

## Chapter 4. Determiner Phrases

### 1 Introduction

Determiner Phrases (DPs) include pronouns and nouns modified by determiners (type  $\langle e \rangle$ ). Pronouns are a special type of nouns, but they differ in the sense that pronouns are referential but nouns are non-referential when they are not determined. That is, pronouns can specify an individual in some possible world, while nouns can do so only with the help of some other overt components such as demonstratives or covert components such as contexts in languages without articles.

Determiners refer to functional words that introduce nouns and provide information about their reference, such as definiteness, quantity, possession, or specificity. Generally, determiners include articles (e.g., *the*, *a/an*), demonstratives (e.g., *this*, *those*), possessives (e.g., *my*, *their*), quantifiers (e.g., *every*, *some*), interrogative determiners (e.g., *which*, *whose*), and numerals (e.g., *one*). Catalan determiners include articles, demonstratives, possessives, interrogative determiners, and quantifiers. When a noun is modified by a determiner, it becomes referential.

### 2 Articles

Articles are one of the most crosslinguistically used determiners that indicate how specific or identifiable the noun is, i.e., they pick a member from the set denoted by the noun.

Generally speaking, articles can be divided into definites and indefinites. Definites pick a specific member that is unique in a given context (the iota operator  $\iota$ ). Indefinites pick a non-specific member from the set (the existential operator  $\exists$ ). See (1):

- (1) a.  $\llbracket \text{the man} \rrbracket = \iota x. \text{MAN}(x)$
- b.  $\llbracket \text{a man} \rrbracket = \lambda P. \exists x. [\text{MAN}(x) \wedge P(x)]$
- c.  $\iota x. \varphi(x) = y \iff \exists y. [\varphi(y) \wedge \forall z (\varphi(z) \rightarrow z = y)]$

There are two systems of definites in Catalan, one for ordinary nouns and the other for personal names, and one system of indefinites. See a summary in Table 1 and examples in (2) - (4).

Table 1: Articles in Catalan

	Masculine Singular	Feminine Singular	Masculine Plural	Feminine Plural
Definite	el / l'	la / l'	els	les
Personal definite	en / l'	la / l'	els	les
Indefinite	un	una	uns	unes

- (2) a. *el noi* ‘the boy’
- b. *l’home* ‘the man’, *l’aigua* ‘the water’
- c. *la noia* ‘the girl’
- d. *els nois* ‘the boys’, *les noies* ‘the girls’
- (3) a. *en Joan* ‘Joan’
- b. *la Maria* ‘Maria’
- c. *l’Austin* ‘Austin’, *l’Anna* ‘Anna’
- d. *els Puig* ‘the Puig family’, *les Puig* ‘the Puig sisters’
- (4) a. *un llibre* ‘a book’
- b. *una casa* ‘a house’
- c. *uns llibres* ‘some books’

- d. *unes cases* ‘some houses’

### 3 Personal pronouns

Personal pronouns refer to a person in a given context. In general, there are two systems of (personal) pronouns in Catalan, including the lexical pronouns and the clitic pronouns. Lexical pronouns can be used independently as determined nouns, while clitic pronouns can only be used when they are attached to a verb.

#### 3.1 Lexical pronouns

Lexical pronouns have generally been losing their features of case marking. Only the first person in singular is distinguished between subject and object/oblique. See a summary in Table 2 and examples in (5).

Table 2: Lexical pronouns in Catalan

Person and number	Nominative	Accusative/Dative
1SG	jo	mi
2SG		tu
3SG		ell/ella
1PL		nosaltres
2PL		vosaltres
3PL		ells/el·les
HONORIC.SG		vostè
HONORIC.PL		vostès

- (5) a. Jo vaig menjar un poma.  
     I 1SG.PST eat a apple  
     ‘I ate an apple.’
- b. Tu vas menjar un poma.  
     you 2SG.PST eat a apple  
     ‘You ate an apple.’
- c. Ell va menjar un poma.  
     he 3SG.PST eat a apple  
     ‘He ate an apple.’
- d. Nosaltres vam menjar un poma.  
     we 1PL.PST eat a apple  
     ‘We ate an apple.’
- e. Vosaltres vau menjar un poma.  
     I 1PL.PST eat a apple  
     ‘You ate an apple.’
- f. Elles van menjar un poma.  
     they 1PL.PST eat a apple  
     ‘They ate an apple.’
- g. Vostè va menjar un poma.  
     you.HON 3SG.PST eat a apple  
     ‘You ate an apple.’
- h. Vostès va menjar un poma.  
     you.HON 3SG.PST eat a apple  
     ‘You ate an apple.’

