(In)definiteness in natural languages
Part 1 continued

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Definite article or not yet?

The definite article

Stage in grammaticalization	Context	Demonstrative/definite article—function
Stage I	Original context	Deixis
Stage II	Bridging context	Direct anaphora (textual deixis)
Stage III	Bridging context/ Switch context	Indirect anaphora (textual)
Stage IV	Extended switch context	Unique reference (non-textual)
Stage V	Conventionalization	Generics (non-textual)

Figure 1: Stages and contexts in the grammaticalization of the definite article (after Skrzypek 2012:49)

Definite article or not yet?

Test some of the articled and articleless languages that you know (either the def. article and the demonstrative or just the demonstrative).

Definite article or not yet?

(1)   a. The/this monkey is looking at you.

        b. I bought a book yesterday. I'm reading the/this book now and I like it a lot.

        c. I bought a book yesterday. The/#This cover is beautiful.

        d. The/#This moon was very bright last night.

        e. The/#This rhino is on the verge of extinction.

Definite article or not yet?

Russian

(2) a. Obez'jana/ Èta obez'jana smotrit na tebja.
       monkey   this monkey   looks   at you

   b. Ja kupila knigu včera.   Ja čitaju knigu/ ètu
      I   bought book yesterday I read book/ this
      knigu   seičas i   ona mne   očen' nravitsja.
      book.F.ACC now   and she me.DAT likes

   c. Ja kupila knigu včera.   Obložka/ #Èta obložka
      I   bought book yesterday cover/   this   cover
      krasivaja.
      beautiful

   d. Luna/ #Èta luna byla jarkoj včera   večerom.
      moon/ this moon was bight yesterday evening

e. Nosorog/ #Ètot nosorog na grani isčeznovenija.
   Rhino/   This   rhino   on verge extinction.GEN

Greenberg's (1978) **hypothesis**

referential   non-referential

| Stage 0 | Stage I | Stage II | Stage III |
DEMONSTRATIVE	DEFINITE ARTICLE	SPECIFIC ARTICLE	NOUN MARKER
The book over there is mine.	Did you buy _the book_, finally?	I've got *_the cat_. → I've got a cat.	----

Figure 2: Greenberg's cline applied to English (Schmuck2020)

The life of a definite article

- Specific article **ang** in Tagalog (Himmelmann 1997: 103)

(3) Doón   ay na-kita   nilá   ang isa-ng
     DIST.LOC PM REAL.STAT-see 3.PL.POSS SPEC one-LK
     ma-lakí-ng   higante
     IRR.STAT-big-LK giant
     'There they saw a great giant ...'

In English, indefinite specific use of the demonstrative *this*.

(4) There was this guy in my class last semester.

- Noun marker in Hausa. 99% of nouns end in a long vowel (Greenberg 1978): dáwákíí 'horses', bààkíí 'mouth';
  - ▶ a marker of nominality or gender, with no synchronic connection to definiteness or specificity

The indefinite article

Stage in grammaticalization	Context	Numeral 'one'/indefinite article
Stage I	Original context	Numeral
Stage II	Bridging context	Presentation marker
Stage III	Bridging context/ Switch context	Marker of specific reference
Stage IV	Extended switch context	Marker of non-specific reference
Stage V	Conventionalization	Generalized article

Figure 3: Stages and contexts in the grammaticalization of the indefinite article (after Skrzypek 2012:53)

Examples from Geist (2013)

    (5)   Bulgarian

        a. Ivan ima **edin** sin (a   ne   dvama).
            Ivan has one   son and not two

            'Ivan has one son (and not two).'

        b. Imalo edno vreme **edin** starec.   Toj imal trima sina.
            had   one time   one old-man he had three sons

            'Once upon a time there was an old man. He had three sons.'

c. Čete mi   se   **edno** spisanie. A   imenno, poslednijat
   read I.DAT REFL one   journal   and namely last.DEF
   broj na Novo Vreme.
   issue of Novo Vreme

   'I would like to read a journal. Namely the last issue of Novo
   Vreme.'

d. An iska   da   se   omăži za   **edin** lekar.
   Ann wants PART REFL marry prep one   doctor

   'Ann wants to marry a doctor.'
   Possible continuations: I know him. / #Unfortunately, there
   are no candidates

Indefinite article or not yet?

