Abstract. This article is about the typology of inverse locational predication, commonly called existential predication, illustrated by English There is a book on the table. After discussing the definition of existential predication and establishing the distinction between the languages that have grammaticalized an existential predicative construction and those that have no dedicated existential predicative construction, I define seven types of existential predication and discuss their distribution in the world’s languages on the basis of a sample of 256 languages.

1. Introduction

1.1. What this article is about

This article puts forward a typology of inverse locational predication, more commonly (but somewhat misleadingly) called existential predication, as illustrated by sentences such as English There is a book (on the table), French Il y un livre (sur la table), German Da liegt ein Buch (auf dem Tisch), Turkish (Masada) bir kitap var, Tswana Go na le buka (fa tafoleng), etc. Cross-linguistically, the predicative constructions illustrated by such sentences differ to a considerable extent both in their formal make-up and in the precise range of their uses, but their common property that will be retained here as criterial for identifying a predicative construction as existential is their ability to provide an alternative way of encoding the prototypical figure-ground relationships also denoted by plain locational sentences such as English The book is on the table, French Le livre est sur la table, German Das Buch liegt auf dem Tisch, Turkish Kitap masadadır, Tswana Buka e fa tafoleng.

The term ‘existential predication’ is retained here, in spite of its shortcomings, as the label most commonly used by linguists to designate such predicative constructions.¹ In other words, in this paper, ‘existential clauses’ must be understood

¹ Although the use of the term ‘existential’ with reference to predicative constructions typically used to denote accidental and temporary presence of an entity at a certain location is fairly common, this term also has other uses that must be mentioned in order to prevent misunderstandings. Some authors restrict the use of ‘existential’ to clauses in which no location is expressed (There is a book), and use ‘locative existential’ or ‘locative presentative’ for existential clauses in which a location is
as referring to clauses analyzable as instantiations of a predicative construction sharing with plain locational predication the ability to encode prototypical figure-ground relationships. What distinguishes existential clauses from plain locational clauses is a different perspectivization of figure-ground relationships whose most obvious manifestation is that, contrary to plain locational clauses, existential clauses are not adequate answers to questions about the location of an entity, but can be used to identify an entity present at a certain location.

1.2. The language sample

The typology of existential predication put forward in this article is based on a convenience sample including 256 languages. In order to constitute this sample, I consulted all the sources I had relatively easy access to (either via libraries or through the Internet), and retained those that provided data making it possible to at least characterize the language in question as having grammaticalized a special predicative construction for inverse locational predication or not. I have refrained from including long lists of closely related languages showing exactly the same type of existential predication, but existential predication is a domain in which important variation may occur even within low-level groups of languages, and in such cases I decided to include as many languages as necessary to give a good idea of the micro-variation.

Such a sample can be expected to give a good picture of the cross-linguistic diversity in the possible types of existential predicative constructions (except perhaps for some very rare types that I may have missed), but not necessarily of the statistical importance of each type. Among the languages of the world, there is probably a much higher proportion of languages that have not grammaticalized a special predicative construction for inverse locational predication, and a much lower proportion of languages with dedicated existential predicators, than within the limits of my sample, since even detailed descriptions of languages in which existential predication has not been grammaticalized must not necessarily be expected to mention this particularity, whereas even brief sketches of languages that have a dedicated existential predicator normally mention it explicitly.

In this connection, it is important to emphasize that, if some language families or areas are quite obviously under-represented in my sample (for example, the languages of native North America), the only reason is that very few of the sources I consulted for the language families or areas in question included the data I needed for this study. I interpret this as an indication that the grammaticalization of overtly expressed, as in There is a book on the table. Others, for example Czinglar (2002), distinguish ‘locative existentials’ expressing accidental and temporary (‘stage-level’) presence (There is a book on the table) from ‘pure existentials’ expressing a habitual (or ‘individual-level’) relationship between an entity and its location (There are many books in this library), whereas in my use of ‘existential’, There are many books in this library illustrates a non-prototypical use of an existential construction identified as such by its ability to be used in clauses such as There is a book on the table. Many descriptive grammars designate as ‘existential verbs/copulas’ predicators used not only in existential clauses, but also in plain locational clauses. Finally, the relationship between existential predication and presentational constructions (see Section 2.9) explains some fluctuation in the use of the terms ‘existential’ and ‘presentational’.
existential predication is probably a relatively uncommon phenomenon in these languages families or areas.

1.3. The structure of the article

This article is organized as follows. Section 2 develops and comments the definition of existential predication just proposed, and discusses the distinction between existential constructions proper and constructions used to express more or less similar meanings but that do not really qualify as existential constructions. Section 3 discusses the division of existential constructions into types. Section 4 is about the possible equivalents of the choice between locational and existential predication in languages that have not grammaticalized such a contrast. Sections 5 to 11 are devoted to a particular type of existential predication each: loc-existentials, trans.poss-existentials, incorp.poss-existentials, poss/loc-existentials, com-existentials, id-existentials, and existential predicators involving dedicated existential predicators. Section 12 is about possible restrictions on the contrast between existential predication and plain locational predication. Section 13 discusses a possible generalization about the use of overt predicators in existential predication. Section 14 summarizes the main conclusions.

2. Existential predication as inverse locational predication

2.1. The need for a cross-linguistic definition of existential predication

‘Existential predication’ is the usual designation of predicative constructions such as English *There is N (Loc)*, French *Il y a N (Loc)* (N a noun phrase, Loc a phrase expressing location), and their equivalents in other languages. There is wide consensus on considering *There is N (Loc)* in English and *Il y a N (Loc)* in French as constructions in their own right that cannot be analyzed as mere variants of the other predicative constructions in which the same verb can be found (locational predication *N is Loc* in the case of English *be*, possessive predication *N₁ a N₂* in the case of French *avoir*).

Much of the confusion about these constructions is due to the fact that ‘inverse locational predication’ or something similar would be a much more convenient label than ‘existential predication’. However, putting forward such a term now would only create further confusion, and the least bad solution is to retain the most commonly used label, but this choice implies emphasizing that ‘existential predication’ must be understood as conventionally carrying a meaning that departs from its etymology, in order to prevent possible misunderstandings, and to explain apparent contradictions with other authors using the same term with a different extension.

Descriptive labels are basically arbitrary, and the use of ‘existential’ as a descriptive label for a particular construction of an individual language is a priori not particularly problematic, although it can be criticized for misleadingly suggesting to identify the meaning of the constructions in question with the lexical meaning of the verb *exist*, as will be commented below. The question that must however be discussed immediately is that there would be no sense in trying to
typologize constructions identified cross-linguistically as existential on the sole basis of a rough translational equivalence with an English (or French, Russian, German, etc.) construction commonly designated as existential.

At this point, it is important to observe that, cross-linguistically, predicative constructions identified in current practice as existential may differ greatly in some aspects of their use. For example, all accounts of the English existential predication *There is N (Loc)* insist on the strong definiteness restrictions that characterize this construction, and suggest considering them as an essential characteristic of existential predication, but in some languages these restrictions seem to be inexistent, or at least much weaker. For example, in colloquial French, a sentence such as *Tiens, (il) y a Jean!* (lit. *Hey, there is Jean!*) is a perfectly normal sentence in a situation in which the speaker simply notes the presence of a person (s)he knows under the name of Jean. Similarly, Leonetti (2008) compares the acceptability of the Catalan sentence in (1) with the unacceptability of its literal equivalents in English (*There is the police in the courtyard*) or Spanish (*Hay la policía en el patio*).

(1) Catalan (Leonetti 2008)

\[
\text{Hi ha la policia al pati.} \\
\text{there expl has the police in the courtyard}
\]

Another interesting observation made by Leonetti is that Spanish is particularly restrictive in the use of the dedicated existential predicator *hay*, and that this must be related to the possibility of using the locational verb *estar* in thetic clauses with a definite subject, as in (2).

(2) Spanish (Leonetti 2008)

\[
\text{Está Juan al teléfono.} \\
\text{is Juan at the phone} \\
\text{‘There is Juan at the phone.’}
\]

Hausa illustrates the opposite situation, with a dedicated existential predicator *àkwai* that freely combines with personal pronouns, as in (3).

(3) Hausa (Newman 2000: 178)

\[
\text{Àkwai mú cikin màganàr.} \\
\text{EXIST 1PL in matter DEF} \\
\text{lit. ‘There is us in the matter.’} \rightarrow \text{‘We are involved in the matter.’}
\]

2.2. Existential predication as an alternative way of encoding prototypical figure-ground relationships

The examples manipulated by linguists dealing with existential constructions show that, when identifying a predicative construction as an instance of existential
predication, most of them implicitly consider crucial the fact that it shares with plain locational predication the ability to encode prototypical figure-ground relationships. This delimitation of existential constructions is explicitly posited here. By ‘prototypical figure-ground relationships’, I mean episodic spatial relationships between a concrete entity conceived as movable (the figure) and another concrete entity (the ground) conceived as occupying a fixed position in the space, or at least as being less easily movable than the figure, as in *The dog is under the tree* or *The book is on the table*.

For example, clauses such as *There is a pond in front of our house* or *There is a stain on the mirror* are instantiations of the existential predicative construction of English *There is N* (*Loc*), but the ability to encode such relationships is not decisive in identifying the predicative construction in question as ‘existential’, and in some languages, the usual translational equivalent of such clauses involves a predicative construction that does not qualify as ‘existential’ in the precise meaning given here to this term.

In particular, in languages sensitive to the distinction between stage-level and individual-level presence (i.e., in languages that use or tend to use distinct constructions for *There are dogs in the garden* and *There are lions in Africa*), the construction retained for the typology proposed here is that used to encode the episodic presence of an entity at some place. Constructions that may provide translational equivalents of English *there is* or French *il y a* in some of their uses but are not available to express things like *There are dogs in the garden* (such as German *Es gibt N* (*Loc*)) are not retained in the typology put forward in this paper. This question will be briefly resumed in Section 2.7.

What I would like to emphasize at this point is that the constructions investigated in this paper are not identified by reference to an abstract meaning accounting for all of their uses, which in some respects show important cross-linguistic variations. In this domain as in others, it is impossible to find two constructions in two different languages with exactly the same range of uses. What identifies a predicative construction as an instance of existential predication in the sense given to this term in this paper is its participation in contrasting pairs of sentences referring to prototypical figure-ground relationships such as *The dog is under the tree / There is a dog (under the tree)* or *The book is on the table / There is a book (on the table)*. The restrictions in the use of the constructions available to encode such relationships and their extension to the expression of situations other than prototypical figure-ground relationships show important cross-linguistic variations, but the ability to be involved in such contrasts is the criterion according to which I have selected the predicative constructions dealt with in this paper.

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2 On the restrictions on the use of German *es gibt*, often (but erroneously) described as an equivalent of English *there is* or French *il y a*, see Czinglar (2002).
2.3. Problems with the conception of existential predication as ‘expressing existence’

In many articles on existential predication, the term ‘existential predication’ is used with the same extension as here (i.e. with an extension consistent with the definition of existential predication as inverse locational predication), but at the same time its meaning is described, without further comments, as ‘the expression of existence’, which suggests identifying the constructional meaning of existential predication with the lexical meaning of the verb *exist*. However, in contrasting pairs criterial for identifying a predicative construction as existential, such as *The dog is under the tree / There is a dog (under the tree)*, the existential variant cannot be paraphrased by means of the English verb *exist*, and the same observation can be made in the other languages that have a verbal lexeme with a similar meaning (which incidentally is by no means a common situation in the languages of the world). The situations with reference to which *exist* is a possible equivalent of *there is* are not the prototypical figure-ground relationships with reference to which most linguist implicitly identify the predicative construction for which they use the label ‘existential’.

Similarly, in French, the uses of the existential predicator *il y a* (lit. *it expl there expl is*) overlap with those of *il existe* (lit. *it expl exists*) and *il est* (lit. *it expl is*), but *Il existe un livre sur la table* and *Il est un livre sur la table* are not possible equivalents of *Il y a un livre sur la table* ‘There is a book on the table’. As analyzed in detail by Méry (2005), the semantics of *Il existe N (Loc)* and *Il est N (Loc)* includes much more than a mere change of perspective on typical figure-ground relationships, and consequently these constructions do not qualify as existential according to the definition adopted here.

There is a huge literature on existential predication, but unfortunately most authors, either do not formulate any definition, or simply reproduce or paraphrase Jespersen’s definition according to which an existential sentence is one in which “the existence of something is asserted or denied” (Jespersen 1924: 155), as if reference to the philosophical notion of existence were sufficient to validate the use of the label ‘existential construction’ by linguists. For example, Lyons (1967) has been particularly influential in the subsequent development of studies investigating the relationship between existential, possessive and locational clauses, but no definition is formulated in this article, in which these three sentence types are just introduced by English examples.

In a recent handbook of semantics, MacNally (2011: 1830) adds two interesting precisions: “The term ‘existential sentence’ is used to refer to a SPECIALIZED OR NON-CANONICAL CONSTRUCTION which expresses a proposition about the existence OR THE PRESENCE of someone or something. (emphasis mine)” However, in spite of the fact that the term of presence figures in her definition, she does not comment on it, and the remainder of her paper shows that she does not really depart from the common view according to which the notion of existence as defined in dictionaries of French or English provides an adequate characterization of the meaning expressed by so-called existential constructions.

The need for avoiding reference to the philosophical notion of existence is particularly obvious in languages in which no special context is required to validate
the use of negative sentences such as those in (3), which quite obviously do not deny the existence of the person mentioned.\(^3\)

(3) French (pers.knowl.) / Russian (Partee and Borschev 2007)

a. *Il n’y avait pas Jean au cours.*
   
   `it expl not there expl had not Jean at the lecture`
   
   ‘Jean was not at the lecture.’

b. *Ivana ne bylo na lekcii.*
   
   `Ivan gen neg be.pst.sg.n at lecture prep`
   
   ‘Ivan was not at the lecture.’

