



ANNUAL
REVIEWS **Further**

Click [here](#) to view this article's online features:

- Download figures as PPT slides
- Navigate linked references
- Download citations
- Explore related articles
- Search keywords

Existential Sentences Crosslinguistically: Variations in Form and Meaning

Louise McNally

Departament de Traducció i Ciències del Llenguatge, Universitat Pompeu Fabra,
08018 Barcelona, Spain

Annu. Rev. Linguist. 2016. 2:211–31

First published online as a Review in Advance on
October 23, 2015

The *Annual Review of Linguistics* is online at
linguist.annualreviews.org

This article's doi:
10.1146/annurev-linguistics-011415-040837

Copyright © 2016 by Annual Reviews.
All rights reserved

Keywords

existence, locative constructions, possessive constructions, impersonal constructions, typology

Abstract

Though the term “existential sentence” goes back at least as far as Jespersen (1924, p. 155) and is used in descriptions of many languages to refer to a designated construction, it is difficult to identify exactly what these constructions have in common crosslinguistically. Following McNally (2011, p. 1829), the term is used here to refer to sentence types that are “noncanonical,” whether due to some aspect of their syntax or the presence of a distinguished lexical item (e.g., Spanish *hay*) and that are “typically used to express a proposition about the existence or the presence of someone or something.” I discuss a representative sample of the different structural resources used to build existential sentences: distinguished existential predicates, on the one hand, and copular, possessive, and expletive or impersonal constructions, on the other. I then address the corresponding variation in the compositional semantics of existentials, as well as pragmatic or discourse functional variation. I contrast the variationist perspective with universalist approaches to existentials, such as that by Freeze (2001).

1. INTRODUCTION

Though the term “existential sentence” goes back at least as far as Jespersen (1924, p. 155) and is used in grammatical descriptions of many languages to refer to a designated sentence type or construction, it is difficult to pin down exactly what these constructions have in common across languages. Jespersen’s definition, according to which “the existence of something is asserted or denied,” is too weak. For example, the English predicate *exist* is used to do exactly that, but linguists do not generally classify sentences such as the following as existential.

- (1) Only 32 Vermeer paintings exist in the entire world.
(Davies 2008)

Following McNally (2011), I use the term here to refer to sentence types that are “noncanonical” in structure, whether due to some aspect of their syntax or the presence of a distinguished lexical item (e.g., Spanish *hay*), and that are invariably accompanied by what appears to be a special semantics or discourse function related to introducing the presence or existence of some individual(s) (see Beaver et al. 2006 and Creissels 2014, though the latter insists that specifically location rather than existence is at stake). Languages tend to use similar building blocks for existential sentences: copular verbs, possessive or locative expressions, expletive pronouns such as English *there*,¹ and special predicates that might be related etymologically to locative or possessive expressions. When existentials are based on predicational copular constructions, the noun phrase that describes the entity whose existence or location is under discussion—hereafter, the pivot—typically appears in a different position than it would in an ordinary predicational copular sentence. For example, in English, a predicational copular sentence like *Some visitors are at the door*, where *some visitors* is the subject and *at the door* is the predicate, can be used to express the location of some guests. In the corresponding existential sentence, *There are some guests at the door*, the noun phrase *some guests* appears after, rather than before, the copular verb *be*.²

The position I take in this review is that, while it is reasonable to think that, as a rule, natural languages have a use for a construction that does little more than allow speakers to introduce a new individual into the discourse (by locating it or asserting its existence), the actual construction used in any given language is a function of the existing resources in that language and will vary accordingly in its syntactic analysis. In this sense, noncanonicity is crucial: To be noncanonical presupposes that there is something canonical. Because what is canonical differs from language to language, we find corresponding variation in existential sentences crosslinguistically.

However, there is an additional source of variation that has less to do with the set of resources in the language and more to do with the extremely poor descriptive content of existential sentences. If indeed existential sentences are specialized for the introduction of a discourse referent, it will matter little whether this is done using a locative predication, a possessive construction where a location is treated as an abstract possessor, or a dedicated existence predicate. The communicative effect will be roughly the same. Thus, to arrive at a better understanding of existential sentences, I do not assume that there is a single, underlying semantics or even a conventionalized (set of) discourse function(s) that is shared crosslinguistically. Rather, I posit that it is more insightful

¹These are also sometimes called impersonal or “dummy” pronouns. Though these terms reflect the intuition that such pronouns are semantically empty, some analyses of existential sentences assign them some sort of semantic content; see Sections 2.2.2 and 3.1.

²See, for instance, Mikkelsen (2011) for a recent overview of the syntax and semantics of different types of copular sentences.

to look at each existential construction within the context of the language in question and, on the basis of this language-internal analysis, search for general, typologically valid patterns that contribute to our understanding of the overall organizational principles of language.

Section 2 presents a representative sample of the different types of structural resources for building existential sentences: the use of distinguished existential predicates, copular constructions (including locative predications), possessive constructions, and expletive or impersonal constructions. I also show that these resources are sometimes used jointly. Section 3 addresses the corresponding variation in the compositional semantics of existentials, as well as pragmatic or discourse functional variation.

A caveat is necessary before the discussion proceeds. Because of the characteristics described above, the syntactic and semantic analysis of existential sentences both for specific languages and crosslinguistically has generated considerable debate. Therefore, the fact that a given construction is chosen here to illustrate a particular strategy for constructing existentials should not imply that all linguists would agree with the most obvious syntactic analysis for the construction. This review does not aim to address the relative merits of one analysis over another. See McNally (forthcoming) for references to different analytical possibilities.

2. EXISTENTIAL SENTENCES: A REPRESENTATIVE SAMPLE OF FORMS

2.1. Special Existential Predicates

Creissels (2014), in a typological study of 256 languages, identifies more than 50 with special existential predicates, from a variety of language families. In some, such as Chamorro (Austronesian family; examples 2*a* and 2*b*), Hebrew (Semitic; example 3), and Spanish (Romance; examples 4*a* and 4*b*), the predicate is clearly verbal. Both Chamorro and Hebrew exemplify cases where distinct forms are used for positive versus negative existentials:³

(2a) Guãha buteya gi hãlum kahun áis.
sg.exist bottle inside box ice
'There's a bottle in the icebox.'
(Chung 1987, example 5*a*)

(2b) Taya' lahi guini.
sg.not-exist boy here
'There is no boy here.'
(Chung 1987, example 15*b*)

(3) yeš/eyn be'ayot.
EX/not-EX problems
'There are/are not problems.'
(Adapted from Hazout 2004, footnote 1)

³The glosses in the examples are partially adapted from the original sources to improve consistency in this article. The abbreviations used are as follows: acc, accusative case; ade, adessive case; comp, complementizer; conj, conjunction; cop, copula; def, definite; EX, existential predicate; f, m, n, feminine, masculine, and neuter (respectively); fut, future tense; fv, final vowel; gen, genitive case; inf, infinitive; loc, locative (case or pronoun); LocCop, locative copula; mp, medio-passive; nom, nominative case; pres, present tense; pl, plural; PossCop, possessive copula; RefCd, referential concord; ref, reflexive; sg, singular; sm, subject marker; T, tense; 1, 2, 3, first, second, and third person (respectively).

