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Existential constructions in crosslinguistic perspective

Delia Bentley, Francesco Maria Cicone & Silvio Cruschina

1. Introduction

Existential constructions are constructions with non-canonical morphosyntax which express a proposition about the existence or the presence of someone or something in a context (Francez 2007, McNally 2011: 1830). They are formed as in (1).

(1) (Expletive) (proform) (copula) pivot (coda)

Following a tradition which is well established in the semantic literature, we use the term PIVOT to refer to the noun phrase which, in English existentials, occurs in immediately post-copular position. The pivot can be followed by a CODA, i.e., an addition, for example a locative phrase. The existential constructions of some languages also exhibit a putatively adverbial form, which can be etymologically locative. This is referred to here as the PROFORM. Only the pivot is universally available, and obligatory, in existential constructions. The other components of the construction may not be present. In (2) we provide examples of existentials in English, Italian, French and Spanish. Observe that the Spanish existential copula exhibits a lexicalized postcopular proform (2d).

- (2) a. There are some books on the table (English)
PROFORM COPULA PIVOT CODA
b. Ci sono dei libri sul tavolo (Italian)
PROFORM be.3PL some books on-the table
c. Il y a des livres sur la table (French)
EXPLETIVE PROFORM have.3SG some books on the table
d. Hay unos libros sobre la mesa (Spanish)
have.3SG-PROFORM some books on the table
'There are some books on the table'

The linear order of the components of the existential construction can also vary across languages. Cudas can occur in initial position, as is shown by the following examples from Brazilian Portuguese, where “the locative phrase must be realized in subject position” (Avelar 2009: 169).

- (3) a. No centro da cidade tinha um engarrafamento enorme
in-the-centre of-the city had a traffic jam big
‘There was a big traffic jam in downtown’
- b. Na locadora tem filmes ótimos em promoção
in-the movie store has movies excellent on sale
‘There are excellent movies on sale in the movie store.’

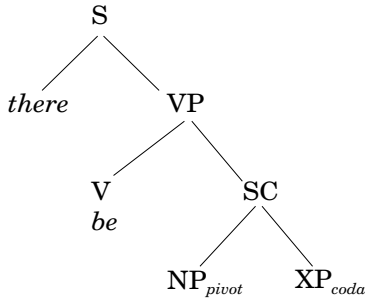
Across languages, the pivot tends not to take the default syntactic position, or the marking, of topics, as is suggested by the contrast between the Japanese construction in (4a), which is an existential construction, and those in (4b-c). Rather, the pivot normally occurs in the position of foci or direct objects.

- (4) a. Koko-ni hon-ga ar-u (Japanese)
here-LOC book.NOM exist(inanimate)-NON-PST
‘There is a book here’
- b. *Koko-ni hon-wa ar-u
here-LOC book-TOP exist(inanimate)-NON-PST
- c. Ano hon-ga koko-ni ar-u
that book.NOM here-LOC exist(inanimate)-NON-PST
‘That book is here’
(Kyoko Toratani, p.c.)

In the languages which do not exhibit fixed word order in existential constructions, the variation in word order tends to correlate with variation in information structure.

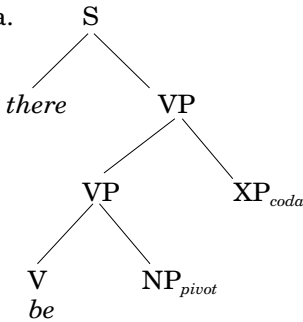
Within an influential syntactic approach, the existential structure is a reduced sentence expressing a subject-predicate relation (Stowell 1978, Chomsky 1981, Safir 1982, Moro 1997), the coda being the predicate of the construction. According to this approach, the existential structure is a SMALL CLAUSE, and the underlying structure of an existential is the same as that of a copular sentence (Freeze 1992).¹

- (5) *be* [SC PIVOT_{SUBJECT} CODA_{PREDICATE}]

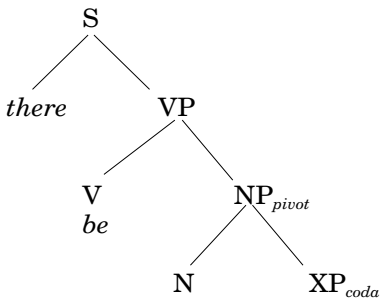


In some studies, a Predicate Phrase (PP) is formally used to represent the predicate relation assumed to hold in the existential construction (Freeze 1992), although this account shares the principal insights of the small-clause analysis. On the other hand, in other syntactic analyses, the coda has been analysed either as a VP adjunct (McNally 1992, Francez 2007, 2009) (cf. (6a)) or as a post-nominal modifier (Barwise and Cooper 1981, Williams 1994) (cf. (6b)).

- (6) a.



- b.



The accounts illustrated in (6a-b) are inspired by the view that existentials are impersonal constructions with an expletive subject and with the pivot as an argument of an existential verb (Milsark 1974, Williams 1984). We return to these accounts below. The syntactic role of the coda in a particular type of existentials, i.e. eventives (Leonetti 2008), is the object of Villalba's contribution to this volume.

2. Theoretical background and open questions

Existential constructions have received a great deal of attention since Milsark (1974). The bulk of the research has investigated the constraints on the pivot or definiteness effects (henceforth DEs). Two principal hypotheses have been advanced. The first is the idea that existentials are impersonal structures (Milsark 1974, 1977, 1979, Perlmutter 1983) in which the pivot must be indefinite because it is an object in object position (subjects are not indefinite). The second is the view that existentials are locative structures (Freeze 1992) whereby definite noun phrases must move to the pre-copular position, thus leaving the post-copular position solely available for indefinite pivots (see **there are the students*, with unstressed *there*, which is ungrammatical in most contexts). Freeze's (1992) view extends to possessive predications, which, like existentials, are claimed to derive from the same underlying locative structure. The Swahili data analysed by Marten in this volume highlight some degree of relatedness between existential, locative and possessive structures. The analysis of negative existentials offered by Veselinova, however, suggests that existential sentences and locative predications are separate constructions.

Both the impersonal and the locative hypotheses seek to explain the DEs in terms of the syntactic position of the pivot. They are thus challenged by any DEs that do not reduce to the syntactic position of this noun phrase. In archaic Campidanese and in Nuorese and Logudorese Sardinian, both definite and indefinite pivots are allowed. However, definite pivots co-occur with the reflex of ESSE 'be', and control agreement on this copula (7a), whereas indefinite pivots normally co-occur with invariant HABERE 'have' (7b). The Sardinian DEs were first investigated by La Fauci & Loporcaro (1993, 1997), who claimed that impersonality does not depend on the position of the noun phrase *per se*, but rather on the combination of indefiniteness and the post-copular position.

- (7) a. Bi sun sas piseddas (Logudorese: Bono)
PF be.3PL the girls
'There are the girls'
- b. B' at medas piseddas
PF have.3SG many girls
'There are many girls'

Subsequent work on the Sardinian DEs has indicated that there are systematic deviations from the expected pattern, i.e., that the default agreeing copula *ESSE* is not only selected with definite pivots but also with classes of putatively indefinite ones, as shown by the examples below.

- (8) a. B' est solu un dischente in iscola (Nuorese: Orosei)
PF be.3SG only a student in school
'There is only one student in the school'
- b. No ddu est / (n)c' est nemus. (Campidanese: Sardara)
not PF be.3SG PF be.3SG nobody
'There is nobody'

These findings suggest that, whilst being morpho-syntactically encoded, the DEs are semantically and pragmatically determined (Bentley 2004, 2010, 2011).

The relatedness between the DEs and the semantics of the subject is the focus of work by Beaver, Francez & Levinson (2005), which in turn draws upon Mikkelsen (2002). Starting from the findings of the typological literature (Clark 1978), Beaver, Francez & Levinson (2006) observed that, across languages, existential constructions differ from canonical copular sentences in several ways: word order, copula selection, locative proforms, verb agreement, etc. These differences correlate with a contrast between the semantic properties of pivots and those of the subject of canonical copular constructions: noun phrases are realized as existential pivots when they lack properties that would make them good subjects. The competition between canonical copular constructions and existential constructions is thus claimed to be the essence of the DEs, which are gradient, rather than categorical, and are defined by the probability of occurrence of a hierarchy of noun phrase classes in subject or pivot function. The language specific interaction of markedness constraints on the subject determines the crosslinguistic variation in the DEs. This is the topic of Bentley, Ciconte & Cruschina's contribution to this volume, which focuses on Italo-Romance, and draws upon Bentley (in press).

Francez (2007, 2009, 2010) shifts the focus of research on existential constructions to the following question: what kinds of proposition do existential sentences express? The proposed solution is that existentials (*There be NP_{pivot} XP_{coda}*) are context-dependent propositions where the pivot is a Generalized Quantifier, and hence a predicate, whereas the coda is a modifier providing the scope of quantification.² Within this account, the DEs arise from the analysis of pivots as predicates, since predicates are by default focal. Noun phrases with properties of topics are blocked from occurring in the construction, if there is a truth-conditionally equivalent proposition in which they are topics rather than foci (Francez 2007: 99). Accordingly, the DEs are not the core issue in the analysis of existential sentences, but rather an epiphenomenon of their semantics.

Despite the size of the existing literature on existential constructions, which we barely touched upon in the above discussion, there remain a number of open questions. We can only mention some here. First, can Francez's (2007) semantic analysis of the pivot as a predicate be extended to constructions of the form *There be definite NP_{pivot} XP_{coda}*? Indeed, are such structures to be analysed as existential sentences? It has been suggested that these constructions must be construed as locative structures in order to be deemed to be grammatical by native speakers (see Moro 1997: 154 and Zamparelli 2000: 69, 196-200 for Italian, and Remberger 2009 for Sardinian). The contrast between existentials and locative predications, i.e., structures of the type *The NP be LocP*, has received some attention both in the semantic literature (Koontz-Garboden 2009, Leonetti 2008: 136, Zamparelli 2000: 69, 196-200) and in the typological one (Dryer 2000: 242-243). In the semantic literature it has been argued that existentials can be diagnosed distinct in truth conditions from locatives (Koontz-Garboden 2009). However, broad crosslinguistic analysis suggests that there are languages which do not formally differentiate between structures which presuppose existence and structures which assert or deny it (Dryer 2000: 243, Koch 2012, Levinson 2006, cf. (9)), and the rationale of the contrast between the grammars which do and those which do not is to date poorly understood.

- (9) Kémi kîgha kapî k:oo ka tóó. (Yélí Dnye)
 mango fruit cup in DEICTIC.TAM sits
 'The ripe mango is in the cup / There is a mango in the cup.'
 (Levinson 2006:165, 177)

Drawing upon Leonetti (2008), Cruschina (2012) suggests that, at least in Italo-Romance, the structures illustrated in (10a-b) should be distinguished.

- (10) a. There be definite NP, XP_{coda}
b. There be indefinite NP XP_{coda}

In (10a), the definite noun phrase is the focal argument of an INVERSE LOCATIVE predication, i.e., a predication with a topical locative predicate, which is separated from the rest of the clause by a pause. The proform is a locative resumptive propredicate clitic. Contrastingly, the structure in (10b) is an existential construction proper, where the indefinite noun phrase is the predicate, while the proform is a proargument spelling out a non referential topic that provides the contextual domain of the existential predication (Francez 2007, Parry 2010, Pinto 1997, Tortora 1997).

The view that, in (10a), the proform retains its original locative function is supported by the analysis of early Italo-Romance sources (Ciconte 2009, 2011). Latin, the mother of Italo-Romance, did not have a proform in existential constructions.

- (11) Est modus in rebus, sunt certi fines (Latin)
be.3SG measure.NOM in things be.3PL certain.NOM boundaries.NOM
'There is a measure in things, there are some boundaries'
(Horace, *Sermones*, 1, 1, 106-107)

The emergence of the proform in early Italo-Romance (13th-15th century Tuscan) is attested first in unmistakably locative predications with a focal definite argument, where the proform is referential and occurs in complementary distribution with a locative phrase. Only at a later stage (16th century) is the proform generalized to genuine existential constructions with an indefinite pivot, where the proform is not in complementary distribution with a locative phrase. Some valuable insights on Romance proforms are offered by Remberger in this volume.

A further type of pseudo-existential, which is referred to as PRESENTATIONAL in Cruschina (2012), is characterized by a special coda, which does not modify the sentence in locational terms, but rather introduces a subject-predicate relation into discourse.

- (12) a. C'è tuo fratello che ti aspetta da un'ora
PF be.3SG your brother who 2SG.OBJ.CL wait.3SG since one hour
'Your brother has been waiting here for you for an hour'
(lit.: 'There's your brother that has been waiting for you for an hour')
- b. C'è Mario che si è fatto male
PF be.3SG Mario who REFL be.3SG done bad
'Mario hurt himself' (lit.: 'There's Mario who has hurt himself')

Presentational sentences are not existential constructions. In fact, they are not subject to definiteness restrictions (see (12a-b)), they may lack locative anchoring, and the noun phrase does not have predicate properties, but rather is introduced as the subject of the subsequent predication (Cruschina 2012: 98). Some of the issues related to this construction in Catalan are addressed by Villalba in this volume.

The attention to existentials and related issues is still very much alive in the current international research arena, as witnessed by workshops devoted to these topics (for example, the workshop on Definiteness Effects organized as part of the 2012 Annual Conference of the German Linguistic Society, *Jahrestagung der Deutschen Gesellschaft für Sprachwissenschaft*, DGfS, Frankfurt, March 2012). Peculiarly, there are only very few recent collections of papers specifically devoted to existential constructions. One such a volume is *Existence. Semantics and Syntax*, edited by Comorovski's and Heusinger (2007), which stems from a workshop held at the University of Nancy in September 2002. Despite its title, this volume mainly concentrates on the semantics of the construction, and only few chapters adopt a crosslinguistic perspective. In the spirit of Beaver, Francez and Levinson (2005), we hope that this thematic issue of the *Italian Journal of Linguistics* will begin to fill this regrettable lacuna by broadening the horizons of the existing research to micro- and macro-variation in existential constructions.

3. *Scope and structure of the volume*

This thematic volume is the first output of a project entitled *Existential constructions: An investigation into the Italo-Romance dialects* (www.manchester.ac.uk/existentials, Arts and Humanities Research Council, grant AH/H032509/1). The objectives of the project are both theoretical, as we seek to shed new light on the discourse-semantics-morphosyntax interface in existentials, and empirical,

in that we aim to create an atlas of the existential constructions of Italo-Romance, to be understood here in the broad sense of Romance dialects spoken in Italy. To test our hypotheses, we conducted extensive fieldwork in Italy, interviewing speakers of 138 dialects. Our body of data is available on our website in a set of streaming media audio-files. Whereas the principal focus of the project is on micro-variation in a family of closely cognate languages, in June 2012 we hosted a symposium (*The Manchester Symposium on Existentials*), which aimed to stimulate theoretical debate in the light of novel evidence from as wide a range of languages as possible. In this issue, we include a selection of the papers from the symposium, in accordance with a trajectory which spans from micro-variation to macro-variation. The volume is thus structured as follows.

Bentley, Ciconte and Cruschina examine the micro-variation in the control of finite (number) agreement on the copula by the pivot of existential constructions, arguing that this depends on the variation in the tolerance of marked subjects. Following a tenet of Optimality Theory, the authors understand SUBJECT MARKEDNESS as the relation between a discrete syntactic function and its semantic and pragmatic correlates. A class of pivots which proves to be particularly resilient to the control of agreement is the class which exhibits cliticization with an outcome of Latin INDE ‘of it’, ‘of them’. The markedness of these pivots as subjects is claimed to depend on the lack of topicality, specificity, and argumentality, the three properties which are relevant to subjecthood across Italo-Romance, as well as the split focus structure involved in INDE-cliticization.

The problem of the coda in existential sentences is addressed by Xavier Villalba, who investigates eventive existentials in Catalan (Cruschina’s 2012 presentational pseudo-existentials). Villalba defends a VP adjunct analysis of codas in eventive existentials, against the recent claim that this type of existential should be analysed as involving a small clause (Leonetti 2008). In support of his hypothesis, Villalba provides a robust set of tests regarding the structural relation between the pivot and the coda and their respective information status. Ultimately, the author concludes that both the pivot and the coda are part of the assertion, while the topic of the existential sentence is represented by a null stage topic. In addition to clarifying and highlighting structural and semantic aspects of eventive existentials, this paper paves the way for further study of the role of the coda in existential sentences.

Existential constructions are better understood in comparison to constructions that exploit the same grammatical elements

and have developed similar meanings. This is the aim of Eva-Maria Remberger's contribution, which analyses DEONTIC EXISTENTIALS (e.g., Italian *ci vuole il pane* 'we need bread', lit. 'there wants the bread') in synchronic and diachronic perspective. In Italian and some dialects of Italy, this special deontic type of existential consists of a modal verb (corresponding to English 'want'), and an obligatory etymologically locative element which is identical to the proform of the canonical existential construction. Deontic existentials resemble canonical existentials in many other respects: definiteness effects, the postverbal position of the noun phrase and the agreement between this noun phrase and the finite verb, or lack thereof. On the basis of these parallels, and building upon an existing tradition of study (Remberger 2009, Cruschina 2012), Remberger claims that a distinction must be drawn between deontic existentials proper, featuring an indefinite pivot, and deontic locatives, which are characterized by a definite noun phrase.

Lutz Marten's paper shifts the focus of the discussion to a different language family, describing and comparing the existential constructions of Swahili. The main interest of these constructions lies in their sharing of morphosyntactic properties with other structures, namely possessives and locatives, which have often been associated with existentiality. Two principal types of existential construction are available in Swahili: the LOCATIVE-POSSESSIVE CONSTRUCTION, formed with a possessive copula and a locative subject marker, and the LOCATIVE-COPULA CONSTRUCTION, involving a locative copula and a non-locative subject. Marten shows that, whilst expressing existentiality, these constructions are distinguished by several structural and interpretive differences. He further notes the possibility of adding a predicative clausal complement to the focussed post-copular noun phrase of both existential constructions. The resulting structure resembles ordinary constructions with post-copular noun phrases modified by a relative clause, but it crucially lacks relative clause marking. Comparable structures are found in unrelated languages, such as English and German, and indeed Italo-Romance presentationals featuring a pseudo-relative clause (cf. 12).

Lastly, Veselinova offers a typological account of negation in existential constructions, capturing macro-variation with the aid of semantic maps. Crosslinguistically, EXISTENTIAL NEGATION can be formally distinct from Standard Negation in form, and consistently proves to be different in meaning. Accordingly, negative existentials are claimed to constitute a grammatical construction of its own, in fact a separate conceptual domain. Given that existential negation is

absolute (it indicates non existence), it is incompatible with locative predications, where the scope of negation is normally constrained to the locative predicate. Veselinova's contribution thus provides a useful test for telling existentials apart from locatives.

We hope that this issue of *Italian Journal of Linguistics* will fruitfully contribute to the debate on existential constructions, ultimately favouring further investigation of these structures in the literature on language typology, semantics, and comparative syntax.

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Notes

¹ Note that in Moro's (1997) account the coda is not part of the small clause involved in existentials, but is regarded as a VP adjunct. It is instead the (locative) expletive that acts as the predicate of the small clause. This variant of the small clause analysis allows Moro to capture the correlations between existentials and copular sentences in light of his "raising" hypothesis, but leaves open the question of what it means for an expletive to be the predicate of the existential construction (see Francez 2007).

² We should note that although this is the first explicit semantic analysis of pivots as predicates, the hypothesis that pivots are predicates had previously been put forward in the syntactic literature (La Fauci & Loporcaro 1993, 1997, Williams 1994, Zamparelli 2000, Hazout 2004).

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Micro-variation in subject agreement: The case of existential pivots with split focus in Romance

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In the light of the findings of extensive fieldwork on existential constructions, we provide an account of the micro-variation in finite (number) agreement in Italo-Romance and Sardinian. Starting from the assumption that this type of agreement is a subjecthood diagnostic, we claim that the said micro-variation is the result of the interaction of a structural constraint promoting agreement, which is sensitive to the markedness of the potential controller as a subject, and a principle of structural economy (Samek-Lodovici 2002). An important role in our analysis is played by existential pivots with INDE-cliticisation, which fail to control agreement in a number of dialects. We capture this tendency in terms of the combined effect of the markedness of these pivots as subjects (Beaver et al. 2005, Bentley 2010, in press, Mikkelsen 2002) and their split focus structure.*

1. *The problem*

In this article we analyse the findings of extensive fieldwork on Italo-Romance and Sardinian existential constructions to provide an account of the micro-variation in finite (number) agreement in these dialects.¹ Following a tradition which is well established in the semantics literature, we use the term pivot to refer to the noun phrase which, in English existential constructions, occurs in immediately post-copular position (see unicorns in (1)).

(1) Thr are unicorns²

From our findings there emerges a wide range of variation in the behaviour of the pivot as a controller of agreement on the finite form

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(5a)) introduces a subset of a set which has been established in discourse. Otherwise, they simply quantify over a set (cf. (5b)).

- (5) a. (Di quelle ragazze,) ce ne sono tre (Italian)
of those girls PF INDE be.3PL three
‘Of those girls, thr are three’
- b. (Problemi,) ce ne sono tanti
problems PF INDE be.3PL many
‘(Problems,) thr are many’

In syntax, these pivots are split between a post-copular quantifier, and, on the other hand, a dislocated prepositional or noun phrase (in Cardinaletti & Giusti’s 1991 analysis, this is the noun phrase complement of a quantifier head). This syntactic split parallels a split in information structure between a focal information unit (the quantifier) and a topical one (the dislocated phrase). The quantifier can be understood, rather than being spelled out, although, following Bentley (2004a), we assume that it is nonetheless part of the assertion, and hence focal.⁵

We found that finite agreement with an INDE-cliticised pivot can be optional or missing even in dialects which otherwise exhibit agreement of the copula with the pivot.

- (6) Talia quanti ova ci su nt’u frigoriferu.
see.2SG.IMP how.many eggs PF be.3PL in-the fridge
Mi pari ca ci nn’ è / nni su uattu (Mussomeli)
to.me seem.3SG that PF INDE be.3SG / INDE be.3PL eight
‘Look how many eggs thr are in the fridge’
‘I think that thr are eight (of eggs)’
- (7) Vide quant’ ova ce su ntr’o frigoriferu.
see.2SG.IMP how.many eggs PF be.3PL inside-the fridge
Mi pare ca ci nd’ è uattu (San Tommaso)
to me seem.3SG that PF INDE be.3SG eight
‘See how many eggs thr are in the fridge’
‘I think that thr are eight (of eggs)’

We start from the assumption that, in the languages under investigation, the control of finite verb agreement is a diagnostic of subjecthood, or a grammatical relation in the construction-specific sense of Van Valin & LaPolla (1997: 242-309) and Van Valin (2005: 94-101). To analyse agreement in feature-specific terms (Samek-Lodovici 2002: 63), we focus on number agreement. Building upon

Beaver et al. (2005), Bentley (2010, in press) and Mikkelsen (2002), we claim that the micro-variation in the control of number agreement by the existential pivot is to be analysed with reference to the dialect-specific tolerance of subject markedness. Following a tenet of Optimality Theory (Aissen 1999, 2003, Prince & Smolensky 1993), we take markedness to be a relation. In the case of the subject, markedness is a relation between a syntactic function and its semantic and pragmatic correlates. Existential pivots are marked candidates to subjecthood on the following grounds: their lack of lexical entailments, and hence of semantic roles and macroroles (see Francez's 2007, 2009, 2010 claim that existential pivots are predicates, not arguments), as well as their lack of topicality (Lambrecht 1994) and of specificity (Enç 1991). The crossdialectal variation in number agreement amounts to the variation in the interaction of the structural requirement of agreement, which is sensitive to the markedness of the potential controller as a subject, and, on the other hand, a principle of structural economy (Samek-Lodovici 2002). We capture the widespread tendency for INDE-cliticised pivots to fail to control number agreement in terms of the combined effect of their markedness as subjects and their split focus structure.

