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## Definiteness in second language acquisition: Preliminary results regarding Indo-European and Afroasiatic languages

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#### Abstract

This article describes and compares the way in which definiteness is expressed in Romance (Catalan and Spanish) and some Slavic and Afro-Asian languages. We present some difficulties concerning definite nominal expressions that speakers of Ukrainian, Egyptian Arabic and Amazigh as L1 face when learning Catalan or Spanish as a second language and we show that the acquisition of definite determiners is, in general, problematic regardless of the typological nature of the L1. We also indicate that these difficulties can be related to the emergence of different determiner layers in the higher functional field in the nominal domain during the acquisition process.

#### Keywords

definiteness, definite determiner, L2 acquisition, Romance languages, Slavic languages, Afro-Asian languages

## Określoność w przyswajaniu języka drugiego: Wstępne przemyślenia dotyczące języków indoeuropejskich i afroazjatyckich

#### Abstrakt

Ten artykuł opisuje i porównuje sposób, w jaki wyrażona jest określoność w językach romańskich (katalońskim i hiszpańskim) oraz w niektórych językach słowiańskich i afroazjatyckich. Przedstawiamy pewne trudności dotyczące określonych wyrażeń nominalnych, z jakimi borykają się osoby mówiące po ukraińsku, egipskim arabskim i amazigh jako L1, ucząc się katalońskiego lub hiszpańskiego jako drugiego języka. Pokazujemy, że przyswajanie rodzajników określonych jest generalnie problematyczne, niezależnie od typologicznego charakteru L1. Wskazujemy również, że trudności te mogą być związane z pojawieniem się różnych warstw określników w wyższym polu funkcjonalnym w domenie nominalnej podczas procesu przyswajania.

#### Słowa kluczowe

określoność, rodzajniki, przyswajanie L2, języki romańskie, języki słowiańskie, języki afroazjatyckie

#### 1. Introduction

This article addresses the issues of how definiteness is encoded in nominal expressions and how definite determiners develop in the process of acquiring a Romance language as a second language (L2). We are presenting the preliminaries of an ongoing research on the acquisition of definite determiners in Spanish and Catalan by speakers whose first languages (L1) belong to different linguistic families (Indo-European and Afro-Asiatic) and present notable differences among them concerning the realization of definiteness in nominal expressions. In this work we deal with Russian and Ukrainian (Indo-European and Slavic), Arabic (Afro-Asiatic and Semitic), Amazigh (AfroAsiatic), and Spanish and Catalan (Indo-European and Romance). The way in which these languages express definiteness in nominal constructions is different in each group (Slavic, Semitic, Amazigh and Romance), either by means of a very specific grammatical element such as the definite article, or by combining the noun with elements such as demonstratives or possessives, or without any grammatical element at all, in which case the definite interpretation is inferred from the discursive context.

The paper is organized as follows: first, we present the basis of the DP hypothesis, which has become fundamental in the study of definite noun expressions in the generative grammar framework over the last decades (Section 2); then, we briefly characterize the languages mentioned with respect to definite nominal constructions (Section 3); finally, we provide a sample of problems directly related to DP acquisition in Spanish and Catalan by learners whose L1 is Russian, Ukrainian, Arabic or Amazigh (Section 4). The article closes with the conclusions (Section 5).

## 2. Nominal structure: the DP analysis

The study of nominal constructions in the framework of generative grammar has changed substantially since the seminal work of Abney (1987). The Determiner Phrase (DP) hypothesis proposed by Abney gives crucial importance to determiners, which come to be considered as the syntactic head of the whole nominal structure. This line of research has its origins in some parallelisms observed between nominal and sentential constructions in languages like Hungarian and English, and it has led to the establishment of very strong syntactic similarities between the functional and lexical structure of nominal constructions and that of sentences (see Valois 1991, Cinque 1994, Giusti 1997, Aboh 2004 or Svenonious 2004).

Within this framework, grammatical items like the definite article came to be considered as exponents of a functional nominal category D that would be the akin to functional categories associated to the syntactic structure of sentences like Infl (currently, T), as in the initial proposal by Abney (1987), or C, as originally postulated by Szabolcsi (1987, 1994). Regardless of the precise correspondence with one or other of these categories, all works on this agree in considering that the phrase headed by D forms the extended projection of the noun in the same way that the heads T and C are extended projections of the verb. In the following representations we include the categories vP and nP as the first functional extension that would contain the generation of the lexical head and its arguments (see Adger 2003 and references therein) but we do not specify the series of functional categories proposed between D and nP (see Ritter 1991 or Laenzlinger 2005 for instance).

(1) a.  $[_{CP} C [_{TP} T [_{\nu P} v [_{VP} V ] ] ] ]$ b.  $[_{DP} \dots [_{nP} n [_{NP} N ] ] ]$ 

One of the first questions raised by the DP hypothesis concerns what is the structure of nominal projections in languages that lack lexical items such as the definite article (i.e. the element that typically occupies the head D). Two possibilities arise a priori: (i) in such languages there is no DP projection (see Bošković 2005), or (ii) the DP projection is present in the syntactic structure in all languages, but whereas in some of them D is explicitly realized by a lexical item, in others it remains empty (Longobardi 1994, Bernstein 2001). We exemplify the two types by means of English and Serbo-Croatian (examples from Bošković 2008):

(2) English

a. The stone *broke the window*. Serbo-Croatian

b. Kamen *je razbio prozor*.
stone is brokenwindow
The stone broke the window.'

The idea that the head D is syntactically present, but phonologically empty, is consistent with Longobardi (1994)'s influential analysis. This author considers that the DP projection is fundamental for the nominal expression to function as an argument. In his analysis, the presence of the DP ensures the nature of argument and the head D can be filled by a determiner (a head D) or by an element shifted to D after an explicit syntactic movement, or it can remain empty in the syntactic representation awaiting a shift in the Logical Form.<sup>1</sup> The relevance of the DP hypothesis lies in the fact that it offers an interesting framework for syntactic comparative studies, whether approached from a macroparametric perspective (Bošković's NP/DP parameter) or a microparametric one (for example, the use or not of the definite article before the proper name in close Romance variants).

Within the particular field of Romance languages, the DP hypothesis has aroused special interest for diachronic and acquisition analyses. From the point of view of diachronic evolution, the question focuses on the fact that in all Romance languages the existence of a definite article is general, a grammatical piece which did not exist in Latin, whose origin is to be found in the Latin pronominal forms *ille* and *ipse*. Examples such as the following are often taken as indications of an incipient use as a definite article of these forms in Late Latin (example, glosses and translation taken from Ledgeway 2012: 90):

(3) Latin (Peregritanio Aeth 1.1-2.1) illi inter quos montes ibamus. aperiebat et mounts.N these.A among which.A went.1PL opened faciebant uallem infinitam [...] Uallis autem ipsa ingens made valley endless.A valley.N but self.N huge.N

and

<sup>&</sup>lt;sup>1</sup> Longobardi applies this analysis to proper names and bare NPs in English and Romance languages, which are expressions that act as arguments, but are not introduced by any determiner.

est ualde. is truly 'th(os)e mountains, through which we were journeying, opened and formed an endless valley. [...] The (= aforementioned) valley is indeed truly huge.'

