;*
                1S   have.IMPF tea.M   very   good-M

                mi   quérir   ti   goustar   per   ell-ou.
                1S   want.IMPF 2S   taste.IMPF DOM   3S-M

---

[15] Here and below: the French line in the sentence-long examples represents the French prompt in the *Dictionnaire*'s dialogues or French-LF glossary.

'J'ai du thé délicieux; je veux que vous en goutiez.'
'I've got some delicious tea, I want you to try it.'
(Anonymous 1830: 97)

b. *ti   venir   dgiousto,*
  2S   come.IMPF   just

  la   mangiaria   star   pronta.
  1S   lunch   be.IMPF   ready
  'Vous venez à propos, le déjeuné est prêt.'
  'You have come just in time, the lunch is ready.'
  (Anonymous 1830: 96)

b'. *commé star   il   fratello   di   ti?*
   how   be.IMPF the   brother   of   2S
   'Comment se porte votre frère?'
   'How is your brother?'
   (Anonymous 1830: 94)

The LF textual samples in Haedo (1612), although much less numerous than in the *Dictionnaire*, point to the productive use of the category of gender as well. This is seen in the gender agreement between *cosa* and *questa* in (21a), *forato* and *aquel* in (21b), *volta* and *altra* in (20c), and *Papaz* and *Christiano* in (20d). Even more conclusive is the agreement shown by the same adjective in *barbero bon-o* 'good doctor' and *bon-a bastonada* 'good beating'. Against this background of consistently applied gender agreement, the partial lack of it in *la Papaz Christiano* in (21d) stands out. Haedo's examples also point to the unmarked status of the masculine gender in LF, as seen in the use of the masculine forms of the demonstratives as neutral demonstrative pronouns in (21d-e) and the adverbial use of the masculine form of the adjective in (21f).

(21) a. *…ancora no   estar   tempo   de   parlar   quest-a cosa*
     yet   NEG be.IMPF time   of   speak.IMPF this-F   thing.F
     'it is not yet time to speak of this'

   b. *…pillar y   meter   en   aquel   forato…*
     take.IMPF and put.IMPF in   that.M   hole.M
     'take (it) and put (it) in that hole'

   c. *Mira   no   trovar   mi   altr-a   volta…*
     see.IMPF NEG find.IMPF 1S   other-F time.F
     'See that I do not find (it) again'

   d. *…que la   Papaz   Christian-o fazer   aquest-o*
     that   the.F   priest.M Christian-M do.IMPF this-M
     'that the Christian priest do this'

e. *mirar   Iafer, que   est-o   estar   gran   pecado…*
    see.IMPF Iafer that   this-M   be.IMPF   big   sin
    'look Iafer, for this is a great sin'

f. *Assi,   assi,   hora estar   buen-o…*
    like.this like.this now   be.IMPF   good-M
    'Like this, like this, now (he) is well'
    (Haedo 1612; in Cifoletti 1989: 159-161)

In summary, LF has inherited from its lexifiers both the category of gender and the specific morphosyntactic means – word endings and syntactic agreement – by which it is signaled. Also in common with its lexifiers, LF seems to treat the masculine – etymologically masculine singular – gender as the default, unmarked form. In light of Bakker (2003) and Roberts and Bresnan (2008), and provided LF is categorized as a pidgin, the preservation of gender in it, and of syntactic agreement with respect to gender, are unexpected.

4.4. Number

The evidence regarding the status and expression of the category of number in LF is much less conclusive. On the one hand, the preface to the *Dictionnaire* informs its readers that "[l]es noms n'ont pas de pluriel [nouns have no plural]" and gives *l'amigo* as the LF equivalent of Fr. *les amis* 'the friends'. This statement is borne out by the examples below, which illustrte the absence of plural marking after a numeral (in 22a) and when the plural reference is indicated by the French prompt (in 22b through 22d). The example in (22d) additionally shows the absence of number agreement between the etymologically singular noun and etymologically plural demonstrative.

(22) a. *mi   pensar   non   star   tré   ora.*
          1S   think.IMPF NEG   be.IMPF   three   hour
          'Je pense qu'il n'est pas trois heures.'
          'I think it's not three o'clock yet.'
          (Anonymous 1830: 97)

      b. *qué   poudir   counchar il   Françis*
          what be.able.IMPF do.IMPF   the   French

          contra   di   Algieri?
          against   of   Algiers
          'Que peuvent faire les Français contre Alger?'
          'What can the French do against Algiers?'
          (Anonymous 1830: 98)

      c. *sé   quérir   paché   l'Yoldach   fazir   gribouila.*
          if   want.IMPF peace   the'janissary   make.IMPF fuss
          'S'il veut la paix les Turcs feront tapage.'

'If (he) wants peace, the janissaries will make a fuss.'
(Anonymous 1830: 98)

d. *Quest-i   Signor   star   amigo   di   mi.*
     this-M.PL gentleman.M.S be.IMPF friend.M.S of   1S
     'Ces Messieurs sont mes amis.'
     'These gentlemen are my friends.'
     (Anonymous 1830: n.n.)[16]

The plural reference of the singular forms in (22b-c) – *il Françis* 'the French' (< Sp. *francés*) and *l'Yoldach* 'janissaries' (< Tu. *yoldaş*) – has a formal parallel in Arabic, e.g. in light of Heath's (1989) showing that borrowed ethnonyms in MCA, including /frənṣiṣ/ 'French', /ingliz/ 'English', /ṣblyun/ 'Spaniards', /alˌman/ 'Germans', /šinwa/ 'Chinese (people)', /mṛṛuk/ 'Moroccans' and /marikan/ 'American' (< Sp. *francés*, *inglés*, Sp. *español*, *alemán* / Fr. *espagnol*, *allemand*, Fr. *chinois*, *maroc* and Eng. *American*) have invariable form for all genders and numbers.[17] Cifoletti (1980: 35) derives many of the LF ethnonyms, including *francis*, from Arabic rather than directly from Romance sources. A formal parallel also exists in the Romance lexifiers of LF in the use of singular count nouns with generic plural meaning. This usage may be seen in (23) (the Italian example is from Serianni 1989: 208 and the Spanish example from Butt and Benjamin 2004: 30).

(23) a. *il   romano   è   amante   della   buona   tavola*
          the   Roman   be.PRES.3S lover   of.the good   table
          'Romans are lovers of good food'

     b. *El   español,   cuando   está   de   vacaciones,*
          the   Spaniard   when   be.PRES.3S   of   vacations

          come   mucho   marisco.
          eat.PRES.3S much   shellfish
          'Spaniards, when they're on holiday, eat a lot of shellfish.'

On the other hand, Cifoletti (1989: 49-50, 2004: 42) draws attention to the existence of plural personal pronouns, the fact that one or two nouns in the *Dictionnaire* are given in both the singular and plural forms, and the number agreement between the plural noun and article in *lé merkantzié di mi* (see 24). It may be significant that all of these plurals are non-sigmatic.

(24) Fr. oreille   LF orékia -é   'ear'
      Fr. quelquefois   LF qoualqué volta   'sometimes'
      Fr. autrefois   LF altré volté   lit. 'other times'
      Fr. marchandise   LF mercantzia   'merchandise'

---

[16] The pages in the *Dictionnaire*'s preface are unnumbered. The authors emphasize the singular form of the nouns in this example by the use of italics: Questi *Signor* star *amigo* di mi.
[17] Heath notes that MCA borrowings involving names of nationalities contrast a zero plural or collective form with a suffixed singular, e.g. /ṣblyun/ 'Spanish people', /ṣblyun-i/ '(a) Spaniard' (1989: 135).