It cannot be denied that there is a relationship between the meaning expressed by English *exist* or French *exister* and that expressed by existential predication, but the notion underlying the use of existential predication is quite obviously much wider than that underlying the use of *exist*. It is very easy to find existential clauses that cannot be paraphrased by clauses headed by the verb *exist*, whereas uses of *exist* that cannot be straightforwardly paraphrased by means of existential predication are relatively marginal. But the most important observation, as already commented above, is that the of the verb *exist* as a synonym of existential predication is restricted to situations whose encoding may constitute an extension of the use of existential predication, but is not criterial for the recognition of a predicative construction as existential. English *exist* and French *exister* have an etymological link with the expression of presence at location, since they come from Latin *existere/exsistere* ‘to step out, stand forth, emerge, appear’, but their meaning has evolved in such a way that clauses headed by such verbs do not qualify as existential clauses in the technical sense of this term.

It may also be mentioned in this connection that in Mandinka, as illustrated by Ex. (4a-c), existence in the philosophical sense of this term is commonly expressed by means of the resultative form of the verb *ké* (a polysemous verb that can be glossed as (a) do, (b) occur, (c) transform, (d) become, and (e) put), but the same construction cannot be used to encode existence in the sense commonly given to this term by linguists – Ex. (4c).

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\(^3\) Note that, due to the restrictions on the use of existential predication in English, the English translation of these examples cannot reflect the nuance that distinguishes them from the corresponding locational sentences (French *Jean n’était pas au cours*, Russian *Ivan ne byl na lekcii*).
(4) Mandinka (pers.doc.)

   well-in-frog-D CMP.NEG 3SG know QUOT ocean-D LCOP occur-RES
   ‘The frog that lives in the well does not know that the ocean exists.’ (proverb)

b. Moo-siifaa jámáa le be kée-rin.
   person-kind many FOC LCOP occur-RES
   ‘There exist many kinds of people.’

   dog-D LCOP occur-RES tree-D under
   Intended: ‘There is a dog under the tree.’

To summarize, it follows from the definition of existential predication as an
alternative way of encoding typical figure-ground relationships that ‘existential
predication’ must be viewed as a technical term arbitrarily used as a label for a class
of constructions whose use is not regulated by the notion of existence as defined in
dictionaries of English or other languages. The main theoretical problem raised by
existential predication is not its relationship to English exist and its translational
equivalents in other languages, or its relationship to the philosophical notion of
existence, but the precise nature of the contrast between existential and plain
locational predication, since the identification of a predicative construction as
existential relies on the possibility of such a contrast.

2.4. Existential predication as encoding a particular perspectivization of the
relationship between a figure and a ground

The reference to existence rather than presence in the definition of so-called
existential clauses has been the source of false problems and groundless
controversies. For example, many Russian linguists have argued that sentences such
as (3b) above (reproduced here as (5)) cannot count as existential sentences, since
they do not deny the existence of the referent of the genitive noun phrase.

(5) Russian (Partee and Borschev 2007)

   Ivana ne bylo na lekcii.
   Ivan.GEN NEG be.PST.SG.N at lecture.PREP
   ‘Ivan was not at the lecture.’

However, as discussed in detail by Borschev and Partee in several co-authored
papers (Borschev and Partee 2002, Partee and Borschev 2004, Partee and Borschev

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4 The abbreviation ‘pers.doc.’ (personal documentation) refers to data I collected myself on poorly
documented or undocumented languages on which I carried out fieldwork, or to data constructed
according to the indications given by grammars and subsequently checked with the help of native
speakers.
such sentences behave in all relevant respects like those whose ‘existential’
nature is not controversial, and the problem they raise is just the consequence of a
wrong definition. Borschev and Partee argue that existence (in the sense relevant to
the analysis of so-called existential construction) is always relative to location, and
that, once existential and locational clauses are clearly defined as encoding two
different perspectives from which the same existence/location situations may be
structured (either from the perspective of the figure or from the perspective of the
ground), there is no difficulty in accepting that sentences such as (5) are existential
sentences.

At first sight, one might get the impression that, when arguing in detail in favor of
such a position (which was already explicitly defended by Bally (1932), and which I
adopted in my habilitation thesis on possessive constructions – see Creissels (1979:
376-385)), Borschev and Partee are just kicking down an open door, given the huge
literature on the relationship between locational and existential constructions.
However, most of the works that have discussed this issue take for granted the
existence of a relationship between existential and locative constructions but do not
discuss its nature. They simply ignore the problem of the cross-linguistic
identifiability of existential constructions and concentrate on the possibility of a
syntactic derivation of constructions labeled ‘existential’, but whose existential
nature is not discussed, from locational constructions (or of both from a deep
syntactic structure shared by existential and locational constructions). The technical
details of the derivation within the frame of the successive versions of the generative
model (in particular, the relevance of the notion of small clause to the analysis of
existential and locational clauses) stand at the center of attention. It is interesting to
observe that most generative accounts of the relationship between locational and
existential predication agree that locational predication is in some sense more ‘basic’
that existential predication, but in general, the authors do not comment this choice,
or try to imagine purely syntactic justifications.

Borschev and Partee do not only depart from other authors in that they discuss
the very nature of the relationship between existential and locational predication,
rather than its morphosyntactic manifestations. They also show the shortcomings of
the position adopted by most of the authors that have tackled this question,
according to which there is a straightforward relationship between information
structure and the choice between existential and locational predication.

It has been proposed that existential clauses are thetic clauses, or that an essential
feature of existential clauses is the rhematicity of the figure, but Borschev and Partee
convincingly argue that none of these two positions is compatible with the
acceptability of existential sentences such as (6) in Russian.

(6) Russian (Borschev and Partee 2002)

\[ Ja \quad iskal \quad kefir. \quad Kefira \quad v \quad magazine \quad ne \quad bylo. \]
[I looked for kefir. kefir GEN in store PREP NEG be PST SG N]
‘[I was looking for kefir.] There wasn’t any kefir in the store.’

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5 The terms used by Borschev and Partee are not figure and ground, but thing and location.
On the basis of such observations, Borschev and Partee conclude that a notion of *Perspectival Structure* distinct from the Theme-Rheme or Topic-Focus structure must be introduced. Both existential and locational predication encode an abstract predicate BE.AT(FIG, GR) ‘figure is at ground’. All languages have a construction analyzable as locational predication, encoding the choice of the figure as the ‘Perspectival Center’, which constitutes the unmarked choice because of the ontological status of the two arguments of the abstract predicate BE.AT. But in addition to that, some languages have grammaticalized a predicative construction encoding the choice of the ground as the Perspectival Center: “An analogy can be made with a video camera and ‘what the camera is tracking’. A Predication sentence [i.e., a locational sentence] keeps the camera fixed on the protagonist as she moves around (THING as Center), an Existential sentence is analogous to the way a security camera is fixed on a scene and records whatever is in that location (LOC as Center).” (Partee and Borschev 2007). Perspectival structure “is basically a structuring at the model-theoretic level ... [that] reflects cognitive structuring of the domains that we use language to talk about, and are not simply ‘given’ by the nature of the external world”. In other words, perspectival structure is basically a choice between different possible conceptualizations of a situation, not between different ways of packaging information, although the choice of a particular perspective has consequences for the expression of information structure.

This notion of perspectival structure needs further elaboration, but it accounts for the fact that, in languages in which a dedicated existential predication can be recognized, the unmarked or default topic in existential clauses is the ground, and the figure is most of the time to be interpreted as rhematic, but the discourse status of the ground and the figure in existential predication is not irrevocably fixed, and operations expressing variations in information structure can affect existential predication like other predicative constructions, as illustrated by Ex. (6) above. The notion of perspectival structure explains at the same time why, in languages devoid of a dedicated existential predication, rough equivalents of existential predication can be obtained by means of manipulations of the information structure of locational sentences, as observed for example in Maslova’s description of Tundra Yukaghir – Maslova (2003).

Interestingly, the formulations found at least in some of the formal analyses of the relationship between locational and existential predication reveal a basic intuition quite compatible with Borschev and Partee’s analysis in terms of unmarked vs. marked perspectival structure. For example, Moro (1992) designates locational sentences as ‘canonical’ copular sentences, and existential sentences as ‘inverse’ copular sentences.

### 2.5. On the non-universality of existential predication

Another important issue is the universality of existential predication. It is widely assumed that all languages have a dedicated existential construction, as illustrated by the following statement from Moro (1992): “In all languages there is a SPECIFIC construction which is called ‘existential sentence’. (emphasis mine)” However, in
many languages, it is impossible to recognize a construction really distinct from the locational predicative construction that would meet the conditions for being analyzed as an existential construction. For example, Welsh has no dedicated existential predication, and the construction *mae N Loc*, identifiable as locational predication, is also used in contexts in which other languages tend to use a special existential construction. As illustrated by Ex. (7), the constituent order in this construction is rigid, and definiteness marking of the subject is the only difference between the Welsh equivalents of English locational and existential clauses.

(7) Welsh (Feuillet 1998: 691)

a. *Mae ˈr car yma.*
   is the car here
   ‘The car is here.’

b. *Mae car yma.*
   is car here
   ‘There is a car here.’

Similarly, Mandinka has no dedicated existential predication, and the construction *N bé Loc*, identifiable as locational predication, is also used in contexts in which other languages tend to use a special existential construction, with no possible variation in the linear order of the constituents. Moreover, noun determination in Mandinka does not involve obligatory marking of nouns as definite or indefinite. In this language, semantic distinctions more or less similar to those expressed by the choice between locational predication and existential predication in other languages can only be suggested by adding the focus marker *le* to one of the two terms of locational predication – Ex (8).

(8) Mandinka (pers.doc.)

   dog- D LCOP tree- D under
   ‘The dog is under the tree.’ or ‘There is a dog under the tree.’

b. *Wul-óo le be ˈyîr-ōo kóto.*
   dog- D FOC LCOP tree- D under
   ‘There is a dog under the tree.’ or ‘It is the dog that is under the tree.’
   (in French, ‘Il y a le chien sous l’arbre’ would be another possible translation)

c. *Wul-óo be ˈyîr-ōo le kóto.*
   dog- D LCOP tree- D FOC under
   ‘The dog is under the tree.’ Or ‘It is under the tree that the dog is.’

In other languages, for example Russian, the recognition of a dedicated existential construction is uncontroversial in some conditions, but problematic in others. As
noted by Partee and Borschev (2002), under negation, case-marking and agreement sharply distinguish existential and ‘plain’ sentences, but in the absence of negation, “because of (a) great ‘freedom’ of word order and (b) no articles, the difference between existential and ‘plain’ sentences is less obvious”, and “it is natural to view the sentences in (9) as differing only in Theme-Rheme structure and word-order (and correspondingly in definiteness of the bare NP); the issue of whether there is any deeper syntactic difference between them is controversial”.

(9) Russian (Partee and Borschev 2002)

   a. V gorode byl doktor.
      in town.PREP be.PST.SG.M doctor
      ‘There was a doctor in town / (The doctor was in town.)’

   b. Doktor byl v gorode.
      doctor be.PST.SG.M in town.PREP
      ‘The doctor was in town.’

2.6. Perspectivization in the encoding of figure-ground relationships and in the encoding of two-participant events

At this point, it is interesting to mention a possible parallelism between the grammaticalization of perspective in the encoding of figure-ground relationships and voice alternations in the encoding of events involving two or more participants.

It is for example obvious for every linguist that passive constructions are not universal, and that the perspectivization of events they encode predisposes them to fulfill discourse functions that are fulfilled by other means in languages that do not have passive constructions proper. It is equally obvious that there would be no sense in identifying the passive constructions of a given language on the mere basis of translational equivalence with sentences previously identified as passive in another language, and that a cross-linguistic study of passive constructions cannot dispense with a discussion of the criteria according to which constructions are identified as passive.

As pointed out to me by Antoine Guillaume, the parallelism is perhaps even better between the locational/existential alternation and symmetrical voice systems as attested in Philippine languages, or direct/inverse systems, i.e., alternations in the encoding of events involving two or more participants that cannot be accounted for in terms of participant promotion/demotion at syntactic level, but only as expressing alternative perspectivizations of the event.

The theoretical problem raised by the existence of such alternations is basically the same as that raised by the possible contrast between locational and existential constructions, but surprisingly, in contrast to voice alternations, the question of the cross-linguistic identifiability of existential constructions has rarely been discussed in the literature.
2.7. Typical and less typical uses of existential predication, and the selection of the data for a typology of existential predication

A crucial aspect of the typology of existential predication I am trying to elaborate in this article is the selection of the relevant data on the basis of a rigorous definition of existential predication. To have an idea of the problem, let's take an English clause like *There are two varieties of millet*. This is unquestionably an existential clause in the sense that it instantiates the English predicative construction (*There is N (Loc)*) meeting the definition of existential predication retained in this article. But the use of the English existential predication it illustrates is not the one that unambiguously identifies this predicative construction as existential according to my criteria. In other words, the ability of a construction to provide a translational equivalent of *There are two varieties of millet* does not ensure that it meets the definition of existential predication as a construction that can be used to express a particular perspectivization of prototypical figure-ground relationships.

For example, in Mandinka, this sentence has three equally usual translational equivalents – Ex. (10), but none of them qualifies as existential on the basis of a rigorous definition of ‘existential’, and more generally, as already stated in Section 2.5, Mandinka is among the languages that have not grammaticalized a construction characterized by its ability to express an alternative perspectivization of prototypical figure-ground relationships:

– (10a) is a locational clause in which the figure phrase is focalized, and the role of ground is fulfilled by *jee*, normally interpreted as ‘there’ (as in *Faatú be jee* ‘Fatou is there’) but used here as a mere place filler with no specific reference;
– (10b) illustrates a construction, already illustrated by Ex. (4), which carries a meaning similar to that of English *exist* but cannot be used to express an alternative perspectivization of prototypical figure-ground relationships;
– (10c) illustrates another usual Mandinka equivalent of English *exist*, with the verb *sotó* ‘be available’; this construction is also used for example to ask a shopkeeper about the availability of some product, but it cannot be used to express the equivalent of English *There is a dog in the room*.

(10) Mandinka (Creissels and Sambou 2013: 139)

a. Ŋoo-síffáa fulá le bé jee.
   millet-variety two FOC LCOP there
   ‘There are two varieties of millet.’

b. Ŋoo-síffáa fulá le be kée-riŋ.
   millet-variety two FOC LCOP there
   ‘There are two varieties of millet.’