The definite articles of Romance languages have their origin in two Latin pronouns: ille, in most languages (Spanish and Catalan el, Italian il, French le, etc.) and ipse in the case of Sardinian su and Catalan es (see Ledgeway 2012, Ledgeway and Maiden 2016). Originally, the former was a distal demonstrative pronoun and the latter an emphatic pronoun, but both were employed too to establish anaphoric relations and to refer to entities familiar to the interlocutors (though not generic, unique or abstract referents, in contrast to definite articles current usage).<sup>2</sup> Bearing this in mind, we can ask ourselves what is the role of pronominal elements like these in the emergence of a nominal functional category such as determiners. Generativist analyses have formalized this evolution through a process of grammaticalization and reanalysis of the Latin pronoun as the head D, whether it was a head of a lower projection in the nominal structure (4a) or a constituent in the specifier of DP (4b) (see Batllori and Roca 2000 and Giusti 2001, respectively):

From the point of view of second language acquisition, the question is also interesting because since the 1990s generativist studies take functional categories (i.e. their characteristics and the formal features which they are associated with) as the locus for parametric variation and, in consequence, studies on L1 and L2 acquisition granted a crucial role to the develop-

<sup>(4)</sup> a.  $[DP[D'[D]] [DemP[Dem'[Dem' ille]] \dots > [DP[[Dille]] \dots ] D. [DP[DemPille]] D'[D] \dots > [[DP[D'[D]]] D'[D] \dots ] D'[D] D'[D]$ 

 $<sup>^2</sup>$  The nature of *ille* and *ipse* as a kind of article in Late Latin is controversial (see Ledgeway 2012: § 4.2.2.1 and references cited).

ment of these categories (see White 2003, Liceras et al. 2008 or Meisel 2011, among many others).<sup>3</sup> In the particular case of L2 acquisition the approaches were opened to identify problems related both to the consecutive stages of development of this item and its grammatical feature and to the influence of the L1, especially when it presented notable differences and involved a different parametric choice. In the particular case of definite determiners, the following situations arise: (i) in the L2 the head D is overtly realized by means of a wide range of determiners, but the L1 lacks elements of the D-type; (ii) both L1 and L2 have definite determiners that occupy the head D, but they express different grammatical features in each language; (iii) the L2, but not the L1 lacks definite determiners. The first one is the usual situation we found in the acquisition of Romance languages as L2 with learners whose L1 is a Slavic or Amazigh language; the second one is found in cases of acquisition as L2 of Romance definite article, which are inflected for gender and number, when L1 articles are not inflected (or are inflected in a different set of features), as in Arabic.

The literature on DPs over the past few decades has revolved around the existence (or not) of a highly articulated structure with a long series of functional projections and around the grammatical features and lexical items with which each one is associated. We will not pursue this discussion and we will limit ourselves to assuming (i) that DP is the highest functional nominal projection, (ii) that the definite article is realized in the head D and that there is a functional space below it (labelled "D2" or "lower D") where certain definite determiners (or elements akin to them can operate in syntax. Following Bernstein in his dialectal and diachronic comparison

<sup>&</sup>lt;sup>3</sup> We are using the acronym L1 as a synonym for mother tongue and L2 to refer to any language that has been learned after having acquired the L1. We do not enter here in further specifications such as L3 (or Ln), which will be pertinent for several groups of individuals in our study at later developments of our research.

among several Romance varieties, we label this projection as D2:

(5)  $[_{DP} [_{D'} [_{D} ] [_{D2P} [_{D2'} [_{D2} ] ... [_{NP} ... ] ] ] ]$ 

In this article, our aim is to compare languages that differ considerably in the way how D is realized, to present some problems detected in the acquisition of Spanish and Catalan as L2 and to point out their possible connection with the syntactic properties of D and with the typological differences between languages. In the following section we compare the six languages involved.

## 3. Definite DPs: a crosslinguistic comparison

In this section we briefly describe the functioning of definite expressions in Spanish and Catalan, two Romance languages with a morphologically complex definite article, in Russian and Ukrainian, two Slavic languages that have no definite article and a rich nominal case morphology, and in Afro-Asiatic languages such as Amazigh, which also lacks a definite article, and Arabic, which has an invariable form of definite article. This comparison serves as a starting point for the understanding of some problems related to contact situations between the grammars of these languages in the process of acquiring Spanish and Catalan as L2 in the following section.

## 3.1. Definite determiners in Spanish and Catalan

In Romance languages, the definiteness of nominal expressions is expressed by means of a definite determiner in the position of D. In most of them, this determiner introduces the nominal construction<sup>4</sup> and is essential for the phrase to be interpreted as definite. Spanish and Catalan definite determiners

<sup>&</sup>lt;sup>4</sup> The exception is Romanian, where the definite article is enclitic to the noun: *baiat-ul* 'the child'.

are the definite article and the demonstratives, and in the particular case of Spanish, also the unstressed prenominal possessive.

The forms of the definite article are parallel in the two languages. It is inflected in gender and number and it agrees with the noun:

(6) Spanish

a. los *libros.* DEF.M.PL book.M.PL 'the books' Catalan b. les *cases.* DEF.F.PL house.F.PL 'the houses.'

The definite article can legitimate a null nominal element if it is followed by an adjectival phrase, a prepositional phrase with *de* 'of' or a relative clause with *que* 'that'. In these cases, the referent is recovered anaphorically or deictically and the gender and number features expressed by the determiner license the empty category (see Bernstein 2001):

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(7) Catalan
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a. les vermelles [<sub>DP</sub> les Ø [<sub>AP</sub> vermelles] ]
DEF.F.PL red.F.PL
'the red ones'
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- b. les *de la cantonada.* [DP les Ø [PP de la cantonada] ]
  DEF.F.PL of the.F corner
  'the ones in the corner'
- c. les *que són de Barcelona* [<sub>DP</sub> les Ø [<sub>CP</sub> que són a Barcelona] ]

DEF.F.PL that are from Barcelona 'the ones that are from Barcelona.'

From the semantic point of view, the coincidences between the two languages are maintained, since, besides introducing specific definite referents, the article is used in generic phrases (8a) and in phrases that denote unspecific referents (8b), and it is interpreted with possessive value in certain relations of inalienable possession (8c): $^{5}$ 

- (8) Spanish
  - a. Los *leones son peligrosos.* DEF.M.PL lions are dangerous 'Lions are dangerous.'
  - b. Hablaré solo con los que suspendan talk.FUT.1SG only with DEF.M.PL that fail.SUBJ.3PL el examen DEF.M.SG exam
  - c. *Me rompi* la *mano.* me broke.1SGDEF.F.SG hand I broke my hand.'