2. *The evidence*

Both in Italo-Romance and in Sardinian the existential construction consists of four components, which are illustrated in (8a-c).

(8) a. (\pm pro-form) + copula + pivot + (locative phrase)

b. Ci sono due bar (in quella strada) (Italian)
PF be.3PL two cafés (in that road)
'Thr are two cafés (in that road)'

c. (In quthu qaminu) bi sunis duos tzilleris (Fonni)
in that road PF be.3PL two cafés
'(In that road) thr are two cafés'

Whereas the copula and the pivot are obligatory components of the existential construction in these dialects, the locative phrase is optional (cf. (8b-c)). The pro-form, in turn, is absent from the existential construction of some dialects.⁶

- (9) Testi frutti qua l' é tanti semi (Belluno)
 in these fruits here E.SBJ.CL be.3SG many seeds
 'In this fruit thr are many seeds'

Within this broadly uniform existential pattern, the dialects under investigation exhibit a wide range of micro-variation in the behavioural and coding properties of the pivot (stress, case, syntactic position, control of copula agreement). In this article, we focus on the behaviour of the pivot as the controller of number agreement on the finite form of the copula. This, as was mentioned above, is the form which carries the same person and number features as the pre-copular argument in copular constructions other than existentials.⁷ In Corbett's (2006: 10-26) terms, the finite form of the copula is thus the target, or locus, of agreement with the pre- or post-copular argument, the controller. The agreement domain which we deal with here is the clause.

A range of variation in number agreement is attested in Italo-Romance and Sardinian existential constructions. First, there are dialects which would at first sight appear consistently to require number agreement on the finite form of the copula.

- (10) a. Ci sîamu nuantri / ci su iddri (Mussomeli)
 PF be.1PL we-others / PF be.3PL they
 'Thr's us' / 'thr's them'
- b. Un nni putîamu spartiri: ci su i picciliddri
 NEG REFL can.1PL divorce.INF PF be.3PL the children
 'We cannot divorce: thr are the children'
- c. Nni sta frutta ci su ossa assà
 in this fruit PF be.3PL seeds many
 'In this fruit thr are many seeds'
- (11) a. Ngə simə nuǰə / ngə so lorə (Potenza)
 PF be.1PL we / PF be.3PL they
 'Thr's us' / 'Thr's them'
- b. Nun putimmə divurzià pirché ngə só rə creaturə
 NEG can.1PL divorce.INF because PF be.3PL the children
 'We cannot divorce because thr are the children'
- c. Ində sta frutta ngə só tantə nuzzələ
 inside this fruit PF be.3PL many seeds
 'In this fruit thr are many seeds'

- (12) a. Ce simu nue / ce su illi (San Tommaso)
PF be.1PL we / PF be.3PL they
 ‘Thr’s us’ / thr’s them’
- b. Un potimu divorziare: ce su li quatriarialli
NEG can.1PL divorce.INF PF be.3PL the children
 ‘We cannot divorce: thr are the children’
- c. Ntra sta frutta ce su tanti semi
inside this fruit PF be.3PL many seeds
 ‘In this fruit thr are many seeds’

Secondly, there are dialects in which agreement is optional with all classes of pivot but pronominal ones.

- (13) a. Ci siamo noi / ci so’ loro (Siena)
PF be.1PL we / PF be.3PL they
 ‘Thr’s us’ / ‘thr’s them’
- b. Un si pò divorzià: c’ è / cisono i figlioli
NEG IMPS can.3SG divorce.INF PF be.3SG / PF be.3PL the children
 ‘We cannot divorce: thr are the children’
- c. In questa frutta c’ è / ci so’ tanti semi
in this fruit PF be.3SG / PF be.3PL many seed
 ‘In this fruit thr are many seeds’

There are also dialects in which only particular classes of pivot control person and number copula agreement. Thus, a subgroup of dialects only requires agreement with definite noun phrases (cf. (14a)), proper names (cf. (14b)), and personal pronouns (cf. (14c)). The remaining classes of pivot do not trigger agreement (cf. (14d)). The copula may alternate in accordance with agreement. In particular, in the Sardinian dialect of Bono, agreeing ‘be’ alternates with invariant ‘have’. The latter is the non-agreeing copula in a number of dialects.

- (14) a. Bi sun sas piseddas (Bono)
PF be.3PL the girls
 ‘Thr are the girls’
- b. Bi sun Juanne, Foricu, Pedru
PF be.3PL Juanne Foricu Pedru
 ‘Thr are Juanne, Foricu, Pedru’
- c. Bi sun eo
PF be.1SG I
 ‘Thr’s me’

d. B' at piseddas
 PF have.3SG girls
 'Thr are girls'

In another subgroup of dialects, finite copula agreement is only controlled by pivots which are personal pronouns (observe that *nui atri* and *gli atri* translate first and third person plural, respectively):

- (15) a. Maria l' è no sola: ghe semu nui atri /
 Maria SBJ.CL be.3SG NEG alone PF be.1PL we others /
 ghe sun gli atri (Genova)
 PF be.3PL they
 'Maria is not alone: thr'us / thr's them'
- b. Nu puremmu divursià: u gh'è i matti
 NEG can.1PL.COND divorce.INF E.SBJ.CL PF be.3SG the children
 'We could not divorce: thr are the children'
- c. Inte sta früta u gh' è tanti ossi
 inside this fruit E.SBJ.CL PF be.3SG many seeds
 'In this fruit thr are many seeds'

The type of existential construction where the pivot consistently fails to trigger agreement is well-known in the Romance literature because it is exemplified by French. In Italo-Romance, we have found this pattern in the dialect of Soletto.

- (16) a. Ave a nui / ave quiddhi (Soletto)
 have.3SG to we / have.3SG those
 'thr's us / thr's them'
- b. No potimu divorziare: ave li piccinni
 NEG can.1PL divorce.INF have.3SG the children
 'We cannot divorce: thr are the children'
- c. Intru a sta frutta ave tanti samenti
 inside to this fruit have.3SG many seeds
 'In this fruit there are many seeds'

Table 1 summarises the micro-variation in number agreement on the copula which has been discussed thus far.

Table 1. Micro-variation in existential copula agreement (I).

DIALECTS	PATTERN (i)	PATTERN (iia)	PATTERN (iib)	PATTERN (iii)
	+ agreement	± agreement (optional + by class)	± agreement (by class)	– agreement
Potenza Mussomeli S. Tommaso	√			
Siena		√		
Bono Genova			√	
Soletto				√

We now come to existential pivots with INDE-cliticisation (see section 1). The dialects with pattern (iii) from Table 1 are expected not to treat partitive pivots as controllers. Since the dialect of Soletto lacks INDE-cliticisation, we report here a French existential construction with INDE-cliticisation of the pivot, in addition to its counterpart in Soletano without INDE-cliticisation. As expected, in neither case is the pivot a controller.

- (17) Tu sais combien d’oeufs il y a encore
 you know.2SG how many of eggs E.SBJ PF have.3SG still
 dans le frigo?
 inside the fridge
 Jecrois qu’ il y en a huit (Spoken French)
 I believe.1SG that E.SBJ PF INDE have.3SG eight
 ‘How many eggs thr are in the fridge do you know?’
 ‘I believe that thr are eight (of eggs)’

- (18) Viti quante ove ave intru lu frigoriferu.
 see.2SG.IMP how many eggs have.3SG inside the fridge
 Crisciu ca ave ottu (Soletto)
 believe.1SG that have.3SG eight
 ‘See how many eggs thr are in the fridge’
 ‘I believe that thr are eight (of eggs)’

The dialects with pattern (iib), i.e., agreement by pivot class, do not exhibit agreement in existentials with INDE-cliticisation, either.

- (19) A bind’at, fiore, in sa tanca? (Bono)
 q INDE have.3SG flowers in the meadow
 ‘(Of flowers), are thr any in the meadow?’

- (20) Mira quante euve u gh'è int u frigu.
 look.2SG.IMP how many eggs E.SBJ.CL PF be.3SG inside the fridge
 Credu c' u ghe ne secce euttu (Genova)
 believe.1SG that E.SBJ.CL PF INDE be.3SG.SBJV eight
 'Look how many eggs thr are in the fridge'
 'I believe that thr are eight (of eggs)'

The dialects with pattern (iia), i.e., optional copula agreement with most classes of pivot, exhibit this pattern in existentials with INDE-cliticisation.

- (21) Guarda quant' òva ci so' in frigo.
 look.2SG.imp how many eggs PF be.3PL in fridge
 Penso che ce ne sia / siano otto (Siena)
 think.1SG that PF INDE be.3SG.SBJV / be.3PL.SBJV eight
 'Look how many eggs thr are in the fridge'
 'I think that thr are eight (of eggs)'

Among the dialects where pivots are normally agreement controllers (pattern (i)), we found some that exhibit obligatory agreement with INDE-cliticised pivots (cf. (22)), others which exhibit optional agreement with such pivots (cf. (23)), and, lastly, some which do not have agreement with these pivots (cf. (24)).

- (22) Virə quanda ovə ngə só ində a u frigoriferə.
 see.2SG.IMP how many eggs PF be.3PL inside to the fridge
 Penzə ca ngə nə só ottə (Potenza)
 think.1SG that PF INDE be.3PL eight
 'See how many eggs thr are in the fridge'.
 'I think that thr are eight (of eggs)'

- (23) Talia quanti ova ci su nt' u frigoriferu.
 see.2SG.IMP how many eggs PF be.3PL in the fridge
 Mi pari ca ci nn' è / nni su ùattu (Mussomeli)
 to me seem.3SG that PF INDE be.3SG/INDE be.3PL eight
 'Look how many eggs thr are in the fridge'
 'I think thr are eight (of eggs)'

- (24) Vide quant' ova ce su ntr' o frigoriferu.
 see.2SG.IMP how many eggs PF be.3PL inside the fridge
 Mi pare ca ci nd' è uattu (San Tommaso)
 to me seem.3SG that PF INDE be.3SG eight

‘See how many eggs thr are in the fridge’
 ‘I think that thr are eight (of eggs)’

The findings on finite agreement in existential constructions with INDE-cliticised pivots combine with the results reported previously as shown in table 2.

Table 2. Micro-variation in existential copula agreement (II).

	OBLIGATORY CONTROL	OPTIONAL CONTROL / CONTROL BY CLASS	LACK OF CONTROL
Potenza	pattern (i) / INDE (i)		
Mussomeli	pattern (i)	INDE (iia)	
S.Tommaso	pattern (i)		INDE (iii)
Siena		pattern (iia) / INDE (iia)	
Bono Genova		pattern (iib)	INDE (iii)
Sp. French			pattern (iii) / INDE (iii)
Soletto			pattern (iii)

Our findings bring to light the following implicational pattern. If agreement is obligatorily controlled by pivots with INDE-cliticisation, it is also obligatorily controlled by other pivots; optional control by INDE-cliticised pivots entails optional or obligatory control by other pivots. Finally, lack of control by INDE-cliticised pivots does not entail lack of control by other pivots. Assuming that agreement is sensitive to a condition (Corbett 2006: 26), i.e., in this case, a property or set of properties of the controller, it would seem that INDE-cliticised pivots do not satisfy this condition to the same extent as other pivots. In the account which we propose in section 4, the split focus structure of INDE-cliticised pivots combines with their markedness as subjects to yield the implicational pattern identified here. Before we move on to our analysis, however, we will introduce the theoretical background of this analysis.

3. Theoretical background

The foundation of our analysis is a proposal by Beaver et al. (2005), which in turn originates in Mikkelsen (2002). Beaver et al. (2005) observe that, across languages, existential constructions differ from other copular sentences in several ways: word order, copula selection, locative pro-forms, verb agreement, etc. These differences

correlate with a contrast between the semantic properties of the pivot and those of the subject of canonical copular constructions (i.e., in English, copular constructions with a pre-copular subject). In accordance with subject properties which are well attested crosslinguistically, the subject of canonical copular constructions tends to be topical, specific, local, referential, and animate (Aissen 2003: 445, Foley & Van Valin 1987: 115, Givón 1976, Jespersen 1924: 145-56, Keenan 1976). Existential pivots instead tend to lack these properties.

Beaver et al. (2005) thus claim that existential constructions are in competition with copular constructions with a canonical subject. The noun phrases which have properties associated with subjecthood tend to occur in subject position in canonical copular constructions, whilst the noun phrases which do not exhibit these properties are attracted to the pivot function of existential constructions.

Those among the said subject properties which will be relevant to our analysis are topicality and specificity. Following Lambrecht (1994: 131), we define topic as follows: the proposition is construed and understood as being about this argument and increases the addressee's knowledge of it. The existential pivot is by default focal, in that it is in the domain of the assertion, and it is not part of a proposition which is construed and understood as being about it (Bentley et al. 2012, Francez 2007, among others). Following Enç (1991: 9-10), we define specificity as a relationship of identity with or inclusion in a set of individuals whose referents have previously been established in discourse. The existential pivot is by default non specific (Enç 1991). Since Milsark (1974, 1977, 1979), the lack of specificity of existential pivots has been known as the Definiteness Effect.

Observe further that subjects are arguments. The predicate imposes lexical entailments on arguments, on the basis of which thematic roles and macroroles are assigned, and the lexical entailments of arguments play a key role in their syntactic realisation (Dowty 1991, Van Valin & LaPolla 1997: 113-158). If we assume with Francez (2007, 2010) that the existential coda (i.e., the adjectival or prepositional phrase which can follow the pivot) is not a predicate, but rather a modifier, there is no predicate imposing any lexical entailments on the existential pivot.⁸ This is another characteristic which makes the pivot a marked candidate to subjecthood (Bentley, *in press*).

Our account departs from Beaver et al.'s (2005) proposal, in that we do not purely define subject in terms of syntactic position, but rather we break this notion down into diagnostics, which can vary across languages. This theoretical choice is based on Van Valin &

LaPolla's (1997: 242-309) and Van Valin's (2005: 94-101) claim that grammatical relations are construction-specific neutralisations of semantic contrasts for syntactic purposes, while subject is the generalized grammatical relation of languages which consistently assign grammatical relations to the most agent-like argument available, typically the argument which bears the macrorole actor (Van Valin & LaPolla 1997: 139-158).

In the dialects under investigation, number agreement classifies as a grammatical relation, and as a subjecthood diagnostic, in that it neutralises the contrast between actor (proto-agent, in Dowty's 1991 sense) and undergoer (proto-patient), privileging the actor as the default controller. The neutralisation of the actor-vs.-undergoer contrast is seen in intransitive constructions (cf. (25a-c)), where the macrorole, whether actor or undergoer, is pressed into service as the controller, whereas other thematic roles (for example, the locative one in (25c)) cannot be controllers (cf. 25d)). The privileging of the actor is testified by transitive constructions (cf. (25e)), which, in the contemporary varieties of these dialects, have no passive counterparts.

- (25) a. Luca e Maria anu arrubbatu (San Tommaso)
 Luca and Mary have.3PL stolen
 'Luca and Mary stole / have stolen'
- b. Luca e Maria se su spagnati
 Luca and Mary REFL be.3PL scared
 'Luca and Mary got scared'
- c. Luca e Maria su juti alla scola
 Luca and Mary be.3PL gone to-the school
 'Luca and Mary went to school'
- d. *Alla scola è jutu Luca e Maria
 to-the school be.3SG gone Luca and Mary
 '(Lit.) To school is gone Luca and Mary'
- e. Luca ha arrubbatu e caramelle
 Luca have.3SG stolen the sweets
 'Luca stole / has stolen the sweets'

In the cognate languages which do have a passive, for example Italian, the selection of the marked controller (the undergoer) in the passive is flagged by passive morpho-syntax: the passive auxiliary *essere* 'be' plus the past participle, and the by-phrase which encodes the actor. We return to this point in section 6.

A fully-fledged analysis of subject markedness in Romance should aim to offer a unified account of the variation in the assignment of each of the construction-specific grammatical relations found in these languages.⁹ It is, however, beyond the scope of the present work to provide a comprehensive analysis of subjecthood in Romance. Section 2 shed light on a wide-range of crossdialectal micro-variation in number agreement, and our goal in the next section will be to capture this variation.

4. A formal account of micro-variation in agreement

We start our analysis from the assumption, which will have to be assessed in the analysis of each dialect, that the subjecthood properties discussed in section 3 are not solely relevant to position (Beaver et al. 2005), but rather, more generally, to the various language-specific subjecthood diagnostics. Drawing upon Aissen (1999, 2003) and Mikkelsen (2002), we formalise this claim in terms of harmonic alignment. In its original formulation (Prince & Smolensky 1993: 136), harmonic alignment is a technique which captures the alignment of structural scales (for example, the binary – peak vs. margin – scale of syllable structure) with substantive ones (sonority). In this context, we are concerned with the alignment of the discrete agreement scale with a scale constituted by one of the pragmatic and semantic properties discussed above, or a combination thereof. The agreement scale is binary, in that it contrasts control with lack of control. The substantive scales can, in principle, be broken down into a range of sub-scales. Indeed, this will turn out to be necessary with respect to specificity. To begin with, we propose the markedness scales in (26a-c).

- (26) a. AGR / topical > AGR / non topical
b. AGR / specific > AGR / non specific
c. AGR / argumental > AGR / non argumental

In (26a-c), AGR stands for the discrete grammatical relation defined by the control of number agreement on the finite form of the verb. According to (26a), a topical controller of agreement is more harmonic – or less marked – than a non-topical one; according to (26b), a specific controller of agreement is more harmonic than a non-specific

one; lastly, (26c) states that an argument is more harmonic than a controller that is not an argument. By argument, we mean a canonical argument, which is part of the argument structure of a predicate, and receives its lexical entailments from it. We will point out below that, in order to extend our analysis of agreement to transitive constructions, it is necessary to break down the notion of argument into the two macroroles actor and undergoer (Van Valin & LaPolla 1997: 139-158).

From (26a-c), we derive the constraint hierarchies in (27a-c), where the symbol \gg stands for 'is more marked than', while $*$ is the avoid operator.

- (27) a. $*_{-AGR} / \text{topical} \gg *_{-AGR} / \text{non topical}$
b. $*_{-AGR} / \text{specific} \gg *_{-AGR} / \text{non specific}$
c. $*_{-AGR} / \text{argumental} \gg *_{-AGR} / \text{non argumental}$

$*_{-AGR}$ is a constraint on outputs, namely the requirement of control of number agreement.¹⁰ The hierarchy in (27a) states that an output in which a topical potential controller fails to control agreement is less optimal than an output in which a non-topical potential controller fails to do so. The hierarchies in (27b-c) are explained in the same way.

Potential agreement controllers belong to the input, which is a predicate-argument structure where arguments bear semantic roles and macroroles (Aissen 2003). The input is also informed by discourse (Grimshaw & Samek-Lodovici 1998: 195). The copulas which are dealt with in this work are mere spell-outs of agreement, and therefore do not figure in the input, but rather only in outputs. *Gen* is the component of grammar which maps an input on to an infinite set of candidate output forms. In our analysis, we will only consider a limited set of candidate outputs for each input. *Eval*, on the other hand, is the component which evaluates the candidate output forms by a set of constraints, which are ranked in a language-specific way. *Eval*, therefore, is concerned with the steps in semantic-syntax mapping which are subject to crosslinguistic variation (Van Valin & LaPolla 1997: 177).

From tables 1 and 2, recall that there are dialects in which the existential pivot controls agreement obligatorily (pattern (i)), dialects which exhibit a combination of agreement by class and optional agreement (pattern (iia)), dialects with sole agreement by class (pat-

tern (iib)), and, finally, dialects in which the existential pivot does not control agreement. Obligatory control of agreement by pivots with INDE-cliticisation entails obligatory control by other pivots, optional control by INDE-cliticised pivots entails optional or obligatory control by other pivots, and lack of control by INDE-cliticised pivots does not entail lack of control by other pivots. To understand how we obtain the crossdialectal variation discussed in section 2, let us start from pattern (iii) of table 1, which is defined by lack of agreement with all classes of pivot.

- (28) a. Ci ave cu me iuta? (Soletto)
 who have.3SG who.REL me help.3SG
 Ave a mie
 have.3SG to me
 ‘Who is thr to help me?’
 ‘Thr’s me’
- b. No potimu divorziare: ave li piccinni
 NEG can.1PL divorce.INF have.3SG the children
 ‘We cannot divorce: thr are the children’
- c. Intru ddra famiglia ave tanti problem
 inside that family have.3SG many problems
 ‘Thr are many problems in that family’

Recall that we define specificity as a relationship of identity with or inclusion in a set of individuals whose referents have previously been established in discourse (Enç 1991: 9-10). The evidence in (28a-c) suggests that specificity is not a relevant property in the assignment of agreement in the dialect of Soletto, since the existential construction lacks number agreement regardless of whether the pivot is in a relationship of identity or inclusion with an established set: this relationship would seem to characterise the pivot of in (28a-b), but not that of (28c).

Recall now that we define topic as follows: the proposition is construed and understood as being about this argument and increases the addressee’s knowledge of it (Lambrecht 1994: 131). The evidence in (29) might at first sight suggest that the lack of topicality of the pivot is to blame for its failure to control number agreement. In (29a) the proposition is not construed and understood as being about the discourse referent spelled out by the pivot, as indicated by the contexts in which this structures can occur felicitously (which we mark with √) and infelicitously (marked with #).

- (29) a. Ave le pantofole, sott a lu iettu (Soleto)
 have.3SG the slippers under at the bed
 ‘(Lit.) Thr are the slippers, under the bed’
 b. √Cce ave sotta lu iettu?
 what have.3SG under the bed
 ‘What is thr under the bed?’
 c. #Addhu stannu le pantofole?
 where stay.3PL the slippers
 ‘Where are the slippers?’

On further inspection, however, the above hypothesis turns out to be unfounded. The structure in (30) would only be felicitous as an out-of-the-blue utterance. Therefore, it introduces the argument encoded post-verbally as part of the assertion. The proposition is not construed and understood as being about the post-verbal argument, which does not qualify as a topic.

- (30) Mannaggia! Me cadera li piatti (Soleto)
 damn to me fall.3PL.PST the plates
 ‘Damn! The plates fell on me’

The contrast in agreement between (29a), on the one hand, and (30), on the other, leads us to think that, in the dialect of Soleto, the subjecthood property which is relevant to the control of finite agreement is argumentality, rather than topicality. As was pointed out above, pivots lack properties of canonical arguments which are crucial to the syntactic behaviour of arguments. We claim that the failure of the pivot to control agreement in Soleto is a morpho-syntactic consequence of its non canonicity as an argument.

Evidence from constructions with a topicalised pivot supports this hypothesis, since agreement is missing in these constructions, regardless of topicality.¹¹

- (31) Li sciucamani stannu intra lu cassettu? (Soleto)
 the towels stay.3PL inside the drawer
 No, non l’ ave
 NEG NEG 3.OBJ.CL have.3SG
 ‘The towels, are they in the drawer? No, they aren’t’

To capture agreement in Soleto we propose that the constraint hierarchy in (27c) interacts with NOFEATS (Samek-Lodovici 2002), a constraint exerting a limiting influence on morphological structure (see note 9). We thus formulate the constraint hierarchy in (32),

where *– AGR / non argumental turns out to be redundant, and hence will not be reported in the tables.

