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# Formal Variation and Language Change in Catalan Quantifiers: The Role of Pragmatics\*

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#### Abstract

This article studies the formal variation of the masculine singular forms of the quantifiers u/un 'one', algú/algun 'someone, some', ningú/ningun 'no-one, anyone, not one, any, none' and cada u/cada un 'everyone, each one' in contemporary Catalan. The standard uses of these forms are contrasted with dialectal uses, obtained from a thorough search in oral and written corpora. In addition, they are compared with the uses in the other Romance languages and with their historical evolution in Catalan. The whole set of data, and especially the dialectal information on the Valencian area, allow us to explain the various factors that have interacted in the variation and formal change of these quantifiers. Among these factors, the fundamental role of pragmatics stands out above the rest. It is shown that, given the polysemy and synonymy caused by vacillations between the variants of the quantifiers, strategies are sought to improve communicative effectiveness, so that the differentiation between form and function becomes firmly established in the majority of quantifiers. Other prominent factors are those of analogical and, above all, phonological nature, which, on the one hand, explain the syncretism of the form un, and, on the other, enable us to understand the reasons why in the Valencian area there is a process of substitution of genuine forms by borrowings from Spanish.

Keywords: Catalan dialects; formal variation; iconicity; language change; pragmatics; quantifier

Resum. Variació formal i canvi lingüístic en els quantificadors catalans: el paper de la pragmàtica

Aquest article estudia la variació formal de les formes de masculí singular dels quantificadors u/un 'one', algú/algun 'someone, some', ningú/ningun 'no one, anyone, not one, any, none' i cada u/cada un 'everyone, each one' en català actual. Els usos estàndard d'aquestes formes es contrasten amb els usos dialectals, obtinguts a partir d'una recerca exhaustiva de corpus oral i escrit. A més, es comparen amb els usos de la resta de les llengües romàniques i amb l'evolució històrica en català. El conjunt d'aquestes dades, i especialment la informació dialectal sobre la zona valenciana, permeten explicar els diversos factors que han interactuat en la variació i el canvi formal d'aquests quantificadors. Entre aquests factors, es destaca el paper fonamental de la pragmàtica. Es fa veure que, davant de la polisèmia i de la sinonímia que provoquen les vacil-

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lacions entre les variants dels quantificadors, es busquen estratègies per a millorar l'efectivitat comunicativa, de manera que es consolida la diferenciació entre forma i funció en la majoria dels quantificadors. També es destaquen els factors analògics i, sobretot, els fonològics, que, d'una banda, expliquen el sincretisme de la forma *un*, i, d'una altra, ens permeten entendre les raons per les quals en l'àrea geogràfica del valencià hi ha un procés de substitució de formes genuïnes per préstecs de l'espanyol.

Paraules clau: dialectes catalans; variació formal; iconicitat; canvi lingüístic; pragmàtica; quantificador

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#### 1. Introduction

In recent years, the study of language change has been carried out from a wide range of perspectives, which have stressed both internal (phonological, analogical, syntactic and semantic) and external factors (social use; communicative or pragmatic situations; language contact; language learning) (cf. Chambers, Trudgill & Schilling-Estes 2004; Bybee 2007; Joseph & Janda 2003; Hickey 2010; Fried, Östman & Verschueren 2010; Traugott 2012). Yet, languages do not change by themselves, but do so as a consequence of the use that their speakers make of them. as has been remarked from a cognitivist perspective (Traugott 2012; Geeraerts & Cuyckens 2007). Therefore, it is the users who, in their willingness to acquire a language and to use it, modify it to adjust to the social environment in which they live and in order to communicate effectively. This means, on the one hand, that we cannot interpret internal factors as isolated from external factors and, on the other hand, that the line separating the synchronic study from the diachronic study of a language is blurred and is part of a continuum that allows us to undertake the linguistic research within the more general framework of linguistic variation. From this perspective, which is the one we will adopt in this article, pragmatics takes on a prominent role, which should not be understood just as a play of implicatures and inferences, but also embraces the entire field of the language in use, and as a result the sociolinguistic context in which speakers are immersed acquires great importance as well (Fried, Östman & Verschueren 2010).

In this article, as a contribution to the study of language variation and change, we will address the formal variation of the quantifiers formed from those derived from the Latin numeral UNUM 'one' in present-day Catalan. This research completes the one that we have carried out on this point from a historical perspective (Ramos 2018, 2020) and aims to account for the variation and dialectal alternation that currently exists between the masculine singular forms of the existential quantifiers

u/un 'one' (< UNUM), algú/algun 'someone, some' (< ALIOUNUM < ALIOUIS UNUM), ningú/ningun 'no-one, anyone, any, not one, none' (< NEC UNUM), and of the distributive universal quantifier cada u/cada un 'everyone, each one' (< CATA UNUM), according to whether they are used as pronouns or as determiners.<sup>1</sup>

In accordance with this objective, first of all, we will begin by describing the forms that the standard language has adopted, which will then be compared with the variants used in the other Romance languages. Second, we will outline the dialectal data obtained primarily through personal research conducted for this purpose. Third, we will compare the uses described with the historical data we have on the phenomenon. Finally, in view of all the data collected, we will seek an interpretation of the factors that have interacted in the variation and the changes described.

#### 2. Standard language

In all the aforementioned quantifiers, it should be noted first of all that the evolutionary outcome of current Catalan shows two different variants: one apocopated (without -n: u. algú, ningú, cada u) and the other one non-apocopated (with -n: un. algun. ningun, cada un). This formal diversity has been fixed in the normative language and, by extension, in the current standard language, as explained in 1) and 2) (cf. Fabra 2010: conversation 308; Brucart 2008; Brucart & Rigau 2008; IEC 2016: Chap. 17):

- 1) The form un 'one' can be used both as a pronoun and as a determiner. In the first case, it acts as the head of a noun phrase (NP) (1a). In the second, it acts as a nominal specifier (1b-d). As a specifier, the head noun may be overt (1b), but may also not appear overtly. An example of this second use can be seen in partitive constructions (1c), in which we can interpret that, in the head of the construction, there is an ellipsis of the head noun, represented by Ø, and this ellipsis maintains a cataphoric link with the noun that includes the prepositional coda.<sup>2</sup> Another example of its appearance as a specifier without a head noun occurs, for instance, when there is a pronominalisation of the head noun by means of the partitive pronoun en, as can be seen in (1d).
- 1. Standard Catalan also has the forms cadascú ('everyone') and cadascun ('each one'), which are equivalent to cada u and cada un, respectively. On the other hand, in this work, we will use the denomination determiner to refer categorically to quantifiers that act as specifiers. This will enable us to avoid the terminological confusion that might occur if both the uses as the head (pronouns) and as specifiers (determiners) are designated as quantifiers. Moreover, the forms of the noun expressing the natural number: u ('one') and un ('one') will not be studied in this article, as they display a syntactic behaviour that differs from that of the quantifiers analysed here (e.g. el número u 'the number one'). For a historical approach to these forms, see Ramos (2018).
- 2. Partitive constructions are characterised by the fact that the quantified element (head of the construction) denotes a subset of everything represented by the noun included in the prepositional phase (prepositional coda). With regard to the assumption of a nominal ellipsis in the head of the partitive constructions, we follow the criterion of Brucart & Rigau (2008: 1535). For a detailed analysis of the arguments for and against postulating a nominal ellipsis, see Martí (2010: § 1.1.2.2) and the references cited therein.

- (1) a. Un ha d'estar en forma.

