

Existential

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INTRODUCTION

Many languages use specialized clause structures whose main function is to express a proposition about the existence or presence of someone or something. These have come to be known as *existential sentences* or *existential constructions*. Existential constructions have been discussed in the syntax literature because they often manifest non-canonical agreement, case-marking, and word order. They have attracted attention in the semantics and pragmatics literature because of the restrictions on definite and quantificational determiners in the so-called existential pivot nominal (the nominal that describes the entity whose existence/presence is asserted in a declarative existential); for the restrictions on the so-called coda predicate that appears in the construction in some languages (e.g. *sick* in *There were several people sick*); and for their special information structural properties. Existentials typically constitute an extension or specialization of expletive, copular, inversion, possessive, or locative constructions, though there is considerable cross-linguistic variation in

the details. This bibliography includes references on syntactic, semantic and pragmatic aspects of the constructions, as well as selected references on specific languages. Many references address more than one aspect of existentials; the classification has been made according to the main focus of the reference or that aspect which distinguishes it most from other references in this bibliography. Acquisition/processing studies are not included, nor are, in general, references to the vast related literature on more general aspects of expletive subjects/topics, unaccusativity, or subject inversion.

GENERAL OVERVIEWS AND COLLECTED WORKS

There are few general works or collections specifically devoted to existentials. Freeze 2001 presents a very brief overview that makes reference to about 30 languages. Zeshan and Perniss 2008, like Freeze, adopt a typological approach, but focus specifically on sign languages. McNally 2011 reviews the range of formal semantic analyses that have been proposed for existentials. The papers in Bentley et al. 2013 largely focus on micro-variation in existentials across the Romance language family from a formal syntactic and semantic perspective. Reuland and ter Meulen 1987, though not limited to existentials, contains enough classic papers on the topic to merit special mention.

Bentley, Delia, Francesco Maria Ciconte, and Silvio Cruschina, eds. 2013. Special issue on Existential constructions in crosslinguistic perspective. *Italian Journal of Linguistics/Rivista di Linguistica* 25:1 –173.

Contains three articles on Romance, including a particular emphasis on variation within Italian dialects; one on Swahili; and one that presents a typological study of negated existentials with additional documentary materials available.

Freeze, Ray. 2001. Existential constructions. In *Language typology and language universals*. Edited by Martin Haspelmath, Ekkehard König, Wulf Oesterreicher, and Wolfgang Raible, 941–953. Berlin / New York: de Gruyter.

Focuses on the structure of existentials. Starts from the hypothesis that all existentials are a subtype of locative construction, developed in Freeze 1992 (cited under *Locative and Possessive Constructions*) and sketches a Government and Binding Theory-based analysis for a variety of examples.

McNally, Louise. 2011. Existential sentences. In *Semantics: An international handbook of natural language meaning*. Edited by Claudia Maienborn, Klaus von Stechow, and Paul Portner, 1829–1848. Berlin: de Gruyter.

Provides a general, semantically and pragmatically grounded definition of 'existential sentence' and a comparison of formal semantic/pragmatic analyses of the definiteness effect and predicate restriction.

Reuland, Eric, and Alice G. B. ter Meulen, eds. 1987. *The representation of (in)definiteness*. Cambridge, MA: MIT Press.

Collection of papers on the definiteness effect in a variety of constructions and languages, though with special attention to existentials. Includes both syntactic and semantic analyses, as well as discussion of data in Chamorro, Chinese, Dutch, English, and Lakhota.

Zeshan, Ulrike, and Pamela Perniss, eds. 2008. *Possessive and existential constructions in sign languages*. Nijmegen: Ishara Press.

Presents the results of a typological survey of 27 sign languages from all over the world, with 10 chapters devoted to detailed studies of individual languages:

Adamorobe (Ghana), American, Austrian, Catalan, Flemish, Japanese, Jordanian, Ugandan, and Venezuelan Sign Languages, as well as Kata Kolok (Bali).

CORPUS STUDIES

There have been both synchronic and diachronic studies of existential constructions; such works are of interest for what they can reveal about both present and past use, and about how different non-canonical structures come to be associated with an 'existential' use. The studies mentioned here all involve English. Breivik 1990 is an early analysis, with detailed frequency information, though it is based on what would be considered a small corpus by Internet-era standards. Jensen 2013 represents a subsequent generation of diachronic study, with more sophisticated statistical analysis based on a much larger, annotated body of data. Breivik 2003 and Olofsson 2010 are not general studies of existentials but rather focus on specific aspects of the construction.

Breivik, Leiv Egil. 1990. *Existential there: A synchronic and diachronic study*. Oslo: Novus. Based on the Survey of English Usage (750K words) and about 4000 pages of text from the period up to 1550. Provides many examples from earlier periods and a summary of previous analyses up to the date of publication. Also compares English with various other Germanic languages, plus French.

Breivik, Leiv Egil. 2003. On relative clauses and locative expressions in English existential sentences. *Pragmatics* 13: 211–230. Corpus study based on the Lancaster-Oslo/Bergen Corpus of English; discusses the information structural properties of relative clauses whose head is the existential pivot, in the context of a more general debate over the role of discourse factors in the grammar of relativization.

Jensen, Gard B. 2013. Mapping meaning with distributional methods: A diachronic corpus-based study of existential *there*. *Journal of Historical Linguistics* 3: 272–306. Multivariate analysis of 4.5M words of tagged corpus data covering the period 850–1700. Argues for a deictic origin for *there* existentials.

Olofsson, Arne. 2010. Existential *there* and catenative concord. Evidence from the British National Corpus. *Nordic Journal of English Studies* 10: 29–47. Strictly descriptive, quantitative study of agreement of *there* sentences in *seem* and *appear* raising (i.e. catenative) constructions. Noteworthy for the unusual data.

FUNCTIONALIST ANALYSES

Functionalist analyses of existential sentences have been provided in a variety of frameworks: Dik's Functional Grammar (Hannay 1985), Halliday's Systemic Functional Grammar (Wang and Xu 2013), and cognitive/constructionist approaches (Lakoff 1987, Bergen and Plauché 2005). With the notable exception of Gaeta 2013, these analyses focus on the similarities between existential and locative/deictic constructions, though as Gaeta observes, since Freeze 1992 the connection between locative and existential sentences has gained more attention within formal approaches.

Bergen, Benjamin, and Madelaine Plauché. 2005. The convergent evolution of radial constructions: French and English deictics and existentials. *Cognitive Linguistics* 16: 1–42. Argues that in French, two radial categories are needed to cover the range of deictic and existential constructions, including *voici / voilà* constructions.

Gaeta, Livio. 2013. Existential constructions: A semasiological perspective. In *Argument structure in flux*. Edited by Elly van Gelderen, Michela Cennamo, and Jóhanna Barðdal, 477-509. Amsterdam: John Benjamins.