(32) *– AGR / argumental >> NOFEATS >> *– AGR / non argumental

Tableau 1. AGR in Soletto (cf. (30)).

	*– AGR / arg	NOFEATS
a. + AGR, arg		*
b. – AGR, arg	*!	

Tableau 2. Lack of AGR in Soletto (cf. ave in (29) and (28a-c)).

	*– AGR / arg	NOFEATS
a. + AGR, – arg		*!
b. – AGR, – arg		

Each of the above tableaux shows the evaluation of two candidate outputs. Candidate a exhibits agreement, thus violating NOFEATS in both cases. This turns out to be a fatal violation in tableau 2, where the potential controller is not argumental, in that it has no lexical entailments. By contrast, in tableau 1, this violation is less serious than the violation of *– AGR / argumental. Since the latter constraint dominates NOFEATS, candidate a is the winner in this table.

To be sure, the constraint hierarchy in (32) does not capture agreement in constructions with two or more arguments. We will address this problem focusing on two types of argument, actor and undergoer, since we have no evidence of agreement control by non-macrorole arguments in Soletto. This leads us to the reformulation of (32) as (32').

(32') *– AGR / actor >> *– AGR / undergoer >> NOFEATS

As we mentioned in passing above, in the contemporary varieties of the dialects under investigation the passive is, at best, odd. Accordingly, (32') predicts that actors will always be preferred to undergoers as controllers. In section 6, we shall briefly examine evidence from a cognate language, Italian, which does have a productive passive structure, and we will suggest how the passive could be captured in our account of agreement.

To return to Soletto, we noted above that this dialect does not have INDE-cliticisation. The lack of agreement in the existential structures which would require this cliticisation in other dialects (cf. (18)) is captured by (32'), in that, on a par with all existential pivots, the

pivots of these structures are not canonical arguments to which a macrorole is assigned.

We defined pattern (iib) as agreement by pivot class. In Genova, number copula agreement is only controlled by pronominal pivots (cf. (15a-c)), whereas in Bono, agreement is controlled by pivots which are definite noun phrases, personal pronouns, and proper nouns (cf. (14a-d)). Specificity is a clearly relevant subjecthood property in these dialects, since crosslinguistically established discourse referents are spelled out by personal pronouns, proper names, and definite noun phrases (Enç 1991). However, specificity plays different roles in the two dialects, as only a subclass of specific pivots, personal pronouns, are agreement controllers in the dialect of Genova.

Focusing on Genovese, first, it is necessary to verify whether the mentioned subclass of specificity is the only property that is relevant to number agreement. In fact, we have evidence that both argumentality and topicality are also relevant properties. The data in (33) suggest that non topical arguments do control agreement, regardless of specificity. The reader should recall from (30) that this is an out-of-the-blue utterance.

- (33) Belin! Me sun keiti di piati (Genova)
swear word to me be.3PL fallen of plates
 '[Swear word]! Some plates fell on me'

In turn, the reply in (34) suggest that topicality overrides the lack of argumentality of pivots, determining agreement.

- (34) Su questu n'u gh'è dubi (Genova)
on this NEG E.SBJ.CL PF be.3SG doubts
 Invece sì, di dubi ghe sun
instead yes of doubts PF be.3PL
 'On this thr is no doubt'
 'Actually, yes, thr are some doubts'

We are now able to propose a constraint hierarchy for Genovese. As we did with Soletano, we break down *–AGR / argumental into *–AGR / actor >> *–AGR / undergoer, in order to account for agreement in transitive constructions (assuming that there is no productive passive in the contemporary variety of this dialect). We thus propose the constraint hierarchy in (35).

(35) *– AGR / actor >> *– AGR / undergoer >> *– AGR / topic >> *– AGR /
 pronominal specific >> NOFEATS

The hierarchy in (35) establishes that actors will always control agreement, whilst undergoers will only do so in the absence of an actor. Among potential controllers which are not canonical arguments, all topics will control agreement, but only focal personal pronouns will do so. The hierarchy is put to work in the tableaux from (3) to (6), where we conflate the first two constraints into *– AGR / argumental, for the sake of simplicity.

Tableau 3. agr with an argument in Genova (cf. (33)).

	*– AGR / arg	*– AGR / top	*– AGR / pro	NOFEATS
a. + AGR, + arg, – top, – pro				*
b. – AGR, + arg, – top, – pro	*!			

Tableau 4. agr with a topicalised non argument in Genova (see the reply in (34)).

	*– AGR / arg	*– AGR / top	*– AGR / pro	NOFEATS
a. + AGR, + top, – arg, – pro				*
b. – AGR, + top, – arg, – pro		*!		

Tableau 5. agr with a pronominal non argument in Genova (cf. (15a)).

	*– AGR / arg	*– AGR / top	*– AGR / pro	NOFEATS
a. + AGR, + pro, – top, – arg				*
b. – AGR, + pro, – top, – arg			*!	

Tableau 6. Lack of agr with a non-pronominal non argument in Genova (cf. (15b-c)).

	*– AGR / arg	*– AGR / top	*– AGR / pro	NOFEATS
a. + AGR, – top, – arg, – pro				*!
b. – AGR, – top, – arg, – pro				

In tableau 3, candidate a is the winner because it only violates NOFEATS, which ranks lower than *₋AGR / argumental, the constraint fatally violated by candidate b. Note in passing that *₋AGR / topical and *₋AGR / pronominal are satisfied vacuously in this case. In tableaux 4 and 5, candidate b violates *₋AGR / topical and *₋AGR / pronominal, respectively, thus losing out to candidate a. Only in tableau 5 does candidate b classify as the winner, since it satisfies vacuously the first three constraints and, unlike candidate a, it also satisfies NOFEATS.

The hierarchy in (35) captures the lack of agreement in existential constructions with pivots with INDE-cliticisation. Recall from section 1 that these pivots are split between a topical noun or prepositional phrase, which is co-referent with resumptive INDE, and a quantifier that is part of the assertion. Due to this split, we argue, pivots with INDE-cliticisation are neither topical nor non topical, with the result that an output where they do not control number agreement satisfies vacuously *₋AGR / top in (35). Given that these pivots are neither argumental nor pronominal, they fail to control agreement in Genoese.

The dialect of Bono differs from Genovese, in that it appears to exhibit the same agreement pattern with existentials as with structures with a canonical predicate. In both cases, specificity determines the control of number agreement or lack thereof (cf. (14a-d)).

- (36) a. B' at balladu medas piseddas (Bono)
PF have.3SG danced many girls
 'Thr danced many girls'
- b. B' an balladu sas piseddas
PF have.3PL danced the girls
 'Thr danced the girls'

Bentley (2004b), however, provided evidence from INDE-cliticisation which suggests that the structure illustrated in (36a) is an existential construction with a pivot that is modified by the predicate 'dance': 'thr are many girls who danced'. If this is the case, the evidence in (36a) is not indicative of lack of agreement with a canonical argument. The reader should further note that non-specific topics are avoided by native speakers of this dialect. In particular, we were unable to obtain evidence of the kind illustrated above in (34). In the light of the available evidence, we thus tentatively propose the hierarchy in (37), which is put to work in tableaux 7 and 8.

(37) *₋AGR / actor >> *₋AGR / undergoer >> *₋AGR / specific >> NOFEATS

Tableau 7. Lack of AGR in Bono (cf. (14d, 36a)).

	* ₋ AGR / act	* ₋ AGR / und	* ₋ AGR / spec	NOFEATS
a. + AGR, -top, - arg, -spec				*!
b. - AGR, -top, - arg, -spec				

Tableau 8. AGR in Bono (cf. (36b)).

	* ₋ AGR / act	* ₋ AGR / und	* ₋ AGR / spec	NOFEATS
a. + AGR, -top, + arg, +spec				*
b. - AGR, -top, + arg, +spec	*!		*	

Pattern (iia) (cf. (13a-c)) is comparable to the pattern found in Genova, although here we recorded optional agreement in the contexts which lack agreement in Genova. As is the case with Genovese, all arguments control agreement (cf. (38a)), whilst, among non arguments, only topics and personal pronouns are obligatory controllers. Existential constructions with personal pronoun pivots were illustrated in (13a). In (38a), we illustrate agreement with arguments. In (38b), we illustrate existential constructions with topicalised pivots.

- (38) a. Maremma! Mi so' cascati dei piatti (Siena)
swear.word to me be.3PL fallen.PL.M some plates
 ' [Swear word]! Some plates fell on me'
- b. Su questo un ci sono dubbi. (Siena)
on this NEG PF be.3PL doubts
 E invece sì, dei dubbi ci so'
and actually yes some doubts PF be.3PL
 'On this thr is no doubt. Actually, yes, thr are some doubts'

We thus propose the following hierarchy for Sienese, where the constraint promoting agreement with non argumental, non topical, non pronominal controllers optionally outranks NOFEATS (the symbol <<>> indicates agreement optionality due to optional constraint ranking). We leave it to the reader to elaborate the relevant tables.

- (39) *-AGR / actor >> *-AGR / undergoer >> *-AGR / topic >> *-AGR /
 pronominal specific >> *-AGR / non pronominal << >> NOFEATS

The constraint hierarchy in (39) captures the optionality of agreement with pivots with INDE-cliticisation in Sienese (cf. (21)) since these are not canonical arguments, topics, or pronouns.

The evidence of pivots with INDE-cliticisation turns out to be crucial, in our account of agreement, when we consider pattern (i), which normally involves agreement (cf. (10a-c) to (12a-c)). In this pattern, *-AGR would seem to rank above nofeats regardless of the properties of the potential controller. However, it was seen above that there is one construction which exhibits optional agreement in Mussomeli and no agreement in San Tommaso. This is the existential construction with an INDE-cliticised pivot. The relevant evidence is repeated in (40) and (41), alongside data which suggest that INDE-cliticised canonical arguments are obligatory controllers in both dialects (cf. (42-43)).

(Mussomeli)

- (40) Talia quanti ova ci su nt'u frigoriferu.
 see.2SG.IMP how many eggs PF be.3PL in-the fridge
 Mi pari ca ci nn' è / nni su uattu
 to me seem.3SG that PF INDE be.3SG / INDE be.3PL eight
 'Look how many eggs thr are in the fridge'
 'I think that thr are eight (of eggs)'

(San Tommaso)

- (41) Vide quant' ova ce su ntr' o frigoriferu.
 see.2SG.IMP how many eggs PF be.3PL inside the fridge
 Mi pare ca ci nd' è uattu
 to me seem.3SG that PF INDE be.3SG eight
 'See how many eggs thr are in the fridge'
 'I think that thr are eight (of eggs)'

- (42) Duttura un nni *arriva / arrivanu mai
 doctors NEG INDE arrive.3SG / arrive.3PL never
 quannu sàrbinu
 when serve.3PL
 'Doctors, they never arrive when they are needed'
 (lit. Doctors, (of them) never arrive when needed)

(Mussomeli)

- (43) Dutturi un nd *arriva / arrivanu mai
 doctors NEG INDE arrive.3SG / arrive.3PL never
 quandu servenu
 when serve.3PL
 'Doctors, they never arrive when they are needed'
 (lit. Doctors, (of them) never arrive when needed)'

(San Tommaso)

The evidence of Mussomeli and San Tommaso indicates that the markedness of the potential controller can surface even in dialects which otherwise require number agreement at all costs, that is, regardless of the markedness of the controller. With particular respect to Mussomeli, we propose that the potential controller will control agreement if (a) it is a canonical argument or (b) it has a single role in information structure, whether this is topical or focal. If the potential controller lacks both of these properties, it may not behave as a controller (cf. (40)).

- (44) *–AGR / actor >> *–AGR / undergoer >> *–AGR / topic >> *–AGR / focus >> *–AGR / –focus << >> NOFEATS

The reason why the potential controller may not be treated as a subject, if it has split focus structure, should be investigated with evidence on split focus constructions in languages other than Italo-Romance. We simply note here that subjects are normally topics, or, in the marked case, foci. Thus, the behaviour of potential controllers with split focus structure may fruitfully be dealt with in terms of subject markedness, on a par with behaviour of potential controllers with the other properties discussed in this paper.

The hierarchy in (44) is put to work in tableaux 9 and 10 and 12, where we conflate the first two constraints under the single one *–AGR / argumental, as we did above, and the third and fourth constraints as *–AGR / focus.

Tableau 9. Lack of agreement in Mussomelese (cf. (40)).

	*–AGR / arg	*–AGR / foc	NOFEATS	*–AGR/ –foc
+AGR, –arg, –focus			*!	
–AGR, –arg, –focus				*

Tableau 10. Agreement in Mussomelese (cf. (40)).

	*–AGR / arg	*–AGR / foc	*–AGR/ –foc	NOFEATS
+AGR, –arg, –focus				*
–AGR, –arg, –focus			*!	

Agreement in San Tommaso is captured by a constraint hierarchy which differs minimally from (44), insofar as NOFEATS obligatorily outranks *– AGR / – focus.

- (45) *– AGR / actor >> *– AGR / undergoer >> *– AGR / topic >> *– AGR / focus >> NOFEATS >> *– AGR / – focus

6. Italian

In the account of finite (number) agreement provided above we assumed that *– AGR / actor invariably outranks *– AGR / undergoer in the dialects under investigation. This assumption was based on the observation that the passive is not a structure of the contemporary varieties of these dialects. In this section, we extend our account to a sister of the dialects investigated, Italian, which does have passive structures. Apart from this, Italian behaves like Mussomelese, in that agreement is only optional with pivots with split focus.

- (46) Credo che ce n' è / sono otto (Italian)
 believe.1SG that PF INDE be.3SG / be.3PL eight
 'I believe that thr are eight (of x)'

Within our account of finite (number) agreement, the passive can be accommodated as a structure found in a language which, while selecting the actor as the default controller, also optionally allows the selection of the undergoer if this is prominent in discourse, i.e., topical. This analysis of agreement in the passive is spelt out in (47), which accounts for both (48a) and (48b).¹²

- (47) *– AGR / actor <<>> *– AGR / topic >> *– AGR / undergoer >> *– AGR / focus >> *– AGR / – focus <<>> NOFEATS

- (48) a. Luca ha mangiato i dolci (Italian)
 Luca have.3SG eaten the cakes
 'Luca has eaten the cakes'
- b. Chi ha mangiato i dolci?
 who have.3SG eaten the cakes
 (I dolci) sono stati mangiati da Luca
 (the cakes) be.3PL been eaten by Luca
 'Who ate the cakes?'
 'The cakes/they were eaten by Luca'

In this perspective the passive is allowed by languages which, whilst principally aligning the grammatical relation subject with the macrorole actor, also allow its alignment with a prominent discourse role, regardless of semantic macrorole.

7. Conclusion

In this article we have investigated the micro-variation in finite (number) verb agreement in a range of Italo-Romance and Sardinian dialects. Starting from the assumption that this type of agreement is a subjecthood diagnostics, we have claimed that the said micro-variation results from the interaction of a structural constraint promoting agreement, which is sensitive to the markedness of the potential controller as a subject, with a constraint limiting morphological structure (Samek-Lodovici 2002). We have noted the crucial role, in the analysis of number agreement, of existential constructions where the pivot exhibits INDE-cliticisation. These structures indicate that the markedness of the potential controller can surface even in dialects which would otherwise require agreement at all costs, that is, regardless of the markedness of the controller. The widespread tendency for existential pivots with INDE-cliticisation to fail to trigger finite agreement was captured in terms of the combined effect of their markedness as subjects (Beaver et al. 2005, Bentley 2010, Mikkelsen 2002) and their split focus structure.

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Notes

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(Veneto), Bono and Fonni (Sardinia), Genova (Liguria), Mussomeli (Sicily), Potenza (Basilicata), San Tommaso (Calabria), Siena (Tuscany), Soletto (Puglia). We use the term **dialect** to refer to Romance languages which do not have the status of national languages. These dialects are sisters of the better known Romance languages and not varieties of any of them. In reporting our data we have not corrected the evidence of pressure from the more prestigious language spoken in the areas investigated, namely, standard Italian.

² Following Lyons (1999: 237) we indicate with *thr* the English unstressed pleonastic *there* and its counterparts in the languages under investigation.

³ The abbreviations used in the glosses follow the Leipzig conventions except in the following cases: CL = clitic; E.SBJ.CL = expletive subject clitic; IMPS = impersonal clitic; PF = existential or locative pro-form.

⁴ Note that, in the variety of Genova, the construction with verb agreement may not exhibit the subject clitic (4a), although this is displayed in other Ligurian varieties (Badalucco *i ghe sun eli*; Rocchetta Cairo *i i sun kaei* 'thr's them'). Interestingly, the construction which lacks agreement (4b) always requires the expletive clitic 'u'. Nevertheless, the same expletive clitic seems to be optional in presentative structures (Badalucco *l'è mancau Luigi*; Rocchetta Cairo *u l'ae mort Luvigi*, 'Luigi died'), although this alternation may be due to sociolinguistic variation (Parry 2005: 313-314) rather than to structural properties.

⁵ Bentley (2004a) provides evidence from intonation in support of this analysis.

⁶ In Bellunese, as well as in most North-eastern Italian dialects, the third person singular is generally syncretic with the third person plural. However, we take the presence of an invariant third person singular subject clitic in the existential construction to be evidence that the verbal form must also be interpreted as singular. This assumption justifies the gloss in the relevant examples.

⁷ Typically, number agreement is spelled out by a form of the copula (cf. 2a-b). Alternatively, or additionally, it can be spelled out by a subject clitic, which is either missing or invariant in existentials without agreement (we gloss invariant subject clitics as expletive subject clitics). We constrain our analysis to number agreement on the copula for the following reasons. First, agreeing subject clitics are optional in many dialects, and tend to mark some grammatical persons more regularly than others (Renzi & Vanelli 1983, Poletto 2000). Secondly, we have found evidence which might suggest that, in some dialects, subject-clitic agreement is sensitive to discourse properties other than those affecting affixal agreement. We therefore analyse copula agreement separately from subject-clitic agreement.

⁸ In fact, existential pivots have been claimed to be predicates themselves (Cornilescu 2009, Francez 2007, La Fauci & Loporcaro 1993, 1997, Williams 1984, 1994, Hazout 2004, Zamparelli 2000). Observe in passing that there are seemingly existential constructions in which the coda encodes a locative predicate (Cruschina 2012, Leonetti 2008, Remberger 2009). However, we can safely disregard this point in the present context.

⁹ Samek-Lodovici (2002) makes the important observation that agreement never lacks in subject position, whereas it can be missing in post-verbal position. Analysing agreement as a property of syntactic projections, he claims that agreement within local projections is never poorer than agreement within their extended projections. He satisfactorily captures this typological generalisation in terms of the re-ranking of three constraints: AGR_{θ} , which defines agreement of a head within its local projection for the feature f ; $EXAGR_{\theta}$, which defines agreement of a head within its extended projection for the feature f , and $NOFEATS$, which is a constraint exerting a limiting effect on morphological structure, in a similar way to *STRUCT of Prince & Smolensky (1993: 25). Since from our perspective agreement is not a property of a syntactic configuration, but rather a grammatical rela-

tion, on a par with position, the important typological generalization uncovered by Samek-Lodovici (2002) will have to be captured in terms of the combined effect of constraint hierarchies on position and agreement. Observe that Samek-Lodovici's (2002) account of agreement does not consider the micro-variation in post-verbal agreement which our analysis brings to light. We capitalise on the analysis of this variation to capture finite number agreement in Italo-Romance and Sardinian.

¹⁰ A consequence of the breaking-down of the notion of subject into construction-specific grammatical relations is that Grimshaw's (1997) constraint SUBJECT must also be broken down into construction-specific constraints, *-AGR being one of them.

¹¹ It should also be mentioned that the lack of agreement in the dialect of Soletto is somehow expected on the basis of the fact that the pivot appears to be treated syntactically as a direct object in the accusative case, as suggested by the prepositional accusative in (16a) above, as well as by the accusative resumptive clitic in (31). In this dialect, and in Romance in general, finite number agreement with a direct object is never found.

¹² The hierarchy in (47) also captures passives with a focal undergoer and no actor (Sono stati rubati i libri 'The books were stolen'), but not passives with a focal undergoer and a topical actor (Da Luca, sono stati rubati i libri 'By Luca, the books were stolen'). While we admit that the exact discourse constraints on the passive may not be captured by (47), we note that structures like the latter one provided above are odd, and may only be deemed acceptable if *i libri* 'the books' bears contrastive focus. Hence these structures are to be analysed in the context of this particular type of focus.

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Structure and interpretation in Swahili existential constructions

Lutz Marten

Swahili has two existential constructions, one formed with a possessive copula and a locative subject marker (locative-possessive constructions), the other formed with a locative copula and a non-locative subject marker agreeing with the theme argument (locative-copula constructions). Both constructions can be used to express existence in a place or more abstract existence. However, the constructions differ with respect to structure and interpretation: the locative-possessive construction has a more rigid word-order and a narrower range of interpretations than the locative-copula construction. On the other hand, the two constructions share the possibility to take 'clausal' complements, where a post-copular NP functions at the same time as the subject of a following clause. The paper illustrates the similarities and differences between the constructions and shows how these are related to information structure and to lexical and morphosyntactic constraints imposed by the two copula forms*.

1. Introduction

The relation between locative, presentational, existential and possessive constructions has long been noted cross-linguistically (e.g. Clark 1978, Freeze 1992, Lyons 1967) as well as for Swahili (e.g. Ashton 1947, Christie 1970, Contini-Morava 1977). In Swahili this relation is particularly complex due to the articulated morphosyntax of locative marking, which is based on the noun class system of the language. There are two types of existential constructions in Swahili, formed with two different complex copulas: locative-possessive constructions and locative-copula constructions. The former type is based on a possessive copula and a locative subject marker (1), while the latter is based on a locative copula and a non-locative subject marker agreeing with the theme argument (2).¹

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- (1) Ku-na n-jia n-yingine y-a ku-punguza bei z-a vi-tu.
SM17-POSSCOP 9-way 9-other 9-GEN 15-reduce 10.price 10-GEN 8-thing
‘There is another way of reducing the prices of thing’ [Nye Uja 155:009]
- (2) Zi-po n-chi amba-zo hu-tegeme-a ki-limo.
SM10-LOCOP16 10-country RELREFCD10 HAB-depend-FV 7-farming
‘There are countries which depend on agriculture.’ [Majira, 2003-02-06]

The paper presents an overview of the two existential constructions in Swahili and shows how the form and function of the construction types partly overlap and are partly distinct. After discussing the morphological structure of the two copula forms and how they relate to wider paradigms of (non-locative) copulas and subject agreement marking, the paper turns to differences in syntax and interpretation between the two existential constructions. It proposes that the greater flexibility of locative-copula constructions in terms of structure and interpretation results from the pragmatic meaning and information structure of existential and locative constructions, and from the lexical constraints on how this meaning is expressed, which are imposed by the relevant copulas and subject markers. Information structure also plays a role in the presence of clausal complements which are found in both types of existential constructions, and which are discussed in a separate section. In these constructions, a theme argument functions at the same time both as the post-copular NP of the existential construction and as the subject of a following predicate, resulting in a hybrid or amalgamated structure, in the sense of Lambrecht (1988, 2001):²

- (3) Ku-na m- geni ha-pa a-me-ku-j-a na siri kubwa.
SM17-POSSCOP 1-stranger DEM-16 SM1-PERF-STM-come-FV CONJ 9.secret 9.big
‘There is a stranger here (who) has come with a big secret.’ [Kez Kic 160:031]

The final section summarizes the findings of the paper and offers some conclusions. The aim of the paper is mainly descriptive, and no formal analysis is developed. However, it is hoped that the discussion and data provided give an indication of the wider theoretical and typological interest of existential constructions in Swahili.