  One have PRES .3SG of be .INF in form

  'You have to be fit'
  - b. Un [<sub>N</sub> atleta] no està en forma.
     One athlete not be.INF in form
     'One of the athletes isn't fit'
  - c. Un  $[{}_{N}O_{i}]$  dels atletes not oneself.CL have.AUX.PRES.3SG classificat. qualify.PP 'One of the athletes hasn't qualified'
  - d. Dels atletes $_i$ , només se  $n_i$ 'ha Of the.PL athletes only oneself.CL en.PART.CL have.AUX.PRES.3SG classificat un  $[_N \mathcal{O}_i]$ . qualify.PP one  $\mathcal{O}$  'Only one of the athletes has qualified'
- 2) The forms *algú* 'someone' (2a), *ningú* 'no-one, anyone' (3a) and *cada u* 'everyone' (4a) are pronouns and therefore act as the head of an NP. Conversely, the forms *algun* 'some' (2b-d), *cap* (or *ningun*) 'any, not one, none' (3b-d) and *cada un* 'each one' (4b-d) act as nominal specifiers (determiners). As specifiers, all these quantifiers can modify an overt noun (2b, 3b), except for the case of *cada un*, which does not allow for this possibility (4b).<sup>3</sup> We can also find usages in which the head is not overt, as shown, for example, in the partitive constructions in (2c, 3c and 4c,d) and in cases of pronominalisation with the partitive clitic *en* (2d, 3d).
- (2) a. Algú ho haurà de comprar. Someone it.CL have.FUT of buy.INF 'Someone will have to buy it'
  - b. Algun [N] empresari] ho haurà de comprar. Some businessman it.CL have.FUT of buy.INF 'Some businessman will have to buy it'
  - c. Algun  $[N_i]$  dels empresaris ho haurà de comprar. Some  $\emptyset$  of the PL businessmen it.CL have FUT of buy.INF 'One of the businessmen will have to buy it'
  - d. De tiquets $_i$ , només  $n_i$ 'ha venut algun  $[{}_N O_i]$ . Of tickets only en.PART.CL have.AUX.3SG sell.PP some O 'He/she has only sold one/some of the tickets'
- 3. On the uses of *cada un* ('each one') with an overt head noun in the ancient language, see Camus (in press) and Ramos (2020).

- (3) a. Ningú ha dit res. No-one have.AUX.3SG say.PP nothing 'No-one has said anything'
  - b. Cap/ningun [home] ha dit Any/any man have.AUX.3SG say.PP nothing 'No man has said anything'
  - $[_{N} \mathcal{O}_{i}]$  dels assistents. dit c. Cap/ningun ha res Not one/not one Ø of the.pl participants have.AUX.3SG say.PP nothing 'None of the participants have said anything'
  - d. De cotxes, no n'i hi ha cap/ningun  $[_{N}O_{i}]$ . Of cars not en.PART.CL hi.LOC.CL have.PRES.3SG any/any 'There aren't any cars'
- (4) a. Cada u agafarà una pilota. Everyone take.FUT.3SG a 'Everyone will take a ball'
  - b. \*Cada un [N jugador] agafarà una pilota. player Each one take.FUT.3SG a ball 'Each of the players will take a ball'
  - c. Cada un  $[N \emptyset_i]$  dels jugadors, agafarà una pilota. Each one Ø of the PL players take FUT. 3SG a ball 'Each of the players will take a ball'
  - d. (Parlant dels jugadors<sub>i</sub>): cada un  $[N \emptyset_i [PP \emptyset_i]]$  agafarà una Talking of the PL players, each one take.FUT.3SG a Ø pilota.4 hall '(Talking about the players): each of them will take a ball'

This description of the standard language can be completed with a number of additional considerations:

- a) The pronouns have the domain of quantification incorporated within them as a lexical feature. This means that they act as the head of the NP and are phonologically stressed. In addition, they denote people and are morphologically invariable.
- b) Determiners quantify over the domain of the head of the NP (overt or nonovert), and thus act as specifiers. As we have pointed out in the previous examples (1-4), we can find them performing this function in two phonotactic settings: on the one hand, they can appear before an overt head noun, which
- The example in (4d) would be a case of a partitive construction with implicit coda, which is also possible with the rest of the quantifiers studied.

makes them proclitic and phonologically unstressed elements, and, on the other, they can appear only in the absence of the N, in which case they cease to be proclitic and are phonologically stressed. In addition, unlike pronouns, they can have a [±human] trait and display inflectional variation. The most common morphological variation is usually that of gender, because that of number may be semantically incompatible: un (m. sing.), una (f. sing.), uns (m. pl.), unes (f. pl.); algun (m. sing.), algun (m. sing.), algun (m. sing.), algun (m. sing.), algun (f. sing.): algun (m. sing.), algun (f. sing.): algun (f. sing.).

- c) In the case of the masculine singular form of all these quantifiers (pronouns and determiners), which is the key topic in this work, we observe that in most cases the standard language establishes a formal distinction that allows pronouns to be distinguished from determiners. Pronouns, in general, display the apocopated formal variant (without -n), whereas determiners have the non-apocopated formal variant (with -n). The exception to this distribution is the simple form un, where the non-apocopated variant represents both the pronoun and the determiner.
- d) With regard to the form *ningun* (3b-d), it should be noted that it is treated as a secondary and dialectal variant as opposed to the more widespread invariable form *cap*.<sup>5</sup>

In the following section we compare this formal distribution of the quantifiers in Catalan with the basic uses in the standard model of the other Romance languages. This will allow us to see the similarities and differences in relation to the formal options.<sup>6</sup>

## 3. Romance languages

If we focus first of all on the forms that are equivalent to the Catalan quantifier *un*, Table 1 represents a summary of its Romance cognates, or their equivalents if the cognate form is not currently in force.<sup>7</sup>

- From a diachronic perspective, the quantifier *cap* was created from the grammaticalisation of the noun *cap* (< Latin CAPUT 'head'). On this point, see Duarte & Alsina (1986: 89-90) and Pérez-Saldanya & Torrent (in press).
- 6. For this description, we have taken into account, in addition to consultations with other colleagues, information provided by the following grammar books and dictionaries: for Spanish, Leonetti (1999), Sánchez (1999), RAE & ASALE (2009: 1090ss.); for Portuguese, Cunha & Cintra (2008: 370-381), Porto Editora (2012); for Galician, DRAG, DdD (2006); for French, Grevisse & Goosse (1993: 927-954 and 1076-1118), Delatour et al. (2004: 59-72), Larousse; for Occitan, Alibèrt (1976: 83-95), Lo Congrès; for Sardinian, Jones (1993: 30-52, 203-213); for Italian, Serianni (1991: 286-308), Carrera (2007: 318-324), Aldo (2015); for Romanian, Lamuela (2005), Academia Română (2009).
- 7. The first column of each of the tables (Tables 1-4) offers a list of the Romance languages ordered according to the degree of affinity between them; therefore, the order of the languages may vary in each table. The other three columns show the formal variants according to two basic criteria: on the one hand, the functional one, which opposes the role as specifier (second column: with overt head noun, N, vs. third column: non-overt head noun, Ø) against the role as the head (fourth column: pronoun); and on the other, the phonological one, which takes into account whether the quantifiers

	Specifier (Det) + N Proclitic position: unstressed	Specifier (Det) + Ø Non-proclitic position: stressed	Head (pronoun) Non-proclitic position: stressed
Catalan	un 'one'	un 'one'	un 'one'
Portuguese	um	um	um
Galician	un	un	un
Occitan	un	un	un (òm)
French	un	un	on (un)
Sardinian	unu	unu	sa pessone
Italian	un (uno)	uno	uno
Spanish	un	uno	uno
Romanian	un	unul	se

**Table 1.** Equivalent forms or cognates of Catalan *u/un* 

As can be seen in Table 1, the formal syncretism of the normative standardised proposal in Catalan un presents similarities with the solutions in Portuguese um and Galician un, which coincide in the three syntactic positions. Occitan and French can also maintain the same form un for the three functions, but with frequent alternatives in the pronominal form (om, on).8 This formal distinction with regard to the pronoun is the one that clearly occurs in Sardinian (unu / unu / sa pessone), where the use of *unu* does not seem feasible as a pronoun (Jones 1993: 212). In the case of Italian, Spanish and Romanian, phonotactic factors (proclitic or non-proclitic position) determine the choice of the apocopated (un), in a proclitic position, or the nonapocopated form (uno, uno or unul, respectively), in a non-proclitic position, although in Romanian it does not seem that there are currently any uses of unul as a generic pronoun, but the construction is rather formed with the impersonal clitic pronoun se.9

The equivalent forms or cognates of Catalan *algú/algun* are shown in Table 2. According to this table, as a specifier of an overt noun, variants or cognates of the Catalan form *algun* appear in Portuguese, Galician, Spanish and Romanian (*algum*, algún, algún, vreun). In Catalan, Portuguese and Galician, the form of the determiner with nominal ellipsis continues to be the same variant (algun, algum, algún), but in Spanish and Romanian this non-proclitic position requires the non-apocopated form (alguno, vreunul). On the other hand, languages such as Occitan, French, Italian, and Sardinian make a formal distinction between the proclitic position in

occupy the proclitic position or not: a) if the quantifier appears before an N, it is phonologically unstressed (second column), b) if it appears without the subsequent presence of an N, it is phonologically stressed (third and fourth columns). Only Table 4, dedicated to the equivalents of cada u/ cada un, presents a functional reduction to the non-proclitic position because the proclitic position, in most Romance languages, has become obsolete.