Argues against the universalist view of existentials as a subtype of locational expression defended in much of the functionalist literature, and, from a typological perspective, in Freeze 2001, cited under *General Overviews and Collected Works*.

Hannay, Michael. 1985. *English existentials in Functional Grammar*. Dordrecht: Foris.

An analysis using Dik's Functional Grammar. Presents some counterexamples to the claim that there is a restriction on the sort of predicate that can appear in the coda.

Lakoff, George. 1987. *Women, fire, and dangerous things: What categories reveal about the mind*. Chicago: University of Chicago Press.

Provides an extended argument that *there*-sentences constitute a radial category in . Relates deictic and expletive uses of *there*.

Wang, Yong, and Jie Xu. 2013. A systemic typology of existential and possessive constructions. *Functions of Language* 20: 1–30.

Provides a Hallidayan Systemic Functional Grammar account of the relation between locative, existential and possessive constructions, with data from a wide variety of languages. Discusses challenges with adapting Systemic Functional Grammar accounts of locational constructions to the analysis of the data discussed in the paper.

SYNTACTIC ANALYSES

Early Generative Works

The first generative analyses of existential sentences were based on English. As transformational analyses have been replaced, these works have become less cited, with the exception of Milsark 1979. Burt 1971 includes perhaps the first the earliest published formulation of the *there*-insertion transformational rule, which she attributes to 1967-1970 MIT class lectures by Morris Halle and John Robert Ross. Jenkins 1975 and Milsark 1979, written at virtually the same time at MIT, present strikingly different analyses of the construction. The range of data in Ross's 1974 discussion and his 'squish'-based approach anticipates in some ways the treatment in Lakoff 1987, cited under *Functionalist Analyses*.

Burt, Marina. 1971. *From deep to surface structure*. New York: Harper and Row.

Illustrates how the *there*-insertion transformation interacts with other transformational rules. As it is a textbook and not a study of existential sentences as such, it is mainly of historical interest.

Jenkins, Lyle. 1975. *The English existential*. Tübingen: Max Niemeyer Verlag.

Published version of Jenkins' 1973 MIT Ph.D. dissertation. An early non-transformational analysis, arguing that the properties of English existential sentences follow from independently motivated phrase structure rules and conditions in the language. Not as widely cited as it should be.

Milsark, Gary. 1979. *Existential sentences in English*. New York: Garland Publishing.

Published version of Milsark's 1974 MIT Ph.D. dissertation. The 'E Rule' for interpreting existential sentences prefigures later property-based analyses of the pivot. Establishes correlation between the definiteness effect and predicate restriction.

Ross, John Robert. 1974. There, There, (There, (There, (There))). In *Proceedings of the Tenth Regional Meeting of the Chicago Linguistic Society*, 569–587. Chicago: Chicago Linguistic Society.

Argues that there are four different *there be* constructions, and that these form a 'squish' with two sorts of presentational *there* sentences (for on the latter, see especially Aissen 1975, cited under *Other Expletive Constructions*).

Later Generative Accounts of Basic Existential Clause Structure

The debate over the syntax of English existentials revolves around the following questions: 1) Is *there* a pure expletive element without any semantic role (e.g. Stowell 1978, Pollard and Sag 1994, Hazout 2004, Kallulli 2008), or does it have some sort of semantic role as either a predicate (e.g. Moro 1997, cited under *Inversion Constructions*) or as a subject (e.g. Williams 1994, 2006)? 2) Relatedly, is the coda in a secondary predication relation with the pivot (e.g. Stowell, Pollard and Sag, Kallulli, Moro), is it an adjunct to the pivot or the VP containing the pivot (Williams, Hazout), or is more than one option available (Law 2002)?

Stowell, Timothy. 1978. What was there before there was there? In *Proceedings of the 14th Regional Meeting of the Chicago Linguistics Society*, 458–471. Chicago: Chicago Linguistics Society.

Early small clause analysis of the existential construction. Raising or expletive insertion is needed to satisfy the requirement on an overt subject in English.

Hazout, Ilan. 2004. The syntax of existential constructions. *Linguistic Inquiry* 35: 393–430.

Argues, like Williams 1994, that the pivot is syntactically a predicate, but proposes in contrast that *there* lacks any sort of participant role. Compares existentials to other expletive copular constructions (e.g. *It is dark.*). Discusses Hebrew data as well.

Kallulli, Dalina. 2008. There is secondary predication in *there*-existentials. *Proceedings of the 26th West Coast Conference on Formal Linguistics*, 279–287. Somerville, MA: Cascadilla Proceedings Project.

Argues that a version of Stowell's 1981 analysis can account for constraints on adjectives and bare nominals in the pivot position, as this analysis forces the pivot to have Number.

Law, Paul. 1999. On the passive existential construction. *Studia Linguistica* 53: 183–208.

Argues that in passive existential constructions (e.g. *There was a book put on the table*) the participial phrase is adjoin to the pivot, effectively as a reduced relative clause, and in contrast to other coda phrases, which he argues can in principle appear as predicates of a small clause complement to *be*.

Pollard, Carl, and Ivan Sag. 1994. *Head-Driven Phrase Structure Grammar*. Stanford, CA: CSLI Publications.

Includes an HPSG analysis of existential sentences on which the coda is a distinct secondary predicate, as opposed to forming a small clause with the pivot or serving as a modifier of the pivot.

Williams, Edwin 1984. *There*-insertion. *Linguistic Inquiry* 15: 131-153.

Defends a version of Jenkins' 1975 'pivot only' analysis against so-called small clause analyses and the related analysis by Milsark 1979. Also argues that *there* is a 'scope marker.'

Williams, E. 2006. The subject–predicate theory of *There*. *Linguistic Inquiry* 37: 648–651.
A reply to Hazout 2004.

Agreement and Case Assignment

The English existential construction is unusual in that the verb appears to agree not with the subject expletive *there* but rather with the pivot nominal. Though Safir 1985 is specifically a study of existential sentences, Belletti 1988, Perlmutter 1983, and Sobin 2014 focus on (abstract) Case assignment and agreement with expletive/impersonal constructions more generally.

Belletti, Adriana. 1988. The Case of unaccusatives. *Linguistic Inquiry* 9: 1–34.

Argues that the pivot is assigned not structural Case but rather inherent Case and links the nature of Case assignment to the definiteness effect. Discusses data from various languages, including Italian and French.

Perlmutter, David. 1983. Personal vs. impersonal constructions. *Natural Language and Linguistic Theory* 1: 141–200.

Presents first easily accessible, published formulation within Relational Grammar of the agreement facts in *there*-existential sentences, characterized using the term ‘Brother-in-Law Agreement.’

Safir, Kenneth. 1985. *Syntactic chains*. Cambridge: Cambridge University Press.

Published version of Safir’s 1982 MIT Ph.D. dissertation. Argues that the pivot is not in a Case-marked position, and that it gets Case by forming an unbalanced theta-chain with the expletive. This is used to account for the agreement facts and for a syntactic account of the definiteness effect.

