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Permalink https://escholarship.org/uc/item/0h60q9xq

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Publication Date

2018-03-01

DOI

10.1016/j.langsci.2017.12.007

Peer reviewed

Toward a typological profile of Lingua Franca: A view from the lexicon and word formation¹

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Although the Mediterranean contact language Lingua Franca (LF) is classified as a pidgin, a closer examination of the specialist literature reveals some doubts regarding this categorization. This paper approaches the classification of LF from the viewpoint of its vocabulary structure and word formation processes. The basis for the study is the lexicon of some 2,000 words recorded in the anonymous didactic dictionary of 1830 that constitutes the most detailed source of information about LF. The study finds that the LF word formation processes are a detailed continuation of those of its Romance lexifiers. This finding calls for a refinement of our understanding of LF, and with it of our "typology of contact outcomes" (Winford 1997: 3).

KEYWORDS: Romance languages, language contact, contact languages, word formation, pidgins, Mediterranean, Maghreb

1. Introduction

1.1. Lingua Franca lexicon

Lingua Franca (LF)² is a Romance-based contact vernacular that was used for interethnic communication in the Mediterranean area until the second half of the nineteenth century. It appears to have achieved structural stability in the context of the slave societies of the Maghreb between the sixteenth and nineteenth centuries (Cifoletti 2004; Castellanos 2007). The documentation of LF comes mostly in the form of brief textual samples given as mere curiosities, or to provide a local color, in pre-scholarly written sources whose genres range from travelers' accounts to former slaves' narratives of captivity, to jocular poems, and to plays set in such locations as North Africa, Venice or the Levant (see Arends 1998). Against this background, two sources in particular tend to stand out: the monumental Topografía e historia general de Argel, published as Haedo (1612) but likely composed several decades earlier (Camamis 1977), and the slender volume titled Dictionnaire de la langue franque ou petit mauresque, suivi de quelques dialogues familiers et d'un vocabulaire des mots arabes les plus usuels; à l'usage des Français en Afrique, published anonymously in 1830 (Anonymous 1830; henceforth the Dictionnaire). The former describes the sociolinguistic setting of LF and provides textual samples totaling about one hundred distinct lexical items (Cifoletti 1989: 163-164; Cornelissen

¹ I would like to thank Derek C. Carr and the anonymous reviewers of Language Sciences for their valuable comments and suggestions.

² The following abbreviations are used in this paper: 1 = first person, 2 = second person, Ar. = Arabic, Cat. = Catalan, DOM = differential object marker, Eng. = English, Fr. = French, IMPF = imperfective, intr. = intransitive, It. = Italian, L2 = second language, Lat. = Latin, LF = Lingua Franca, PF = perfective, Ptg. = Portuguese, S = singular, SLA = second language acquisition, Sp. = Spanish, tr. = transitive, Tu. = Turkish, Ven. = Venetian.

1992). The latter is a learner's dictionary, published in Marseilles and intended for the use of the French in North Africa. It consists of a 6-page grammar of LF (this section has unnumbered pages), an 82-page French-LF glossary, 6 pages of French-LF dialogues, and a 9-page French-Maghrebi Arabic glossary. The value of these sources is enhanced by the fact that both document the variety or varieties of LF used in Algiers, albeit at a distance of about two and a half centuries.

The profoundly Romance character of LF is revealed by the etymological composition of its lexicon. Cornelissen (1992: 220) estimates that from among the about one hundred distinct lexical items documented by Haedo (1612), 41% derive from Spanish, 17% from Italian, 39% are traceable to multiple Romance sources, and 3% derive from Turkish and Arabic. With respect to the about 2,000 LF lexical items in Anonymous (1830), he estimates that 58% derive from Italo-Romance, 6% from Spanish, 4% from French, 27% may have multiple Romance sources, and 3% derive from Arabic; the remaining 2% are composed of Turkish, Portuguese and Catalan words (Cornelissen 1992: 221). Operstein's investigation (2017a) of the Swadesh list vocabulary in the *Dictionnaire*'s LF reveals only one non-Romance lexical item – Lat. *cinis* 'ash' – in both the 100- and 200-item Swadesh lists.

The non-Romance portion of the Dictionnaire's vocabulary of LF is conspicuous by the absence of verbs and of words of Berber origin (Cifoletti 1980: 26; Aslanov 2014: 124). The most substantial non-Romance lexical component is Arabic; there is also a small number of Greek, Latin and Turkish words as well as one suspected Anglicism, *flinta*³ (Cifoletti 1980: 29-35; 1980: 62-70; 2004: 58-73). In terms of its size, the Arabic component of LF does not exceed those of Sicilian, Spanish or Portuguese, the Romance languages that historically have been in direct contact with Arabic (Aslanov 2014: 124); Aslanov's assessment resonates with Schuchardt's (1909: 30) earlier observation that "[t]he Romance vocabulary of Lingua Franca appears to have been enriched by a number of Arabic words, but for comparative purposes the number is probably not greater than that of the Arabic loans in Spanish⁴ The immediate source for some of the Arabic words is not Arabic but rather the Romance lexifiers of LF. This includes such items as harem and magazino, whose phonological shape points to their acquisition from Italian (< It. harem, magazzino); as well as sultan and minaret, likely acquired from French (< Fr. sultan, minaret) (Schuchardt 1909: 30; Cifoletti 2004: 53; Aslanov 2014: 126-127). Arabic words are also somewhat marked in the LF phonology: for example, words of Arabic origin that end in a consonant do not acquire a final vowel in LF, whereas consonant-final words (non-verbs) of Romance origin often do (Cifoletti 2004: 37-38). Some of the Turkish and Arabic ("oriental") words are also singled out in the Dictionnaire's orthography of LF (Operstein 2017b).

The main Romance lexical components in the *Dictionnaire* are Italian, Spanish and French, in that order. In terms of their diachronic layering, the Spanish component appears to be the earliest of the three, and the French component the most recent

³ Aslanov (2014: 127) derives *flinta* from Fr. *platine* 'platinum'. This etymology seems less likely in view of the absence of the change from pl - > fl- in LF *plata* 'silver, metal', *platzà* 'square' and *platzar* 'to place' (< Sp. *plata*, Sp. *plaza* / Fr. *place*, Fr. *placer*).

⁴ In quantitative terms, Sayahi (2014: 157-158) mentions the following figures for Iberian Romance: 1,188 direct loans from Arabic in Spanish (according to the 2001 *Diccionario de la Real Academia Española*), around 1,000 in Portuguese, and around 450 in modern Galician. For Spanish, Lapesa's earlier estimate (1981: 133 fn. 5bis) comprises about 850 direct loans, 780 derivatives and over 1,500 toponyms.

(Cornelissen 1992; Cifoletti 2004; Operstein 2017a). The Italian component includes over 94% of words that are compatible in form with standard written Italian; Cornelissen (1992: 221) has identified only about 60 words, or under 6% of the total number of Italianisms, that differ enough from written Italian to be qualified as "informal", "archaic" or "dialectal". The Italo-Romance contributors to the *Dictionnaire*'s LF, other than Italian, include Ligurian, Venetian and Southern Italo-Romance. Other Romance lexical contributors to LF include Catalan, Occitan and Portuguese, with the Portuguese component being the least researched to date (Schuchardt 1909; Coates 1971; Cifoletti 1989, 2004; Cornelissen 1992; Castellanos 2007).

1.2. Classification of Lingua Franca

In the literature on contact languages, including textbooks, LF is usually categorized as a pidgin (see Foltys 1984: 1-2; Bakker 1994: 27; Smith 1994: 355; Mufwene 1997: 56; Thomason 2001: 162; Holm 2004: 15; Vellupilai 2015: 151). Pidgins, in turn, are conceptualized as a distinct type in the typology of contact languages (e.g. Thomason 1997, 2001; Bakker & Matras 2013), though, as summarized by Parkvall & Bakker (2013: 19ff), attempts at defining this language type satisfactorily have generally been unsuccessful. In their own cross-linguistic typological study of pidgins, the first of its kind in its extent and scope, Parkvall and Bakker distill a small set of linguistic and social criteria which they consider "essential parts of pidginhood" (21) and use them to set pidgins apart from such other linguistic systems as L2 varieties, creoles, and natively spoken languages. The structural criterion in this set merely states that a pidgin "is highly reduced lexically and grammatically compared to its input languages" (22). The criterion of structural reduction forms part of the provisional definition of pidgins that Parkvall and Bakker adopt:

A pidgin is a language which (a) functions as a **lingua franca**, and which (b) is lexically and structurally **extremely limited** in its communicative possibilities. (Parkvall & Bakker 2013: 25; the font and emphasis are original)

Among the morphosyntactic characteristics that are "typically absent from pidgins", Parkvall and Bakker include the following:

- In the area of morphology: inflection, derivation,⁵ 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;

⁵ But see Crowley's (2008: 84) observation that derivational morphology is better retained than inflectional morphology in pidgins.

- In the area of syntax: functional differences between word orders (e.g. questions versus statements) (Parkvall & Bakker 2013: 46)

While the *Dictionnaire*'s LF shares with pidgins some of the above characteristics, it is structurally much more complex than a typical pidgin. For example, in the nominal system it has gender marking on adjectives and personal pronouns, gender agreement in the noun phrase, definite and indefinite articles, and proximal and distal demonstratives. In the verb system, it distinguishes aspects via suffixes on the verb and can express valence alternations via analytic causatives and inchoatives. In the area of functional categories, it has not only definite and indefinite articles and demonstratives but also well-developed sets of prepositions, question words and clause-combining morphemes. In the area of syntax, it makes functional use of word-order differences, including by using the preverbal position for topicalization, by inverting the order of nominal subjects and verbs in content questions, and by apparently differentiating between the pre- and post-nominal placement of attributive adjectives (Operstein 2017c, 2017d). As will be seen in this paper, LF also has well-developed derivational morphology, including a certain amount of derivational allomorphy.