<sup>8.</sup> In Occitan and in French, the forms  $\partial m$  and  $\partial n$ , respectively, have their Latin origin in HOMO 'man'. Catalan also has the cultured cognate hom, which is unusual in the oral language.

<sup>9.</sup> In Italian, the use of *uno* in proclitic position is determined by the sounds at the beginning of the noun that it accompanies. It adopts this formal variant when the next word starts with: gn, ps, z, y, and s + consonant). For the uses of Romanian unul, cf. Academia Română (2009).

	Specifier (Det) + N Proclitic position: unstressed	Specifier (Det) + Ø Non-proclitic position: stressed	Head (pronoun) Non-proclitic position: stressed
Catalan	algun 'some'	algun 'some, one'	algú 'someone'
Portuguese	algum	algum	alguém
Galician	algún	algún	alguén
Spanish	algún	alguno	alguien
Romanian	vreun	vreunul	cineva
Occitan	qualque	qualqu'un	qualqu'un (qualqu'ü)
French	quelque	un (quelqu'un)	quelqu'un
Italian	qualche	qualcuno	qualcuno
Sardinian	carki	carcunu	carcunu (calicunu)

Table 2. Equivalent forms or cognates of Catalan algu/algun

which there is no need to add UNUM to the determiner (qualque, quelque, qualche, carki), and the non-proclitic position. In fact, in this non-proclitic position, the determiner requires to be combined with the derivative of UNUM in all these cases (qualau'un, quelau'un, qualcuno, carcunu). It should also be noted that, in Occitan. French, Italian and Sardinian, the form used as a specifier with nominal ellipsis usually coincides with the form chosen for the pronoun (qualqu'un, quelqu'un, qualcun, carcunu). Conversely, in Catalan, Portuguese, Galician, Spanish and Romanian, a different form is chosen to represent the pronoun form. In this sense, it is also noteworthy that Catalan marks the differentiation between the form of the determiner with a non-overt noun and that of the pronoun using formal variants of the same compound (algun vs. algú), and does not resort to the formation of a different compound, as occurs in Spanish (alguno vs. alguien), in Portuguese (algum vs. alguém), in Galician (algún vs. alguén) and in Romanian (vreunul vs. cineva). 10

As for the cognates of ningú/cap (ningun), illustrated in Table 3, we can observe that, in Catalan, Occitan, French, Portuguese, Galician and Sardinian, the specifier function is performed in the same way (cap/ningun, cap/degun, aucun, nenhum, ningún, nudda) regardless of whether the noun is overt or not. On the other hand, in languages such as Spanish, Romanian and Italian, the presence or absence of the noun determines the formal variant (ningún vs. ninguno; niciun vs. niciunul; nessun vs. nessuno). In contrast, all the languages, except Italian (nessuno), opt for a different way of representing the pronoun (ningú, degun/degü, personne, ninguém, ninguén, neune, nadie, nimeni).

Finally, in the case of cada u/cada un, their Romance cognates are shown in Table 4, where it can be seen that most of the languages express both functions in the same way. However, in the case of Catalan and, to a greater or lesser extent, Galician and Spanish, a formal differentiation is drawn between the specifier with

<sup>10.</sup> Alibèrt (1976: 84–85) suggests that, in the spoken language, this possibility also exists in Occitan: qualqu'un 'some' / qualqu'ü 'someone'. See the case of degun 'any' and degü 'no-one, anyone' in Table 3.

	Specifier (Det) + N Proclitic position: unstressed	Specifier (Det) + Ø Non-proclitic position: stressed	Head (pronoun) Non-proclitic position: stressed		
Catalan	cap (ningun) 'any'	cap (ningun) 'any, not one, none'	ningú 'no-one, anyone'		
Occitan	cap (degun)	cap (degun)	degun (degü)		
French	aucun	aucun	personne		
Portuguese	nenhum	nenhum	ninguém		
Galician	ningún	ningún	ninguén		
Sardinian	nudda	nudda	neune, nemos		
Spanish	ningún	ninguno	nadie		
Romanian	niciun	niciunul	nimeni		
Italian	nessun (nessuno)	nessuno	nessuno		

Table 3. Equivalent forms or cognates of Catalan ningú/ningun

Table 4. Equivalent forms or cognates of Catalan cada u / cada un

	Specifier (Det) + Ø Non-proclitic position: stressed	Head (pronoun) Non-proclitic position: stressed
Catalan	cada un 'each one'	cada u 'everyone'
Galician	cada un	cadaquén (cada un)
Spanish	cada uno	cada uno (cada quién)
Portuguese	cada um	cada um
Sardinian	cadaunu	cadaunu
French	chacun	chacun
Occitan	cadun	cadun
Romanian	fiecare	fiecare
Italian	ciascuno	ciascuno

a non-overt noun and its use as a pronoun: Cat. cada un vs. cada u; Gal. cada un vs. cadaquén (cada un); Spa. cada uno vs. cada uno (cada quién).

#### 4. Dialectal variation

The distribution of quantifiers in the standard language broadly corresponds to the variants we can find in the non-standard language of the greater part of Catalan. However, it should be noted that there are some geographical areas, especially the Valencian Community, that display a series of quantifier forms that deviate from the standard.<sup>11</sup>

11. The information on dialectal variation that we present in this section is based fundamentally on the research that we have carried out through several sources: a) Extraction from the whole oral corpus of the Museum of the Word (<a href="https://www.museudelaparaula.es/web/home/">https://www.museudelaparaula.es/web/home/</a>), which contains numerous audiovisual interviews (more than 300) of spontaneous conversation with old people from a large part

# 4.1. The forms u/un

In section 2, we have seen that the form *un* 'one' shows a syncretism between its use as a pronoun and its use as a determiner without an overt noun. Now we will explain that in the Valencian variety there are other formal options, which are not always the same within the Valencian territory.

First, there is the more conservative option, which as we will remark below (cf. § 5), is linked to a historical variant: the use of the non-apocopated formal variant when the quantifier is in a proclitic position (see 1b) and the use of the apocopated formal variant whenever the quantifier is in a non-proclitic position (5). This apocopated form continues to be used by speakers of over sixty years of age in the regions of Plana Alta, Alcalaten, Alt Maestrat and, especially, in Plana Baixa, <sup>12</sup> although often with alternations with the non-apocopated form *un* when it acts as a specifier, as we reproduce, for practical purposes, in (6a,b) (see 1c,d). It should be noted, however, that vacillations in this area tend to be resolved in the age groups under the age of sixty, with an increase in the use of the non-apocopated variant *un*, thus favouring a formal distinction between the pronoun, with the apocopated form (5a), and the determiner, with the non-apocopated form (6a,b).

- (5) a. U ha d'estar en forma.