Sobin, Nicholas. 2014. Th/Ex, agreement, and case in expletive sentences. *Syntax* 17: 385–416. [doi: 10.1111/synt.12021]

Argues that Deal’s 2009 analysis, cited under ‘Other Expletive Constructions’, is challenged by agreement facts. Builds on that analysis to provide a general, Minimalist Program account of a broad variety of agreement facts.

THE SEMANTICS OF EXISTENTIAL CLAUSES

The earliest discussion of existentials in the formal semantics literature focused largely on the definiteness effect (see section ‘The Definiteness Effect’) and were not especially concerned with the relation of this semantics to the syntax of existentials. Lumsden 1988 provides the first detailed description of a broad range of semantic and pragmatic facts concerning *there*-existentials; though he does not work out a compositional semantics, his study is informed by formal semantic work. McNally 1997 offered the first formal semantic treatment. Her syntactic analysis follows Jenkins 1975 and Williams 1984, cited under ‘Syntactic Analyses’ and treats the pivot at one level analogously to the predicate in a copular sentence in denoting (the entity correlate of) a property, but her semantics treats *there be* as an unanalyzed predicate to which the pivot serves as an argument. Francez 2009, based on his 2007 Stanford Ph.D. dissertation, argues that the pivot denotes a generalized quantifier, but that it serves as the main predicate in the existential proposition, rather than as the argument to an existential predicate – in this respect, his analysis semantics is closer in spirit to Williams’ 1994 syntax. Like McNally, however, Francez treats the coda as an adjunct. Francez 2010 presents a dynamic semantic analysis version of his previous account of the core existential proposition, but does not extend this analysis to his account of the coda. Kim’s 1996 account focuses on

connecting a formal semantics for existentials to their information structure; it also includes a syntactic analysis. Moltmann 2013 connects the semantic analysis of *there*-existentials to philosophical work on the semantics of the verb *exist*.

Francez, Itamar. 2009. Existentials, predication, and modification. *Linguistics and Philosophy* 32: 1–50.

Argues that the pivot is the main predicate in existentials, but that it denotes a second-order, rather than first order, property, whose argument is a contextually salient set, or contextual domain. The coda is analyzed as a modifier that provides information about this domain.

Francez, Itamar. 2010. Context dependence and implicit arguments in existentials. *Linguistics and Philosophy* 33: 11–30.

Focuses specifically on bare existentials (e.g. *There is one God.*) Developed in a version of Dynamic Predicate Logic.

Kim, Yookyung. 1996. *A situation semantic account of existential sentences*. Ph.D. diss., Stanford University.

Formalizes in situation semantics the intuition that existential sentences arethetic, while copular sentences are categorical (see Ladusaw 1994, cited under *The Definiteness Effect and Quantifier Semantics*). Treats the predicate restriction as independent of the definiteness effect.

Lumsden, Michael. 1988. *Existential sentences: Their structure and meaning*. London: Routledge.

A detailed study of English *there*-sentences that develops the crucial observation that quantificational determiners are acceptable in the pivot when the pivot describes a kind. Uses the Government and Binding framework for the syntactic analysis.

McNally, Louise. 1997. *An interpretation for the English existential construction*. New York: Garland Publishing.

Published version of McNally's 1992 University of California, Santa Cruz Ph.D. dissertation. Defends syntactic analysis on which the pivot is the sole argument to *there be* and denotes an entity correlate of a property. Argues that the definiteness effect is not a unified phenomenon. Treats the coda as a VP-adjunct.

Moltmann, Friederike. 2013. The semantics of existence. *Linguistics and Philosophy* 36: 31–63.

Contrasts English *there be* with the verb *exist*. Mentions significant philosophical literature on existence predicates.

THE DEFINITENESS EFFECT

The definiteness effect (also sometimes called the 'definiteness restriction') has generated a huge literature. The references listed here focus on semantic accounts (Milsark 1977, Barwise and Cooper 1981, Keenan 1987, Keenan 2003) and pragmatic accounts (Abbott 1993, 1997, Ward and Birner 1995, Zucchi 1995, Musan 1997) that are not discussed as part of the general analyses of existential sentences listed elsewhere in this bibliography. In addition, references are provided to works that focused on early-recognized exceptions to the claim that morphologically definite expressions could not appear in the construction: existential sentences with the so-called list interpretation (Rando and Napoli 1978), and cases in which morphologically definite expressions can clearly introduce a novel discourse referent

(Holmback 1984, Mikkelsen 2002, Woisetschlaeger 1983). Finally, Carnie and Harley 2005 present a unique study that relates restrictions on the lexical aspect of *-ing* nominals that can appear in the pivot position to the definiteness effect.

Carnie, Andrew, and Heidi Harley. 2005. Existential impersonals. *Studia Linguistica* 59: 46–65. [doi: 10.1111/j.1467-9582.2005.00119.x]

Compares Dutch impersonal passives and existentials like *There was dancing*. Argues that the restriction on telic predicates in both constructions (?? *There was dancing off the stage*) follows from the fact that the assertion of the event's endpoint presupposes a process, and that this is incompatible with the discourse function of the existential/impersonal.

The Definiteness Effect and Quantifier Semantics

Milsark 1977 took the first steps towards a semantic account of the definiteness effect, arguing that only pivots whose determiner could be analyzed as a cardinal predicate could appear in the construction. Such pivots were referred to as 'weak', as opposed to those that could not appear in the construction, which he referred to as 'strong'. Milsark related this to the proposal that *there be* introduced existential quantification: the pivot could not be doubly quantified, by this existential quantifier and by a quantifier of its own. This intuition is preserved in Ladusaw's 2004 claim that 'weak' amounts to 'property-denoting'. Barwise and Cooper 1981 used 'weak' and 'strong' to exemplify classes of determiners that could be defined formally within their theory of generalized quantifiers in natural language. Keenan 1987, 2003 offers refinements of Barwise and Cooper's account in subsequent works. Musan 1996 takes a rather different approach, appealing to quantification over stages.

Barwise, Jon, and Robin Cooper. 1981. Generalized quantifiers and natural language. *Linguistics and Philosophy* 4: 159–219.

Provides the first formal definition of 'weak' and 'strong', as properties of determiners, within generalized quantifier theory.

Keenan, Edward. 1987. A semantic definition of indefinite NP. In *The representation of (in)definiteness*, 286–317. Edited by Eric Reuland and Alice G. B. ter Meulen. Cambridge, MA: MIT Press.

Proposes a formal definition of 'existential NP' as an empirically superior alternative to Barwise and Cooper's definition of 'weak' and 'strong' to account for the definiteness effect facts.

Keenan, Edward. 2003. The definiteness effect: Semantics or pragmatics? *Natural Language Semantics* 11:187–216.