Special attention should be given to the 3SG and 3PL, which don't necessarily refer to humans. Instead, they can also refer to objects or places, as shown in (6).

- (6) (Context: There is a *taula* 'table' in the Cortes Ingles.)

Hi ha un llibre a ella.  
LOC HAVE a book LOC 3SG.FEM  
'There is a book on it.'

### 3.2 Clitic pronouns

Codic pronouns differ from lexical pronouns in the sense that they can only be used as a codic of a verb, and they only have forms of accusative and dative. See a summary in Table 3 and examples in (7) and (8).

Table 3: Clitic pronouns in Catalan

Person and number	Accusative	Dative
1SG	em / m'	
2SG	et / t'	
3SG/HONORIC.SG	el / la / ho (neutral)	li
1PL		ens
2PL		us
3PL/HONORIC.PL	els / les	els

- (7) a. Em va veure.  
me 3SG.PST see  
'(S)he saw me.'
- b. Et va veure.  
you 3SG.PST see  
'(S)he saw you.'
- c. El vaig veure.  
him 1SG.PST see  
'I saw him.'
- d. Ens va veure.  
us 3SG.PST see  
'(S)he saw us.'
- e. Us va veure.  
you.PL 3SG.PST see  
'(S)he saw you.'
- f. Les vaig veure.  
them.FEM 3SG.PST see  
'I saw them.'
- g. No ho sé.  
NEG it know  
'I don't know it.'
- h. M' ha vist.  
me HAVE.3SG seen  
'(S)he has seen me.'

- (8) a. (A mi) m' agrada.  
to me me be.likable.3SG  
'I like him/her/it (lit. To me, he/she/it is likable).'
- b. T' agrada.  
you be.likable.3SG  
'You like him/her/it (lit. To you, he/she/it is likable).'
- c. A ell li agrada.  
to him him be.likable.3SG  
'He likes him/her/it (lit. To him, he/she/it is likable).'
- d. Ens agrada.  
us be.likable.3SG  
'We like him/her/it (lit. To us, he/she/it is likable).'
- e. Us agrada.  
you.PL be.likable.3SG  
'You like him/her/it (lit. To you, he/she/it is likable).'
- f. Els agrada.  
them be.likable.3SG  
'They like him/her/it (lit. To them, he/she/it is likable).'

When the accusative and dative clitics are used together for a ditransitive verb like *donar* 'give', the canonical order is 'dative + accusative + verb', as shown in Table 4.

Table 4: Double clitic constructions in Catalan (1st and 2nd persons)

Dative	Accusative	Example
1SG	3SG.N	M'ho dóna.
1SG	3SG.M	Me'l dóna.
1SG	3PL.M	Me'ls dóna.
1SG	3SG.F	Me la dóna.
1SG	3PL.F	Me les dóna.
2SG	3SG.N	T'ho dóna.
2SG	3SG.M	Te'l dóna.
2SG	3PL.M	Te'ls dóna.
2SG	3SG.F	Te la dóna.
2SG	3PL.F	Te les dóna.
1PL	3SG.N	Ens ho dóna.
1PL	3SG.M	Ens el dóna.
1PL	3PL.M	Ens els dóna.
1PL	3SG.F	Ens la dóna.
1PL	3PL.F	Ens les dóna.
2PL	3SG.N	Us ho dóna.
2PL	3SG.M	Us el dóna.
2PL	3PL.M	Us els dóna.
2PL	3SG.F	Us la dóna.
2PL	3PL.F	Us les dóna.

Complexity arises when the dative is 3rd person. When the dative is singular, *li* may change to *hi*, which goes the accusative, as in Table 5.

On the other hand, when the dative is plural, the accusative can change to *hi* in informal styles, as shown in Table 6.

Table 5: Double clitic constructions in Catalan (3rd person singular)

Dative	Accusative	Formal	Informal
3SG	3SG.N	Li ho dóna.	L'hi dóna.
3SG	3SG.M	L'hi dóna.	L'hi dóna.
3SG	3PL.M	Els hi dóna.	Els hi dóna.
3SG	3SG.F	La hi dóna.	L'hi dóna.
3SG	3PL.F	Les hi dóna.	Els hi dóna.