Fr. (mes) marchandises   LF lé merkantzié (di mi)   '(my) merchandise'

The glossing of etymologically plural nouns such as *douros* 'piaster' (< Sp. *duro*, pl. *duros*) and *scarpé* 'shoe' (< It. *scarpa*, pl. *scarpe*) as singulars in the *Dictionnaire* argues for the non-productivity of the category of number in LF. On the other hand, the apparent hybrids in which an Ibero-Romance noun is matched with an Italo-Romance plural marker or vice versa, such as *tapétos* 'rug' < It. *tappeto* plus Sp. *-s* and *coustié* 'chop' < Sp. *costilla* plus It. *-e*, appear to argue to the contrary. In summary, the data contained in the *Dictionnaire* is inconclusive as to whether the category of number was productive in LF, which contrasts with the clear evidence regarding the productivity of the category of gender. The LF fragments in Haedo (1612) contain no plural nouns or adjectives, and provide no independent evidence with respect to this issue.

5. Verbs

5.1. Verb inflection

Verb inflection in the *Dictionnaire*'s LF has both synthetic and analytic components. The only inflectional distinction morphologically marked on the LF verb, other than the gender in the perfective form (see §4.3), is aspect. Two aspectual forms are distinguished, the *r-* (imperfective) and the *to-* (perfective) form. The former derives from the Romance infinitive and functions as the unmarked form of the verb; it is found in a much greater number of textual examples, is used in imperfective and imperative contexts, and is the form the verb takes when used as a complement of another verb. The latter derives from the Italian past participle, is recorded in fewer textual examples, and is used with reference to discrete events in the past (see also Cifoletti 1989: 54, 2004: 43). The refunctionalization of the lexifier infinitive and past participle in LF may be appreciated from the examples in (25).

(25) a.   *mi   doubitar   di   qouesto.*
            1S   doubt.IMPF   of   this
            'J'en doute.'
            'I doubt this.' (present)

      b.   *qué   servir   touto   qouesto?*
            what   serve.IMPF   all   this
            'A quoi servira tout cela?'
            'What will all this accomplish?' (future)

      c.   *qui   star   qouesto   signor*
            who   be.IMPF   this   gentleman

            qué   poco   poco   ablar   per   ti.
            that   little   little   speak.IMPF   DOM   2S
            'Qui est-ce Monsieur qui vous parlait tantôt.'
            'Who is the gentleman that spoke with you just now?' (imperfective past)

d. *sarar*   *la*   *porta.*
   close.IMPF   the   door
   'Fermez la porte.'
   'Close the door.' (imperative)

e. *mi*   *non*   *poudir*   *crédir.*
   1S   NEG   be.able.IMPF   believe.IMPF
   'Je ne saurais croire.'
   'I can't believe (it).' (verb complement)

f. *mi*   *mirato*   *in*   *casa*   *di*   *ti.*
   1S   see.PF   in   house   of   2S
   'Je l'ai vu chez vous.'
   'I saw (him) at your house.' (perfective past)

g. *mi*   *venouto*   *aposto*
   1S   come.PF   specially

   per   *far*   *mangiaria*   *con*   *ti.*
   for   do.IMPF   lunch   with   2S
   'Je suis venu exprès pour déjeuner avec vous.'
   'I have come especially to have lunch with you.' (perfective past)
   (Anonymous 1830: 93-97)

The aspectual basis of the opposition between the *r-* and *to-* forms is indirectly supported by Dahl's (1985) typological analysis of tense and aspect systems. With respect to Romance languages, this approach conceptualizes the relationship between tense and aspect as one of subordination of the former to the latter, with present and past tense distinguished only in the imperfective aspect, and the perfective aspect restricted to past time reference. This analysis is applied to Spanish in Figure 3, based on Bybee (1995: 444-445), with the Spanish inflectional categories indicated in brackets. Bybee's (1995) argument for the analysis encapsulated in Figure 3 includes both a semantic component ("the present is inherently imperfective") and a formal one (the imperfect and present forms have the same stem whereas the preterit has a different stem in Spanish) (445-446). The two-form verb system of the *Dictionnaire*'s LF shows conceptual continuity with this organization, with the *to-* form confined to contexts describing discrete events in the past and the *r-* form occurring everywhere else. The contributing effect of the Arabic verb system, where the perfective is used for punctual or perfective events in the past and the imperfective for present, future or imperfective past events (Heath 1989: 21), cannot be ruled out, and has been suggested by Fronzaroli (1955: 239-241).

INSERT FIGURE 3 HERE

The examples supplied in Haedo (1612) support the inference of the aspectual basis of the above opposition, with some variation in the realization of each of its members. The glossary of Haedo's (1612) LF compiled by Cifoletti (1989: 163-164) shows that in addition to the infinitive, the imperfective member of the opposition is also realized by second person singular imperatives and third person singular presents (see Table 6). (Variation in the realization of the perfective member will be addressed in §5.2.) A count of the relevant tokens shows that the inflected forms constitute a minority; in percentage terms, about 84% (53 out of the 63 recorded verb forms) are expressed by the infinitive, under 10% (6 out of 63) by the imperative, and about 6% (2 out of 63) by the third person singular present.[18] Even with this variation, the predominant form realizing the imperfective member of the aspectual opposition in Haedo's LF is still the refunctionalized Romance infinitive. This becomes especially clear when the occurrence contexts of the inflected forms and the number of tokens for verbs that appear in both inflected and uninflected forms are taken into account. For example, both occurrences of the inflected form *guarda* are as part of the expletive *guarda diablo* and the imperatives *anda* and *piglia* occur only once each whereas the corresponding infinitives, *andar* and *pillar*, each occur four times.[19] The verbs with the most occurrences, *estar* (10 times) and *parlar* (5 times), only appear in the infinitive form.

Table 6. Realization of the imperfective verb form in Haedo's LF

Romance infinitive	Number of tokens (53)	Romance 2nd singular imperative	Number of tokens (6)	Romance 3rd singular present	Number of tokens (4)
abrusar	1	anda	1	dole	1
andar	4	mira	2	ha	1
cerrar	1	piglia	1	guarda	2
correr	1	porta	1		
curar	2	ven	1		
dezir	2				
donar	1				
estar	10				
fazer	1				

[18] A formal parallel to the range of LF verb forms recorded by Haedo is provided by the verbs borrowed from Spanish in MCA. Heath (1989) notes that, although Spanish verbs are mostly borrowed into MCA in the infinitive form, there is also "a small number of documented borrowings ending in weak /a/ vs. /i/; most of these appear to be based directly on the Sp familiar Sg imperative and involve verbs commonly used in commands (the examples are mostly nautical in nature)" (105).