In contrast, Spanish (Suñer 1982) uses a single form of the verb *haber* ‘have’ with a special, nonvarying conjugation in the present indicative tense, *hay*, which developed etymologically from a fusion of the third-person singular present tense of *haber* plus the locative pronoun *y*:⁴

- (4a) Hay una cosa que te quiero decir.
 EX a thing that 2sg.acc want.1sg say.inf
 ‘There is something that I want to tell you.’
 (name of a Spanish TV program)
- (4b) No hay dos sin tres.
 not EX two without three
 ‘(These) things come in threes.’
 (Spanish proverb)

In other languages, such as Irish (Celtic; examples 5*a* and 5*b*) and Hausa (Afroasiatic; examples 6*a* and 6*b*), the existential predicate has been argued to be nonverbal. McCloskey (2014, p. 347) notes that “[a]t least historically, [Irish] *ann* is the third person singular non-feminine form of the preposition meaning *in* and so might be translated ‘in it.’” He argues extensively that, even though Irish existentials often appear with a copular verb (i.e., one equivalent to English *be*), the copula is not essential. Rather, the existential predication involves a “small clause,” which in the most general case serves as a complement to the copula (example 5*a*), but can also appear as the complement to other predicates (example 5*b*).

- (5a) Beidh go leor bia ann.
 be.fut plenty food in-it
 ‘There’ll be plenty of food.’
 (McCloskey 2014, example 10*a*)
- (5b) Is annamh baisteach ann.
 cop.pres rare rain in-it
 ‘There’s rarely (any) rain.’
 (McCloskey 2014, example 14*c*)

Though the data on Hausa (examples 6*a* and 6*b*) are less clear, Abdoulaye (2006) maintains that its existential predicates are nonverbal because they do not appear in the same position or with the same morphology as verbs. Like Chamorro, Hausa has both positive and negative variants—indeed, two of each. Though he does not discuss the origins of the positive form *àkwai* or the negative forms *baabù* and *baâ* (which appear to be morphosyntactically conditioned variants), Abdoulaye notes that the positive existential predicate *dà* is also used as a comitative preposition and in possessive constructions.

- (6a) Dà/Àkwai haskee.
 exist light
 ‘There is light.’
 (Abdoulaye 2006, examples 2*a* and 3*a*)

⁴In contrast, when used as an auxiliary to form the present perfect indicative, *haber* takes distinct singular and plural forms: *ha/ban hablado* ‘has/have spoken.’

- (6b) Baabù/baâ ruwaa cikin wannàn kwaanò-n.
 not-exist water inside this bowl.def
 ‘There is no water in this bowl.’
 (Abdoulaye 2006, example 4b)

Interestingly, Abdoulaye argues that the comitative and possessive uses derived diachronically from the existential use, even though the existential predicate is more often considered derivative (see the quote from McCloskey, above).

Finally, Maori represents what might be considered the limiting case of this sort of strategy: a language in which the existential construction consists simply of the pivot nominal (example 7a). Though Maori has an overt existential predicate in the negative form (example 7b), in the positive form it has been lost over time.

- (7a) Āe, he taniwha.
 yes a taniwha
 ‘Yes, there are taniwhas.’
 (Chung & Ladusaw 2004, p. 42, example 29a)
- (7b) Kāhore he taniwha.
 T.not a taniwha
 ‘There are no taniwhas.’
 (Chung & Ladusaw 2004, p. 43, example 32a)

Chung & Ladusaw (2004, p. 43) observe that “[t]he nineteenth-century scholars H.W. Williams . . . and W.L. Williams . . . cite examples in which affirmative existential sentences are formed with the verb *ai* ‘(there) is’, which is now viewed as archaic. This verb, revealingly, is homophonous with the oblique pronoun *ai*, some of whose functions resemble functions of English *there*.” In summary, special existential predicates can be verbal or nonverbal, and are often (if not always) historically related to locative or possessive predicates.

2.2. Existentials Based on Copular Constructions

Specialization in the form of a distinct predicate is not the only way existential constructions can be distinguished. In many languages, existentials are based on copular constructions, very often with a locative expression as the other element in the relation. Creissels (2014) found that more than half of the languages in his survey do not have a special existential construction distinct from a locative construction (see also Clark 1978 for additional data from 30 languages, more than half of which are not covered in Creissels’s survey). Nonetheless, even if the core syntax of the construction is related to a locative copular predication, other aspects can be noncanonical. In the more basic case, the pivot is the logical subject of the copular predication (possibly with a noncanonical word order) and the locative expression is the predicate. However, there are also cases for which it has been argued that the pivot is the predicate and the location or some other element is the subject. I consider these in turn.

2.2.1. The pivot as logical subject. The simplest sort of existential construction based on a locative copular construction (while still being formally distinct in some way) is exemplified by languages like Finnish. Finnish (Finno-Ugric; examples 8a and 8b) existentials contain exactly the same elements as locative copular sentences—an adessive case-marked locative, a verb translatable

as ‘be,’ and a nominative case–marked pivot. The only difference is in the relative order of the pivot and locative expressions.

- (8a) Poika on piha-lla.
 boy.nom be.pres.3sg yard.ade
 ‘The boy is in the yard.’
 (Huumo 2003, example 3)
- (8b) Piha-lla on poika.
 yard.ade be.pres.3sg boy.nom
 ‘There is a boy in the yard.’
 (Huumo 2003, example 4)

The fact that there is no difference in case marking between the two sentences suggests that the pivot is the grammatical subject in both, and that we cannot exclude the possibility that the difference between the locative and existential interpretations is purely information structural, though how best to characterize this difference is a pending task.

A variant on this sort of existential construction is found in Swahili (Bantu; see Marten 2013 for a recent discussion, as well as Christie 1970). According to Marten, Swahili has an existential construction consisting of a locative copula—*n-po*, *-ko*, or *-mo*⁵—and the pivot as the subject (as indicated by the presence of agreement morphology on the copula), but the locative phrase is only optionally expressed.

- (9) Leo katika Afrika y-a Mashariki yu-ko m-tu
 today in 9.Africa 9.gen east sm1.LocCop17 1.person
 a-na-ye-wez-a ku-ji-tokez-a na ku-sem-a kuwa Ki-swahili
 sm1.pres.RefCd1.be-able.fv 15.refl.come-out.fv conj 15.say.fv comp 7.Swahili
 ch-a leo ni mali y-ake?
 7.gen today cop 9.wealth 9.his
 ‘Today in East Africa is there a man who can come out and say that today’s
 Swahili is his own possession?’
 (Marten 2013, example 48*a*)

This copula is not a specialized existential predicate, as it is also used in sentences where an adjective is predicated of the subject without an existential interpretation.

Despite the optionality of the locative phrase, Swahili resembles Finnish in that constructions such as example 9 occur alongside alternatives in which the relative orders of the pivot, copula and locative phrase (if expressed) are different. Marten claims that whenever the locative phrase appears after the copula, the sentence has a locative interpretation; when the pivot appears after the copula, the interpretation is generally existential, in a pattern clearly reminiscent of Finnish. However, when the locative phrase is absent, things are a bit more complicated: In some cases the interpretation is locative (example 10*a*), whereas in others it appears to be existential-like (example 10*b*).

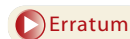
⁵The agreement system in Swahili, as in other Bantu languages, is based on noun classes; Swahili has 18 of them, the last 3 of which are locative. Each of these copulas corresponds to a different noun class and does double duty as what Marten (2013) refers to as “referential concord,” though he argues that they are not used as concord in the examples discussed here. In the Swahili glosses, numbers indicate noun classes.

- (10a) M-geni yu-ko.
 1-guest sm1-LocCop17
 ‘The guest is there.’
 (Marten 2013, example 60)
- (10b) ... wa-tu wa-po...
 ... 2.person sm2.LocCop16
 ‘... people are available. ...’ (i.e., ‘there are people’)
 (Marten 2013, example 49*b*)

Though overall the Swahili data suggest that, as in Finnish, information structure plays a role in making available an existential interpretation, example 10*b* suggests that information structure alone does not entirely determine the interpretation. Interestingly, Partee & Borschev (2007) reach a similar—indeed, stronger—conclusion for Russian (Slavic).

