# Negative existentials, forms of indefinite subjects: bare, articles, "special" forms, NPIs

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Here we are interested in coding the possible form(s) of the pivot in negative existential constructions. In many languages, the pivot (i.e. subject) in a negative existential construction differs in form from the pivot in an affirmative existential construction. We develop a set of 4 properties to try to capture the typology, building on our existing classification schema and definitions.

In the near future, we intend to extend the same type of properties to indefinite mass/count/ nouns in object position in negative sentences, and incorporate questions about the scope of indefinites. PLEASE CONTACT US IF YOU ARE INTERESTED IN DEVELOPING SCOPE PROPERTIES.

# 1 Developing a coding schema

# 1.1 Two articles in French affirmative existentials, one in negative existentials

In French affirmative existential constructions, the pivot of a mass or count noun has two articles (de and the definite article (le or its allomorphes du, de l', de la, des).

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(1) | il | y | a [ de l'eau | dans | le | lac |
There is water in the lake
```

This yields the following values for French mass nouns in affirimative existential constructions:

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the subject in existential constructions_1: ..can be bare : no the subject in existential constructions 2 \dots must have an article : yes
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But in negative existential constructions, the definite article le must be absent, and de is obligatory:

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(2) |il|(n')y|a pas [d'eau|dans|le|lac|
there is neg   D' water in the lake
there is no water in the lake
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This means we have two articles, art1 and art2, with art2 disallowed under negation.

We capture this distribution in French by the following values for three properties for negative existentials: In negative existentials, the pivot/subject (in French):

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01... can be bare: no 02... (can) lack an article: yes (comparing it to the affirmative existential, the article le is absent). 03. .. must have an article/specialized article/ form: yes (because "de" is obligatory)
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Under 03, we include not just de or genitive case (which count in some languages as an "article", but also negative determiners like English no, "special" articles like any in English, other special indefinite forms, or reduplicated forms (often called Negative Polarity items, NPI).

It will be important to give glossed examples to include in the database.

While this allows coding the difference between French and English (see below), it does not allow bring out a difference between French and Italian, a language in which mass nouns in the (negative) existential construction can be bare, or can have an article, i.e. the article form alternates with the bare form, (i.e. a language will have a yes value for 01, and a yes value for -04 as in the table below.

To this effect, we add a fourth property:

<sup>&</sup>lt;sup>1</sup>when it alternates with a different form for example

(3) [] 04 .. can have an article (no for French, because de is obligatory (and French does not allow bare mass nouns), yes for Italian Because if allows bare nouns can be bare, or the article di (thus can have an article).

In other words, this will allow coding a language in which mass nouns cannot be bare, but must have an article, or a language in which mass nouns can either be bare, or have an article.

As we will show below there are implicational relations in our definitions: the problem is that our definitions must be set up in such a way as to allow a finegrained typology, so filling out these properties for each language individually is important.

## 1.2 An expected typology

The following table is a first shot at the expected typology for indefinites in negative existential constructions given these 4 properties-) (this is done for mass nouns here, but need to be completed for singular and plural count Ns (for example, a language could have an optional NPI with count nouns), as well (and possibly for "light" nouns (no-one, no-body, no-person, no-thing).

Table x (to complete): Form of indefinite Mass Nouns an pivot in negative existential constructions:

## Italian and French

	01 can be bare?	02 (can) lack art	03 must have art?	04 can have article	found?
1	yes	yes	no	yes (di)	Italian,
3	no	yes ( $*le/*la$ )	yes (de)	no (no D-NPIs?)	French

Italian: we don't get info about the definite article. This should come out from examples/ comments.