In Spanish, demonstratives distinguish three degrees of deixis: proximity to the speaker (*este*), proximity to the hearer or intermediate distance (*ese*), and distance from both interlocutors (*aquel*). In Catalan, there are two different systems: a binary one that distinguishes only the degrees of proximity (*aquest*) and distance (*aquell*) with respect to the deictic center, and a ternary one with the same distinctions as in Spanish (*este*, *eixe* and *aquell*). The binary system is the most extended and the ternary system is characteristic of some western variants like, for instance, Valencian.

Demonstratives reproduce the same inflection and agreement patterns of the definite article. The main syntactic differences between demonstratives and the definite article are that demonstratives can appear alone (9) or in postnominal position (10):

<sup>&</sup>lt;sup>5</sup> In Catalan, human proper nouns are usually introduced by an article. In some dialectal varieties a specific determiner (the so-called personal article) *en/na* is used; in others, the determiner is the definite article *el/la* (see Brucart 2002: § 7.3.4; IEC 2016: §16.3.1.2). In Spanish, the use of the definite article before a human proper name is also possible, but it is less general and it is subject to social and dialectal variation (see RAE-ASALE 2009: §12.7).

- (9) Catalan
  - a. *Agafaré* aquell *llibre*. take.FUT.1SG that.M.SG book 'I will take that book.'
  - b. *Agafaré* aquell. take.FUT.1SG that.M.SG 'I will take that one.'
- (10) Spanish
  - a. *El libro* aquel DEF.M.SG book that.M.SG 'That book'
  - b. *El noi* aquest DEF.M.SG boy this.M.SG 'This boy'

Postnominal demonstratives require the presence of the definite article: *\*libro aquel, \*noi aquest.* These constructions have been considered as evidence for a complex nominal structure with two levels of determination along the lines of (5) (see Roca 1997 or, on different grounds, Zamparelli 2000) or with several functional categories that may host the demonstrative (see Giusti 1997, Brugè 2002).

Possessives are different grammatical elements in Catalan and in Spanish. Only Spanish has a possessive that behaves as a determiner, that is, it is prenominal, it converts the nominal expression into definite and allow it to act as an argument, and it is in complementary distribution with the definite article and the demonstrative:<sup>6</sup>

(11) Spanish

a. mi *libro*. POS.1SG book 'my book.'

<sup>&</sup>lt;sup>6</sup> The prenominal possessive co-occurred with the definite article and with indefinites in older stages of the language. The co-occurrence with the demonstrative (*esta su casa* 'lit. this your house') is maintained in some western European Spanish dialects or with an archaic flavor (see. RAE/ASALE 2009: §17.4z).

b. *	el	mi	libro/*	mi	el	libro
	DEF.M.SG	POS.1SG	book	POS.1SG	DEF.M.SG	book
c. *	este	mi	libro/*	mi	este	libro
	this.M.SG	POS.1SG	book	POS.1SG	this.M.SG	book

Spanish possessive determiners have person features that agree with the possessor and differ from other determiners in that they do not agree in gender with the noun, unless they are first or second person plural:

(12) Spanish

a. mi *libro/ casa*POS.1SG book.M house.F
'my book/house'

b. nuestro *libro/* nuestra *casa*POS.1SG.M book.M POS.1SG.F house.F

'Our book'/ 'Our house'

The monosyllabic prenominal possessives mi, tu and su are like French prenominal possessives and they are clitic forms

(see Escandell 1999).

The Catalan possessive paradigm has prenominal forms like those of Spanish and French, but their use is reduced to express certain family ties (*mon pare* 'my father', *ta germana* 'your sister') and, less systematically, with elements that maintain a particularly close relationship with the possessor (*mon poble* 'my village').<sup>7</sup> The possessive generally used in Catalan is

b. Spanish Hablé con padre ayer. talked.1sG with father yesterday

<sup>&</sup>lt;sup>7</sup> Kinship terms present particular uses in several languages. Thus, in Catalan (and in Spanish too) the presence of the definite article might be enough to interpret the possession relationship when the context is clear (ia), in certain Spanish varieties names like *padre* or *madre* may appear without any determiner (ib) (ee RAE-ASALE 2009: 18.7m), and, as an anonymous reviewer noticed to us, in Polish the possessive is often dropped with similar names and situations (ic):

<sup>(</sup>i) a. La Clara ha deixat els fills amb l'àvia. (Catalan) DEF.F Clara has left DEF.PL sons with DEF-grandma 'Clara left her sons with their grandmother.'

a stressed form that reproduces the person features of the possessor and agrees in gender and number with the noun that denotes what is possessed. This possessive can be prenominal or postnominal:

(13) Catalan

a.	el	meu	llibre/	el lli	ibre m	eu.
	DEF.M.SG	POS.1SG	book.M	[		
	'My book'					
b.	la	vostra	casa/	' la	casa	vostra.
	DEF.F.SG	POS.1PL.	F house	e.M		
	Your (pl)	house'				

In this sense, Catalan is similar to Romance languages such as Italian *(il mio libro* 'my book') or Portuguese (*o meu livro* 'my book'). The construction with the possessive in prenominal position is usually interpreted as definite, but the definite article must head the construction.<sup>8</sup> This behavior shows that, unlike the case of Spanish (or French and English), this Catalan possessive does not fulfill the syntactic and semantic roles (definiteness, argumenthood, etc.) associated with D in this language.<sup>9</sup>

'I talked to my/our father yesterday.' c. Polish Rozmawiałem z tatą. spoke.1sG.M with father.1sG 'I spoke to my father.'

<sup>8</sup> In some varieties, it can also be headed by a demonstrative (*aquest teu amic* 'lit. this your friend') or by an indefinite (*un meu amic* lit. 'a mine friend'). In the latter case, which is characteristic of certain areas of Central and Eastern Catalan, the indefinite is interpreted as specific (see Brucart 2002: § 7.5.2.1, IEC (2016: §16.5.1d)).

<sup>9</sup> Only prenominal possessives that are incompatible with the definite article are associated to definiteness and to the D head. This is the case of monosyllabic possessives (like Sp. *mi*, Fr. *mon* or Cat. *mon*) and forms like *nuestro* 'our' or *vuestro* 'your' in Spanish. These forms can be prenominal or postnominal (*nuestro libro* 'our book', *este libro vuestro* 'this book of yours'), but only if they are prenominal can they be related to D (like monosyllabic possessives), are they incompatible with the definite article (*\*el vuestro libro*), and is the expression interpreted as definite (*\*un vuestro libro* vs. *un libro vuestro* 'a book of yours').