Partee & Borschev (2007) argue that not information structure but rather something they call “perspective structure” distinguishes locative and existential sentences in Russian (see example 15). Russian locative and existential sentences look parallel to those in Finnish in the affirmative past.

- (11a) Doktor byl v gorode.
 doctor.nom.m.sg was.m.sg in town
 ‘There was a doctor in town.’
 (Partee & Borschev 2007, example 2*b*)
- (11b) V gorode byl doktor.
 in town was.m.sg doctor.nom.m.sg
 ‘The doctor was in town.’
 (Partee & Borschev 2007, example 2*a*)



However, they differ in the affirmative simple present, where a special form of the copula is used for the existential (example 12*b*) but not the locative (example 12*a*), and in the negative form, where genitive case always marks the pivot but not the subject of the locative predication (examples 13*a* and 13*b*).

- (12a) Doktor v gorode.
 doctor.nom in town
 ‘A doctor is in town.’
- (12b) V gorode est’ doktor.
 in town BE doctor.nom.m.sg
 ‘There is a doctor in town.’
- (13a) Doktor ne v gorode.
 doctor.nom.m.sg not in town
 ‘The doctor is not in town.’
- (13b) V gorode net doktora / *doktor.
 in town neg.is doctor.gen.m.sg / doctor.nom.m.sg
 ‘There is no doctor in town.’

These additional diagnostics are interesting not only in their own right, but also because they allow one to observe that the existential interpretation in Russian is not simply a matter of information structure, if word order is taken to be an indicator. Existential sentences are, in fact, found with other word orders:

- (14) Studentov na koncerte ne bylo.
 students.gen at concert neg was
 ‘There were no students at the concert.’
 (Partee & Borschev 2007, example 21*b*)

What is less clear is that no other syntactic differences are involved. Example 14 shows that the copula does not agree with the pivot. The lack of agreement is accompanied by the presence of genitive case on the pivot, rather than the nominative case typical of subjects. This could indicate that the pivot is not a typical subject in example 14, whereas it would appear to be in example 12*b*; the existential sentence might be an example of an impersonal construction like those discussed in Section 2.4 (see Chvany 1975, Babby 1980, Pesetsky 1982, and references cited in Partee & Borschev 2007 for further discussion). Partee & Borschev (2007) do not take a definitive position on this point, but maintain that both existential and locative sentences describe a basic proposition of the schematic form BE(THING, LOC(ation)), and they argue that the difference between the two sorts of sentences is due to a difference in what they call perspective structure, defined as follows.

- (15) Perspective structure: An “existence/location situation” may be structured either from the perspective of the THING or from the perspective of the LOCation. We use the term *Perspectival Center* for the participant chosen as the point of departure for structuring the situation. (Partee & Borschev 2007, p. 156)

Partee & Borschev (2007, p. 150) suggest that perspective structure is related to diathesis—in other words, that essentially the same proposition could be expressed by two distinct syntactic structures; in later work (e.g., Partee et al. 2012), they suggest that this diathesis involves shifting the pivot from the semantic type of a referential expression to that of a property, in an analysis that is similar to the analysis of existentials discussed in example 33*b*, below. The possibility that existentials and locatives are related via diathesis moves us, as discussed in the following section, toward the second general sort of existential based on a copular construction, namely that in which the pivot serves as a predicate, rather than as a subject.

2.2.2. The pivot as logical predicate. Though virtually every conceivable syntactic analysis of the English existential construction, illustrated in example 16*a*, has been defended at one point or another, here I assume the analysis put forward by Jenkins (1975) and later developed more fully by Williams (1984, 2006) and, with slight variations, by McNally (1997), Hazout (2004), and Francez (2007). On this analysis, English existentials are considered analogous to copular sentences such as example 16*b*, with the expletive *there* as the subject, the pivot as the predicate, and any additional phrase after the pivot (typically known as the coda phrase) as an adjunct or modifier of some sort. This view establishes a parallelism between existentials and other sorts of copular sentences with expletives, such as examples 16*c*–16*e*.

- (16*a*) There are two types of diesel engines used to power large ships.
 (Davies 2008)
- (16*b*) Macabeo and parellada are two types of grape.

- (16c) That'll be our guests arriving.
- (16d) It's your son on the phone.
- (16e) This is Robin.

The main argument for such an analysis is its simplicity. In every respect other than subject-verb agreement, which depends on the pivot, the expletive behaves as a subject. For instance, it inverts with the auxiliary in question formation (example 17*a*), something impossible for fronted constituents that are not subjects (compare with example 17*b*, which is based on example 17*c*).

- (17a) Are there two types of diesel engines?
- (17b) *Were first in line two young guys in suits?
- (17c) First in line were two young guys in suits.

Initially it might be less obvious that the pivot is a predicate, as pronominal anaphora to the pivot works differently from that to typical predicate nominals. In example 18*a*, the pronoun *she* appears to be anaphoric to *a small child*. However, in example 18*b*, it is clearly anaphoric to *Martina*. We cannot infer from the second sentence that small children in general are cute.

- (18a) There is a small child in line. She is cute.
- (18b) Martina is a small child. She is cute.

However, a crucial similarity between the existential pivot and a predicate nominal involves the conditions on the range of determiners that can appear in each. It has long been acknowledged that not just any kind of nominal can appear as the pivot in any circumstances (see Milsark 1977, 1979; Barwise & Cooper 1981; Keenan 1987; Lumsden 1988; McNally 1997; Ward & Birner 1995; and Abbott 1997, among many others, for different accounts of this restrictions, known as the definiteness restriction or the definiteness effect, and see Section 3 for further discussion). Rather, definite and demonstrative determiners are subject to pragmatic restrictions, and necessarily quantificational determiners, such as *each* and *every*, are licensed only when they quantify over properties or similar higher-order entities, such as kinds or types. The latter restriction also applies to predicates in copular sentences, as noted by Partee (1987), following observations by Williams (1983).

- (19a) ??There is every diesel engine used to power large ships.
- (19b) There was every kind of news in the paper: accidents, shipwrecks, sports, and politics.
[Joyce 2003 (2016)]
- (19c) ??Mary considers that every island.
(Partee 1987, example 10)
- (19d) This house has been every color.
(Partee 1987, example 11)

Partee explains the contrast between examples 19*c* and 19*d* as follows. Assume that the predicate nominal in copular sentences must contribute a property. Certain kinds of determiners, such as the definite and indefinite articles, demonstratives, and cardinal determiners such as *two* or *many*, are compatible with a property-type interpretation for the entire nominal, independently of the

semantics of the noun.⁶ Other determiners can only be understood as quantifying over the sort of object described by the noun. If the determiner quantifies over an ordinary entity (as in example 19c), the quantificational nominal will not be able to appear in predicate nominal position—a general property of quantificational nominals is that the domain of entities the determiner quantifies over must be of a sort that could occupy the syntactic position occupied by the quantificational nominal. In contrast, if the noun describes a property, and thus the determiner quantifies over a property, the nominal will be acceptable, as demonstrated by the contrast in acceptability of the pseudological paraphrases in examples 20a and 20b.

(20a) ??Every island *x* (Man, Skye, Wight, ...) is such that Mary considers that *x*.

(20b) Every color *x* (blue, yellow, red, ...) is such that this house has been *x*.

McNally (1997) extends this explanation to the contrast in examples 19a and 19b.

The most obvious challenge for an analysis of existentials on which *there* is the subject and the pivot is the predicate is semantic. How can *there*, which appears not to be referential, serve as the subject of a predication? I address this question in Section 3.1.