Other features that make the *Dictionnaire*'s LF less than typical from the perspective of pidgins include its comparatively large vocabulary, which includes about 2,000 distinct lexical items (see Parkvall & Bakker 2013: 33 regarding vocabulary sizes in pidgins), and its intelligibility with at least some of its lexifiers (whereas "[p]idgins tend to be mutually incomprehensible with their respective input languages"; Parkvall & Bakker 2013: 23). Regarding this latter point, we have, for example, the testimony of Haedo (1612) that christianos 'Christians' "se acomodan al momento a aquel hablar [adapt themselves instantly to this language]" (in Cifoletti 1989: 158; see also Operstein 2007). The criterion of mutual intelligibility with lexifiers not only distances LF from pidgins but also makes it similar to koines, the outcome of contact between genetically related, typologically similar and mutually intelligible language varieties (Siegel 1985: 365). LF also differs from pidgins in the provenance of its lexicon: while pidgins derive the bulk of their lexicon either from a single lexifier or from two lexifiers in roughly equal proportions,⁶ LF derives most of its vocabulary from several Romance languages, in proportions that vary from source to source (see §1.1). This characteristic, like the previous one, makes LF similar to koines: as emphasized by Siegel (2001: 182-183), in koineization "there is no one 'lexifier'; several of the varieties in contact share in providing the lexical and morphological content".

The possibility of regarding LF as a koine was briefly entertained by Arends:

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,

⁶ "Most pidgins derive almost all of their vocabulary from one language There are also pidgins with a mixed lexicon deriving from two languages" (Bakker 2008: 137); "The pidgin lexicon in most documented cases derives primarily from one single language, with only minor contributions from the other speech varieties involved However, there are also some pidgins where the lexicon is derived from two languages in roughly equal numbers, probably in special social circumstances" (Parkvall & Bakker 2013: 33).

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)

Taking up the above discussion, Operstein (2017c) proposes to view LF as located on a structural continuum between a pidgin and a koine based on the genetic and typological distance between the source languages⁷ (see Siegel 1985: 370-372 and Winford 1997: 5-6 for pertinent discussion). The basilectal end of this continuum is comprised of the idiolects of non-Romance language speakers, whereas its acrolectal end is comprised of the idiolects of Romance language speakers. With respect to word formation, the subject of this study, this understanding of LF predicts that some of its word formation patterns will be inherited from its lexifiers whereas others will reflect the vocabulary enrichment strategies typical of pidgins.

1.3. Goals and structure of the paper

This paper has both a descriptive and a theoretical goal. Its descriptive goal is to examine the word formation patterns of LF as reflected in the LF lexicon captured by the *Dictionnaire*. This part of the study will fill an important gap in our understanding of the structural properties of LF: unlike its inflection, which has been described in a number of publications (most notably in Schuchardt 1909 and Cifoletti 1980, 1989, 2004), the derivational morphology of LF has not yet been the subject of a dedicated study. The theoretical goal of the paper is to contribute to a refinement of our understanding of LF and its place in the overall "typology of contact outcomes" (Winford 1997: 3).

The structure of the paper reflects the above goals. The remainder of this section surveys the word formation patterns in the main Romance lexifiers of LF, on the one hand, and pidgins (and creoles), on the other. Its purpose is to set the scene for a discussion of word formation in LF in the later sections, particularly as regards the expected limits of variation against which the word formation strategies of LF may be evaluated. Section 2 is devoted to the predominant derivational pattern reflected in the *Dictionnaire*' lexicon. This section also provides the context for a general discussion of suffixation, prefixation, compounding, neologism formation and suppletion. Section 8 examines how the different word formation mechanisms interact in a single functional domain, that of valency / transitivity alternations. Section 9 concludes the paper by summarizing the main findings and by relating them to the larger question of the typological profile of LF.

⁷ This structural continuum intersects with and is superimposed on other continua, including those that reflect the relative inputs of the different Romance lexifiers and the first or dominant languages of LF's speakers and observers (see Operstein 2017d and related discussions in Dakhlia 2008: 87-88 and Aslanov 2014: 128-129).

1.4. Word formation in LF's Romance lexifiers

The most productive and varied word formation device in the Romance lexifiers of LF is affixation, particularly suffixation.⁸ In both Italian and Spanish, the final unstressed vowel of the noun (the so-called word marker),⁹ if present, is suppressed during suffixation (e.g. It. *finestr-a* 'window' \rightarrow *finestr-ino* 'car window', Sp. *cor-o* 'choir' \rightarrow *cor-al* 'choral'). The same is generally true of the adjective gender marker (e.g. It. *bell-o* 'beautiful' \rightarrow *bell-ezza* 'beauty', Sp. *clar-o* 'clear' \rightarrow *clar-idad* 'clarity'). The theme vowel of the verb is analyzed by some researchers as a derivational suffix in its own right (e.g. It. *martello* 'hammer' \rightarrow *martell-a-re* 'to hammer', Sp. *sal* 'salt' \rightarrow *sal-a-r* 'to salt').

The above examples show that suffixes can change the lexical category of the base. Prefixes, by contrast, do not have this ability (e.g. It. *caricare* 'to load' \rightarrow *s-caricare* 'to unload', Sp. *leal* 'loyal' \rightarrow *des-leal* 'disloyal'). Prefixes and suffixes may be added to a base simultaneously; in Romance linguistics, this type of derivation is known as parasynthesis (see Rainer 2016c: 517). Examples include It. *ab-botton-a-re* 'to button up' (from *botton-e* 'button'), *ad-occhi-a-re* 'to catch sight of' (from *occhi-o* 'eye') and Sp. *en-vej-ec-er* 'to age' (from *viej-o* 'old'), *en-dulz-a-r* 'to sweeten' (from *dulc-e* 'sweet'). The theme vowel *-a-* in these verbs may be assumed to act as a derivational suffix.

Non-affixal derivation is possible but is less productive than affixation. It comprises clipping (e.g. It. *bicicletta* \rightarrow *bici* 'bicycle', Sp. *colegio* \rightarrow *cole* 'school'), conversion (e.g. It. *povero* 'poor' \rightarrow *i poveri* 'the poor', *parlare* 'to speak' \rightarrow *il parlare* 'dialect'; Sp. *bueno* 'good' \rightarrow *el bueno* 'the good guy', *lo bueno* 'the good thing'), and the process variably classified as conversion or back-formation (e.g. It. arrivare 'to arrive' \rightarrow arrivo 'arrival'; Sp. *retener* 'to retain' \rightarrow *retén* 'stop, checkpoint', *costar* 'to cost' \rightarrow *costo*, *coste*, *costa*(*s*) 'cost(s)').

Compounding is, similarly, less productive than affixation.¹⁰ In both Italian and Spanish, the lexical categories of the bases are mostly nouns, adjectives and verbs, less often adverbs or prepositions; while the resulting compounds are almost exclusively nouns or adjectives. Examples of compounding include It. *apribottiglie* 'bottle opener', *vagone letto* 'sleeping car', *agrodolce* 'bittersweet', *cassaforte* 'strongbox' and *benedire* 'to bless'; and Sp. *lavaplatos* 'dish washer', *coche cama* 'sleeping car', *claroscuro* 'light-dark', *pelirrojo* 'red-headed' and *malgastar* 'to waste'. Verb-noun compounds are a particularly productive compound type in the Romance lexifiers of LF.

⁸ This summary is based on Rohlfs (1969), Voghera (2004), Real Academia Española (2010), Kabatek & Pusch (2011), Varela (2012), Buchi & Chauveau (2015), Forza & Scalise (2016) and Rainer (2016a, 2016b, 2016c). These sources, which are not individually cited in the text, do not necessarily agree in their analysis, terminology or classification of the Romance word formation patterns. For example, derivation of action nouns from verbs through addition of the word marker -o/-a/-e/- \emptyset is variably analyzed as conversion or back-formation; different functional analyses of the theme vowel lead to non-uniformity in delimiting the scope of conversion and parasynthesis; and the place of so-called syntagmatic compounds in the taxonomy of lexeme building devices is still unsettled (Voghera 2004; Alonso Ramos 2009; Rifón Sánchez 2011: 234 fn. 2; Varela 2012: 209; Rainer 2016a: 2636, 2016b: 2717, 2016c: 517, 519-521). The brief synopsis of Romance word formation patterns offered in this section represents only one possible approach to their analysis.

⁹ "Word markers are morphological segments which are specifically associated with nominal derivation" (Varela 2012: 209-210); see Harris (1991: 28) on the history of the term.

¹⁰ Neoclassical compounds are omitted as irrelevant in the context of this paper.

A related lexeme building technique, located halfway between composition / morphology and phraseology / syntax, are so-called syntagmatic compounds, "new names for concepts [formed] on the basis of lexical patterns with internal syntactic structure" (Rainer 2016a: 2714). Examples of syntagmatic compounds in Italian include terza età 'third age' = 'the elderly' and anima gemella 'twin soul' = 'soulmate', and examples in Spanish include media naranja 'half orange' = 'spouse, significant other' and sociedad anónima 'anonymous company' = 'stock company'. The complement of a syntagmatic compound may be introduced via a preposition, as in It. coda di cavallo 'tail of horse' = 'ponytail', macchina da scrivere 'machine for writing' = 'typewriter', camera del lavoro 'room of the work' = 'chamber of labor, labor union center'; and Sp. cuello de botella 'neck of bottle' = 'bottleneck', asesino en serie 'killer in series' = 'serial killer', orden del día 'order of the day' = 'agenda'. Some scholars treat syntagmatic compounds together with other multi-word lexemes (see Rainer 2016b), including periphrastic verbal lexemes such as It. buttare via 'throw away' and dare buca 'give hole' = 'let down, stand up' and Sp. hacer alusión 'make allusion' = 'allude to', dar fin 'give end' = 'finish'. Another pattern with unclear morphological status is reduplication, as in It. piccolo piccolo 'very small', pian piano 'very slowly', fuggi fuggi 'stampede' and Sp. mujer mujer 'real woman', tonto tonto 'very stupid', muy muy grande 'very big'. In the Romance lexifiers of LF, reduplication is marginal.

1.5. Word formation in pidgins and creoles

The vocabulary enrichment strategies of pidgins are summarized in Table 1 (based on the discussion in Parkvall & Bakker 2013: 33-35, 46).

Strategy	Description and notes
Polysemy	In lexical items, the small size of the lexicon leads to "a staggering amount of polysemy". In functional items, the same factor leads to many pidgins having a single multi-purpose adposition.
Multifunctionality	This term covers the use of the same invariable word in different part-of-speech categories.
Compounds	The compounds may be conventionalized or improvised.
Analytic lexemes	The analytic lexeme type singled out by Parkvall and Bakker are verbs formed by combining the verb 'do' or 'make' with nouns.
Circumlocutions	Like compounds, these may be conventionalized or improvised.
	General lack of "derivation, reduplication, infixation, suprafixation, allomorphy" (Parkvall & Bakker 2013: 46).