Substages of the stage "generalized article" (Givón 1981):
predicative use > generic use > negative scope

(6)   a.   Peter is a teacher. (predicative use)

       b.   A cat is usually smart. (generic use)

       c.   I didn't read a magazine, I read a book. (negative scope)

(7)   Bulgarian

       a.   Peter e (*edin) učitel.
          Peter is one   teacher

       b.   *Edna kotka obiknoveno e umna.
          one   cat   usually   is smart

       c.   Ne četoh   (*edno) spisanie, četoh kniga.
          not read.1SG.PAST one   magazine read   book

Indefinite article or not yet?

Test a language you know. Does it have a full-fledged indefinite article?
Test 'one' or an element different from 'one'.

Back to the meaning of the definite article

The meaning of the definite article

(8)   The dog is barking outside.

- There is a dog x   (Existence)
- x is the only (salient) dog   (Uniqueness)

Two requirements on the correct use of definites:
- There must be an individual described by the description
- There must be only one such individual (for sg!).

What is the status of these implications?
$\rightarrow$ Asserted or presupposed?

Where do they come from?
$\rightarrow$ The definite article or something else?

Two main positions on definites:

- Russell (1905): non-presuppositional
- Frege (1892)/Strawson (1950): presuppositional (standard)

(9)   The king of France is bald.

Is this false or nonsense?

- False $\rightarrow$ existence is asserted
- Nonsense $\rightarrow$ existence is presupposed

Russell's analysis

(10) The King of France is bald.
      $\exists x$ (KOF(x) & $\forall y$ (KOF(y) $\rightarrow$ y = x) & BALD (x))
      'There is an x such that x is a King of France and any y which is a
      King of France is the same object as x and x is bald'

The sentence in (10) asserts the following:

▶ There is a King of France (false).
▶ There is no King of France other than x. /There is only one King of
  France.
▶ He is bald.

Main ideas:

- The KOF sentence is false because the first of the three propositions
  that it asserts is false.
- The def. article *the* is analyzed as a quantifier (for Russell, the
  existential quantifier with the uniqueness qualification).

Presuppositionality

Frege's/Strawson's theory: Empty descriptions like *the King of France* have a sense but no referent.

Strawson (1950):
"Suppose someone were in fact to say to you... 'The King of France is bald'... and went on to ask you whether you thought that what he had just said was true, or was false... I think you would be inclined to say... that the question of whether his statement was true of false simply did not arise, because there is no such person as the King of France."

Presuppositionality

Strawson's main idea:

- The use of an expression like *The King of France* presupposes the existence of its referent.
  - ▶ Presupposition is a pre-condition for a sentence to have a truth value.
  - ▶ If the presupposition fails, the statement is neither true nor false → There is a truth value gap!
  - ▶ If the full statement has a truth value, then the presupposition is satisfied.

Presuppositions

- Statement S presupposes P.
- If S is true, P is true.
- If S is false, P is true.
  If non-S is true, P is true.
  $\rightarrow$ Presuppositions 'survive' under negation.
- If P is false, then S is neither true nor false.

Presuppositions

Presuppositions project over negation.

(11) a. I am happy she won. $\rightarrow$ She won.
       b. I am not happy she won. $\rightarrow$ She won.

(12) The dog is not barking outside.

- There is a dog x   (Existence)
- x is the only (salient) dog   (Uniqueness)

The presuppositional analysis seems to hold.

▶ Definite NPs presuppose the existence of exactly one entity in the extension of the NP they contain.

Note: This presupposition entails the existential presupposition.

Presuppositions

- To represent the "uniqueness" part of the description, its definitiveness, a special operator called an iota operator (Partee 1986) is used.
- Definition:

(13) ι: P $\to$ $\iota x[P(x)]$

ι maps a property onto a unique individual having that property

(14) The meaning of the definite article (Heim 2011:998, 4)
$[\![the]\!] = \lambda P : \exists x \forall y[P(y) \leftrightarrow x = y].\iota x.P(x)$,

where $\iota x.P(x)$ denotes the unique x such that x is P, if there is exactly one, and is otherwise undefined.

- Situational definites
  - Elbourne (2005, 2013): a unified analysis of all types of definites, which takes the situational use as the primary one.