To date, explicit arguments that the pivot in the existential construction corresponds to the predicate in a copular construction have been provided only for English and Hebrew (Hazout 2004, Francez 2007). They may indeed be truly rare; however, it is also possible that such analyses simply have not been considered because they clash with the initial intuition that the pivot introduces a discourse referent. If a semantic and pragmatic analysis can account for this intuition under a treatment of the pivot as a predicate, the door may be opened to considering it for additional languages. The complexity of the data from Russian, mentioned in the previous section, and Partee & Borschev's (2007) observation that information structure alone cannot account for the differences between existential and locative constructions in that language, suggests that the pivot-as-predicate analysis is worth exploring for more languages.⁷

2.3. Existentials Based on Possessive Constructions

Linguists have long observed that existential constructions are also related to possessive constructions in many languages (see, e.g., Lyons 1967, Clark 1978, and references cited there for early discussion; Creissels 2014 identifies well over 40 languages manifesting this sort of existential). Though the details vary from language to language, as a rule the pivot has the same grammatical function as the possessee in a transitive possessive construction, as shown by, for example, identical case marking. The difference between the existential and the possessive lies in the absence of an overt subject in the former construction. Modern Greek (Indo-European; examples 21a and 21b) illustrates this sort of existential.

(21a) Ta chōriá den échoun neró.
the villages neg have.pres.3pl water.acc
'The villages don't have water.'
(Creissels 2014, example 25a)

⁶Explaining in detail why this is so is beyond the scope of this article, though there is some additional discussion in Section 3. See also Partee 1987.

⁷However, the following caveat should be noted. Although we expect the pivot to behave semantically like a property if it is a predicate, we cannot conclude that a pivot that behaves like a property is syntactically a predicate; example 33b, below, illustrates. See Chung & Ladusaw (2004) and Partee et al. (2012) for examples and discussion.

- (21b) Den eíche Germanóus sto chōrió.
 neg have.past.3sg Germans.acc in-the village
 ‘There were no Germans in the village.’
 (Creissels 2014, example 25*b*)

In one variant of this strategy, a locative pronoun accompanies the possessive verb, as in the Romance languages Catalan (example 22) and French (example 23*b*; example 23*a* illustrates a standard possessive construction in French, the latter of which also has an expletive pronoun of the sort discussed in the next section.⁸

- (22) Hi ha un tresor amagat a dins.
 loc has a treasure hidden inside
 ‘There is a treasure hidden inside.’
 (<http://bradib.assembleadocentsib.cat/spip.php?article58>)
- (23a) La chambre a deux lits.
 the room has two beds
 ‘The room has two beds.’
 (<http://www.chambresdhotelslafougeraie.fr/chambres/>)
- (23b) Il y a trois chambres et deux salles de bain...
 it loc has three bedrooms and two bathrooms
 ‘There are three bedrooms and two bathrooms...’
 (<https://www.pinterest.com/casadyfrench8/ma-maison-de-reve>)

Swahili has a similar construction based on the predicate *-na*, which Marten (2013) describes as a possessive copula and Creissels (2014) calls a comitative predicate (equivalent to English ‘be with’). In this language, existentials and possessives are distinguished in that the copula in the former construction bears locative noun class marking (*ku-* in example 24*a*), whereas in the latter the copula bears the same noun class marking as the possessor (namely the noun class 1 marked *a-* in example 24*b*).

- (24a) Ku-na ma-endeleo sana.
 sm17.PossCop 6.development much
 ‘There is a lot of development.’
 (Marten 2013, example 5)
- (24b) Juma a-na wa-nafunzi wa-tano.
 Juma sm1.PossCop 2.student 2.five
 ‘Juma has five students.’
 (Marten 2013, example 4*b*)

In all of these constructions, agreement and other morphosyntactic data strongly suggest that the pivot is not the subject and, thus, that it is analogous to a possessee. What is less clear, much as in the case of the existentials discussed in Section 2.2.2, is what, if anything, plays a role analogous to the possessor. The locative marker in Swahili might suggest that some more or less abstract

⁸Note that *haver* ‘have’ was used as a transitive verb of possession only in older varieties of Catalan; in Modern Catalan, *tenir* ‘have’ is used for transitive possession. See Bassaganyas-Bars (2015) for a recent discussion.

location fulfills this function, though Marten observes that such markers can be strictly expletive, like English *there* (see Demuth 1990 for a similar argument for locative noun class agreement in Southern Sotho, another Bantu language). Bassaganyas-Bars (2015) offers somewhat more substantive, if still inconclusive, evidence that the locative *hi* in Old Catalan existentials indicated the presence of a locative subject. By contrast, in Modern Greek there is no morphology whatsoever that corresponds to the putative possessor, raising a question as to whether a single semantics can or should be maintained for all of these constructions, despite their similarities. I return to this point in Section 3.1.

2.4. Existentials Based on Expletive/Impersonal Constructions

The final strategy for forming existential sentences discussed in this review involves the use of an expletive pronoun in the position where the pivot would occur in a canonical predication, and concomitant displacement of the pivot. Such sentence types are often described as “impersonal.” In some languages, this strategy is combined with one of the others mentioned above—I have already shown that French and English are examples.

The Germanic languages offer several variations on this strategy. First, the choice of expletive varies: Alongside English *there*, which is ostensibly related to a locative pronoun, we find nonlocative pronouns such as the neuter personal *es* ‘it’ in German (example 25*a*) and the demonstrative *það* ‘that’ in Icelandic (example 25*b*).

- (25*a*) Es gibt viele Gänseblümchen in meinem Garten.
 it gives many daisies in my garden
 ‘There are many daisies in my garden.’
 (Adapted from Czinglar 2002, example 2*a*)

- (25*b*) það eru mýs í baðkerinu.
 that are mice in bathtub.def
 ‘There are mice in the bathtub.’
 (Platzack 1983, example 1)

Second, we find variation in the verb. In addition to *be*, as in English and Icelandic, and *avoir* ‘have,’ as in French, we see *geben* ‘give’ (example 25*a*) and what Hopper (1998) refers to as the “medio-passive” form of the verb *finna* ‘find’ in Swedish (example 26; counterparts of *find* are also used in other Scandinavian languages).

- (26) Det finns barn som gärna äter spinat.
 this find.mp children who gladly eat spinach
 ‘There are children who gladly eat spinach.’
 (Czinglar 2002, example 19*b*)

Third, Platzack (1983), among others, has argued that in some Germanic languages the expletive is a subject, whereas in others it is a topic. Clear evidence of subject status for the expletive in German comes from the possibility of subject–auxiliary inversion.⁹

- (27) Gibt es viele Gänseblümchen in meinem Garten?
 gives it many daisies in my garden
 ‘Are there many daisies in my garden?’

⁹Platzack himself does not discuss the *es geben* construction and does not make this specific claim about it.

In contrast, Platzack (1983, p. 84) claims that in other cases, the expletive disappears, indicating that it is not a subject but rather that it appears simply to satisfy the constraint in Germanic that some expression must precede the tensed verb in ordinary declarative main clauses. The following German sentences, which look superficially like existentials but contain the verb *sein* ‘be’ instead of *geben*, illustrate.

(28a) Es sind viele Gänseblümchen in meinem Garten.
 it are many daisies in my garden
 ‘There are many daisies in my garden.’
 (Czinger 2002, example 3a)

(28b) In meinem Garten sind (*es) viele Gänseblümchen.
 in my garden are (*it) many daisies
 ‘There are many daisies in my garden.’
 (Czinger 2002, example 3b)

The fact that these sentences contain a different verb from that in example 25a raises an important question: Are they all existential sentences? In the paper by Platzack (1983) and other works on existentials in Germanic, the term “existential” is frequently used to refer to a broad range of sentence types containing an expletive, with arguably special forms such as the German *es geben* not always being distinguished. If we apply this criterion to English, sentences such as the following (from Davies 2008), would also count as existential.