Table 1. Vocabulary enrichment strategies in pidgins

For creole languages, Plag (2009) makes similar predictions regarding the word formation patterns. In this and related work, Plag pursues the hypothesis that "creoles originate as conventionalized interlanguages of an early developmental stage" (339), and

is thus specifically interested in the role of second language acquisition (SLA) in their genesis:

If creoles are conventionalized interlanguages, we would expect to find word-formation systems with the following properties:

- frequent use of circumlocutions
- very little affixation in comparison to the lexifier
- in cases of affixation, overgeneralizations and innovative use of inherited affixes
- very productive compounding, with transfer effects concerning headedness
- productive multifunctionality (Plag 2009: 346-347)

The above lists overlap to a considerable degree, particularly as regards the productivity of multifunctionality, compounding and circumlocution and non-productivity of affixation. The similarities between the two lists are broadly attributable to the universals of naturalistic SLA, particularly in the context of source/target language pairs with a considerable genetic or typological distance between them (Cysouw 2013; Schepens, van der Slik & van Hout 2013).

1.6. Summary

The sociohistorical context in which LF became stabilized – the multilingual slave cultures of the Maghreb between the sixteenth and nineteenth centuries – involved two types of language contact, with two types of outcomes and a continuum of variation between them. The first type involved in-group communication among the Christian slaves, the vast majority of whom had Romance language backgrounds; the expected result of this type of contact is a Romance koine. The second type of contact involved out-group communication between Romance and non-Romance language speakers; due to the considerable structural distance between the languages involved in this type of contact, its expected result is a pidgin. The two types of contact took place concurrently and in the same linguistic space,¹¹ and most likely resulted in a variety of ways of speaking LF. The latter are likely to have ranged from the more koine-like idiolects of Romance-language speakers, which were structurally closer to the lexifiers, to the more pidgin-like idiolects of non-Romance language speakers, which were structurally farther from the lexifiers. From the perspective of word formation, we would expect LF to display a mixture of inherited Romance patterns and those that are more typical of pidgins. The relative weight of the two types of word formation in any given idiolect is expected to vary in function of the speaker's familiarity with the lexifier(s). The actual word formation processes captured of the Dictionnaire's LF are presented in the following sections.

¹¹ This view of the development of LF finds a conceptual parallel in the model of the development of American Spanish developed by Parodi & Luján (2014) and Luján (2017), which involves simultaneous intra-group contact among speakers of different Spanish dialects, resulting in a Spanish koine, and extra-group contact between Spanish speakers and speakers of American indigenous languages, resulting in new linguistic structures.

2. Predominant derivational pattern in the Dictionnaire

The most numerous derivational pattern in the *Dictionnaire* is the one that connects nouns and verbs (see examples in 1 and the discussion immediately below concerning the direction of the derivation). The *Dictionnaire* records over a hundred such verb-noun pairs, significantly more than any other word formation pattern.

(1)	a.	Nouns	with the word marker	-0	
		balo	'dance'	balar	'to dance'
		risico	'risk'	risikar	'to risk'
		soffio	'breath'	soffiar	'to breathe'
		viagio	'journey'	viagiar	'to travel'
	b.	Nouns	with the word marker	<u>-a</u>	
		peska	'fishing'	peskar	'to fish'
		caschia	t 'hunting'	caschar	'to hunt'
		paga	'pay'	pagar	'to pay'
		fouga	'flight'	fougir	'to flee'
	c.	Nouns	with the word marker	- <u>e</u>	
		salé	'salt'	salar	'to salt'
		fioré	'flower'	fiorïr	'to blossom'
	d.	Nouns	with the word marker	Ø	
		saboun	'soap'	saboun	ar 'to soap'
		favor	'protection'	favorir	'to protect'

In the noun, the shared base is furnished with the word marker -o, -a, -e or \emptyset (zero). The majority of the nouns take the word marker -o (over 50) or -a (over 30), which reflects the overall prevalence of these word markers in LF. Their perception as an important part of the noun category is indicated by the adaptation of many Romance-origin nouns that lack these markers in the lexifiers (shown in 2).

(2)	moukera ~ mouchéra 'woman'	(< Sp. mujer)
	biéra 'beer'	(< Fr. bière)
	bagueta 'stick'	(< Fr. baguette)
	verro 'glass'	(< Fr. verre)
	grazia 'thank you'	(< It. gratzie)
	ventro 'stomach'	(< It. / Fr. ventre)

In the verb, the shared base is furnished with a theme vowel and an inflectional ending, as in *assassin-o* 'murderer' \rightarrow *assassin-a-r* / *assassin-a-to* 'to murder'. LF has only two inflectional verb endings, -r (deriving from the Romance infinitive) and -to (deriving from the Italian past participle). The -r form is the unmarked form of the verb. It is used in non-past, imperfective and imperative contexts and in verbal complements; in the examples below, it is glossed as IMPF (imperfective). The -to form is found only in perfective or past contexts; in the examples, it is glossed as PF (perfective). The imperfective form distinguishes two theme vowels, -a- and -i-, and the perfective form distinguishes three, -a-, -i- and -u-. In both aspectual forms, -a- is the predominant theme vowel; it generally derives from the Spanish / Italian theme vowel -a- or French theme vowel -e- (see 3a). The LF theme vowel -i- conflates the Spanish / Italian theme vowels -i- and -e-; exceptionally, it also may reflect the first conjugation vowel of the lexifiers (see 3b). The theme vowel -u-, of the perfective form, is less frequent than either -a- or -i- (see 3c).

(3)	a.	comminchiar comminchiato escapar escapato avalar avalato	'to begin''to escape''to swallow'	(< Sp. escapar + Itto)
	b.	ridir fiorïr fiorito fazir fazito inchir	'to laugh''to blossom''to do, make''to fill'	(< It. fiorire) (< It. fiorito)
		inchito composir composito	'to arrange'	(< Sp. henchir + Itto)
	c.	conoschiuto escondouto cédouto	'to know' 'to hide' 'to give up'	(< It. conosciuto) (< Sp. esconder + Itu-to) (< Fr. céder + Itu-to)

In some of the verb-noun pairs in (1), the probable direction of the derivation is from the noun to the verb (e.g. salé 'salt' \rightarrow salar 'to salt'), while in others it is from the verb to the noun (e.g. caschiar 'to hunt' \rightarrow caschia 'hunting'). From the viewpoint of the typology of derivational processes, this represents two separate patterns. It was noted earlier (in §1.4) that derivation of Romance denominal verbs of the type sal-a-r 'to salt' $(\in Sp. sal 'salt')$ may be qualified as suffixal, since "it is commonly assumed that the thematic vowel of the verb acts as a derivational suffix" (Varela 2012: 214). The opposite process – derivation of deverbal nouns by removing part of the verbal lexeme, as in It. sostare 'to stop' \rightarrow sosta 'stop' – is considered nonaffixal derivation, including when accompanied by the addition of a word marker to the noun (Rifón Sánchez 2011; Varela 2012; Rainer 2016c: 520). This analysis may be extended to LF. Also as in the lexifiers, the verb-noun pairs exemplified in (1) display a variety of semantic relationships. Disregarding the direction of the derivation, we find such pairings as verb / agent noun (as in gouidar 'to guide' / gouida 'guide'), verb / instrument noun (as in ségar 'to saw' / séga 'saw'), verb / location noun (as in cousinar 'to cook' / cousina 'kitchen'), verb / result or object noun (as in gouadagniar 'to earn' / gouadagnio 'earnings') and verb / event or action noun (as in *sospirar* 'to sigh' / *sospiro* 'sigh') (see Rifón Sánchez 2011: 110-111).

3. Suffixation

The *Dictionnaire*'s LF has inherited from its lexifiers a fair amount of derivational affixation. As may be appreciated from the illustrative word families in (4), the majority of the inherited derivational patterns involve suffixation, and the majority of the suffixes derive nouns. Both these characteristics are continuous with the lexifier patterns: "[i]n Romance, nouns boast the most articulate array of suffixes" (Rainer (2016c: 518). There is also some evidence that LF not only passively preserved the inherited derivational material but also actively used it to construct new words. For example, Cifoletti (2004) hypothesizes that the LF verb *forar* 'disturb, remove, discard, pull out', which is presumed to be based on Ven. *fora* 'out, outside', as well as the nouns *balador* 'dancer', *fougidor* 'deserter, runaway, renegade', *biancador* 'launderer' and *cazéria* 'barracks', are language-internal innovations (56, 74).¹²

(4)	a.	séga ségar ségadoura segador	'saw' 'to saw' 'sawing' 'sawyer'
	b.	senso sensato sensationé sensibilé sensibilita	'sense' 'sensible' 'sensation' 'sensitive' 'sensitivity'

3.1. Deverbal nouns

Several inherited patterns involve derivation of nouns from verbs. About nineteen nouns are nominalizations of the past participle; the majority of these end in -a. This number includes the forms exemplified in (5b), in which the derivational relationship is obscured by inherited allomorphy.

(5)	a.	volar	'to fly'	volata	'flight'
		fritar	'to fry'	fritata	'omelet'
		vendir	'to sell'	vendita	'sale'
		vestir	'to dress'	vestito	'garment'
		dgémir	'to moan'	dgémito	'moan'

¹² The derivation of *forar* from *fora* goes back to at least Schuchardt (1909: 29). Baglioni (2010) describes this verb as a "neologismo dell'italiano nordafricano e levantino [a neologism of North African and Levantine Italian]" (90) and discusses additional etymologies (438-439). For an alternative etymology of *cazéria*, see Dakhlia (2008: 345); Derek C. Carr (p.c.) suggests Sp. *casería* as another possibility for this word.

b.	piangir	'to cry'	pianto	'tear, sob'
	soridir	'to smile'	soriso	'smile'
	succedir	'to succeed'	succeso	'success'
	promettir	'to promise'	promessa	'promise'
	scométir	'to bet'	scometza	'bet'

The most frequent suffix deriving action nouns is *-tzion* ~ *-tion*; some eighteen verb-noun pairs of this type are attested in the *Dictionnaire*.

(6)	séparar	'to separate'	séparatzion	'separation'
	permettir	'to allow'	permitzion	'permission'
	pounir	'to punish'	pounitzion	'punishment'

About ten deverbal nouns are derived by means of *-ntza*.