[19] The only candidate for an inflected verb form in the *Dictionnaire* is *basta* (< 3rd person singular present indicative of Sp. *bastar* and/or It. *bastare* 'be enough'), which derives from the impersonal use of this verb in the lexifiers and is recorded in LF alongside *bastar* 'suffice'. It is seen in the following example:

non	*counchar*	*per*	*mi,*	*il*	*café*	*basta.*
NEG	make.IMPF	for	1S	the	coffee	is.enough

'N'en faites pour moi, le café me suffit.'
'Don't make (tea) for me, coffee is enough.'
(Anonymous 1830: 97)

forar	2				
hazer	1				
meter	1				
mirar	2				
morir	2				
parlar	5				
pillar	4				
poder	1				
portar	1				
responder	1				
saber	2				
sentar	1				
tener	3				
trabajar	2				
trovar	1				
venir	1				

5.2. Copulas and auxiliaries

The verbs functioning as *have*-auxiliaries in the lexifiers do not retain this function in the *Dictionnaire*'s LF and are used only as verbs of possession. The compilers emphasize this fact by informing the readers that "[l]e verbe *avir* ou *tenir* (avoir), ne s'emploie pas comme auxiliaire, mais seulement comme verbe possessif [the verb *avir* or *tenir* (have) is not used as an auxiliary but only as a verb of possession]". As seen in (26), *ténir* is also found in existential sentences (*avir* does not surface in textual examples).

(26)   a.   *questo   umbré   ténir   cabessa*
                  this   man   have.IMPF head
                  'cet homme à de l'esprit'
                  'this man is witty'
                  (Anonymous 1830: 32)

        b.   *mi   tenir   questo   dgiardino*
                  1S   have.IMPF   this   garden
                  'je possède cette campagne'
                  'I own this garden'
                  (Anonymous 1830: 61)

        c.   *ténir   poco   tempo.*
                  have.IMPF   little   time
                  'Il y a peu de temps.'
                  'There is little time.'
                  (Anonymous 1830: 96)

LF does not inherit from its lexifiers the descendants of Lat. *esse(re)* and instead completely grammaticalizes *(e)star* (< Sp. / Ptg. *estar*, It. *stare*), which functions in LF only as a copula (see 27).[20]

(27) a. *qouesto   non   star   vero.*
          this   NEG   be.IMPF   true
          'Cela n'est pas vrai.'
          'This is not true.'
          (Anonymous 1830: 93)

      b. *commé star   il   fratello   di   ti*?
          how   be.IMPF the   brother   of   2S
          'Comment se porte votre frère?'
          'How is your brother?'
          (Anonymous 1830: 94)

Haedo's (1612) fragments contain ten occurrences of *estar*, all of them used as a copula (see 28).

(28) a. *…mirar   como mi   estar   barbero   bono…*
          see.IMPF   how   1S   be.IMPF   doctor   good
          'see what a good doctor I am'
          (Haedo 1612; in Cifoletti 1989: 158)

      b. *… no   parlar   que   estar   malato.*
          NEG   say.IMPF   that   be.IMPF   sick
          'don't say that you are sick'
          (Haedo 1612; in Cifoletti 1989: 158-159)

Haedo's (1612) fragments offer evidence that at least some lects of LF did make use of the *have*-auxiliary. As shown in (29), the form *portato* (spelled *por tato*) is used in the same stretch of text once with and once without an auxiliary (this fragment may also be seen in Figure 1). The auxiliary-full perfect may be a carryover from the writer's native Romance language; as cautioned by Fronzaroli (1955: 238), "non si deve dimenticare che chi conosceva le lingue romanze avrà contaminato la lingua franca di forme più vicine a quelle [it should not be forgotten that those who knew Romance languages would have contaminated Lingua Franca with forms closer to those]". The example in (29) additionally illustrates the use of *tener* as an existential verb.

(29) *… porque   tener   aqui   tortuga?   qui   por tato   de*
      why   have.IMPF here   turtle   who   bring.PF   from

      campaña?   gran   vellaco   estar,   qui   ha   por tato.
      field   big   scoundrel   be.IMPF   who   has   bring.PF

---

[20] The *Dictionnaire*'s description of *(e)star* as an auxiliary in its preface may be due to a misunderstanding (this point is addressed in Cifoletti 2004: 43).

'why is there a turtle here? Who has brought it in? Whoever has brought it is a big scoundrel.'
(Haedo 1612; in Cifoletti 1989: 161)

Haedo (1612) also contains an example of the copular use of *sentar* (< Sp. / Ptg. *sentar(se)* 'sit (down)'; shown in 30a). In the *Dictionnaire*, *sentar* surfaces only as a lexical verb, with such meanings as 'live', 'stay' and 'sit (down)' (illustrated in 30b-c). The copular use of *sentar* in Haedo's LF is paralleled by its use as a copula, subsequntly discontinued, in contemporaneous literary imitations of Afro-Portuguese (Lipski 2014: 368).

(30)   a.   *… Dio   grande   sentar ….*
                 God   big   be.IMPF
                 'God is great'
                 (Haedo 1612; in Cifoletti 1989: 159)

         b.   *ové   sentar?*
                 where   sit.IMPF
                 'Où demeure-t-il?'
                 'Where does (he) live?'
                 (Anonymous 1830: 96)

         c.   *ti   sentar.*
                 2S   sit.down.IMPF
                 'Asseyez-vous.'
                 'Sit down.'
                 (Anonymous 1830: 95)

The analytic component of LF verbal inflection includes the grammaticalized use of It. *bisogno* 'need, necessity' and/or *bisogna* 'it is necessary' as a future marker (in 31a); its other use is to express obligation (in 31b).[21] The example in (31c) shows that the use of *bisogno* in future contexts is non-obligatory.

(31)   a.   *bisogno andar   domani.*
                 FUT   go.IMPF tomorrow
                 'Nous irons demain.'
                 'We will go tomorrow.'
                 (Anonymous 1830: 96)

         b.   *cosa   bisognio   counchar?*
                 what   need   do.IMPF
                 'Que faut-il faire?'
                 'What needs to be done?'

---

[21] It is unclear whether the source of the LF future marker is the noun *bisogno* (see Baglioni 2010: 142 on the *bisogno ~ bisogna* alternation in the lexifier) or the impersonal verb *bisogna*. The *Dictionnaire* gives both *bisogno* and *bisogna* as translations for Fr. *falloir* 'need, have to'.

(Anonymous 1830: 94)

c.   *qué   servir   touto   qouesto*?
what   serve.IMPF   all   this
'A quoi servira tout cela?'
'What will all this accomplish?'
(Anonymous 1830: 95)

Typologically-oriented studies, such as Bybee and Pagliuca (1987) and Bybee (1995), have identified three main diachronic sources of future markers: verbs of desire, verbs of movement, and verbs and phrases expressing "obligation, necessity, or predestination". The co-opting of It. *bisogno* and/or *bisogna* for the expression of future tense in LF not only conforms to this cross-linguistic trend but also has clear parallels in the Romance domain, beginning with the Romance synthetic future which has its source in a Latin construction expressing necessity or obligation (Bourciez 1967: 117-118; Bybee 1995: 451).

5.3. Verb classes

The *Dictionnaire*'s LF distinguishes two verb classes in the *r-* form, *-ar* and *-ir* verbs. The bulk of the *-ar* verbs derive from first-conjugation verbs in the lexifiers (see 32a) and the bulk of the *-ir* verbs derive from second- and third-conjugation lexifier verbs (see 32b-c). In a handful of cases, LF *-ir* verbs derive from first-conjugation lexifier verbs, or the verb belongs to more than one conjugation in LF (see 32d-e).