- (29a) There exists a vast literature about babies. . .
- (29b) In his room, tacked up on the wall, there hung a large map of the city of Sao Paulo.
- (29c) . . . one day there arrived in Montale’s mail a privately published little volume of poetry printed on cheap paper. . .
- (29d) . . . one day there strolled into the five-and-dime a rangy young fellow. . .
- (29e) . . . there ruled in Ireland great Kings. . .

In addition to the presence of an expletive, these sentences share with existentials a similar function of introducing a new discourse referent or presenting for the first time in a discourse an already familiar individual. However, Ross (1974), Aissen (1975), and others have observed that there are also differences between sentences 29a–e and *there be* sentences. For this reason, examples 29a–e (particularly 29c–e, where the pivot is postposed after a locative phrase) are generally distinguished as presentational, rather than existential, *there*-constructions. Similar considerations should apply in analyses of the family of impersonal sentences in other languages.

2.5. On the Syntactic Analysis of Existentials

Despite the morphosyntactic variation observed in the data reviewed in this section, many linguists have tried to capture the similarities between the different types of existential sentences through a single underlying syntactic structure. The attempt by Freeze (2001) is illustrative. Freeze proposes that, universally, not only existential but also locative and possessive sentences have the underlying syntactic structure shown below (see, e.g., Haegeman 1991 for background on the basic assumptions concerning phrase structure and movement in the theoretical framework Freeze adopts). In this framework, sentences have a base syntactic representation that reflects a hypothesis about the

underlying propositional structure, in this case a P-mediated relation between some entity (the theme) and a location—highly reminiscent of Partee & Borschev’s (2007) BE(THING, LOC) proposition.

$$(30) \quad [IP [NP e][I' [I BE][PP [NP THEME] [P' [P] [NP LOCATION]]]]]$$

Here, IP stands for inflectional phrase; NP, noun phrase; and PP, prepositional phrase. Movement and other operations are used to derive the surface syntactic form. In structure 30, the main subject NP is empty, being projected only to fulfill the theory-internal requirement that all base structures include such a subject position. In the course of deriving the final structure, this position can be filled by either the theme or the location phrase, yielding locative predications and Russian-like existential constructions, respectively. It can also be filled by an expletive, yielding English-like existentials. Freeze also hypothesizes that the contents of the P node can move and incorporate into the position occupied by BE, the result being spelled out as a possessive verb. When this possessive verb result is combined with the option of the theme, location, or expletive occupying the subject position, the result is possessives, Greek-style existentials, and French-style existentials, respectively.

Though powerful as an attempt to capture the relation between these different types of sentences, this unified syntactic approach can also be criticized. As discussed by Gaeta (2013), it arguably conflates, in the same analytical model, the synchronic sentence structure (in the form of the resulting output) with both typological and diachronic analysis. The typology is reflected in the different options for deriving the output from the input: the diachrony, in the fact that existential constructions, on the one hand, and locative or possessive constructions, on the other, are derived from the same base structure. Ironically, however, this conflation obscures both typological variation and diachronic development by implicitly placing greater importance on capturing broad crosslinguistic similarities than on capturing the coherence of the existential within the system of any given language. Gaeta provides several examples of how an alternative approach that takes syntactic variation at face value leads to a deeper understanding of why existentials look the way they do in each language.

In addition, by assigning the same base structure to existentials universally, analyses such as structure 30 effectively constitute the hypothesis that the core proposition expressed by existentials is the same universally if one assumes that the base structure determines the core proposition. The next section calls into question this hypothesis.

3. VARIATION IN MEANING

3.1. Semantic Variation

If we assume even a weak form of the principle of compositionality for natural language, according to which the meaning of a complex expression is a function of the meaning of its parts and the morphosyntactic operations by which they are combined (see Werning et al. 2012 for further discussion), then it should be obvious that, if there is no single construction that can be described as “existential” universally, there also need not be any single “existential proposition,” even if, crosslinguistically, those constructions identified as existential prove to be truth conditionally equivalent. It is therefore not surprising that we find a variety of explicit or implicit proposals for the existential proposition. Interestingly, all but one of them have been proposed for the English existential construction, and we can thus use that construction to illustrate.

One highly influential analysis treats existentials as semantically identical to ordinary copular (including progressive and passive) sentences in English. Thus, the compositional semantics of examples 31*a* and 31*b* could be represented in predicate logic as in example 31*c*, where the indefinite *a baby* is assumed to denote the entity returned by a choice function f_i on the set denoted by *baby* (see Reinhart 1997 and Kratzer 1998 for different implementations).¹⁰

- (31*a*) There was a baby crying.
 (31*b*) A baby was crying.
 (31*c*) **crying**($f_i(\lambda x.\mathbf{baby}(x))$)

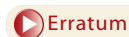
Such a semantics is implicit in the small clause analysis of existentials (e.g., Stowell 1978, as well as the slightly different syntactic analysis in Moro 1997), which can be regarded as a more general precursor to the analysis in structure 30. It may also conceivably be appropriate for existentials related to copular constructions in which the pivot is clearly a subject, and possibly for Germanic-like existentials in which the construction appears to involve simply displacing the pivot from preverbal position and introducing an expletive pronoun.¹¹

A second analysis (see examples 32*a* and 32*b*) takes the coda phrase to be an adjunct or modifier in the existential proposition and effectively treats *there be* as a unit equivalent to the predicate *exist*, which they roughly interpret as “to be a member of the set of entities in the world.”

- (32*a*) There is a God.
 (32*b*) **exist**($f_i(\lambda x.\mathbf{god}(x))$)

This sort of analysis (with differences in detail) was first proposed by Barwise & Cooper (1981) and could be considered for languages in which there is a dedicated existential predicate. Indeed, Chung & Ladusaw (2004) propose a slight variant on this analysis for Maori. Specifically, these authors identify the similarities between Maori existentials and noun incorporation constructions (intuitively similar to, e.g., *lip-read* in English; see Hall 1956 and Lamberty & Schmid 2013 on English and Mithun 1984 on incorporation more generally). They argue that the pivot denotes a property, rather than an entity, and thus it combines with the existential predicate via a modification-like composition operation they term **Restrict**. **Restrict** conjoins the existential predicate with the predicate contributed by the pivot; an independently needed operation of existential closure (**EC** in example 33*b*) converts the predicate into a well-formed proposition.

- (33*a*) Kāhore he taniwha.
 T.not a taniwha
 ‘There are no taniwhas.’
 (33*b*) **EC**(**Restrict**($\lambda x[\neg \mathbf{exist}(x)], \lambda x[\mathbf{monster}(x)]$))
 = $\neg \exists x[\mathbf{exist}(x) \wedge \mathbf{monster}(x)]$



¹⁰Space precludes presenting an introduction to formal semantic representations here. See, for example, Heim & Kratzer (1998) for an introduction.

¹¹Interestingly, although at first glance it also seems to underlie the classic *there*-insertion analysis in Transformational Grammar (Milsark 1979), Milsark’s informal semantics for existentials arguably has more in common with the analysis proposed by McNally (1997), illustrated in example 34, below.