2. Two Swahili existential copulas

There are three copula forms in Swahili: the ‘pure’ copula (4a), the possessive copula (4b) and the locative copula (4c) (Ashton 1947, Schadeberg 1992). Of these, the latter two are found in existential constructions.

- (4) a. Jumani mw-alimu.
Juma COP 1-teacher
‘Juma is a/the teacher.’
- b. Juma a-na wa-nafunzi wa-tano.
Juma SM1-PossCOP 2-student 2-five
‘Juma has five students.’
- c. Shule i-ko m-ji-ni.
9.schoolSM9-LOC COP17 3-town-LOC
‘The school is in town.’

The two kinds of existential construction in Swahili both employ copulas which involve locative morphology. The locative-possessive construction is based on the possessive copula with the formative *-na* and a locative subject marker of one of the locative noun classes 16, 17 and 18 (5). The locative-copula construction involves the locative copula with a non-locative subject marker (6).

- (5) Ku-na ma-endeleo sana.
SM17-PossCOP 6-development much
‘There is a lot of development.’ [Kez Kic 186: 026]
- (6) Wa-tu wa-po.
2-person SM2-LocCOP16
‘There are people/people are there/available.’ [Kez Gam 052: 014]

Both constructions are copula constructions, involving non-tensed copulas. The similarity between the two constructions can further be shown in tensed contexts (as well as in relative constructions), where both constructions are replaced by a complex copula construction where tense-aspect distinctions are marked on the verb *-wa* ‘to be’:³

- (7) Ku-li-ku-w-a na ma-endeleo sana.
 SM17-PAST-STM-be-FV POSSCOP 6-development much
 ‘There was a lot of development.’
- (8) Wa-tu wa-li-ku-w-a-po.
 2-person SM2-PAST-STM-be-FV-LOCOP16
 ‘There were people.’

Both these copula forms involve locative agreement morphology, which is part of the Swahili noun class system. Locative-possessive constructions include locative concords used as subject marker like *ku-* in (5) and (7), while locative-copula constructions have a non-locative subject marker, but a locative copula such as *-po* in (6) and in (8), which is formally identical to the so-called referential concord used, for example, in relative clauses and anaphoric demonstrative pronouns, as will be discussed in more detail below. The position of these locative forms in the noun class system is given in the noun class overview in Table 1, where the locative classes (conventionally numbered as classes 16, 17, and 18) are highlighted in italics.

Table 1. Swahili noun classes.

CLASS	CLASS PREFIX	EXAMPLE WORD	CONCORD (SUBJECT, OBJECT)	REFERENTIAL CONCORD	POSSESSIVE CONCORD	‘MEANING’
1	m	mtu ‘person’	a/ya	ye	wa	People
2	wa	watu ‘people’	wa	o	wa	
3	m	mti ‘tree’	u	o	wa	Trees, plants
4	mi	miti ‘trees’	i	yo	ya	
5	ji/Ø	jicho ‘eye’	li	lo	la	Round things, liquids, masses, augmentatives
6	ma	macho ‘eyes’	ya	yo	ya	
7	ki	kiti ‘chair’	ki	cho	cha	
8	vi	viti ‘chairs’	vi	vyo	vya	Artefacts, tools, manner, diminutives
9	n/Ø	ndege ‘bird’	i	yo	ya	Animals, loanwords
10	n/Ø	ndege ‘birds’	zi	zo	za	
11	u	ubao ‘board’	u	o	wa	Long things, abstracts
15	ku	kuimba ‘to sing’	ku	ko	kwa	Infinitives
16	<i>(pa)</i>	<i>mahali ‘place’</i>	<i>pa</i>	<i>po</i>	<i>pa</i>	<i>Locatives</i>
17	<i>(ku)</i>		<i>ku</i>	<i>ko</i>	<i>kwa</i>	
18	<i>(mu)</i>		<i>m</i>	<i>mo</i>	<i>mwa</i>	

While both existential constructions in Swahili involve locative agreement morphology, the difference in the specific locative morphology (locative subject concord vs. locative copula/referential concord) is correlated to a number of other differences between the two copula forms and the constructions in which they are found. The following sections describe in more detail possessive copulas in locative-possessive constructions, first, and then locative copulas in locative-copula constructions. As an aid for the ensuing discussion, Tables 2 and 3 provide a schematic summary of the copula forms in the two constructions.

Table 2. Locative-possessive constructions.

LOCATIVE SUBJECT MARKER (CONCORD)	POSSESSIVE COPULA	LOCATIVE-POSSESSIVE CONSTRUCTIONS
cl. 16 <i>pa-</i>	<i>-na</i>	<i>pana</i>
cl. 17 <i>ku-</i>		<i>kuna</i>
cl. 18 <i>m-</i>		<i>mna</i>
‘There is / are...’ / ‘(In) there is / are...’		

Table 3. Locative-copula constructions.

SUBJECT MARKER (CONCORD)	LOCATIVE COPULA	LOCATIVE-COPULA CONSTRUCTION
1 sg. <i>ni-</i>	<i>-po</i> <i>-ko</i> <i>-mo</i>	<i>nipo / niko / nimo</i>
2 sg. <i>u-</i>		<i>upo / uko / umo</i>
1 pl. <i>tu-</i>		<i>tupo / tuko / tumo</i>
2 pl. <i>m-</i>		<i>mpo / mko / tmmo</i>
cl. 1 <i>yu-</i>		<i>yupo / yuko / yumo</i>
cl. 2 <i>wa-</i>		<i>wapo / wako / wamo</i>
...		...
cl. 9 <i>i-</i>		<i>ipo / iko / imo</i>
cl. 10 <i>zi-</i>		<i>zipo / ziko / zimo</i>
cl. 11 <i>u-</i>		<i>upo / uko / umo</i>
‘There is / are I / you / we / you / she / he / it / they’ / ‘I / you / we / you / she / he / it / they is / are there’		

2.1. Locative-possessive copulas

The forms called ‘concord’ in Table 1 function as subject or object markers in inflected verb forms, such as the subject marker *ku-* in the verb form *kulikuwa* in (7), and in copula constructions such as *kuna* in (5). There are three locative classes in Swahili, approximately denoting proximity (class 16 *pa-*), distance (class 17 *ku-*) and interiority (class 18 *m-*). All three locative classes are found in so-called locative inversion constructions, in which a locative is coded as gram-

matical subject, and the logical subject follows the verb (cf. Ashton, 1947: 125-129):

- (9) a. M-ji-ni pa-me-ku-f-a wa-tu w-engi.
3-town-LOC SM16-PERF-STM-die-FV 2-person 2-many
 ‘(Here) at the town many people have died.’
- b. M-ji-ni ku-me-ku-f-a wa-tu w-engi.
3-town-LOC SM17-PERF-STM-die-FV 2-person 2-many
 ‘(There) at the town many people have died.’
- c. Ki-sima-ni m-na ma-ji.
7-well-LOC SM18-POSSCOP 6-water
 ‘There is water in the well.’ (Lit.: ‘In-well therein-with water’)

In terms of information structure, locative inversion constructions express presentational focus, where the referent of the post-verbal NP and/or the event in which it plays a part are introduced as discourse-new, while syntactically the post-verbal NP has to follow the verb immediately and cannot be omitted; the locative phrase, on the other hand, can be dropped (see Bresnan and Kanerva 1989, Marten 2006 among others). Swahili canonical word-order is SVO, but as a head-marking language (Nichols 1986), arguments can be marked on the verb, and word-order is correspondingly free. Focus is typically associated with the post-verbal position, as in the locative inversion examples in (9), although in Swahili this correlation is not as strict as in some other Bantu languages (cf. Marten 2007, 2011). In locative inversion constructions without an overt locative phrase, the interpretation of the subject marker depends on the availability of a contextually accessible topical locative antecedent. Swahili subject markers are – in contrast to object markers – obligatory in the inflected verb, except for imperatives, and function like incorporated pronouns. They can normally be interpreted discourse-anaphorically as well as as expletive place-holders for (logical) subjects placed after the predicate (cf. Bresnan and Mchombo 1987, Marten 2007, 2011). So if the subject markers in (9) can be interpreted contextually, a locative reading obtains. However, in the absence of a suitable locative antecedent, the locative subject marker may function as an expletive subject marker:

- (10) Mw-aka u-le ku-li-fuat-i-a u-kame na n-jaa...
3-year 3-DEMSM17-PAST-follow-APPL-FV 11-drought CONJ 9-hunger
 ‘That year there followed drought and hunger...’ [Mun Njo 12]

- (11) Pa-li-pit-a mu-da.
SM16-PAST-PASS-FV 3-while
 ‘A while passed. / There passed a while.’ (Marten 2011: 790)

There is a difference between the three locative markers in terms of the extent to which they can be used in expletive contexts, and in locative-presentational constructions. Both class 16 *pa-* and class 17 *ku-*, as in (12) and (13), are frequent in expletive and presentational contexts, but class 18 forms less so, although the negative form *hamna* has developed wider uses, and can be used for the expression of negative existential meaning (i.e. absence) or as a general negation marker (14).

- (12) Pa-na wa-chache wa-ji-som-e-a-o kwa moyo...
SM16-POSSCOP 2-few SM2-REFL-read-APPL-FV-REFCD2 with 3-heart
 ‘There are (only) a few who study from their heart...’ [Sha Kie 34/5]

- (13) Je, ku-na ma-swali?
q SM17-POSSCOP 6-question
 ‘Are there any questions?’ [Hus Kin 043:015]

- (14) Ha-m-na sababu y-a ku-huzunika.
NEG-SM17-POSSCOP 9.reason 9-GEN 15-become_sad
 ‘There is no reason for sadness.’ [Majira 2003-05-16]

While often it is not obvious without context whether a locative or an existential interpretation is expressed, it is clear that at least the class 17 copula *kuna* has a grammaticalised usage in which *ku-* does not function as a referential, locative subject marker, but as an expletive. This is shown in contexts in which even in the presence of a locative topic, the copula does not agree in class:

- (15) Ha-pa-ku-na kazi moja n-zuri sana...
DEM-16 SM17-POSSCOP 9.work 9.one 9-good very
 ‘Here there is a very nice job...’ [Sem Njo 090:013]

While the locative demonstrative in (15) is of class 16 (*hapa*), the copula shows class 17 inflection (*ku-*), indicating that the class 17 subject marker in this construction functions as an expletive marker rather than as an agreeing anaphoric marker.

The first morpheme of the copula used in existential locative-possessive constructions is thus a locative subject marker used as an

expletive subject marker, as shown, for example, in (12-14) above. The second morpheme is the form *-na* which is often analysed as a possessive copula. However, *na* is found in a variety of other contexts in Swahili grammar, and the basic underlying function of the form can be described as conjunction or comitative preposition. The form is found in NP coordination (16), comitatives (17), agents of passives (18), following locative prepositions (19) and as additive focus marker (20):⁴

- (16) Juma na Nayla wa-li-fik-a.
Juma CONJ Nayla SM2-PAST-come-FV
'Juma and Nayla came.'
- (17) Juma a-li-zungumz-a na Nayla.
Juma SM1-PAST-talk-FV CONJ Nayla
'Juma had a conversation with Nayla.'
- (18) Juma a-li-pig-w-a na Nayla.
Juma SM1-PAST-beat-PASS-FV CONJ Nayla
'Juma was beaten by Nayla.'
- (19) Juma a-li-ka-a karibu na Nayla.
Juma SM1-PAST-sit-FV near CONJ Nayla
'Juma sat close to Nayla.'
- (20) Sadru na-ye a-li-tamk-a kwa sauti.
Sadru CONJ-REFCD1 SM1-PAST-speak-FV with voice
'Sadru, too, spoke loudly.' [Lem Yar 110:020]

As can be seen from the examples, *na* can variously be translated as 'and', 'with', 'together with', 'by' or 'to', and it has been analysed as a conjunction and/or a preposition (e.g. Mous and Mreta 2004: 225), as a marker of 'association' (Ashton 1947: 102), and as syntactically underdetermined conjunction (Marten 2005). Given the wide range of functions of *na*, it might be the case that there is no unified underlying syntactic or semantic characterisation of this form. On the other hand, it has often been observed that possession is cross-linguistically commonly expressed as 'be + with', and so examples of tensed locative-possessive constructions in Swahili, which are formed with *-wa* 'to be' and *na* would support an analysis of *na* as corresponding to a comitative preposition 'with' (cf. also 7, above):

- (21) Ku-li-ku-w-a na vy-akula vy-a kila aina.
 SM17-PAST-STM-be-FV POSSCOP 8-food 8-GEN every kind
 ‘There was food of every kind.’ [Sem Njo 28]

In the case of non-tensed possessive copulas such as *kuna*, the argument could be made that the specific copula interpretation results from the morphological context in which *na* is found in these forms: it is the only context in which *na* is directly preceded by a subject marker, and this may license the use of *na* as providing some form of predicate-argument structure and the interpretation of ‘possession’ rather than ‘conjunction’ as is the case with, for example, NP conjunction as in (16), above. For the present purposes I analyse *na* in copula constructions as a possessive copula (glossed as POSSCOP) and as a conjunction elsewhere (glossed as CONJ), without precluding the possibility of a more abstract, unified analysis.

The possessive interpretation of *na* when preceded by a subject marker is not restricted to locative subject markers, but is found with all other subject markers, resulting in different interpretations with animate and non-animate subjects (cf. Christie 1970):

- (22) Nayla a-na vi-tabu vi-tatu.
 Nayla SM1-POSSCOP 8-book 8-three
 ‘Nayla has three books.’

- (23) M-pango hu-u u-na ma-tatizo y-ake.
 3-plan DEM-3 SM3-POSSCOP 6-problem 6-its
 ‘This plan has its problems.’

- (24) M-toto a-na baridi.
 1-child SM1-POSSCOP 9.cold
 ‘The child is cold.’ (Ashton 1947: 98)

- (25) Chai hi-i i-na m-oto.
 9.tea DEM-9 SM9-POSSCOP 3-heat
 ‘This tea is hot.’ (Ashton 1947: 98)

- (26) Dunia-ni ku-na ku-danganyana kw-ingi.
 9.world-LOC SM17-POSSCOP 15-deceive 15-much
 ‘The world has a lot of deceit/there is a lot of deceit in the world.’
 [Kez Gam 107:030]

- (27) Ku-na sababu m-bili z-a ku-chapisha upya makala ha-yo.
SM17-POSSCOP 10.reason 10-two 10-GEN 15-publish again 6.article DEM-REFCD6
 ‘There are two reasons for publishing this article again.’
 [Mba His 047:001]
- (28) Tu-na ma-adui, na katika sisi w-enyewe ku-na ma-adui.
SM1PL-POSSCOP 6-enemy CONJ among 1PL 2-self SM17-POSSCOP 6-enemy
 ‘We have enemies and even among ourselves there are enemies.’
 [Hus Kin 005:011]

The range of interpretations of *-na* in (22-28) shows that the relation encoded by the possessive copula varies in different contexts, resulting in pragmatically plausible readings given the semantics of the subject and, to a lesser extent, of the post-copular NP. The interpretation of the locative-possessive copula in (26-28) is part of this paradigm, resulting in (26) in a reading where the existence of deceit holds at the location of the world. In (27), the interpretation of *-na* as encoding existence remains the same, but with the expletive subject marker, there is no particular space at which this existence holds, and so a more existential reading obtains. The example in (28) illustrates the subtle difference between the possessive copula used with an animate subject marker (*tuna* ‘we have’) and a locative one (*kuna* ‘there are’).

In summary, in terms of morphology, the locative-possessive copula consists of a locative subject marker followed by the conjunction/preposition *-na* in non-tensed contexts, and of an inflected verb based on *-wa* ‘to be’ followed by *na* in tensed and relative contexts. The possessive copula *na* is not only found with locative subject markers, and a comparison of the use with different subject markers shows that the range of interpretations covered under ‘possession’ is wide and dependent on the specific semantics of the subject and the post-verbal NP. Furthermore, *na* has a number of other functions in other contexts, many of which can be related to the use as comitative preposition and/or conjunction, and it is probable that an underlying abstract function of *na* can be found unifying most of, if not all of the different uses. The locative subject marker found in the locative-possessive construction can have a referential, locative interpretation, in which (the existence of) an entity is located at a particular location, or can function as expletive subject marker, resulting in a more existential interpretation. Before discussing syntactic aspects of locative and existential constructions in Swahili, the next section will provide an overview of the morphological aspects of the second type of existential constructions in Swahili, locative-copula constructions.

2.2. Locative copulas in existential constructions

Like locative-possessive constructions, locative-copula constructions are based on locative morphology. However, in this case, the locative marker is the so-called referential concord of class 16, 17 or 18 (*-po*, *-ko*, *-mo*), which follows a non-locative subject marker and functions as locative copula. In addition to locative-copula constructions, the referential concord is found in different constructions, most notably in relative clauses, but also in demonstrative forms:

- (29) Soko-ni pa-li-po-ja-a wa-tu pa-li-ku-w-a m-ji-ni.
 5.market-LOC SM16-PAST-REFCd16-be.full-FV 2-person SM16-PAST-STM-be-FV 3-town-LOC
 ‘The market that was full of people was in the town.’ (locative subject)
- (30) Soko-ni tu-li-po-kwend-a pa-li-ja-a wa-tu.
 5.market-LOC SM1PL-PAST-REFCd16-go-FV SM16-PAST-be.full-FV 2-person
 ‘The market that we went to was full of people.’ (locative object)
- (31) Ha-pa amba-po wa-vulana wa-ta-(pa)-nunu-a pombe...
 DEM-16 REL-REFCd16 2-boy SM2-FUT-(OM16)-buy-FV 9.beer
 ‘Here where the boys will buy beer...’ (locative object, ‘amba-’ relative)
- (32) Mahali wa-fik-a-po ...
 place.LOC SM2-arrive-FV-REFCd16
 ‘The place where they arrived...’ (untensed relative)
- (33) u-li-po-fik-a...
 SM2SG-PAST-REFCd16-arrive-FV
 ‘When you arrived...’ (headless relative)
- (34) a. ha-pa b. pa-le c. ha-po
 DEMI-Cd16 Cd16-DEMI Cd16-REFCd16
 ‘here’ ‘there’ ‘there’ (referred to)

The data in (29-33) show the use of the class 16 referential concord *-po* in the three different relative clause constructions commonly distinguished in Swahili (Schadeberg 1989): in subject and object relatives of the synthetic tense-marked relative clause, where the relative is marked by the referential concord following the tense marker within the inflected verb (29-30); in the analytic or ‘amba-’ relative construction, where the referential concord follows the relativiser

amba- (31); and in the untensed relative construction without overt tense marking, with *-po* following the verb stem (32). The headless relative construction in (33) shows the idiomatic (grammaticalised) use of *-po* as a relative of time, without any implied antecedent (there is no appropriate word of class 16, the word meaning ‘time’, *wakati*, being of class 11). The final example (cf. (34)) shows the use of the referential concord in demonstratives, where anaphoric demonstratives, which refer to contextually salient antecedents (often translated as ‘already mentioned’) are based on a demonstrative form plus the referential concord (34c).⁵ A common semantic characteristic of the referential concord in these forms is reference to some antecedent provided or assumed to exist in the context – although this is not quite so clear for the grammaticalised use in (33). However, an alternative, distributional approach to explain the form is to relate it to its final position: this is most clear in (31), (32) and (34c), where *-po* is word-final, while for the synthetic relatives in (29-30) and (33), a secondary morpheme break before the verb stem is sometimes postulated (see e.g. Buell 2002, Vitale 1981). However, if *-po* is simply the concord in final position, the difference between (34a) and (34c) is difficult to explain, since the concord in (34a), being word-final, should then take the form *-po*, when in fact it is *-pa*. Be that as it may, it is the referential concord which is found in locative-copula constructions. As with locative-possessive constructions, the class 16 and class 17 forms (*-po* and *-ko*) are more frequent than the class 18 form (*-mo*). In contrast to locative-possessive forms, existential-locative copulas are not part of a wider paradigm with different interpretations. The existential-locative interpretation is maintained with both animate (35, and *wapo* in 36) and non-animate (*upo* in 36, 37-38) subjects, and in either order of copula and theme argument: with preceding theme (35-36) or with following theme (37-38). Furthermore, the locative referential concord cannot be replaced in this construction by a non-locative referential concord since only locative referential concords can function as copulas (39).⁶

(35) Yeye yu-ko Ukerewe mimi ni-ko Usukuma.
 3SG sm1-LocCOP17 Ukerewe 1SG sm1SG-LocCOP17 Usukuma
 ‘He is in Ukerewe, I am in Usukuma.’ [Kez Ros 040:030]

(36) Kweli maskini wa-po,... lakini na u-tajiri pia u-po.
 true 10.pauper sm2-LocCOP16 but conj 11-wealth also sm11-LocCOP16
 ‘It is true, there are poor people, but wealth, too, is there.’ [Yah Pep 015:014]

- (37) Zi-ko sababu m-bili zi-li-zo-fany-a
SM10-LocCOP17 10.reason 10-two SM10-PAST-REFCd10-make-FV
 ki-tabu hi-ki ki-andik-w-e.
8-book DEM-8 SM8-write-PASS-SBJV
 ‘There are two reasons which made this book be written.’ [Jen Fal 1]
- (38) U-po u-husiano kati y-a elimu na ki-pato.
SM11-LocCOP16 11-relation between 9-GEN 9.education CONJ 7-earnings
 ‘There is a relation between education and earnings.’ [Mbi Wan]
- (39) *wa-yo
SM2-REFCd6

In the locative use, the referential concord is grammaticalised to assume a specific function, and its interpretation is not necessarily discourse anaphoric as is usually the case with referential concords. In this respect, existential-locative copulas are similar to the use of locative referential concords in headless relatives to refer to time without implying a salient antecedent. Both are instances of grammaticalised uses of locative referential concords. As with the conjunction/possessive copula *na*, I will assume here that the forms *-po*, *-ko* and *-mo* in locative and existential constructions are locative copulas, and referential concords elsewhere. Both with *na* and with *-po*, *-ko* and *-mo*, the copula interpretation obtains when the forms are preceded by a subject marker or by the verb *-wa*. The copula interpretation is thus restricted to the same specific morphosyntactic context. The difference between the two constructions is that the locative aspect of the interpretation is introduced by the locative subject marker in locative-possessive constructions, but by the locative copula in locative-copula constructions. It will be seen below that several structural and interpretation differences between the constructions result from this difference in morphological form.

3. Structure and interpretation

The two existential constructions are similar in that both can express existence in a place, or, in the absence of an appropriate locative referent, existence or availability more generally. However, there are also differences between the two constructions. As shown above, locative-possessive constructions are similar to general possessive constructions as well as to locative inversion constructions, while

locative-copula constructions do not share any similarities with other constructions types. Furthermore, locative-possessive constructions are more restricted in terms of structural flexibility, complementation and interpretation than locative-copula constructions, as will be shown in more detail below.

3.1. *Locative-possessive constructions*

There are comparatively strict word-order restrictions on the locative-possessive construction. The locative-possessive copula may be preceded by a locative phrase, and is obligatorily followed by the theme argument.