Argues specifically against the pragmatic account of the definiteness effect developed in Zucchi 1995, cited under *The Definiteness Effect and Information Structure*. Defends a strictly semantic account based on the notion of 'conservativity on the second argument' of the determiners that appear in the pivot.

Ladusaw, William A. 1994. Thetic and categorical, stage and individual, weak and strong. In *Proceedings of Semantics and Linguistic Theory 4*, 220–229. Ithaca, NY: Cornell University DMLL.

Though not devoted primarily to existential constructions, contains the first explicit identification of 'weak' with 'property-denoting', and situates existential sentences within the theory of thetic and categorical of judgments types.

Milsark, Gary. 1977. Toward an explanation of certain peculiarities of the existential construction in English. *Linguistic Analysis* 3: 1–29.

Develops the semantic observations in Milsark's PhD dissertation. Contains the first use of the terms 'weak' and 'strong' to characterize the conditions on the nominal that can appear as pivots.

Musan, Renate. 1996. *There*-constructions revisited. In *Proceedings of Semantics and Linguistic Theory 6*, 167–184. Ithaca, New York: Cornell University DMLL.

Argues that the definiteness effect should be characterized as the restriction that the pivot must quantify over stages of individuals.

The Definiteness Effect and Information Structure

The claim that existential sentences are non-canonical presupposes that they stand in a paradigmatic alternation with some other, canonical sentence type, typically a copular or locative predication. Underlying this paradigmatic alternation are differences in information structure. The analyses of the definiteness effect in Mikkelsen 2002 and Beavers et al. 2006 exploit the connection between information structure and (non-)canonicity. Zucchi 1995 represents a different sort of appeal to information structure, grounded in a felicity condition on the use of existentials, to account for the effect.

Beaver, David, Itamar Francez and Dmitry Levinson. 2006. Bad subject! (Non-)canonicity and NP distribution in existentials. In *Proceedings of Semantics and Linguistic Theory 15*, 19–43. Ithaca, NY: CLC Publications.

Argues based on cross-linguistic data that the definiteness restriction is a gradient phenomenon driven by competition between canonical and non-canonical structures for certain types of nominals.

Mikkelsen, Line. 2002. Reanalyzing the definiteness effect: Evidence from Danish. *Working Papers in Scandinavian Syntax* 69: 1–75.

Optimality theoretic account of the definiteness effect similar in spirit to the analysis in Beaver, et al. 2006. Detailed discussion of Danish data.

Zucchi, Alessandro. 1995. The ingredients of definiteness and the definiteness effect. *Natural Language Semantics* 3: 33–78.

Accounts for the definiteness effect via a felicity condition on existentials requiring that the common ground include neither the proposition that the intersection of the set described by the pivot and that described by the coda is empty, nor the proposition that this intersection is non-empty.

The Definiteness Effect and Definite Nominals

A number of works criticizing syntactic and semantic accounts of the definiteness effect start by challenging the claim that the pivot must be syntactically or semantically definite. One well-known sort of case where definite pivots appear in existentials is on the so-called 'list' interpretation (e.g. *Who can help us? Well, there's you, for a start.*), first discussed extensively by Rando and Napoli 1978. However, some later authors (e.g. Holmback 1983, Abbott 1993) have argued that the 'list' interpretation is not a distinct interpretation from other cases of definites in existentials. Other works, for example Ziv 1982, Woisetschlaeger 1983, raise the possibility that not all morphologically definite pivots count as semantically or pragmatically indefinite; for example, if the definite pivot has type reference, it may be used non-anaphorically, effectively introducing a novel token discourse referent. Ward and Birner 1995 argue that the definiteness effect should be characterized in terms of Ellen Prince's

notion of hearer-newness – the referent cannot have been previously familiar to the hearer, or at least the speaker can have a discourse-motivated reason for behaving as if the referent was not familiar; however, Abbott 1997 raises some counterexamples to this proposal.

Abbott, Barbara. 1993. A pragmatic account of the definiteness effect in existential sentences. *Journal of Pragmatics* 19: 39–55.

Argues against treating 'list' existentials as a separate subtype of the construction. Also offers arguments against the syntactic and semantic accounts of the definiteness effect that had been proposed up to that time.

Abbott, Barbara. 1997. Definiteness and existentials. *Language* 73: 103–108.
A reply to Ward and Birner 1995.

Holmback, Heather. 1984. An interpretive solution to the definiteness effect problem. *Linguistic Analysis* 3: 195–215.

Argues specifically against the syntactic account of the definiteness effect in Safir 1985 (cited under *Later Generative Accounts of Basic Existential Clause Structure*). Further argues that 'list' existentials do not constitute a distinct construction. Builds on Woisetschlaeger 1983.

Rando, Emily, and Donna Jo Napoli. 1978. Definites in *there*-sentences. *Language* 54: 300–313.

Classic reference on the 'list' interpretation. Argues that (non-)anaphoricity, rather than (in)definiteness, is crucial to characterizing the restrictions on the pivot. Discusses the special intonational properties of 'list' existentials.

Ward, Gregory, and Betty Birner 1995. Definiteness and the English existential. *Language* 71: 722–742.

Argues that the referent of the pivot must introduced a 'hearer new' discourse referent, as defined by Ellen Prince. Study based on naturally occurring examples.

Woisetschlaeger, Erich. 1983. On the question of definiteness in 'an old man's book'. *Linguistic Inquiry* 14: 137–154.

Argues that there is no syntactic or semantic restriction on definiteness in *there*-existentials. Mainly of interest as an early discussion of examples with pivots that are morphologically definite and contain a relational noun, as in *There was the air of the successful businessman about him*.

Ziv, Yael. 1982. Another look at definites in existentials. *Journal of Linguistics* 18: 73–88.

Discusses examples of morphologically definite pivots in Hebrew and proposes that in some of these cases it is wrong to assume that the structure that is identified as 'existential' has the same discourse function as do existentials where the definiteness restriction applies.

THE EXISTENTIAL CODA

The existential coda is that element in an existential construction, independent of the main verb if there is one, which contributes a predicate that is ascribed to the pivot. Typically it is an adjective or prepositional phrase. It has long been claimed that in English and other languages, the coda must be a so-called 'stage-level predicate'; however, Liu 2011 argues that this is not so for Chinese. The syntactic status and/or semantic properties of the coda are discussed in most works on existentials; Comorovski 1995 and Leonetti 2008 are different in

focusing specifically on the implications of the syntactic and semantic composition of the coda with the pivot for the definiteness effect. Villalba 2013 presents some challenges to Leonetti's account.

Comorovski, Ileana. 1995. On quantifier strength and partitive noun phrases. In *Quantification in natural language*, 145–177. Edited by Emmon Bach, Eloise Jelinek, Angelika Kratzer, and Barbara H. Partee. Dordrecht: Kluwer Academic Publishers.

Argues that the coda can compose semantically with the pivot either as if it were a relative clause modifier of the descriptive content of the pivot, or after first forming a complex predicate with *be*. Further argues that the choice of analysis influences the applicability of the definiteness effect.