Insofar as it treats the pivot as semantically equivalent to a predicate, this analysis, unlike the previous two, accounts directly for the restriction on quantificational pivots illustrated in examples 19*a–d* in Section 2.2.2.¹²

Chung & Ladusaw’s (2004) analysis was also inspired by the semantics for existentials proposed by McNally (1997). On this analysis, *there be* denotes a predicate of higher-order entities (specifically of what Chierchia & Turner 1988 call “entity correlates of properties”), paraphrasable as ‘(to be) instantiate(d).’ Thus, the representation of example 32*a* would be as follows (where \cap is an operator that turns properties into their entity correlates).

$$(34) \quad \text{instantiate}(\cap \lambda x. \text{god}(x))$$

McCloskey (2014) has recently defended this analysis for Irish. However, if in fact the syntax of English existentials is exactly parallel to that of predicational copular sentences, with the pivot functioning as the predicate (as suggested in Section 2.2.2.), it is not obvious that it is the best analysis for English. On the basis of this and other considerations, Francez (2007) argues that the pivot is semantically the main predicate in English existentials, applying to what he calls a contextual domain. Francez (2007, p. 73) defines contextual domains as follows.

$$(35) \quad \text{For every element } \alpha \text{ of type } \tau, \text{ let } d_\alpha \text{ be the contextual domain of } \alpha, \text{ where} \\ d_\alpha =_{\text{def}} \lambda y_{\tau'} [R_{(\tau, (\tau', t))}(\alpha, y)].$$

Though somewhat abstract, the intuition is that the contextual domain is the set of entities related to some other entity in the context—for example, a location (as in *There was a book on the table*, where the domain could be the set of entities on the table) or the universe of discourse (as in *There is a God*). In other words, rather than denoting a property of ordinary individuals, the pivot in the existential denotes a property of sets, that is, a generalized quantifier, as illustrated in example 36*a* (where d_u stands for the universe of discourse).

$$(36a) \quad a \text{ God: } \lambda P[\mathbf{a}(\text{god}), P]$$

$$(36b) \quad \mathbf{a}(\text{god}, d_u)$$

On the one hand, under this sort of analysis, the expletive could be understood as signaling that the argument of the pivot is a contextual domain, solving the mystery of what the expletive could contribute semantically on an analysis of the existentials on which the pivot is analogous to a predicate nominal. On the other hand, it treats the pivot as of a different semantic type from ordinary predicate nominals, which are generally assumed to denote properties of ordinary entities once combined with the copula.

Finally, analyses of existentials that build explicitly on the semantics of possessives are rare, but Bassaganyas-Bars’s (2015) analysis of Old Catalan existentials offers a recent example. Following Barker’s (1995) semantics for the English possessive construction, Bassaganyas-Bars takes the verb *haver* ‘have’ to denote a maximally general relation π , which can be pragmatically resolved as possession when the subject is human, but can also be resolved as a very general “central coincidence” (Hale 1986) or location relation. Example 37*b* presents an adaptation of Bassaganyas-Bars’s analysis of the Old Catalan sentence in example 37*a*. He posits that *en Ungria* ‘in Hungary’

¹² See Chung & Ladusaw’s (2004) work and the analysis of Kalallisu (West Greenlandic) by Van Geenhoven (1996) for further details; see McNally (2009) for a comparison of this sort of analysis with the one in example 34.

denotes a contextually determined location in Hungary, represented below as l_j , which functions as the subject of *haber*. The object *un rey* ‘a king’ is argued to denote a property and is composed with *haber* via an operation like **Restrict**, with the result in example 37*b*. Given that the subject is a location, π is pragmatically resolved as a location relation.

- (37a) En Ungria ach un rey.
in Hungary had.3.sg a king
‘There was a king in Hungary.’
(*La fiyla del rey d’Ungria*, fourteenth century)
- (37b) $\exists x[\pi(l_j, x) \wedge \mathbf{king}(x) \wedge \mathbf{in}(\mathbf{Hungary}, l_j)]$

Given the extremely poor descriptive content of the copula, π , and predicates such as **exist** or **instantiate**, under the right circumstances any of these analyses can be used to construct a proposition that is true in exactly the same circumstances as any other. This fact, together with the general tendency to pursue a maximally similar syntactic analysis for existential sentences crosslinguistically, has arguably contributed to the absence (to date) of work on typological variation in the semantics of existentials.

This concludes the overview of the different sorts of propositions that existential sentences might express. One last issue remains, namely the variation in the restrictions on the distribution of nonquantificational pivots, the remainder of the definiteness restriction.

3.2. Pragmatic Variation

The definiteness restriction is perhaps the characteristic of existential sentences that has generated the largest literature in theoretical linguistics. Setting aside quantificational pivots such as those in examples 19*a* and 19*b*, the restriction refers to the oddness, at least in certain contexts, of certain definite and demonstrative pivots, such as the following.

- (38) There was it / Rex / the dog / that dog in the yard.

Syntactic, semantic, and pragmatic accounts of this restriction have been proposed. In this section, rather than focusing on the analyses themselves, I consider some of the variation in the manifestations of this restriction (see McNally, forthcoming, for references to both the full range of analyses and criticisms of them).

In very general terms, the intuition behind some characterizations of this restriction (e.g., Barwise and Cooper’s) is the idea that if existential sentences are used to assert the existence of an individual, that individual should not be described using an expression that presupposes its existence, as definites, demonstratives, proper names, and pronouns typically do. Other authors draw not on the semantic notion of existence but rather on discourse pragmatic notions such as novelty: For example, Ward & Birner (1995) maintain that the pivot must contribute what Prince (1992) referred to as a “hearer-new” discourse referent, namely one that not only has not been previously mentioned in the discourse but, indeed, is not familiar to the hearer at all.

However, a notorious fact about the definiteness restriction is the slipperiness of the data. Many examples of definites, demonstratives, and proper names are attested in English existentials in corpora. These exceptions have sometimes been claimed to be limited to “list”-like environments (see Rando & Napoli 1978 and example 39*a*, below) or to morphologically definite but semantically somehow indefinite nominals (see Woisetschlaeger 1983 and example 39*b*), but Ziv (1982), Ward

& Birner (1995), Abbott (1997), and others have shown that this is not the case, as examples 40*a* and 40*b* attest.

- (39a) Ricci's three friends are waiting near the museum. . . . There's Kate Jones . . . There's Kate's boyfriend, Antony, who has a job with British television. And there's Ricci's boyfriend, Matthew Frauman. . .
(Davies 2008)
- (39b) There was the wedding photo of a young black couple among his papers.
(Woisetschlaeger 1983, p. 142)
- (40a) I think there was one flight where we had one problem. It wasn't ours, but there was that one flight.
(Abbott 1997, example 4*a*)
- (40b) CT: It's just not something the Midland Symphony is going to be able to pull off.
KC: That's true—there is that.
(Abbott 1997, example 7*b*)

On the basis of such examples, Abbott (1997) concludes that there is no one single discourse function associated with English *there*-existentials and, thus, that simple characterizations of the restriction in terms of hearer-newness are not viable.

Crosslinguistic variation in the definiteness restriction is also well known but has not been systematically analyzed. Beaver et al. (2006) provide perhaps the best-developed attempt to capture this variation. Building on Mikkelsen's (2002) analysis of Danish, Beaver et al. present an account that builds on the premise that existentials are noncanonical sentence types that differ from their canonical counterparts in the syntactic or information structural status of the pivot. If the pivot is a subject at all in existentials, it is not a canonical subject—for example, it is not likely to be a sentence or discourse topic. The definiteness restriction is then a manifestation of the following hypothesis (Beaver et al. 2006, p. 23).

- (41) Subject properties hypothesis. NPs that exhibit properties associated with subjecthood are attracted to constructions involving a canonical subject, whereas those that do not display such properties are attracted to constructions that do not involve canonical subjects.