- (40) Hu-ko nje ku-na mw-anga?
DEM-REFCD17 outside SM17-POSSCOP 3-light
‘There outside is there light?’ [Kez Nag 042:023]

- (41) Ku-na m-oshi!
SM17-POSSCOP 3-smoke
‘There is smoke!’ [Hus Kin 007:027]

The presence or absence of the pre-copular locative phrase often correlates with a more locative vs. a more existential interpretation. The close relation between ‘existence’ and ‘existence in a place’ (cf. Lyons 1967, Freeze 1992) is particularly clear in the locative-possessive construction, in which at least historically, the locative subject marker indicates a locative subject or topic of which a certain action or state is predicated. The order between copula and post-copular theme NP is fixed, and the theme argument cannot precede the copula (42); this is in contrast to locative-copula constructions where both orders are possible, as seen in (35-38) above, and further discussed below.

- (42) *M-oshi ku-na.
3-smoke SM17-POSSCOP

Furthermore, the post-verbal NP cannot normally be omitted, even in elliptic contexts, as (43B) shows.

(43) A: Je, ku-na soda?
 q sm17-PossCOP 9.soda
 ‘Is there any soda?’

B: *Ndiyo, ku-na
 yes sm17-PossCOP

B’: Ndiyo, zi-po
 yes sm10-LocCOP16
 ‘Yes, they are there.’

B’’: Ha-ku-na.
 neg-sm17-PossCOP
 ‘No, there is not/aren’t any.’

Instead of a locative-possessive construction, in contexts like in (43), a locative-copula construction can be used, and the theme argument omitted (43B’), showing another contrast between the two constructions. However, in negative contexts, the locative-possessive construction can be used without a theme argument (43B’’). The asymmetry between affirmative and negative copulas in this respect is found with all uses of possessive copulas, and is not restricted to the locative use. Another structural restriction on the locative-possessive construction is that it cannot be used with an adjectival rather than nominal post-copular phrase, in contrast to locative-copula constructions, as will be shown below. In summary, the locative-possessive copula is restricted to two typical construction types: with a preceding locative phrase and following theme NP (44a), or without the locative phrase and simply with post-copular theme (44b). All other orders or complementation types are ungrammatical (in 44, *kuna* is short-hand for *kuna*, *pana*, and *muna*):

(44)	Construction (schematic)	Typical interpretation (* = ungrammatical)
a.	LOC <i>kuna</i> NP	locative-existential
b.	<i>Kuna</i> NP	locative-existential
c.	NP <i>kuna</i>	*
d.	NP <i>kuna</i> LOC	*
e.	<i>Kuna</i> LOC	*
f.	<i>Kuna</i> LOC NP	*
g.	<i>Kuna</i>	*
h.	<i>Kuna</i> ADJ	*
i.	ADJ <i>kuna</i>	*

However, although restricted to the two constructions types in (44a, b), there is considerable variation in the kind of NP complement found in locative-possessive constructions which includes simple NPs (45a), NPs modified by genitives (45b) or by relatives (45c), as well as wh-phrases (45d):

- (45) a. Ku-na m-kutano leo.
SM17-POSSCOP 3-meeting today
'There is a meeting today.' [Hus Kin 003:019]
- b. Ku-na vi-fo vy-a aina ny-ingi.
SM17-POSSCOP 8-death 8-GEN 9.kind 9-many
'There are deaths of many kinds.' [Kez Kic 210:027]
- c. Ku-na ki-tu muhimu amba-cho ha-ki-ku-taj-w-a.
SM17-POSSCOP 7-thing important REL-REFCd7 NEG-SM7-PAST-mention-PASS-FV
'There is an important thing which has not been mentioned.'
[Kez Gam 116:012]
- d. Nyumba-ni ku-na m-ambo gani?
9.home-LOC SM17-POSSCOP 6-matter which
'At home what is the matter?' [Kez Kic 030:010]

In addition, locative-possessive constructions, as well as locative-copula constructions, are found with clausal complements, without relative marking. This is shown in (46), a structure to which I will return in section 4.

- (46) Ku-na ki-tu ki-na-m-taabish-a.
SM17-POSSCOP 7-thing SM7-PRES-OM1-worry-FV
'There is a thing (which) worries him.' [Hus Mas 034:007]

3.2. *Locative-copula constructions*

The structural contexts in which the locative copula is found are much more diverse than those described in the previous section for the locative-possessive copula. Where only two word orders were possible in (44), above, eight possibilities summarised in (47) are found with locative-copula constructions (in 47, *yuko* stands as a shorthand for any locative copula):

Structure and interpretation in Swahili existential constructions

(47)	Construction (schematic)	Typical interpretation (* = ungrammatical)
a.	LOC <i>yuko</i> NP	existential
b.	<i>Yuko</i> NP	existential
c.	NP <i>yuko</i>	existential
d.	NP <i>yuko</i> LOC	locative
e.	<i>Yuko</i> LOC	locative
f.	<i>Yuko</i> LOC NP	locative
g.	<i>Yuko</i>	existential
h.	(NP) <i>yuko</i> ADJ	descriptive
i.	ADJ <i>yuko</i>	*

The schematic representations in (47) show how the interpretation of locative-copula constructions depends on the presence and word-order of copula, locative and theme NP. If the theme NP follows the copula, the result is typically an existential reading, irrespective of whether there is a preceding locative phrase (cf. 47a-b):

(48) a.	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	
	SM1-PRES-REFCD1-be.able-FV	15-REFL-come.out-FV	CONJ	15-say-FV	COMP	
	Ki-swahili	ch-a leo	ni mali	y-ake?		
	7-Swahili	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?’ [TUK Lug 017:009]

b.	Wa-po	pia wa-chunguzi	binafsi.
	SM2-LocCOP16	also 2-investigator	private

‘There are also private investigators.’ [TUK Fas 155:010]

In the absence of a locative phrase, the theme NP may also precede the copula and still receive an existential interpretation, often with a meaning of availability (cf. 47c):⁷

(49) a.	Mimi ni-na-amini	kama ma-shetani	wa-po.	
	1SG	SM1SG-PRES-believe	COMP 6-evil.spirit	SM2-LocCOP16

‘I believe that there are evil spirits.’ [Hus Mas 029:026]

- b. Madini tu-na-yo, reli tu-na-yo,
 9.metal SM1PL-PossCOP-REFCd9 9.train SM1PL-PossCOP-REFCd9
 na wa-tu wa-po...
 CONJ 2-person SM2-LocCOP16
 ‘Metals we have, a railway we have, and people are available...’
 [Kez Gam 052:014]

However, if a locative phrase follows the copula, a locative reading is strongly preferred, irrespective of the presence or absence of the theme NP (cf. 47d-f). This may reflect the different interpretations available for the locative copula (and referential concords more generally), varying between interpretations with respect to contextually overt or implied antecedents such as overt locative NPs, and grammaticalised and expletive interpretations which may result in more abstract, non-locative interpretations (cf. section 2.2., above).

- (50) a. Bwanyenye yu-ko m-ji-ni, m-kulima yu-ko shamba.
 1.rich.person SM1-LocCOP17 3-town-LOC 1-farmer SM1-LocCOP17 5.field
 ‘The rich man is in town, the farmer is in the field.’ [\$ TUK Fas 005:008]
- b. Yu-ko London
 SM1-LocCOP17 London
 ‘He is in London.’
- c. Wa-ko wapi wa-toto w-angu?
 SM2-LocCOP17 where 2-child 2-my
 ‘Where are they, my children?’ [Kez Ros 008:029]

A different interpretation results when the existential-locative copula is used with an adjective phrase, which has to follow the copula, resulting in a descriptive reading:

- (51) a. Wa-tu wa-li-ji-on-a wa-po huru zaidi.
 2-person SM2-PAST-RELF-see-FV SM2-LocCOP16 free more
 ‘People saw themselves as being more free.’ [Liw Nyo 144:013]
- b. Ha-wa wa-tu wa-po w-engi sana.
 DEM-2 2-person SM2-LocCOP16 2-many very
 ‘These people are very many.’ [Liw Nyo 078:007]

- c. Vi-jana wa-ko tayari ku-ahirisha n-doa...
 8-youth SM2-LocCOP17 ready 15-postpone 9-marriage
 ‘The young people are ready to postpone getting married...’
 [Kez Kic 144:005]

In terms of the morphosyntactic variation of the complement NP, the locative-copula construction does not differ from the locative-possessive construction. It allows simplex (52a) and complex NPs, including genitive (52b) and relative NPs (52b-c), and also including clausal complements without relative marking (52d).

- (52) a. Wa-po ma-ofisa, ma-fundi, ma-mesenja...
 SM2-LocCOP16 6-official 6-technician 6-messenger
 ‘There are officials, technicians, messengers...’ [Mac Twe 008:005]
- b. Wa-po wa-tu w-engi w-a Zanzibar wa-li-o-ji-zamish-a
 SM2-LocCOP16 2-person 2-many 2-GEN Zanzibar SM2-PAST-REFCD2-REFL-dive-FV
 katika fani z-a tenzi na ma-tumbuizo
 in 10.kind 10-GEN 10.poem CONJ 6-song
 ‘There are many Zanzibari people who have immersed themselves into various kinds of poems and songs.’ [TUK Lug 039:009]
- c. Lazima yu-ko m-tu a-taka-ye-fanya-a mi-pango...
 necessary SM1-LocCOP17 1-person SM1-FUT-REFCD1-make-FV 4-plan
 ‘There has to be a person who will make plans...’ [Nye Uja 153:003]
- d. Yu-ko m-tu a-na-pig-a hodi m-lango-ni.
 SM1-LocCOP17 1-person SM1-PRES-hit-FV hodi 3-door-LOC
 ‘There is someone knocking “hodi” on the door.’ (i.e. asking to enter)
 [Sem Njo 071:035]

In addition to the differences in word order and interpretation, the difference between locative-possessive and locative-copula constructions is also reflected in the availability of definite interpretations of complements. Definiteness is not morphologically marked in Swahili, but is related to the morphosyntactic context, and in particular to word-order, as discussed in the following section. A clear illustration of the difference between the two constructions in this respect is the different acceptability of proper names. While proper names are possible in locative-copula constructions, they are only marginally possible in locative-possessive constructions.

- (53) a. Juma yu-ko.
Juma SM1-LocCOP17
'Juma is there.'
- b. Yu-ko Juma.
SM1-LocCOP17 Juma
'Juma is there/There is Juma.'
- c. [?]Ku-na Juma
SM17-PossCOP Juma
'Juma is there/There is Juma.'

Although not fully ungrammatical, the locative-possessive construction with a proper name complement in (53c) is significantly worse than the locative-copula constructions in (53a, b). Locative-possessive constructions might thus be analysed as a more canonical existential construction in that the post-copular position is virtually restricted to indefinite NPs, while the locative-copula construction in (53a, b) has no such restriction (cf. Milsark 1974, 1977).

The locative-copula construction is thus structurally less restricted than the locative-possessive construction, and can express a wider range of interpretations. The following section will discuss how this difference is related to word-order and information structure and the morphological structure of the two copula forms.

3.3. Word-order, agreement and information structure in Swahili existential constructions

The description of the two existential constructions in Swahili above has shown similarities, but also a range of differences between the two constructions. Locative-possessive constructions conform more closely to typical existential constructions, both in terms of their structural restrictions and in terms of the definiteness restriction. Freeze (1992: 556) notes that existential constructions in basic SVO languages typically have the word-order LOC Cop NP, exactly as the order in Swahili locative-possessive constructions. Similarly, the restriction on definite theme NPs as seen in the locative-possessive construction is a typical characteristic of existential constructions (e.g. Christie 1970, Freeze 1992, Milsark 1974, 1977, Lyons 1999). On the other hand, while some uses of the locative-copula construction conform to typical existential uses, the construction exhibits a wider range of syntactic

possibilities, and it can be used in a wider range of contexts. In part this difference is related to the functional closeness, and cross-linguistically common correlation, between possessive and existential constructions, which is evident in the Swahili locative-possessive construction, but which does not play a role for the locative-copula construction, which has a locative, but not a possessive component. Within the specific Swahili context, this difference is reflected in the fact that *-na* is a predicate in other contexts as well, namely in pure (non-locative) possessive constructions, as illustrated in section 2, above, while the locative referential concords *-po*, *-ko* and *-mo*, even though they have other uses, are not used as predicates other than in locative-copula constructions. A second difference between the two construction types concerns the subject agreement markers used in the constructions. The locative subject marker (*ku-*, *pa-*, or *m-*) used in locative-possessive constructions has two distinct uses. On the one hand, it functions as a locative subject marker, agreeing with a semantic locative subject, which may be coded as grammatical subject or topic (Swahili subject markers being quite generally underspecified as to whether they agree with extra-clausal topics or clause-internal subjects). Agreement with semantic locative subjects results in ordinary predicate-argument structure such as in the intransitive structure in (54).

- (54) Nyumba-ni ku-na-pendez-a.
9.house-LOC SM17-PRES-be.pleasant-FV
'At home (it) is pleasant.'

On the other hand, locative markers function as grammaticalised expletive markers, where they may or may not agree with a locative topic, but where they fill the verbal subject agreement slot, with the semantic subject encoded by an NP immediately following the verb. This usage is found, for example, in locative inversion constructions (55) (repeated from above).

- (55) M-ji-ni ku-me-ku-f-a wa-tu w-engi.
3-town-LOC SM17-PERF-STM-die-FV 2-person 2-many
'(There) at the town many people have died' (Ashton 1947: 125-129)

It is locative expletive markers as in (55) which are found in existential locative-possessive constructions, without an implied locative topic (56), or failing to agree with a preceding locative phrase (cf. 15, repeated here as 57).

- (56) Wao wa-na-amini kuwa ku-na Mungu m-moja.
3PL SM2-PRES-believeCOMPL SM17-POSSCOP 1.god 1-one
'They believe that there is one god.' [Hus Kin 000:056]
- (57) Ha-pa ku-na kazi moja n-zuri sana...
DEM-16 SM17-POSSCOP 9.work 9.one 9-good very
'Here there is a very nice job...' [Sem Njo 090:013]

Expletive markers cannot be used with a preceding (non-locative) semantic subject, and their central function is to allow for the introduction of semantic information in post-verbal position, which in turn serves to express presentational focus. It is thus the interpretational restriction on expletive subject markers which renders any order in which a theme NP precedes a locative-possessive copula ungrammatical. Furthermore, since expletive subject markers also disallow reference to contextually given non-locative logical subjects, that is, to antecedents in the context, the locative-possessive copula cannot be used in elliptical contexts. This means that the only possible word order of locative-copula constructions is (LOC) *kuna* NP, as shown above.

Grammaticalised locative markers as used in Swahili locative-possessive constructions are the only or primary expletive markers in many Bantu languages (see e.g. Buell 2012 for Zulu). However, in Swahili other subject markers function in expletive contexts, such as class 9 markers in raising predicates (58). Furthermore, quite generally subject markers in Swahili may be used to introduce a new referent in post-verbal position in presentational constructions (59). This interrelation between subject agreement, word-order and information structure in Swahili is discussed in more detail in Marten (2011), and is also central for the interpretation of existential constructions in Swahili.

- (58) I-na-onekan-a kwamba a-me-ondok-a.
SM9-PRES-seem-FV COMPL SM1-PERF-leave-FV
'It seems that he has left.'
- (59) A-li-fik-a Juma.
SM1-PAST-arrive-FV Juma
'Juma arrived / There arrived Juma.'

It is the difference in subject markers which explains the structural versatility and difference of locative-copula constructions from existential locative-possessive constructions. The central relevant quality of non-locative subject markers in Swahili such as in (59) is

that they allow both anaphoric and expletive use, that is, interpretation with reference to, and agreement with, either preceding or following NPs. The difference between constructions with pre-verbal NPs and those with post-verbal NPs is related to information structure. Pre-verbal NPs function as antecedent for the pronominal interpretation of the subject marker, which is thus interpreted anaphorically. The pre-verbal NP is thus typically interpreted as a discourse-old topic. In contrast, in constructions with post-verbal NPs, the subject marker cannot be interpreted anaphorically, since no antecedent is available.⁹ This means that the subject marker functions as an expletive marker, that is, as a place-holder for the subject interpretation which will be provided by the post-verbal NP. In the latter function ordinary subject markers are similar to locative expletive markers – with the difference that they show agreement in class with the following subject, rather than invariant, historically locative, agreement. Since subject markers in locative-copula constructions are of the ordinary, non-locative kind, their syntactic and interpretational qualities inform the construction overall. In contrast to grammaticalised locative expletive markers, non-locative makers can be used with either pre-verbal or post-verbal NPs, and so both these word-orders are possible in locative-copula constructions: NP *yuko* (LOC) or (LOC) *yuko* NP. As with ordinary verbal predicates, the difference in order is related to a difference in information structure:

(60) M-geni yu-ko
1-guest SM1-LocCOP17
'The guest is there'

(61) Yu-ko m-geni
SM1-LocCOP17 1-guest
'There is a guest'

In (60), the pre-copular NP is introduced first, and provides the topic of the assertion. The subject marker is interpreted with respect to the topic, and existence in some location is predicated of that topic, so that the result is a locative reading. In contrast, in (61), no interpretation is available for the subject marker, and so an expletive reading obtains. The post-copular NP is interpreted as new information, and introduced as new against the background of some location. Without a specific location available in the context of the sentence, and the introduction of the theme argument as new, an existential reading obtains.

The difference between locative-possessive and locative-copula constructions is thus a function of their constituent morphemes. They differ in the copula employed, where in locative-possessives the possessive copula receives a locative, and hence existential, interpretation only when combined with a grammaticalised locative subject marker, while in other cases it functions to express possession. In contrast, in locative-copula constructions the copula is a locative expression and only used as a copula in these constructions. Furthermore, the locative subject markers in locative-possessive constructions only have expletive use, while the non-locative subject markers in locative-copula constructions can be used both anaphorically and as expletives. These two differences are thus at the heart of the different structural and interpretational qualities of the two constructions.

Before turning to the summary and conclusion of the paper, the next section turns to ‘clausal’ complements found in both Swahili existential constructions.

4. ‘Clausal’ complements

As noted above, both locative-possessive constructions and locative-copula constructions can be followed by what appear to be clausal complements. In terms of their meaning the constructions are similar to existentials with relative clause complements (62), but in contrast to these, with the clausal structures no relative marking is found (63).

- (62) Ku-na wa-tu w-engine wa-na-o-vi-sifu
SM17-POSSCOP 2-person 2-other SM2-PRES-REFCD2-OM8-praise
 vi-tendo hi-vyo hi-vyo
8-action DEM-REFCD8 DEM-REFCD8
 ‘There are other people who praise these very same actions.’
 [Nye Uja 084:002]

- (63) a. Ku-na poultry farm ha-pa i-na-uz-w-a.
SM17-POSSCOP 9.poultry farm DEM-16 SM9-PRES-sell-PASS-FV
 ‘There is a poultry farm here (which) is being sold.’ [Hus Mas 024:004]

- b. Ku-na m-tu a-me-kw-ambi-a a-na-ku-chumb-i-a.
SM17-POSSCOP 1-person SM1-PERF-OM2SG-tell-FV SM1-PRES-OM2SG-engage-APPL-FV
 ‘There is a person (who) told you he will propose to you.’
 [Kez Gam 011:007]

Due to the head-marking quality of Swahili verbs, in the absence of relative marking, the resulting verb form is an inflected main clause verb form. Syntactically the examples in (63) thus look like two juxtaposed clauses, with the NP linking the two clauses functioning at the same time as post-copular NP and as subject or topic of the following clause. Interestingly, similar structures are found in English and German, where they also appear in existential and other copular contexts (the English examples are from Lambrecht 2001: 654; capitals indicate stress):

- (64) a. There was a BALL of FIRE shot up through the seats in FRONT of me.
b. We had a FRIEND of mine from NORWAY was staying here.
- (65) a. Es gibt Leute, die ihren Kindern zu viel Eis kaufen.
it exist people REL/DEM their children too much ice-cream buy
'There are people who buy their children too much ice-cream.'
- b. Es gibt Leute, die kaufen ihren Kindern zu viel Eis.
it exist people REL/DEM buy their children too much ice-cream
'There are people who buy their children too much ice-cream.'

The examples in (64) show VP complements in English with *there* and *have* constructions, while the German examples in (65) show complements in existential constructions with expected subordinate verb-final syntax (65a), but also with unexpected verb-second syntax (65b). Verb-second word-order in German is normally restricted to main clauses, while subordinate clauses, such as the relative clauses in (65), show verb-final word-order. In (65b) the appearance of verb-second word-order is thus surprising in the syntactic context. Lambrecht (1988, 2001) presents a range of examples like (64) from English and proposes that 'presentational amalgam constructions' like (63-65) are characterised by the fact that 'an NP coding a discourse-new entity functions simultaneously as the complement of a presentational verb and as the subject of a regular predication' (2001: 655). This description is indeed applicable to the Swahili constructions, where, as noted above, the post-verbal NP is presentationally focused, while the predication in an example like (63a) is that the poultry farm is being sold. The Swahili, German, and English examples all share the same information structure, while the resultant syntactic structure differs, depending on the underlying clausal syntax, verb morphology and relative clause formation. In Swahili, due to the rich verbal inflection, the absence of relative morphology results

in a clausal complement, while in English it results in a VP complement. In German the use of the same form as relative and demonstrative pronoun (*die*) means that in examples like (65) word-order distinguishes between subordinate and main clause, so that in (65b), like in Swahili, the complement is clausal. Like in the previous section, the examples here show the central role information structure plays in existential constructions, and how intra- and cross-linguistic variation results from construction-specific or language-specific lexical and morphosyntactic constraints.

5. Conclusions

The aim of this paper was two-fold. On the one hand it aimed at describing and illustrating two kinds of existential constructions found in Swahili, locative-possessive constructions and locative-copula constructions. The constructions are interesting because of their interaction with the complex Swahili locative morphology; locative-possessive constructions exhibit locative subject markers which are prefixed to a possessive copula, while in locative-copula constructions a locative copula is used with non-locative subject markers. The difference in morphological structure corresponds to a number of differences between the two constructions in terms of syntactic structure and range of interpretations. The second aim of the paper was to show, based on this description, how existential constructions in Swahili are related to information structure, and how their interpretation interacts with word-order and lexical and morphosyntactic constraints, such as restrictions on the interpretation of locative vs. non-locative subject markers, and the interpretation and complementation of the two different copulas involved. The tight restrictions on word-order and interpretation on locative-possessive constructions result from the use of locative subject markers, which in locative-possessive constructions function as expletive subject markers, and thus require the theme NP not to be encoded as grammatical subject and to be placed after the predicate. The post-verbal position of the logical subject results in a presentational construction, and the use of the possessive copula in an existential interpretation. On the other hand, in locative-copula constructions, the non-locative subject marker can be used both anaphorically and as expletive marker. This means that a much wider variety of word-orders are possible in the locative-copula construction, and that the construction is available for a wider range of interpretations, result-

ing from the respective placement and information-structural role of the locative and the theme argument.

A further aspect of existential constructions in Swahili which is noteworthy is the possibility of ‘clausal’ complements, where the post-copular NP is pragmatically focussed as new information introduced by the existential construction and, at the same time, fulfils the function of subject in the underlying predication. While formally close to constructions with post-copular NPs modified by a relative clause, the absence of relative clause marking makes these complements formally clausal. Interestingly, comparable structures are found in the same context in unrelated languages such as English and German.

Given the descriptive aim of the paper, no formal analysis of Swahili existential constructions has been proposed, and comparative aspects have only been touched upon. These two areas thus remain for future research. While the main aspects of Swahili existentials are maybe not surprising from a comparative-typological perspective, the specific interplay between the pronominal/agreement system, the particular role of locatives in existential constructions, and the availability of clausal complements are all aspects of the construction which could profitably be investigated further from a theoretical perspective.