  One have PRES.3SG of be.INF in form

  'You have to be fit'
  - b.  $U\left[_{N} \varnothing_{i}\right]$  dels atletes no s'ha classificat. One  $\varnothing$  of the PL athletes not onself.CL have AUX.PRES.3SG qualify.PP 'One of the athletes hasn't qualified'
  - c. Dels atletes, només se  $n_i$ 'ha Of the.PL athletes only onself.CL en.PART.CL have.AUX.PRES.3SG classificat u  $[_N \ \mathcal{O}_i]$ . qualify.PP one  $\ \mathcal{O}$  'Only one of the athletes has qualified'

of the Valencian territory; b) 50 written surveys (not spontaneous) in which the interviewees rated, from different usage options, the uses they make of quantifiers (the interviewees, men and women, were of different ages, between 30-80 years old, and covered the main dialectal zones of Catalan); c) constant analysis of spontaneous conversations held in the street, which at the same time makes it possible to correct, if necessary, the problems that could arise in the surveys as a consequence of the so-called observer's paradox; d) non-specific literature on dialectal information: Alcover & Moll (1964-1969), Coromines (1980-2001), Sanna (1988), Badia (1994: 515-539), Bosch (2002: 152-153), Saragossà (2005: 136-143), Colomina (2008: 557, 563), Beltran (2011: 78), Beltran & Herrero (2011a: 77), Beltran & Herrero (2011b: 68), Beltran & Segura (2017: 201, 204); e) direct or indirect references to the subject in normative works (IEC 2016: Chap. 17; AVL 2006: § 19; AVL 2016: § 24), which help to put together a compilation of current uses; and f) consultation of the written corpora *Corpus Textual Informatitzat de la Llengua Catalana* of the IEC (<a href="https://ctitle2.iec.cat/scripts/">https://ctitle2.iec.cat/scripts/</a>) and *Corpus Informatitzat del Valencià* of the AVL (<a href="https://ctitle2.iec.cat/scripts/">https://ctitle2.iec.cat/scripts/</a>)

<sup>12.</sup> This also seems to be the variant we find in the Alghero dialect, spoken in the city of Alghero on the Italian island of Sardinia, as can be deduced from the examples in Sanna's dictionary (1988) and the contributions made by Bosch (2002: 152-153) and Colomina (2008: 563).

- (6) a. Un  $[N \emptyset]$  dels atletes, no s'ha classificat.
  - b. Dels atletes, només se n'ha classificat un  $[N \emptyset]$ .

In the case of the northernmost regions of the Valencian Community, the trends tend to be different: on the one hand, in Baix Maestrat there is an increase in the uses of the non-apocopated variant, which also extends to the pronominal use, as in (1a), which we reproduce as (7). In fact, this use ties in with the behaviour in the Catalan area of the so-called *Tortosi*. On the other hand, there is the region of Ports, which tends to seek a formal alternative as in (8a), different from the variant used in (7). We are referring to the use of the form uno 'one', which coincides with the variant of the Spanish spoken in the neighbouring towns and villages of Aragon.<sup>13</sup> This formal variant is also possible, with vacillations, in the structures formed by a determiner and non-overt N (8b,c).

- (7) Un ha d'estar en forma.
- (8) a. Uno ha d'estar en forma. One have PRES .3SG of be INF in form 'You have to be fit'
  - b. Uno  $[_N \emptyset_i]$  dels at letes $_i$  no s'ha classificat. One  $\emptyset$  of the PL athletes not onself. CL have . AUX. PRES. 3SG qualify. PP classificat. 'One of the athletes hasn't qualified'
  - atletes, només se n<sub>i</sub>'ha c. Dels Of the.PL athletes only onself.CL en.PART.CL have.AUX.PRES.3SG classificat uno  $[N \emptyset]$ . qualify.PP one 'Only one of the athletes has qualified'

In the central regions of the Valencian Community, among speakers over sixty years of age, we can find alternations that oscillate between the solutions displayed in (5), (6) and (8). Nevertheless, among the middle and younger generations, there is a tendency to consolidate the use of *uno* in all non-proclitic forms, as in (8).

This formal alternation between (5), (6) and (8) also appears in Valencian regions such as Ribera Alta, Ribera Baixa, Costera, Safor and Vall d'Albaida, although cases as in (5b,c) seem to have disappeared.

In the south of the Valencian Community, the variant in (8) is fully consolidated, except for in the region of Marina Alta, where there is a preference for the variant un as a pronoun and as a determiner without an overt noun, 14 although in both positions there is an increasingly presence of the variant *uno*.

- 13. The choice of the Castilian form uno also appears alternately in the regions of the so-called Aragon Strip, which is an area that borders with Catalonia (cf. Veny & Pons 2016: map 1965, although it refers to the natural number *vint-i-u* 'twenty-one').
- 14. This use has been explained by a historical fact: the repopulation of Mallorca in the 17th century (cf. Beltran 2011: 78; Beltran & Herrero 2011a: 77; Beltran & Herrero 2011b: 68, map 111; Beltran & Segura, 2017: 201).

# 4.2. The forms algú/algun

Regarding the uses of  $alg\acute{u}$  and algun, we have pointed out that the standard language presents a distribution of forms conditioned by the function:  $alg\acute{u}$  'someone', the head of the NP (pronoun), and algun 'some', a specifier (determiner). But the dialectal data that we have collected indicate that this use, although generalised in most Catalan, presents areas or cases deviating from the standard model.

One of the divergences from the general variant occurs when the apocopated form  $alg\dot{u}$  is also used as a specifier with a non-overt noun (cf. ex. 2c,d vs. 9a,b). This fact gives rise, on the one hand, to a formal syncretism between the form of the pronoun and that of the determiner in non-proclitic position (cf. ex. 2a vs. 9a,b) and, on the other, to the possibility that  $alg\dot{u}$ , as a determiner, can correspond to both human (9a) and non-human (9b) referents.

- (9) a. Algú  $[N] \otimes [N]$  dels empresaris; ho haurà de comprar. Some  $\emptyset$  of the PL businessmen it.CL have FUT of buy.INF 'One/some of the businessmen will have to buy it'
  - b. De tiquets, només  $n_i$ 'ha venut algú  $[N_i]$ . Of tickets only en.PART.CL have.AUX.3SG sell.PP some  $\emptyset$  'He/she has only sold one/some of the tickets'

The use of  $alg\acute{u}$  as a specifier is found in an area that ranges from the region of Alt Maestrat to the area around the city of Valencia. In general, it occurs in speakers over sixty years of age, who also prefer the apocopated variant for the quantifier u (cf. ex. 5b,c). Nevertheless, it is fair to say that it is not unusual to hear cases of alternation with algun as a specifier, which is a generalised option among the generations under sixty years old.

Another phenomenon worth mentioning is the progressive increase in the use of the Spanish form alguno 'some' (10). This formal variant is heard among speakers of all generations, in alternation with the traditional variants that we have pointed out earlier, in the central regions of the Valencian Community. Yet, it is not exclusive to this area, and we find it again in regions in close contact with Spanish, such as in the region of Ports and in the southernmost regions of the Valencian Community. Overall, however, the use of the apocopated variant algu as a pronoun (2a) appears to remain fairly stable.