(7)	miscolar	'to mix'	miscolantza	'mixture'
	ignorar	'to ignore'	ignoranza	'ignorance'
	sfidar	'to mistrust'	sfidentza	'mistrust'
	obédir	'to obey'	obédientza	'obedience'

About eight deverbal nouns are formed by means of *-mento* (see 8a). In one case, the corresponding verb is not recorded, though there is a related noun (see 8b).

(8)	a.	ornar 'to decorate'	ornamento 'ornament'
		armar 'to arm'	armamento 'arms'
		movir 'to move'	movimento 'movement'
		combatir 'to fight'	combatimento 'battle'
	b.	campo 'camp, field'	campamento 'camp'

About seven nouns are formed with the suffix *-oura* ~ *-doura* ~ *-toura*. Included in this number is the deadjectival noun *verdoura* 'gardening, greenery' (*< verde* 'green').

(9)	serrar	'to shut'	serradoura	'lock'
	aprir	'to open'	appertoura	'opening'

Most agent nouns are derived by means of $-dor \sim -tor$ (see examples in 10). The *Dictionnaire* contains about sixteen relevant verb-noun pairs; the more frequent allomorph of this suffix is *-dor*. The noun in (10c) is based on the lexifier past participle and contains a different allomorph of the stem.

(10)	a.	peskar	'to fish'	peskador	'fisherman'
		caschar	'to hunt'	caschador	'hunter'
		cantar	'to sing'	cantador	'singer'
		bévir	'to drink'	bévidor	'drinker'

b.	vincir	'to conquer'	vincitor	'victor'
	mentir	'to lie'	mentitor	'liar'
c.	succedir	'to succeed'	successor	'successor'

The suffix *-or* derives both agent and non-agent nouns; there are about five relevant verbnoun pairs (shown in 11) plus a larger number of nouns in *-or* whose corresponding verb is not recorded.

(11)	a.	scoultar saltar	'to sculpt' 'to jump'	scoultor saltor	'sculptor' 'jumper'
	b.	amar sudar	'to love' 'to sweat'	amor sudor	'love' 'sweat'

In several cases, the verb corresponding to the agent noun is not recorded; instead, the noun is derivationally related to another noun or an adjective (see 12). As previously mentioned, Cifoletti (2004) views *biancador* 'launderer' as a probable language-internal innovation of LF.

(12)	lavoro	'work'	lavorador	'worker'
	bianco	'white'	biancador	'launderer'
	sédouctzion	'seduction'	sedouctor	'seducer'

Other deverbal agent noun suffixes, illustrated in (13), are infrequent.

(13)	corrir	'to run'	corriéré	'messenger'
	gouardar	'to guard, supervise'	gouardian	'guard, warden'
	commandar	'to order'	comandanté	'commander'

3.2. Deadjectival nouns

Quality nouns can be derived from adjectives by means of *-etza* (there are about sixteen such adjective-noun pairs); the variant *-essa* occurs in *altessa* 'height' (from *alto* 'high'). The inflectional ending of the adjective is removed before the addition of the nounforming suffix.

(14)	largo	'wide'	largetza	'width'
	riko	'rich'	rikétza	'wealth'
	locou	'mad'	loketza	'madness'
	grandé	é 'large'	grandetza	'size'

Another pattern of quality noun derivation involves adding *-ita* (*-ità*) ~ *-ta* to the adjective. The *Dictionnaire* records about nineteen nouns with this suffix; this number includes the nouns in (15c), whose base adjectives are not recorded.

(15)	a.	oscouro cativo vero sensibilé	'dark' 'bad, nasty' 'true' 'sensitive'	oscourita catività verita sensibilita	'darkness' 'nastiness' 'truth' 'sensitivity'
	b.	libéro	'free'	liberta	'freedom'
	c.	pounir probar	'punish' 'prove'	impounità probità	'impunity' 'integrity'

A handful of deadjectival nouns are formed with other suffixes.

(16)	proudenté	'prudent'	proudentza	'prudence'
	impatienté	'impatient'	impatientza	'impatience'
	fourbo	'crafty'	forbéria	'craftiness'

3.3. Denominal nouns

The suffix *-iére* ~ *-iero* ~ *-ier* derives agent or instrument nouns from other nouns. There are about sixteen nouns with this suffix, two of which are recorded without the corresponding base noun (see 17a-b). Two of the nouns attest different allomorphs of the suffix (in 17c), which continues the state of affairs in the lexifier: as noted by Serianni (1989: 117-118), some Italian masculine nouns in *-iere* have a variant in *-iero* due to variable adaptation of this borrowed suffix, which is consonant-final in the donor language (< Fr. *-ier*).

(17)	a.	canon timone tintoura prigeon candella zoukro scola	'cannon' 'rudder' 'dye' 'prison' 'candle' 'sugar' 'school'	canoniéré timoniéré tintouriéré prigioniéré candéliéré zoukriéro scolier	'gunner' 'helmsman' 'dry cleaner' 'prisoner' 'torch' 'sugar bowl' 'schoolboy'
	b.	armar serrar	'to arm' 'to lock'	armouriéro serruriero	'gunsmith' 'locksmith'
	с.	gouerriéré mariniére	'warrior' 'rower'	guerriero mariniéro	'warlike' 'sailor'

Other examples of denominal noun derivation are given in (18).

(18)	cavalo	'horse'	cavaléria	'cavalry'
	séda	'silk'	sédaria	'silk factory'
	orlogio	'clock'	orlogiaïo	'clockmaker'
	galina	'hen'	galinaïo	'henhouse'

moska	'fly'	mousquita	'mosquito'
louna	'moon'	lounetta	'glasses'
forno	'oven'	fornello	'stove'

3.4. Derived verbs

Approximately sixteen verbs are derived from adjectives without any derivational affix other than the theme vowel, predominantly -a. The adjective agreement marker is removed prior to adding the theme vowel. The derived verbs appear mostly to have causative semantics (Rainer 2016c: 519) (but see Section 8).

(19)	sporco	'dirty'	sporcar	'to make dirty'
	libéro	'free'	libérar	'to free'
	contento	'glad'	contentar	'to satisfy'
	limpio	'clean'	limpiar	'to clean'

About eleven verbs are derived from nouns and adjectives by means of suffixes. The suffixes with the most occurrences are -ific- and -iz- or their variants.

(20)	a.	forti dgiousto	'strong' 'just'	fortificar dgioustificar	'to strengthen' 'to justify'
	b.	favor netto	'favor' 'clean'	favorisar néttegiar	'to favor' 'to clean'

Approximately ten verbs are formed via simultaneous addition of a prefix and a suffix to a noun or adjective base (parasynthesis).

(21)	a.	rico sicouro nouovo kiaro	ʻrich' ʻsafe' ʻnew' ʻclear, transparent'	enrikir assicourar rinovar diskiarar	'to make rich' 'to assure' 'to renew' 'declare'
	b.	flamma frédo	ʻflame' ʻcold'	infiamar rifrédar	'to set fire to' 'to cool'

3.5. Derived adjectives, adverbs and numerals

Approximately fourteen adjectives are derived by means of $-to \sim -ato$. Included in this group are adjectivized past participles (these are the majority; see 22a-b) and denominal adjectives (in 22c). The adjective in (22b) exhibits inherited allomorphy.

(22)	a.	inchir	'to fill'	inchito	'full'
		morir	'to die'	morto	'dead'
		ousar	'to use'	ousato	'used'

	ornar	'to adorn'	ornato	'ornate'
b.	perdir	'to lose'	perso	'lost'
c.	senso fortouna	'sense' 'happiness, fortune'	sensato fortounato	'sensible' 'happy'

Several adverbs are derived from adjectives by means of the suffix -mente.

(23)	simplo	'simple'	simplamente	'simply'
	altro	'other'	altramente	'differently

LF also uses the masculine (etymologically masculine singular) form of adjectives in the adverbial function (see 24).¹³ This use continues similar use in its Romance lexifiers, as seen, e.g., in *parlare chiaro* 'to speak clearly', *parlare forte* 'to speak loudly' in Italian and *hablar alto* 'to speak loudly', *jugar limpio* 'to play fair' in Spanish (Serianni 1989: 494; Butt & Benjamin 2004: 438).

(24)	a.	star mouchou bon	ои.
		be.IMPF very goo	d
		'Il se porte fort bien.'	
		'He is very well.'	
		(Anonymous 1830: 94)	
		· · ·	

b. *mi ablar dgiousto.* 1s speak.IMPF just 'Je dis la vérité.' 'I speak the truth.' (Anonymous 1830: 93)

The majority of the numerals recorded in the *Dictionnaire* preserve the derivational and suppletion patterns of the lexifiers. An exception to this are the analytically formed *diechisetté* 'seventeen', *diechiotto* 'eighteen' and *diechinové* 'nineteen' (literally, 'tenseven', 'ten-eight' and 'ten-nine'; the corresponding numerals in Italian being *diciassette*, *diciotto* and *diciannove*). In his discussion of similar forms in Tunisian chancery Italian, *deci sette* 'seventeen' and *dieci nove* 'nineteen', Baglioni (2010: 268) points to the probable influence of Fr. *dix-sept* and *dix-neuf*. The same explanation may be adopted for the LF numerals.

(25)	<u>1-10</u>	<u>11-19</u>	<u>20-90</u>	<u>Ordinals</u>
	oun '1'	oundichi '11'		primo, primiéré '1st'
	doué '2'	dodichi '12'	venti '20'	ségoundo '2nd'
	tré '3'	trédichi '13'	trenta '30'	tertzo '3rd'
	qouatro '4'	qouatordichi '14'	qouaranta '40'	

¹³ The French translations in the sentence-long examples represent the French-language prompts in the *Dictionnaire* and preserve the original orthography.

chinqoué '5'	qouindichi '15'		
seï '6'	sedichi '16'	sessanta '60'	
sété '7'	diechisetté '17'	settanta '70'	settimo '7th'
otto '8'	diechiotto '18'		
nové '9'	diechinové '19'	novanta '90'	
diéchi '10'			

3.6. Other suffixal patterns

The *Dictionnaire* attests additional patterns of suffixation, such as adjectivized or nominalized Romance present participles, each represented by a small number of tokens. A representative selection of these additional patterns is given in (26).