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Notes

¹ The majority of data in this paper are from the ‘Books’ sub-collection of the Helsinki Corpus of Swahili which contains about 1 million words from Swahili novels (the source tag of the example is given in square brackets). Examples without reference are from first-hand data collection in London as well as from research visits to Tanzania in 2001 and 2006. I am grateful to Yussuf Hamad for discussion of examples in the paper. The following abbreviations are used in the glosses: 1, 2, 3 = noun class number, 1/2/3SG/PL = 1st/2nd/3rd person singular/plural, APPL = applicative, CD = concord, COMPL = complementiser, CONJ = conjunction, COP = copula, DEM = demonstrative, FUT = future, FV = final vowel, GEN = genitive, HAB = habitual, LOC = locative, LOCOP = locative copula, NEG = negation, OM = object marker, PASS = passive, PERF = perfect, POSSCOP = possessive copula, PRES = present, Q = question marker, REFCd = referential concord, REFL = reflexive, REL = relative, SBJV = subjunctive, SM = subject marker, STM = stem marker.

² The stem marker *ku-* in (3) – historically a class 15 infinitive marker – is added to monosyllabic verb roots in certain tenses (see Ashton 1947: 142, Marten 2002).

³ In contrast to the pure, locative and possessive copulas introduced above, *-wa* ‘to be’ behaves morphologically like a verb and can be inflected for tense, aspect, negation etc. and, as a monosyllabic verb root, is preceded by the stem marker in the relevant contexts. The form functions as an auxiliary in complex tenses, as well as in complex copulas. In the latter function it may be combined with a pure, locative or possessive copula and carries the temporal, aspectual etc. specifications of the sentence.

⁴ Animacy has an effect on agreement in Swahili: nouns denoting living beings show verbal agreement of class 1/2. This includes personal names such as in examples (16-20), independent pronouns, as well as any noun from any class denoting a living being. For example, the class 10 noun *maskini* ‘poor people’, used in example (36), below, and the class 8 noun *vijana* ‘youths’ in (51), show class 2 verbal agreement.

⁵ The semantics of locative demonstratives is slightly more complex than indicated by the translations here, as it interacts also with the semantic distinctions between the three different locative classes, noted above.

⁶ As noted above, independent pronouns such as the 3rd person singular pronoun *yeye* in (35) and nouns from any class denoting living beings such as *maskini* ‘poor people’ in (36), take class 1/2 verbal agreement. In (35), the class 1 concord is *yu-* rather than *a-*; this is the class 1 form used with the locative copula. In all other classes there is only one form of the concord.

⁷ The pre-copula position of the focal NP in (49a) may result from the specific discourse context; (49a) is the answer to the questions whether the speaker believes that there are evil spirits. In the question, *mashetani* ‘evil spirits’ follows the copula *wapo*, and so in the answer in (49a) *mashetani* may be taken as discourse old. A better translation of (49a) might be ‘I believe that they exist, evil spirits.’ The subtle differences between pre- and post-copula theme NPs need further investigation.

⁸ I am abstracting away from afterthought constructions, in which a topic is contextually given, and resumed by the post-verbal NP, for example to ensure correct reference.

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Deontic Existentials

Eva-Maria Remberger

The aim of this paper is to investigate the components of so-called “deontic existentials”, in order to shed new light on the interplay of syntax and semantics in canonical existential constructions. I start from the claim that at least some languages display constructions that work in parallel to canonical existential constructions but which are characterized by a surplus value, namely deontic modality. In the languages under discussion, this special “deontic” type of existential is instantiated by a construction with the modal verb WANT, which would encode volitionality in its canonical use. Crosslinguistically, this deontic existential behaves syntactically like its canonical counterpart: in both types of existential construction in Italian, there is an obligatory (originally) locative element; the unmarked position of the pivot is postverbal, but it still agrees with the finite verb. Once true existential constructions are clearly distinguished from locatives, definiteness effects in both deontic and canonical existentials can be observed even in Italian. Definiteness effects are even more obvious in Sardinian, where both types of existentials also display similar syntactic behaviour. However, some differences between canonical and deontic constructions, which can be traced back both to the argument structure of WANT and to its modal semantics, can be observed as well.*

1. Introduction

This paper starts from the claim that at least some languages exhibit constructions that work in parallel to canonical existential constructions but which are characterized by a surplus deontic value, cf. (1) from Italian:¹

- (1) a. Canonical existential
Ci sono tre uova nel frigo.
LOC² be.3PL three eggs in-the fridge
‘There are three eggs in the fridge.’

* I thank one anonymous reviewer for his/her valuable comments which made me clarify some problematic points in this paper. The research on which this paper is based was partly carried out during my stay at the Department of Italian at the University of Cambridge, funded by the Alexander von Humboldt-Foundation.

b. Existential + deontic modality

Ci *vogliono* tre uova per fare questa torta
 LOC want.3PL three eggs for make.INF this cake
 ‘There must be three eggs / Three eggs are needed to make this cake.’

The deontic existential construction under discussion here consists of a form of the verb WANT/*volere*, which functions as a modal existential auxiliary (in italics), an apparently locative clitic (in bold) and a nominal phrase representing the element whose modalized coming-into-existence³ is predicated, known as the pivot⁴ (underlined).

Crosslinguistically, this pattern is not uncommon in other Romance varieties, cf. (2) from Venetan and especially (3) from Sardinian; however, similar deontic existentials with WANT can also be found in earlier stages of English, cf. (4):⁵

(2) Venetan (Benincà & Tortora 2009: 23)

Ghe *vole* do euro.
 LOC want.3SG two euros
 ‘Two Euros are necessary.’

(3) Sardinian (Jones 1993: 101)⁶

Bi *keret* tres ovos.
 LOC want.3SG three eggs.
 ‘Three eggs are necessary.’

(4) I grant that two bodies placed beyond the tenth sphere, or in a vacuity, according to Aristotle’s philosophy, could not behold each other, because **there** *wants* a body or medium to hand and transport the visible rays of the object unto the sense.

(Sir Th. Brown 1635)

The overall aim of this paper is to further investigate the components of the “deontic existentials” presented here, in order to shed new light on the interplay of syntax and semantics in canonical existential constructions. Thus, in what follows, I will use principally Italian and Sardinian data to 1) explain how and why the verb WANT can develop into a deontic existential auxiliary, and 2) exemplify the parallels and differences between the behaviour of the deontic and canonical existential constructions. The organization of the paper is as follows: the next section (§2) introduces some basic concepts of voli-

tionality, the modality usually attributed to the verb WANT⁷, within formal modal semantics. Morphosyntactic criteria will be the subject of §3, as they have been identified as relevant to the description of existentials in general and the type of constructions at issue here; §4 looks at the distinction between true existentials and locatives. An analysis of the data, covering synchronic and diachronic aspects, is presented in §5, while a summary and brief outlook conclude the paper (§6).

2. Modal semantics

This special type of “deontic” existential, which is instantiated in the languages under discussion by a construction with the modal verb WANT, is more specialized in interpretation than the simple combination of deontic modal plus canonical existential would be, cf. (5a) vs. (5b):

- (5) a. **Ci** *devono* *essere* tre uova.
 LOC must.3PL be.INF three eggs
 ‘There must be three eggs.’
 ⇒ Interpretation: deontic / epistemic (preferred)
- b. **Ci** *vogliono* tre uova.
 LOC be.3PL three eggs
 ‘There must be three eggs/Three eggs are needed.’
 ⇒ Interpretation: deontic / *epistemic

Thus, ‘coming into existence’ can be semantically modalized in several ways. In (5a) the semantically compositional construction with the modal *dovere* ‘must’ and BE can have two readings, the strictly deontic reading and the usually preferred epistemic reading. In the WANT-construction (5b), the modality can only be interpreted as deontically, not epistemically necessary. This seems to be due to the impossibility, at least in Italian, to get an epistemic reading for *volere* at all.⁸ This property of *volere* thus seems to be inherited also by the *volerci*-constructions.⁹

The following example furthermore shows that in the WANT-construction negation always has scope over the deontic necessity:¹⁰

- (6) Non **ci** *deve* *essere* la panna nella carbonara.
 NEG LOC must.3PL be.INF the cream in-the Carbonara
 a. ‘It is necessary not to have cream in Carbonara.’
 b. ‘It is not necessary to have cream in Carbonara.’
 ⇒ Interpretation:¹¹ $\neg\Box, \Box\neg$
- (7) Non **ci** *vuole* la panna nella carbonara.
 NEG LOC want.3PL the cream in-the Carbonara
 a. ‘It is necessary not to have cream in Carbonara.’
 b. *‘It is not necessary to have cream in Carbonara.’
 ⇒ Interpretation: $\neg\Box, *\Box\neg$

Thus, modality in the deontic WANT-construction is purely deontic and lower in scope than both epistemic modality and negation.

Crosslinguistically, WANT not only develops into a future auxiliary in many languages, but it is also found in all types of constructions expressing pure deontic necessity: see the following examples from German, Calabrian (CS) and Sardinian (for an overview in Romance, see Remberger 2005; for the deontic passive, see Remberger 2006b; for the development into an evidential marker particular to German, cf. Remberger 2011):¹²

- (8) Ger. Dieses Buch *will* *gelesen* *werden*.
 this book want.3SG read.PST.PTCP be.PASS.3PL
 ‘This book must be read.’
- (9) Cal. ‘sta pasta *vo* *cu* *ru* *sugu*. (Ledgeway 2000: 261)
 this pasta want.3SG with the sauce
 ‘This pasta should be eaten with tomato sauce.’
- (10) Sard. Sas *criticas* *cheren* *motivadas* *e* *misuradas*,
 the critiques want.3PL motivated and measured
sinono non *servin* *a* *nudda*.
 if-not not help.3SG to nothing
 ‘Criticism needs to be motivated and modest, otherwise it is not helpful at all.’
 (Sa-Limba 1999-2011,¹³ cf. also Remberger 2006: 263)

In (8) we have an inanimate subject with the complement of WANT in the passive, which results in a non-volitional reading. In (9), WANT acts as a copula selecting a small clause, whose subject

is still inanimate. Finally, in (10), WANT appears as a true passive auxiliary with a main verb participle and, again, the subject is not volitional. Thus WANT can have a purely deontic reading in certain constructions, especially in passive contexts and with inanimate subjects.

Let us now look at the semantic make-up of WANT, given in (11). Following Kratzer's modal semantics with two basic types of modality, i.e. possibility and necessity, the modal meaning of WANT can clearly be related to necessity (see property i); the modal base for WANT has been claimed to be buletic, and sometimes there might be a further epistemic or doxastic modal base (cf. property ii); the goal of the modal relation is the complement in the scope of WANT, namely a set of propositions which are preferred in a world *w* (see property iii); what makes WANT unusual among the verbs expressing modality is that the modal meaning of WANT, necessity, is individually anchored (for this notion, cf. Farkas 1992) in the external argument of the clause (see property iv):

- (11) The components of volitional modality / WANT
(cf. also Remberger 2010: 165-167):
- i. a modal relation of necessity
(cf. Calbert 1975: 36, fn. 32)
 - ii. a modal base: a buletic or epistemic / doxastic model
(buletic: cf. Kratzer 1981; doxastic: cf. von Stechow 1999:117; Heim 1992; epistemic: cf. Hacquard 2006)
 - iii. a goal of modality: the complement over which WANT takes scope
(a set of propositions preferred in *w*, cf. Quer 1998: 22)
 - iv. a source of modality: the individual anchor of volitional modality is the thematic 'subject', i.e. the external argument of WANT, usually an intentional entity.

It is property iv which is particular to WANT among most of the other modal verbs. However, as we have seen before, this link of the source of modality to the external argument can be cancelled in certain contexts, namely, 1) if the external argument is not (even metonymically) intentional, e.g. an inanimate entity (as 'the book' in (8)); 2) if the goal of modality contradicts what an intentional entity could want (e.g. in passive constructions with animate subjects); and 3) if there is no external argument at all, as in impersonal constructions. These conditions, of course, play a role in the diachronic development of WANT as a pure deontic marker of modality (cf. especially §5.2).

3. Morphosyntactic criteria

As in canonical existential constructions, several morphosyntactic and often individually parametrized properties can also be observed in deontic existential constructions in the languages discussed here:

- (12) Morphosyntactic criteria
- (1) the presence of a coda
 - (2) +/- agreement of the DP with the verb
 - (3) +/- defective paradigm of the deontic existential verb
 - (4) +/- overt case of the DP
 - (5) *ne*-cliticization
 - (6) +/- obligatoriness of the locative/existential clitic
 - (7) +/- co-occurrence or complementary distribution with a dative clitic
 - (8) +/- formal identity of the existential clitic with other clitics
(dative / locative / reflexive)
 - (9) +/- definiteness effect

These morphosyntactic criteria will each be illustrated in the following subsections.

3.1. Presence of the coda

An overt locative phrase in canonical existential constructions is usually called a “coda”, cf. the PP *nel frigo* in (1a). The coda¹⁴ usually narrows down the spatiotemporal circumstances for which the existence of an entity is predicated (cf. Leonetti 2008, Cruschina 2012). Deontic existentials can also have a coda: this is mostly not locative in nature, but – probably as a consequence of the modal meaning – encodes a purpose, consisting either of a final infinitival sentence, like *per fare questa torta* in (1b), or a final PP (e.g. *per questa torta* ‘for this cake’). However, locative codas are possible, like *nella carbonara* in (7), where a purpose is implicit. Conversely, canonical existentials can also have a non-locative coda, consisting of a purpose phrase, cf. (13):

- (13) Per ogni tipo di gioco *c’era* un edificio. (Mereu 2011: 120)
for every type of game LOC be.PST.3SG a building
‘For every type of game there was a building.’

However, the coda for a canonical existential is usually a locative phrase.

3.2. +/- Agreement of the DP with the verb

In the Italian deontic existential, the finite verb agrees with the pivot, but in Sardinian it always appears in the 3sg default form (but see the correlation with the definiteness effect below in §3.3.), cf. (14a) vs. (14b) (repeated from (1b) and (3) above):

(14) a. Italian

Ci *vogliono* tre uova per fare questa torta.
 LOC want.3PL three eggs for make this cake
 ‘There must be three eggs/Three eggs are needed to make this cake.’

b. Sardinian (Jones 1993:101)

Bi *cheret* tres ovos.
 LOC want.3SG three eggs
 ‘Three eggs are necessary.’

3.3. +/- Defective paradigm of the deontic existential verb

In Sardinian, the paradigm of WANT in the deontic existential is clearly defective, i.e. it can appear only in the 3sg. Unlike Italian *bisogna*, however, which is much more restricted in use (cf. Benincà & Poletto 1994, 1997), it can appear in other than simple finite tenses, e.g. the compound perfect (for *have-* vs. *be-*selection, see again §3.9):

(15) Sardinian (Jones 1993: 101)

B' at *kérfitu* tres ovos pro fákere cussas gatheddas.
 LOC have.3SG want.PST.PTCP three eggs for make these biscuits
 ‘Three eggs were needed to make these biscuits.’

Also in Italian, *ci vuole* is able to appear in the compound perfect as the data from Russi (2006: 253-257)¹⁵ show:

(16) **Ci** sono *voluti* quattro anni per creare “Standing Stone”.
 LOC be.3PL want.PST.PTCP.M.PL four years for create “Standing Stone”
 ‘It took 4 years to create “Standing Stone”.’

Russi (2006: 253-257) also has further data for Italian, like (17) with a gerundial form or even forms in the 2nd and 1st person, cf. (18):

- (17) *Volendoci del pane, Carlo è andato a comprarlo.*

want.GERUND=LOC of.the bread Carlo be.3SG gone to buy=it
16

‘Since bread was needed, Carlo went to buy it.’

- (18) a. *Ci voglio io / Ci vuoi tu /*
 LOC want.1SG I / LOC want.2SG you.SG /
Ci vogliamo noi / Vi volete voi per...
 LOC want.1PL we / LOC want.2PL you.PL for...

- b. *Ci voglio io per ridargli una motivazione.*
 LOC want.1SG I for to-give-back=him a motivation
 ‘It’ll take me to get his motivation back.’

- c. *Ci volevi tu, eh, Grassone!*
 LOC want.PST.2SG you.SG eh fatty
 ‘It took you, eh, fatty!’

However, besides the fact that these data are not all accepted by all native speakers, I would propose that examples like (18) are not true existentials, since the DP is definite. In fact, cases with 2SG pronouns or other definite DPs are also found in Sardinian, cf. (19):

- (19) a. *Non bi keres tue inoke.*
 NEG LOC want.2SG you.SG here
 ‘You are not needed here.’

- b. *Bi sun kèrfitos cussos òmines.*
 LOC be.3SG want.PST.PTCP.M.PL these men
 ‘These men were needed there.’

However, also these constructions can be claimed to be locative rather than existential, since they can clearly be distinguished from one another, at least in Sardinian, by agreement phenomena and auxiliary selection (see §3.8 below, and Remberger 2009, Remberger 2012); for Italian, although these tests are not available, a similar distinction can be made between topical locative constructions and existentials proper (cf. Leonetti 2008 and Cruschina 2012, and §4).

3.4. +/- Overt case of the DP

Overt case marking in Italian is detectible only with a limited

number of pronouns. But since overt personal pronouns are definite by definition, they can be said to be not existential pivots proper, but nominative subjects in locative constructions (for canonical existentials, cf. Leonetti 2008 and Cruschina 2012). The following examples, again from Russi (2006: 253-257), as the ones already presented in (18),¹⁷ are thus not existential deontics proper, but deontic existentials involving a pronominalized locative phrase (in what follows I will call these constructions deontic-locatives, in order to distinguish them from existential deontics proper):

- (20) a. **Ci** *voleva* lui, Silvio Berlusconi in persona.
 LOC want.PST.3SG he.NOM S.B. in person
 ‘It required him, Silvio Berlusconi in person.’
- b. Sono robusti, **ci** *vogliono* loro.
 be.3PL strong LOC want.3PL they.NOM
 ‘They are strong, they are needed there.’

As for the postverbal indefinite pivot in Sardinian, it is unclear which case it has: here too, case is overt only with personal pronouns, which are definite by definition, so there never can be a clear nominative marking for indefinite pivots. Also Jones (1993: 104) claimed that these indefinite DPs cannot be subjects and might have either no or another case than nominative. For similar pivots in other languages, especially those that use HAVE as an existential auxiliary,¹⁸ the case is clearly accusative. In Sardinian (and maybe Italian too) it might be partitive (see also the following *ne*-cliticization test).

3.5. *Ne-cliticization*

Ne-cliticization shows that the indefinite pivot of an existential construction proper is its internal argument (Russi 2006: 253-257):

- (21) a. Gli **ce** *ne* sono *voluti* otto.
 him.DAT LOC CL.PART be.3PL want.PST.PTCP.M.PL eight
 ‘At least eight were necessary for him.’
- b. Gli **ce** *ne* / **le* *vorranno* almeno due.
 him.DAT LOC CL.PART / CL.ACC.F.PL want.FUT.3PL at least two
 ‘At least two he will need.’

For these arguments in unaccusative constructions it has been claimed that they have partitive (and thus not nominative) case (cf. Belletti 1988).

3.6. Obligatoriness of the locative / existential clitic

In Italian, the locative clitic in the *ci vuole* construction can never be omitted (Russi 2006: 253-257):

- (22) *(**Ci**) *vogliono* nove giorni per farsi installare
LOC want.3PL nine days for make= REFL install
in casa il telefono dalla Telecom.
in home the phone by-the telecom
 ‘It takes nine days to have the phone installed by Telecom at home.’

In Sardinian, the locative can only be left out in examples such as the following (from Sa-Limba 1999-2011), where the pivot is not a DP but a CP (and in case there is a dative clitic instead, see next subsection):

- (23) a. *Como cheret chi faedemus e scriemus.*
now want.3SG that talk.SBJV.1PL and write.SBJV.1PL
 ‘Now it is necessary to talk and write.’
- b. *Cheret chi tumbulemus prus a forte pro las abberrer.*
want.3SG that hit.1PL more strong for them.F.PL open
 ‘It’s necessary that we hit them harder to open them.’

I assume, as I have done in Remberger (2009), that the originally locative clitic is a kind of overt existential operator in both the canonical and the deontic existential; the existential operator then needs a verbal predicator (BE for Italian, HAVE for Sardinian, or WANT, for both) in order to build an existential predicate. Furthermore, the clitic has the function of marking a stage topic (which is the ‘here and now’ of the speech situation, cf. Erteschik-Shir 1997). This is a remainder of the former locative function.¹⁹

3.7. +/- Co-occurrence or complementary distribution with a dative clitic

In Italian, as well as the (obligatory) locative in the deontic existential, a dative pronoun encoding a beneficiary can also appear (Russi 2006: 253-257):

- (24) Gli **ci** sono *voluti* otto mesi
 him.DAT LOC be.3PL want.PART.M.PL eight months
 per rimettersi dall' incidente.
 for recover=REFL.from.the accident
 'For him, it took eight months to recover from the accident.'

In Sardinian, instead, either the locative clitic or a dative pronoun, but not both, appears in these constructions (Jones 1997: 101):²⁰

- (25) Nos *keret* unu milione de francos.
 us.DAT want.3SG one million of francs
 'We need one million francs.'

What is interesting here²¹ is that a dative clitic is never possible in the existential constructions proper, neither in Italian (cf. (26a)) nor in Sardinian (cf. (26b)):

- (26) a. *Mi **ci** sono *tre* uova nel frigo.
 me.DAT LOC be.3PL three eggs in-the fridge
 b. *Mi **b'** at *tres* ovos.
 me.DAT LOC have.3SG three eggs

In principle, it seems to be the argument structure of WANT that allows a beneficiary dative representing the source of modality (cf. (11iv)). In Sardinian, unlike Italian, the dative clitic is obviously able to additionally assume the role of the existential operator and stage topic marker *bi*.

3.8. +/- Formal identity of the existential clitic with other clitics (dative / locative / reflexive)

In Italian, the pronoun clitic *ci* has several functions: 1) 1PL accusative (also reflexive); 2) 1PL dative (also reflexive); 3) deictic locative; 4) existential operator;²² 5) replacement for the reflexive in the case of double *si* (cf. Benincà & Tortora 2009:21 and the examples given there in (8)). In Sardinian, the locative *bi* and other locative forms found in the Sardinian varieties are not identical to any personal pronoun (e.g. the 1PL would be *nos*, the 2PL would be *bos*); *bi* is only used as a deictic or existential locative (also in presentational locative constructions, cf. Remberger 2009, 2012; for the variation of the locative clitic in existential constructions in other Sardinian varieties, cf. Bentley 2011).