---

6 The same verb used transitively constitutes the usual equivalent of English *get* and *have*.
c. Ñoo-síifáa fulá le soto-ta.
    millet-variety two FOC be_available-CMPL
    ‘There are two varieties of millet.’

When selecting data for this study, the main difficulty I had to face is that some descriptive grammars have a section on existential clauses, but all the examples they provide refer to non-prototypical figure-ground relationships, and nothing ensures that, in the language in question, the same construction would be available to express an alternative perspectivization of prototypical figure-ground relationships.

In particular, many languages have constructions comparable to the Mandinka constructions with kéeriŋ or sototá, which constitute usual equivalents of exist or be available and are commonly used to encode situations involving atypical figures and/or grounds, or to express habitual presence of an entity at some place, but are not used to encode accidental presence of a concrete and movable entity at some place, and therefore do not qualify as existential constructions as defined here. This is for example the case of the following constructions:

- German es gibt N (Loc), lit. ‘itexpl gives N (Loc)’.
- Swedish det finns N (Loc) and Norwegian det finnes N (Loc), lit. ‘itexpl finds itself N (Loc)’, with a mediopassive form of the verb ‘find’;
- Russian imeetsja N (Loc), lit. ‘has itself N (Loc)’ with a mediopassive form of the verb ‘have’.

2.8. Existential predication and negation

In some of the languages that have grammaticalized an existential predicative construction, no special negative strategy is required for existential clauses (English there is / there is not, French il y a / il n’y a pas, Spanish hay / no hay, etc.) In some others, a special negative strategy is used for existential clauses, and many languages have a suppletive negative existential predicator, for example Turkish var ‘there is’ / yok ‘there is not’ – Ex. (11).

(11) Turkish (pers.doc.)

    a. Masa-da bir kitap var.
       table-LOC one book EXIST
       ‘There is a book on the table.’

    b. Masa-da kitap yok.
       table-LOC book EXIST.NEG
       ‘There is no book on the table.’

---

7 Czinglar (2002) provides a detailed analysis of the uses of German es gibt in contrast with those of the Alemannic existential predicator es hot ‘there is’ (lit. ‘itexpl has’). On the development of this particular use of a verb ‘give’, see Gaeta (2013).
However, special negative strategies (including suppletion) are cross-linguistically common not only in existential predication, but also in identificational and locational predication, i.e., in the other types of predication commonly subsumed under labels such as ‘copular predication’ or ‘non-verbal predication’.

Since the aim of this paper is limited to establishing a typology of the constructions used for existential predication on the basis of their formal similarities with other functional types of predication, I will not develop further the question of negation in existential clauses. Many languages have negative existential predicators completely different from their positive counterpart, which shows that positive and negative existential predicators may grammaticalize independently of each other, but as a rule, in a given language, positive existentials and negative existentials belong to the same type, i.e. show the same similarities or contrasts with other functional types of predication. There are exceptions, for example Polish (cf. Section 12), but they are statistically marginal.

Some interesting observations and hypotheses about negative existentials can be found in Veselinova (2013).

2.9. Existential predication and presentational sentences

Presentative utterances are speech events in which the speaker “call[s] the attention of an addressee to the hitherto unnoticed presence of some person or thing in the speech setting” – Lambrecht (1994: 39, 177), and the structural configurations conventionally used to encode presentative utterances can be called ‘presentational constructions’, or simply ‘presentationals’ – Gast and Haas (2011: 128). ‘Presentative utterances’ are “a special case of the more inclusive class of thetic judgements” – Gast and Haas (2011: 132).

Among the languages that have grammaticalized an existential predicative construction, many also have a presentational construction in which the existential predicator is used to introduce the NP presenting the new participant, as in English

*There are many students who work in supermarkets.*

However, there are many reasons for keeping apart the notions of existential predication and presentational sentences, in spite of the obvious connection between them. As discussed by Gast and Haas (2011) for Romance and Germanic languages, in the languages in which a presentational construction involving an existential predicator is usual, this construction is in competition with other types of presentational constructions that do not have identical distributions and also differ in some of their semantic implications. For example, two distinct presentational constructions must be recognized in Spanish: the cleft construction with the new participant introduced by the existential predicator *hay*, as in *Hay mucha gente que piensa así* ‘There are many people who think so’, and the inversion construction illustrated by *Entraron dos hombres con escopetas en la mano* ‘[There] entered two men with guns in their hands’. In the terminology of Gast and Haas (2001), presentational constructions involving an existential predicator are called ‘formulaic presentational’, and those without an existential predicator, ‘non-formulaic presentational’.
Moreover, there is important cross-linguistic variation in the distribution of presentational constructions involving existential predicators. In particular, it is obvious that French is particularly ‘liberal’ in the use of such constructions, and that for example literal translations of French presentational sentences involving the presentational predicator *il y a* into Russian are very often quite unnatural, if not completely agrammatical – Ex. (12).

(12) French (a) / Russian (b) (pers.knowl.)

a. *Il y a Jean qui veut te parler.*
   \[\text{it}_{\text{expl}} \text{ there}_{\text{expl}} \text{ has Jean who wants to you talk}\]
   lit. ‘There is Jean who wants to talk to you.’

b. *Est’ Ivan kotoryj xočet govorit’ s toboj.*
   \[\text{there is Ivan who wants talk with you}\]

To summarize, presentational constructions of the type illustrated by Ex. (12a) constitute a common extension of the use of existential predicators, and the semantic motivation of this extension of the use of existential predicators is obvious, but taking into consideration such constructions and their possible equivalents in a typological study of existential predication such as that developed in this article could only lead to confusions.

3. Types of existential predication

It follows from the definition of existential predication that, in a typology of existential predication, the first distinction to be made is between languages in which a special predicative construction distinct from plain locational predication is available to encode an alternative perspectivization of prototypical figure-ground relationships, and languages in which no such predicative construction exists. Section 4 will briefly address the question of the possible equivalents of the choice between locational and existential predication in languages that have not grammaticalized such a contrast.

As regards the possible criteria for dividing dedicated existential predicative constructions into types, the crucial point is that, in a typological approach to existential predication in the languages of the world, the classification can only be based on the possible formal affinities between existential predication and predicative constructions expressing other functional types of predication. In a typology of existential predication not limited to a particular group of languages, it is impossible to use criteria referring to language-specific notions such as ‘subject’. For example, in a typology of existential predication in Romance or Germanic languages, it is important to characterize the phrase representing the figure with respect to the extent to which it shows the properties considered typical for subjects, since in Romance and Germanic languages, the notion of subject in verbal predication is not problematic, and the figure phrase in plain locational predication invariably shows the properties considered typical for subjects, whereas in
existential predication, there is important variation in way the figure phrase behaves with respect to the properties in question and in the possible presence of an expletive locative or pronoun exhibiting some subject properties. But such a characterization of existential predication can only be extended to languages with a particular type of organization of grammatical relations, and trying to generalize it to all languages could only result in inconsistencies.

For similar reasons, it would not be reasonable to introduce the morphological nature of existential predicicators as a criterion in a general typology of existential predications. Some of the languages in which the identification of verbs as opposed to other categories puts into play a rich inflectional system have existential predicicators that can uncontroversially be identified as verbs. But existential verbs are very often more or less irregular, and there is no universal criterion according to which predicicators that are not uncontroversial verbs could be consistently identified as irregular/defective verbs, or rather non-verbal predicicators, and the question is particularly difficult in languages with a relatively reduced verb inflection. Here again, classifying existential predications according to the morphological nature of the predicicator could only make sense for more or less closely related groups of languages, after taking a decision about the criteria according to which a word is identified as a verb in the languages in question.

According to the criterion of formal resemblance with predicative constructions expressing other functional types of predication, the following six types can be defined:

- **loc-existentials**, existential constructions characterized by the presence of an element generally used with a meaning such as ‘there’ or ‘in it’, but whose only function in existential predication is to mark the distinction between plain locational and existential predication; English *there is N (Loc)* and Arabic *hunaaka N (Loc)* lit. ‘there N (Loc)’ are typical examples of loc-existentials;

- **trans.poss-existentials**, existential constructions involving a predicicator also used in a transitive possessive construction, i.e. in a possessive predicative construction in which the possessor and the possessee show coding characteristics identical to those of the agent and the patient of typical transitive verbs; in its existential use, this predicicator may occur either alone (as in Brazilian Portuguese *tem N (Loc)* lit. ‘has N (Loc)’) or combined with an expletive pronoun (as in Alemannic *es hot N (Loc)* lit. ‘it has N (Loc)’);

- **incorp.poss-existentials**, existential constructions in which the figure is treated like the possessee in an incorporating possessive construction; by ‘incorporating possessive construction’, I mean a possessive predicative construction in which the noun referring to the possessee cannot be analyzed as the head of an NP in a construction including two slots for NPs (as in the other types or predicative possession), and must be analyzed as converted into a one-place predicate meaning ‘be an N-owner’ by a ‘proprietive’ operator;

- **poss/loc-existentials**, existential constructions involving a predicicator also used in a transitive possessive construction, plus an additional element generally used with a meaning such as ‘there’, but whose only function in existential predication is to distinguish existential predication from possessive predication
(as in Catalan *hi ha N (Loc)* lit. ‘there has N (Loc)’, or in French *il y a N (Loc)* lit. ‘it there has N (Loc)’) illustrate this type;
- com-existentials, in which the figure is encoded like the phrase representing the companion in comitative predication, as in Swahili *ku na N (Loc)* lit. ‘there with N (Loc)’;
- id-existentials, existential constructions characterized by the presence of a non-locative expletive element also used in identificational clauses equivalent to English *This is an N*; Norwegian *det er N (Loc)* lit. ‘this is N (Loc)’ illustrates this type;
- existential predications distinguished from plain locational predication by the presence of an existential predicator that does not lend itself (at least synchronically) to an analysis similar to those on the basis of which the other types of existential predication are identified.

These seven types will be successively presented in Sections 5 to 11.

4. Languages without existential predication

4.1. The predominance of languages devoid of dedicated existential predicative construction

Most of the authors that have discussed the relationship between locational and existential clauses neglect the distinction between the languages that have grammaticalized an existential predicative construction contrasting with plain locational construction and those in which no such predicative construction can be recognized.

Once this distinction is introduced, it turns out that the lack of dedicated existential predication is the most common situation in the languages of the world. More than half of the languages in my sample have not grammaticalized the selection of the ground as the perspectival center in clauses encoding figure-ground relationships, and this is probably an underestimation, since even detailed descriptions of languages devoid of dedicated existential predication must not necessarily be expected to mention this particularity, whereas even brief sketches of languages that have a dedicated existential predicative construction normally mention this construction explicitly.

This predominance of the languages in which the selection of the ground as the perspectival center has not been grammaticalized can be viewed as a natural consequence of the fact that existential predication is a marked construction expressing the same abstract relationship as locational predication.

4.2. Types of locational predication and the grammaticalization of the selection of the ground as the perspectival center

At least within the limits of my sample, there is no clear correlation between types of locational predication and the grammaticalization of a dedicated existential construction. Plain locational clauses may be constructed as the mere juxtaposition
of a noun phrase representing the figure and a locative expression representing the ground (Russian *Kniga na stole*), they may involve a predicator also used in identificational clauses (French *Le livre est sur la table*) or a specialized locational predicator (Mandinka *Kitáabóo be táabúlóo kaŋ*), they may also involve postural verbs in the function of locational predicator (German *Das Buch liegt auf dem Tisch*), but dedicated existential predicative constructions can be found in languages with plain locational clauses belonging to any of these types.

It seems however that the grammaticalization of a dedicated existential construction is less frequent among the languages that make a systematic use of postural verbs as locational predicators.  

4.3. Rough equivalents of existential predication in languages devoid of dedicated existential predicative construction

4.3.1. Introductory remarks

There cannot be exact equivalents of existential predication in the languages that have not grammaticalized the selection of the ground as the perspectival center in the encoding of figure-ground relationships. However, rough translational equivalence between languages with and without dedicated existential predicative constructions can often be established on the basis that, when the figure is selected as the perspectival center, it is typically topical and definitive, whereas it is typically non-topical and indefinite when the term selected as the perspectival center is the ground. Consequently, in the languages that have not grammaticalized the selection of the ground as the perspectival center in the encoding of figure-ground relationships, information structure marking and definiteness marking in locational clauses may result in distinctions functionally comparable (at least to some extent) to those expressed in other languages by the choice between plain locational and existential predication.

This is particularly obvious in languages with relatively flexible constituent order, in which mere permutations of constituents are available to express modifications of information structure implying the de-topicalization of the term that has the greatest propensity to be interpreted as the topic. This situation has already been illustrated above for Russian. Basque – Ex. (13) – and Finnish – Ex. (14) – provide additional examples.

(13) Basque (pers.doc.)

   
   park-SG river-side-SG.LOC be.PRS.3SG
   ‘The park is next to the river.’

---

8 By ‘systematic use of postural verbs as locational predicators’, I mean the routinized use of postural verbs in contexts in which location constitutes the relevant piece of information, and the particular posture of the figure is just the default posture for the entity fulfilling the figure role in the spatial configuration referred to.
In Japanese – Ex. (15), the abstract predicate BE.AT(FIG, GR) is invariably expressed by the same verbs aru (with inanimate figures) and iru (with animate figures), but in addition to the variation in constituent order, the use of the topic marker wa conveys semantic nuances comparable to those involved in the choice of a dedicated existential construction, in the languages in which such a construction is available.

(15) Japanese (pers.doc.)

a. Hon wa/ga tsukue no ue ni aru.
   book TOP/SUBJ table GEN top at be.PRS
   ‘The book is on the table.’

b. Tsukue no ue ni (wa) hon ga aru.
   table GEN top at TOP book SUBJ be.PRS
   ‘There is a book on the table.’

4.3.2. Locational predications in which movement of the figure phrase to the position immediately before the locational predicator expresses de-topicalization of the figure

In Basque and Japanese – ex. (13) and (15) above, FIG GR Pred, with the ground phrase immediately before the predicator, is the default constituent order in locational predication, expressing the unmarked information structure in which the figure is topical, but the figure phrase can move to the position immediately before the predicator, being then interpreted as forming part of the comment.