(26)	a.	<u>Verb</u> fabricar gouarantir desiderar prégar passar servir gouardar	 'to manufacture' 'to guarantee' 'to wish' 'to request' 'to pass' 'to serve' 'to guard' 	<u>Noun</u> fabricanté gouarantia desiderio préguiéra passagio servitou gouardia	'manufacturer' 'guarantee' 'desire' 'request' 'passage' 'servitude' 'guard'
	b.	<u>Verb</u> pesar ridir	'to weigh' 'to laugh'	<u>Adjective</u> pesanti ridicoulé	'heavy' 'ridiculous'
	c.	<u>Noun</u> terra fronté	'earth, ground' 'front'	<u>Noun</u> terreno frontiéra	'territory' 'border'
	d.	<u>Noun</u> vergognia senso lodé Algiéri	'shame' 'sense' 'praise' 'Algiers'	Adjective vergognioso sensibile lodévolé Algérino	'shameful' 'sensitive' 'commendable' 'Algerian'
	e.	<u>Adjective</u> dgiousto dgiovine malato	ʻjust' ʻyoung' ʻill'	<u>Noun</u> dgioustitia dgioventù malattia	'justice' 'youth' 'illness'

4. Prefixation

Prefixation is less important than suffixation in LF word formation, which continues the state of affairs in its lexifiers. The three negative prefixes -in- $\sim im$ -, dis- and s- are used for deriving antonyms.

(27)	a.	certo outilé possibilé patzientza	'certain' 'useful' 'possible' 'patience'	incerto inoutilé impossibilé impatientza	'uncertain' 'useless' 'impossible' 'impatience'
	b.	piacher armar	'to please' 'to arm'	dispiacher disarmar	'to displease' 'to disarm'
	с.	cargar ricordar	'to load' 'to remember'	scaricar scordar	'to unload' 'to forget'

The (etymologically spatial) prefix in - im is seen in the verbs and parasynthetic items in (28).

(28)	a.	piégar prestar	'to fold' 'to lend'	impiégar imprestar	'to employ' 'to borrow'
	b.	testa caténa	'head' 'chain'	intestato incadénar impalidir	'stubborn' 'to chain up' 'to turn pale'

The forms in (29) contain allomorphs of the prefix re- ~ ri-; the ri- allomorph predominates.

(29)	a.	scaldar mettir conoschir dgitar	'to heat' 'to put' 'to know' 'to throw'	riscaldar rimettir riconoschir ridgitar	'to reheat' 'to put back' 'to recognize' 'to reject'
	b.	frédo nouovo	'cold' 'new'	rifrédar rinovar	'to cool' 'to renew'
	c.	fortza gratzia	'strength' 'thanks'	rinfortzo ringratziar	'reinforcements' 'to thank'
	d.	venir tirar	'to come' 'to pull'	revenir rétirar	'to return' 'to withdraw'
	e.	intrar contar	'to enter' 'to count'	rintrar racontar	'to come back' 'to tell'

Other etymological prefixes (see 30) have few occurrences and do not appear to form discernible morphological or semantic patterns, at least from the viewpoint of the recorded LF data.

(30)	salidor	'assailant'	assalidor	'besieger'
	dormir	'to sleep'	adormir	'to put to sleep'
	parté	'part'	aparté	'separately'
	ridir	'to laugh'	soridir	'to smile'
	segouir	'to follow'	prosegouir	'to chase'

Some of the derivationally related pairs in the *Dictionnaire* appear to calque specifically French formal and semantic patterns (see 31), and thus may or may not represent "authentic" LF.

(31)	LF	French	
	rispondir / risponsa	répondre / réponse	'to answer / answer'
	assicourar / rassicourar	assurer / rassurer	'to assure / to reassure'
	testa / intestato	tête / entêté	'head / stubborn'

5. Compounding

The *Dictionnaire*'s LF has few compounds without a linking morpheme. These include nominal, adjectival and numeral compounds inherited from the lexifiers (see §3.5 and the examples in 32a) and possible LF neologisms (in 32b-c). The element *fora*- in (32c) is either the adverb *fora* meaning 'out, outside', of Venetian origin, or derives from the verb *forar* 'to remove, take away, pull out', a suspected LF neologism based on *fora* (Schuchardt 1909: 29; Cifoletti 1980: 32). Analyzing *fora*- as a verb form is possible because such a pattern would agree with the productive verb-noun compound pattern of the lexifiers (e.g. It. *apri-bottiglie* 'open-bottles' = 'bottle-opener', Sp. *saca-corchos* 'pull.out-corks' = 'corkscrew') (Varela 2012: 219; Forza & Scalise 2016: 531).

(32)	a.	passeporto gouarda sol metzo giorno	'safe-conduct' 'umbrella' 'midday, afternoon, south'	(verb-noun) (adjective-noun)
		prima vera campo santo sottoterréno benvenouto	'spring''cemetery''underground''welcome'	(noun-adjective) (preposition-noun) (adverb-adjective)
	b.	diechisetté diechiotto diechinové	'seventeen' 'eighteen' 'nineteen'	(numeral-numeral)
	c.	fora-tapa fora-balla	'corkscrew' 'bullet-forceps'	(verb/adverb-noun)

6. Neologisms

Apart from several derivational neologisms identified by Cifoletti (2004), and the innovative compounds seen in the preceding section, all LF neologisms rely on analytic

strategies of lexeme formation. One of these consists of joining two nouns by means of the preposition *di* 'of, from'. This lexeme formation pattern shows continuity with the syntagmatic compounds of the lexifiers (see §1.4). As in the lexifiers, a number of semantic relationships may be identified between the complement and the head noun, including those of possession (as in *moukera del filio*), material (as in *piato di terra*), origin (as in *grasso di porco*) and purpose (as in *cortello di barba*).

(33)	French	<u>LF</u>	
	rasoir	cortello di barba	'knife of beard' = 'razor'
	sain-doux	grasso di porco	'fat of pig' = 'lard'
	saumure	agoua di salé	'water of salt' = 'brine'
	palmier	albéro di datoli	'tree of date' = 'palm tree'
	boulet	balla di canone	'bullet of cannon' = 'cannonball'
	affût	carreta di canone	'carriage of cannon' = 'gun carriage'
	fichu	fatzoletto di collo	'handkerchief of neck' = 'scarf'
	faïence (plat de)	piato di terra	'plate of earth' = 'earthenware plate'
	belle-fille	moukera del filio	'son's wife' = 'daughter-in-law'

A related but less frequent strategy consists of modifying the base noun by means of an adjective.

French	<u>LF</u>	
sentier	picolo camino	'small road' = 'path'
caisson	picola cassa	'small box/chest' = 'case'
baguette	picolo bastone	'small stick' = 'stick'
hachoir	cortello grosso	'big knife' = 'cleaver'
	sentier caisson baguette	sentierpicolo caminocaissonpicola cassabaguettepicolo bastone

The pre-posed adjective *picolo* in the above lexemes appears to be functionally equivalent to a diminutive suffix. This is suggested by Serianni's (1989: 204) remarks concerning similar semantic equivalence in Italian, e.g., between the pre-posed adjective *piccolo* in *un piccolo discorso amichevole* 'a little friendly speech' and the diminutive suffix *-etto* in *un discorsetto amichevole* 'id.'.¹⁴ It was seen in some of the earlier examples (repeated below in 35) that etymologically diminutive suffixes can be used for word formation in LF.

(35)	moska	'fly'	mousquita	'mosquito'
	louna	'moon'	lounetta	'glasses'

The following examples display the use of relative clauses in new lexeme formation.

(36) <u>French</u> <u>LF</u> bienfaiteur suffisant qué bastar 'he who does well' = 'benefactor' 'which suffices' = 'sufficient'

¹⁴ "... gli aggettivi intensificatori anteposti esprimono spesso un contenuto semantico simile a quello dei suffissi accrescitivi e diminutivi [pre-posed intensifying adjectives often express similar semantic content to that of augmentative and diminutive suffixes]" (Serianni 1989: 204).

•	· · ·	4 1 1 1 1 9 4.11 9
COLONALIV	and tentr cours	\mathbf{W} high has care \mathbf{H} - \mathbf{f}
soigneux	qué tenir coura	'which has care' = 'tidy'

The last two examples in (36) above illustrate the use of a verbal periphrasis to translate an adjective prompt in French. Additional examples of this strategy for translating adjectives into LF are given in (37).

(37)	<u>French</u> brave sinueux timide effrayé effrayant	<u>LF</u> ténir coragio ¹⁵ tenir dgiro tenir vergonia ténir paoura fasir paoura ¹⁶ fasir malá	'have courage' = 'brave' 'have turn' = 'winding' 'have shame' = 'shy' 'have fear' = 'scared' 'make fear' = 'scary' 'do hadly' = 'harmful'
	nuisible	fasir malé	'do badly' = 'harmful'

New verb lexemes are formed by combining verbs with nouns, adverbs, adjectives or prepositional phrases. The verbs that participate in this type of lexeme formation tend to be semantically broad and include mettir 'to put', far ~ fazir ~ counchar 'to do, make', dar 'to give', andar 'to go' and forar 'to remove, take away, pull out'. A representative sample of analytic verb lexemes that correspond to single-word French entries in the Dictionnaire is given in (38) (additional examples may be seen in Cifoletti 1989: 151-154).

(38)	French	LF	
	reconcilier	far amigo	'to make friend' = 'to reconcile'
	éclairer	far loumé	'to make light' = 'to light'
	nuire	far malé	'to do badly' = 'to harm'
	raser	forar barba	'to take away beard' = 'to shave'
	saigner	forar sangré	'to take out blood' = 'to bleed'
	sarcler	forar erba	'to pull out grass' = 'to weed'
	traire	forar late	'to draw milk' = 'to milk'
	sceller	mettir taba	'to put seal' = 'to seal'
	ferrer	mettir ferro	'to put iron' = 'to shoe'
	enterrer	mettir in terra	'to put in ground' = 'to bury'
	sabrer	toccar con yatagan	'to strike with dagger' = 'to sabre'
	souffrir	ténir dolor	'to have pain' = 'to suffer'
	escorter	dar scorta	'to give escort' = 'to escort'
	accourir	venir presto	'to come quickly' = 'to rush'
	enfermer	sarar dentro	'to lock inside' = 'to lock up'
	reflechir	mirar bonou	'to look good' = 'to think about'

In some cases, the Dictionnaire lists multi-word lexemes side by side with their singleword equivalents.