They further argue that this hypothesis predicts that the definiteness restriction will be gradient, that we will find concomitant “antidefiniteness” effects (i.e., noun phrases that tend to appear in pivot position will resist canonical subject position), and that variation will be systematic such that, across languages, “two NP types that are ordered in relation to their propensity for subjecthood will not switch their order in another language” (Beaver et al. 2006, p. 24). For example, in various hierarchies related to subject selection and cognitive status or salience, pronouns are ranked more highly than proper names or other definite noun phrases (see, e.g., Silverstein 1976 and Gundel et al. 1993). Therefore, all things being equal, a pronoun should be less likely to occur as a pivot than a proper name or a definite, and if there is a language that allows pronouns in pivot position, it should allow definites, whereas the reverse should not hold. Beaver et al. test their proposal through a comparative quantitative study of English, Dutch, Hebrew, and Russian, with promising, if still preliminary, results. Their efforts should inspire further empirical work

grounded in a detailed analysis of the information structural differences between existentials and their canonical counterparts in a broad range of languages.

4. CONCLUSION

This survey of the variation in form and meaning of existential sentences is very much in the spirit of the view defended by Gaeta (2013), insofar as it does not presuppose that there is a universal existential syntactic structure or proposition. In some languages there is clear evidence for a specialized construction, but in others the evidence is less clear. For the latter languages, as Ziv (1982, p. 84) observes, the term “existential sentence” is a misnomer; at most, we might be able to talk about an existential construal or use. The four decades of research since the publication of Milsark’s (1979) influential analysis of English *there*-sentences and Clark’s (1978) seminal typological survey have spawned a large literature emphasizing the commonalities between existential, locative, possessive, and impersonal sentences across languages. However, perhaps it is now time to focus more on the insights we can gain from careful attention to the crosslinguistic variation in these constructions and their role in the internal logic of the individual languages in which they appear.

DISCLOSURE STATEMENT

The author is not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

ACKNOWLEDGMENTS

I thank Josep M. Fontana for discussion. Financial support was provided by Spanish MINECO grant FFI2013-41301-P and an ICREA Academia award.

LITERATURE CITED

- Abbott B. 1997. Definiteness and existentials. *Language* 73:103–8
- Abdoulaye M. 2006. Existential and possessive predication in Hausa. *Linguistics* 44:1121–64
- Aissen J. 1975. Presentational-*there* insertion: a cyclic root transformation. In *Papers from the 11th Regional Meeting of the Chicago Linguistic Society*, pp. 1–14. Chicago: Chicago Linguist. Soc.
- Babby LH. 1980. *Existential Sentences and Negation in Russian*. Ann Arbor, MI: Karoma
- Barker C. 1995. *Possessive Descriptions*. Stanford, CA: Cent. Study Lang. Inf.
- Barwise J, Cooper R. 1981. Generalized quantifiers and natural language. *Linguist. Philos.* 4:159–219
- Bassaganyas-Bars T. 2015. The rise of *haber* as the existential predicate and the perfect auxiliary: the case of Old Catalan. In *Proceedings of Sinn und Bedeutung 19*, pp. 107–24. Göttingen, Ger.: Univ. Göttingen
- Beaver D, Francez I, Levinson D. 2006. Bad subject: (non-)canonicity and NP distribution in existentials. In *Proceedings of Semantics and Linguistic Theory 15*, pp. 15–43. Ithaca, NY: CLC
- Chierchia G, Turner R. 1988. Semantics and property theory. *Linguist. Philos.* 11:261–302
- Christie JJ. 1970. Locative, possessive and existential in Swahili. *Found. Lang.* 6:166–77
- Chung S. 1987. The syntax of Chamorro existential sentences. In *The Representation of (In)definiteness*, ed. E Reuland, A ter Meulen, pp. 191–225. Cambridge, MA: MIT Press
- Chung S, Ladusaw WA. 2004. *Restriction and Saturation*. Cambridge, MA: MIT Press
- Chvany CV. 1975. *On the Syntax of BE-Sentences in Russian*. Cambridge, MA: Slavica
- Clark E. 1978. In *Universals of Human Language*, ed. J Greenberg, 4:85–126. Stanford, CA: Stanford Univ. Press
- Creissels D. 2014. *Existential predication in typological perspective*. Work. pap., Univ. Lyon

- Cztinglar C. 2002. Decomposing existence: evidence from Germanic. In *In Issues in Formal German (ic) Typology*, ed. W Abraham, JW Zwart, pp. 85–126. Amsterdam: Benjamins
- Davies M. 2008. *The Corpus of Contemporary American English: 450 Million Words, 1990–Present*. <http://corpus.byu.edu/coca/>
- Demuth K. 1990. Locatives, impersonals and expletives in Sesotho. *Linguist. Rev.* 7:233–49
- Francez I. 2007. *Existential propositions*. PhD thesis, Dep. Linguist., Stanford Univ., Stanford, CA
- Freeze R. 2001. Existential constructions. In *Language Typology and Language Universals*, ed. M Haspelmath, E König, W Oesterreicher, W Raible, pp. 941–53. Berlin/New York: de Gruyter
- Gaeta L. 2013. Existential constructions: a semasiological perspective. In *Argument Structure in Flux*, ed. E van Gelderen, M Cennamo, J Barðdal, pp. 477–509. Amsterdam: Benjamins
- Gundel J, Hedberg N, Zacharski R. 1993. Cognitive status and the form of referring expressions in discourse. *Language* 69:274–307
- Haegeman L. 1991. *Blackwell Textbooks in Linguistics*, vol. 1: *Introduction to Government and Binding Theory*. Cambridge, MA: Blackwell
- Hale K. 1986. Notes on world view and semantic categories: some Warlpiri examples. In *Features and Projections*, ed. P Muysken, H van Riemsdijk, pp. 233–54. Dordrecht, Neth.: Foris
- Hall RA. 1956. How we noun-incorporate in English. *Am. Speech* 31:83–88
- Hazout I. 2004. The syntax of existential constructions. *Linguist. Inq.* 35:393–430
- Heim I, Kratzer A. 1998. *Semantics in Generative Grammar*. Oxford, UK: Blackwell
- Hopper P. 1998. The paradigm at the end of the universe. In *The Limits of Grammaticalization*, ed. AG Ramat, P Hopper, pp. 147–58. Amsterdam: Benjamins
- Huumo T. 2003. Incremental existence: the world according to the Finnish existential sentence. *Linguistics* 41:461–93
- Jenkins L. 1975. *The English Existential*. Tübingen, Ger.: Niemeyer
- Jespersen O. 2007 (1924). *The Philosophy of Grammar*. Abingdon, UK: Routledge
- Joyce J. 2003 (1916). *Portrait of the Artist as a Young Man*. Salt Lake City: Project Gutenberg. eBook ed. <http://www.gutenberg.org/ebooks/4217>
- Keenan EL. 1987. A semantic definition of indefinite NP. In *The Representation of (In)definiteness*, ed. E Reuland, AG ter Meulen, pp. 286–317. Cambridge, MA: MIT Press
- Kratzer A. 1998. Scope or pseudoscope? Are there wide scope indefinites? In *Events and Grammar*, ed. S Rothstein, pp. 163–96. Dordrecht, Neth.: Kluwer
- Lamberty A, Schmid HJ. 2013. Verbal compounding in English: a challenge for usage-based models of word-formation? *Anglia* 131:591–626
- Lumsden M. 1988. *Existential Sentences: Their Structure and Meaning*. London: Croom Helm
- Lyons J. 1967. A note on possessive, existential, and locative sentences. *Found. Lang.* 3:390–96
- Marten L. 2013. Structure and interpretation in Swahili existential constructions. *Riv. Linguist.* 25:45–73
- McCloskey J. 2014. Irish existentials in context. *Syntax* 17:343–84
- McNally L. 1997. *An Interpretation for the English Existential Construction*. New York: Garland
- McNally L. 2009. Properties, entity correlates of properties, and existentials. In *Quantification, Definiteness, and Nominalization*, ed. A Giannakidou, M Rathert, pp. 163–87. Oxford, UK: Oxford Univ. Press
- McNally L. 2011. Existential sentences. In *Semantics: An International Handbook of Natural Language Meaning*, ed. C Maienborn, K von Stechow, P Portner, 2:1829–48. Berlin: de Gruyter
- McNally L. Existential. In *Oxford Bibliographies in Linguistics*. Oxford, UK: Oxford Univ. <http://www.oxfordbibliographies.com/obo/page/linguistics>. Forthcoming
- Mikkelsen L. 2002. Reanalyzing the definiteness effect: evidence from Danish. *Work. Pap. Scand. Syntax* 69:1–75
- Mikkelsen L. 2011. Copular clauses. In *Semantics: An International Handbook of Natural Language Meaning*, ed. C Maienborn, K von Stechow, P Portner, 2:1805–29. Berlin: de Gruyter
- Milsark G. 1979. *Existential Sentences in English*. New York: Garland
- Milsark G. 1977. Toward an explanation of certain peculiarities of the existential construction in English. *Linguist. Anal.* 3:1–29
- Mithun M. 1984. The evolution of noun incorporation. *Language* 60:847–94