Among the languages of my sample devoid of dedicated existential predicative construction and for which I have been able to find the relevant data, de-topicalization of the figure in locational predication by means of movement of the figure phrase to the position immediately before the locational predicator is attested in the following languages:

Avar (Nakh-Daghestanian)
Basque (isolate – Spain and France)
Buryat (Mongolic)
Georgian (Kartvelian)
Hayu (Sino-Tibetan, Tibeto-Burman)
Lezgi (Nakh-Daghestanian)
Paez (isolate – Colombia),
Palula (Indo-European, Indo-Aryan, Dardic)
Slave (Athabaskan)
Ts’amakko (Afro-Asiatic, Cushitic)
Udihe (Tungusic)
Zhaba (Tibeto-Burman, Qiangic)

All of these languages have basic OV type of constituent order, and in all of them, the position immediately before the locational predicator is the default position of the ground phrase in locational predication.

This situation is probably much more widespread among OV languages than suggested by this relative short list of languages. The point is that most of my sources on OV languages are vague as to the possible function of constituent order variation in locational clauses, but interestingly, one of them only mentions a rigid constituent order in locational predication, and in many others, the examples provided, although not sufficient to conclude, suggest a situation of this type. We will see in Sections 4.3.3 and 4.4 that the situation is markedly different for VO languages.

4.3.3. Locational predications in which movement of the figure phrase to the position immediately after the locational predicator expresses de-topicalization of the figure

In Finnish – ex. (14) above, FIG Pred GR, with the ground phrase immediately after the predicator, is the default constituent order in locational predication, expressing the unmarked information structure in which the figure is topical, but the figure phrase can move to the position immediately after the predicator, being then interpreted as forming part of the comment.

Among the languages of my sample devoid of dedicated existential predicative construction and for which I have been able to find the relevant data, de-topicalization of the figure in locational predication by means of movement of the figure phrase to the position immediately after the locational predicator is attested in the following languages:

Czech (Indo-European, Slavic)
Estonian (Uralic, Finnic)
Finnish (Uralic, Finnic)
Kabyle (Afro-Asiatic, Berber)
Latvian (Indo-European, Baltic)
Lithuanian (Indo-European, Baltic)
Romanian (Indo-European, Romance)
Nganasan (Uralic, Samoyedic)
With the only exception of Nganasan, all of these languages are VO languages in which the position immediately after the locational predicador is the default position of the ground phrase in locational predication.

It is however important to emphasize that this alternation is far from general among VO languages that have not grammaticalized a dedicated existential predicative construction. The data I have collected unquestionably show that, contrary to a widespread opinion, a minority of them only have locational clauses in which the flexibility of constituent order provides a way of expressing the de-topicalization of the figure.

The uncommon alternation observed in Nganasan by Wagner-Nagy (2009), with basic FIG GR Pred order in plain locational clauses and the alternative order GR Pred FIG expressing the de-topicalization of the figure, can be explained by the influence of a dominant VO language (Russian) on a severely endangered language that originally was a consistent OV language.

4.3.4. Constituent order variation in locational predications devoid of overt predicador

Among the languages of my sample devoid of dedicated existential predicative construction and in which locational predication consists simply of the juxtaposition of the figure phrase and the ground phrase, the order FIG GR in basic locational clauses with the possibility of expressing de-topicalization of the figure by means of the alternative order GR FIG is attested by the following language:

Nyangumarta (Pama-Nyungan)

whereas GR FIG in basic locational clauses with the possibility of expressing de-topicalization of the figure by means of the alternative order FIG GR is attested by the following language:

Maori (Austronesian, Oceanic, Polynesian)

This particularity of Maori is consistent with the fact that, more generally, Maori can be described as a predicate-initial language (Chung and Ladusaw 2001: 31)

4.4. Languages devoid of dedicated existential predicative construction, and with rigid constituent order in locational clauses

Among the languages of my sample that have not grammaticalized a dedicated existential predicative construction, a relatively high proportion have locational clauses with a rigid constituent order that excludes the possibility of de-topicalizing the figure by moving the figure phrase to the position occupied by the ground phrase in the default constituent order. All of them have basic VO constituent order, with the only exception of Retuarã, and in all of them without exception, the figure phrase precedes the ground phrase in locational predication.

This finding contradicts the common opinion that existential constructions in basic SVO languages (or their equivalents in languages that have not
grammaticalized a predicative construction for inverse locational predication) typically have the word order GR Pred FIG – Freeze (1992: 256), or that non-canonical word order is a typical characteristic of existential constructions – Veselinova (2013: 108). Such statements can only be explained by a European bias in the data taken into account.

In my language sample, locational constructions with rigid FIG Pred GR order and no possible contrast with a dedicated existential construction are attested in the following languages:

- Banda-Linda (Ubangian)
- Baule (Niger-Congo, Kwa)
- Bobo (Mande)
- Boko (Mande)
- Dzuungoo (Mande)
- Fang (Niger-Congo, Benue-Congo, Bantu)
- Ganja (Niger-Congo, Atlantic)
- Gbay (Ubangian)
- Ikposo (Niger-Congo, Kwa)
- Kana (Niger-Congo, Benue-Congo)
- Koromfe (Niger-Congo, Gur)
- Koyraboro Senni (Songhay)
- Lango (Eastern Sudanic, Nilotic)
- Mandinka (Mande)
- Mangarayi (Gunwingguan)
- Mankon (Niger-Congo, Benue-Congo, Bantu)
- Nengee (English-based Creole)
- Nizaa (Niger-Congo, Benue-Congo)
- Oko (Niger-Congo, Benue-Congo)
- Pana (Niger-Congo, Gur)
- Samba-Leko (Niger-Congo, Adamawa)
- Sango (Ubangian)
- Sar (Central Sudanic, Sara)
- Soninke (Mande)
- Tadaksahak (Songhay)
- Tigemaxo (Mande, Bozo)
- Tiv (Niger-Congo, Benue-Congo)
- Vai (Mande)
- Yoruba (Niger-Congo, Benue-Congo).

Rigid Pred FIG GR order is attested in the following languages:

- Gaelic (Indo-European, Celtic)
- Irish (Indo-European, Celtic),
- Puyuma (Austronesian)
- Wa (Austro-Asiatic, Mon-Khmer).
Rigid FIG GR Pred order is attested in one language only:

Retuarã (Tucanoan)

Rigid FIG GR order without an overt predicator is attested in two languages only:

Bagiro (Central Sudanic, Bongo-Bagirmi)
Kamaiurá (Tupi-Guarani)

It is obvious from this enumeration that languages with rigid order in locational clauses and no contrast between locational predication and a dedicated existential predicative construction are particularly common in Northern Subsaharan African, i.e. in the part of Subsaharan Africa that Güldemann (2008) has proposed to identify as a linguistic area under the name of ‘Macro-Sudan belt’.

In such languages, in the absence of indications provided by definite/indefinite markers or focus markers, the same locational clauses can be used indiscriminately in contexts that would trigger a choice between locational and existential predication in other languages, as illustrated by Ex. (16).


\[
\text{Mawuj ja-Ø-ŋ biyangin ŋa-bongan.}
\]

food 3-3SG-be inside LOC-box
‘There’s food in the box.’ or ‘The food is in the box.’

4.5. Obligatoriness vs. optionality of the ground phrase in locational predication

In some of the languages that have not grammaticalized a dedicated existential predicative construction, the ground phrase is not syntactically obligatory, and its absence triggers an interpretation of locational predication as expressing presence at an unspecified place (presence at the deictic center being a possible interpretation depending on the context). This possibility is explicitly mentioned in the descriptions of the following languages:

Kokota (Austronesian, Oceanic)
Palula (Indo-European, Indo-Aryan, Dardic)
Pana (Niger-Congo, Gur)
Sango (Ubangian)
Semelai (Austro-Asiatic, Mon-Khmer)
Tadaksahak (Songhay)
Tiv (Niger-Congo, Benue-Congo)
Wa (Austro-Asiatic, Mon-Khmer)

Interestingly, this may happen even in locational predications that do not involve an overt predicator, in which case an utterance reduced to a noun phrase may be
interpreted as expressing presence at an unspecified place. For example, as stated by Chung and Ladusaw (2001: 54), “in modern Maori, affirmative existential sentences look as though they consist simply of an indefinite noun phrase”. The languages of my sample for which such a possibility is signaled are as follows:

Kayardild (Tangkic)
Maori (Austronesian, Oceanic, Polynesian)
Tolai (Austronesian, Oceanic)
Wambaya (Mirndi)

However, the possibility of simply dropping the ground phrase in locational predication to express presence at an unspecified place seems to exist only in a minority of the languages devoid of a dedicated existential predicative construction. In some languages, the ground phrase is an obligatory constituent of locational predication, and if no specific place is targeted, a locative expression normally interpreted anaphorically or deictically (‘there’, as in Bobo – ex. (17), or ‘in it’, as in Gaelic). In Ex. (17b), yé ‘there’ is not necessarily understood as referring to a specific place identifiable by the hearer.

(17) Bobo (Le Bris and Prost 1981: 55)

a. Yàlaló tì sònón mà.
   bird LCOP tree on
   ‘There is a bird on the tree.’

b. Kpìn tì yē.
   wine LCOP there
   ‘There is wine.’

For some languages, for example Tigemaxo (Mande), locational predication with such a default ground phrase is explicitly mentioned as the usual way to express a meaning similar to that encoded by means of the verb exist in English – ex. (18).

(18) Tigemaxo (Blecke 1996: 205-206)

a. ṇɔ ye ga Kuntoolo.
   DEM PL COP Kuntoolo
   ‘They are in Kuntoolo.’

b. Ala ga gɔ.
   God COP there
   ‘God exists.’ (lit. ‘God is there.’)

Among the languages of my sample that do not have a dedicated existential construction contrasting with plain locational predication and in which the ground
phrase is syntactically obligatory in locational predication, the non-referential use of ‘there’ or ‘in it’ as a default ground phrase is attested in the following languages:

- Baule (Niger-Congo, Kwa)
- Bobo (Mande)
- Ewe (Niger-Congo, Kwa)\(^9\)
- Gaelic (Indo-European, Celtic)
- Gbaya (Ubangian)
- Goemai (Chadic)
- Lau (Austronesian, Oceanic)
- Mandinka (Mande)
- Oko (Niger-Congo, Benue-Congo)
- Tigemaxo (Mande, Bozo)

5. Loc-existentials

5.1. Definition and illustrations

The existential constructions dealt with in this section are characterized by the presence of an expletive locative, either alone or combined with a predicator also found in locational predication (and possibly in identificational predication too). By ‘expletive locative’, I mean an element generally used with a meaning such as ‘there’ or ‘in it’, but whose only function in existential predication is to distinguish existential predication from other types of predication. Crucially, in existential predication, the expletive locative is not interpreted as referring to a specific place, and co-occurs with a referential locative expression fulfilling the function of ground even if the meaning it carries in other constructions would be in contradiction with that of the locative expression it co-occurs with. Ex. (19) illustrates a construction of this type in Italian.

(19) Italian (pers.doc.)

\begin{itemize}
  \item[a.] \textit{La chiave è sul tavolo.} \hfill \textit{‘The key is on the table.’}
  \item[b.] \textit{C’è una chiave sul tavolo.} \hfill \textit{‘There is a key on the table.’}
\end{itemize}

\(^9\) Ewe has the particularity that the default ground phrase in locational predication is not a locative expression, but a third person singular pronoun. This is however consistent with the fact that this third person singular pronoun can also be used anaphorically in the same position to refer to an already mentioned location – Felix Ameka, pers.com.
In some Italo-Romance varieties, for example, Genovese – ex. (20), in addition to the existential marker, the existential construction includes a third person masculine expletive subject clitic.

(20) Genovese (Bentley and al. 2013: 16)

\[ \text{Sta attenta che inte sta früta u gh’è tanti ossi.} \]

stay.2SG.IMP careful that in this fruit 3SG.Mexpl thereexpl be many seeds

‘Be careful that there are many seeds in this fruit.’

Like Italian, Classical Arabic has an existential predicative construction involving an expletive locative whose original meaning is ‘there’ – Ex. (21), and Tunisian Arabic uses in the same way \( fämmā \) ‘there’ – Ex. (22), but other Arabic varieties (Palestinian Arabic – Ex. (23), Djibouti Arabic, etc.) have existential constructions with an expletive locative \( fīh \) whose original meaning is ‘in it’.

(21) Standard Arabic (Aziz (1995) and Darine Saïdi, pers.com.)

a. \( Ar-rajulu \ fī-l-maktabi. \)
\[ \text{DEF-man in-DEF-office.GEN} \]

‘The man is in the office.’

b. \( Hunạka \ rajulu-n fī-l-maktabi. \)
\[ \text{thereexpl man-INDEF in-DEF-office.GEN} \]

‘There is a man in the office.’

(22) Tunisian Arabic (Darine Saïdi, pers.com.)

a. \( Il-bumā \ fūq iš-šažra. \)
\[ \text{DEF-owl on DEF-tree} \]

‘The owl is on the tree.’

b. \( Fämmä \ bumā fūq iš-šažra. \)
\[ \text{thereexpl owl on DEF-tree} \]

‘There is an owl on the tree.’

(23) Palestinian Arabic (Hoyt 2000: 119)

\[ \text{Baka / Baku fi-h ulād fi-d dār.} \]
\[ \text{be.PST.3SG.M / be.PST.3SG.M in-it expl child.pl in-DEF-house} \]

‘There were children in the house.’

Existential constructions whose characteristic marker originates from the combination of a locative preposition and a pronoun (‘at/in it’) are particularly widespread in the Oceanic family, especially among Polynesian languages.
In Nahuatl, the prefix *on-* added to the locational verb *cah-* in existential predication is used with other verbs as an andative marker (i.e., as a marker encoding movement towards a place distinct from the deictic center) – ex. (24).