Table 6: Double clitic constructions in Catalan (3rd person plural)

Dative	Accusative	Formal	Informal
3PL	3SG.N	Els ho dóna.	Els hi dóna.
3PL	3SG.M	Els el dóna.	Els hi dóna.
3PL	3PL.M	Els els dóna.	Els hi dóna.
3PL	3SG.F	Els la dóna.	Els hi dóna.
3PL	3PL.F	Els les dóna.	Els hi dóna.

The informal forms in both Tables 5 and 6 are well used in ordinary life. When both the accusative and dative are singular, *L'hi dóna* is used; when one of them is plural, *Els hi dóna* is used.

Besides, there is a clitic for place in Catalan: *hi* ‘there’ (neutral):

- (9) Hi ha un llibre a la taula.  
there HAVE a book LOC the table  
'There is a book on the table.'

## 4 Demonstratives

Demonstratives are words we use to point to or indicate things—usually showing which one we mean, especially in terms of distance or location relative to the speaker and listener. One of the most common features of demonstratives is spatial deixis. Typologically, languages with a two-way distinction of demonstratives are most common cross languages (e.g., English, Mandarin Chinese). However, there are languages that employ a three-way distinction (e.g., Japanese, Spanish) or even more ways (e.g., Malagasy (Austronesian)). Catalan applies a two-way distinction in all of demonstrative pronouns, demonstrative adjectives, and demonstratives for place.

### 4.1 Demonstrative pronouns and adjectives

The demonstrative pronouns and adjectives in Catalan share the same form, as summarized in Table 7 and exemplified in (10) and (11).

Table 7: Demonstrative pronouns and adjectives in Catalan

Number and Gender	Near the Speaker	Far from the Speaker
MAS.SG	aquest	aquell
FEM.SG	aquesta	aquella
MAS.PL	aquests	aquells
FEM.PL	aquestes	aquelles

- (10) a. *aquest llibre* ‘this book’  
      b. *aquesta casa* ‘this house’  
      c. *aquests llibres* ‘these books’  
      d. *aquestes cases* ‘these houses’
- (11) a. *aqueell home* ‘that man’  
      b. *aquella dona* ‘that woman’  
      c. *aqueells homes* ‘those men’  
      d. *aqueelles dones* ‘those women’

Moreover, there is another pair of demonstrative pronouns with the neutral gender, which usually refer to abstract things like an idea or the content of a sentence, see Table 8 and (12) - (13).

Table 8: Neutral demonstrative pronouns in Catalan

Gender	Near the Speaker	Far from the Speaker
NEUTRAL	això	allò

- (12) a. Què és      això?  
      what be.3SG this  
      ‘What is this?’
- b. Això no      ho sabia.  
      this NEG it know.3SG.PST.IMPF  
      ‘I didn’t know this.’
- (13) a. Allò que      vas      dir era      cert.  
      that COMP 2SG.PST say be.3SG.PST.IMPF true  
      ‘What you said was not true.’
- b. Allò és      massa lluny per caminar-hi.  
      that be.3SG too far for walk-there  
      ‘That is too far to walk there.’

## 4.2 Demonstratives of place

There are three demonstratives of place in Catalan, as summarized in Table 9 and exemplified in (14).

Table 9: Demonstratives of place in Catalan

Specificity	Near the Speaker	Far from the Speaker
SPECIFIC SPOT	aquí	allí
NON-SPECIFIC SPOT (direction)		allà

- (14) a. Visc      aquí a      la      Plaça      Valle Inclán.  
      live.1SG here LOC the square  
      ‘I live here in the square Valle Inclán.’
- b. Deixa-ho      allí.  
      leave.2SG.IMP-it there  
      ‘Leave it there.’
- c. L’ escola és      allà.  
      the school be.3SG there  
      ‘The school is around there.’

## 5 Possessives

Possessives are forms that express a relationship between two entities, typically indicating ownership, part–whole relations, kinship, or other close associations. A possessive includes two participants, namely the **POSSESSOR** (the entity that holds the relationship) and the **POSSESSED** (the entity being related to). Morphologically, possessives can be marked by affixes (e.g., Turkish: *ev-im* ‘my house’), clitics (e.g., English: John’s book), pronouns (e.g., English: my), juxtapositions (e.g., Mandarin: 我的书 *wǒde shū* ‘my book’), and prepositions (e.g., English: the book of John), etc. Semantically, they can be divided into alienable possession (e.g., John’s car) and inalienable possession (e.g., my hand). Crosslinguistically, languages vary in whether possessor appears before or after the possessed, whether possession uses agreement, case marking, or adpositions, and whether different morphosyntactic strategies are used for alienable vs. inalienable possession.