(32)   a.   ablar   'say'   (< Sp. hablar)
                mirar   'see'   (< Sp. mirar)
                dgiocar   'play'   (< It. giocare)
                dgitar   'throw'   (< It. gettare)
                alloumar   'light'   (< Fr. allumer)
                avalar   'swallow'   (< Fr. avaler)

        b.   rompir   'break'   (< Sp. romper)
                escondir   'hide'   (< Sp. esconder)
                crédir   'believe'   (< It. credere)
                volir   'want'   (< It. volere)

        c.   inchir   'fill'   (< Sp. henchir)
                capir   'understand'   (< It. capire)

        d.   sanir   'heal'   (< Sp. sanar)
                composir   'arrange'   (< Fr. composer)

        e.   sédar ~ sédir   'sit (down)'   (< It. sedere)
                imparar ~   'learn'   (< It. imparare)

imparir   'teach'[22]

The number of *-ar* verbs exceeds that of *-ir* verbs by about three to one, with about 320 of the former and 110 of the latter. Two verbs are attested in both conjugations (see 32e above). The *Dictionnaire* does not list the *-to* form for each and every verb, however, where supplied, it is overwhelmingly *-ato* for the *-ar* verbs and mostly *-ito* for the *-ir* verbs (see 33a-b). The *-uto* form is attested in the verbs shown in (33c-d); only two of these belong to the *-ar* conjugation. Some of the *-uto* forms appear to have been assembled in LF language-internally, compare LF *escondir / escondouto* 'hide' with its etymological source, Sp. *esconder / escondido*.

(33)   a. ***-ar / -ato***

        ablar, -ato   'say'
        andar, -ato   'go'
        amousar, -ato   'entertain'
        sarar, -ato   'close'

    b. ***-ir / -ito***

        adormir, -ito   'put to sleep'
        composir, -ito   'arrange'
        cousir, -ito   'sew'
        fazir, -ito   'do, make'

    c. ***-ar / -uto***

        cédar, -outo   'give up'
        sédar, -outo   'sit (down)'

    d. ***-ir / -uto***

        avir, -outo   'have'
        bévir, -outo   'drink'
        conoschir, -uto   'know'
        crédir, -outo   'believe'
        deffendir, -outo   'defend'
        dévir, -outo   'owe'
        dispendir, -outo   'spend'
        escondir, -outo   'hide'
        fendir, -outo   'split'
        intendir, -outo   'her'
        vénir, -outo   'come'

The *-ir* verbs in (34) show different stem allomorphs in the *-to* form (or its lexicalized adjectival form).

(34)   fingir, finto   'feign'
       morir, morto   'die'

---

[22] Derek C. Carr (p.c.) suggests the possibility of contamination with Sp. *impartir* 'give, impart'.

perdir, perso	'lose'
pingir, pinto	'paint'
rompir, roto	'break'
scrivir, scrito	'write'
vincir, vinto	'defeat'

In Haedo's LF, the *-r* form distinguishes three rather than two conjugations (see 35). Of the two *-to* forms recorded in that source one ends in *-ato* (*portato*) and the other in *-ito* (*(e)scripto*).

(35) | ***-ar*** | ***-er*** | ***-ir*** |
|---|---|---|
| abrusar | correr | dezir |
| andar | fazer ~ hazer | morir |
| cerrar | meter | venir |
| curar | poder | |
| donar | responder | |
| estar | saber | |
| forar | tener | |
| mirar | (dole) | |
| parlar | (ha) | |
| pillar | | |
| portar | | |
| sentar | | |
| trabajar | | |
| trovar | | |
| (guarda) | | |

The merger of the *-er* verbs with *-ir* verbs in the *Dictionnaire*'s LF has been attributed to phonological causes, namely raising of mid vowels due to assimilation to the vocalism of North African Arabic and Berber (e.g. Schuchardt 1909; Castellanos 2007). This analysis is indirectly supported by the treatment of Spanish verbs in MCA, as reported by Heath (1989: 105); these are mostly borrowed in the infinitive form and end in /-aṛ/ and /-iṛ/ ~ /-ir/ in the receiving language, e.g. *comer* 'eat' > /kumir/. Cifoletti advances a complementary hypothesis:

> Credo perciò che la generalizzazione della desinenza *-ir* sia da attribuire più che altro al bisogno di semplificare e normalizzare, anche se possono avervi giocato un ruolo le difficoltà di pronuncia di alcuni arabofoni. (Cifoletti 1989: 40)

> [I believe therefore that the generalization of the ending *-ir* is to be attributed above all to the need to simplify and normalize, even if the pronunciation difficulties of some Arabic speakers may have played a role here as well.]

Cifoletti's hypothesis is supported by the consideration that the [e] > [i] shift before a word-final [r] is specific to verbs and is not extended to nouns. For example, Sp. *poder* (verb) is reflected in LF as *poudir* 'be able', with the vowel raising, whereas Sp. *poder*

(noun) is reflected as *poder*, without the vowel raising (these forms may be seen in Figure 2). The raising is similarly absent in the noun *mouchéra ~ moukera* 'woman', from Sp. *mujer*. A small number of the verbs, such as *piachir ~ piacher* 'please' and *mettir ~ metter* 'put', are recorded with both endings, hinting at likely variation in actual usage.

In conclusion, the *Dictionnaire*'s verb classes show continuity with the verb classes of the lexifiers in that (i) the *-ar* class is the more productive inflection class (this is also true of Haedo's LF, with the recorded fragments containing 15 *-ar* versus 12 *-er* / *-ir* verbs), (ii) neutralization of the conjugational distinctions affects non-first conjugation (non-*ar*) verbs, and (iii) verbs of the *-ar* class show no stem allomorphy, with all such allomorphy confined to verbs of the *-ir* class (see a discussion of these developmental trends in Maiden 2011).

6. Personal pronouns

As discussed in Section 3, in the Romance lexifiers of LF personal pronouns distinguish the category of case, the oblique pronouns additionally distinguish between tonic and clitic forms, and there are also dedicated pronominal possessives. The *Dictionnaire*'s LF reduces the complexity of this system; the forms of the personal pronouns may be seen in the following quasi-paradigm of *andar* 'go' from the *Dictionnaire*'s preface:

(36)   mi andar   'I go'   noi andar   'we go'
        ti andar   'you (sg.) go'   voi andar   'you (pl.) go'
        ellou andar   'he goes'   elli andar   'they go'
        ella andar   'she goes'

The above formal reduction brings about the development of analytic means for signaling possessors and objects expressed by personal pronouns. It was mentioned in §3.2.1 that the Romance lexifiers of LF use the preposition descending from Lat. *de* to express possession when the possessor is a noun or selected personal pronouns. The *Dictionnaire*'s LF both agrees with its lexifiers in using a descendant of this preposition to signal nominal possessors (in 37a) and goes beyond them in completely grammaticalizing this possessive construction (in 37b-c): while in the lexifiers the analytic possessive construction with pronominal possessors is either stylistically marked (Cordin 2001) or distributionally restricted (Orozco 2012), in LF it is used even with singular pronouns of the first and second person (see also Operstein 2017b).

(37)   a.   *mi   andar   in   casa   del   Signor.*
                1s   go.IMPF in   house   of.the   mister
                'Je vais chez Monsieur M.'
                'I am going to the house of the gentleman.'
                (Anonymous 1830: 95)

        b.   *per   la   palabra   di   mi.*
                by   the   word   of   1s
                'Sur ma parole.'
                'Upon my word.'

