

Negative existentials: SSWL

Cristina Guardiano
and
Hilda Koopman

July 4, 2018

Contents

1	Background	2
1.1	Expanding the current coding schema.	3
1.2	There are two "articles" in French affirmative existentials, but only one in negative existentials.	3
2	Indefinite Mass Nouns in negative existential contexts	4
2.1	Broadening the notion of "article" in negative contexts: English NPIs and the negative determiner <i>no</i> :	5
2.2	French and Italian	5
2.3	Expanding the typology: more languages	6
2.3.1	Croatian: "Genitive of negation" (Slavic)	6
2.3.2	Mandarin Chinese	7
2.3.3	Gungbe	8
2.3.4	Samoan (Polynesian)	8
2.4	Impossible languages	9
2.5	Singular Count nouns: negative existential contexts: indefinite articles, the numeral "one", and NPIs	10
2.5.1	More than one strategy.: When 'un' does not disappear, and more about the possible appearance of 'aucun'	11

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

Cristina Guardiano¹
and Hilda Koopman²

Version of July 4, 2018. (This document lacks some references.)

Each property definition includes instructions, an elicitation contexts, examples of values in individual languages. A file with examples to elicit can be found [here](#).

PLEASE READ THIS DOCUMENT TO GET AN IDEA OF THE GENERAL CODING SCHEMA BEFORE CODING THE NEGATIVE EXISTENTIAL PROPERTIES.

1. WE PRESUPPOSE FAMILIARITY WITH THE CODING SCHEMA FOR OBJECT PROPERTIES [here](#), WHICH INCLUDE OUR DEFINITION WHAT COUNTS AS AN ARTICLE, AND EXISTENTIAL CONSTRUCTIONS [here](#).

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)

¹ Dipartimento di Comunicazione ed Economia, Università degli Studi di Modena e Reggio Emilia

<http://personale.unimore.it/rubrica/dettaglio/cguardiano>

²Department of Linguistics, UCLA
koopman@ucla.edu and linguisticexplorer@ucla.edu

P(olarity) **I**(tems)). It raises questions about the scope of indefinites under negation, their form(s), and the syntactic distribution of various expressions ³

1.1 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. And finally, we 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 code the strategy for the most neutral/ least marked negative existential strategy (see section 2.5).

1.2 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* ART1, related to Genitive Case, and the definite article (*le/la/les* ART2), which combine as *du, de l', de la, des*, sometimes called "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 in French, 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:

(Values for S02:

Indefinite mass noun in affirmative existential constructions for French:

	<i>_1</i> can be bare	<i>_2</i> must have an art	<i>_3</i> can have an art	found?
	no	yes	no	French

In negative existential constructions, however, the two articles (*de* ART1 and the definite article (ART2) behave differently: *de* (related to "Genitive") is

³In 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.

obligatory, but the definite article *le/la/les* must be absent, i.e. ART2 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, and do so for each of the indefinite <mass, sg or pl count N > pivots.

- (4) Property Subj_Neg.ex._4 an indef <mass/sg count/plural count> subject in a negative existential context: an article disappears

2 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)*).⁴

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* nor *le* is optional _3).

⁴A language with no article in the affirmative, will automatically be NO for _4

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.

2.1 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"⁵, 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 properties:
 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*⁶)

<code>_1</code> can be bare	<code>_2</code> must have a art/specialized form	<code>_3</code> can have an art/specialized form	<code>_4</code> an art disappears	found?
no	yes	no	yes	French
no?	yes	no	no	English

2.2 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* +

⁵when it alternates with a different form like accusative for example

⁶ NB:we must code lacks an article w.r.t. the affirmative, as we can see from Croatian below

definite article)⁷. 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`.

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*)

<code>_1</code> can be bare	<code>_2</code> must have a art/specialized form	<code>_3</code> can have an art/specialized form	<code>_4</code> an art disappears	found?
no	yes	no	yes	French
yes	no	yes	no	Italian
no?	yes	no	no	English

2.3 Expanding the typology: more languages

Here we incorporate examples from 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 2.5.

2.3.1 Croatian: "Genitive of negation" (Slavic)

We start with the affirmative existential construction in Croatian. At first blush, Croatian does not really seem to have a special affirmative existential construction⁸.

(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 ?? 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.**

⁷In a affirmative existential construction in Italian, the mass noun must be bare, and the partitive article is excluded (differing from French in this respect).

⁸Data kindly provided by Daniela Culinovič

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'*:

- (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.

2.3.2 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

2.3.3 Gungbe

(Data provided by Enoch Aboh.)

Il y a pas d'eau dans le lac

Sin má tò tò ló mɛ
 Eau NEG être-LOC étendue.d'eau DET P

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

Ví má tò xwé gbé
 Enfant NEG être-LOC maison P

Il y a pas de medecin au village

Dòtó má tò tò ló mɛ
 Médecin NEG être-LOC village DET P

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

<code>_1</code> can be bare	<code>_2</code> must have a art/specialized form	<code>_3</code> can have an art/specialized form	<code>_4</code> 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

2.3.4 Samoan (Polynesian)

Samoan⁹ has *se*, a specialized NPI like determiner in negative existential constructions (and other contexts).¹⁰

⁹Data from Mosel and Hovdhaugen, 1992 *Samoan Reference Grammar* and a 2 quarter UCLA field methods class on Samoan (2006/2007).

¹⁰The existential predicate appears to be composed of a locative "case" *i* and *ai* ('there'). the negative existential is 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 is marked with *le* .

- (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
etc				

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. How to analyze this difference is ultimately a question for linguists, not a question of generating the cross linguistic patterns, which is the general purpose of these properties.

2.4 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 2.5):

- (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.

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

2.5 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 ' <i>un</i> ' disappears	French

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

It is sufficient for our purposes for the setting of this property to consider the most natural or "neutral" negative existential constructions in case of conflicts.

2.5.1 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, the indefinite article *un* can appear as well, particularly when it is stressed i.e. *FR "UN"*. Note that in these cases, *de* cannot appear, and a special interpretation (*pas un seul* 'not a single' arises:

- (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 applies to English *one/a*, when it interpreted as "(not) a single". Stressed *ÚN* and *ONE* are indistinguishable from numerals, and seem 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?

For our purposes here, we put the question of how to resolve this problem here aside. In case of conflict it is sufficient to consider what happens in neutral negative existentials. Adding examples and comments to the database when such cases arise, will be useful for further development

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 add a special line for the properties of French w.r.t. to *un*, and note the problem w.r.t the non-neutral status here.

(ideally we should code the inventory of the different forms in French in the database, as we do in the table below.

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

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

On the basis of this example, we can add another line for *aucun*, which clearly is build on *un, une*, hence is NO for *_4*. Thus, different strategies may (but do not have to) lead to different codings. 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.

	_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 <i>un</i>	FR
un	no	yes	no	?no/?yes "special reading?"	FR
aucun NP	no	yes (aucun)	no	no "un is part of aucun"	FR

Important: with these 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 'one' or 'un' scoping 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. The next step is to gather the data from individual languages to code this variability in a systematic fashion: it will be important to give examples. The search function (cross) will allow extracting all patterns in the database for these 4 properties, and save and download the results.