Catalan applies the preposition *de* and possessive pronouns for the possession.

### 5.1 Physical and abstract possessions

Both physical and abstract possessions are marked by *de*, the basic structure of which is [POSSESSED + de + POSSESSOR], and there is no difference between alienable and inalienable possessions. See some examples:

- (15) a. el llibre d’ en Joan  
the book of the  
'The book of Joan'
- b. la casa de la Maria  
the house of the  
'the house of Maria'
- c. el pare de l’ Anna  
the father of the  
'the father of Anna'

### 5.2 Pronominal possessives

The pronominal possessives in Catalan are marked for person, number, gender, and sometimes definiteness. See a summary in Table 10 and examples in (16).

Table 10: Pronominal possessives in Catalan

Gender and Number	MAS.SG	MAS.PL	FEM.SG	FEM.PL
1SG	el meu	els meus	la meva	les meves
2SG	el teu	els teus	la teva	les teves
3SG/PL	el seu	els seus	la seva	les seves
1PL	el nostre	els nostres	la nostra	les nostres
2PL	el vostre	els vostres	la vostra	les vostres

- (16) a. *el meu llibre* ‘my book’
- b. *la teva casa* ‘your house’
- c. *el seu professor* ‘his/her/their teacher’
- d. *els seus ordinadors* ‘his/her/their computers’
- e. *el nostre amic* ‘our friend’
- f. *les vostres classes* ‘your classes’

### 5.3 Omission of POSSESSED

The POSSESSED can be omitted when it is clear from the context.

- (17) a. (Aquest llibre) és d' en Joan.  
           this book be.3SG of the  
           ‘(This book) is Joan's.’  
   b. (Aquella casa) és la meva.  
       that house be.3SG the mine  
       ‘(That house) is mine.’

### 5.4 Partitive

When the POSSESSED is a numeral or *alguns/algunes* ‘some’, the noun (the abstract POSSESSOR) can be replaced by the clitic pronoun *en* attached before the verb.

- (18) a. Vaig llegir tres dels llibres.  
       1SG.PST read three of.the books  
       ‘I read three of the books.’  
   b. En vaig llegir tres.  
       of.them 1SG.PST read three  
       ‘I read three (of them).’
- (19) a. Conec algunes de les persones.  
       know.1SG some of the persons  
       ‘I know some of the people.’  
   b. En coneix algunes.  
       of.them know.1SG some  
       ‘I know some (of them).’

## 6 Interrogatives

Interrogatives are clauses whose primary function is to request information. A major subtype is WH-interrogatives, which are interrogative clauses introduced or headed by a WH-word (also called an interrogative word). Interrogative words can be divided into interrogative pronouns and interrogative determiners.

### 6.1 Interrogative pronouns

Like pronouns, Catalan interrogative pronouns are determined in nature. See a summary in Table 11 and examples in (20).

Table 11: Interrogative pronouns in Catalan

WH-word	Catalan
who	qui
what	què
where	on
which	quin / quina / quins / quines
when	quan
why	per què
how (state, manner, degree)	com
how (degree)	quin / quina / quins / quines
how much (quantity)	quant / quanta / quants / quantes