3.9. Definiteness effect

In Sardinian existential constructions, as in other languages such as English or French, definiteness effects (in the sense of the weak/strong determiner distinction cf. Milsark 1974, 1977) are found, with the following side effects:

- | | |
|---------------------------------------|------------------------------------|
| (27) a. With a definite DP we have: | b. With an indefinite DP there is: |
| auxiliary selection | the default auxiliary |
| verb agreement | no verb agreement |
| participle agreement | no participle agreement |
| post- or preverbal position of the DP | postverbal position of the DP |
| a locative construction | an existential construction proper |

Crosslinguistically, the deontic existential behaves syntactically like its canonical counterpart: in Italian both existential constructions have an obligatory locative element; the unmarked position of the pivot is postverbal, but still it agrees with the finite verb. Once a clear distinction is drawn between true existential constructions and locatives (as observed by Leonetti 2008) definiteness effects can also be observed in both deontic and canonical existentials in Italian. Definiteness effects are even more obvious in Sardinian, which also has both types of existentials. Moreover, Sardinian canonical and deontic constructions exhibit similar syntactic behaviour and show the same correlations with the definiteness effect, cf. (28) (repeated from (15) and (19b) above) (cf. Jones 1993, La Fauci & Loporcario 1997, Bentley 2004, 2011):

- (28) a. **B'** *at kérfitu tres ovos* [...]. (Jones 1993: 101)
 there have.3SG want.PST.PTCP.M.SG three eggs
 'Three eggs were needed.'
 ⇒ indefinite DP, postverbal position, no agreement, auxiliary: HAVE
 ⇒ deontic existential with an existential operator in subject position²³
- b. **Bi** *sun kérfitos cussos ómines* [...]. (Jones 1993: 101)
 there be.3PL want.PST.PTCP.M.PL these men
 'These men were needed there.'
 ⇒ definite DP, subject-verb and participle agreement, auxiliary: BE
 ⇒ deontic copula with a locative clitic in subject position

The difference in meaning between these two constructions stems from the difference in the functional meaning encoded in the copula BE, normally considered to be semantically almost empty (i.e. just a verbal predicator where a verbal category is needed), and the verb WANT: in its canonical use, the latter is a modal verb encoding volitionality, but, as shown in §2, it can develop into a modal encoder of pure necessity in certain circumstances.

4. Existentials proper vs. locative constructions

Studies have adopted two main approaches to the interpretation of existential constructions. In typological discussions in particular, existentials have been put on a par with locatives (cf. Freeze 1992), interpreting the DP present in the structure as the (theme) subject of the predication, and the locative phrase the predicate, with the locative pronoun as a further spell-out of a locative feature or a pro-predicate. Moro (1998) tried to show that existentials are simply inverse locatives, with the DP a focus and the locative predicate the topic of the sentence (thus expressed by a pro-predicate, and sometimes by a locative adjunct, the coda). Some studies that claim that locatives and existentials have the same underlying structure go even further, claiming that the full verbs BE and HAVE, often used as existential verbs in the European languages, are also the same, with HAVE containing some additional incorporated feature (like a location, for example). The most recent exponent of the latter claim is Kayne (1993).²⁴

On the other hand, several other studies keep existential constructions clearly distinct from locative constructions, such as McNally (1992, 2011), Zamparelli (2000), Cornilescu (2008) for Romanian, Remberger (2009) for Sardinian, and Leonetti (2008) and Cruschina (2012) for Italian. They all have shown that the pivot in existentials is not a good subject (cf. also Bentley 2010, Beaver, Levinson & Francez 2005) and have attributed several functions to it within the structure of the proposition (for a recent semantic analysis of existentials, cf. Francez 2007), cf. Table 1:

Table 1. Existentials are different from locatives.

EXISTENTIALS	ROLE OF THE DP	ROLE OF THE LOCATIVE PHRASE	ROLE OF THE LOCATIVE ELEMENT
McNally (1992)	complement to BE _{exist} (property)	semantic adjunct	expletive in [Spec, IP] (requires the definiteness restriction/ novelty)
Zamparelli (2000)	predicate	optional locative adjunct	specific indefinite locative with a novelty requirement
Cornilescu (2008)	predicate	adjunct (optional)	subject (external argument) specific indefinite locative

In line with these authors and based on Jones (1993), Remberger (2009) has also claimed that existentials are different from locatives, and that this difference is highlighted by Sardinian, where the definiteness effect is accompanied by further overt grammatical consequences as shown above and summed up in (29):

(29) Correlation in Sardinian

- (i) for existentials proper:
 - ⇒ indefinite/weak DP, postverbal position, HAVE-selection, default-agreement, obligatory clitic;
- (ii) for locative constructions:
 - ⇒ definite/strong DP, (pre- and) postverbal position, BE-selection, S-V-agreement, locative clitic (often referring to an overt locative PP).

However, the definiteness effect, and thus a distinction between locatives and true existential constructions, can also be observed in Italian, as Leonetti (2008) and Cruschina (2012) have shown. The following test is from Leonetti (2008: ex. 13):

- (30) a. C' è la statua di Michelangelo, in Piazza della Signoria.
 b. ??C' è la statua di Michelangelo in Piazza della Signoria.
 c. C' è la statua di Michelangelo.
LOC is the statue of Michelangelo in Piazza della Signoria
 'The statue of Michelangelo is there, in Piazza della Signoria.'

According to Leonetti, (30a), with a definite nominal, is not a true existential but a locative construction with a topicalized and thus right-dislocated locative. (30b) is therefore excluded, since it has an existential syntax with a locative coda within the focus of the sentence, which is a violation of his Coda Constraint (i.e. definite DPs in these constructions must have narrow focus, not allowing a non-topical locative coda). (30c) is again grammatical, but still a locative construction with a definite nominal. Existentials proper, with an indefinite pivot, are not subject to the Coda Constraint, making them distinct from locatives in Italian.

Cruschina (2012) proposes a further group of tests in order to distinguish a locative construction, compatible with definite DPs, from a true existential, which is incompatible with a definite pivot (cf. Cruschina 2012: 15ff). All these tests follow from the generalization that, in a locative construction, the location cannot be focal:

(31) Tests for Italian

- (i) In a locative construction, where the DP is allowed to be definite, the locative element, the Italian clitic *ci*, must be linked to a topic; thus if the location corresponds to a wh-phrase, i.e. it is focus, *ci* cannot be present. In existential constructions, with obligatorily indefinite pivots, where *ci* does not refer to a location but has the function of a kind of existential operator, a combination of a locative wh-phrase and *ci* is possible.
- (ii) If the location bears contrastive focus it is not compatible with the presence of *ci* and with a definite DP; existential *ci* and indefinite pivots can instead appear together with a contrastive locative coda.
- (iii) If the location represents the focus constituent in an answer to a wh-question definite DPs and *ci* in the same clause are out; in existentials proper, which allow only indefinite DPs, *ci* can appear together with a information focus marked locative coda.

Let us now try to apply Cruschina's tests, which have been proven to work with the Italian *esserci* construction, to deontic existentials. Let us start with (31i), cf. (32) (which is parallel to Cruschina 2012: 15, ex. (29)):

- (32) a. *Dove **ci** vuoi **tu**?
 where LOC want.2SG tu?
 ⇒ locative *ci* (impossible in the same clause with *dove*)

- b. ??Dove pensi che **ci** voglia Gianni?
 where think.2SG that LOC want.SBJV.3SG Gianni
 ⇒ locative *ci* (impossible in the same clause with
dove)

In (32a) and (32b) the DP is definite, thus not an existential pivot. The constructions are marginal or ungrammatical because of the incompatibility between a locative *wh*-phrase and the locative *ci*, which is linked to a topical location. If the DP is indefinite, thus a proper pivot, the co-occurrence of a locative *wh*-phrase and existential *ci* is possible (sometimes in particular contexts),²⁵ cf. (33a) and (33b):

- (33) a. Dove **ci** vogliono tanti fiori?
 where LOC want.3PL many flowers
 ‘Where is it that many flowers are needed?’
 ⇒ existential *ci*
- b. In quale stanza **ci** vuole una finestra in più?
 in which room LOC want.3SG a window in more
 ‘In which room is one more window needed?’
 ⇒ existential *ci*

However, whereas in the constructions with *essere* in (34) (cf. Cruschina 2012:15, (29a) and (30a)) a grammatical sentence is easily yielded by omitting the topical locative *ci*, for the WANT-construction this is not so easy, since a further change in meaning occurs, cf. (35):

- (34) a. Dove sei tu?
 where be.2SG you
 ‘Where are you?’
- b. Dove hai detto che è Gianni?
 where have.2SG said that be.3SG Gianni
 ‘Where did you say Gianni is?’
- (35) a. *?Dove vuoi tu?
 where want.2SG you
- b. *?Dove hai pensato che voglia Gianni?
 where have.2SG think.PST.PTCP that want.SBJV.3SG Gianni

(35a) and (35b) are both difficult to interpret, close to incomprehensible, since the omission of the existential clitic *ci* in the WANT construction automatically results in the interpretation of *volere* as a personal volitional verb, which, as such, needs two arguments: an intentional experiencer as the source of volitionality (cf. §2) and a theme argument as the goal of modality. Since this second argument is missing in (35a) and (35b), the sentence is odd and only marginally interpretable with an implicit or pragmatically omitted argument, as in (36):²⁶

- (36) ?Dove *vuoi* tu (che mettiamo il tavolo)?
 where want.2SG you that put.1PL the table
 ‘Where do you want (us to put the table)?’

However, as we have seen before, Italian has examples such as those quoted above from Russi (2006: 253-257), cf. (18) and (20), in which only one definite argument for *volere* occurs – and is definite – in the presence of *ci*. These examples resemble the deontic existential construction but cannot have an existential reading, since there only indefinite pivots are allowed.²⁷ Examples such as (18) and (20) are indeed interpreted similarly to the *esserci* constructions in (37) (from Cruschina 2012: 19):

- (37) a. C’ è Gianni.
 loc be.3SG Gianni
 ‘Gianni is here.’
- b. Guarda: C’ è tua sorella!
 Look LOC be.3SG your sister
 ‘Look: Your sister is here.’

Cruschina (2012: 19) claims that *ci* in (37) is locative-deictic, i.e. it “designates the perceptual identification of a referent in the speaker’s proximal physical space”. Thus, the examples in (18) and (20) could best be translated by the sentences in (38), where *ci* is rendered as a true locative-deictic referring to a specific location or discourse situation, i.e. a normal locative stage topic, but not also an existential operator (with (38a-c) for (18); (38d-e) for (20)):

- (38) a. ‘I am needed here. / You are needed here. / We are needed here...’
 b. ‘I am needed here to give him back a motivation.’
 c. ‘You were needed here, eh, fatty!’ (ironic)
 d. ‘It was him, Silvio Berlusconi in person who was needed here.’
 e. ‘They are strong, they are needed here.’

Cruschina's second test, cf. (31ii), is illustrated by the following examples:

- (39) a. **Ci vorrebbe un cane** in giardino.
 loc want.COND.3SG a dog in garden
 'It would be better to have a dog in the garden.'
- b. In GIARDINO **ci vorrebbe un cane** (non nel cortile).
 in garden LOC want.COND.3SG a dog not in-the courtyard
 'It would be better to have a dog in the garden, not in the courtyard.'
- c. ?* IN GIARDINO **ci vorrebbe il cane** (non nel cortile).
 in garden LOC want.COND.3SG the dog not in-the courtyard
- d. *IN GIARDINO **vorrebbe il cane** (non nel cortile).
 in garden want.COND.3SG the dog not in-the courtyard

(39a) and (39b) are grammatical, with an indefinite DP and a locative coda, which is contrastively focused in (39b). (39c) with a definite DP is ungrammatical, since the locative PP is contrastively focused, and with a definite DP,²⁸ *ci* is locative and can only be coreferential with a topic. However, (39d), with *ci* omitted, is also out, since in this case the interpretation of *volere* automatically becomes a personal one and the second argument is missing.²⁹ Cruschina's third test, cf. (31iii), is not applicable to the WANT-constructions for the same reasons of argument structure that cause the wh-questions in (35a-b) to be ungrammatical.

To conclude, this section has been shown that for Italian *volerci* two WANT-constructions can be distinguished: the true deontic existential and the deontic-locative construction. The same distinction holds for Sardinian, where further criteria, such as agreement (cf. §3.2) and auxiliary selection (cf. §3.9) clearly show the grammatical and interpretational difference between deontic existentials and deontic-locatives. Without *ci*, the *volere* returns to its personal reading as a volitional verb. This is not always true for Sardinian, which exhibits impersonal deontic WANT-constructions without existential (or operator) *ci*, like (23a-b) above, but an analysis of these constructions is outside the scope of this paper.

5. Comparative analysis

5.1 Synchrony

We have already seen that *volere* as a deontic existential is characterized by an indefinite pivot and an existential operator, whereas personal *volere* has two arguments. In what follows, only DP-complements, not infinitival complements, of *volere* are considered since these are the relevant arguments also for the analysis of the construction under discussion. In synchrony, the following parallel can be drawn between these constructions, since the pivot in the existential construction directly corresponds to the theme argument of personal *volere*, cf. (40a-b):

- (40) a. Gianni *vuole* una macchina (per andare in campagna).
 G. want.3SG a car (for go.INF in countryside)
 ‘Gianni wants a car to go to the countryside.’
- b. Ci *vuole* una macchina (per andare in campagna).
 loc want.3SG a car (for go.INF in countryside)
 ‘A car is needed to go to the countryside.’

If the theme argument of *volere* is definite, it is interpreted as specific, cf. (41):

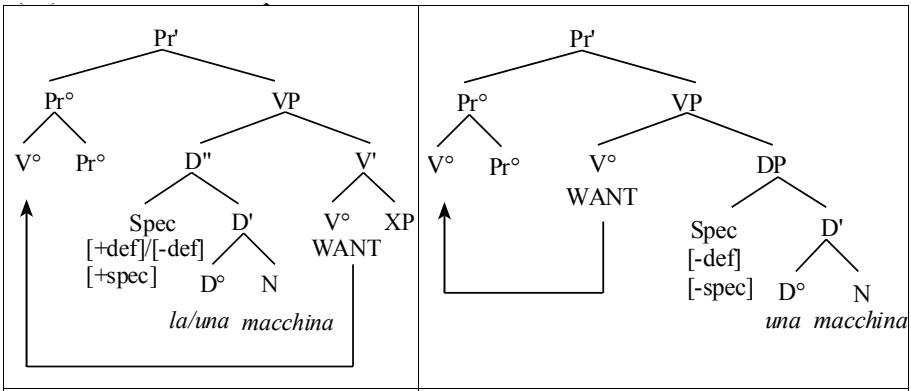
- (41) Gianni *vuole* la macchina (per andare in campagna).
 G. want.3SG the car (for go.INF in countryside)
 ‘Gianni wants the car to go to the countryside.’

If the theme argument is indefinite, two possible readings are available: specific (*de re*) and non-specific (*de dicto*). This distinction is illustrated in (42):

- (42) Gianni *vuole* una macchina ...
 G. want.3SG a car
 ‘Gianni wants a car...’
- a. ...che sia verde.
 ‘...that is green.’
 ⇒ [-specific]
- b. ...che ha visto dal venditore più caro della città.
 ‘...that he has seen at the most expensive car seller of town.’
 ⇒ [+specific]

In Remberger (2009), I argued that in Sardinian deontic WANT-constructions an indefinite pivot is in a position lower than other definite postverbal DPs. Evidence for that comes mainly from auxiliary selection and agreement criteria. Although the latter criteria are not visible in Italian personal and impersonal WANT-constructions or in Sardinian personal WANT-constructions I would now like to argue that there is a general structural difference in the generation of indefinite theme arguments of WANT, as shown in figure (43):

(43) a. Definite description/*de re* b. *de dicto*



DP[+def] < WANT => [+spec]
 DP[-def] < WANT => [+spec]

WANT < DP[-def] => [-spec]

In both cases, the DP is inside the PrP (a generalized predication phrase, abstracting away from little v, little n, and little a, cf. Bowers 1993), where a proper internal argument (or direct object) should be. In (43a), the DP is in Spec, VP, in (43b) it is a complement of the VP. This structural difference would explain the scope factors which are at the basis of the *de dicto* vs. *de re* interpretation: in the former WANT has scope over the theme argument, which has a non-specific reading, while in the latter the theme argument is existentially closed above WANT, thus the reading is specific. It must of course be the *de dicto* interpretation which is at the origin of the WANT-constructions that are true deontic existentials, i.e. the indefinite pivot (the element just coming into existence within the set of worlds introduced by the modal) must be structurally lower than the verb.

5.2. Diachrony

The first attestations of the use of *ci vuole* as a deontic existential are given below. The data were retrieved from OVI and independently from Russi (2009), a paper in which many of the examples presented as (what we call here) deontic existentials are misinterpreted.

(44) Old Italian

- a. A farne cotanta **ci** ne vuole tre foglie;
 to make that.much LOC PART want.3SG three leaves
 ‘To make a certain amount of it three leaves are needed.’
 (Giordano da Pisa; 1306)
- b. ... che largamente **ci** vorrebbe molto tempo...
 that by-and-large LOC want.COND.3SG much time
 ‘... that by and large a lot of time would be needed...’
 (Giordano da Pisa; 1306)
- c. Ma altro rimedio **ci** voleva per appacificarci con Dio...
 but other remedy LOC want.PST.3SG for reconcile=REFL with God
 ‘but another remedy was needed for to reconcile ourselves with God...’
 (Giovanni Villani; 1348)
- d. Piero, de’ tuoi pari **ci** vorrebbe assai;
 Piero of your kind LOC want.COND.3SG a-lot
 ‘Piero, many of your kind would be needed;’
 (Sacchetti; XIV cent.)

All the DPs present in these structures are indeed indefinite (*tre foglie, molto tempo, altro rimedio, de’ tuoi pari*) and thus already seem to represent deontic existentials proper; (44a) and (44c) also have an appropriate coda (*a farne cotanta, per appacificarci con Dio*). Let us now look at possible pathways in the development of *volere* into an impersonal deontic existential.

5.2.1. Diachronic development: Hypotheses

In what follows, three hypotheses will be sketched, which might provide insight into how the volitional meaning of WANT was lost in the impersonal deontic constructions discussed. Hypothesis (A) is that the deontic existential and the deontic-locative both developed out of an impersonal construction, *si vuole* ‘one wants’, also involving a locative-deictic *ci*. In hypothesis (B) I assume that the construction originates from the personal pronoun clitic *ci*, encoding a beneficent dative 1PL, which is natural with WANT, indicating the source of modality

(cf. §3.7). Finally, hypothesis (C), which was proposed by Russi (2009), claims that it was the metonymical use of inanimate subjects which led to the impersonal use:

- (45) A. *ci si vuole > ci vuole*
 ⇒ merger/exchange of the impersonal reflexive and locative clitic
- B. *gli/mi/ti...ci vuole > ci vuole*
 ⇒ dative clitic *ci* is the origin of *ci* in *volerci*
- C. $DP_{[inanimate]} vuole DP ci vuole$ (Russi 2009)
 ⇒ metonymical use of inanimate subjects leads to impersonal use

The following subsections will shortly discuss each of these hypotheses.

5.2.2. Hypothesis A

(46a) demonstrates again the personal use of *volere* with a direct object. The corresponding impersonal construction featuring the clitic pronoun *si* comes in two versions in Italian, namely without agreement (cf. (46b)) and as a medio-passive reflexive with agreement (cf. (46c)) (for speaker variation in these constructions, cf. D'Alessandro 2007). A locative-deictic marker *ci* might also appear in the medio-passive construction (cf. (46d)) (although it is quite marginal).³⁰ A loss of the reflexive element would then give rise to the deontic existential discussed here (cf. (46e)):

- (46) a. *Maria vuole due ragazzi allo stesso tempo.*
 Maria want.3SG two boy-friends at-the same time
 'Maria wants two boyfriends at the same time.'
- b. *Quando si vuole due ragazzi allo stesso tempo...*
 when SI want.3SG two boy-friends at-the same time
 'When one wants two boyfriends at the same time...'
- c. *Quando si vogliono due ragazzi allo stesso tempo...*
 when SI want.3PL two boy-friends at-the same time
 'When one wants two boyfriends at the same time...'

- d. Quando (?**ci**) *si vogliono* due ragazzi_(s) allo stesso tempo...
 when (LOC) *si* want.3PL two boy-friends at-the same time
 ‘When one wants two boyfriends there at the same time...’
- e. **Ci** *vogliono* due ragazzi.
 loc want.3PL two boys
 ‘Two boys are needed.’

Although the presence of a prepositional adjunct pronominalized by *ci* might seem odd in (46d), it is in principle possible in a transitive construction with personal *volere*, cf. (47):

- (47) Gianni **ci** *vuole* sempre due piatti, sul tavolo.
 Gianni loc want.3SG always two plates on-the table
 ‘Gianni always wants two plates, on the table.’

However, something seems to inhibit the presence of both, impersonal *si* and locative *ci*, in these constructions, so that we find either one or the other.³¹ As for impersonal *si*, early attestations of an impersonal or medio-passive use of *volere* are given in the following examples from Dante:³²

- (48) Old Italian

- a. Questo **si** *vuole* e questo già **si** cerca...
 this *si* want.3SG and this already *si* search-for.3SG
 ‘One wants this and one already searches for this.’
 (Dante, Paradiso 17, 0)
- b. E tutte le altre cose **si** *vogliono* per la perfezione
 and all the other things *si* want.3PL for the perfection
 di colui che vuole
 of him that want.3SG
 ‘And all the other things are wanted for the perfection of him who wants.’
 (Dante, Conv. 13, 56)

The meaning of *si vuole* (impersonal construction with *si*) and *ci vuole* (deontic existential) already is very close, so that there might have been a functional exchange or merger of the clitics at one point or another.³³ However, hypothesis A clearly needs some further investigation.

5.2.3. Hypothesis B

One argument in favour of hypothesis (B) is that the deictic meaning of 1PL is very close to the locative-deictic meaning in any case (indeed, Italian *ci* is derived from the former proximal locative adverb in Latin, *HICCE) and thus a shift from 1PL dative meaning to a purely situational and then later purely functional meaning would be natural. Furthermore, in at least some Italian varieties (cf. Benincà & Tortora 2009) constructions that might initially appear to be deontic existentials with *ci vuole* can still be also interpreted as referring to 1PL, cf. (49) from Benincà & Tortora (2009: 24):³⁴

(49) Regional Italian from Padua

Ci	vogliono	due	euro.
cl.1pl.dat	want.3PL	two	euros

‘We need two Euros.’

We have already seen that in Sardinian the existential clitic *ci* can be substituted by a dative clitic (in contrast to Standard Italian, where this construction would be ungrammatical), cf. (25) above. However, Sardinian *bi* (and the other ‘locative’ elements found in these WANT-constructions such as Logudorese *ke*, Campidanese *ddhue*, *ci*) cannot be explained as a dative clitic (e.g. *nos* ‘to us’, *bos* ‘to you’ etc., cf. also §3.6) since in Sardinian, contrary to Italian, the distinction between 1PL dative clitic and locative-deictic clitic is maintained (cf. also §3.8). Thus also hypothesis B must be further explored in future research.

5.2.4. Hypothesis C

Russi’s (2009) hypothesis derived the deontic existential use of *volere* from early examples where the subject argument of the construction is inanimate. We have indeed already seen in §2 (cf. especially examples (8-10)) that non-volitional subjects in WANT-constructions easily result in pure deontic readings. Russi (2009) gives the following example from Latin:

(50) *Seri non volt hordeum nisi in sicca et soluta terra.*
to-be-sown not want.3SG barley but in dry and loose soil
‘Barley doesn’t want to be sown except in dry and loose soil.’

Note that this example closely resembles the German use of WANT in (8), where the infinitive is also in the passive; Russi (2009) also provides the following example for Old Italian:

- (51) Il regno di Cielo *vuole* fatica e forza grandissima...
the reign of Heaven want.3sg trouble and effort biggest
'The reign of heaven wants highest trouble and effort...'

Of course, examples of this kind can also be found in Modern Italian even with non-infinitival complements (from Russi 2009):

- (52) È un verbo che *vuole* l'accusativo.
is a verb that want.3sg the accusative
'This verb takes the accusative.'

Although the shift from a volitional to a deontic meaning can be conditioned by semantic features of the subject, I do not think that this fact can explain why the *ci vuole* construction arises in Italian and Sardinian at all, nor in Latin or German, were similar shifts with respect to inanimate subjects could be observed. Furthermore, it is the subject of volitional WANT, i.e. the experiencer, which is lost, whereas the DP-argument, which might be inanimate in both constructions, is still kept (see the parallels given in (40) above). However, a more detailed discussion of the historical factors leading to the development of WANT as a deontic existential is a topic for further research.