## 3.2. Definite nominal constructions in Slavic languages

Most Slavic languages lack definite articles,<sup>10</sup> but not demonstratives or possessives, which, according to Bošković, are elements closer to adjectives that are inflected in gender, number and case, and agree in these grammatical features with the noun they modify. The definite interpretation of a nominal phrase in, for instance, Russian in (14) is deduced from the discourse or pragmatic context and it correlates with the position it occupies in the sentence. Sentence-initial positions are often linked to definite interpretations:<sup>11</sup>

- (14) Russian
  - a. *Ánna citáet* knígu. Anna.N.SG reads book.ACC.SG 'Anna reads a book.'
  - b. Kníga bylá napísana na ispánskom.
     book.ACC.SG was.Fwritten.NOM.F.SG in Spanish.PREP.SG
     'The book was written in Spanish.'

The forms *knigu* and *kniga* have no formal marking that reveals their definite or indefinite character, but context (in this case the position in the sentence) provides this interpretation.

Slavic demonstratives distinguish two degrees of deixis, like the binary system of Catalan and most of the languages collected in Diessel (2013): *céj* 'this' and *tój* 'that' in Ukrainian; *étot* 'this' and *tot* 'that' in Russian. The demonstrative heads the nominal construction, agrees in gender, number and case with the noun, and, as shown in (15b), may appear without an explicit noun:

<sup>&</sup>lt;sup>10</sup> As indicated by Bošković, Bulgarian and Macedonian are exceptions.

<sup>&</sup>lt;sup>11</sup> Russian and Ukrainian examples are taken, respectively, from Chernova and Roca (2010) and Roca (2005) unless otherwise indicated.

#### (15) Ukrainian

- a. Ta knýžka *ne mojá*, *a johó*. this.SG book.NOM.SG NEG POS.NOM.3SG.F but POS.NOM1SG.M That book is not mine, but his.'
- b. Ta *ne mojá*, *a johó*. this.sg NEG POS.NOM.3SG.F but POS.NOM1SG.M 'That one is not mine, but his.'

Possessives express the person features of the possessor, have an adjectival character and, generally, precede the noun, with which they agree in the three grammatical specifications:<sup>12</sup>

#### (16) Russian

(i)

- a. *Ja vzjál* tvojú súmku. I took.m POS.ACC.2SG.F bag.ACC.3SG.F I took your bag.'
- b. Onánáša učíteľnica. she POS.NOM.1PL.F teacher 'She i sour teacher.'

Reflexive possessives keep the gender, number and case agreement with the noun, but they do not reproduce the person features of the possessor. In Ukrainian, Russian or Polish the forms *svij*, *svoj* and *swoj* are used with antecedents of any of the three grammatical persons:<sup>13</sup>

 $<sup>^{12}</sup>$  Third person possessives show a different behavior. They do not agree with the noun and express the gender of the possessor:

Russ	Russian						
a.	jegó	sestrá					
	he.GEN.M.SG	sister.N.F.SG					
	'his sister'						
b.	jejó	knígi					
	she.GEN.F.SG	book(F.).N.PL					
	'her books'	. ,					

These forms are, as indicated in the glosses, genitive personal pronouns, rather than possessives. They cannot be linked to a D head because the case feature attributed to the whole nominal construction is nominative, as shows the case inflection of the nouns *sestrá* and *knígi*.

<sup>13</sup> We thank an anonymous reviewer for pointing this to us.

(17)	Ukrainian						
	a. <i>Ja vz'av</i> svojú	val'ízku.					
	I took.m REF.POS.ACC.SG.	F suitcase.ACC.SG.F					
	'I took my suitcase.'						
	Russian						
	b. <i>Ty pómni</i> š' swojt	à škólu.					
	you remember.2sg REF.P	OS.ACC.SG.F school.ACC.SG.F					
	You remember your scho	ol.'					
	Polish						
	c. <i>Janek czyta</i> swoją	książkę.					
	Janek reads REF.POS.ACC.SG.F book.ACC.SG.F						
	'Janek reads his own book.'						

There is no formal difference between possessives that appear in nominal constructions and those that appear as predicates. This suggests that the possessive does not contain grammatical features or properties as the ones of determiners. In this sense, Slavic possessives are similar to those of Catalan (and other Romance languages) but different to those of English or Spanish:

- (18) Russian
  - a. *Étot karandáš* moj. This.NOM.SG.M pencil.NOM.SG.MPOS.1SG.NOM.SG.M 'This pencil is mine.'
  - b. moj karandáš
     POS.1SG.NOM.SG.M pencil.NOM.SG.M
     'My pencil'
- (19) Catalan
  - a. Aquest llapis és meu. This.SG.M pencil.SG.M is POS.1SG.M 'This pencil is mine.'
  - b. *El* meu *llapis* the POS.1SG.M pencil.SG.M 'My pencil'
- (20) English
  - a. This pencil is mine/\*my.
  - b. My pencil

(21)	Sp	anish			
	a.	Este	lápiz	es	mío/*mi.
		This.SG.M	pencil.SG.M	is	POS.1SG.M
		This penci	l is mine.'		
	b.	Mi	lápiz.		
		POS.1SG.M	pencil.SG.	М	
		'My pencil'			

In conclusion, the preceding data suggest that neither demonstratives nor possessives would unambiguously correspond to the realization of the head D of the highest DP projection: possessives do not have determiner-like properties at all; demonstratives coincide with Romance definite determiners in the definite interpretation, in the initial position and in constructions without an overt noun. These properties could be related to a lower position different to the one that occupies the definite article.

## 3.3. Definite nominal constructions in Egyptian Arabic<sup>14</sup>

In contrast with Slavic languages, Egyptian Arabic (also known as Ameya) has a definite article that can be considered as the head of the DP. However, this element is not the only way to mark that the nominal expression is interpreted as definite. In this language definiteness may be expressed through different ways: by means of the definite article *al*- (22a), a genitive complement (22b), a possessive affix (22c), or a demonstrative that follows the noun preceded by the definite article (22d).<sup>15</sup>

<sup>&</sup>lt;sup>14</sup> Arabic language is a set of varieties that present notable differences among them. Here we focus on describing one of these varieties: Egyptian Arabic or Ameya.

 $<sup>^{15}</sup>$  We simplified the transliteration of Arabic vowels in three (<a>, <i>, <u>), as dictated by modern standard Arabic, though in the spoken language there are the allophones [e] and [o]. We follow Bezos (2006) transliteration system and we adapt the pronunciation of words according to Ameya except in cases where we give standard Arabic examples.

- (22) Ameya
  - a. al-*walād* DEF-boy 'The boy'
  - b. tālib al-ğam'ah
    student def-university
    'the student of the university.'
  - c. *kitāb*-hu book-POS.3SG.M 'his book'
  - d. al-*kitāb* dà DEF-book this.SG.M 'this book.'