- (20) a. Qui és aquest home?  
       who be.3SG this man  
       ‘Who is this man? (Argument)’
- b. Amb qui vas venir?  
       with who 2SG.PST come  
       ‘With whom did you come? (Adjunct)’
- (21) a. Què vols menjar avui?  
       what want.2SG eat today  
       ‘What do you want to eat today? (Argument)’
- b. Amb què vas tallar el pa?  
       with what 2SG.PST cut the bread  
       ‘With what did you cut the bread? (Adjunct)’
- (22) a. On vius ara?  
       where live.2SG now  
       ‘Where do you live now? (Argument; restricted)’
- b. On va beure la coca-cola en Jian?  
       Where 2SG.PST drink the coke the Jian  
       ‘Where did Jian drink the coke? (Adjunct)’
- (23) a. Quins prefereixes?  
       which prefer.2SG  
       ‘Which do you prefer? (Argument)’
- b. Amb quin dels llapisos vas escriure?  
       with which of.the pencils 2SG.PST write  
       ‘With which of the pencils did you write? (Adjunct)’
- (24) a. Quan et funciona millor?  
       when you.DAT work.3SG better  
       ‘When works better for you? (Argument; restricted)’
- b. Quan torna el tren?  
       when return.3SG the train  
       ‘When does the train come back? (Adjunct)’
- (25) a. Per què estàs trist?  
       why be.2SG sad  
       ‘Why are you sad? (Adjunct)’
- (26) a. Com estàs?  
       how be.2SG  
       ‘How are you? (Predicate; state *how*)’
- b. Com es diu aquesta ciutat?  
       how REFL call.3SG this city  
       ‘What is the name of this city? (What does the city call itself?) (Argument; restricted; manner *how*)’
- c. Com vas a l'escola?  
       how go.2SG to the.school  
       ‘How do you go to school? (Adjunct; manner *how*)’

- d. Com de llarga és la carretera?  
 how of long be.3SG the road  
 ‘How long is the road? (Adjunct; degree *how*)’
- (27) a. Quant costa això?  
 how.much cost.3SG this  
 ‘How much is this? (lit. What amount does this cost?) (Predicate / Cognate object)’
- b. Quants en vas comprar?  
 how.much of.them 2SG.PST buy  
 ‘How many (of them) did you buy? (Argument)’
- c. Amb quants vas comprar aquest ordinador?  
 with how.much 2SG.PST buy this computer  
 ‘With how much did you buy this computer? (Adjunct)’

## 6.2 Interrogative determiners

Catalan interrogative determiner includes *quin* / *quina* / *quins* / *quines* ‘which’ and *quant* / *quanta* / *quants* / *quantes* ‘how much’, which behave more like demonstratives and possessives, in the sense that they determine a noun to form a DP.

- (28) a. Quin llibre estàs llegint?  
 which book be.2SG reading  
 ‘Which book are you reading? (Argument)’
- b. Amb quin llapis vas escriure?  
 with which pencil 2SG.PST write  
 ‘With which pencil did you write? (Adjunct)’
- c. Quina amplada té la carretera?  
 which width have.3SG the road  
 ‘How wide is the road? (Argument; degree *how*)’
- (29) a. Quants anys tens?  
 how.many years have.2SG  
 ‘How old are you? (Argument)’
- b. Amb quants diners vas comprar aquest ordinador?  
 with how.much money 2SG.PST buy this computer  
 ‘With how much money did you buy this computer? (Adjunct)’

## 7 Quantification

Generalized quantifiers are expressions that denote relations between sets (or properties), rather than individuals. Numerals, or cardinal quantifiers are quantificational expressions that specify the exact number (cardinality) of individuals in the intersection of two sets. Catalan has ways of quantification as such:

- (30) a. Universal quantifiers: e.g., *tots* / *totes* ‘all’, *cada* ‘each’ (distributivity)
- b. Free choice items (Modalized universal quantifiers): e.g., *qualsevol(s)* ‘any/whichever’, *qui-sevol* ‘whoever’
- c. Existential quantifiers: e.g., *algun* / *alguns* / *alguna* / *algunes* ‘some’, *algú* ‘someone’
- d. Negative concords: e.g., *cap* ‘none of’, *ningú* ‘nobody’, *res* ‘nothing’
- e. Context-dependent quantifiers: e.g., *molts* / *moltes* ‘many’
- f. Numerals: e.g. *un* / *una* ‘one’, *dos* / *dues* ‘two’

## 7.1 Universal quantifiers

A universal quantifier is an operator that expresses that a statement holds for all members of a given set or domain. It is usually written as  $\forall$ , read as *for all*. For example, the formula in (31) means: for all  $x$ , if  $x$  is a human,  $x$  is mortal.

- (31)  $\forall x. [\text{HUMAN}(x) \rightarrow \text{MORTAL}(x)]$

### 7.1.1 *tots / totes* ‘all’ and scope ambiguity with *un / una* ‘a’

[] An example including the Catalan universal quantifier *tots / totes* ‘all’ is shown (32).

- (32) a. Tots aprenem català.  
           all learn.1PL Catalan  
           ‘All of us learn Catalan.’  
   b.  $\forall x. [\text{MEMBER-OF-US}(x) \rightarrow \text{LEARN CATALAN}(x)]$

Scope ambiguity exists between *tots / totes* ‘all’ and the existential quantifier *un / una* ‘a’ in (33).