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(Anonymous 1830: 93)

b.   *commé star il fratello di ti*?
        how   be.IMPF the brother of 2s
        'Comment se porte votre frère?'
        'How is your brother?'
        (Anonymous 1830: 94)

The single possessive form recorded by Haedo (1612), shown in (38), indicates that there likely existed variation in the expression of pronominal possession. As in the case of variation in the expression of the aspectual opposition, with more lexifier-like forms (imperatives, third person singulars and auxiliary-ful perfects) coexisting with more basilectal forms (infinitives and auxiliary-less perfects), variation in the expression of pronominal possession, with more lexifier-like forms like *tuya* thrown into the mixture, is consistent with the hypothesis of LF being located on a pidgin-koine continuum (Operstein forthc. b).[23]

(38)   *… si venir ventura andar a casa tuy-a*
       if   come.IMPF luck   go.IMPF to   house.F your-F
       'if your luck comes, you will go home'
       (Haedo 1612; in Cifoletti 1989: 159)

The analytic expression of pronominal possessors is paralleled in the *Dictionnaire*'s LF by the analytic marking of direct and indirect pronominal objects (illustrated in 39). The object marker has as its source the preposition *per* 'by, for' which, in other contexts, continues to maintaim its spatial and benefactive functions.

(39)   a.   *dispiacher mouchou per mi.*
         displease.IMPF very   DOM   1s
         'J'en suis bien fâché.'
         'I am very sorry.'
         (Anonymous 1830: 94)

      b.   *ti crédir per mi,*
         2s   believe.IMPF DOM   1s

         mi poudir assicourar per ti.
         1s   be.able.IMPF assure.IMPF   DOM   2s
         'Croyez-moi je puis vous l'assurer.'
         'Believe me, I can assure you.'
         (Anonymous 1830: 93)

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[23] The number of variant structures would increase if the LF textual samples from different areas and periods are treated as a single corpus. In the area of pronominal possession, this variation would include postposed possessives of the Southern Italo-Romance type attested in *Contrasto della Zerbitana*: compare *casama* 'my house' with Haedo's *casa tuya* 'your house' and the *Dictionnaire*'s *la casa di mi* 'my house' (Minervini 1996: 250).

The examples in (40) show that the *Dictionnaire*'s LF does not mark nominal objects with *per*.

(40) a. *molto   tempo   ti   non   mirato   Signor   M.*?
          much   time   2S   NEG   see.PF   mister   M.
          'Y a-t-il long-tem[p]s que vous n'vez vu Monsieur M.?'
          'Has it been long since you have seen Mr. M.?'
          (Anonymous 1830: 94)

      b. *aprir   la   bentana.*
          open.IMPF   the   window
          'Ouvrez la fenètre.'
          'Open the window.'
          (Anonymous 1830: 95)

      c. *ti   dar   una   cadiéra   al   Signor.*
          2S   give.IMPF   a   chair   to.the   mister
          'Donnez une chaise à Monsieur.'
          'Give a chair to the gentleman.'
          (Anonymous 1830: 94)

The use of *per* for the marking of pronominal objects is not confined to the *Dictionnaire* but is also found in the LF fragments in Gigio Artemio Giancarli's play *Zingana* (1545) and the plays of Carlo Goldoni, though its use in these sources is less regular and differs in details from that of the *Dictionnaire* (Zago 1986: 125; Operstein 1998, 2007: 242-244). In connection with this use, Schuchardt (1909) notes the marking of objects by means of *pour* 'for' in the Judeo-French of Algiers and quotes structurally parallel examples from Cape Dutch and Malayo-Portuguese.

Both Italian and Spanish display differential object marking (DOM), albeit at different stages of grammaticalization. LF agrees with its main lexifiers in the fact of the existence of this phenomenon, while also differing from them in the choice of the preposition grammaticalized as the DOM marker and the type of objects selected for differential marking (see Operstein forthc. b).

7. Summary and outlook

If LF is categorized as a pidgin, its inflectional system appears anomalous in a number of respects, including those listed in (41).

(41) a. Inherited definite and indefinite articles
      b. Morphologically expressed aspect distinction
      c. Allomorphy in selected verb forms
      d. Gender distinction in nouns and personal pronouns
      e. Adjectival agreement with respect to gender
      f. No productive number marking on nouns

The features (41a) through (41e) are unexpected in light of Parkvall and Bakker's (2013) and Parkvall's (2016) findings that definite and indefinite articles, TAM marking, synthetic structures, allomorphy, gender distinction in nouns and personal pronouns, and adjectival agreement are typically absent from pidgins. (41e) is additionally unexpected in light of Roberts and Bresnan's (2008) prediction that gender agreement, being an instance of contextual inflection, is an unlikely candidate for retention in a pidgin. The combination of (41d) and (41f) is unexpected in light of Bakker's (2003) finding that pidgins are more likely to inherit number than gender marking from their lexifiers. Other features indicated by Parkvall and Bakker (2013) and/or Parkvall (2016) as typically absent from pidgins, which are not listed in (41) as not specifically addressed in this study, include derivational morphology, distance contrast in demonstratives, functional use of word order variation, clause connectors, and substantial sets of question words and prepositions (Operstein 2017b, forthc. a). With respect to the last three features named, the *Dictionnaire* records the clause connectors *qué* 'that, which', *sé* 'if' and *qouando* 'when'; the question words *qui* 'who', *cosa* 'what', *qué* 'what, which', *ové* 'where, whither', *oundé* 'whence', *commé* 'how', *perqué* 'why', *qouando* 'when' and *qouanto* 'how much, how many'; the simple prepositions *a* 'to', *di* 'of, from', *in* 'in', *con* 'with', *per* 'for, by', *sopra* 'on', *sotto* 'under' and *da* 'at'; the complex prepositions *fora di* 'out of' and *contra di* 'against'; and the articulated prepositions *al = a il* 'to the (m.)', *alla = a ella* 'to the (f.)', *del = di il* 'of the (m.)' and *della = di ella* 'of the (f.)'.

The above retentions are supplemented by retentions that relate more specifically to the Romance morphological background of LF, including preservation of the Romance inflectional classes in nouns, adjectives and verbs. The noun and adjective classes of LF continue those of its lexifiers with a high degree of faithfulness, while also exhibiting the related phenomenon of hypercharacterization of gender. Also as in the lexifiers, the expression of gender in LF is accomplished both morphologically via word endings and syntactically via agreement between elements of the noun phrase. LF further matches its lexifiers in the apparently unmarked status of the masculine gender. The number of verb classes in the *Dictionnaire*'s LF is reduced by comparison with its main lexifiers, however, the reduction proceeds in the same direction as the corresponding reduction in the lexifiers, with the diachronically unstable conjugation with the thematic vowel *-e-* merging with the more productive *-i-* conjugation, and with the *-a-* conjugation being numerically the stronger of the resulting two conjugations.