Definiteness grammatical markers are important in Arabic DPs. The following examples differ only in the presence of *al*- adjoined to the adjective  $t\bar{a}yib$  'good'. In definite DPs, definiteness spreads to the adjective and the definite article must appear with both the noun and the adjective (23a); if the adjective does not bear this definiteness marker, the sequence is interpreted as a copulative sentence (23b):

(23) Ameya

- a. al-*walād* al-*tāyib* DEF-boy DEF-good The good boy'
- b. al-*walād tāyib* DEF-boy good 'The boy is good.'

Definiteness spreading through elements inside the DP clearly distinguishes Arabic from Romance languages, where it is expressed only by means of one element in the head D, and from Slavic languages, where it is not expressed by any overt element in D. The Arabic definite article *al*- is proclitic to the noun or to the adjective and it lacks gender and number features (Corriente 1988). Its main function is to set the reference

of the nominal expression; in its absence, the whole nominal expression is interpreted as indefinite:

(24) Ameya *walād tāyib* good boy 'a good boy'

Thus, Arabic bare NPs are clearly different to Slavic bare NPs: whereas the first ones correlate with indefiniteness, the second ones are potentially ambiguous between a definite and an indefinite interpretation.

In Ameya, the definite article is also used in contexts with non-specific referents phrases interpreted as generics (25) and in certain inalienable possession relationships (26):

(25) Ameya

- a. Al-qahua<sup>h</sup> bita-rfa' al-duğat.
  DEF-coffee brings up DEF-pressure
  'Coffee brings pressure up.'
- b. Al-*līmūn* fākha<sup>h</sup>
  DEF-lemon fruit
  'A lemon is a fruit.'
- c. Al-*kilāb 'and*-hā ārba' riglin. DEF-dogs in-POS.3SG.F four.M legs.F 'Dogs have four legs.'

(26) Ameya

*Qal'nā* al-*baranit* take.1PL.PF DEF-hats.PL 'We took off our hats.'

In standard Arabic singular nouns preserve the specific reading unless the presence of a predication or an adverb induce the generic interpretation (see Fassi Fehri 2007), but in Ameya sentences like those in (25) are interpreted as generic or as referential simply according to the pragmatic context. The use of the definite article in generic in Arabic is, then, akin to the one we find in Spanish or Catalan.<sup>16</sup>

Concerning inalienable possession relations, Ameya distinguishes between parts of the body and clothes. As shown in (26), clothes are introduced by means of a DP headed by the definite article (*al-baranit* 'the hat'), as in Spanish (*Nos quitamos los sombreros* 'We took off our hats'), but parts of the body need the possessive (as in English):

(27) Ameya Mary bita-rfa' yid-hā.
Mary IMPF.3SG.F-raise hand-3SG.F
'Mary raises her hand.'

Following Hänninen (2014) we consider, then, that Ameya grammar is sensitive to the nature of the semantic relationship between the object and the possessor and that the highest degree of alienation is encoded through the need to use the possessive.

In Ameya, as in Spanish, it is possible to drop the noun in presence of a modifier:

(28) Ameya

- a. al-*kitāb* al-*ahmar*. DEF-book DEF-red 'the red book'
- b. al-*ahmar* DEF-red 'the red one'

In standard Arabic demonstratives express a two-way deictic distinction: proximity and distance from the speaker, as in English, Russian, Ukrainian, or Catalan. However, in Egyptian

<sup>&</sup>lt;sup>16</sup> Arabic contrasts with English and Romance languages in the behavior of indefinites: indefinite nominal phrases can be interpreted as generic in English (*A whale is a mammal*) or in Spanish (*Una ballena es un mamífero*), but in Arabic they are interpreted with an existential reading (see Fassi Fehri 2007: 47).

Arabic the same form of demonstrative is used to express both proximity and distance. In terms of Diessel (2013), this would be a case of no distance contrast system, where the identification of distant referents is made by the pragmatic context, which provides the proximity or distal interpretation:

(29) Ameya al-*rağul* dà DEF-man this.M 'this/that man'

Demonstratives show variation in gender and number (da 'this/that' is masculine singular, di 'this/that' is feminine singular, and di or dol 'these/those' is plural) and agree with the noun they are referring to, which can be explicit or not:<sup>17</sup>

(30) Ameya

a. al-rağul dà
DEF-man this.M
'this/that man'

b. al-bint dī
DEF-girl this.F
'this girl'

(31) Ameya

Ajat dà.
take.PF that
'I took this/that one.'

Differently to the definite article and to possessives (see below), Arabic demonstratives are not clitics. Their usual position in Standard Arabic is prenominal, but, in Ameya they appear in postnominal position (and the definite article must precede the noun, as in Spanish or in Catalan):

<sup>&</sup>lt;sup>17</sup> The plural of non-human nouns are treated as feminine, this means that they will take the demonstrative di (this treatment extends to adjectives). The Standard Arabic number distinction between dual and plural is not preserved in Ameya, where the plural form subsumes the dual.

(32) Ameya al-*bint* dī DEF-girl this.F 'this girl'

Possessives are clitic morphemes attached to the right of nouns, pronouns, verbs or prepositions. When combined with a noun, the possessive provides the meaning of possession and turns the nominal construction into definite, as Spanish prenominal possessives do. The definiteness content provided by the possessive is consistent with the fact that it cannot cooccur with the definite article:

(33) Ameya
a. bayt-y
house-POS.1SG
'my house'
b.\*āl-bayt-y
def-house-POS.1SG

The possessive determiner only expresses the person and number features of the possessor; it does not show any kind of agreement with the noun (the possessive). In this sense, it is closer to English possessive forms than to Slavic or Romance forms, where agreement with the noun is expressed.

The possessive can co-occur with a demonstrative, which follows the noun with the possessive:

(34) Ameya
kitāb-nā dà.
book-POS.1PL this.M
This book of ours'

In sum, Ameya has a definiteness marker that can occupy the head D that introduces the nominal construction. Demonstratives and possessives do not display such a behavior and they should be considered as elements that contribute to the definite interpretation but appear in a lower position.

## 3.4. Definite nominal constructions in Amazigh<sup>18</sup>

Amazigh is a language that, like Slavic languages or Latin but unlike Romance languages or Arabic, lacks definite articles. In Amazigh the nominal expression is interpreted as definite or as indefinite according to its function in the discourse (example taken from Quitout, 1997 [adapted by Lamuela 2002]):

(35) Amazigh
 *Tedew* therijat.<sup>19</sup>
 fly.3SG.PF butterfly
 'A/the butterfly is flying away.'