- (33) a. Tots els estudiants van llegir un article.  
       all the students 3PL.PST read a article  
       ‘All the students read an article.’  
   b.  $\forall > \exists$  (distributive reading): for every student  $x$ , there exists (possibly different) an article  $y$  such that  $x$  read  $y$ .  
   c.  $\exists > \forall$  (specific reading): there exists one article  $y$  such that for every student  $x$ ,  $x$  read  $y$ .

However, Catalan strongly prefers the  $\forall > \exists$  reading, especially with topicalization and the partitive clitic *en* in (34).

- (34) a. Topicalization:  
     D’article, tots els estudiants en van llegir un.  
     of.article all the student it 3PL.PST read one  
     ‘All the students read one article.’

On the other hand, there exist things that can force the inverse scope. Strategies that help to elicit  $\exists > \forall$  include:

- (35) a. Specific indefinites:  
     Tots els estudiants van llegir un cert article.  
     all the students 3PL.PST read a certain article  
     ‘All the students read a certain article.’  
   b. Existential constructions:  
     Hi ha un article que tots els estudiants van llegir.  
     there HAVE a article that all the students 3PL.PST read  
     ‘There is an article that every student read.’  
   c. Pragmatic specificity:  
     (Speaking about an article in linguistics...)  
     Tots els estudiants van llegir un article.  
     all the students 3PL.PST read a article  
     ‘All the students read an article (the one in the context).’

### 7.1.2 Distributivity operator: *cada* ‘each’

Another universal quantifier in Catalan is *cada* ‘each’. Unlike *tots* / *totes* ‘all’, it forces the distributive reading in sentences involving *un* / *una* ‘a’, as in (36). In other words, it is a distributivity operator.

- (36) a. Cada estudiant va      llegir un article.  
           each student 3SG.PST read a article  
           ‘Each student read an article.’  
       b.  $\forall > \exists$  (distributive reading): for every student  $x$ , there exists (explicitly different) an article  $y$  such that  $x$  read  $y$ .

This distributive reading is strongly preferred even with the specificity operator *cert* ‘certain’:

- (37) a. Cada estudiant va      llegir un cert      article.  
           each student 3SG.PST read a certain article  
           ‘Each student read a certain article.’  
       b.  $\forall > \exists$  (distributive reading): for every student  $x$ , there exists (explicitly different) an article  $y$  such that  $x$  read  $y$ .

However, with existential constructions, the collective/specific reading is elicited (because  $\exists$  overtly scopes over  $\forall$ ):

- (38) a. Hi    ha    un article que cada estudiant va      llegir.  
           there HAVE a article that each student 3PL.PST read  
           ‘There is an article that each student read.’  
       b.  $\exists > \forall$  (specific reading): there exists one article  $y$  such that for every student  $x$ ,  $x$  read  $y$ .

### 7.1.3 Other universal quantifiers: *tothom* ‘everyone’, *cadascun* ‘each one’

*Tothom* ‘everyone’ and *cadascun* ‘each one’ are derived from *tot* ‘all’ and *cada* ‘each’, respectively, and display scope ambiguities parallel to those of *tot* ‘all’ and *cada* ‘each’:

- (39) a. Tothom    va      llegir un article.  
           everyone 3SG.PST read a article  
           ‘Everyone read an article.’  
       b.  $\forall > \exists$  (distributive reading): for every person  $x$ , there exists (possibly different) an article  $y$  such that  $x$  read  $y$ .  
       c.  $\exists > \forall$  (specific reading): there exists one article  $y$  such that for every person  $x$ ,  $x$  read  $y$ .  
(40) a. Cadascun    va      llegir un article.  
           each.one 3SG.PST read a article  
           ‘Each one read an article.’  
       b.  $\forall > \exists$  (distributive reading): for every person  $x$ , there exists (possibly different) an article  $y$  such that  $x$  read  $y$ .

## 7.2 Free choice items (Modalized universal quantifiers)

Free choice items (FCIs) are expressions that convey unrestricted choice over a set of alternatives. Intuitively, they signal that any member of a relevant domain is allowed, with no contextual restriction. They then give rise to universal-like interpretations through alternatives and exhaustification, rather than through lexical universal quantification.

