# Negative existential contexts.
# On the form(s) of indefinite subjects: bare, articles, NPIs, "special" forms.

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WE PRESUPPOSE FAMILIARITY WIH THE CODING SCHEMA FOR OBJECT PROPERTIES, WHICH INCLUDES OUR DEFINITION WHAT COUNTS AS AN ARTICLE, AND THE PROPERTIES FOR EXISTENTIAL CONSTRUCTIONS.

## 0.1 Background

Here we are interested in coding the possible form(s) of an **(unmodified) pivot** (or **subject** in **negative existential constructions**), broadening the typological patterns of articles within a particular language as well as crosslinguistically.

In many languages, the pivot (i.e. subject) in a negative existential construction or context differs in form from the pivot in an affirmative existential construction, as we can see in negative existential constructions in English for mass nouns.

| (Affirmative) existential | Negative existential |
| --- | --- |
| (i) there is water in the bucket | (ii) a. There is **no water** in the bucket |
| | (ii) b. There isn't **any water** in the bucket |

This is an area of great interest to syntax and semantics. It connects to the (very substantial) syntax-semantic literature on negation and **NPIs**(**N**(egative) **P**(olarity) **I**(tems)). It raises questions about the scope of indefinites under negation, their form(s), and the syntactic distribution of various expressions [4]

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[4] In the future, we intend to develop questions about the form, distribution and interpretation/scopal properties of indefinites objects in negative contexts
*Please contact us if you are interested in collaborating some SSWL properties about scope.*

## 0.2 Expanding the current coding schema.

We build on our existing definitions and classification schema of the 3 properties *_1 can be bare, _2 must have an "article", _3 can have an article.* These are not sufficient for capturing the known linguistic variation in negative existential contexts, as we detail below. We will:

1. broaden the notion of "article" in _2 and _ 3 to "article/specialized form" in negative contexts;

2. add an additional property _4 "an article disappears";

3. illustrate the settings for different languages.

4. Discuss how to deal with cases in which there are different strategies within the same language that cannot all be captured by the properties. In this case, our guidelines will be to record the strategy **for the most neutral/ least marked negative existential strategy (see section 0.5**.

## 0.3 There are two "articles" in French affirmative existentials, but only one in negative existentials.

We will start with **(unmodified) indefinite mass nouns**.
In French affirmative existential constructions, the pivot of a mass noun has two "articles". *de* related to Genitive Case, and the definite article *le/la/les*, which combine as *du, de l', de la, des*, sometimes referred to as "Partitive article".

(1)  il y     a    de l'eau     dans le   lac
     it there has DE LE.water in     the lake
     "There is water in the lake"

In affirmative existential constructions, bare (mass) noun phrases are not allowed. The value for _1 is NO. Since both "articles" are obligatory, the value for _2 is YES, and for _3 it is NO:

French: Values for S_Exist_02_
Indefinite mass noun in affirmative existential constructions:

| _1 can be bare | _2 must have an art | _3 can have an art | found? |
|----------------|---------------------|--------------------|--------|
| no             | yes                 | no                 | French |

In negative existential constructions, however, the two articles behave differently: *de* (related to "Genitive") is obligatory, but the definite article *le/la/les* must be absent, i.e. cannot be present under negation.

(2)  il (n')y       a    pas d'eau     dans le   lac
     it (NEG).there have NEG  DE.water in     the lake
     there is no water in the lake

(3)   *il (n')y   a   pas             de l'eau dans le lac
      it  N'.there have NEG DELE.water in the  lake
      there is no water in the lake

To capture this important property, the properties for negative indefinites must be further refined and expanded.

To this effect, we add a fourth property to the list, which captures the fact an article cannot be present or "disappears" on the pivot in negative existential constructions starting with S05_NegEx_, and do so for each of the indefinite (*<mass, sg or pl count N >* pivots.