In the introduction, we reported on Bakker's (2003) and Parkvall and Bakker's (2013) observation that some pidgins explicitly mark certain parts of speech. Formally, this is achieved by adding a certain morpheme to each member of the respective word class, "even though they are never applied completely consistently" (Bakker 2003: 13). One of the examples of such marking is the verb in Tay Boi, which ends in *-er* regardless of the infinitival ending in its lexifier French. It would seem that the reduction of verb classes in LF, with only two such classes distinguished in the unmarked verb form, *-ar* and *-ir*, may be a further instance of this phenomenon. Bakker's (2003: 13) observation that such formal marking of word classes is rare in the world languages but is found in some artificial languages like Esperanto resonates with the following remarks made by Schuchardt in his seminal article on LF:

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In its primary features Lingua Franca is thus reminiscent of "planned" languages in general; and in the composite nature of its lexicon and a certain formal agreement between its components of varied origin, it is reminiscent of the sort of language that Neo-Latin or Novi Latin reveals itself to be. (Schuchardt 1909; the English translation is cited after Schuchardt 1979: 32)

LF also shows similar division into word classes as its lexifiers, displaying verbs, nouns, adjectives, pronouns, adverbs, numerals, prepositions, articles, conjunctions and complementizers. A rough manual calculation of membership in each major word class shows that the relative sizes of the word classes in the *Dictionnaire*'s LF are comparable with the sizes of the corresponding word classes in at least one of its major lexifiers (see Table 7). The middle column in Table 7 represents the percentages of each word class in the about 7,000 word basic vocabulary of Italian (De Mauro 1991). The last column represents the percentage of words in each word class in the vocabulary of 527 words produced by children between the ages of 8 and 30 months acquiring Italian as their first language. The figures for Italian are reported after Lo Duca, Ferronato and Mengardo (2009: 117), and have been rounded off.

Table 7. Word classes in Lingua Franca and Italian

	Lingua Franca	Italian basic vocabulary	Italian L1 acquisition
nouns	58%	67%	67%
verbs	25%	20%	20%
adjectives	11%	15%	12%

The inflectional innovations of LF are plausibly conditioned by the loss of certain lexifier functional categories and/or their means of expression. Refunctionalization of the non-finite Romance verb forms into members of an aspectual opposition and grammaticalization of It. *bisogno / bisogna* into a future marker may be connected with the non-retention in LF of Romance auxiliaries and inflected verb forms. Complete copularization of *(e)star* may be correlated with the non-retention in LF of the Romance copula derived from Lat. *esse(re)*. Complete grammaticalization of the analytic possessive construction with *di* 'of' is conditioned by the loss in LF of Romance possessives and pronominal clitics. The development of an analytic means to signal pronominal objects and grammaticalization of *per* as the DOM marker may be connected with the non-retention in LF of the pronominal case distinctions and clitic pronouns of the lexifiers. These developments are summarized in Table 8.

Table 8. Inflectional innovations of LF

Lexifier material lost	Corresponding development in LF
inflected verb forms; auxiliary verbs	refunctionalization of the lexifier infinitive and past participle into members of an aspectual opposition; grammaticalization of *bisogno/a* into a future marker
copula descending from Lat. *esse(re)*	complete grammaticalization of *(e)star*

possessives; pronominal clitics	complete grammaticalization of the analytic possessive construction with *di*
case distinction in pronouns; pronominal clitics	analytic marking of pronominal objects; grammaticalization of *per* into a DOM marker

In summary, the structural features of LF include a high degree of retention of lexifier inflectional categories and the morphosyntactic means by which they are expressed, resulting in a high degree of typological continuity between LF and its lexifiers in the area of inflection. The continuity is seen not only in the retentions but also in the direction of LF's language-internal developments, such as reduction in the number of verb classes, grammaticalization of *(e)star* and the development of DOM, which proceed in the same direction as the corresponding developments in the lexifiers. It may be hypothesized that the high-contact environment that engendered LF and supported its continued existence may have served as a catalyst for some of the processes that were already underway in the lexifiers. The taxonomic classification of LF needs to take into account the structural features that it shares with its Romance lexifiers, and the approach proposed in Operstein (forthc. b), which views LF as located on a continuum between a pidgin and a koine, may provide a fruitful alternative to classifying it as a pidgin.

Finally, many of the LF structural features and developments have parallels not only in the diachronic development of Romance languages but also in their various contact and L2 varieties. For example, hypercharacterization of gender has been reported for *italiano popolare*[24] (e.g. *moglia* for *moglie* 'woman'), interlanguages of Spanish-speaking learners of Italian (e.g. *meso*, *padro* for *mese* 'month', *padre* 'father') and adaptation of English borrowings in American Italian (e.g. *Broccolino, giobba, fensa* for *Brooklyn, job, fence*) (Schmid 1992: 293; Berruto 2012: 215). The mixed language of Italian immigrants in Argentina, documented under the name of *cocoliche*, exhibits hybrid Hispano-Italian formations similar to those seen in LF; compare, for example, *fuciles* 'guns' (< It. *fucile* plus Sp. *-s*) with LF *tapétos* 'carpet' (< It. *tappeto* plus Sp. *-s*) (Berruto 2012: 217). These parallels, and many others besides, suggest that a fruitful direction of future research on LF is to bring it firmly within the ambit of Romance studies, and to approach it as a specifically Romance phenomenon.

References

Acquaviva, P. (2009). The structure of the Italian declension system. In F. Montermini, G. Boyé, & J. Tseng (Eds.), *Selected proceedings of the 6th Décembrettes* (pp. 50-62). Somervile, MA: Cascadilla Proceedings Project.

Anonymous. (1830). *Dictionnaire de la langue franque ou petit mauresque, suivi de quelques dialogues familiers et d'un vocabulaire des mots arabes les plus usuels, a l'usage des Français en Afrique*. Marseille: Typographie de Feissat ainé et Demonchy.

Arends, J. (1997). The Lingua Franca hypothesis: a review of the evidence. Paper presented at the meeting of the Society of Pidgin and Creole Linguistics. London: School of Oriental and African Studies.

Arends, J. (1998). A bibliography of Lingua Franca. *The Carrier Pidgin*, 26, 4-5, 33-35.

Arends, J. (2005). Lingua Franca. In P. Strazny (Ed.), *Encyclopedia of linguistics* (Vol. 1,

---

[24] Italian of dialect speakers.

pp. 625-626). New York: Fitzroy Dearborn.

Aslanov, C. (2006). *Le français au Levant, jadis et naguère: à la recherche d'une langue perdue*. Paris: Honoré Champion.

Baglioni, D. (2010). *L'italiano delle cancellerie tunisine (1590-1703): edizione e commento linguistico delle "Carte Cremona"*. Rome: Scienze e Lettere.

Bakker, P. (1994). Pidgins. In P. Muysken, N. Smith, & J. Arends (Eds.), *Pidgins and creoles: an introduction* (pp. 25-39). Amsterdam: Benjamins.

Bakker, P. (2003). Pidgin inflectional morphology and its implications for creole morphology. In G. Booij & J. van Marle (Eds.), *Yearbook of Morphology 2002* (pp. 3-33). Dordrecht: Kluwer.

Berretta, M. (1992). Marcatezza in morfologia e apprendimento di lingue seconde. *Quaderni del Dipartimento di Linguistica e Letterature Comparate*, 8, 129-156.

Berruto, G. (2012). *Sociolinguistica dell'italiano contemporaneo* (new ed.). Rome: Carocci.

Blake, B. J. (2001). *Case* (2nd ed.). Cambridge: Cambridge University Press.

Booij, G. (1996). Inherent versus contextual inflection and the split morphology hypothesis. In G. Booij & J. van Marle (Eds.), *Yearbook of Morphology 1995* (pp. 1-16). Dordrecht: Kluwer.

Bourciez, Édouard. (1967). *Éléments de linguistique romane*. (5th ed.) Paris: Librairie C. Klincksieck.

Butt, J., & Benjamin, C. (2004). *A new reference grammar of Modern Spanish* (4th ed.). New York: McGraw-Hill.