This is the general situation in most varieties of Amazigh, including those with a larger number of speakers, but this idea is not fully accepted among all Amazigh researchers. Some authors claim that there existed some elements prefixed to nouns (a- for the singular, i- for the plural) that formerly conveyed the value of a definite article. Traces of this definiteness marker would remain in some varieties. Vycichl (1989) gives examples from Amazigh of Djebel Nefusa, among others, in which the definite/indefinite distinction appears. In the following example, the definiteness marker appears attached to the adjective in a parallel way as the Arabic definite article is enclitic to the adjective that modifies a definite noun (examples from Vycichl, 1989):

<sup>&</sup>lt;sup>18</sup> Amazigh presents a remarkable dialectal variety. Even so, researchers such as Chaker (1995) or Múrcia (2015, 2021) affirm, following both linguistic and sociolinguistic criteria, that it is a single language. With this in mind, in this paper we describe the functioning of determiners in Amazigh as a whole, focusing on specific varieties when considered necessary.

<sup>&</sup>lt;sup>19</sup> Amazigh is a language in the process of standardization, so there is variation in the encoding of the language depending on the author. In this work we keep the spelling used in the sources consulted unless otherwise indicated.

- (36) Djebel Nefusa Amazigh
  - a. *bucîl* aməckân boy DEF.little 'the little boy'
  - b. *bucîl* məccək
    boy little
    'a little boy'

Amazigh demonstratives distinguish between proximity and remoteness in relation to the first person. This binary distinction turns into a ternary one in some varieties where another demonstrative is used to refer to proximity with respect to the second person. Demonstratives are morphemes that are suffixed to the noun and that do not show any gender or number agreement with it. In the following examples the suffixes *-a* and *-nn* indicate proximity (first person) and remoteness (second and third person), respectively (examples adapted from Aghmiri 2014: 22):<sup>20</sup>

(37) Amazigh

- a. Argaz-a walu yar-s taddart.
  man-this nothing in-PR3SG house
  This man has no home.'
  b. Argaz-inn walu yar-s taddart
  - man-that nothing in-PR3SG house That man has no home.'

In the varieties of Amazigh that express proximity to the second person, like, for instance, Tachelhit, the demonstrative -*a* serves only to indicate remoteness and the suffix -*nna* is used to refer to the second person (Naït-Zerrad 2011): *argaz* 'man' vs. *argaz-nna* 'this man (who is where you are)'.

<sup>&</sup>lt;sup>20</sup> In many dialects the first person demonstrative is *-a* (preceded by [y] if the noun ends in *-a*), but in others it may be *-u* and in some others, as in Tachelhit, it takes the form *-ad* (see Múrcia 2021, Naït Zerrad 2011). We made a spelling change:  $\dot{g} > \gamma$  (also in the Aghmiri's examples that follow).

In addition, there are also demonstratives that have an anaphoric function. This is the case of the suffixes *-(e)nni* in Riffian, *-lli* in Tachelhit, and *-nni* in Kabyle (see Sarrionandía 1905, Naït-Zerrad 2011):

(38) Riffian Amazigh

a. taddart-nni
house-that
'that house in question'

Tachelhit Amazigh

b. afrux-lli
boy-that
'that boy in question'

Kabyle Amazigh

c. arrac-nni
children-that
'those children in question'

The anaphoric demonstrative pronoun is also used when the noun is not expressed lexically (see Lamuela 2002).<sup>21</sup> Then, a (non-affix) full form is used preceding the modifier of the empty noun (example from Sarrionandía 1905: 371):

(39) Riffian Amazigh
Necc xsey wenni amezyan.
I want.1SG.PF that.M.SG little
'I want the little one.'

With the exception of  $1^{st}$  person singular possessive, which is *inu*, in Amazigh possession is expressed through a possessive constituent that combines the prepositional suffixed pronoun, interpreted as the possessor, with the genitive preposition n 'of, which can undergo some phonetic modification such as the

<sup>&</sup>lt;sup>21</sup> The demonstratives we have described so far can be attached to other elements, such as pronouns which, as we have seen above, express proximity to the 1st person (*ta d yelli-s n ujellid* 'this is the king's daughter') or to the second and third person (*tin d taddart-inu* 'that is our house') or have anaphoric function (*ayenni* war *i*hli 'this does not work').

tension of the consonant n, as shown in (40). This combination suffixed to the noun and its presence leads to the definite interpretation of the nominal phrase (examples from Aghmiri 2014: 30):<sup>22</sup>

## (40) Amazigh

a.	taddart-inu	taddart-nns
	house-POS.1SG	house-pos.3sg
	'my house'	'his/her house'
1	<i>T</i> : <i>L</i> · ·	1 1 1 10

b. *Tidtawin*-inu *nnumnt* akd tfuct cwait cwait. eyes-POS.1SG get-used-to.3SG with sun gradually 'My eyes get used to the sun gradually.'

The possessive construction is subject to differences among varieties. In Kabyle, for instance, there is no genitive preposition and the pronominal element preceded by an -i is attached to the noun (examples from Kossmann 2012: 75):

(41) Kabyle Amazigh *aqcic*-is boy-POS.3SG 'his/her boy'

Finally, possessive constructions with certain nouns, such as kinship terms, involve direct affixation of the possessive to the noun with the particularity that it is preceded by t when the possessor is plural (example (42c) from Aghmiri 2014: 27):<sup>23</sup>

- (i) Amazigh
  - a. ylli-s n wuma daughter-PR3SG of brother 'my brother's daughter'

<sup>&</sup>lt;sup>22</sup> When the noun is omitted, the preposition and the pronoun are postponed to the anaphoric demonstrative (Sarrionandía, 1905):

<sup>(</sup>i) Ncc xsy *tinni-nkmt*, war xsy *tinni-nsnt*. I want.1sg this-Pos2PL.F. not want.1sg. this-Pos3PL.F 'I want yours, not theirs.'

 $<sup>^{23}</sup>$  The terms *mmi* 'son' and *ylli* 'daughter' carry the suffixed pronoun indicating possessor, even when expressed by another N (example (ia) from Lamuela 2002: 50; example (ib) from Kossmann 2012: 76):

(42) Amazigh

a. baba-k
father-POS.2SG.M
'your father'

b. baba-tsn

father-POS.3PL.M
'their father'

c. baba-s issxdm Xuan.

Father-POS.2SG.M make-work.3SG.M Juan
'His father made Juan work.'

The different behavior with particular kinds of nouns reminds of the choice of monosyllabic prenominal possessives in Catalan. In comparison with the preceding languages, all the grammatical items (possessives and demonstratives) inducing the definite interpretation in Amazigh appear postnominally. This would indicate that there is no specific determiner for the head D and that, probably, the elements contributing to fix the definite interpretation occupy a lower position in the structure.

## 3.5. Summary

We summarize the main grammatical properties of possessives, demonstratives and definite articles in the six languages in Table 1.<sup>24</sup>

b. mmi-*s n Ffaya* son-PR3SG of Mustapha 'Mustapha's son'

<sup>&</sup>lt;sup>24</sup> The label "Determiner-like" holds for the ability to provide a definite interpretation, head the nominal construction and function as an argument.