(4)   S05_4_NegEx_
      indef <mass/sg count/plural count> subject in a negative existential context: an article disappears

## 0.4   Indefinite Mass Nouns in negative existential contexts

This yields the following 4 properties for indefinite mass nouns in **negative existential contexts**, and their values for French:

_1... can be bare : NO
_2. .. must have an article: YES (*because "de" is obligatory*)
_3 .. can have an article: NO *because "de" is obligatory, (even though le cannot be present)*
_4... an article "disappears": YES (*in comparison to the affirmative existential, the definite article le disappears (i.e. must be absent)*).[5].

Indefinite mass nouns in negative existentials (*preliminary coding schema*):

| _1 can be bare | _2 must have an art | _3 can have an art | _4 an article disappears | found? |
|:---:|:---:|:---:|:---:|:---|
| no | yes | no | yes | French |

_1 is no, and _2 remains yes, since *de* must be present in this context.
Because *de* is obligatory, _3 is no ( since neither *de* not *le* is optional _3).
Since _4 lacks an article is 'yes", it must be the case that there are two articles in the affirmative.
Other potential candidates for language like French, where an article goes missing in negative contexts are Bantu languages with so-called "augments".
Note that currently, we don't make a distinction as to whether the article disappears obligatorily or optionally.

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[5]A language with no article in the affirmative, will automatically be NO for _4

### 0.4.1 Broadening the notion of "article" in negative contexts: English NPIs and the negative determiner *no*.

Under _2 and _3, we include not just *de* (or genitive case which in some languages count as an "article"[6], but also negative determiners like English *no*, "special" articles like *any* in English, or other special indefinite forms, (reduplicated or not), often called Negative Polarity items, NPI).
It will be important to give as many glossed examples in the database as necessary.

(5)  a.  There is no water in the lake
    b.  There isn't any water in the lake
    c. ??There isn't water in the lake

*There seems to be some speaker variation on the acceptability of (5) c. The set value could go either way depending on the native speaker linguist. As a first step, this should be indicated in a comment that accompanies the example. In the future it may lead to having different varieties of "English".*

(6)  Negative existential poperties:

    Property S05_2 and S05_3:
    A (mass/sg count/plural count) noun in a negative existential context must/can have an **article/ specialized** form: Yes/No

**Table for Indefinite Mass Nouns in negative existential constructions**(*final schema.*[7]

| _1 can be bare | _2 must have a art/specialized form | _3 can have an art/specialized form | _4 an art disappears | found? |
|:---:|:---:|:---:|:---:|:---|
| no | yes | no | yes | French |
| no? | yes | no | no | English |

### 0.4.2 French and Italian

French and Italian differ in that in Italian a mass nouns in the negative existential construction can either be bare, or have the partitive article (di + definite article)[8]. i.e. **the two articles alternate with the bare form, one article cannot disappear**. This means that Italian will have a YES value for _ 1, for _3, and a NO value for _4.

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[6]When it alternates with a different form like accusative, for example.

[7]NB: we must code _4 an article disappears w.r.t. the affirmative. See section **??** on Croatian.

[8]In an affirmative existential construction in Italian, the mass noun must be bare, and the partitive article is excluded (differing from French in this respect).

This means that we determine the value for _4 w.r.t the forms in _2 and _3. Since the two articles must be both present _4 will be NO in Italian. In French, since the definite article is excluded in this context, _4 will be YES.

**Table for Indefinite Mass Nouns in negative existential constructions**(*continued*)

| _1 can be bare | _2 must have a art/specialized form | _3 can have an art/specialized form | _4 an art disappears | found? |
|:---:|:---:|:---:|:---:|:---|
| no | yes | no | yes | French |
| yes | no | yes | no | Italian |
| no? | yes | no | no | English |

### 0.4.3   More languages: expanding the typology.

Here we incorporate examples from a a few more languages of the form indefinite mass nouns as subjects/pivots in negative existential contexts, and show how they should be classified. The same needs to be done independently for singular and plural count Ns. We briefly return to singular count nouns in section 0.5.