¹⁵ The noun *coragio* is not listed as an independent entry.

¹⁶ The complete dictionary entry is: Fr. *effrayant* (*cela est effrayant*) 'scary (this is scary)' = LF *qouesto* fasir paoura 'this makes fear'.

(39)	French	LF	
	baguette	picolo bastone, bagueta	'stick'
	brave	bonou, ténir coragio	'brave'
	intrépide	intrépido, tenir coragio	'intrepid'
	saler	salar, mettir salé	'to put salt in'
	sucrer	zoukar, mettir zoukaro	'to put sugar in'
	ranger	rangiar, componir, mettir in logo	'to arrange'
	soigner	servar, tenir coura	'to look after'
	permettre	permettir, dar licentzia	'to allow'
	aider, secourir	agioudar, dar agioudo	'to help'
	favoriser	favorisar, counchar favour	'to favor'
	remercier	ringratziar, ablar gratzia	'to thank'

The analytic strategy of verbal lexeme formation seen in (38) has a long history in Romance languages, and ample parallels in the main lexifiers of LF (see discussion and references in Operstein 2017d). Parallel Italian / Spanish examples of similar verbal lexemes include It. *avere sete* / Sp. *tener sed* 'to have thirst' = 'to be thirsty', It. *fare freddo* / Sp. *hacer frío* 'to make cold' = 'to be cold' and It. *andare a cavallo* / Sp. *andar a caballo* 'to go on horseback' = 'to ride' (Serianni 1989: 183, 379; Patota 2006: 70). As in LF (see 39), many of these verbal lexemes are paraphrasable with a single verb, e.g. *dar fuoco* 'to give fire' = *incendiare* 'to set fire to', *far soldi* 'to make money' = *guadagnare* = 'to earn' in Italian or *dar un paseo* 'to give a walk' = *pasear* 'to walk' in Spanish (Berruto 1983: 64; Renzi 2001: 427; Real Academia Española 2010).

Several multi-word verbs and adjectives are formed by modifying the base word with $no \sim non$ 'no, not', *molto* $\sim mouchou(s)$ 'much, very', *tropo* 'too much' or *oun poco* 'a little'.

French	LF	
taire	non ablar	'to not speak' = 'to be silent'
déplaire	non piacher	'to not please' = 'to displease'
opposer (s')	non quérir	'to not want' = 'to oppose'
surpayer	pagar tropo	'to pay too much' = 'to overpay'
estimer	quérir mouchou	'to love much' = 'to esteem'
mécontent	non contento	'not happy' = 'unhappy'
injuste	non jiousto	'not just' = 'unjust'
magnifique	mouchou bello	'very beautiful' = 'magnificent'
opulent	molto riko	'very rich' = 'opulent'
délicieux	molto bouno	'very good' = 'delicious'
tiède	oun poco caldo	'a little hot' = 'warm'
	taire déplaire opposer (s') surpayer estimer mécontent injuste magnifique opulent délicieux	tairenon ablardéplairenon piacheropposer (s')non quérirsurpayerpagar tropoestimerquérir mouchoumécontentnon contentoinjustenon jioustomagnifiquemouchou belloopulentmolto riko

Two French adverbs are translated into LF with prepositional phrases with *con* 'with' (in 41). The adverbial use of prepositional phrases is likewise shared with LF's lexifiers, cf. It. *con pazienza* 'with patience = patiently', *con gioia* 'with joy = gladly'; Sp. *con frequencia* 'with frequency = frequently', *con locura* 'with madness = passionately' (Patota 2006: 70; Butt & Benjamin 2004: 437-438).

(41)	<u>French</u>	<u>LF</u>
	secrètement	con ségréto
	soigneusement	con coura

'with secret = secretly' 'with care = carefully'

7. Suppletion

In common with its lexifiers, LF displays instances of derivational suppletion, or cases in which the semantic relationship between the members of a derivational set is the same as in the other sets whereas the formal relationship is not (cf. the definition of suppletion in Mel'čuk 1976: 52; 1994: 358). An example of derivational suppletion from Italian is given in (42). Here, the adjectival counterpart to the noun *formaggio* 'cheese' does not have the same formal relationship to it as the other adjectives to their nouns (Serianni 1989: 192-194).

(42)	<u>Noun</u>	<u>Adjective</u>
	legno 'wood'	legnoso
	ferro 'iron'	ferroso
	fumo 'smoke'	fumoso
	formaggio 'cheese'	caseario

Following the dominant approach in the literature on suppletion, the relationship of suppletion is understood here as being free from etymological considerations: the forms in a suppletive relationship may be etymologically distinct (as in the case of *formaggio / caseario*) or they may come from the same etymological source (as, for example, in It. *madre* 'mother' / *materno* 'maternal', both ultimately from Lat. *mater*) (pertinent theoretical discussions of this point may be found in Mel'čuk 1994: 355ff, 2006: 416ff and Veselinova 2006: 14). The criterion of shared phonological material between the forms in a suppletive relationship gives rise to the distinction between strong suppletion, as in *formaggio / caseario*, and weak suppletion, as in *madre / materno* (Dressler 1985).

The patterns of suppletion attested in the *Dictionnaire*'s LF have one of three sources: suppletion inherited from the lexifiers, suppletion that arose from different etymological sources of the allomorphs, and suppletion that arose due to language-internal change. Inherited suppletion is illustrated in (42a) through (42d); the last row in each set illustrates the corresponding derivational relationship. (42a) and (42b) are instances of strong suppletion. The suppletive pattern in (42b) has been inherited from the lexifiers (cf. It. *tacere / silenzio*), however, the verb 'to be silent' was analytically re-created in LF (see Mel'čuk 2006: 424). The sets in (42c-d) exemplify weak inherited suppletion. Other suppletive sets that LF has inherited from its lexifiers include *bonou* 'good' / *melior* 'better', *béné* 'well' / *mélio* 'better' and *oumbré* 'man' / *oumano* 'human' (< It. *buono* / *migliore, bene / meglio*, Sp. *hombre / humano*).

(42)	a.	cardinal numeral	ordinal numeral
		oun 'one'	primo, primiéré 'first'
		doué 'two'	ségoundo 'second'
		(sété 'seven'	settimo 'seventh')

b.	<u>verb</u> non ablar 'to be silent' (sentir 'to feel'	<u>deverbal noun</u> silentzio 'silence' sentimento 'feeling')
c.	<u>verb</u> promettir 'to promise' (vendir 'to sell'	<u>deverbal noun</u> promessa 'promise' vendita 'sale')
d.	<u>verb</u> perdir 'to lose' (adormir 'to put to sleep'	<u>deverbal adjective</u> perso 'lost' adormito 'asleep')

Suppletive sets that are due to different etymological sources of the allomorphs are exemplified in (43). The different provenance of the allomorphs is revealed by their phonological shape; for example, the members of the first set below, *flamma* ~ *infiamar*, show different treatment of Lat. cl (> [kj] versus [kl]; see Repetti & Tuttle 1987).

(43)	flamma 'flame' caténa 'chain' prigeon 'prison' brakio 'arm' kiamar 'to call' cargar 'to load' tradir 'to betray' tradir 'to betray' viagiar 'to travel'	 	infiamar 'to set fire to' incadénar 'to chain up' imprisonar 'to imprison' embrachiar 'to embrace' riclamar 'to ask for' scaricar 'to unload' trahisoun 'betrayal' traïdor 'traitor' viator 'traveler'
	viagiar 'to travel'		viator 'traveler'
	scrivir 'to write'		scriban 'secretary'

Finally, the derivational sets in (44) differ in the height of a vowel. This difference may be due to different etymological sources of the words, which would make these sets a subgroup of those in (43). Alternatively, or in addition, it may be due to the mid vowel raising characteristic of the LF vocalism (Schuchardt 1909; Cifoletti 1989, 2004; Castellanos 2007).

(44)	Allomorph wi	th a mid vowel	Allomorph wi	th a high vowel
	moska	'fly'	mousquita	'mosquito'
	forno	'oven'	fourniéré	'baker'
	sécourità	'safety'	sicouro	'safe'
	forbéria	'guile'	fourbo	'cunning'
	sedjiorno	'stay'	sedjiournar	'to stay'

8. Expression of valency / transitivity

The interplay between the different word formation techniques presented in the preceding sections may be illustrated by focusing on a single functional domain, such as valency / transitivity alternations. LF expresses such alternations through a combination of lexical,

morphological and analytic means, showing continuity with the expression of this functional domain in the lexifiers (Lavale 2007; Cennamo 2015).

Examples of lexically expressed valency / transitivity alternations are given in (45). Although the pair *dormir / adormir* is derivationally related in the lexifier, due to the non-productivity of this morphological pattern in LF the alternation may be considered lexical.

(45)	morir 'to die'	massar	'to kill'
	dormir 'to sleep'	adormir	'to put to sleep'

LF can also apparently express different valency / transitivity with the same verb. This inference follows from the *Dicionnaire*'s entries in which the French prompt for the LF verb can have both an inchoative and a causative reading, as in (46a), or where the same LF verb is used to render French verbs that differ in valency / transitivity, as in (46b). The phenomenon of verb lability in LF is continuous with the same phenomenon in its Romance lexifiers, as is clear from the French-language prompts in (46a) as well as the probable Romance sources of the labile verbs in LF, such as Sp. *sanar* 'to heal (tr./intr.)' and *vestir* 'to dress (tr./intr.)'.

(46)	(46) <u>French</u> a. guérir refroidir		'to cure/be cured' 'to cool (tr./intr.)'	<u>LF</u> sanir rifrédar
	b.	vêtir habiller (s')	'to dress (tr.)' 'to dress (intr.)'	vestir vestir

The *Dictionnaire* also supplies examples of morphological formation of causative verbs from abstract nouns (see 47a). Examples of Romance causatives of the same type include Sp. *vergüenza* 'embarrassment' \rightarrow *avergonzar* 'to embarrass' and *pena* 'shame' \rightarrow *apenar* 'to shame'. The examples in (47b-c) show that causatives from abstract nouns can also be formed in LF analytically. For some of the verbs, the *Dictionnaire* provides both a morphological and an analytic causative, e.g. *alloumar* ~ *far loumé* 'to light (up)'.