Leonetti, Manuel. 2008. Definiteness effects and the role of the coda in existential constructions. In *Essays on nominal determination*, 131–162. Edited by Henrik Høeg Müller and Alex Klinge. Amsterdam: John Benjamins.

Argues that the presence or absence of the definiteness effect correlates with the analysis of the coda: specifically, if the pivot and the coda form a small clause (in what he terms an 'eventive existential'), there is no definiteness effect; if the coda is simply an additional secondary predicate, the effect is maintained.

Liu, Yi-Hsien. 2011. Topic-comment and the Chinese existential construction. In *Proceedings of the 23rd North American Conference on Chinese Linguistics*, volume 2, 48–65. University of Oregon, Eugene, OR.

Shows that the coda in Chinese *you*-existentials is not semantically restricted, unlike in English; attributes this contrast to a difference in the information structure of the existentials in the two languages.

Villalba, Xavier. 2013. Eventive existentials in Catalan and the topic-focus articulation. *Rivista di Linguistica/Italian Journal of Linguistics* 25: 147–173.

Argues that the small clause analysis of eventive existentials in Leonetti 2008 for Spanish does not apply to Catalan; advocates a VP-adjunct analysis of the coda.

COMPARISONS WITH RELATED CONSTRUCTIONS

Other Expletive Constructions

English and many other languages use expletive pronouns not only for existential constructions but also for other constructions. Aissen 1975 discusses *there*-sentences with verbs other than *be*, and observes that they fall into two subclasses, one in which the pivot appears adjacent to the verb (and which are more similar in behavior to ordinary existentials), and the other in which it is postposed past a locative coda (more similar to locative inversion). Hartmann 2008 tests Aissen's claim experimentally. As with inversion constructions, the class of verbs that can appear with expletives has been debated (Deal 2009, Alexiadou and Schaefer 2011). The role of the expletive has also been controversial. Richards and Biberauer 2005 and Deal 2009 offer recent discussions within the Minimalist framework; several of the works in the section *Agreement and Case Assignment* also address this issue.

Aissen, Judith. 1975. Presentational-*there* insertion: A cyclic root transformation. In *Papers from the Eleventh Regional Meeting of the Chicago Linguistic Society*, 1-14. Chicago: Chicago Linguistic Society.

Presents evidence for differences between two subtypes of *there* sentences with verbs other than *be*: those with verbs like *exist* and indefinite pivots, which are more similar to *there be* sentences; and those with verbs like *stand* and potentially definite

pivots.

Alexiadou, Artemis, and Florian Schaefer. 2011. *There*-insertion: An unaccusativity mismatch at the syntax-semantics interface. *WCCFL 28 Online Proceedings[<https://sites.google.com/site/wccfl28pro/>]*.

Argues that the distribution of *there* with different verbs points to the existence of two classes of unaccusative verbs. Discusses some of the same data as Deal 2009.

Deal, Amy Rose. 2009. The origin and content of expletives: Evidence from 'selection.' *Syntax* 12: 285-323.

Argues that the function of *there* is to permit the pivot to occupy a low position in the syntax while still sharing Case and agreement features with the subject position. Discusses the conditions on verbs that can take *there* as a subject.

Hartmann, Jutta. 2008. *Expletives in existentials: English there and German da*. Ph.D. diss., Tilburg University.

Contains a Magnitude Estimation experiment investigating the possibility of extraction out of *there*-V structures to test the proposal in Aissen 1975. Argues that while *there* is an expletive, German *da* is not, despite the similarities between them.

Richards, Marc, and Theresa Biberauer. 2005. Explaining Expl. In *The function of function words and functional categories*, 115-154. Edited by Marcel den Dikken and Christina Tortora. Amsterdam: John Benjamins.

Defends an analysis of expletive *there* and related expletives in other Germanic languages that is similar to that in Deal 2009, but includes arguments based on diachronic data.

Inversion Constructions

In English, existential constructions shares with locative inversion (e.g. *In walked Robin*.) the obvious similarity that what we might call the 'notional subject' (i.e., that which is located or whose existence is in question) is postposed. However, the extent to which existentials and inversion are related has been a matter of considerable debate: Analyses such as Moro's 1997 point to derivational similarity, while e.g. Birner 1996 and Rezac 2006 argue explicitly against a connection. *There*-constructions and locative inversion are also similar in allowing a limited range of verbs other than *be* to appear in them; the classification of these verbs has, likewise, been hotly debated, with some identifying inversion verbs with unaccusatives (e.g. Hoekstra and Mulder 1990) and others arguing against such a view (Levin and Rappaport Hovav 1995). On this latter point, see also the paper by Alexiadou and Schaefer 2011, cited under *Other Expletive Constructions*.

Birner, Betty. 1996. *The discourse function of inversion in English*. New York: Garland Publishing.

Published version of Birner's 1992 Northwestern University Ph.D. thesis. Presents evidence, based on naturally occurring examples, that *there*-constructions and locative inversion are distinct constructions.

Hoekstra, Teun, and Rene Mulder. 1990. Unergatives as copula verbs: Locational and existential predication. *The Linguistic Review* 7: 1-79.

Early and highly cited discussion of existentials in relation to locative and impersonal constructions, in the context of the Government and Binding unaccusativity literature.

Levin, Beth, and Malk Rappaport Hovav. 1995. *Unaccusativity: At the lexical semantics interface*. Cambridge, MA: MIT Press.

Includes an in-depth discussion of locative inversion and the verbs that appear in it, including many naturally occurring examples. Argues that the construction is not a diagnostic for unaccusativity, contrary to claims in e.g. Hoekstra and Mulder 1990. Relevant for the comparisons it provides between locative inversion and *there*-constructions.

Rezac, Milan. 2006. The interaction between TH/EX and locative inversion. *Linguistic Inquiry* 37: 685–697.

Argues based on data involving past participial codas that existentials and locative inversion should not be assimilated, i.e. that *there* should not be treated as an inverted predicate.

Moro, Andrea. 1997. The raising of predicates: Predicative noun phrases and the theory of clause structure. Cambridge: Cambridge University Press.

Argues that *be* takes a small clause complement whose predicate is *there*; defends a 'predicate raising' analysis. Includes extensive discussion of Italian data. Close connection to the locative analyses discussed in section *Locative and Possessive Constructions*.

Locative and Possessive Constructions

There is a long tradition of viewing existential constructions as closely related to locative and possessive constructions, particularly in the typological and functionalist literature. Lyons 1967 and Clark 1978 are widely cited early discussions; Freeze 1992 and Creissels 2013 are later examples. Kuno 1971 and Kimball 1973 devote attention to less widely discussed facts involving contrasts between locative and existential predication. Breivik 1981 rejects the locative analysis.

Breivik, Leiv Egil. 1981. On the interpretation of Existential *there*. *Language* 57: 1–25.