### 0.4.4   Croatian: and the Slavic "Genitive of negation"

We start with the affirmative existential construction in Croatian. At first blush, Croatian does not really seem to have a special affirmative existential construction[9]

(7)     frizideru je voda
        in.fridge is water.nom
        there is water in the fridge
        # not: the water is in the fridge

(8)     Voda      je u  frizideru
        water.NOM is in fridge
        the water is in the fridge *not*: there is water in the fridge
        **comment**: in this order the (mass noun) subject is interpreted as definite

However, since word order encodes the difference in interpretation, we treat (7) as an instance of a special existential construction, and test all properties of existential subjects in this order/context.
**Note that the pivot carries nominative case in this context**.

**Negative existentials and the "genitive of negation".**   Croatian does have a special form for negative existential predicates, consisting of a contraction of *negation 'ne'* and *'imati' 'have'*:

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[9]Data kindly provided by Daniela Culinovič.

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

In negative existential contexts, the indefinite pivot must be genitive (and cannot be nominative). Since genitive contrasts with nominative in the affirmative construction, the genitive case is treated as an "article" (just like Romance *de/di*), according to our definitions for "articles".

**Table for Indefinite Mass Nouns in negative existential constructions**(*continued*)

| _1 can be bare | _2 must have a art/specialized form | _3 can have an art/specialized form | _4 an article disappears | found? |
|:---:|:---:|:---:|:---:|:---:|
| no | yes | no | yes | French |
| yes | no | yes | no | Italian |
| no?/yes? | yes | no | no | English |
| no | yes | no | no | Croatian |

Croatian differs from French for the values of _4. Since Croatian does not have an article in the affirmative, the value for property _4 "an article disappears" is *no*, because the language simply doesn't have an "article" that can disappear. (nominative will not qualify as an article, because the nominative form in the affirmative does not distinguish between definite and indefinite interpretations.) It is important to make sure that the value for _4 is based on a comparison with the *presence* of an article in the affirmative form.

### 0.4.5   Mandarin Chinese

(10)    Mandarin

        hu   li    mei-you           shui
        lake inside NEG.PERF-have water
        There was no water in the lake.'

**Table for Indefinite Mass Nouns in negative existential constructions**(*continued*)

| _1 can be bare | _2 must have a art/specialized form | _3 can have an art/specialized form | _4 an art disappears | found? |
|:---:|:---:|:---:|:---:|:---:|
| no | yes | no | yes | French |
| yes | no | yes | no | Italian |
| no | yes | no | no | English |
| no | yes | no | no | Croatian |
| yes | no | no | no | Mandarin |

### 0.4.6 Gungbe

(Data provided by Enoch Aboh. )

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Il y a pas d'eau dans le lac

| Sìn | má | tò | tɔ̀ | lɔ́ | mè |
|---|---|---|---|---|---|
| Eau | NEG | être-LOC | étendue.d'eau | DET | P |

Il y a pas pas d'enfants dans la maison.

| Vǐ | má | tò | xwé | gbé |
|---|---|---|---|---|
| Enfant | NEG | être-LOC | maison | P |

Il y a pas de medecin au village

| Dòtó | má | tò | tò | lɔ́ | mè |
|---|---|---|---|---|---|
| Médecin | NEG | être-LOC | village | DET | P |

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Property _4 is NO for Gungbe, because there is no article in the affirmative, i.e. there is simply no article that can disappear. Thus, Mandarin and Gungbe represent the same values for negative mass nouns in existential constructions.