(47)	a.	loumé flamma	ʻlight' ¹⁷ ʻflame'		alloumar infiamar	'to light (up)' 'to set fire to'
	b.	ti fato 2s do.PF 'Vous m'avez 'You have ins (Anonymous		per DOM .'	<i>mi.</i> 1s	
	c.	<i>qouesto fazir</i> this do.Pl 'cela me fait s	F shame	<i>per</i> DOM	<i>mi.</i> 1s	

¹⁷ Attested as part of the entry *far loumé* 'to light' (Fr. *éclairer*).

'this embarrasses me' (Anonymous 1830: 74)

Most verbs derived from adjectives apparently have causative semantics (see 48a below and $\S3.4$). The examples in (48b) suggest that the *Dictionnaire*'s LF has the ability to form the inchoative counterparts to deadjectival verbs analytically, with the quasi-auxiliaries *tornar* 'to turn' and *vernir*.¹⁸

(48)	a.	sporco dopio rico forti	'dirty' 'double' 'rich' 'strong'	sporcar dopiar enrikir fortificar	'to make dirty''to double''to make rich''to strengthen'
	b.	rosso bello	'red' 'beautiful'	tornar rosso tornar bello ~ vernir bello	'to blush' 'to grow lovelier'

Further examples of analytic expression of valency / transitivity involve the verbs *far* ~ *fazir* 'to do, make', *laschiar* 'to let', *tornar* 'to turn' and *tenir* 'to have'. The opposite valence values of the verb pairs *fasir / ténir* and *far / tornar* in combination with nouns are exploited in the examples in (49). The use of these verbs for expressing valency / transitivity alternations in LF is continuous with similar uses in the lexifiers; for example, in Italian, *fare* 'to make' in combination with abstract nouns can function as a causative to *avere* 'to have' with the same nouns, as in *fare paura* 'to scare' / *avere paura* 'to be scared' (Salvi 2001: 92-94).

(49)	ténir paoura	'scared'	fasir paoura	'scary'
	far amigo	'to reconcile'	tornar amigo ¹⁹	'to get reconciled'

The examples in (50) illustrate the causative use of LF *fazir* 'to do' and *laschiar* 'to let' in combination with other verbs. The construction in (50a) is the exact equivalent of the so-called Romance causative, the analytic causative construction consisting of the verb 'to do, make', such as It. *fare* or Sp. *hacer*, followed by the infinitive (Lavale 2007; Cennamo 2015). Comparable examples from Italian are provided in (50c-d).

(50)	a.	fazir	scaldar	agoua,	; mi	quérir	counchar	thé.
		make.IMP	F heat.IMPF	water	1s	want.IMPF	make.IMPF	tea
		'Faites chauffer de l'eau; je veux faire du thé.'						
		'Have some water heated; I want to make tea.'						
		(Anonym	ous 1830: 9	7)				

¹⁸ The verb *vernir* is attested only in this entry, and Cifoletti (1989: 148) wonders if this is an error for *venir* 'come'.

¹⁹ This is my interpretation of the entries Fr. réconcilier – LF far amigo and Fr. réconcilier (se) – far tornar amigo.

b.			per DOM	<i>mi</i> . 1s		
c.	<i>Faccio</i> make.pres.1s 'I have a song s (Maiden & Rob	•		<i>canzone</i> . song		
d.		-	pr	eparare epare.INF	<i>le</i> the	<i>valigie</i> suitcases

The preceding exposition makes it clear that the range of means of expression in the domain of valency / transitivity in LF shows both typological and specific continuity with the expressive possibilities of its lexifiers in this domain.

9. Discussion and further issues

The vocabulary structure and word formation strategies of LF may be characterized as follows.

a. Lexicon

Etymologically, at least 95% of the LF vocabulary recorded in the Dictionnaire is from Romance sources, with the leading source being Italian, followed by Spanish and French. In most instances, words from different sources fill non-overlapping slots in the LF lexicon; nevertheless, there is also a sizeable number of doublets, or words for the same concept that derive from different etymological sources (Hellinger 1985: 58; Cifoletti 2004: 55-56). The majority of the doublets are Hispano-Italian (see 51a), though doublets from other sources are also attested (see 51b).

(51)	a.	<u>Italian</u>	<u>Spanish</u>	
		figlio	mouchachou	'son'
		bekiéré	tassa	'cup'
		pianto	lagrima	'tear'
		parola	palabra	'word'
		timoun	timone	'helm'
		piou	mas	'more'
		molto	mouchou	'much'

	débole	flaco	'weak'
	vouoto	basio	'empty'
	star	estar	'be'
	domandar	quérir	'ask'
b.	Sp. quérir	Fr. désirar	'want'
	Sp. locou	Ar. maboul	'crazy'
	It. cappello	Ven. baréta ²⁰	'hat'
	It. tavola	Cat. taula	'board'
	It. canoniéré	Tu. tobgi	'gunman'
	It. prima vera	Ar. roubié	'spring'

The *Dictionnaire* provides some evidence of functional differentiation in the doublets. An example of this is the specialization of germana (< Cat. germana 'sister') in the meaning 'sister' and of sorella (< It. sorella 'sister') in the meaning 'sister-in-law'. Similarly, the LF translation of Fr. femme 'woman, wife', which is "mouchéra, (épouse), dona, (dame)", suggests that the primary sense of the Spanish-origin word (< mujer) is 'wife' and of the Italian-origin word (< donna), 'woman'. This inference is confirmed by the LF translation of Fr. belle-fille 'daughter-in-law', which is moukera del filio rather than *dona del filio. Collocational specialization is further evident in the verb doublets. For example, dar 'give' (< Sp. dar / It. dare), rather than donar 'give' (< Fr. donner), is used in the creation of analytic lexemes such as *dar scorta* 'to escort' and *dar agioudo* 'to help'. In the case of the etymological triplet far / fazir / counchar 'to do, make' (< It. fare / Sp. ~ Ptg. fazer / Southern Italo-Romance²¹), the examples in the Dictionnaire suggest that the verbs are interchangeable in some but not all of their uses. For example, while Fr. il faut faire 'it is necessary to do' is translated into LF as bisogna far, fazir counchar, the LF translations of Fr. il fait chaud 'it is hot', il fait froid 'it is cold' and il fait du vent 'it is windy' all employ the verb fazir: fazir caldo, fazir frédo and fazir vento. In the doublet avir / ténir 'to have' (< It. avere / Sp. tener), only the second verb is recorded in analytic verb lexemes such as ténir paoura 'scared' and ténir febra 'he has fever'; compare this with avere paura, avere la febbre in Italian and tener miedo, tener fiebre in Spanish. The semantic equivalence of *avir* and *ténir* is assured by the statement, in the *Dictionnaire*'s preface, that "[1]e verbe avir ou tenir (avoir), ne s'emploie pas comme auxiliaire, mais seulement comme verbe possessif [the verb avir or tenir (to have) is not used as an auxiliary but only as a possessive verb]."

LF's lexical continuity with its Romance lexifiers is further apparent in its lexical typology, or "characteristic ways in which language . . . packages semantic material into words" (Lehrer 1992: 249, as cited in Koptjevskaja-Tamm, Rakhilina & Vanhove 2016: 434). Selected examples of LF's packaging of semantic material into lexical units are assembled in Table 2 and (52). They reveal that, in common with its Romance lexifiers, LF lexically distinguishes between different senses of *know* and *old*, and employs different verbs for centrifugal and centripetal movement. In the *Dictionnaire*' lexicon, the adjective *antico* is opposed to *nouovo* 'new' and *vekio* is opposed to *dgiovine* and *picolo* 'young'; the use of *antico* to refer to time rather than age is emphasized by the entry

²⁰ On the Venetian origin of LF *baréta*, see Cifoletti (2004: 56).

²¹ On the origin of LF *counchar*, see Cifoletti (2004: 58).

tempo antico, which translates Fr. anciennement 'formerly'. Further, LF has separate words for hand and arm, and for foot and leg; and displays suppletion between the verb to be silent and its deverbal noun, and between the verbs die and kill. Its vocabulary of color distinguishes between négro 'black', bianco 'white', rosso 'red', dgialo 'yellow', verdé 'green', blou 'blue', griso 'gray', biondo 'blond', kiaro 'clear', oscouro 'dark', and possibly also dorato, which translates Fr. doré 'gilded, golden'. Its kinship terminology distinguishes between mamma 'mother', madre 'mother; mother-in-law', padre 'father', figlio ~ mouchachou 'son', mouchacha 'daughter', fratello ~ cognato 'brother', germana 'sister', zio 'uncle', zia 'aunt', nipoté 'nephew', nipota 'niece', sorella 'sister-in-law', moukera del filio 'daughter-in-law' and mouchéra 'wife' (Koch 2001; Brown 2001; Peeters et al. 2006: 90-94). In common with its lexifiers, LF has the ability to code the experiencer of a psych-verb as an object as well as a subject (Koch 2001: 1171): compare the behavior of LF quérir and piacher in (52b-c) with those of, e.g., Sp. querer 'to love' and gustar 'to like'. These numerous and specific lexical-typological correspondences between LF and its Romance lexifiers, and the finely grained lexical and syntactic distinctions that obtain in LF, confirm the important role of inter-Romance koineization in its formation.