- Moro A. 1997. *The Raising of Predicates: Predicative Noun Phrases and the Theory of Clause Structure*. Cambridge, UK: Cambridge Univ. Press
- Partee BH. 1987. Noun phrase interpretation and type-shifting principles. In *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers*, ed. JAG Groenendijk, D de Jongh, MJB Stokhof, pp. 115–43. Dordrecht, Neth.: Foris
- Partee BH, Borschev V, Paducheva E, Testeleys Y, Yanovich, I. 2012. The role of verb semantics in genitive alternations: genitive of negation and genitive of intensionality. *Oslo Stud. Lang.* 4 (spec. issue):1–29
- Partee BH, Borschev V. 2007. Existential sentences, BE, and the genitive of negation in Russian. In *Existence: Semantics and Syntax*, ed. I Comorovski, K von Heusinger, pp. 147–90. Dordrecht, Neth.: Springer
- Pesetsky D. 1982. *Paths and categories*. PhD thesis, Dep. Linguist., MIT, Cambridge, MA
- Platzack C. 1983. Existential sentences in English, German, Icelandic and Swedish. In *Papers from the 7th Scandinavian Conference of Linguistics*, ed. F Karlsson, pp. 80–100. Helsinki: Dep. Gen. Linguist., Univ. Helsinki
- Prince EF. 1992. The ZPG letter: subjects, definiteness, and information-status. In *Discourse Description: Diverse Linguistic Analyses of a Fund-Raising Text*, ed. WC Mann, S Thompson, pp. 295–325. Philadelphia: Benjamins
- Rando E, Napoli DJ. 1978. Definites in *there*-sentences. *Language* 54:300–13
- Reinhart T. 1997. Quantifier scope: how labor is divided between QR and choice functions. *Linguist. Philos.* 20:335–97
- Ross JR. 1974. There, There, (There, (There, (There))). In *Proceedings of the 10th Regional Meeting of the Chicago Linguistic Society*, pp. 569–87. Chicago: Chicago Linguist. Soc.
- Silverstein M. 1976. Hierarchy of features and ergativity. In *Grammatical Categories in Australian Languages*, ed. RMW Dixon, pp. 112–71. Canberra: Aust. Natl. Univ.
- Stowell T. 1978. What was there before *there* was there? In *Proceedings of the 14th Regional Meeting of the Chicago Linguistic Society*, pp. 458–71. Chicago: Chicago Linguist. Soc.
- Suñer M. 1982. *Syntax and Semantics of Spanish Presentational Sentence-Types*. Washington, DC: Georgetown Univ. Press
- Van Geenhoven V. 1996. *Semantic incorporation and indefinite descriptions: semantic and syntactic aspects of noun incorporation in West Greenlandic*. PhD thesis, Univ. Tübingen, Ger.
- Ward G, Birner B. 1995. Definiteness and the English existential. *Language* 71:722–42
- Werning M, Hinzen W, Mächery E, ed. 2012. *The Oxford Handbook of Compositionality*. Oxford, UK: Oxford Univ. Press
- Williams E. 1983. Semantic versus syntactic categories. *Linguist. Philos.* 6:423–46
- Williams E. 1984. *There* insertion. *Linguist. Inq.* 15:131–53
- Williams E. 2006. The subject–predicate theory of *there*. *Linguist. Inq.* 37:648–51
- Woisetschlaeger E. 1983. On the question of definiteness in ‘an old man’s book’. *Linguist. Inq.* 14:137–54
- Ziv Y. 1982. Another look at definites in existentials. *J. Linguist.* 18:73–88



Contents

| | |
|---|-----|
| Morris Halle: An Appreciation <i>Mark Liberman</i> | 1 |
| Synchronic Versus Diachronic Explanation and the Nature of the Language Faculty <i>Stephen R. Anderson</i> | 11 |
| Phonological Representation: Beyond Abstract Versus Episodic <i>Janet B. Pierrehumbert</i> | 33 |
| Contrast in Phonology, 1867–1967: History and Development <i>B. Elan Dresher</i> | 53 |
| Phonological Neighborhood Effects in Spoken Word Perception and Production <i>Michael S. Vitevitch and Paul A. Luce</i> | 75 |
| Sociophonetics of Consonantal Variation <i>Erik R. Thomas</i> | 95 |
| Phonological Effects on Syntactic Variation <i>Arto Anttila</i> | 115 |
| Functional Categories and Syntactic Theory <i>Luigi Rizzi and Guglielmo Cinque</i> | 139 |
| Syntactic Ergativity: Analysis and Identification <i>Amy Rose Deal</i> | 165 |
| Nonsyntactic Explanations of Island Constraints <i>Frederick J. Newmeyer</i> | 187 |
| Existential Sentences Crosslinguistically: Variations in Form and Meaning <i>Louise McNally</i> | 211 |
| Negation and Negative Dependencies <i>Hedde Zeijlstra</i> | 233 |
| The Semantic Properties of Free Indirect Discourse <i>Anne Reboul, Denis Delfitto, and Gaetano Fiorin</i> | 255 |

| | |
|---|-----|
| Experimental Work in Presupposition and Presupposition Projection <i>Florian Schwarz</i> | 273 |
| Expressives Across Languages: Form/Function Correlation <i>Olga Steriopolo</i> | 293 |
| Sentiment Analysis: An Overview from Linguistics <i>Maitte Taboada</i> | 325 |
| The Sociolinguistics of Globalization: Standardization and Localization in the Context of Change <i>Barbara Johnstone</i> | 349 |
| “So Much Research, So Little Change”: Teaching Standard English in African American Classrooms <i>Rebecca Wheeler</i> | 367 |
| Constructing a Proto-Lexicon: An Integrative View of Infant Language Development <i>Elizabeth K. Johnson</i> | 391 |
| Language and Speech in Autism <i>Morton Ann Gernsbacher, Emily M. Morson, and Elizabeth J. Grace</i> | 413 |

Errata

An online log of corrections to *Annual Review of Linguistics* articles may be found at <http://www.annualreviews.org/errata/linguistics>