Bybee, J. L. (1995). Spanish tense and aspect from a typological perspective. In P. Hashemipour, R. Maldonado, & M. van Naerssen (Eds.), *Studies in language learning and Spanish linguistics in honor of Tracy Terrell* (pp. 442-457). San Francisco: McGraw Hill.

Bybee, J. L., & Pagliuca, W. (1987). The evolution of future meaning. In A. Giacalone Ramat, O. Carruba, & G. Bernini (Eds.), *Papers from the VIIth International Conference on Historical Linguistics* (pp. 109-122). Amsterdam: Benjamins.

Camamis, G. (1977). *Estudios sobre el cautiverio en el Siglo de Oro*. Madrid: Gredos.

Camus Bergareche, B. 1993. Lingua franca y lengua de moros. *Revista de Filología Española*, 73, 417-426.

Castellanos, C. (2007). La lingua franca, una revolució lingüística mediterrània amb empremta catalana. Paper presented at the XII International Colloquium of the North American Catalan Society. Halifax, Canada. http://www.uab.cat/Document/439/403/castellanos_linguafranca2007.pdf. Accessed 14 February 2017.

Cifoletti, G. (1978). *Lingua franca* e *sabir*: considerazioni storiche e terminologiche. *Incontri Linguistici*, 4, 205-212.

Cifoletti, G. (1980). *Il vocabolario della lingua franca*. Padova: CLESP.

Cifoletti, G. (1989). *La lingua franca mediterranea*. Padova: Unipress.

Cifoletti, G. (1991). L'influsso arabo sulla Lingua Franca. In A. Loprieno (Ed.), *Atti della quinta giornata comparatistica* (pp. 34-39). Perugia: Dipartimento di Linguistica e Filologia Romanza.

Cifoletti, G. (1994). Aggiornamenti sulla lingua franca mediterranea. In J. M. Brincat, (Ed.), *Languages of the Mediterranean: Substrata – The Islands – Malta* (pp. 143-

149). The Institute of Linguistics, University of Malta.

Cifoletti, G. (2000). La lingua franca a Venezia nel settecento. In V. Orioles (Ed.), *Documenti letterari del plurilinguismo* (pp. 9-18). Rome: Il Calamo.

Cifoletti, G. (2004). *La lingua franca barbaresca*. Rome: Il Calamo.

Collier, B. (1977). On the origins of Lingua Franca. *Journal of Creole Studies*, 1, 281-298.

Coates, W. A. (1971). The Lingua Franca. In F. Ingemann (Ed.), *Papers from the Fifth Kansas Linguistics Conference* (pp. 25-34). Lawrence, Kansas: The Linguistics Department, University of Kansas.

Cordin, P. 2001. I possessivi: pronomi e aggettivi. In L. Renzi, G. Salvi, & A. Cardinaletti (Eds.), *Grande grammatica italiana di consultazione* (new ed.) (pp. 619-630). Bologna: il Mulino.

Cornelissen, R. (1992). Zur Lingua Franca des Mittelmeers. In G. Birken-Silverman & G. Rössler (Eds.), *Beiträge zur sprachlichen, literarischen und kulturellen Vielfalt in der Philologien* (pp. 217-228). Stuttgart: Franz Steiner.

Couto, H. H. do. (2002). *A língua franca mediterrânea: histórico, textos e interpretação*. Brasilia: Editora Plano.

D'Achille, P., & Thornton, A. M. (2003). La flessione del nome dall'italiano antico all'italiano contemporaneo. In N. Maraschio & T. Poggi Salani (Eds.), *Italia linguistica anno Mille – Italia linguistica anno Duemila. Atti del XXXIV congreso internationale di studi della Società di Linguistica Italiana* (pp. 211-230). Rome: Bulzoni.

Dakhlia, J. 2008. *Lingua Franca: histoire d'une langue métisse en Méditerranée*. Arles: Actes Sud.

Dahl, Ö. (1985). *Tense and aspect systems*. Oxford: Basil Blackwell.

De Mauro, T. 1991. *Il vocabulario di base della lingua italiana*. In *Guida all'uso delle parole* (pp. 149-183). Rome: Editori Riuniti.

Foltys, C. (1984-1985). Die Belege der Lingua Franca. *Neue Romania*, 1, 1-37; 2, 133-134.

Fronzaroli, P. (1955). Nota sulla formazione della lingua franca. *Atti e Memorie dell' Academia Toscana di Scienze e Lettere La Colombaria*, 20 (n.s. 6), 211-252.

Gardani, F., Arkadiev, P., & Amiridze, N. (2015). Borrowed morphology; an overview. In F. Gardani, P. Arkadiev, & N. Amiridze (Eds.), *Borrowed morphology* (pp. 1-23). Berlin: De Gruyter Mouton.

Grandgent, C. H. (1927). *From Latin to Italian: an historical outline of the phonology and morphology of the Italian language*. Cambridge: Harvard University Press.

Grion, G. (1890-1892). Farmacopea e lingua franca del dugento. *Archivio Glottologico Italiano*, 12, 181-186.

Haedo, Fray Diego de. (1612). *Topographia e historia general de Argel*. Valladolid.

Harris, J. W. (1991). The exponence of gender in Spanish. *Linguistic Inquiry*, 22, 27-62.

Harris, J. W. (1992). The form classes of Spanish substantives. In G. Booij & J. van Marle (Eds.), *Yearbook of Morphology 1991* (pp. 65-88). Dordrecht: Kluwer.

Heath, J. (1989). *From code switching to borrowing: foreign and diglossic mixing in Moroccan Arabic*. London: Kegan Paul International.

Hengeveld, K. (1992). *Non-verbal predication: theory, typology, diachrony*. Berlin: Mouton De Gruyter.

Holm, J. (2004). *An introduction to pidgins and creoles*. Cambridge: Cambridge University Press.

Kabatek, J., & Pusch, C. D. (2011). The Romance languages. In B. Kortmann & J. van der Auwera (Eds.), *The languages and linguistics of Europe: a comprehensive guide* (pp. 69-96). Berlin: De Gruyter Mouton.

Korletjanu, N. G. (1974). *Issledovanie narodnoj latyni i ee otnoshenij s romanskimi jazykami* [A study of Vulgar Latin and its relationship with Romance languages]. Moscow: Nauka.

Lipski, J.M. (1993). Origin and development of 'ta' in Afro-Hispanic creoles. In F. Byrne & J. Holm (Eds.), *Atlantic meets Pacific: a global view of pidginization and creolization* (pp. 217-231). Amsterdam: Benjamins.

Lipski, J. M. (2014). A historical perspective of Afro-Portuguese and Afro-Spanish varieties in the Iberian Peninsula. In P. Amaral & A. M. Carvalho (Eds.), *Portuguese-Spanish interfaces: diachrony, synchrony, contact* (pp. 359-376). Amsterdam: Benjamins.

Lloyd, P. M. (1987). *From Latin to Spanish: historical phonology and morphology of the Spanish kanguage*. Philadelphia: Memoirs of the American Philosophical Society.

Lo Duca, M. G., Ferronato, M., & Mengardo, E. (2009). 'Indicazioni per il curricolo' e obiettivi di apprendimento sulle categorie lessicali: il riconoscimento del nome. In P. Baratter & S. Dallabrida (Eds.), *Lingua e grammatica: teorie e prospettive didattiche* (pp. 11-27). Milan: FrancoAngeli.

Maiden, M. (1995). *A linguistic history of Italian*. London: Longman.