(15)   Examples from Šimík (2014)

    a.   [The projector is running]
       $= 1$ iff
       the individual x that is a projector (the only projector) in situation s is running in s

    b.   [The Moon is the only Earth's natural satellite]
       $= 1$ iff
       the individual x that is a moon (the only moon) in our world w and that moon is the only Earth's natural satellite

    c. [The chairs in this classroom were bought in IKEA]
        = 1 iff
        the individual x that is a group of chairs (the maximal group
        of chairs) in situation s are such that there is a situation s'
        some time in the past and x were bought in IKEA.

- Anaphoric definites
  Schwarz(2009) Anaphoric definites are essentially situational definites
  plus an explicitly expressed relation with an antecedent.

Plurals

- Plural definite NPs seem to violate the uniqueness presupposition.
- Singular definites can be unique, but intuitively *the* should make the same contribution to the meaning of plural NPs as well
  - Uniqueness is not intuitively 'suitable' for plurals (*the dogs*)
  - Nor it is for mass nouns (*the butter*)
- Hawkins (1978): not uniqueness but inclusiveness.
- Sharvy (1980), Link (1983): maximality
- The reference is to the totality of objects/mass that satisfy the description in a given context

Does it remind you of a certain quantifier?

THE as $\forall$

   (16)   a. I read the articles.

           b. I read all the articles.

(16a) and (16b) receive the same truth conditions.

- Uniqueness as inclusiveness/maximality.
- Gives a uniform explanation for singular and plural definites.

Plurals

Standard analysis for plurals: Individuals in the model can also be *groups*. *Atomic* individuals combine into more complex ones, these combine into yet more complex ones, creating a structure called semi-lattice (Link 1983). The elements of such a semilattice are then partially ordered by the part-of relation (e.g., a is part of a+b, a+c, and a+b+c).

Table 1: Model of maximality (Link 1983)

	a+b+c		$\leftarrow$	group (maximal individual)
a+b	b+c	a+c	$\leftarrow$	groups
a	b	c	$\leftarrow$	atoms

- The definite article picks out the maximal individual in the domain.

(17)   The dogs are barking outside.

(17) is false if there are some dogs that are not barking outside.

- Test for maximality (Gillon 2015).

(18) He saw five wolves and three bears. He killed the bears, #but one escaped.

An insertion. Some experimental evidence for uniqueness/non-uniqueness

- The interpretation of Catalan definite and indefinite singular NPs vs. the interpretation of Russian bare singular NPs.
- Which of them encode uniqueness?
- Predictions:
    - If we assume that the meaning of the definite article is universal, we expect Catalan definite NPs to be interpreted as unique.
    - If uniqueness is encoded by a definite article, we don't expect this interpretation to be present on Catalan indefinites or Russian bare NPs.
- Participants are asked to agree or disagree (on a scale) with the interpretation of the nominal as unique in a given context.

Example item (Catalan)

(19)   Anit van robar en un centre comercial del nostre veïnat. Els lladres
       no van tenir problemes per entrar i recollir tots els diners. *El/Un*
       guàrdia de seguretat estava mirant la televisió i no va sentir res.
       - *Entenc que era l'únic guàrdia de seguretat que hi havia dins del*
       centre comercial.
       - filler

An insertion. Some experimental evidence for uniqueness/non-uniqueness

Example item (Russian):

(20) Včera večerom v našem rajone ograbili magazin. Grabiteli bez osobogo truda vzlomali dver' i sobrali vse naličnye. *Oxrannik* smotrel televizor i ničego ne slyšal.
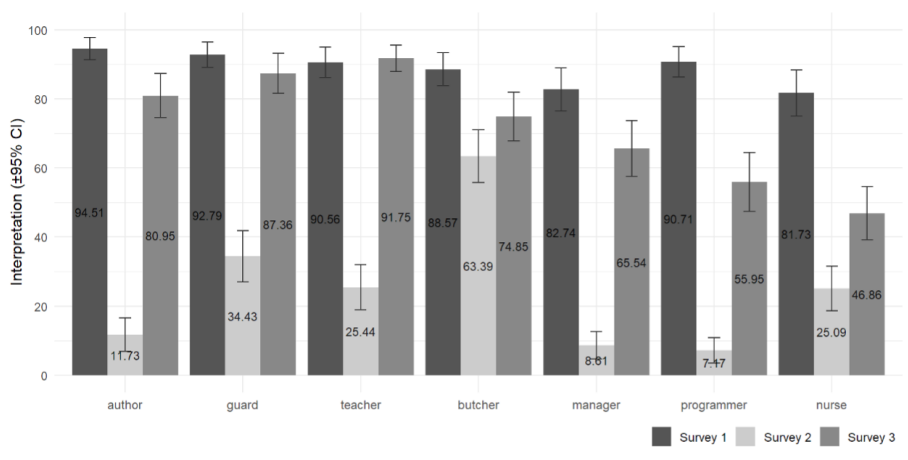-*V magazine ne bylo drugix oxrannikov.*
-filler