Argues against Lyons' 1967 locative analysis of *there* for contemporary English using diachronic data. Emphasizes information-structural considerations in accounting for the presence of *there*.

Clark, Eve. 1978. Locationals: Existential, locative and possessive constructions. In *Universals of human language*, 85–126. Edited by Joseph Greenberg. Stanford, CA: Stanford University Press.

Survey of 35 languages, including basic information about the (in)definiteness of the pivot/locatum, an explicit comparison of word orders in existential vs. locative and possessive constructions, and a list of verbs used in all three constructions. Also considers negation and agreement facts. Presents the data in extremely useful tables.

Creissels, Denis. 2013. Control and the evolution of possessive and existential constructions. In *Argument structure in flux*, 461–476. Edited by Elly van Gelderen, Michela Cennamo, and Jóhanna Barðdal (eds.). Amsterdam: John Benjamins.

Compares existential uses of verbs of possession in various languages, including Spanish, Serbo-Croat, Mandinka, Finnish and Tswana, with special attention to case marking facts.

Freeze, Ray. 1992. Existentials and other locatives. *Language* 68: 553–595.

Widely cited Generative development of the locative analysis of existential constructions. Argues that *there*-existentials, *have*-possessives, and locative predications are derived from the same underlying structure. Extends the analysis to a variety of other languages.

Kimball, John. 1973. The grammar of existence. In *Papers from the Ninth Regional Meeting, Chicago Linguistics Society*, 262–270. Chicago, IL: Chicago Linguistics Society.

Focuses on existential sentences that lack a well-formed copular counterpart (e.g. *There is space in the manger*, cp. ??*Space is in the manger*). Argues that these are derived from underlying forms like *One locate(s) space (that is) in the manger*.

Kuno, Susumo. 1971. The position of locatives in existential sentences. *Linguistic Inquiry* 2: 233–278.

Argues that existential sentences in English and Japanese are fundamentally locative constructions. Extensive discussion of scope and quantification facts involving the pivot. Presents curious restrictions on the types of locative relations that can be expressed, later discussed in Kimball 1973.

Lyons, John. 1967. A note on possessive, existential, and locative sentences. *Foundations of Language* 3: 390–396.

Early proposal to connect existential and locative sentences, on the one hand, and *have*-possessives, on the other. Mentions Latin data in passing; contains useful references to earlier work. Later works by Lyons develop the ideas in this paper in more detail.

EXISTENTIALS AND AMOUNT RELATIVES

Carlson 1977 observed that certain relative clauses had only an ‘amount’ reading (e.g. *It would take years to drink the champagne they spilled that evening*) and identified various syntactic and semantic correlates of these so-called amount relatives. He observed that a relative clause based on the pivot of an existential in English appears to necessarily involve amount relativization. Heim 1987 connects this fact to the definiteness effect. McNally 1997 observed that, surprisingly, relatives based on the pivot require not just identity of amounts, as is typical with amount relatives, but referential identity. Grosu and Landman 1998 offer an account of this curious fact that preserves the amount relative analysis. McNally 2008 and Herdan 2008 both find problems with Grosu and Landman’s proposal, but present contrasting alternatives: The latter, one that preserves the essence of Heim’s analysis for relativization out of the pivot; the former, one that rejects the idea that amount relativization is involved at all.

Carlson, Gregory N. 1977. Amount relatives. *Language* 53: 520–542.

Presents the first discussion of the syntax and formal semantics of amount relatives.

Grosu, Alexander, and Fred Landman. 1998. Strange relatives of the third kind. *Natural Language Semantics* 6: 125–170.

Argues that some amount relatives entail identity not only of amount, as would be expected, but also of reference, to account specifically for relativization out of the pivot position.

Heim, Irene. 1987. Where does the definiteness restriction apply? Evidence from the definiteness of variables. In *The representation of (in)definiteness*, 21–42. Edited by Eric Reuland and Alice G. B. ter Meulen. Cambridge, MA: MIT Press.

Argues that the special properties of relativization of the pivot follow from a ban on individual variables in the pivot position; only binding of a degree variable within the pivot is possible, accounting for similarity between amount relatives and relatives based on the pivot.

Herdan, Simona. 2008. A superlative theory of amount relatives. *Proceedings of the 26th West Coast Conference on Formal Linguistics*, 234–242. Somerville, MA: Cascadilla Proceedings Project.

Defends an essentially Heimian analysis of amount relatives; accounts for the facts unexplained by Heim's analysis by proposing a superlative quantifier that binds the degree variable in the pivot.

McNally, Louise. 2008. DP-internal *only*, amount relatives, and relatives out of existential sentences. *Linguistic Inquiry* 39: 161–169.

Argues that Grosu and Landman's 1998 analysis of amount relatives cannot apply to existential sentences and that, contrary to appearances, relativization of the pivot does not yield a true amount relative reading.

MODAL EXISTENTIAL CONSTRUCTIONS

Grosu 2004 is credited with coining the term *modal existential wh-construction* to refer to a construction that '(i) has the appearance of a clause with a fronted wh-phrase, but (ii) its semantic force is that of a narrow-scope existential generalized quantifier, with (iii) the special property that the IP within it necessarily includes a semantic modal operator with possibility/ability force.' (p. 420). These constructions are not generally found in the Germanic languages, but are attested in Romance, Slavic, Finno-Ugric, and Semitic, among other families; an example from Czech, from Šimík 2011, is *Je / mám co číst* (lit. 'is / have.1sg what read.inf', 'There is / I have something to read.'). The modal existential construction discussed by von Fintel 1992 is different: Intriguingly, it is found precisely in Germanic and consists of an expletive + modal auxiliary + negative subject + verb + object. He cites, e.g., Danish *Der må ingen sige det* (lit. 'there must nobody say that', 'Nobody must say that.'). Though it is far from obvious that these constructions are directly related to each other, it is worth asking why modality would be a crucial element in both.

Fintel, Kai von. 1992. The modal existential construction. *FLSM III: Papers from the Third Annual Meeting of the Formal Linguistics Society of Mid-America*. Bloomington: IULC Publications.

Interesting descriptive study and syntactic analysis focusing mainly on earlier varieties of English.

Grosu, Alexander. 2004. The syntax-semantics of modal existential *wh*-constructions. In *Balkan syntax and semantics*, 405–438. Edited by Olga Mišeska Tomić. Amsterdam: John Benjamins.

Brings together and provides a critique of a range of earlier work on a variety of languages. Argues that the *wh*-clause denotes an existential generalized quantifier.

Šimík, Radek. 2011. *Modal existential wh-constructions*. Ph.D. diss., Rijksuniversiteit Groningen.

Defends what he refers to as an 'event extension' analysis of the *wh*-clause. Contains an outstanding annotated bibliography on the construction.