- (10) a. Alguno  $[N] O_i$  dels empresaris ho haurà de comprar. Some O of the PL businessmen it.CL have FUT of buy.INF 'One/some of the businessmen will have to buy it'
  - b. De tiquets $_i$ , només  $n_i$ 'ha venut alguno  $[_N \emptyset_i]$ . Of tickets only en.PART.CL have.AUX.3SG sell.PP some  $\emptyset$  'He/she has only sold one/some of the tickets'

Finally, the formal instability of this quantifier as a specifier with a non-overt noun is not exclusive to the Valencian area. In fact, in partitive constructions such as those in (9a), in which the non-overt referent is a person, it is not unusual to find vacillations between the non-apocopated variant (algun) and the apocopated form (algú) in the rest of Catalan. Even in the standard language, the non-apocopated variant with a personal pronoun is fully consolidated (cf. Brucart 2008: 1444-1449; IEC 2016: 664. See § 6.1 below):

(11) Algú  $[_{N} \emptyset_{i}]$  de nosaltres, ho haurà de comprar. it.CL have.FUT of buy.INF Some Ø of us 'One of us will have to buy it'

# 4.3. The forms ningú/cap (ningun)

In the case of the forms ningú and cap, the standard distribution also indicates the use of ningú 'no-one, anyone' as a pronoun and that of cap 'any, not one, none' as a specifier. This second case alternates with the colloquial form *ningun*, especially in much of the Valencian area and the island of Ibiza (cf. IEC 2016: 647). This distribution is broadly maintained throughout the Catalan language, but it should be noted that, similar to the case of algú, the apocopated variant ningú may also appear in Valencian territory, acting as a specifier with a non-overt noun (12), alternating with *cap* or *ningun* (cf. with 3c,d):

- (12) a. Ningú  $[_{N} \mathcal{O}_{i}]$  dels assistents, ha dit res. Not-one Ø of the.pl participants have.AUX.3SG say.PP nothing 'None of the participants has said anything'
  - ningú  $[_N \mathcal{O}_i]$ . b. De cotxes, no n'hi not en.PART.CL hi.LOC.CL have.PRES.3SG any 'There aren't any cars'

This use can be observed especially in the central and northern area of Valencian where we have also found the use of algú as a specifier and, as in this case, it is restricted to elderly speakers. Nevertheless, in the same central zone, and also in the southern area of Valencian and in the Valencian region of Ports, the Spanish form *ninguno* 'any, not one, none' (13) is present and alternates with cap and with ningun, although for the time being it does not seem to occupy the position of the pronoun ningú (cf. 3a).

- (13) a. Ninguno  $[N \emptyset_i]$  dels assistents; dit res. Ø of the.pl participants have.AUX.3SG say.PP nothing 'None of the participants has said anything'
  - b. De cotxes, no n'hi ninguno  $[_{N} \mathcal{O}_{i}]$ . not en.PART.CL hi.LOC.CL have.PRES.3SG any Of cars 'There aren't any cars'

We will complete the information on the use of the apocopated form ningú as a specifier by referring to its appearance in partitive constructions with a prepositional coda that includes a personal pronoun. In this case, as with  $alg\acute{u}$ , the selection of the apocopated form is generalised throughout the whole of Catalan (14):

(14) Ningú  $[N \ O_i]$  de nosaltres, ha dit res. Not-one O of us have.AUX.3SG say.PP nothing 'None of us has said anything'

#### 4.4. The forms cada u/cada un

In oral language, and often also in written language, the forms *cada u* 'everyone' and *cada un* 'each one' also display uses that differ from those observed in the standard proposal. In the Valencian Community, as a specifier, people prefer the apocopated variant (15) (cf. with 4c,d).

- (15) a. Cada u  $[N \emptyset]$  dels jugadors, agafarà una pilota. Each one Ø of the PL players take FUT. 3SG a ball 'Each of the players will take a ball'
  - b. (Parlant dels jugadors<sub>i</sub>): cada u  $[N \emptyset_i]_{PP} \emptyset_i$ ] agafarà una pilota. ( $[PP \emptyset_i]_{PP} \emptyset_i$ ] = dels jugadors)

    Talking of the PL players, each one Ø take FUT. 3sG a ball '(Talking about the players): each of them will take a ball'

In the rest of Catalan, it is also not unusual to find this variant without -n in this position, especially if the coreferent designates a person and the complement of the partitive construction is non-overt (15b). This formal vacillation also affects more especially partitive constructions with a personal pronoun (16), which are structures that, in the cases of  $alg\acute{u}$  and  $ning\acute{u}$ , generally opted for the forms without -n. 15

(16) Cada un/cada u  $[N O_i]$  de nosaltres, agafarà una pilota. Each one/each one O of us take.FUT.3SG a ball 'Each of us will take a ball'

In the Valencian area where the interfered variant uno of the quantifier u/un is common, the variant  $cada\ uno$  'everyone, each one' has also begun to spread among the middle and younger generations, albeit with a lower frequency than that of uno, both for the pronoun (17a) and for the specifier (17b):

15. It is striking that, in this type of constructions with personal pronouns, the examples given by the IEC (2016: 664) suggest the apocopated form in the case of algú/algun and ningú/cap (ningun) and, in contrast, the non-apocopated form in the case of cada u/cada un. Cf. also Wheeler, Yates & Dols (1999: 138), who have a similar criterion. Brucart (2008: 1444) assumes the apocopated variant for algú/algun, but pointing out the characteristics that differentiate these partitives with a personal pronoun from the rest of the partitives. See also note 17.

- (17) a. Cada uno agafarà una pilota. Everyone take.FUT.3sg a ball 'Everyone will take a ball'
  - b. Cada uno  $[N \emptyset]$  dels jugadors; agafarà una pilota. Each one Ø of the PL players take.FUT.3SG a ball 'Each of the players will take a ball'

#### 5. Historical perspective

In the previous sections, we have seen the morphosyntactic behaviour of the quantifiers studied in the standard language and we have contrasted these uses with the rest of the Romance languages. This has allowed us to observe the similarities and differences between these languages, which, when selecting the form adopted by the quantifier, tend to oscillate between a preference for a phonotactic criterion (proclitic or non-proclitic position) or for a functional criterion (categorical and structural distinction). We have completed this panorama with dialectal information, which in some way shows that the criteria of distribution between form and function are not fully consolidated. Furthermore, we have seen that formal vacillations occur fundamentally in the forms assigned to the function of specifier in a non-proclitic position. In fact, we must not lose sight of the fact that they occupy a position at the intersection between the other two more stable functions: from a functional point of view, they link up with the other specifiers with an overt noun and, from a phonological point of view, they connect with the pronoun, due to its non-proclitic nature.

In order to understand this variation, it is necessary to know how these quantifiers have behaved throughout history. In this sense, we must first remember that, in the transition from Latin to Catalan, the latter follows this general phonetic law: words ending in -NE(M) or -NU(M) drop their unstressed vowel and, if the word occupies a non-proclitic position, they also drop the final -n (Duarte & Alsina 1986: 81-90; Gulsoy 1996). This rule affects the formation of the quantifiers comprising UNUM in Catalan. For instance, as illustrated in (18), in the case of (18a), the quantifier ALIOUN(U), in its evolution to Catalan, maintains the final nasal consonant, algun, because it appears in a proclitic position as a noun modifier. In the case of (18b), on the other hand, the same quantifier drops the final nasal consonant, algú, because it occupies a non-proclitic position.

- (18) a. ALIQUN(U) HOMIN(E) > algun homeSome man some man 'Some man'
  - b. ALIQUN(U) VENIT > algú ve Someone come.PRES.3SG someone come.PRES.3SG 'Someone is coming'

As Camus (in press) and, in a more detailed manner, Ramos (2018, 2020) have pointed out, the situation of quantifiers composed of UNUM in medieval Catalan broadly reflected this phonetic law. This means that in a non-proclitic position, both when they acted as the head of NP (pronouns) and when they acted as specifiers of a non-overt noun, they dropped the final -n: u, algú, ningú and cada u. Nevertheless, vacillations between maintaining and suppressing the final -n in the non-proclitic position were also frequent in this period. As Ramos (2020) has pointed out, in the evolution from the Middle Ages to the 20th century, Catalan presents the following trends with each of the quantifiers studied:

- a) In the case of *u/un*, in the Middle Ages there was an alternation of the formal variants *u* and *un*, regardless of the geographical origin, both in their use as a pronoun and as a specifier with a non-overt noun. In the Early Modern period, in Valencian texts this alternation gets way to the preferential use of *u* in both functions, and in non-Valencian texts there are very similar percentages of vacillations between *u* and *un*. During the 19th and early 20th centuries, the Valencian tendency to resolve the two uses with the apocopated form *u* became firmly established; conversely, in the same syntactic contexts, the rest of Catalan preferred the non-apocopated variant *un*.
- b) With regard to algú/algun, in the Middle Ages, although there were alternations between algú and algun in the uses as a pronoun and as a specifier with a non-overt noun, overall in Catalan the most frequent form in both cases is the apocopated one. But despite this, in the specific case of the variant algun, it is used more frequently as a specifier than as a pronoun. This situation was repeated in the Early Modern period. On the other hand, in the 19th century, in its uses as a pronoun, the texts reflect a generalisation of algú throughout the whole territory; and in the uses as a specifier, the apocopated form algun is maintained in the Valencian area, but the non-apocopated form algun is clearly adopted in the rest of Catalan.
- c) As for *ningú/ningun*, in the Middle Ages, in general, the apocopated variant predominated over the non-apocopated one, not only in its uses as a pronoun, but also in the uses as a specifier with a non-overt noun. This situation is repeated in the Early Modern period, when a new quantifier, *cap*, competing for the position as a specifier, was documented. Throughout the 19th century, only *ningú* was used as a pronoun, and uses as a specifier with a non-overt noun, regardless of the geographical origin, generally appear with *cap*, which can alternate with *ningú* and *ningun*.
- d) With regard to *cada u/cada un*, despite the alternations between the two formal variants, the mediaeval uses generally show a predominance of the apocopated variant *cada u* in the two functions studied. In the Early Modern period, this variant became firmly established as a pronoun throughout the territory and continued to predominate as a specifier with a non-overt noun. However, in this second function, it should be noted that, whereas in Valencian texts the apocopated variant is the general one, in non-Valencian texts it alternates with the variant *cada un*, which became notably widespread. In the 19th century, Valencian texts stabilised the use of the apocopated variant *cada u* as a pronoun and as a specifier with a non-overt noun; on the other hand, the rest

of Catalan shows alternations of the two formal variants, although displaying a preference for *cada un* in cases of a specifier with a non-overt noun.

If we link this historical review to the standard and dialectal description of the quantifiers studied, we can say that the current alternations are just one more stage in the evolution of the use of quantifiers. But what are the reasons that have guided and continue to guide this language change? Can the current behaviour of some dialects or subdialects help us to understand rather ancient phases of this language change, as dialectology has often maintained? (cf. De Schutter 2010: 76).

## 6. Causes of the language change

As we have pointed out in the introduction to this work, in the study of language change, two types of factors are usually stressed: internal factors, associated with language as a system that adjusts its functioning, and external factors, related to the use of the language made by the speaker in his or her communicative setting. As we shall see below, both of them are important in explaining the formal variation and the changes described.

# 6.1. Pragmatic-discursive factors

One of the most important factors to be taken into account in order to understand the changes produced in the distribution of quantifiers is pragmatics. We can observe that, from a historical point of view and still today in areas of the Valencian dialect, the application or simple vacillation of the general phonetic rule of the dropping of the -n in a non-proclitic position gives rise to a polysemy, which may lead to ambiguous communicative situations. In fact, each of the quantifiers concentrates in a single form – the apocopated one (u, algú, ningú and cada u) – the possibility of performing several syntactic functions (head and specifier) and of having different meanings (non-coreferential and coreferential) (19). In addition, the same form can be identified with both [+human] and [-human] features (cf. 19a-19b and 9b).

(19) a. Algú no pagarà. (Head: we do not know the concrete referent designated by the pronoun)

> Someone not pay.FUT.3SG 'Someone will not pay'

b. Algú  $[N \otimes N]$  no pagarà. (Specifier: the referent of the noun is within the discourse)

Some Ø not pay.FUT.3SG 'One of them will not pay'

On the other hand, historical vacillations in the application of the phonetic rule result in the presence of more than one form (the apocopated one, without -n, and the non-apocopated one, with -n) to perform the same function. This fact, understood as a synonymy (e.g.  $alg\dot{u} = algun$ ), further increases the lack of concretion

of the form-function correspondence and, from a communicative point of view, the formal variation becomes redundant.

Faced with this historical and dialectal panorama and in view of the more generalised distribution of the formal variants that the contemporary language has reached, everything suggests that the current variants respond, to a large extent, to a pragmatic-discursive strategy: the attempt to overcome the problems that this polysemy and this synonymy could trigger in order to gain communicative effectiveness (Traugott & Dasher 2002; Mithun 2003: 553; Traugott 2012).

It can be observed that, except for the singular case of *u/un*, which we will see below, in much of Catalan the apocopated forms specialise in the function as the head of an NP and the non-apocopated forms tend to cover the function as a specifier. This distinction between form and function based on a formal marking *-n*, from a theoretical perspective, connects with the concept of iconicity and with markedness theory. According to these concepts, the forms with more pragmatic relevance tend to be formally more salient. <sup>16</sup>

Note that, in the assumption we are dealing with, the unmarked form, without -n, is assigned to the simplest function: the head element, inherent non-coreferential meaning, [+human], morphologically invariable. And the marked form, with -n, designates the most marked function: absence of a head, coreferent meaning depending on the discursive context, [±human], morphologically variable. Ramos (2020) has drawn attention to the fact that the conventionalisation of this formal differentiation is not a fact that occurs quickly, but is something that gradually establishes itself over the centuries. Even if we focus our attention on the dialectal variation in the current language as an instrument for understanding processes of change in other eras (cf. De Schutter, 2010: 76), there are geographical areas that show formal vacillations and intermediate evolutionary situations that endorse the pragmatic factor as one of the most outstanding in this language change.

For example, in the Valencian territory, especially in the northern regions, in the generations under the age of sixty, we can find intermediate situations in which, although the use as a pronoun adopts the apocopated form in all the quantifiers, different stages may arise in the position of specifier:

- a) If the non-explicit nominal referent is human, the apocopated forms remain (20a), but if it is non-human, the non-apocopated forms are chosen (20b). This means that the forms without -n, which could designate elements with [+human] or [-human] features, now see their use reduced only to the cases that are identified with people, following the model of the forms used as a pronoun, without -n, which prototypically designate people.
- (20) a. De convidats,  $n_i$ 'ha arribat  $u[_N \emptyset_i]$ . (=[+human]) Of guests en.PART.CL have.AUX.PRES.3SG arrive.PP one  $\emptyset$  'One of the guests has arrived'

On the concept of iconicity, see Dressler (1987: 7-8), Pérez Saldanya (1998, 13-33), Mithun (2003), Bybee (2003) or Van Langendonck (2007).

- b. De trens, n<sub>i</sub>'ha arribat un  $[N O_i]$ . (= [-human]) Of trains en.PART.CL have.AUX.PRES.3SG arrive.PP one Ø 'One of the trains has arrived'
- b) If the element acting as a discursive coreferent shows a certain distance from the specifier, it is not unusual to find that, although the ellipsis refers to a human antecedent, the form taken by the specifier is not apocopated, and has a final -n (21). This means that more relevance is given to marking the coreferential specifier iconically, with -n, than to maintaining the distinction between [+human] (without -n) and [-human] (with -n). The distribution of formal variants therefore becomes similar to that of the rest of Catalan.
- (21) a. No podia tenir xiquets: i Notcan.PAST.3SG have.INF children and go.AUX.PRES.3SG go.INF to podia adoptar algun  $[N \emptyset_i]$ . veure si en if en.PART.CL can.PAST.3SG adopt.INF some 'She couldn't have children and went to see if she could adopt one'
  - b. Han entrat molts pares, però estic segur que Have.AUX.PRES.3PLenter.PP many parents but be.PRES.1SG sure algun/un  $[N \emptyset_i]$  no entrarà. some/one Ø not enter.FUT.3sG 'A lot of parents have gone in, but I'm sure that some/one won't enter'

This option contrasts with the more conservative tendency that the same speakers present when the human coreferent appears adjacent to the quantifier: for example, in partitive constructions like (22):