	Definite articles, demonstratives and possessives							
	Definite article		Demonstrative			Possessive		
	Position	Agree- ment with N	D- like	Position	Agree- ment with N	D- like	Position	Agree- ment with N
Sp	Pre-N Initial	Gender and number	Yes	Pre-N or post-N Initial	Gender and number	Yes	Pre-N	Number
Cat	Pre-N Initial	Gender, number	Yes	Pre- N/post- N Initial	Gender and number	No	Pre-N or post-N	Gender and number
Rus / Ukr	Ø		Yes	Pre-N (genera- lly) Initial	Gender, number and case	No	Pre-N or post-N	Gender, number, case (not with 3rd poss.)
Arab	Pre-N + pre-Adj Initial	No	No	Post-N	Gender and number	No	Post-N (suffi- xed)	No
Amaz	Ø		No	Post-N	Gender and number (only if used as a pro- noun)	No	Post-N (suffi- xed form)	No

Table 1Definite articles, demonstratives and possessives

The comparison among these languages shows relevant differences with respect to the way in which definite nominal expressions are built in each language. Only in Spanish definiteness is systematically encoded by means of grammatical elements located in the DP projection. Catalan, as well as other Romance languages, also places some elements (demonstratives and the definite article) in this projection, but it locates possessives in a lower position in the nominal functional projection. In Egyptian Arabic the initial D-head position is filled only by the definite article. Slavic languages do not have grammatical elements (i.e. definite articles) that appear in D, but demonstratives show a similar behavior in the sense that they are prenominal, introduce the nominal construction and can appear alone as arguments. Finally, Amazigh does not seem to have any grammatical element that could be clearly assimilated to the DP projection.

A syntactic structure like the one in (5) hosts elements akin to determiners in the functional structural space below DP. Elements such as demonstratives or possessives, which tend to facilitate the definite interpretation of the nominal construction, might be located in this area. Then, the comparison among these languages can be conceived in terms of the properties of the functional categories in the higher area of the nominal projection. This means, for instance, that Slavic (or Arabic or Amazigh) demonstratives could be considered as determiner-like elements related to a lower D, whereas Romance demonstratives are generally related to the higher D. We can give the following temptative structures for each language:<sup>25</sup>

 $\begin{array}{c} (43) \text{ a. } \begin{bmatrix} DP \begin{bmatrix} D' \end{bmatrix} Dem \end{bmatrix} \begin{bmatrix} D2P \begin{bmatrix} D2' \end{bmatrix} \begin{bmatrix} D2 \end{bmatrix} \begin{bmatrix} D2 \end{bmatrix} \begin{bmatrix} NP \\ D2' \end{bmatrix} \begin{bmatrix} D2 \end{bmatrix} \begin{bmatrix} NP \\ D2' \end{bmatrix} \begin{bmatrix} NP \\ D2 \end{bmatrix} \begin{bmatrix} NP \\ D2 \end{bmatrix} \begin{bmatrix} D2P \begin{bmatrix} D2' \end{bmatrix} \begin{bmatrix} D2 \\ D2 \end{bmatrix} \begin{bmatrix} D2P \\ D2' \end{bmatrix} \begin{bmatrix} D2P \\ D2' \end{bmatrix} \begin{bmatrix} D2P \\ D2' \end{bmatrix} \begin{bmatrix} NP \\ D2 \end{bmatrix} \begin{bmatrix} NP \\ D2 \end{bmatrix} \begin{bmatrix} D2P \\ D2' \end{bmatrix} \begin{bmatrix} D2P \\ D2'$ 

Then, the syntactic properties of the kind of elements related to the expression of definiteness in the higher area (D2 and D1) of the structure appear as very pertinent for the development of the category D. The study of L2 acquisition of definite DPs may shed some light on this issue.

<sup>&</sup>lt;sup>25</sup> We do not specify the syntactic (head and/or phrasal) movement operations that yield the surface linear order and that involve the specifier of DP2 as a hosting position when the noun precedes the demonstrative ([DP1 *el* [DP2 [NP *libro*] [D2 *este* ...  $t_i$  ... ]]], for instance) as well as other specifiers in the case of possessives (see Roca 1997, Giusti 1997, Escandell 1999 or Bernstein et al. 2019). A detailed application of this analysis to every language goes beyond the scope of this paper.

# 4. Acquisition of definite nominal expressions in Spanish and Catalan as second languages

In this section we present a sample of errors produced by learners of Spanish and Catalan as L2 with Russian, Ukrainian, Egyptian Arabic or Amazigh as L1. The data we analyzed came from acceptability tests, production tasks and semi-structured interviews. The participants were all adults and they started studying Spanish or Catalan after adolescence.<sup>26</sup> This first approach, which consists only of a presentation of some problems detected from a qualitative point of view, is to be continued in future work by ensuring the uniformity of data across all groups of speakers and by incorporating a quantitative analysis of errors.

The use of the definite article and gender agreement are two of the biggest difficulties detected in the acquisition of nominal constructions in Spanish or Catalan as L2. The fact that three of the languages we have described (Russian, Ukrainian and Amazigh) lack definite articles, the canonical realization of the functional head D, suggests that the acquisition of this functional category may be particularly problematic for learners with any of these languages as L1. By contrast, Arabic has a morphologically invariant definite article, so learners with this L1 would be expected to show less difficulties.

Our preliminary analysis shows that this expectation is met, but some with nuances. First of all, it should be noticed that the use of the definite article is attested from the very first levels in all learners; there are no differences depending on the properties of the L1, in this sense. Similarly, errors related to the misuse of bare noun phrases are found with all learners but especially among those with Russian, Ukrainian or

<sup>&</sup>lt;sup>26</sup> The population sample differs from each group of languages in terms of the context where they learn Spanish: the L1 Ukrainian, Russian and Amazigh groups did learn Spanish and Catalan in an immersion context while the group of L1 Ameya did learn Spanish in Egypt at the *Instituto Cervantes*.