**Table for Indefinite Mass Nouns in negative existential constructions**

| _1 can be bare | _2 must have a art/specialized form | _3 can have an art/specialized form | _4 an art disappears | found? |
|---|---|---|---|---|
| no | yes | no | yes | French |
| yes | no | yes | no | Italian |
| no | yes | no | ?*no* | English |
| no | yes | no | no | Croatian |
| yes | no | no | no | Mandarin |
| yes | no | no | no | Gungbe |

### 0.4.7 Samoan (Polynesian)

Samoan[10] has a specialized NPI-like determiner *se (sg)/ ni (pl)* in negative existential constructions (and other contexts). [11]

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[10]Data from Mosel and Hovdhaugen, 1992 *Samoan Reference Grammar* and a 2 quarter UCLA field methods class on Samoan (2006/2007).

[11]The existential predicate appears to be composed of a locative "case" *i* and *ai* ('there'). The negative existential seems to be composed of the negation *le:* and *ai* "there".

(11)　e　　leai　　　se araisa i　　　totonu o le　pou
　　　GEN NEG.exist SE rice　　LOC inside　of the bowl
　　　There is no rice in the bowl

In positive existential a mass noun pivot must have the determiner *le*, which marks indefinite DPs as well as definite DPs.

(12)　o lo'o　　iai　　le masima i　　　totonu o le　supu
　　　O PRES EXIST LE salt　　　LOC inside　of the soup
　　　There is salt in the soup

**Table for Indefinite Mass Nouns in negative existential constructions**

| _1 can be bare | _2 must have a art/specialized form | _3 can have an art/specialized form | _4 an art disappears | found? |
|:---:|:---:|:---:|:---:|---|
| no | yes | no | yes | French |
| yes | no | yes | no | Italian |
| no? | yes | no | no | English |
| no | yes | no | no | Croatian |
| yes | no | no | no | Mandarin |
| no | yes | no | yes (?) | Samoan |

We see that Samoan and French come out in the same way, though by the definite article *le,la,les* disappearing in French, but in Samoan by the general article *l* alternating with *s l.e/ s.e* for mass nouns and singular count nouns. For plural count nouns, the D is zero, and the NPI Det is *ni*. Examples and comments should allow deducing this distributional difference.

The general purpose of our properties is to establish the cross linguistic patterns according to the various variables, not to present specific analyses. That is a question for existing and future linguistic theories.

### 0.4.8　Impossible languages

The way our properties are formulated define intrinsically impossible languages. For example (at least for each strategy within a language, see the discussion in 0.5):

(13)　a.　_1 "can be bare" and _2 "must have an article" cannot have the same values
　　　b.　_2 "must have an article", and _3 "can have an article" cannot have the same values

This is indicated in red under the double line in the table below: we expect to find zero languages with this combination of values.

**Table for Indefinite Mass Nouns in negative existential constructions**

| _1 can be bare | _2 must have a art/specialized form | _3 can have an art/specialized form | _4 an art disappears | found? |
|---|---|---|---|---|
| no | yes | no | yes | French |
| yes | no | yes | no | Italian |
| no? | yes | no | no | English |
| no | yes | no | no | Croatian |
| yes | no | no | no | Mandarin |
| no | yes | no | yes (?) | Samoan |
| yes | yes | | | 0 |
| no | no | | | 0 |
| | yes | yes | | 0 |
| | no | no | | 0 |

## 0.5 Singular Count nouns: negative existential contexts: indefinite articles, the numeral "one", and NPIs

French (unmodified) indefinite pivots in affirmative existentials require the indefinite article "un" (which is homophonous with the numeral *one*). In "neutral" negative existential constructions *de* appears (14) b): *de* is incompatible with *un* , as shown in (14) c.

(14)    a.    Il y a un médecin au village
              There is a doctor in the village
        b.    Il n y a pas de médecin au village
              There is not DE doctor in the village

        c.    *Il n y a pas d'un médecin au village
              There is not DE ONE doctor in the village

On the basis of these examples, we should set the values for singular indefinite count nouns in negative existential constructions as follows: _1 is NO (since the count noun cannot be bare), _ 2 is yes (since an article i.e. *de* is obligatory), and _4 as YES, since *un* disappears.)