(24) Nahuatl (Launey 1981)

a. *N-on-no-tlātia.*  
   1SG-AND-REFL-hide  
   ‘I am going to hide.’

b. *Nicān  on-cah  ātl.*  
   here  ANDexpl-be  water  
   ‘There is water here.’

5.2. **Loc-existentials in the languages of the world**

Among the languages of my sample, existential predication of this type is found in the following languages:

- Arabic, classical and vernacular varieties (Afro-Asiatic, Semitic)
- Danish (Indo-European, Germanic)
- Dutch (Indo-European, Germanic)
- Emérillon (Tupi-Guarani)
- Eviya (Niger-Congo, Benue-Congo, Bantu)
- English (Indo-European, Germanic)
- German (Indo-European, Germanic)
- Italian and other Italo-Romance varieties (Indo-European, Romance)
- Mwotlap (Austronesian, Oceanic)
- Nahuatl (Uto-Aztecan)
- Palauan (Austronesian, Malayo-Polynesian)
- Samoan (Austronesian, Oceanic, Polynesian)
- Yiddish (Indo-European, Germanic)
- Zaar (Afro-Asiatic, Chadic)

This type of existential predication is not very frequent at world level, but due to its presence in some major Germanic and Romance languages, there is a huge literature devoted to the discussion of the syntactic status of the figure phrase and of the existential marker in such constructions. Depending on the individual languages, the existential marker may share some formal properties with canonical subjects (this is quite clearly the case of *there* in the English existential construction, but not of Italian *ci*). As regards the figure phrase, in the languages in question it uncontroversially fulfills the subject function in plain locational predication, but its behavior in existential predication shows variation, in particular with respect to the control of verb agreement, and consequently such existential constructions figure prominently in discussions about impersonality. For a recent and well-informed discussion, cf. Gast and Haas (2011).
5.3. The grammaticalization of the expletive locative in loc-existentials

The expletive (non-referential) locative whose presence characterizes this type of existential predication occurs in other constructions with a deictic/anaphoric meaning (‘at/in that place’), but in existential clauses, it cannot be considered referential, otherwise sentences such as English There is a bus stop here or Where is there a bus stop? would be unacceptable. What was originally a deictic locative has grammaticalized as a marker encoding the change in the perspectivization of the figure-ground relationship that characterizes existential predication.

It is not difficult to imagine the grammaticalization path leading to loc-existentials. For example, starting from a situation in which the basic order FIG Pred GR has a variant GR Pred FIG expressing a change in topic-comment articulation, as in ex. (14) above, the topicalization of the ground yields a construction in which the position immediately before the locational predicator in the inverted construction is occupied by a deictic locative co-referent with a locative expression in dislocated position:

\[ \text{GR}, \text{there}_i \text{Pred FIG} \sim \text{there}_i \text{Pred FIG}, \text{GR}_i \]

The variant with the ground phrase in right dislocation position may subsequently be re-analyzed as a construction of its own in which the ground phrase is in clause-internal position (and can in particular be questioned, as in Where is there a bus stop?), which implies that the deictic locative becomes a non-referential element whose only function is to mark the existential construction as distinct from plain locational predication. This evolution may be favored by the fact that, in many languages with no dedicated existential predicative construction, locative deictics can be used in locational predication with an arbitrary rather than deictic or anaphoric reading – see Section 4.5.

6. Trans.poss-existentials

6.1. Definition and illustration

Trans.poss-existentials are defined as existential constructions involving a predicator also used in a transitive possessive construction. In its existential use, this predicator may occur either alone or combined with an expletive pronoun. By ‘transitive possessive construction’ I mean a construction in which the semantic roles of possessor and possessee are assigned to the referents of noun phrases whose coding characteristics are identical to those of the agent and patient of typical action verbs.

For example, in its transitive construction, the Greek verb écho ‘have’ has a nominative subject with which it agrees, and an accusative object, as in (25a). But this verb also has an existential use in a construction analyzable as impersonal, since an accusative object representing the ground is present, but there is no nominative NP, and the verb invariably includes a non-referential 3rd person singular index – Ex. (25b). Ex. (26) and (27) illustrate trans.poss-existential constructions in
languages that do not have subject-verb agreement, and in which the deletion of the noun phrase preceding the transitive verb of possession is the only thing that differentiates existential predication from possessive predication.

(25) Greek (pers.doc.)

a. Ta chōriá den échoun neró.
the villages NEG have.PRS.3PL water.ACC
‘The villages don’t have water.’

b. Den éiche Germanóus sto chōrió.
NEG have.PST.3SG Germans.ACC in.the village
‘There were no Germans in the village.’ (also interpretable as ‘He/she did not have Germans in the village.’ in an appropriate context)

(26) Vietnamese (pers.doc.)

a. Tôi có sách.
I have book
‘I have books.’

b. Có một con ruồi trong bát canh của tôi.
have one CLS fly in bowl soup of me
‘There was a fly in my soup.’

(27) Palikur (Launey 2003: 80) ¹⁰

a. Nah kadahan aynesa karukri.
I have some money
‘I have some money.’

b. Kadahan im ahakwa un.
have fish in water
‘There are fish in the water.’

6.2. Problems in the identification of trans.poss-existential constructions

The use of the same predicator in existential or locational/existential predication and in possessive predication is a widespread phenomenon. There is a wide consensus that a distinction must be made between situations in which the possessor shows some kind of oblique-like coding, and situations in which possessive

¹⁰ In Palikur, kadahan ‘have’ is originally a monovalent predicate ‘be the owner of something’ consisting of the prefixe ka- ‘endowed with’ and the generic noun dahan ‘possession’, but it is now used in a construction in which it is followed by a noun phrase to which the role of possessee is assigned.
predication involves transitive coding, with the possessor and the possessee encoded like the agent and the patient of typical transitive verbs, respectively.

In the typology of existential predication I am putting forward, the languages in which the same predicator is found in (locational/)existential predication and in possessive predication are classified as having a trans.poss-existential construction if and only if the possessive use of the predicator in question can be viewed as an instance of transitive coding, but this is not always easy to evaluate. This question is made difficult by the fact that transitive verbs of possession are identified as such by the coding frame through which they express their argument structure, but are rarely well-behaved transitive verbs in other respects.

Practically, I decided to recognize a trans.poss-existential construction whenever there is no obvious difference between the coding of the possessor and the possessee and that of the agent and the patient of a typical transitive verb, but I cannot exclude that perhaps a better knowledge of some of the language I have classified as having trans.poss-existentials would lead to reconsidering this decision. This problem arises mainly for languages of South East Asia (including Formosan and West Malayo-Polynesian languages), and most of the descriptions I consulted for the languages of this zone that are more or less problematic in this respect do not take a clear stand on this issue.

6.3. Trans.poss-existentials in the languages of the world

Contrary to a widespread opinion according to which transitive verbs of possession, and consequently trans.poss-existentials, are rare (if not totally inexistent) outside Europe,\(^{11}\) transitive verbs of possession and trans.poss-existentials are not rare in the languages of the world, and Europe is not the only area in which they are particularly common. Among the languages of my sample, trans.poss-existentials can be recognized (subject to the caveat expressed in Section 6.2) in the following languages:\(^{12}\)

- Akan (Niger-Congo, Kwa)
- Albanian (Indo-European)
- Alemannic (Indo-European, Germanic)
- Bulgarian (Indo-European, Slavic)
- Cantonese (Sino-Tibetan, Chinese)
- Cape Verdean (Portuguese-based Creole)
- Early Italo-Romance varieties\(^ {14}\) (Indo-European, Romance)

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\(^{11}\) The origin of this opinion can be traced back to the theory of language change elaborated in the first half of the 20th century by Indo-Europeanists such as Meillet – cf. in particular Meillet (1924).

\(^{12}\) Edel'man (1975) states that an existential use of the Iranian verb of possession \(*dar\) has also developed in gilaki and other Iranian languages spoken in Iran, without however giving the details that could allow checking the validity of this statement, and I consequently decided not to include the languages in question in my sample.

\(^{13}\) The existential construction of Akan GR \(wɔ FIG\) can be classified as trans.poss-existential, since it uses a predicator \(wɔ\) that also occurs in the transitive positive construction POSS\(wɔ\) POSS\(wɔ\) GR, but Akan is quite atypical in that the same predicator also occurs in the locational construction FIG \(wɔ GR\) – Boadi (1971). I came across no other language with a similar situation.
Trans.poss-existentials are unquestionably common, not only in Central and South Europe, but also in the Northern part of Subsaharan Africa (particularly among Atlantic languages), and among Pidgin and Creole languages. They also seem to be common among the languages of South East Asia, but this is precisely to the languages of this zone that the caveat expressed in Section 6.2 applies.

The predominance of trans.poss-existentials among Pidgins and Creoles is particularly striking: out of the 75 Pidgin and Creole varieties dealt with in the Atlas

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14 Trans.poss-existentials were more widespread in early Italo-Romance varieties than in their descendants, characterized by a strong predominance of loc-existentials – Bentley et al. (2013).

15 As mentioned in footnote 14, trans.poss-existentials were more widespread in early Italo-Romance varieties. As a rule, they have been supplanted by loc-existential constructions, but they are still found in some Calabro-Sicilian varieties spoken in the Salento, Calabria, and North East Sicilia – Bentley et al. (2013) and Adam Ledgeway, pers. com.
of Pidgin and Creole Language Structures (Michaelis et al. 2013), 41 have an existential predicative construction of this type. Interestingly, in this sample, trans.poss-existentials are found in 19 out of the 26 Pidgin and Creoles varieties whose lexifier language is English, i.e. a language which does not have this type of existential predication.

6.4. The distinction between possessive predication and existential predication in the languages that have trans.poss-existentials

Trans.poss-existentials may be ambiguous with the possessive use of ‘have’ with a third person possessor, as in Greek – Ex. (25) above. Fourteenth-century Tuscan – Ex. (28) and Wolof – Ex. (29) – provide additional illustrations.

(28) Fourteenth-century Tuscan (Ciconte 2013)

\[
\begin{align*}
\text{Nelle parti di Grecia ebbe un signore.} \\
\text{in.the parts of Greece have.PST.3SG a sir}
\end{align*}
\]

‘Somewhere in Greece (there) was a sir.’

(29) Wolof (Creissels et al., under revision)

\[
\begin{align*}
\text{Am na woto.} \\
\text{have_PRF.3SG car}
\end{align*}
\]

‘He/she has a car.’ or ‘There is a car.’

In other languages, existential constructions with a transitive verb of possession in the function of existential predicator are organized in a way that limits or even rules out the possibility of ambiguity between the poss-existential construction and the possessive use of ‘have’.

In Alemannic – ex. (30), the obligatory presence of an expletive third person neuter pronoun limits the possibility of ambiguity, since possessors are typically human, and therefore represented rather by masculine or feminine pronouns.

(30) Alemannic (Czinglar 2002)

\[
\begin{align*}
\text{Es hot Rössr voram Hus.} \\
\text{3SG.N have.PRS.3SG horses in_front_of_the house}
\end{align*}
\]

‘There are horses in front of the house.’

A similar situation is found in Pepel (Atlantic), a language with a noun class system of the Niger-Congo type in which verb forms include a prefix indexing the subject. With the verb ‘have’ denoting possession, this prefix indexes the noun class of the possessor, whereas ‘have’ as an existential predicator shows an invariable expletive prefix of a non-human class.

A more radical distinction between the possessive use of a transitive verb of possession and its use as an existential predicator is found in some West African
languages belonging to the Atlantic family. In these languages, the general rule is that, either subjects are obligatorily indexed on the verb, or subject indexes attached to the verb are obligatory if the subject is not expressed as a noun phrase, but trans.poss-existentials are an exception to this rule, and the absence of the subject index distinguishes the impersonal use of ‘have’ in the function of existential predicator from its possessive use – Ex. (31).

(31) Joola Banjal (Bassène and Creissels 2011: 294-295)

a. Na-bajɛ ji-iba.
   CLa-poss-CMP CLji-knife
   ‘He/she has a knife.’

b. Bajɛ ji-iba mɛ-poc yayu.
   poss-CMP CLji-knife in CEL-bag DEF
   ‘There is a knife in the bag.’

6.5. The coding of the figure in trans.poss-existentials

As a rule, the noun phrase representing the figure in trans.poss-existentials shows the same coding characteristics as the noun phrase representing the possessee in the corresponding possessive predication. For example, in Greek, as shown by ex. (17) above, the possessee in the possessive use of ‘have’ and the figure in the existential use of the same verb are equally in the accusative case. Trans.poss-existentials may however undergo changes that affect the coding of the noun phrase representing the figure, as illustrated by Serbo-Croat.

In Serbo-Croat, imati ‘have’ as a transitive verb of possession assigns nominative case to its subject (the possessor) and accusative case to its object (the possessee), whereas imati as an existential predicator has developed special case-assigning properties. Ex. (32) shows that, in the existential use of imati, the possessee reanalyzed as the figure in a spatial configuration has undergone a change in its case marking properties resulting in the possibility of nominative marking.

(32) Serbo-Croat (Creissels 2013: 467-468)

a. Ima jedna cura u sokaku mome.
   have.PRS.3SG one.SG.F.NOM girl.SG.NOM in street.SG.PREP my.SG.M.LOC
   ‘There is a girl in my street.’ (title of a song)

b. Ima jedna krčma u planini.
   have.PRS.3SG one.SG.F.NOM inn.SG.NOM in mountain.SG.PREP
   ‘There is an inn in the mountain.’ (title of a song)

c. Ima jednu krčmu u planini.
   have.PRS.3SG one.SG.F.ACC inn.SG.ACC in mountain.SG.PREP
   ‘(S)he has an inn in the mountain.’
This change, which probably started with the re-analysis of accusative forms homonymous with the nominative, reinforces the distinction between the existential construction and the transitive possessive construction from which it developed. However, in spite of its possibility of nominative marking, the NP representing the figure in the existential construction with imati illustrated by Ex. (24a) cannot be analyzed as an inverted subject in a more or less canonical intransitive construction, since in the plural, the genitive must be used in conditions in which intransitive subjects (even in postverbal position) are normally in the nominative, and the verb does not show plural agreement – Ex. (33b).