(22) Han entrat molts pares, però estic Have.AUX.PRES.3PL enter.PP many parents but be.PRES.1SG sure that algú  $[N \ O_i]$  d'ells, no entrarà. of them not enter.FUT.3sG 'A lot of parents have gone in, but I'm sure that one/some of them won't enter'

Notice that in (22) we have a partitive construction with the overt coda, d'ells, which contrasts with the partitive construction with the implicit coda in (21b). This overtness of the coda makes the need to singularise the quantifier with the -nirrelevant, because it shows the referent of the specifier next to it. Moreover, this could explain why this variant does not sound strange even outside the Valencian area, and why, especially with first and second person personal pronouns, variants with the apocopated form are still common today everywhere (23):17

17. Brucart (2008: 1444-1449) justifies this use of (23) by referring to the deictic nature of the first and second person pronouns that include the coda of the partitive construction. According to this author, their deictic and non-anaphoric nature involves discarding the form of the specifier (algun) and adopting a head form (algu). As we understand it, although this type of pronouns occupy a very The partitive constructions in (22) and (23) have to be differentiated from the structures in (24), where the prepositional phase contains an NP in the singular indicating an origin.<sup>18</sup> Note that in (24a) the apocopated quantifier acts as a pronoun that has its indefinite inherent meaning restricted. But this interpretation is not viable when the referent is not human (24b). In this case, it is understood that there is a discursive antecedent linked to the non-overt N, and the quantifier can only adopt the formal variant with -n.

- (24) a. Algú de la comissió vindrà demà.

  Someone from the committee come.Fut.3sg tomorrow 'Someone from the committee will come tomorrow'
  - b. Algun [NØ] de l'aparcament està tapant Some Ø from the car-park be.PRES.3SG impede.GER l'eixida. (Ø = vehicle) the exit
     'One (of the vehicles) in the car park is blocking the exit'

If we take a look back at section 2, where we have described the basic functioning of the Romance languages, we can see that the strategy of formally differentiating the two functions has also historically been assumed by many other Romance languages. In fact, for instance, Spanish has ended up consolidating the forms *alguien* and *nadie* as pronouns as opposed to the form *alguno* and *ninguno*, which historically were not only used as specifiers with a non-overt noun, but also as pronouns. <sup>19</sup> Other languages such as Portuguese and Galician have also established formal differences: the former contrasts *algum* with *alguém* and *nenhum* with *ninguém*; the latter, *algún* with *alguén*, *ningún* with *ninguém*, and even *cada un*, as a pronoun, has the more marked alternative *cadaquén*. Romanian has also sought to mark the functional differences of the quantifiers analysed in different

high position in the hierarchy of referentiality and, therefore, are very similar to the inherent feature of person that the apocopated form entails, in view of the historical and dialectal alternations that have been highlighted, it is easier to explain them as residual cases within the group represented by (22).

<sup>18.</sup> For further information about this kind of construction, see Brucart (2008: 1449) and Sánchez (1999: 1034-1051).

<sup>19.</sup> An approximation to the Spanish texts of the 15th century that form part of the diachronic corpus CORDE of the RAE (<a href="http://corpus.rae.es/cordenet.html">http://corpus.rae.es/cordenet.html</a>) confirms this polysemy. On the other hand, although in current Spanish this functional distinction has undergone a process of routinisation, it is not free of cases of alternations between *alguno/alguien* and *ninguno/nadie* in certain partitive structures with overt coda (cf. RAE & ASALE 2009: 1445-1447).

ways: the specifiers *vreunul* and *niciunul* have the corresponding pronouns *cineva* and *nimeni*. Other languages, despite not having developed a formal differentiation in many of their quantifiers, have done so in the case of the negative existential quantifier, as for example in Occitan (cap/degun vs. degü), in French (aucun vs. personne) or in Sardinian (nudda vs. neune).

# 6.2. Phonological and analogical factors

In the previous section, we have pointed out that the pragmatic-discursive factors played and continue to play a role in the selection of different forms for each function. Yet, although in the specific case of the simple form u/un the Valencian region has consolidated the apocopated form u for the generic value of the pronoun, most Catalan varieties have adopted the non-apocopated form *un* to perform this function. This particular behaviour with respect to the rest of the quantifiers studied is due, in our opinion, to the phonological instability of this form.<sup>20</sup>

Note that we are dealing with a monosyllabic word, with the variant u or with the variant un, which, due to its lexical and stressed nature, is able to act as a head or as a specifier without the head noun. This fact, in words that combine a vowel and a consonant, such as un, is not exceptional in Catalan, but it is unusual in words that only have a vowel without a consonantal coda, such as u. Given this lack of phonetic substance, the speaker tends to look for a formal variant that affords more consistency to the instability perceived in the apocopated form. The closest option is the adoption of the same variant used by the specifier in the proclitic position, the non-apocopated form un, which retains the underlying etymological -n (25a).21

- 20. Cf. the work, conducted on the basis of a historical perspective, of Ramos (2018, 2020).
- 21. In reference to the concept of the minimality of word, Cabré Monné (1994, 1995) points out that languages tend to establish phonological minima in their lexical words. In Catalan, the minimum phonological sequence in independent words is the so-called moraic trochee (with two moras). Thus, words formed by a consonant + vowel tend to present limitations and especially so in the case of monosyllables consisting of a single vowel, which have just one mora, namely, the one corresponding to the vowel in the head. Monosyllabic words with a long vowel or with a diphthong and those with a vowel joined to a consonant also exceed these minima (Jesús Jiménez, personal communication). Therefore, the case of un would not be problematic, because it contains two moras, but that of u would be a problem, because it has only one mora. Along these lines, Floricic & Molinu (2012) highlight the fact that the minimality constraints also affect the monosyllabic forms of the imperative in Romance languages, which in some cases present morphological syncretism with other verbal forms. When this circumstance occurs and the minimality constraints are violated, there is also a tendency to seek a solution by inserting an enclitic element acting as a mark that allows us to differentiate coinciding verb forms (e.g. the second person imperative of tenir 'to have' in Catalan, which has the same form as the 3sg of the present indicative té, and has been replaced in some varieties with a form displaying a final -n: ten or tin 'have.IMP').

- (25) a. Ell ha vist un [home].

  He have.AUX.PRES.3SG see.PP one man

  'He has seen a man'

  - c. U ha vist un home > Un ha
    One have.AUX.PRES.3SG see.PP one man One have.AUX.PRES.3SG
    vist un home.
    see.PP one man
    'One has seen a man'

When the non-apocopated form becomes consolidated in specifiers with a non-overt noun (25b), that is, in a non-proclitic position, the next step is to extend this form to the other non-proclitic position, that of the pronoun (25c).<sup>22</sup> It should be remembered that this second stage has taken place in a large part of the Catalan language, but there are areas in the Valencian territory that have only reached the first stage (25b).

We must not lose sight of the importance of the analogical factor in this generalisation of the first stage, illustrated in (25b), to other forms. In fact, the analogy affects not only the homogenisation of specifiers in the case of *un*, but also that of the rest of the quantifiers, which will end up adopting the same non-apocopated variant: *algun*, *cada un* and, dialectally, *ningun*.<sup>23</sup> This analogical variants also make it possible to match the form-function relationship that other quantifiers display such as the interrogative determiner *quin* 'what, which (one)' (26a) vs. the interrogative pronoun *qui* 'who' (26b).<sup>24</sup>

- 22. For examples in other languages where a phonetic change entails grammatical consequences due to the reduction of a formal alternation and the analogical generalisation of one of the formal variants at the expense of the other, see Joseph (2003: 483).
- 23. Note that this tendency towards homogeneity in specifiers also occurs in many of the Romance languages, as described above (cf. tables in § 3). In fact, from a Natural Morphology perspective, as underlined by Dressler (1987) and, in the Catalan domain, Pérez Saldanya (1998: § 1.4.4), these changes can also be explained by referring to naturalness principles such as that of transparency (the use of different forms to express different functions, that is, each form has a meaning or function), of uniformity (each function has a different form) and of congruence (following the most usual trends in each language). As Pérez Saldanya (p.c.) suggests, the use of the pronoun *un* goes against the uniformity principle (it is not expressed in a uniform way with respect to the other equivalent pronouns) and against the transparency principle (pronoun and determiner have the same form), but it does follow phonological principles that tend to avoid the minimality of word. On the role of analogy in linguistic change, see also Bybee (2007: 958-964).
- 24. Cf. IEC (2016: 664). It should be noted that the form-function distinction in the formal pair quin/qui has remained stable since the ancient language, unlike the historical vacillations of the quantifiers analysed in this work.