STUDIES OF EXISTENTIAL CONSTRUCTIONS IN LANGUAGES OTHER THAN ENGLISH

Austronesian

In the Austronesian languages, existential constructions consist of an existential predicate plus a subject; no coda is posited as part of the core existential proposition (Chung 1987, Chung and Ladusaw 2004, Sabbagh 2009), though Law 2011 argues that in Malagasy the existential predicate can also take a clausal complement, similar in function to the combination of pivot+coda. As Zeitoun, et al., 1999 specifically focus on comparing existential constructions with locative and possessive constructions, their work brings together much useful data about the different types of verbs that are used in each of these construction types across the Formosan languages.

Chung, Sandra. 1987. The syntax of Chamorro existential sentences. In: E. Reuland and A. G. B. ter Meulen (eds.). In *The representation of (in)definiteness*, 191–225. Edited by Eric Reuland and Alice G. B. ter Meulen. Cambridge, MA: MIT Press.

Argues that Chamorro existential sentences take only a nominal complement, rather than e.g. a small clause, following Williams 1984 for English, cited under *Later Generative Accounts of Basic Existential Clause Structure* – i.e., they have a pivot-only, rather than pivot+coda structure.

Chung, Sandra, and William A. Ladusaw. 2004. *Restriction and saturation*. Cambridge, MA: MIT Press.

Compares Chamorro with Maori, further developing Chung's 1987 analysis of the former and connecting the facts to the literature on so-called semantic incorporation.

Law, Paul. 2011. Some syntactic and semantic properties of the existential construction in Malagasy. *Lingua* 110: 1588–1630.

Argues that Malagasy existential predicate *-isy* can take either a DP complement (cf. Chung 1987, Sabbagh 2009) or an IP complement, which he considers to be analogous to the small clause complement analysis in e.g. Stowell 1978, cited under *Later Generative Accounts of Basic Existential Clause Structure*.

Sabbagh, Joseph. 2009. Existential sentences in Tagalog. *Natural Language and Linguistic Theory* 27: 675–719.

Argues that the existential construction in Tagalog involves an unaccusative verb that takes only a pivot, and no separate coda or small clause. Further argues that the pivot must denote a property.

Zeitoun, Elizabeth, Lillian M. Huang, Marie M. Yeh, and Anna H. Chang. 1999. Existential, possessive, and locative constructions in Formosan languages. *Oceanic Linguistics* 38:1–42.

Thorough survey of similarities and differences between existentials in 10 Formosan languages. Argues that the data question some of the claims in Clark 1978 and Freeze 1992, both cited under *Locative and Possessive Constructions*.

Germanic

Existentials in the Germanic languages invariably involve an expletive; the verb varies, including cognates of *be*, *give*, *have*, and *find* (Czinger 2002). Germanic existentials data is therefore frequently brought to bear on debates over the syntactic analysis of impersonal constructions more generally (e.g. Platzack 1983, Christensen 1991; see also Hartmann 2008, cited under *Other Expletive Constructions*).

Christensen, Kirsti K. 1991. AGR, adjunction, and the structure of Scandinavian existential sentences. *Lingua* 84: 137–158.

Presents an account of a claimed contrast in the syntax of the expletive in Icelandic and Faroese (expletives are topics) vs. Mainland Scandinavian languages (expletives are subjects). Also discusses definiteness effect facts.

Cztinglar, Christine. 2002. Decomposing existence: Evidence from Germanic. In *Issues in Formal German(ic) Typology*, 85–126. Edited by Werner Abraham and Jan-Wouter Zwart. Amsterdam: John Benjamins.

Argues for distinguishing between ‘pure’ existentials (e.g. German *es gibt*, lit ‘it gives’) and ‘locative’ existentials (e.g. Alemanic *es hot*, lit ‘it has’). Contrasts these with *es sein* constructions as well as *there*-existentials and ‘*find*’-existentials in Scandinavian.

Platzack, C. 1983. Existential sentences in English, German, Icelandic and Swedish. In *Papers from the 7th Scandinavian Conference on Linguistics*, 80–100. Helsinki: University of Helsinki Department of General Linguistics.

Difficult to access but frequently cited source of comparative data. Argues that expletives in Icelandic appear in a ‘high’ SpecCP position, rather than the ‘low’ position that Deal 2009, cited under *Other Expletive Constructions*, assigns to English *there*.

Niger-Congo

The sample of Niger-Congo languages offered here is too small to be representative; the references have been chosen based on their availability and engagement with the theoretical literature. Constructions using a copula in conjunction with a semantically empty locative-related morpheme are an option in all of the languages covered in these entries. Boadi 1971 suggests that in Akan, both the copula and empty locative are inserted by a late rule and play no role in semantic interpretation. Demuth 1990 is of added interest for comparing existential constructions to locative inversion constructions, which have been more widely discussed for Bantu in the Lexical Functional Grammar literature. Marten 2013 considers a wider variety of construction types than does Demuth, but focuses exclusively on Swahili.

Boadi, Lawrence A. 1971. Existential Sentences in Akan. *Foundations of Language* 7: 19–29.

Argues that whether a construction involving the copula *wɔ* has a pure existential, locative or possessive interpretation depends on the syntactic configuration and whether, if there is an overt beneficiary, it is locative or non-locative. Examples are not glossed morpheme by morpheme.

Demuth, Katherine. 1990. Locatives, impersonals and expletives in Sesotho. *The Linguistic Review* 7: 233–249.

Detailed discussion of Sesotho *ho-* constructions. Argues that the locative noun class marker *ho-* is an expletive, not a true locative, and shows that there is no definiteness effect. Points to interesting contrasts with other Southern Bantu languages. Analysis cast in a version of Lexical Functional Grammar.

Marten, Lutz. 2013. Structure and interpretation in Swahili existential constructions. *Rivista di Linguistica/Italian Journal of Linguistics* 25: 45–73.

Detailed descriptive study that compares two distinct existential constructions: one with a locative noun class marker, similar to Sesotho *ho-*, and a possessive copula; the other involving a locative copula.

Romance

Existential constructions in the Romance languages typically involve a locative clitic: *y* in French (Côté 1999), *hi* in Catalan (Rigau 1997), *ci* in Italian (Tovena 2007). Often, if not always, the verb is cognate with English *have*: *avoir* in French, *haver* in Catalan, *haber* in Spanish (Suñer 1982). Thus, Romance language data have been appealed to in efforts to relate existential sentences both to locative and to possessive constructions. The Romance languages have also played a significant role in the literature on those aspects of existentials that involve inversion and agreement. There is variation in the manifestation of the definiteness effect: specifically, Catalan and Quebec French are claimed to lack the effect.

Côté, Marie-Hélène. 1999. Quantification over individuals and events and the syntax-semantics interface: The case of existential constructions. In *Proceedings of the Seventeenth West Coast Conference on Formal Linguistics*, 147–161. Stanford, CA: CSLI Publications.