(33) Serbo-Croat (Creissels 2013: 467-468)

a. *Ima* lijepa djevojka u ovoj kući.
   have.PRS.3SG pretty.SG.NOM girl.SG.NOM in this.SG.PREP house.SG.PREP
   ‘There is a pretty girl in this house.’

b. *Ima* lijepih djevojak u ovom selu.
   have.PRS.3SG pretty.PL.GEN girl.PL.GEN in this.SG.PREP village.SG.PREP
   ‘There are pretty girls in this village.’

6.6. The historical development of trans.poss-existentials

6.6.1. Trans.poss-existentials resulting from the impersonalization of a transitive verb of possession

A possible semantic analysis of trans.poss-existentials relies on the possibility of considering possession as an abstract variety of location with the personal sphere of an individual in the role of ground. Transitive verbs of possession can thus be viewed as expressing the abstract predicate ‘be an individual I such as an entity E is located in the personal sphere of I’, and the suppression of the possessor from argument structure can trigger a semantic shift from ‘presence in the personal sphere of some individual’ to ‘availability at some place’, since the role of ground is typically fulfilled by places. Consequently, the development of an existential use of transitive verbs of possession can easily result from an impersonal use of transitive verbs of possession implying no reference to a specific possessor:

‘one has N’ > ‘there is N somewhere’

In this perspective, the Krio data is particularly interesting, since in Krio, get ‘have’ (< English get) in its existential use is accompanied by an expletive third person plural pronoun: cross-linguistically, third person plural pronouns constitute a particularly common way to express non-specific reference to humans.

A factor that may favor the development of the existential use of a transitive verb of possession is the possible use of possessive constructions to describe situations
that can also be viewed as involving a ground-figure relationship as in *This well has water ~ There is water in this well.*

6.6.2. Other possible scenarios

The impersonalization of a transitive verb of possession is however not the only scenario that may yield existential constructions synchronically analyzable as trans.poss-existentials. One may also imagine that the coding characteristics of a possessive construction that originally did not involve a transitive verb of possession (in particular, a possessive construction with locative marking of the possessor (‘at Possessor is Possessee’) have changed in such a way that the possessor and the possessee have acquired coding characteristics identical to those of the agent and the patient of typical transitive verbs, which automatically triggers the reanalysis of the existential construction as a trans.poss-existential conclusion.

I am aware of no language for which this scenario would be historically documented, but several languages show that possessive constructions that originally derived from locational predication may acquire coding characteristics typical of the transitive construction, and that consequently, this is at least a possible source of transitive positive constructions. For example, the predicative possessive construction of Finnish clearly derives from a locative inversion construction (something like *at Possessor is Possessee*), but in the possessive construction of present-day Finnish, pronouns in possessee role are usually in the accusative case, which excludes analyzing them as inverted subjects in the locational construction – Creissels (2013: 469). This phenomenon, sometimes designated as ‘have-drift’, is analyzed by Ziv (1982) and Zuckermann (2009) for Israeli. Stassen (2009) argues that such an evolution occurred in Cornish, Ahland (2009) analyzes similar changes that have affected the Amharic possessive construction, and Bar-Asher (2011) discusses evidence that the transitive possession verb of Akkadian *išûm* ‘have’ derived from an existential predicate *iš.*

To summarize, classifying an existential construction as trans.poss-existential in a synchronic typology of existential constructions does not necessarily implies historical derivation from a construction involving a transitive verb of possession.

7. Incorp.poss-existentials

7.1. Definition and illustration

Incorp.poss-existentials are existential constructions in which the figure is treated like the possessee in an incorporating possessive construction, i.e. a possessive predicative construction in which the noun referring to the possessee cannot be analyzed as the head of an NP in a construction including two slots for NPs (as in the other types or predicative possession), and must be analyzed as converted into a one-place predicate meaning ‘be an N-owner’ by a ‘proprietive’ operator.

For example, Kalaallisut (aka West Greenlandic) has a suffix -*qar* converting nouns into intransitive verbs ‘be an N-owner’ (proprietive verbs) that assign the role of possessor to their argument, encoded as a noun phrase in the zero case (alias
absolutive case) and cross-referenced on the verb, as in (34a). The existential construction involves the third person singular form of a proprietive verb derived from the noun referring to the figure in the third person singular, but in the existential construction, no noun phrase in the zero case is present – Ex. (34b).

(34) Kalaallisut (Van Geenhoven 1998: 25, 27)

a. *Angut taana illu-qar-puq.*
   man that house-PROPR-IND.3SG
   ‘That man has a house.’

b. *Nillataartarfim-mi tallima-nik manne-qar-puq.*
   fridge-LOC five-INSTR.PL egg-PROPR-IND.3SG
   ‘There are five eggs in the fridge.’

In other words, this construction is quite comparable to the trans.poss-existential construction of Greek illustrated by Ex. (25) above. In both cases, the existential construction involves a predicate also used with the meaning ‘has N’. The difference is that, in the construction illustrated by Greek, this predicate results from the combination of a transitive verb of possession with a noun phrase encoded like the patient of typical transitive verb, whereas in the Kalaallisut construction, it results from a derivational operation converting nouns into intransitive verbs meaning ‘be an N-owner’.

The recognition of an incorp.poss-existential construction in Tagalog is far less obvious, since in this language, a superficial look at existential and possessive clauses – Ex. (35) – may suggest analyzing rather (35a) a transitive possessive construction in which *may* would be a verb ‘have’ rather than a proprietive operator, and consequently (35b) as a trans.poss-existential construction.

(35) Tagalog (Naylor 2005: 419)

a. *May pera ang bata.*
   PROPR money NOM child
   ‘The child has money.’

b. *May tao sa bahay.*
   PROPR person LOC house
   ‘There is someone in the house.’

What rules out the analysis of (35a) as a transitive construction is that, in Tagalog, as illustrated by Ex. (36), both arguments of a transitive verb must be introduced by a proclitic case marker.

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16 A priori, a possible analysis is that *-qar* is in fact a bivalent verb ‘have’ that obligatorily incorporates its second argument. However, due to my lack of familiarity with Eskimo languages, I am not in a position to discuss the validity of such an analysis.
(36) Tagalog (Naylor 2005: 427)

\[ \text{Nabali n(an)g bata ang sanga.} \]
\[
\text{broke GEN child NOM branch}
\]
\[ \text{`The child broke the branch.'} \]

In the transitive construction, one of the two core arguments must be marked by \text{ang} (nominative) and the other one by \text{n(an)g} (genitive), and the choice of the nominative-marked argument is correlated to the choice of a voice marker which constitutes an obligatory element of the verb form. By contrast, in the possessive construction, \text{may} includes no voice marker, and the noun representing the possessee is invariably devoid of any case marker. Consequently, the noun referring to the possessee cannot be analyzed as the head of a noun phrase in a predicative construction with two syntactic slots for noun phrases representing the arguments of a two-place predicate. The only possible analysis is considering \text{may} as a proprietive operator that converts the noun it precedes into a monovalent predicate whose meaning can be glossed as `be an N-owner', which implies analyzing the existential construction in (34b) as an incorp.poss-existentiaL construction.

7.2. Incorp.poss-existentials in the languages of the world

Incorporating possessive constructions are not rare in the languages of the world, in particular among Amerindian languages, but within the limits of the data I have been able to collect, existential constructions with the figure treated like the possessee in an incorporating possessive construction are attested in three languages only:

- Kalaallisut, aka West Greenlandic (Eskimo-Aleut, Eskimo)
- Tagalog (Austronesian, West Malayo-Polynesian)
- Yup’ik (Eskimo-Aleut, Eskimo)

8. Poss/loc-existentials

8.1. Definition and illustration

Poss/loc-existentials share with trans.poss-existentiaL the use of a predicator also used in a transitive possessive construction, and with loc-existentiaLs the presence of an expletive locative.\footnote{There is no difficulty in imagining existential predications in which an expletive locative would accompany an intransitive verb of possession used impersonally in the same way as in the type of existential predication presented in Section 7, but no such construction is attested in the data I have been able to collect.} This type of possessive predication has already been illustrated in Catalan – Ex. (1). Occitan – Ex. (37) provides an additional illustration.
The existential predicator of French *il y a* belongs to this type, but in addition to the expletive locative (*y*) and a third person singular form of *avoir* ‘have’, it includes an expletive subject clitic of third person masculine (*il*).

### 8.2. Poss/loc-existentials in the languages of the world

All the languages of my sample in which a predicative construction of the poss/loc-existential type can be identified belong to the Romance family:

- Catalan (Indo-European, Romance)
- French (Indo-European, Romance)
- Occitan (Indo-European, Romance)
- Sardinian (Indo-European, Romance)

Historically, the present form of the Spanish existential predicator *hay* originates from such a poss/loc-existential construction, since it can be decomposed as *ha* third person singular of *haber* < Latin *habere* ‘have’ plus *-y* reflex of an expletive locative, but synchronically, *hay* can only be analyzed as a dedicated existential predicator, since in Spanish, *haber* has been completely replaced by *tener* (< *tenere* ‘hold’) in the expression of possession.

### 9. Com-existentials

#### 9.1. Definition and illustration

Com-existentials are defined as existential predications in which the figure is encoded like the phrase representing the companion in comitative predication. Com-existentials are common among Bantu languages, and there is a clear relationship with the possessive use of comitative predication in Bantu languages.

In languages in which locative phrases have access to the syntactic function of subject, like Swahili, com-existentials can straightforwardly be described as comitative predications with the ground in the syntactic role of subject: ‘GR is with FIG’. Example (38a-b) illustrates the possessive use of the Swahili comitative predication with plain NPs in subject function, and (38c-d) illustrate the same construction with locative phrases in subject function.\(^\text{18}\)

---

(38) Swahili (pers.doc.)

a. *Hamisi* a na *kitabu.*
   *(CL1)Hamisi CL1 with CL7.book*
   lit. ‘Hamisi he (is) with book.’ → ‘Hamisi has a book.’

b. *Kisima* ki na *maji.*
   *(CL7.well CL7 with CL6.water)*
   lit. ‘The well it (is) with water.’ → ‘The well has water.’

c. *Kisima-ni* m na *maji.*
   *(CL7.well-LOC CL18 with CL6.water)*
   lit. ‘at-the-well there (is) with water.’ → ‘There is water in the well.’

d. *Meza-ni* pa na *kitabu.*
   *(CL9)table-LOC CL16 with CL7.book*
   lit. ‘at-the-table there (is) with book.’ → ‘There is a book on the table.’

In Southern Bantu languages, where locative phrases have lost the ability to be used in the syntactic function of subject, the com-existential construction involves an existential predicator consisting of a an expletive locative index and the comitative predicator, as in Tswana *go na (le)* ‘there is’, lit. ‘there_expl is.with’ – Ex. (39).19

(39) Tswana (pers.doc.)

a. *Ga* ke na *mathata.*
   *NEG 1SG be.with problems*
   ‘I have no problem.’ lit. ‘I am not with problems.’

b. *Ga* go na *mathata.*
   *NEG there_expl be.with problems*
   ‘There’s no problem.’ lit. ‘There_expl is not with problems.’

9.2. Com-existentials in the languages of the world

Outside the Bantu sub-branch of Niger-Congo, Hausa (Afro-Asiatic, Chadic) is the only attestation of this type of existential construction in my sample.20 Interestingly, Bantu and Chadic are two groups of languages in which possessive constructions derived from comitative predication (Possessor is with Possessee) are relatively common.

Ex. (40) illustrates the use of the Hausa comitative preposition *dà* with comitative/instrumental adjuncts (a), in possessive predication (b), and in the function of existential predicator (c-d).

20 Hausa also has a dedicated existential predicator *àkwai*, already illustrated by Ex. (3), Section 2.1.
(40) Hausa (Newman 2000: 467, 222, 178)

a. Yā yankâ dà wukā.
   3SG.M.CMP slaughter with knife
   ‘He slaughtered it with a knife.’

b. Yārò yanâ dà fensīr.
   boy 3SG.M.INCMP with pencil
   lit. ‘The boy is with knife.’ → ‘The boy has a knife.’

c. Dà dâlîlî.
   with reason
   ‘There is a reason.’

d. Dà isasshen shâyî?
   with enough tea
   ‘Is there enough tea?’

10. Id-existentials

10.1. Definition and illustration

Id-existentials are defined as existential constructions characterized by the presence of either a dedicated identificational predicative, or an identificational/locational predicative accompanied by a non-locative expletive element also used in identificational clauses equivalent to English This/that is an N. Icelandic illustrates this type of existential predication – Ex. (41).

(41) Icelandic (Neijmann 2001: 22, Freeze 2001: 949)

a. Pað er kirkja.
   that is church
   ‘That is a church.’

b. Pað eru mys í baðkerinu.
   that are mice in bathtub
   ‘There are mice in the bathtub.’ litt. ‘That are mice in the bathtub.’

This type of existential construction is interesting in a theoretical perspective, since it emphasizes the semantic relationship between existential predication in the sense of inverse locational predication and identificational predication: in some sense, the existential perspective on figure-ground relationships is tantamount to identifying an entity present at a given place. This connection is even more obvious in the variant of the id-existential type found in Tahitian (Polynesian). In most Polynesian languages, the figure phrase in existential predication is introduced by an expletive
locative or by an existential predicator that historically derives from an expletive locative, but Tahitian uses the identificational predicator e in a construction whose literal meaning is ‘That at/of Loc is N’. Ex. (42a) illustrates the Tahitian identificational predication, and Ex. (42b-c) illustrates the two variants of existential predication. In both variants, the word glossed ART(icle) can be viewed as marking the nominalization of a prepositional phrase.

(42) Tahitian (Lazard and Peltzer 2000: 36-45)

a. E fa'ehau terā ta'ata.
   ICOP soldier DEM man
   ‘This man is a soldier.’

b. E pape te-i tera vāhi.
   ICOP water ART-at DEM place
   ‘There is water at that place.’ lit. ‘It is water, that at that place.’

b. E pape te-o tera vāhi.
   ICOP water ART-of DEM place
   ‘There is water at that place.’ lit. ‘It is water, that of that place.’