FCIs are modalized because they are usually licensed only in non-veridical contexts, such as modals (*can*, *may*, *must*), imperatives, generics, conditionals and questions.

### 7.2.1 Canonical FCI in Catalan: *qualsevol(s)* ‘any/whichever’

The canonical FCI in Catalan is *qualsevol(s)* ‘any/whichever’, see some examples in (41).

- (41) a. Modal:

Pots triar qualsevol llibre.  
can.3sg choose any book  
'You can choose any book.'

- b. Imperative:

Tria qualsevol llibre.  
choose.2sg.imp any book  
'Choose any book.'

- c. Generic:

Qualsevol estudiant entén aquest problema.  
any student understand.3sg this problem  
'Any student understands this problem.'

- d. Conditional:

Si tens qualsevol dubte, truca' m.  
if have.2SG any doubt call.2SG.IMP me  
'If you have any doubt, call me.'

- e. Question:

Puc triar qualsevol llibre?  
can.1SG choose any book  
'Can I choose any book?'

### 7.2.2 Free choice expressions built from interrogatives + *-sevol* in Catalan

WH-words can combine with *-sevol* to form free choice expressions, including *qui-sevol* ‘whoever’, *què-sevol* ‘whatever’, *on-sevol* ‘wherever’, *quin-sevol* ‘whichever’, *quan-sevol* ‘when-ever’, and *com-sevol* ‘however’. See some examples:

- (42) a. Convida qui-sevol que vulgis.  
invite.2SG.IMP whoever that want.2SG.SUB  
'Invite whoever you want.'
- b. Pots fer què-sevol.  
can.2SG do whatever  
'You can do whatever.'
- c. Tria quin-sevol tema.  
choose.2SG.IMP whichever theme  
'Choose whichever theme.'

### 7.2.3 Periphrastic free choice constructions in Catalan

WH-words can appear in “sigui + WH-word + sigui” and “no importa WH-word” to form free choice constructions, as in (43).

- (43) a. Sigui qui sigui, l' ajudarem.  
     be.3SG.SUB who be.3SG.SUB it help.1PL.FUT  
     ‘No matter who (s)he is, we will help him/her.’
- b. Acceptarem el resultat, sigui què sigui.  
     accept.1PL.FUT the result be.3SG.SUB what be.3SG.SUB  
     ‘We’ll accept the result, whatever it is.’
- c. No importa quin llibre triïs.  
     NEG matter which book choose.2SG.SUB  
     ‘It doesn’t matter which book you choose.’

### 7.3 Existential quantifiers

An existential quantifier is an operator that expresses that the predicate holds for at least one element in the relevant domain. It is usually written as  $\exists$ , read as *there exists a/an*. For example, the formula in (44) means: there exists an  $x$  such that  $x$  is a human and  $x$  is mortal.

- (44)  $\exists x. [\text{HUMAN}(x) \wedge \text{MORTAL}(x)]$

#### 7.3.1 Indefinite: *un / una* ‘a’

Cross-linguistically, indefinites can have an existential interpretation. As shown in Section 7.1.1, Catalan indefinites can indeed be used in this way.

#### 7.3.2 *algun / alguns / alguna / algunes* ‘some’

Another way to express existential in Catalan is with *algun / algunos / alguna / algunes* ‘some’; see the examples in (45).

- (45) a. Tens algun dubte?  
     have.2SG some doubt  
     ‘Do you have any question?’
- b. Alguns estudiants van arribar tard.  
     some students 3SG.PST arrive late  
     ‘Some students have arrived late.’

In particular, existential quantifiers are widely used in existential constructions, as shown in (46).

- (46) a. Hi ha algun llibre sobre aquest aspecte.  
     there HAVE some book about this aspect  
     ‘There is a book about this aspect.’
- b. Hi ha algunes síndries a la taula.  
     there HAVE some watermelons LOC the table  
     ‘There are some watermelons on the table.’

#### 7.3.3 Other existential quantifiers: *algú* ‘someone’, *quelcom / alguna cosa* ‘something’

In Catalan, *algú* ‘someone’ and *quelcom / alguna cosa* ‘something’ respectively refers to some human and something that exists, see some example in (47).

- (47) a. Algú vol construir una frase?  
someone want.3SG build a sentence  
'Does anyone want to make a sentence?'  
b. En Jian vol dir alguna cosa.  
the Jian want.3SG say some thing  
'Jian wants to say something.'