Presents an analysis of existentials in Quebec French, where there is no definiteness effect, arguing that the complement to the existential *Y a* (lit. 'LOC have') is a DP. Also discusses Haitian data.

Rigau, Gemma. 1997. Locative sentences and related constructions in Catalan: *ésser/haver* alternation. In *Theoretical issues at the morphology-syntax interface*, 395–421. Edited by Amaya Mendikoetxea and Myriam Uribe-Etxebarria. Bilbao: Universidad del País Vasco.

Treats the locative clitic *hi* in the *haver-hi* (lit. 'have-LOC') existential as the subject of a small clause complement to the copula *ésser*, the small clause head being an abstract preposition of central coincidence whose locatum argument is the pivot. The preposition incorporates into *ésser* and spells out as *haver*.

Suñer, Margarita. 1982. *Syntax and semantics of Spanish presentational sentence-types*. Washington: Georgetown University Press.

Very complete study that includes an unusually broad range of data.

Tovena, Lucia. 2007. Negative quantification and existential sentences. In *Existence: Semantics and syntax*, 191–219. Edited by Ileana Comorovski and Klaus von Heusinger. Dordrecht: Springer.

Discusses special verbless constructions in Italian fronted by *nessuno*- 'no/nobody' and *niente*- 'no/nothing' that have an existential interpretation. Some comparison to *ci* existentials.

Sino-Tibetan

You ('have') sentences have been claimed to be the Chinese counterpart to English *there* existential construction. Huang 1987 and Hu and Pan 2007 offer two easily accessible basic descriptions of the definiteness effect facts in this language. See also Liu 2011, cited under *The Existential Coda*, for further discussion of these sentences.

Hu, Jianhua and Haihua Pan 2007. Focus and the basic function of Chinese existential *you*-sentences. In *Existence: Semantics and syntax*, 133–145. Edited by Ileana Comorovski and Klaus von Heusinger. Dordrecht: Springer.

Discuss examples of definite pivots in *you*-sentences, ameliorated by the presence of a focus particle.

Huang, C. T. James. 1987. Existence sentences in Chinese and (in)definiteness. In *The representation of (in)definiteness*, 226–253. Edited by Eric Reuland and Alice G. B. ter Meulen. Cambridge, MA: MIT Press.

Presents a basic syntactic analysis for *you*-sentences and argues that these sentences manifest the definiteness effect.

Slavic

The Slavic languages, and Russian in particular, have played a significant role in the literature on existential sentences. In these languages, the standard existential construction consists of a locative or locative-like element, a copula, and the pivot. Slavic data have played a prominent role in debates about the role of information structure in the analysis of existentials (Partee and Borschev 2007), about the semantic effects of the so-called genitive of negation (Babby 1980), and about the analysis of so-called modal existential *wh*-constructions (Avgustinova 2003; see also the Šimík 2011, cited under *Modal Existential Constructions*, and references in his work).

Avgustinova, Tania. 2003. Russian infinitival existential constructions from an HPSG perspective. In *Investigations into formal Slavic linguistics. Contributions of the Fourth European Conference on Formal Description of Slavic Languages (FDSL IV)*, 461–482. Edited by Peter Kosta, Joanna Blaszczak, Jens Frasek, Ljudmila Geist, and Marzena Zygis. Frankfurt am Main: Peter Lang.

Focuses specifically on modal existential *wh*-constructions; discusses word order facts not previously attested in the literature.

Babby, Leonard H. 1980. *Existential sentences and negation in Russian*. Ann Arbor, Michigan: Karoma Publishers.

Early, highly detailed Generative work on Russian existentials and the genitive of negation.

Partee, Barbara H., and Vladimir Borschev. 2007. Existential sentences, BE, and the genitive of negation in Russian. In *Existence: Semantics and syntax*, 147–190. Edited by Ileana Comorovski and Klaus von Heusinger. Dordrecht: Springer.

One of the more recent in a series of articles by these authors on existentials in Russian. Presents a useful comparison of different approaches to Russian existentials going back to the 1970s, as well as references to earlier work by the authors. Integrates insights from formal semantics and information structure.

Uralic

In the Uralic languages represented here, existentials are formed around *be* or verbs of appearance (as opposed to a form of *have*); there is no overt expletive. In Finnish (Huumo 2003), the pivot appears in partitive case. For Hungarian, Szabolcsi 1986 argues for a correlation between the definiteness effect and the presence of the pivot in the preverbal position occupied by incorporated nominals.

Huumo, Tuomas. 2003. Incremental existence: the world according to the Finnish existential sentence. *Linguistics* 41, 461–493.

Cognitive linguistic study. Discusses a rich variety of data.

Szabolcsi, Anna. 1986. From the definiteness effect to lexical integrity. In *Topic, focus, and configurationality*, 321–348. Edited by Werner Abraham and Sjaak de Mey. Amsterdam: John Benjamins.

Argues based on a detailed discussion of Hungarian data that whether or not the definiteness effect is manifest depends on a combination of syntactic and semantic factors. Discusses various verbs of existence and appearance.

Other Languages

The works selected for mention in this section have been chosen to reflect (sub)families not mentioned in previous sections, for their engagement with theoretical debates concerning the syntax or semantics of existentials, and/or for their descriptive richness. Irish (McCloskey 2014) is argued to have a verb of existence, similar to what is found in Austronesian. Both of the Japanese existential constructions discussed in Muromatsu 1997 involve the copula *aru*. Ulwa makes use of a posture predicate *lau* (lit 'sit'), which Koontz-Garboden 2009 argues to have lost its postural/locative meaning. Hausa uses the morpheme *dà*, which also marks comitative relations and is used to express possession in combination with a copula (Abdoulaye 2006).

Abdoulaye, Mahamane L. 2006. Existential and possessive predication in Hausa. *Linguistics* 44: 1121–1164.

Argues, in contrast to other work on Hausa, that the (nonverbal) predicate *dà* originated historically as an existential predicate and only later acquired possessive and comitative uses. Briefly compares *dà* to the other Hausa existential predicates, *àkwai*, and *baabù/bâa*, as well as to existentials in Kanuri, Ewe, and Yoruba.

Koontz-Garboden, Andrew. 2009. Locative and existential constructions in Ulwa. *Anthropological Linguistics* 51: 244–268.

Compares locative predications using posture predicates (e.g. *lau* 'sit', *sâk* 'stand') with (non-)existence assertions based specifically on *lau* and the negative existential predicate *âisau*. Argues that locative and existential constructions are semantically distinct.

McCloskey, James. 2014. Irish existentials in context. *Syntax* 17: 343–384.

Argues that Irish existentials are best accounted for by treating the existential predicate as selecting for an entity correlate of a property. Extensive discussion of both syntax and semantics.

Muromatsu, Keiko. 1997. Two types of existentials: evidence from Japanese. *Lingua* 101: 245–269.

Argues for two kinds of existential constructions in Japanese: one related to part-whole constructions; the other spatial. Compares Japanese to Hungarian.