10.2. Id-existentials in the languages of the world

In my language sample, this type of existential predication can be recognized in the following languages:

- Icelandic (Indo-European, Germanic)
- Norwegian (Indo-European, Germanic)
- Swedish (Indo-European, Germanic)
- Tahitian (Austronesian, Oceanic, Polynesian)

Another attestation of this type of existential construction is reported by Labov (1973: 270), who notes that American African Vernacular English tends to use it is instead of standard there is, as in It’s a policeman at the door.

11. Existential predications involving a dedicated existential predicator

11.1. Definition and illustration

By ‘dedicated existential predicator’, I mean an existential predicator in a construction that cannot be analyzed as an instance of one of the types of existential predication presented in the previous sections, and that cannot be analyzed as having the same kind of relationship with another type of predicative construction either. Note that this definition does not exclude the possibility that a dedicated existential predicator may have other uses resulting from divergent
grammaticalizations from the same source, such as for example that of auxiliary verb.

Ex. (43) illustrates the use of the distinction between locational predication and existential predication involving a dedicated existential predication in Turkish.

(43) Turkish (pers.doc.)

a. Otel şehir-de(-dir)  
hotel town-LOC(-be)  
‘The hotel is in the town.’

b. Otel şehir-de değil(-dir)  
hotel town-LOC NEG(-be)  
‘The hotel is not in the town.’

c. Bu şehir-de bir otel var.  
DEM town-LOC one hotel EXIST  
‘There is a hotel in this town.’

d. Bu şehir-de otel yok.  
DEM town-LOC hotel EXIST.NEG  
‘There is no hotel in this town.’

11.2. Dedicated existential predicators in the languages of the world

Among the languages of my sample, the data I have at my disposal suggest recognizing a dedicated existential predicator in the following ones:

Anywa (Eastern Sudanic)  
Beng (Mande)  
Breton (Indo-European, celtic)  
Cebuano (Austronesian, Philippine)  
Chamorro (Austronesian, Malayo Polynesian)  
Chuvash (Turkic)  
Coptic (Afro-Asiatic, Egyptian)  
Erzya (Uralic, Mordvinic)  
Ese Ejja (Takanan)  
Fon (Niger-Congo, Kwa)  
Fagauvea (Austronesian, Polynesian)  
Fon (Niger-Congo, Kwa)  
Hausa (Afro-Asiatic, Chadic)  
Hebrew (Afro-Asiatic, Semitic)  
Hdi (Afro-Asiatic, Chadic)  
Huastec (Mayan)  
Kanuri (Saharan)  
Karachay (Turkic)  
Karo Batak (Austronesian, West Malayo-Polynesian)  
Kimaragang (Austronesian, West Malayo-Polynesian)  
Kurmanji Kurdish (Indo-European, Iranian)  
Kwaza (isolate – Brazil)  
Lele (Afro-Asiatic, Chadic)  
Limbu (Sino-Tibetan, Tibeto-Burman, Kiranti)  
Madurese (Austronesian, West Malayo-Polynesian)  
Makassar (Austronesian, West Malayo-Polynesian)
Dedicated existentials predicators are unquestionably widespread in the world’s languages. A caveat is however in order. In some languages for which the source I have used describes an existential predicator without mentioning a possible etymology, it may well be that a better knowledge of the languages in question would have allowed me to identify another type of existential construction. In particular, several Oceanic languages in my sample are described as having an existential predicator that seems to be cognate with the locative expletives found in the existential construction of Samoan (i ai) or Mwotlap (aē), but the sources I have used do not discuss the possibility of such an etymology, and I am not in a position to decide whether the languages in question should be re-classified as having loc-existential constructions, or their classification as having dedicated existential predicators is correct.

11.3. The origin of dedicated existential predicators

A priori, existential predications belonging to any of the types presented in the previous sections may undergo evolutions that moves them apart from their source construction, resulting in the conversion of existential constructions initially analyzable as belonging to one of the types analyzed in the previous sections into existential constructions involving dedicated existential predicators.
The emergence of a dedicated existential predicator may also be the result of changes in the source construction.

For example, synchronically, the existential predicator of Spanish *haber* is a dedicated existential predicator, in spite of the fact that, historically, the existential use of *haber* developed from its use as a transitive verb of possession, and no change has occurred in its construction. The reason why the existential construction with *haber* cannot be analyzed as an instance of the poss-existential type in present-day Spanish is simply that *haber* is not used as a lexical verb anymore, and has been replaced by *tener* in the function of transitive verb of possession – Ex. (44).

(44) Spanish (pers.knowl.)

   a. *Había* un problema muy grave.
      EXIST.IMPF.3SG a problem very serious
      ‘There was a serious problem.’

   b. *Tenía* un problema muy grave.
      have.IMPF.3SG a problem very serious
      ‘He/she had a serious problem.’

Interestingly, a similar evolution occurred in Portuguese, resulting in the creation of the dedicated existential predicator *há* (third person singular of *haver* < *habere* ‘have’, replaced in present-day Portuguese by *ter* in the function of verb of possession), but in Portuguese, a new trans.poss-existential construction is emerging. In this construction, particularly usual in Brazilian Portuguese, the function of existential predicator is fulfilled by *tem*, third person singular of the new transitive verb of possession *ter*.

Evolutions affecting locational predication are probably a major cause of the emergence of dedicated existential predicatior. The descriptions of several of the languages of my sample that do not have existential predication properly speaking mention two variants of plain locational predication, one with an overt predicator, and the other consisting of the mere juxtaposition of the figure phrase and the ground phrase. Some languages have an optional predicator shared by identificational and locational predication. But it is common that optional locational or identificational/locational predicatior cannot be dropped in typical existential contexts. A possible outcome of such a situation is the generalization of the construction by mere juxtaposition in all the contexts that are not typical existential contexts, and the retention of an overt predicator in typical existential contexts only, which triggers the reanalysis of a former locational (or identificational/locational) predicator as a dedicated existential predicator.

This is precisely what occurred in the history of Russian, resulting in the emergence of a dedicated existential predicator *jest’* (neg. *net*) which historically comes from the 3rd person singular of the present of *byt* ‘be’. The Russian construction with a dedicated existential predicator is the direct reflex of the locational predication of Old Russian, and the status of *jest’* changed because of the development of a locational/identificational predicative construction with no overt
predictor in the present. As a result of this evolution, the use of *jest’* has become very marginal in locational and identificational predication, whereas *jest’* has been maintained as an existential predictor. By contrast, in the past, ‘be’ has been maintained in locational/identificational predication, and consequently no dedicated existential predictor has emerged – Ex. (45).

(45) Russian (pers.doc.)

a. *Derevnja za goroj.*

   village behind hill

   ‘The village is behind the hill.’

b. *Za goroj est’ derevnja.*

   behind hill EXIST village

   ‘There is a village behind the hill.’

c. *Derevnja byla za goroj.*

   village be.PST behind hill

   ‘The village was behind the hill.’

d. *Za goroj byla derevnja.*

   behind hill be.PST village

   ‘There was a village behind the hill.’

A situation similar to that of Russian is found in Erzya (Uralic, Modvinic) and in Udmurt (Uralic, Permic).

In some of the languages that I have classified as having dedicated existential predicates, the existential predictor seems to originate from the combination of a locational predictor with an additional element whose origin is however unclear. This is the case for Ese Ejja, Kurmandji Kurdish, and Mari.21

12. Systematic restrictions on the contrast between locational and existential predication

In some of the languages in which a dedicated existential predicative construction must be recognized, the contrast between this construction and plain locational construction is limited to clauses presenting certain grammatical characteristics. The case of Russian has been evoked in Section 2.5.

In Serbo-croat – Ex. (46), the use of the trans.poss-existential construction with *ima* ‘has’ in the function of existential predictor is restricted to the present, and locational predication with *biti* ‘be’ is the only possible option for clauses in other tenses corresponding to existential clauses in the present.

(46) Serbo-Croat (pers.doc.)

a. *Još ima dobrih ljudi.*

   still have.3SG good.PL.person.PL

   ‘There are still good people.’

21 According to Geoffrey Heath (pers.com.), there is no consensus about the origin of the element he- that distinguishes the existential predicate *hebûn* from the copula *bûn* in Kurdish, but “one reasonably plausible suggestion is to connect it to the postposed demonstrative element *ha(n)*, which is quite similar to German postposed particle *da* in things like *das Buch da* ‘that book (there)*.”
b. *Bilo je dobrih i loših dana.*
   `be.PST.SG.N AUX.3SG good.PL GEN and bad.PL GEN person.PL GEN`
   ‘There were some good and bad days.’

In Polish, the use of the poss-existential construction is restricted to negative clauses in the present tense – Ex. (47). In the present tense positive, and in other tenses irrespective of polarity, there is no possible contrast between locational predication with *być ‘be’* and a dedicated existential construction.

(47) Polish (pers.doc.)

a. *Są jeszcze wolne miejsca.*
   `be.PRS.3PL still free.PL place.PL`
   ‘There are still some seats left.’

b. *Nie ma już wolnych miejsc.*
   `NEG have.PRS.3SG already free.PL GEN place.PL GEN`
   ‘There are no seats left.’

c. *Nie było już nikogo.*
   `NEG be.PST.SG.N already nobody.GEN`
   ‘There was nobody left.’

13. Is the mere juxtaposition of the ground phrase and the figure phrase a possible type of dedicated existential construction?

It follows from the data presented in the previous sections that there are languages with a locational predicative construction consisting of the mere juxtaposition of the figure phrase and the ground phrase and no possible contrast between this construction and a dedicated existential predicative construction. In such languages, clauses including no overt predicator may constitute the translational equivalent of the existential clauses of languages that have a dedicated existential predicative construction.

There are also languages in which a locational predicative construction consisting of the mere juxtaposition of the figure phrase and the ground phrase contrasts with a dedicated existential construction involving an overt predicator.

The question examined in this section is whether existential predicative constructions including no overt predicator can contrast with locational constructions involving an overt predicator.

Whatever the construction from which an existential construction derives historically, changes in the source construction may result in the emergence of dedicated existential constructions whose structure maintains the original shape of the source construction. According to this principle, it should be possible to find existential predications involving no overt predicator in languages in which a locational predication that did not necessarily involve an overt predicator was replaced by a locational construction with an obligatory overt predicator.
Interestingly, locational predications involving no overt predicator are common cross-linguistically, but in the documentation I have been able to gather I came across no language with an obligatory overt predicator in locational predication, but not in existential predication.

Of course, I am not in a position to exclude the possibility that perhaps such languages exist. It is however obvious that the use of overt predicators is much more widespread in existential predication than in locational predication. In other words, although existential predication and locational predication encode two possible perspectivizations of the same abstract predicate, there is an obvious dissymmetry in the possible use of a construction involving no overt predicator for locational and existential predication. This can be viewed as a manifestation of the marked nature of existential predication.

14. Conclusion

In this paper, after defining existential predication as inverse locational predication and discussing this definition, I have presented a typology of the existential predicative constructions in which seven types are recognized. The main conclusions are as follows:

- Less than half of the world’s languages have grammaticalized a special predicative construction encoding a perspectivization of figure-ground relationships opposed to that of plain locational clauses: in the language sample I have constituted, 120 languages out of 256 have a dedicated existential predicative construction, and the proportion among the world’s languages is probably lower, as explained in Section 1.2.
- None of the types of existential predication is evenly distributed across language families and areas, but two of them have a particularly wide distribution at world level: trans.poss-existentials, and existential constructions involving dedicated existential predicators.
- Loc-existentials are common among European languages, but relatively rare elsewhere.
- The other four types (incorp.poss-existentials, poss/loc-existentials, com-existentials, and id-existentials) are statistically marginal, at least within the limits of my sample.

Abbreviations

ACC = accusative, ADESS = adessive, AND = andative, ART = article, CL = noun class, CLS = classifier, D = default determiner, DEF = definite, DEM = demonstrative, CMP = completive, COP = copula, DET = definite, EXIST = dedicated existential predicator, expl = expletive, F = feminine, FOC = focus marker, GEN = genitive, ICOP = identificational copula, IMP = imperative, IMPF = imperfect, INCMP = incomplete, IND = indicative, INDEF = indefinite, INSTR = instrumental, LCOP = locative copula, LOC = locative, M = masculine, N = neuter, NEG = negation marker, NOM = nominative, PL = plural, PREP = prepositional case, PRF = perfect, PROPR = proprietive,PRS = present, PST = past, QUOT = quotative, REFL = reflexive, RES = resultative, SG = singular, SUBJ = subject marker, SUPESS = superessive, TOP = topic marker
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Appendix: The language sample

The language names in bold type signal languages that have an existential predicative construction distinct from locational predication.

Ainu (isolate, Japan) – Bugaeva (2011)
Akan (Niger-Congo, Kwa) – Boadi (1971)
Albanian (Indo-European) – pers.doc.
Alemannic (Indo-European, Germanic) – Czinglar (2002)
Alutor (Chukotko-Kamchatkan) – Kibrik et al. (2000)
Amharic (Afro-Asiatic, Semitic) – Cohen (1936)
Ancient Greek (Indo-European) – Humbert (1945)
Anywa, aka anuak (Eastern Sudanic) – Reh (1993)
Arabic (Standard) (Afro-Asiatic, Semitic) – Aziz (1995)

Arabic (Djibouti) (Afro-Asiatic, Semitic) – Kassim Mohammed (2012)

Arabic (Palestinian) (Afro-Asiatic, Semitic) – Freeze (2001)

Arabic (Tunisian) (Afro-Asiatic, Semitic) – Darine Saïdi, pers.com.

Avar (Nakh-Daghestanian, Avar-Andic-Tsezic) – pers.doc.

Bagiro, aka Furu (Central Sudanic, Bongo-Bagirmi) – Boyeldieu (2000)

Banda-Linda (Ubangian) – Cloarec-Heiss (1998)

Barasano (Tucanoan) – Jones and Jones (1991)

Basque (isolate – Spain, France) – pers.doc.

Baule (Niger-Congo, Kwa) – Creissels and Kouadio (1977)

Baure (Arawakan) – Danielsen (2007)

Beng (Mande) – Paperno (to appear)

Bogo (Mande) – Le Bris and Prost (1981)

Boko (Mande) – Prost (1976)

Bukawa (Austronesian, Oceanic) – Eckermann (2007)

Breton (Indo-European, Celtic) – Trépos (1968)

Bulgarian (Indo-European, Slavic) – pers.doc.