Maiden, M. (1997). Inflectional morphology of the noun and adjective. In M. Maiden & M. Parry (Eds.), *The dialects of Italy* (pp. 68-74). London: Routledge.

Maiden, M. (2011). Morphological persistence. In M. Maiden, J. C. Smith, & A. Ledgeway (Eds.), *The Cambridge history of the Romance languages* (Vol. 1, pp. 155-214). Cambridge: Cambridge University Press.

Maiden, M. (2016). Inflectional morphology. In A. Ledgeway & M. Maiden (Eds.), *The Oxford guide to the Romance languages* (pp. 497-512). Oxford: Oxford University Press.

Malkiel, Y. (1967). Linguistics as a genetic science. *Language*, 43, 223-245.

Mann, C. C. (1993). Polysemic functionality of prepositions in pidgins & creoles: the case of 'fò' in Anglo-Nigerian Pidgin. In F. Byrne & J. Holm (Eds.), *Atlantic meets Pacific: a global view of pidginization and creolization* (pp. 57-67). Amsterdam: Benjamins.

Minervini, L. 1996. La lingua franca mediterranea: plurilinguismo, mistilinguismo, pidginizzazione sulle coste del mediterraneo tra tardo medioevo e prima età moderna. *Medioevo Romanzo*, 20, 231-301.

Napoli, D. J., & Vogel, I. (1990). The conjugations of Italian. *Italica*, 67, 479-502.

Operstein, N. (1998). Was Lingua Franca ever creolized? *Journal of Pidgin and Creole Languages*, 13, 377-380.

Operstein, N. (2007). On the status and transmission of Lingua Franca. In W. Hock & M. Meier-Brügger (Eds.), *Darъ Slovesьny: Festschrift für Christoph Koch zum 65. Geburtstag* (pp. 235-249). Munich: Verlag Otto Sagner.

Operstein, N. (2017a). The Spanish component in Lingua Franca. *Language Ecology*, 1, 105-136.

Operstein, N. (2017b). The syntactic structures of Lingua Franca in the *Dictionnaire de la langue franque*. *Italian Journal of Linguistics*, 29.

Operstein, N. (forthc. a). Toward a typological profile of Lingua Franca: a view from the lexicon and word formation. *Language Sciences*.

Operstein, N. (forthc. b). Lingua Franca between pidginization and koineization. *Journal of Pidgin and Creole Languages.*

Orozco, R. 2012. The expression of nominal possession in the Spanish of Colombians in New York City. In R. J. File-Muriel & R. Orozco (Eds.), *Colombian varieties of Spanish* (pp. 205-233). Madrid: Iberoamericana and Frankfurt am Main: Vervuert.

Parkvall, M. (2016). Pidgin languages. *Oxford Research Encyclopedia, Linguistics*. linguistics.oxfordre.com. doi 10.1093/acrefore/9780199384655.013.58

Parkvall, M., & Bakker, P. (2013). Pidgins. In P. Bakker & Y. Matras (Eds.), *Contact languages: a comprehensive guide* (pp. 15-64). Berlin: De Gruyter Mouton.

Patota, G. (2006). *Grammatica di riferimento dell'italiano contemporaneo*. Novara: Garzanti Linguistica.

Penny, R. (2002). *A history of the Spanish language* (2nd ed.). Cambridge: Cambridge University Press.

Plag, I. (2008). Creoles as interlanguages: inflectional morphology. *Journal of Pidgin and Creole Languages*, 23, 109-130.

Pountain, C. (1982). *ESSERE/STARE as a Romance phenomenon. In N. Vincent & M. Harris (Eds.), *Studies in the Romance verb. Essays offered to Joe Cremona on the occasion of his 60th birthday* (pp. 139-160). London: Croom Helm.

Prado, M. (1982). El género en español y la teoría de la marcadez. *Hispania*, 65, 258-266.

Roberts, S. J., & Bresnan, J. (2008). Retained inflectional morphology in pidgins: a typological study. *Linguistic Typology*, 12, 269-302.

Rohlfs, G. (1968). *Grammatica storica della lingua italiana e dei suoi dialetti. Morfologia*. Turin: Giulio Einaudi.

Sabatini, A. (1993). *Il sessismo nella lingua italiana*. Rome: Istituto Poligrafico e Zecca dello Stato.

Santoro, S. (1996). Lingua Franca in Goldoni's *Impresario delle Smirne*. *Journal of Pidgin and Creole Languages*, 11, 89-93.

Savoia, L. (1997). Inflectional morphology of the verb. In M. Maiden & M. Parry (Eds.), *The dialects of Italy*, 75-86. London: Routledge.

Schmid, S. (1992). Le interlingue di ispanofoni nella Svizzera tedesca: un tipo di italiano popolare? In B. Moretti, D. Petrini, & S. Bianconi (Eds.), *Linee di tendenza dell'italiano contemporaneo* (pp. 285-301). Rome: Bulzoni.

Schuchardt, H. (1909). Die Lingua franca. *Zeitschrift für Romanische Philologie*, 33, 441-461.

Schuchardt, H. (1979). The Lingua Franca. In T. L. Markey (Ed. and Transl.), *The ethnography of variation: selected writings on pidgins and creoles* (pp. 26-47). Ann Arbor: Karoma.

Schwarze, C. (1999). Inflectional classes in lexical functional morphology: Latin -sk- and its evolution. In M. Butt & T. Holloway King (Eds.), *Proceedings of the LFG 99 Conference*. The University of Manchester: CSLI Publications. http://web.stanford.edu/group/cslipublications/cslipublications/LFG/4/lfg99schwarze. pdf. Accessed 14 February 2017.

Schwegler, A. (1990). *Analyticity and syntheticity: a diachronic perspective with special reference to Romance languages*. Berlin: Mouton de Gruyter.

Selbach, Rachel. 2008. Norms, grammar, or a bit of style: Lingua Franca and the issue of languageness. In P. Sutcliffe, L. Stanford, & A. Lommel (Eds.), *LACUS Forum 34: speech and beyond* (pp. 221-232.). Houston, TX: LACUS.

Serianni, L. 1989. *Grammatica italiana. Italiano comune e lingua letteraria*. Turin: Utet Libraria.

Stovicek, T. W. (2010). *A developmental history of the Hispano-Romance verb conjugations*. Doctoral dissertation, Columbus, OH: The Ohio State University.

Swiggers, P. (1991-1993). Autour de la 'lingua franca': une lettre de Marcel Cohen à Hugo Schuchardt à propos de la situation linguistique à Alger. *Orbis*, 36, 271-280.

Thomason, S. G. (2001). *Contact languages*. Edinburgh: Edinburgh University Press.

Thornton, A. M. (1996). On some phenomena of prosodic morphology in Italian: accorciamenti, hypocoristics and prosodic delimitation. *Probus*, 8, 81-112.

Thornton, A. M. (2003). L'assegnazione del genere ai prestiti inglesi in italiano. In A. Sullam Calimani (Ed.), *Italiano e inglese a confronto* (pp. 57-86). Florence: Franco Cesati Editore.

Velupillai, V. (2015). *Pidgins, creoles and mixed languages: an introduction*. Amsterdam: Benjamins.

Vincent, N. (1997). Synthetic and analytic structures. In M. Maiden & M. Parry (Eds.), *The dialects of Italy* (pp. 99-105). London: Routledge.

Zago, R. (1986). Lingua franca nelle commedie di Goldoni. *Quaderni Utinensi*, 7-8, 122-126.