Indefinite singular count nouns in negative existentials:

| | _1 can be bare | _2 must have a art/specialized form | _3 can have an art/specialized form | _4 an art disappears | found? |
|---|---|---|---|---|---|
| de | no | yes | no | yes *'un' disappears* | French |

This takes care of "neutral" (or least marked) negative existential constructions: but there are other strategies as well, as we discuss below.

**In case of conflict, please consider the most natural or "neutral" strategy to determine the setting of _4, and explain the problem in a comment.**

### 0.5.1 More than one strategy: When 'un' does not disappear, and more about the possible appearance of 'aucun"

The problem is that languages may have more than one strategy in negative existentials. In French (FR), the indefinite article *un* cán appear as well, particularly when it is stressed i.e. *"UN"*. Note that in these cases, *de* is absent and a special interpretation (*pas un seul* 'not a single' arises prominently:

(15)    a.    Il n y a pas UN médecin au village
               There is not ONE doctor in the village
        b.    There isn't (even) a (single) doctor in the village

The same holds for English *one/a* , when it interpreted as "(not) a single". Stressed ÚN and *ONE* are indistinguishable from the numeral *one*, and appear to be interpreted close to *not (a single) one*. This raises complex questions about the relation of the unstressed indefinite article *un* and the numeral *one*: are these different categories or not?
We clarify the problem further by examining how we would we set _4 for indefinite count nouns on the basis of the examples and interpretation with (15-a) under negation. We keep the line with "de" and add a special line for the properties of French w.r.t. to *un*, and note the problem w.r.t the non-neutral interpretation here.

|  | _1 can be bare | _2 must have a art/specialized form | _3 can have an art/specialized form | _4 an art disappears | found? |
|---|---|---|---|---|---|
| de | no | yes | no | yes | French |
| un | no | yes | no | ?no "special reading?' | French |

If we collapse the two strategies *de* and *un* we get conflicting values for _4.
**Guideline: in case of conflicts: we consider most neutral negative existential strategy, i.e. *de*. Adding examples and comments to the database when such cases arise, will be important and useful for further development.**

    Ideally, we should consider each strategy independently, and set the values for each, i.e. we should add a line for *un* and one for *aucun*:

(16)    Il n' y a aucun médecin au village
         There is AUC.UN doctor in the the village
         NB:*pas* must be absent

    *Aucun* contains *un, une*, hence is NO for _4, as shown in the table below.

| | _1 can be bare | _2 must have a art/specialized form | _3 can have an art/specialized form | _4 an art disappears | found? |
|---|---|---|---|---|---|
| de | no | yes | no | yes *un* | FR |
| un | no | yes | no | ?no/?yes "special reading?' | FR |
| aucun NP | no | yes (aucun) | no | no "un is part of aucun' pas must be absent | FR |

Thus, different strategies within a language coexist, which may very well lead to different codings (but do not have to!). This is why we restrict the coding for the moment to the least marked strategy. Examples for the other strategies can always be added, and commented on.

> **Important**: with indefinite counts nouns *de, un, or aucun* in negative existentials, the (unmodified) indefinite count noun pivot must be interpreted under the scope of negation (i.e. the meaning can be paraphrased with *it is not the case that there is a doctor in the village, i.e. there are no doctors in the village*). These sentences cannot be interpreted with *'un, aucun, de* taking scope above the negation. This can be concluded from the fact that these sentences cannot mean: *\* there is a single doctor who is not in the village* which would be true if **all other village doctors were actually in the village**.

We return to the (possible) form(s) and interpretation of indefinite count noun objects under negation in the near future.

This document discusses how to develop a coding schema, and how to formulate the queries so as to capture the variation found in natural languages, within an individual language, and across languages.
The next step is to gather systematic data from individual languages to code this variability in a systematic fashion. Note that it will be important to give examples illustrating the settings. The search functions that come with the database (cross) will allow extracting all patterns in the database for these 4 properties, and save and download the results.