- (26) a. Quin  $[_{N} \mathcal{O}_{i}]$  dels amics. vindrà? seus of the PL his/her friends come.FUT.3SG Which Ø 'Which of his/her friends will come?'
  - b. Oui vindrà? Who come.FUT.3sG 'Who will come?'

On the other hand, the selection of the non-apocopated form un to represent the pronoun, for the time being, does not seem to have an analogical incidence on the rest of the quantifiers, which, thanks to their phonological structure of more than one syllable (algú, ningú, cada u), do not need to be reinforced with the underlying -n.<sup>25</sup> Therefore, without the effect of the phonological factor, it is the pragmaticdiscursive factor that imposes itself with a formal differentiation.

Despite this phonological stability provided by the formal variant un as a representative of the pronoun and of the specifier, we have to note that there are areas of current Catalan that have still not resolved this issue by consolidating the variant with -n, but have sought a different formal alternative. In fact, they have resorted to a variant that also provided them with phonological stability: uno, which we address in the following section.

## 6.3. Language contact and standardisation

As we have pointed out in § 4.1, in a large part of the Valencian territory, as an alternative to the monosyllable without a consonantal coda u, the Spanish borrowing uno has been adopted. This new variant has spread especially in areas in the Valencian Community that border with Spanish, particularly in the northernmost inland areas and in the south. But, at this point, it is widely extended in the central zone as well, where it also appears in speakers of all age groups.<sup>26</sup>

This solution, as with the syncretic pattern of un (27a), does not formally distinguish the pronoun from the determiner with a non-overt noun (27c). Therefore, it continues to make the phonological criterion prevail over the functional one. Furthermore, on the basis of the traditional Valencian model (27b), it consolidates the formal distinction based on the phonotactic criterion (proclitic position vs. non-proclitic position) (27c), which coincides with the distribution adopted by Spanish (cf. Table 1):

- 25. The fact that the phonological characteristics of these quantifiers play a fundamental role in determining whether the underlying -n is acquired or not is also confirmed by the behaviour of the noun designating the natural number u 'one'. This number currently shows u/un vacillations as well, although it presents the following trends: when it appears alone, it tends to be reinforced with -n (un 'one', dos 'two', tres 'three', ...); but when combined in a long phonological sequence, since it is no longer affected by the minimality constraints, the absence of -n is more usual (vint-i-u) (cf. Veny & Pons 2016: map 1965).
- 26. On the first historical samples of interference of the variant *uno*, see Ramos (2018: 604-605, 2020).

- (27) a. Un (Det + overt N) / un (Det + non-overt N) / un (Pronoun).
  - b. Un (Det + overt N) / u (Det + non-overt N) / u (Pronoun).
  - c. Un (Det + overt N) / uno (Det + non-overt N) / uno (Pronoun).

Resorting to another socially prestigious language to solve problems of phonological instability in one's own language is not uncommon in bilingual communities, as Thomason has shown (2003: 687-688). Moreover, it may have consequences that go beyond the specific aspect that is being addressed. In fact, the analogical process that had favoured the homogenisation of the forms of the specifiers with a non-overt noun with the non-apocopated form (28a) now gives way to another analogical sequence based on the behaviour of specifiers in (27c), where we had *un* with an overt noun and *uno* with a non-overt noun. This led to the appearance, in the rest of the quantifiers, of new formal variants coinciding with those of Spanish (alguno, ninguno, cada uno), which are not justified by phonological reasons.

- (28) a. Algun (Det + overt N) / algun (Det + non-overt N) / algú (Pronoun).
  - b. Algun (Det + overt N) / alguno (Det + non-overt N) / algú (Pronoun).

Note, however, that now the analogy is partial, because it does not affect all positions, but only the specifier when a non-overt noun (28b) is involved. This means that the speaker continues to distinguish the specifier with a non-overt noun (*alguno*, *ninguno*, *cada uno*) from the pronoun (*algú*, *ningú*, *cada u*). Nevertheless, although this pattern is the general one in the corpus that we have analysed, all the evidence points to a new change in the immediate future: a generalisation of the endings in *-uno* that also affects the pronoun.<sup>27</sup> In fact, in the case of the quantifier *cada u*, perceived semantically as closer to *uno*, cases of the pronominal variant *cada uno* can already be heard.

In contrast to this panorama, it should be pointed out that the standardisation of the language and a greater awareness among Valencian speakers of the interference of Spanish act to curb the advance of these options in the formal registers. Likewise, the standard model, especially in the written language, contributes to reducing the historical vacillations seen in the language as a whole. Thus, it is unusual, even among Valencian writers, to find variants that deviate from the standard described in §  $2.^{28}$ 

- 27. In this sense, we have already seen cases of this variant in constructions in which the pronoun appears modified by a complement that indicates origin or by a relative clause (i):
  - (i) Alguno que no té diners no pot fer això. Someone who not have.PRES.3SG money not can do.INF that 'Someone who doesn't have any money can't do that'
- 28. In fact, throughout the 20th and early 21st centuries, the vast majority of written production in the Valencian Community has followed this model in a disciplined manner. Recently, the AVL (2006: § 18-20) launched a normative proposal calling for the apocopated variant for the pronoun u, which at the same time avoids vacillations in the position of the specifier; thus, all pronominal forms are apocopated and the forms of the specifier with a non-overt noun are not apocopated. For

#### 7. Conclusions

The study that we have conducted has allowed us to contribute new data not only to research on the uses of quantifiers in Catalan, but also to the analysis of language change in general. In the investigation of the syntactic uses of the masculine singular form of the quantifiers studied here (u/un, algú/algun, ningú/ ningun and cada u/cada un), specifically in their function as the head (pronoun) and as a specifier (determiner), we have observed that, together with the more or less consolidated standard uses, there are variants that depart from the form-function distribution assumed by the grammatical norm. This divergence is especially significant in the geographical area of the Valencian Community. The dialectal data we have provided, compared with the historical information about these quantifiers, have enabled us to see that in Valencian today the differences or vacillations in the selection of the formal variants are a sign of an ongoing process of language change. This is why they help us to interpret the language changes produced in other areas of the language in the past.

Along the same lines, we have also seen that the dialectal information collected lends support to the idea that pragmatics is one of the main factors in the changes and the functional specialisation of formal variants: the apocopated forms have remained as pronouns and the non-apocopated forms have tended to become established in the position of the specifier. Therefore, the iconic marking of the -n stabilises a functional distinction and avoids possible problems of ambiguity (variants with more than one meaning) and of synonymic redundancy (more than one variant for the same function), resulting in an increase in communicative effectiveness. In fact, as we have seen when comparing Catalan with the other Romance languages, the option of formally distinguishing the two functions is not exclusive to Catalan, and vies with the option of formally distinguishing quantifiers according to a phonotactic criterion (proclitic position vs. non-proclitic position). Likewise, we have also highlighted the interaction of analogy in the consolidation and homogenisation of the formal distribution.

Finally, we have dealt with the formal syncretism of un, which in much of Catalan departs from the form-function correspondence carried out by the rest of the quantifiers. In this case, reference has been made to the phonological factors that intervene in the attempt to resolve the phonological markedness of the apocopated monosyllable u. This aspect, in areas with strong language contact with Spanish, is also related to the appearance of the borrowing *uno*.

a personal proposal that diverges from this one and calls for more uses of the apocopated form uas an identifying feature of Valencian, see Saragossà (2005: 136-143).

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