## English

English must have a negative determiners (no), or a special article like any (often referred to as a Negative polarity item (NPI)). English does not seem to allow for a bare mass noun here.

- (4) a. there is no water in the lake
- 'no' is a negative determiner
- b. there isn't any water in the lake

- 'any' is a special article
- c. \*there isn't water in the lake. bare mass NP does not seem to be allowed (unless contrasted?)

Table x (to complete): Form of indefinite Mass Nouns an pivot in negative existential constructions: English

	01 can be bare?	02 (can) lack art	03 must have art?	04 can have article	found?
5	no	no	yes	no	English

### 1.2.1 Croatian

We start with the affirmative construction:

At first blush, Croatian does not really seem to have a special affirmative existential construction<sup>2</sup>.

- (5) frizideru je voda in fridge is water.nom there is water in the fridge # not the water is in the fridge
- (6) Voda je u frizideru water.NOM is in fridge the water is in the fridge not: there is water in the fridge comment: genitive is not possible in this context.

<sup>&</sup>lt;sup>2</sup>Data provided by Daniela Culinovic

However, since word order encodes the difference in interpretation, we treat ?? as an instance of special existential construction, and test all properties of subjects in this order/context. Note that the pivot carries nominative case

Croatian does have a special form for negative existentials, consisting of a contraction of negation 'ne' and have 'imati':

(7) Nema vode u frizideru not.have water.GEN in fridge there is no water in the fridge

Under negation the indefinite pivot must be genitive (and cannot be nominative). Since genitive is not possible in the affirmative construction, the genitive case is treated as an article (just like Romance de/di) according to our definitions. This yields the following values for Croatian:

Table x (to complete): Form of indefinite Mass pivot in negative existential constructions: Croatian 01 can be bare? 02 (can) lack art 03 must have art? 04 can have article found?

4 no yes (gen) no Croatian

Question about 02. Why is the value no?

Since nominative case is absent in the negative existential, should we count nominative as an article? Here are the reasons why we don't count nominative as an article:

- We have independently argued that case only counts as an article (for definiteness), it the form of the subject alternates depending on definiteness/indefiniteness. This means that in Croatian, accusative or nominative count as bare nouns. (accusative noun phrases are compatible with a definite or indefinite interpretation, as are nominative noun phrases).
  - This does not exclude that the language marks definiteness in a different way, i.e. by word order (cf ?? and ??).
- nominative is the unmarked case (to start with).

#### 1.2.2 Table so far and some remarks

Table x (to complete): Form of indefinite Mass pivot in negative existential constructions:

	01 can be bare?	02 (can) lack art	03 must have art?	04 can have article	found?
1	yes	yes	no	yes	Italian,
2	yes	yes	no	?no	?Mandarin
3	no	yes ( $*le/*la$ )	yes (de)	no (no NPIs?)	French
4	no	no	yes (gen)	no	Croatian
5	no	no	yes	no	English
6	no	no	yes	no	Dutch
	?okwithcontrast				
7	no	no	yes	no	Samoan
8	no	no	yes (gen)	? no or ?yes	?Russian
	yes		yes		

### 1.3 Remarks

Some Remarks, Implications, and tasks for the expert:

It would be good to set up some training data.

• "Articles":

There are two articles in the affirmative, one Case related and one "Polarity" related: (Case/P/Gen=Art1

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and D(ef) = Art2^3
must have an article (Art1 so far, but Art 2 can be missing),
special forms (NPIs, no, any, indefinites, indetermined, NPI.....)
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- row 1: Italian can have bare nouns, or di, which yields a yes value for 04. row 1 or row 2: Mandarin: depends on whether "what" can (or must) combine with water in a neutral negative existential sentence.
- 02: (can) lack an article, w.r.t. to the positive: (Art1? so far: Art2 is the one that goes missing (why? ) Could be polarity related, or have multiple sources, relation accusative and genitive)...
- 03/04 are informative about possible forms under negation
- setting the values for 03 and 04 require a comparison with 01.
- row 1 and 2: a yes value for 01 can be bare: implies 02 is yes, and 03 is no;  $\rightarrow$  04 can be yes or no This means 02 is only potentially informative if 01 is no.
- 03 "yes" does not imply 02 "no", since one article can be missing.
- To do: Add exactly what type of languages we don't expect to find
- 1.3.1 Wolof
- 1.3.2 Basaa
- 1.3.3 Bulgarian

 $<sup>^3\</sup>mathrm{Vincent}$  Homer (and myself independently) have suggested the definite article in French is a PPI  $^4$