Lingua Franca	Italian	Spanish	French	
sabir	sapere	saber	savoir	'know'
conoschir	conoscere	conocer	connaître	
vekio	vecchio	viejo	vieux	ʻold'
antico	antico	antiguo	ancien	
venir	venire	venir	venir	'come'
andar	andare	ir	aller	ʻgoʻ
non ablar ~	tacere ~	callar ~	se taire ~	'be silent' ~
silentzio	silenzio	silencio	silence	'silence'
morir ~	morire ~	morir ~	mourir ~	'die' ~
massar	uccidere	matar	tuer	'kill'
mano	mano	mano	main	'hand'
brakio	braccio	brazo	bras	'arm'
piedi	piede	pie	pie	'foot'
gamba	gamba	pierna	jambe	'leg'

Table 2.	Packaging	of sen	nantic 1	material	in 1	Lingua	Franca

(52)	a.	'Do yo	<i>conoschir</i> know.IMPR nnaissez vous ou know him? ymous 1830:	s?' ?'	ellou? Зѕ.м	
	b.	'I resp	<i>quérir</i> want.IMPF is estime' ect you' ymous 1830:	<i>mouchou</i> very 32)	per DOM	ti. 2s

qouando piacher c. per ti. please.IMPF when DOM 2s'Quand il vous plaira.' 'Whenever you like.' (Anonymous 1830: 96)

The leading non-Romance component in the LF lexicon is Arabic. At about 3% of the total vocabulary size, it does not exceed that of Romance languages, like Spanish, which have been in direct contact with Arabic (Schuchardt 1909; Aslanov 2014). There is no discernible structural influence of Arabic on LF outside the domain of phonology; in the latter, the Arabic influence is stronger in Spanish words than in words from other Romance sources (Cifoletti 1989, 2004). The comparatively minor Arabic contribution to LF is emphasized by Aslanov:

L'assenza relativa dell'arabo nella lingua franca ... potrebbe corroborare l'idea secondo la quale la lingua franca svilupattasi in Algeria, Tunisia e Tripolitana in prima età moderna serviva più all'intercomprensione fra cristiani provenienti da vari orizzonti linguistici ... che alla comunicazione fra arabi e cristiani. (Aslanov 2016: 31)

[The comparative absence of Arabic in Lingua Franca could corroborate the idea that the Lingua Franca that developed in Algeria, Tunisia and Tripolitania in the early modern period served more for mutual understanding among the Christians from different linguistic horizons than for communication between Arabs and Christians.]

Arabic and Turkish words are treated in LF similarly to loanwords in non-contact languages: unlike many words from Romance sources, Arabic words ending in a consonant do not acquire a final vowel in LF, non-Romance words do not participate in the morphological processes of LF,²² and non-Romance words are not subjected to internal analysis in the way words from Romance sources are.²³ In addition, none of the non-Romance languages have contributed verbs to LF. The proposed cross-linguistic hierarchies of borrowability, such as Muysken's (1981), suggest that verbs are more difficult to borrow than either nouns or adjectives (see also van Hout & Muysken 1994: 41-42). In light of this generalization, the failure of non-Romance languages to supply any verbs to LF indicates that they may have been treated as foreign languages with respect to LF, which in turn implies that words from non-Romance sources were treated in LF as loanwords. The compilers of the Dictionnaire occasionally emphasize the perceived foreignness of Turkish and Arabic words by applying to them different orthographic conventions than the ones they normally employ for LF words of Romance origin (Operstein 2017b).

²² The only exception is the adjective maboul 'crazy', which is recorded together with its feminine counterpart, maboula. The source of the feminine gender marker -a in maboula is unclear, however, as it is shared by Arabic, Italian and Spanish (Cifoletti 2004: 41). ²³ E.g. *tobgi* 'gunman' contains the unanalyzed agent suffix -gi (< Tu. -ci) (borrowed into Romanian as -giu,

cf. barcă 'boat' → barcagiu 'ferryman') (Rainer 2016c: 519).

Also similarly to its Romance lexifiers, LF did not escape the influence of Latin, displaying such Latinisms as *imago* 'image', *brakio* 'arm', *cinis* 'ash' and *viator* 'traveler' (Schuchardt 1909; Cifoletti 2004). Castellanos (2007) argues for an even more pervasive Latin influence on LF when he suggests that the kind of inter-Romance neutralization seen in LF may be the result of its creators' reliance on their mutual knowledge of Latin:

La neutralització interromànica té lloc, probablement, sobre la base dels rudiments de llatí medieval que eren utilitzats en el conjunt de la Romània, per a fer-se entendre els parlants de les diferents llengües filles del llatí, en llurs contactes mutus. (Castellanos 2007: 3)

[The inter-Romanic neutralization probably takes place on the basis of the rudiments of Medieval Latin that speakers of different Romance languages used for making themselves understood in their mutual contacts.]

Aslanov views LF as fulfilling a similar mediating role in inter-Romance communication, connecting this role with the lack of a generalized knowledge of the mutually intelligible, supra-dialectal standard forms of the respective Romance languages:

... gli spagnoli o gli italiani di oggi non necessitano di nessuna lingua franca, neanche dell'inglese, la lingua franca moderna, per capirsi l'uno con l'altro. Però qualche secolo fa, quando la conoscenza della lingua standard . . . non era diffusa in tutta la popolazione ... la lingua franca offriva una soluzione comoda laddove italofoni e locutori di lingue iberoromanze si incontravano. (Aslanov 2016: 40)

[The Spaniards or Italians of today do not need any Lingua Franca, not even English, the modern lingua franca, in order to understand one another. But a few centuries ago, when the knowledge of the standard languages was not widespread among the population, Lingua Franca offered a handy solution wherever speakers of Italo- and Ibero-Romance languages met.]

b. Word formation

This paper has shown that the word and lexeme formation strategies of LF, as recorded in the *Dictionnaire*, are either inherited from or are parallel with the corresponding strategies of LF's Romance lexifiers. A specific point of agreement is the use of affixation, particularly suffixation, as the best-developed word formation technique. The difference between LF and its lexifiers in this domain consists in the number of the inherited derivational patterns, with only a fraction of the lexifier patterns represented in LF. A related difference is the level of productivity of the inherited patterns. In particular, the pattern with the largest number of tokens in LF (see Section 2) is not the most productive one in its lexifiers. Rainer (2016c), however, notes that derivation of deverbal action nouns in *-o*, *-a*, *-e* "witnessed a spectacular rise in medieval Romance" but was subsequently contained as a consequence of "the massive relatinization of the category of action nouns" (520). The prevalence of this pattern in LF may therefore be the result of

its comparative independence from its lexifiers, especially as regards their registers that were subjected to relatinization.²⁴ LF also agrees with its lexifiers in having a richer repertoire of noun-forming suffixes as compared to suffixes that derive other word classes.

Other specific points of agreement between LF and its lexifiers are the moderate use of compounding as compared to affixation, and preference for syntagmatic over lexical compounds. Some of the LF syntagmatic compounds also exist in, and may have been directly inherited from, the lexifiers; compare, for example, LF *agoua di limoun* with Sp. *agua de limón* 'lemonade'. The use of conversion, though attested (e.g. *vekio* 'old' / 'old man', 'veteran'; *vichino* 'close' / 'nearby' / 'neighbor'), is limited.

LF also agrees with the colloquial registers of its lexifiers in its overall preference for the analytic techniques of new lexeme formation. This preference has deep roots in the Romance domain, as already Vulgar Latin constructed new lexemes analytically, e.g., with the verbs facere 'to do, make' and habere 'to have', as in verba facere 'to speak' or habere desiderium 'to desire' (Korletjanu 1974). Similar periphrases abound in modern Romance languages, particularly in their colloquial registers and/or L2 varieties, which are less constrained by prescriptive norms. Berruto (1983: 64) notes such periphrases as fare un'emigrazione 'to make an emigration' for emigrare 'to emigrate' and far soldi 'to make money' for guadagnare 'to earn' in italiano popolare.²⁵ In its multi-word verbal lexemes, LF utilizes some of the same semantically broad verbs as its lexifiers, including far ~ fazir 'to do, make' and ténir 'to have', and in some cases it continues the specific periphrases of the lexifiers, such as fazir frédo 'it's cold', fazir vento 'it's windy' and ténir paoura 'to be afraid' (< Sp. hacer frío, hacer viento, tener miedo / It. far freddo, far vento, avere paura). Romance languages also have expanded the use of particle verbs, such as It. andare fuori 'to go out' and andare via 'to go away', which were marginal in Latin (Rainer 2016c: 516). LF exhibits similar verbal lexemes, including andar fora 'to go away', portar fora 'to take away' and andar indiétro 'to be slow (of a clock)'.

The way of forming new adjectives in LF by preposing adverbs such as 'very' is not dissimilar to the analytic way of forming the degrees of comparison of adjectives that replaced the earlier synthetic constructions of Latin, e.g. *magis altus* ~ *plus altus* for *altior* 'higher' (Sp. *más alto /* It. *più alto*). The formation of antonyms by preposing a free negative morpheme, as well as other types of periphrases, also abound in native speaker speech and writing directed at adult second language learners of Romance languages. This is shown, for example, by Moretti (1988) on the basis of readings adapted for foreign learners of Italian, which include such replacements as *non simpatico* 'not nice' for *antipatico* 'disagreeable' and *ha visto* 's/he has seen' for *vide* 's/he saw'. Reduplication is uncharacteristic of LF, with only two examples supplied by the *Dictionnaire, poco poco* 'shortly, soon' (translating Fr. *incessament, tantôt* and *bientôt*) and *siémé* siémé 'together' (translating Fr. *ensemble*). In Latin and Romance languages, reduplication is also used sparingly, e.g. Lat. *fortis, fortis* 'very strong', It. *due occhi neri, neri* 'two very black eyes' (Korletjanu 1974: 177-180, 223).

²⁴ Metzeltin (2007) makes a similar point with respect to the evolution of Romanian, which he considers more "natural" than that of Western Romance languages because it was less constrained by prescriptive tendencies and the presence of the Latin model.

²⁵ L1 and L2 Italian of speakers of other Italo-Romance vernaculars.

In common with its Romance lexifiers, LF exhibits some suppletion in its derivation. The sources of the suppletion – inheritance from the lexifiers, different etymological provenance of the suppletive allomorphs and language-internal phonological developments – are the same as in other languages that exhibit suppletion.

In conclusion, it may be asserted that the lexicon and lexical unit formation strategies of the Dictionnaire's LF are characterized by features and phenomena that are both typologically and specifically Romance.²⁶ The lexicon of LF is at least 95% Romance, with a sprinkling of Latinisms, a sizeable number of etymological doublets, and an Arabic component not exceeding those of Romance languages which had direct contact with Arabic. LF's word and lexeme formation techniques continue those of its Romance lexifiers with a substantial degree of detail, exhibiting the prevalence of suffixation, less productive use of prefixation, moderate use of lexical compounds, preference for syntagmatic compounds, overall preference for analytic lexeme formation techniques, and little use of conversion and reduplication. LF's reliance on the vocabulary enrichment strategies characteristic of pidgins - in particular, a "staggering amount of polysemy", circumlocutions and the use of the same invariable word in different part-ofspeech categories – is less in evidence. These facts argue against the classification of LF as a pidgin, at least as this linguistic type is commonly understood, and call for a refinement of our understanding of this contact language, and of our typology of contact languages in general.

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²⁶ On word formation as a parameter in typological classification see, e.g., Anderson (1985).

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