'Last night, a commercial center in the neighbourhood was burgled. The thieves didn't have any problem to enter and take all the money. The security guard was watching TV and didn't hear anything.
- I understand that it was the only security guard who was inside the commercial center.'

An insertion. Some experimental evidence for uniqueness/non-uniqueness

An insertion. Some experimental evidence for uniqueness/non-uniqueness

- As expected, Catalan speakers give very high acceptability to the interpretation of the def. NP as unique ($M = 88.80$, $SD = 24.55$); in all cases, the acceptability is higher than $81\% \Rightarrow$ a strong tendency to interpret a def. NP as unique

- The rating of statements with indef. NPs claiming the uniqueness of the referent is, indeed, very low ($M = 25.12$, $SD = 39.03$)

- Preference for a uniqueness reading of bare NPs in Russian varies significantly: from 91.75% to 46.86% ($M = 71.89$, $SD = 38.10$); a clear preference for a uniqueness interpretation in some contexts, while no preference in others.

- The presence of an overt def. article in languages with articles can be related to the uniqueness construal of a nominals, while an indef. article implies non-uniqueness.

An insertion. Some experimental evidence for uniqueness/non-uniqueness

- The results of the interpretation of Russian bare nominals are not as straightforward and uniform (an expected result). We'll talk about it later!

For more details on this study see: Seres, Borràs-Comes & Espinal (2021). Uniqueness in languages with and without articles: Catalan vs Russian. Beyond Philology, 18(3), 163-195

Challenges to the theory of uniqueness

- Referentiality

Donnellan (1966):

(21) The murderer of Smith is insane.

Possible interpretations:

1. 'Whatever is uniquely F is G'.

   attributive use (Russell's analysis)

   "Whoever murdered Smith must be insane."

2. 'The F is G' picks out a specific individual, x, and says of x that x is G.

   referential use (Strawson's analysis)

   "That guy/Jones (who happens to be Smith's murderer) is insane."

Kripke (1977): The difference between the two interpretations is a matter of pragmatics. Semantic reference (what is literally said) vs. speaker's reference (what is meant).

Challenges to the theory of uniqueness

- Incomplete descriptions

(22) The table is covered with books.

▶ The problem is that this description does not apply uniquely (i.e. there not only one table in the world)

▶ Russell: the X will only have an application in the event of there being only one X.
'There is a table and only one table and every table is covered with books.'

▶ The problem of incomplete descriptions does not seem to be specific for definites though. Consider:

(23) Everyone was sick.
where 'everyone' is in fact 'everyone at the dinner party I went to yesterday'.

Challenges to the theory of uniqueness

- General approach: try to shrink the domain of evaluation so that the descriptive content is satisfied uniquely.

- General question: What exactly restricts the domain?

- Pragmatic approaches: it is a context dependent restriction.

- The problem is still subject of discussion... (see Abbott's (2004) paper for references and various proposals)

Challenges to the theory of uniqueness

- Covarying definites

(24) Every time I stopped at a railway station, I spoke to the mayor.
(= I spoke to more than just one mayor).

Solution: Uniqueness of the mayor is satisfied: there is indeed only one mayor, provided we look at the situations of stopping at railway stations individually.

(25) Every situation s with some railway station x where I stopped is such that I spoke to the individual y that is a mayor (the only mayor) in some proper supersituation s' (involving a town) of s (involving the railway station x).

- Non-unique definites
▶ These are the expressions which are definite but often or always NOT unique, even if the domain of evaluation is very restricted.

(26)   a. The kid scribbled on the living-room wall.
       b. John was hit on the arm.
       c. In the evening we came to the bank of a river

(27)   a. # The boy scribbled on a living room wall.
       b. # Mary painted the living room wall.