Amazigh as L1. The absence of a determiner or a quantifier occurs with both definite and indefinite expressions and even in constructions in which the noun is omitted (46):

(44)	Catalan							
	a. $\emptyset < els > homes regalen a \emptyset < les > mullers (L1 Russian)$							
	DEF men give to DEF wives							
	'The men give to their wives.'							
	b. $\emptyset < els > pobres tenien que pagarla terra (L1 Ukranian)$							
	DEF por had that pay DEF land							
	The poor had to pay for the land.'							
	Spanish							
	a. Cambiar $\emptyset$ < la> ropa y el pelo. (L1 Amazigh)							
	change DEF clothes and DEF hair							
	They change their clothes and their hair.'							
	b. $\emptyset < los> plátanos tienen potasio (L1 Ameya)$							
	DEF bananas have potassium							
(45)	'Bananas have potassium.' Catalan							
(+3)	a. $com \emptyset < un > arbre, però no és \emptyset < un > arbre,$							
	like INDEF tree but not is INDEF tree							
	és un cérvol. (L1 Russian)							
	is INDEF deer							
	'like a tree, but it's not a tree, it's a deer.'							
	b. <i>[-Com era (la joguina)?] –Era Ø&lt; un&gt; ós.</i> (L1 Ukranian)							
	how was DEF toy was INDEF bear							
	'What did the toy look like? It was a bear.'							
	Spanish							
	c. [- $Qu\acute{e} l\acute{e}\acute{e}is$ ?] - $\emptyset < un$ > libro. (L1 Ukranian)							
	what read INDEF book							
	'–What are you reading? – A book.'							
(46)	Catalan							
	a. Per a mi totes són fàcils, però $\emptyset < la >$ més difícil							
	for to me all are easy but DEF more difficult							
	és llengua. (L1 Russian)							
	is language							
	'For me they are all easy, but the most difficult one is							
	language.'							

b. *més bo que* Ø < *la*> *d' aquí* (L1 Russian) more good than DEF of here 'better than here'

Interestingly, learners with Ameya as L1 produce sequences like the one in (44d), which corresponds to generic noun phrases that in Arabic are introduced by the definite article as in Spanish and Catalan. This indicates that factors other than L1, such as the possible influence of English L2 or general factors of the determiners and definiteness acquisition can influence the development of the definite article during L2 acquisition (see Pérez-Leroux et al. 2004, Rosado 2007, Landa-Buil 2010 or Vilosa 2021). It is also worth mentioning that the omission of the definite article is more frequent than that of the indefinite article: in a rough calculation 3 out of 4 errors of absence of determiner in learners with the two Slavic languages as L1 are of the definite article (76 %).

Overgeneration of the definite article also occurs, but it is considerably less common than those of absence: again, in an approximate calculation, 1 out of 5 (18.6 %) errors related to the use of definite determiners in the two Slavic languages correspond to unnecessary use (as opposed to 75.6 % of errors of absence). Some examples:

- (47) Catalan
  - a. els llibres del Ø rus. (L1 Russian) def books of. DEF Russian 'the Russian books.'
  - b. (una nena) que tenia un pare i no tenia la <Ø> INDEF girl that had a father and not had DEF mare. (L1 Ukranian) mother

#### Spanish

c. -Cuánto tiempo hace?- Los <Ø> dos años (L1 Amazigh) how.much time does DEF two years 'How long has it been? - Two years.'

The use of demonstratives and possessives shows few deviations from proper usage in Spanish or Catalan. Problems with gender agreement aside (see below), most errors involve syntactic order (48a), absence of the definite article (48b-d), and redundant use in inalienable possession relations (48e):

(48) Catalan	
a. Ø < les>festes de Tura aquestes.	(L1 Amazigh)
DEF feast.daysof Tura these	
These feast days of Tura.'	
b. para Ø <el> nostre pare</el>	(L1 Ukranian)
for DEF our father	
'for our father'	
c. jo ambØ <el> seu marit.</el>	(L1 Russian)
I with DEF his/her husband	
'me and his/her husband.'	
d. Va posar el seu <Ø> cap dins del	pot.(L1Russian)
put.3sg DEF his head into of.DEF	pot
'He put his head inside the pot.'	
Spanish	
e. Me duele mi <la> cabeza.</la>	(L1 Ameya)
me hurts my DEF head	
'I have a headache.'	

According to the characteristics of their L1, learners are likely to consider that the presence or the demonstrative in (48a) in a possible position in the L2, but under certain circumstances, or the possessive in (48b-d) is enough to turn the nominal expression into definite and, consequently, they dispense with the obligatory initial determiner. In (48e) the inadequate use of the possessive reflects the us in Arabic.

Although our main interest lies in the acquisition of determiners, we will conclude this section with a couple of remarks on problems detected in the realization of gender. The acquisition of gender and gender agreement is one of the main difficulties in the acquisition of Spanish or Catalan as an L2 and leads to fossilized errors (see Alarcón 2011). Some examples of gender confusion in definite phrases are the following

```
(49) Catalan
     a. les
                <els>
                          dies. els
                                          <les>
                                                    cançons
        DEF.F.PL DEF.M.PL days DEF.M.PL DEF.F.PL songs
        (L1 Russian)
     b. la
                \langle el \rangle
                                      pare.
                                              les
                                                      <els>
                            seu
        DEF.F.SG DEF.M.SG POS.3SG.M father DEF.F.PL DEF.M.PL
                                            (L1 Amazigh)
        ulls
        eyes
     Spanish
     c. los
                <las>
                                          <los>
                                                    billetes.
                          ratas, las
        DEF.M.PLDEF.F.PL rats
                                  DEF.F.PL DEF.M.PL notes
        (L1 Ukranian)
     d. el
                 < la >
                            ciudad, la
                                             < e1>
                                                         coche
        DEF.M.SG DEF.F.SG city
                                     DEF.F.SG DEF.M.SG car
        (L1 Arabic)
```

Among the reasons for the confusion in the assignment of grammatical gender to nouns we found the arbitrariness of gender in Spanish and Catalan or the lack of a systematic formal correlation with the L1, which can result in positive transfer or negative interference (see, for instance, Sabourin et al 2006 or Vilosa 2021). In relation to the nature of the L1, we have noticed a remarkable difference on learners with the two Slavic languages as L1 and those with Amazigh or Arabic: in the former, gender confusions appear relatively balanced between masculine and feminine (although with a slight preference for the masculine), but in the latter, most of the errors are due to the use of the feminine instead of the masculine form. This difference might indicate that the Indo-European versus non-Indo-European character of the languages involved is somehow influencing the acquisition process.

This difference reflects the difficulty learners have in familiarizing themselves with the use of this determiner and suggests that the acquisition (or development) of the higher functional layer (the DP) of the nominal structure is particularly problematic (for L1 speakers who lack this element).

## 5. Conclusion

In this article we have compared the nominal constructions of typologically different languages and we have provided a first piece of evidence for the difficulties to acquire the functional projection D by learners with one of these languages as L1. Our preliminary analysis shows, on one hand, that the acquisition of definite nominal expressions is problematic in general and, to some extent, independent of the properties of the L1, and, on the other hand that there are relevant differences among definite determiners (or elements associated with the DP projection in the L2). These differences can be related to difficulties in acquiring a good command of the highest functional field in the nominal structure, where the distinction between several layers of determination can help to identify the problems posed by certain lexical items and to find correlations in the development of the category D in Romance languages.

Our future steps in this research are, firstly, to get a more balanced set of informants and data in order to be in a better position to carry out qualitative and quantitative analyses, and secondly, we will deepen our knowledge of the grammatical characteristics and processes of the different L1 and of the possible influence of other L2. The data and conclusions provided by a study on the acquisition of nominal structure from this comparative perspective are also relevant for heritage languages, where the emergence of a DP projection can also occur as a consequence of language contact.

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