Buryat (Mongolic) – Skribnik (2003).

Camling (Sino-Tibetan, Tibeto-Burman, Kiranti) – Ebert (1997)

Cantonese (Sino-Tibetan, Chinese) – Matthews and Yip (2011)

Cape Verdean (Portuguese-based Creole) – Creissels et al. (under revision)

Carapana (Tucanoan) – Metzger (1981)

Catalan (Indo-European, Romance) – Villalba (2013)

Cebuano (Austronesian, West Malayo-Polynesian) – Dryer (2007)

Chamorro (Austronesian, West Malayo-Polynesian) – Chung (1987)

Choctaw (Muskogean) – Broadwell (2006)

Chuvash (Turkic) – Clark (1998)

Coptic (Afro-Asiatic, Egyptian) – Walters (1972)


Danish (Indo-European, Germanic) – pers.doc.

Dumi (Tibeto-Burman, Kiranti) – Van Driem (1993)

Dutch (Indo-European, Germanic) – pers.doc.

Dzuungoo (Mande) – Solomiac (2007)

Early Italo-Romance (Indo-European, Romance) – Ciconte (2013)


Eastern Cham (Austronesian, West Malayo-Polynesian) – Thurgood (2005)

Emérillon (Tupi-Guarani) – Rose (2003)

English (Indo-European, Germanic) – pers.knowl.

Erzya (Uralic, Mordvinic) – Turunen (2010)

Ese Ejja (Takanan) – Vuillermet (2012)

Estonian (Uralic, Finnic) – Lehiste (1969)

Ewe – Felix Ameka, pers.com.

Fagauvea (Austronesian, Oceanic, Polynesian) – Djoupa (2013)


Folopa (Trans-New Guinea, Teberan) – Anderson (1989)

Fon (Niger-Congo, Kwa) – Segurola and Rassinoux (2000)

French (Indo-European, Romance) – pers.knowl.

Fula (Niger-Congo, Atlantic) – Creissels et al. (under revision)

Gaagju (Arnhem) – Harvey (2002)


Galo (Sino-Tibetan, Tibeto-Burman) – Post (2008)

Ganja (Niger-Congo, Atlantic) – Creissels and Biaye (to appear)

Gbaya (Ubangian) – Roulon (1998)
Genovese (Indo-European, Romance) – Bentley et al. (2013)
Georgian (Kartvelian) – Hewitt (1995)
German (Indo-European, Germanic) – Czinglar (2002)
Goemai (Afro-Asiatic, Chadic) – Hellwig (2011)
Greek (Indo-European) – pers.doc.
Haitian (French-based Creole) – DeGraff (2007)
Hayan (Sino-Tibetan, Tibeto-Burman) – Michailovsky (1988)
Hdi (Afro-Asiatic, Chadic) – Frajzyngier (2002)
Hindi (Indo-European, Indo-aryan) – Montaut (2012)
Hinuq (Nakh-Daghestanian, Avar-Andic-Tsezic) – Forker (2013)
Huastec (Mayan) – Kondić (2012)
Hungarian (Uralic) – pers.knowl.
Icelandic (Indo-European, Germanic) – Neijmann (2001)
Igbo (Niger-Congo, Benue-Congo) – Onumajuru (1985)
Ibposo (Niger-Congo, Kwa) – Soubrier (2013)
Iloklo (Austronesian, West Malayo-Polynesian) – Rubino (2005)
Indonesian (Austronesian, Malayo-Polynesian) – Moeljadi (2012)
Irish (Indo-European, Celtic) – Harley (1995)
Israeli, aka Modern Hebrew (Afro-Asiatic, Semitic) – Zuckermann (2009)
Italian (Indo-European, Romance) – pers.knowl.
Jaminjung (Yirram) – Schultze-Berndt (2006)
Joola (Niger-Congo, Atlantic) – Creissels et al. (under revision)
Kabyle (Afro-Asiatic, Berber) – Amina Mettouchi, pers.com.
Kamajura (Tupi-Guarani) – Seki (2000)
Kana (Niger-Congo, Benue-Congo) – Ikoro (1996)
Kanuri (Saharan) – Cyffer (1991)
Karakay (Turkish) – Seegmiller (1996)
Karo Batak (Austronesian, West Malayo-Polynesian) – Woollams (2005)
Kavardil (Tangkic) – Evans (1995)
Kimaragang (Austronesian, West Malayo-Polynesian) – Kroeger (2005)
Kinyarwanda (Niger-Congo, Benue-Congo, Bantu) – Kimenyi (1980)
Koasati (Muskogean) – Kimball (1991)
Kodava (Dravidian) – Ebert (1996)
Kokota (Austronesian, Oceanic) – Palmer (1999)
Korean (isolate – Korea) – Sohn (1999)
Koyraboro Senni (Songhay) – Heath (1999)
Krio (English-based Creole) – Finney (2013)
Kurmanji Kurdish (Indo-European, Iranian) – Blau and Barak (1999)
Kwaza (isolate – Brazil) – Van der Voort (2004)
K’ichee’ (Maya) – Pye (2001)
Lango (Eastern Sudanic, Nilotic) – Noonan (1992)
Latin (Indo-European, Italic) – Ernout and Thomas (1951)
Latvian (Indo-European, Baltic) – Veksler and Jurik (1975)
Lau (Austronesian, Oceanic) – Singer (2002)
Lehar, aka Laalaa (Niger-Congo, Atlantic) – Creissels et al. (under revision)
Lele (Afro-Asiatic, Chadic) – Frajzyngier (2001)
Lezgi (Nakh-Daghestanian, Lezgi) – Haspelmath (1993)
Limbu (Sino-Tibetan, Tibeto-Burman, Kiranti) – Van Driem (1987)
Limilngan (Darwin languages) – Harrey (2001)
Lithuanian (Indo-European, Baltic) – Kalėdaitė (2008)
Maale (Afro-asiatic, Omotic) – Amha (2001)
Maba (Maban) – Weiss (2009)
Madurese (Austronesian, West Malayo-Polynesian) – Davies (1999)
Makassar (Austronesian, West Malayo-Polynesian) – Jukes (2005)
Malayalam (Dravidian) – Asher and Kumari (1997)
Mandarin (Sino-Tibetan, Chinese) – Li (1972)
Mandinka (Mande) – Creissels and Sambou (2013)
Mangaranyi (Gunwingguan) – Merlan (1982)
Maonan (Tai-Kadai) – Lu (2008)
Maori (Austronesian, Oceanic, Polynesian) – Chung and Ladusaw (2003)
Mapudungun (isolate – Chile) – Smeets (2008)
Mari (Uralic, Permic) – Zorina et al. (1990)
Mauritian (French-based Creole) – Baker (1972)
Mawake (Trans-New Guinea) – Berghäll (2010)
Ma’anyan (Austronesian, West Malayo-Polynesian) – Gudai (1988)
Ma’di (Central Sudanic) – Blackings and Fabb (2003)
Meyah (East Bird’s Nest-Sentani) – Gravelle (2010)
Mixtec (Oto-Manguean) – Macaulay (1996)
Mongolian (Mongolic) – Beffa and Hamayon (1975)
Mongsen Ao (Sino-Tibetan, Tibeto-Burman) – Coupe (2007)
Mojeno Ignaciano (Arawakan) – Olza Zubiri et al. (2002)
Mori Bawah (Austronesian, West Malayo-Polynesian) – Mead (2005)
Movima (Isolate – Bolivia) – Haude (2006)
Mwotlap (Austronesian, Oceanic) – Alexandre François, pers.com.
Nahuatl (Uto-Aztecan) – Launey (1981)
Newar (Sino-Tibetan, Tibeto-Burman) – Genetti (2007)
Nganasan (Uralic, Samoyedic) – Wagner-Nagy (2009)
Nheengatú (Tupi-Guarani) – Da Cruz (2011)
Nias (Austronesian, West Malayo-Polynesian) – Brown (2005)
Norwegian (Indo-European, Germanic) – Gast and Haas (2011)
Nyun (Niger-Congo, Atlantic) – Creissels et al. (under revision)
Ocicant (Indo-European, Romance) – pers.knowl.
Ok (Niger-Congo, Benue-Congo) – Atoyebi (2008)
Ostyk (Uralic) – Nikolaeva (1999)
Paez (isolate, Colombia) – Rojas-Curieux (1998)
Palauan (Austronesian, West Malayo-Polynesian) – Freeze (2001)
Pepel (Niger-Congo, Atlantic) – Creissels et al. (under revision)
Persian (Indo-European, Iranian) – Lazard (1957)
Pipil (Uto-Aztecan) – Campbell (1985)
Plang (Austro-Asiatic, Mon-Khmer) – Paulsen and Block (1997)
Polish (Indo-European, Slavic) – pers.doc.
Portuguese (Indo-European, Romance) – pers.doc.
Puinave (isolate – Colombia) – Giron Higuita (2008)
Puyuma (Austronesian) – Ross and Teng (2005)
Quechua, Ancash variety (Quechuan) – Cole (1985)
Quechua, Imbabura variety (Quechuan) – Cole (1985)
Rapanui (Austronesian, Oceanic, Polynesian) – Du Feu (1996)
Retoará (Tucanoan) – Strom (1992)
Romanian (Indo-European, Romance) – pers.doc.
Russian (Indo-European, Slavic) – Partee and Borschev (2007) and pers.doc.
Sakha aka Yakut (Turkic) – Stachowski and Menz (1998)
Sama-Bajau (Austronesian, West Malayo-Polynesian) – Jun (2005)
Samoan (Austronesian, Oceanic, Polynesian) – Mosel and Hovdaugen (1992)
Sango (Ubangian) – Diki-Kidiri (1998)
Sar (Central Sudanic, Sara) – Palayer (1989)
Sardinian (Indo-European, Romance) – Jones (1993)
Seediq (Austronesian) – Tsukida (2005)
Serbo-Croat (Indo-European, Slavic) – Creissels (2013)
Sereer (Atlantic) – Creissels et al. (under revision)
Sheko (Afro-Asiatic, Omotic) – Hellenthal (2010)
Siar-Lak (Austronesian, Oceanic) – Rowe (2005)
Sikuan (Guahiban) – Queixaalós (1998)
Slave (Athapaskan) – Rice (1989)
Somali (Afro-Asiatic, Cushitic) – Saeed (1993)
Soninke (Mande) – pers.doc.
Soureth (Afro-Asiatic, Semitic, Aramaic) – Poizat (2008)
Southern Italo-Romance (Indo-European, Romance) – Bentley et al. (2013) and Adam Ledgeway, pers.com.
Spanish (Indo-European, Romance) – pers.knowl.
Sundanese (Austronesian, West Malayo-Polynesian) – Müller Gotama (2001)
Swahili (Bunue-Congo, Bantu) – Marten (2013)
Swedish (Indo-European, Germanic) – Czinglar (2002)
Tadakshakh (Songhay) – Christiansen-Bolli (2010)
Tagalog (Austronesian, West Malayo-Polynesian) – Naylor (2005), Sabbagh (2009)
Tahitian (Austronesian, Oceanic, Polynesian) – Lazard and Peltzer (2000)
Tamashke (Afro-Asiatic, Berber) – Heath (2005)
Tetun dili (Austronesian, West Malayo-Polynesian) – Williams-van Klinken et al. (2002)
Thai (Tai-Kadai) – Iwasaki and Ingkaphirom (2005)
Tibetan (Sino-Tibetan, Tibetan-Burman) – Tournadre (1998)
Tigemato (Mande, Bozo) – Blecke (1996)
Tiv (Niger-Congo, Benue-Congo) – Abraham (1940)
Tok Pisin (English-based Creole) – Verhaar (1995)
Toqabaqita (Austronesian, Oceanic) –
Tolai (Austronesian, Oceanic) – Mosel (1984)
Trio (Cariban) – Carlin (2004)
Trumai (Isolate - Brasil) – Guirardello Damian (2007)
Tswana (Bunue-Congo, Bantu) – pers.doc.
Ts’umakko (Afro-Asiatic, Cushitic) – Savà (2005)
Tukang Besì (Austronesian, West Malayo-Polynesian) – Donohue (1999)
Tundra Yukaghir (Yukaghir) – Maslova (2003)
Turkish (Turkic) – Kornfilt (1998)
Tuvalu (Austronesian, Oceanic, Polynesian) – Besnier (2000)
Tzeltal (Mayan) – Brown (2006)
Udihe (Tungusic) – Nikolaeva and Tolskaya (2001)
Udmurt (Uralic, Permic) – Winkler (2001)
Ulua (Misumalpan) – Koontz-Garboden (2009)
Urarina (isolate – Peru) – Olawsky (2006)
Urhobo (Niger-Congo, Benue-Congo) – Blanc (1985)
Ute (Uto-Aztec) – Givón (2011)
Vaeakau-Taumako aka Pileni (Austronesian, Oceanic) – Naess and Hovdaugen (2011)
Vai (Mande) – Welmers (1976)
Vietnamese (Austroasiatic) – pers.doc.
Wa (Austro-Asiatic, Mon-Khmer) – Seng Mai (2012)
Wambaya (Mirndi) – Nordlinger (1993)
Warrwa (Nyulnyulan) – McGregor (1994)
Wolaytta (Afro-Asiatic, Omotic) – Lamberti and Sottile (1997)
**Wolof** (Atlantic) – Creissels et al. (under revision)
**Xamtanga** (Afro-Asiatic, Cushitic) – Chloé Darmon, pers.com.
Yems (Afro-Asiatic, Omotic) – Lamberti (1993)
**Yiddish** (Indo-European, Germanic) – Jacobs (2005)
Yoruba (Niger-Congo, Benue-Congo) – pers.doc.
Yup’ik (Eskimo-Aleut, Eskimo) – Miyaoka (2012)
**Zaar** (Afro-Asiatic, Chadic) – Bernard Caron, pers.com.
Zhaba, aka nDrapa (Tibeto-Burman, Qiangic) – Shirai (2008)