6. Conclusion and outlook

In this paper I have demonstrated that the deontic existentials in the languages discussed here show a morphosyntactic behaviour parallel to canonical existentials. The difference in meaning between deontic and canonical existentials stems from the verb WANT, which inherently encodes the modal relation of necessity and takes two arguments. The shift from volitionality to necessity can be observed in several WANT-constructions in many languages in the world.

I have also shown that, as with canonical existentials, a distinction must be drawn between deontic existentials proper and deontic-locatives with WANT. Synchronically, it can be observed that the theme argument of WANT can also be either specific (*de re* => a higher internal argument) or unspecific (*de dicto* => a lower internal argument) in personal WANT-constructions. In the true deontic existentials the indefinite pivot is a low argument, in contrast to the deontic-locatives, where the argument DP is definite (*de re*) and must be in a higher position. With regard to diachrony, several paths of

development have been proposed and some arguments in favour of each have been outlined. A detailed study of the possible origins of the construction, however, must be left to further studies. We have seen that there are differences between the WANT and the BE constructions discussed here, but these can be traced back to differences in argument structure and modal meaning. Yet, the parallel behaviour of the constructions with WANT and the constructions with BE in both Italian and Sardinian is a further argument in favour of the claim that a clear distinction between locatives with definite subjects and true existentials with indefinite pivots is necessary.

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Notes

¹ As for the Italian examples, they were checked by three native speakers of Italian, one from a Southern area, one from Tuscany, and one from a Northern region; thanks to Silvio Cruschina, Alessia Angiolini and Cecilia Poletto for their help. I think that a detailed study of WANT-constructions in regional Italian would reveal some substantial variation in grammatical judgements. However, as for the particular WANT-construction at issue here, the judgements seem quite clear, when the appropriate contexts are given.

² The element glossed with LOC is meant to be formally, but not always also semantically, locative; in fact, in existential constructions LOC is more an existential operator (or expletive) than a locative marker (cf. also the distinction between *there* and *thr* in Lyons 1999: 227-252).

³ In existential constructions, the pivot is the element that “comes into existence”: it is not present in the preceding discourse and it can only be referred to after its existence was predicated. As Bentley (2004, 2007) puts it the pivot must be a “brandnew unanchored element”. As for the deontic existentials at issue here, the modal environment adds an additional factor insofar as modality introduces sets of alternative worlds. The indefinite pivot in a modal environment must necessarily have a non-referential, non-specific interpretation, i.e. a *de dicto* reading, whereas a *de re* reading of an indefinite element would suggest that the definite DP is interpreted as being existentially quantified above the modal. Such a DP thus is not “brandnew” and “unanchored”; see also the representation in (43).

⁴ In the text, I will refer to the nominal phrases involved in the constructions under discussion as a “pivot” only in cases of true existential constructions (as for the distinction, cf. §4 below). I will also avoid the notion “subject” in the context of proper existential pivots (as for the general problem of subjecthood, cf. also Bentley 2010).

⁵ Note that English *want* is a loan from Old Norse *vanta* ‘to lack’ (cf. Onions et al. 1966), originally meaning ‘lack’ in English as well and thus often used as an

impersonal verb. Therefore, although there often is a development from a personal verb to an impersonal construction observable in language history, the opposite development, as in English, from an impersonal to a personal use of *want* is also observable.

⁶ The Sardinian variety in Jones (1993) is Logudorese (from the village of Lula). In what follows, as for Sardinian, I will only use examples from the Logudorese varieties, although the construction does exist also in Campidanese (where the verb for WANT is *bòlliri/bolli* and also the locative element is different). Since there is no commonly accepted standard for Sardinian, the orthography might vary following the different sources of the data. Of course, a thorough investigation of micro-variation with respect to the Sardinian constructions at issue here would be a desideratum (cf. the work of Delia Bentley as presented in Bentley 2011).

⁷ Sometimes the term “volitionality” is used for larger concepts, like in Portner (2009: 196 ff, ch. 4.4.1), where it is assumed that “volitional modals take their subject as a semantic argument in the fashion of control predicates”, which actually holds also for ability modals (Portner 2009: 220).

⁸ Epistemic (or sometimes rather: evidential) readings for WANT do exist in other languages, cf. Remberger (2010, 2011) and the references therein.

⁹ Thus the impossibility of getting an epistemic reading is due to compositionality as well and completely independent from the interpretation of the clitic *ci*, which is the same in existentials proper and deontic existentials.

¹⁰ Note that *la panna* is only apparently definite in these examples, as the English translation shows.

¹¹ \neg is the negative operator, \square is the modal operator of necessity. The epistemic interpretation is not taken into account here, since it seems to be difficult to get if not impossible with negation.

¹² Besides Remberger (2005), a very short overview on possible constructions with WANT is given in Patruno (2005); however, the latter provides only a superficial treatment of the most interesting research questions concerning the semantics and syntax of WANT; as for the classification of examples like (i) as evidential, the author obviously has not considered that the evidential meaning here stems from the verb *sembrare*, not *volere*, see also De Mauro (2000) where for exactly this example *volere* is classified as imminential:

- (i) *Sembra che voglia piovere*
 seem.3SG that want.SBJV.3SG rain.INF
 ‘It seems as if it is about to rain.’

¹³ As for the examples taken from the electronic corpus of the mailing list Sa-Limba (cf. Sa-Limba 1999-2011), it has to be emphasized that the data are manually filtered in order to consider only messages from known native speakers.

¹⁴ Note that in what follows the notion “coda” will only be used in case of existential constructions proper (cf. §4 below).

¹⁵ The examples are from Russi; however, as far as the translations are concerned, I could not follow her proposals in all cases since there were a few inconsistencies and errors.

¹⁶ This example is not accepted by everyone (S.C.). The following may be better, although not accepted by everyone iether (C.P.):

- (i) *Volendoci più soldi per comprare la macchina nuova, ho smesso di fumare*
 want.GERUND = LOC more money for buy the car new have.1SG stop.PST.PTCP to smoke
 ‘Since more money are needed to buy a new car, I stopped smoking’

¹⁷ As noted by a reviewer, *loro* and *lui* in (20) could be in principle both, accusative or nominative. The pronouns *io* and *tu* in (18), however, can only be nominative.

¹⁸ E.g. in Modern Greek or regional German, cf. (i):

- (i) Southwestern Regional German
 Es hat keinen Fisch im See.
 expl have.3SG NO.ACC fish.ACC in-the lake
 ‘There is no fish in the lake.’

¹⁹ There are languages, like Romanian, where this function is not expressed by a clitic, but by stress on the auxiliary BE, cf. Cornilescu (2009).

²⁰ This is also valid for Paduan where either a dative clitic or the locative element can appear, cf. (i) from Benincà & Tortora (2009: 23):

- (i) Me (*ghe) vole do euro.
 me.CL.DAT LOC want.3SG two Euros

²¹ I am grateful to the reviewer for pointing this out to me.

²² In Benincà & Tortora (2009:21) the existential operator is dubbed “existential locative”; in order to keep constructions involving a locative clitic clearly distinguished from existentials proper I changed this denomination.

²³ Of course, with “subject position” I refer to both a specifier position (for constituents such as overt DPs) as well as a head position (for the non-overt subject *pro*, which, due to its interpretative properties parallel to clitic object pronouns, should also be considered a clitic). Thus, the existential operator as well as the locative are incorporated in the head representing the preverbal subject position (be it T, I, Subj or Fin; for the proposal that clitics can check an information structural feature in this position, cf. Giurgea & Remberger 2012).

²⁴ The underlying structure of WANT was also analysed as WANT + HAVE (Fodor & Lepore 1998) or, on the basis of Kayne (1993), as WANT + BE + P (Harley 2004).

²⁵ An appropriate context to (33a), according to Silvio Cruschina (p.c.), would be the following: ‘In a church one of the frescos was damaged by an increase of humidity and thus now several flower arrangements are needed in order to cover the damage for aesthetic reasons. The question is where the damaged fresco is located.’ Remember that locative codas seem to be less natural with deontic existentials than final clauses or purpose DPs (cf. §3.1).

²⁶ (36) would be pragmatically less marked for some speakers if the subject pronoun *tu* was omitted, or if there would be a contextually given contrast, e.g. ‘I want to have the table put here; where do YOU want us to put the table?’; for other speakers, the example is ungrammatical in any case.

²⁷ A further example from Russi (2006: 254) with a definite DP is the following:

- (i) Credo che per quelli all’ ultima fila **ci** voglia addirittura
 I-think that for those at-the last row LOC want.SBJV.3SG even
 il binocolo per...
 the binocular for...

Yet, in this case *il binocolo* is not referential (i.e. it does not refer to a specific pair of binoculars) but has an indefinite (or generic) reading, so that (i) can be said to be a true deontic existential.

²⁸ (39c) is marked as less ungrammatical than (39d) since the definite DP *il cane* could be interpreted as a non-referential entity, a dog in general as there could be one for every house.

²⁹ The parallel example in German would be grammatical since in German WANT can have a locative second argument which results in a directional interpretation, cf. (i); in Italian, the structure could be rescued by inserting an infinitive of a verb of motion or state, cf. (ii):

- (i) In den Garten *will* der Hund.
 in the garden want.3SG the dog
- (ii) IN GIARDINO *vorrebbe* andare il cane.
 in garden want.COND.3SG go.INF the dog
 'The dog wants to go into the garden.'

³⁰ In the internet examples like the following are found:

- (i) Ci *si* vogliono più foto come questa!
 LOC SI want.3SG more pictureslike this
 'More pictures like this are needed here.'

However, they are judged as ungrammatical by native speakers. Combinations of locative-deictic *ci* and impersonal *si* are more easily found in infinitive constructions with WANT, since Italian has Clitic Climbing.

³¹ The combination *ci si* is possible, of course, in cases where double *si* (impersonal + reflexive) is avoided.

³² Interestingly, in (48b) in the second occurrence of WANT it is used as an intransitive (unergative) verb.

³³ Russi notes for one of her examples brought forward for early *volerci* that the original form for the example is *si voglia*, but then read as *ci voglia* and listed as first attestation for *volerci* by Battaglia's dictionary (cf. Russi 2009: 176, fn. 9; Battaglia 1961-2002).

³⁴ In Paduan, the parallel construction would be (from Benincà & Tortora 2009: 23):

- (i) Ghe vole do euro.
 him want.3SG two euros

Thus a sentence like (i) is ambiguous between the interpretation of the clitic *ghe* as 3SG dative and the interpretation as a locative/existential, as given before in (2); cf. also fn. 20.

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Negative existentials: A cross-linguistic study

Ljuba Veselinova

The aim of this study is to provide a cross-linguistic outline of the negation strategies in existential predications like ‘There are no mice in the basement’. It is found that there is a strong cross-linguistic tendency to use a special negation strategy in these predications. Furthermore, the special negators, labelled here ‘negative existentials’, show a number of similarities in terms of their semantics, morphosyntax, use and diachronic origin. In light of this, it is suggested that they represent a linguistic construction of its own, and in fact, a separate conceptual domain.

1. Introduction

The purpose of this paper is to investigate the expression of negation in existential sentences such as (1):

- (1) There are no mice in the basement

Cross-linguistically oriented surveys of negation (see, for instance, Dahl 1979, 2010 and Miestamo 2005) tend to cover a domain usually defined as standard negation (SN), for example the negation of simple indicative sentences with an overt verb predicate as in (2):

- (2) Mary doesn't sing

Normally, sentences like (1) are excluded from the domain of SN because in many languages they are negated by a special strategy. Apart from the collection of articles in Kahrel & van den Berg (1994), which present detailed accounts of negation in specific languages, and only as a side topic in Stassen (1997), a systematic survey of the strategies used for the negation of non-verbal and existential predications does not yet exist. Croft (1991) draws attention to negative existentials from a diachronic perspective, discussing their re-analysis as markers of SN.

As will become clear from the presentation below, the use of a special strategy to negate existential sentences is cross-linguistically extremely common. Special negative existentials show a number of

similarities in terms of their semantics, morphosyntax, and diachronic origin. All this suggests that they can be described as a unified cross-linguistic phenomenon. Furthermore, the claim put forth here is that they represent a separate functional domain, whereby absolute absence is predicated rather than relative absence, which is predicated by negation markers proper.

The paper is organized as follows. In section 2, I present the terminology and methodology used here. In section 3, I offer a classification of negative existentials based on a comparison between the negation strategy used for existential predications and that used for standard negation in each language under study. A discussion of negative existentials as a separate cross-linguistic phenomenon is presented in section 4. A summary and some conclusions follow in section 5.

2. Concepts and methodology used in this study

2.1. Concepts

For theoretical introductions to the concepts presented below, see Givón (1979), Hengeveld (1992), Stassen (1997) and Hamari (2007). Short working definitions are provided in this section.

‘Standard negation’ (**SN**) refers to the negation strategy used in main declarative sentences where the predicate is a full lexical verb as in (2) above. SN is used interchangeably with the term ‘verbal negation’. ‘Existential sentence’ refers to sentences which state the plain existence of an object and typically show one or more of the following characteristics: non-referential subject, usually marked by a non-prototypical subject marking; word order that differs from dominant word orders in language X; special agreement or no agreement between subject and predicate (whenever agreement is relevant); a predicate (item) with a special morphology. Thus (1) above is considered an existential sentence because of the dummy subject and its indefinite non-referential notional subject. A sentence such as the one shown in (3) is a regular intransitive sentence.

(3) Dark wizards do not exist

‘Locative-presentative’ constructions, in the sense of Hengeveld (1992), often share features with existential constructions, but, in addition to stating existence, they also specify the location of the predicated entity as in (4).

- (4) There are giant spiders in the forbidden forest

The short definition offered here does not exhaust the topic on affirmative existential constructions; however, it is considered sufficient for the purposes of this paper, as they are not the focus of the current inquiry. The criteria listed above were used to identify grammaticalized existential constructions in the languages under study. Apart from the English one in (4), some examples of such constructions in other languages follow below.

- (5) Bulgarian (Indo-European, Slavic, South)¹ (own data)

Grammaticalized existential construction

- a. Ima tri butilk-i vino v xladilnik-a
have.3.SG.PRS three bottle-PL.F.INDF wine in fridge-DEF.M.SG²
'There are three bottles of wine in the fridge'

Intransitive sentence

- b. Tri-te butilk-i vino sa v xladilnik-a
three-DEF.F.PL bottle-PL.F.INDF wine be.3.PL.PRS in fridge-DEF.M.SG
'The three bottles of wine are in the fridge'

In (5a) the word order is marked, the notional subject *tri butilki* is syntactically an object and does not trigger agreement; in (5b), where the sentence is an intransitive predication, the subject *tri butilki* is marked by the definite article as expected and the copula verb agrees with it in number.

In Swahili (a Niger-Congo language, with an official status in Tanzania, but also spoken as a second language in a number of other countries), the copula takes pronominal agreement in an intransitive locative sentence (cf. (6a)), but it has to take locative agreement when existence is predicated (cf. (6b); see also Marten in this volume).

- (6) Swahili (Niger-Congo, Bantu, Central), (Givón 1979: 744)

- a. Mtoto a-li-kuwa nyumba-ni
child he-PST-be house-LOC
'The child was in the house'

- b. Ku-li-kuwa na mtoto mmoja nyumba-ni
LOC-PST-be with child one house-LOC
'There was a child in the house'

Existence can be also predicated by a nominal predication where no verb categories are allowed. For instance, in Māori, a verb initial Polynesian language spoken in New Zealand, the verb complex which consists of tense-aspect marker and the verb comes first in a verbal predication (cf. (7a)); when predicating existential, a nominal predication has to be used where the notional subject and a possible location are simply juxtaposed (cf. (7b)); no tense-aspect marking is possible in such a predication. Existence is predicated in a similar way in a number of other languages in Australia and Oceania (cf. also Map 2 in the Online Appendix 1).³

- (7) Māori (Austronesian, Malayo-Polynesian, [...] Nuclear Polynesian, Eastern, Tahitic), (Harlow 2007: 151, 153)

- a. E tangi ana te tamaiti
GENR weep TA DET child
'The child is/was crying'

- b. He whare wānanga kei Kirikiriroa
DET house learning PREP Hamilton
'There is a university in Hamilton'

'Existential negation' refers to the negation strategy used in existential sentences such as (1) above. 'Locative negation' refers to the negation strategy used in sentences with a locative predicate and a definite subject as in (8).

- (8) The cat is not on the couch

'Ascriptive negation' refers to the negation strategy used in sentences with a nominal or adjectival predicate⁴ such as (9); the predication of inclusion in a certain class as in (10); the predication of a stable quality as in (11), and finally the predication of a temporary state as in (12) (see Stassen 1997).

- (9) I am Luna

- (10) Luna is a student at Hogwarts

- (11) Luna is tall.
(12) Luna is happy

While the typology of negation in these predications is outside the scope of the current inquiry, an overlap between the negation strategies used in existential and ascriptive predications does exist, which is why a working definition of the latter is necessary here.

'Negation of possession/possessive negation' is used to refer to sentences which express negated predicative possession such as (13). All the other kinds of possessive constructions are ignored here.

- (13) Mary does not have a car

'Stative predication' is a cover term for all predications described above as ascriptive, locative, existential and possessive. Likewise, if one and the same negator is used in all these predications, this is referred to as 'stative negator'.

All negators that differ from SN are referred to as 'special negators'.

The term "pro-sentence" was introduced by Bernini & Ramat (1996: 89) to describe "sentences with the same propositional content as the utterance of the preceding context". In English two words can be used as pro-sentences: *not* as in (14) and *no* as in (15).

- (14) Are you coming or not?
(15) No, [I am not coming]

'Negative-Existential cycle' refers to the diachronic cycle for the evolution of negation suggested by Croft (1991).

2.2. Methodology

The current study seeks to explore the cross-linguistic distribution and variation of negative existentials. I use two kinds of samples: one with world-wide coverage, which I call a 'macro-sample'; it consists of 95 genealogically and geographically diverse languages (cf. Online Map 1). To test the generalizations suggested by the macro-sample and also to get more in-depth diachronic information, I use several 'micro-samples', in particular, comparative data from three language families, Slavic, Uralic and Polynesian.

The data used for this study were collected with the aid of a translation questionnaire.⁵ The data sources are grammars as well as elicitation from language experts.

The special negative existentials are first identified on the basis of a comparison between the negation strategy used for existential sentences and the expression of SN. Explicit criteria for what counts as difference are detailed in section 3 below. These criteria also serve to postulate structural types of negative existentials based on the degree they differ from SN.

Once identified, the properties negative existentials have in common are discussed. The semantic maps method is used for the analysis of their content and various uses; the analysis is accompanied by a structural and constructional description. The reasons for choosing semantic maps over other methods are as follows. It is a function-usage based approach, but it also allows a visualization of rather abstract data. Following this method, the first step is to identify all the functions of a particular lexical item or a gram. There is no need to commit to functions which appear basic and others that appear secondary. The second step is to decide on the spatial arrangement of the identified functions. Generally, their arrangement has to reflect their closeness in semantic space in as many languages as possible.⁶ The map has to be the same for all languages. If the arrangement is changed for one language, one has to go back and re-do the map for all languages. By way of conclusion, I discuss the origin of negative existentials.

3. Classification of negative existentials on the basis of the comparison with SN

Four types of situations have been found with respect to whether the various negation strategies of a language are different or similar. The first is that of ‘prototypical difference’. This involves a complete formal and constructional difference between the expressions used for the negation of existential constructions and those used for SN. For instance, in Turkish SN is expressed by a suffix *-me* on the main verb (cf. (16b) below). Existential predications are negated by the word *yok* ‘not exist’ which shows some verbal properties. This is illustrated by (16d) below.

(16) Turkish (Altaic, Turkic), (Van Schaaik 1994: 38-39, 44-45)

- a. Gel-ecek
 come-FUT
 ‘(She) will come’

b. Gel-me-yecek

come-NEG-FUT

‘(She) will not come’

c. Su var-dı

water exist-PST

‘There was water’

d. Su yok-tu

water NEG.EX.PST

‘There was no water’

There are also some intermediate cases. The first one is when SN and the negative existential are formally the same, but one is a free form and the other is bound. For instance, in Kannada, a South Dravidian language spoken in southern India, SN is expressed by the suffix *-illa*. Locative, existential and possessive predications are negated by *illa* as a free-standing form, in a predicate position (cf. (17b) below).

(17) Kannada (Dravidian, South), (Sridhar 1990: 112, 220)

a. Anil ka:le:jige ho:gu-vud-illa

name college.DAT go-NONPST.GER-NEG

‘Anil won’t/doesn’t go to college’

b. Khaja:neyalli haNa illa

treasury.LOC money NEG.EX

‘There is no money in the treasury’

The second case of intermediate difference is when SN and the negative existential are formally the same, but require different syntactic constructions for the negation of existential predications and for verbal predications. For instance, in Māori SN is expressed by a negative *kāore* ‘not exist’ in a complex clause. The verb *kāore* is in the main clause and the negated proposition is in the subordinate clause. When negating an existential predication *kāore* is used in a simple clause (cf. (18c)).

- (18) Māori (Austronesian, Malayo-Polynesian, [...] Nuclear Polynesian, Eastern, Tahitic), (Harlow 2007: 161-162, 153-154)

- a. E tangi ana te tamaiti
GENR weep TA DET child
 ‘The child is/was crying’
- b. Kāore te tamaiti e tangi ana
NEG DET child GENR weep TA
 ‘The child is/was not crying’
- c. He whare wānanga kei kirikiriroa
DET house learning PREP Hamilton
 ‘There is a university in Hamilton’
- d. Kāore He whare wānanga i Taihape
NEG DET house learning PREP Taihape
 ‘There’s no university in Taihape’

Thus, *illa* (free form) and *-illa* (bound form), as well as *kāore* as SN in a complex clause and *kāore* as a negative existential in a simple clause, are considered to be intermediate cases of different negation markers. The first one is considered to be a case of morphological difference, the second a case of constructional difference. The languages are classified accordingly.

A somewhat more complex case is represented by Swedish in this sample, but what is said about Swedish applies, in varying degrees, to all Germanic languages. In Swedish, existential predications can be negated by the SN marker *inte*, as shown in (19d). However, another possibility for negating these predications is by using a negative quantifier, *ingen* (or relevant forms), shown in (19e). Pragmatically, (19e) is the unmarked choice.

- (19) Swedish (Indo-European, North Germanic), (own data, checked by Mikael Parkvall, p.c.)

- a. Maia sjung-er
Maia sing-PRS
 ‘Maia sings’
- b. Maia sjung-er inte
Maia sing-PRS NEG
 ‘Maia doesn’t sing’

- c. Det finns ost i kylskåp-et
it be at cheese in fridge-DEF
'There is cheese in the fridge'
- d. Det finns inte ost i kylskåp-et
it be at NEG cheese in fridge-DEF
'There isn't any cheese in the fridge'
- e. Det finns ingen ost i kylskåp-et
it be at any cheese in fridge-DEF
'There is no cheese in the fridge'

Generally, the choice between SN and the negative quantifier is contingent on a complex interplay of factors relating to polarity, quantification and scope (Östen Dahl, p.c.). Spelling them out in full detail is not possible because of space limits. For the purposes of identifying negation strategies of existential predications that differ from SN, the Swedish case represents yet another intermediate situation which has to be allowed its own structural type. Furthermore, as we will see later, there are languages where negative existentials are used instead of negative quantifiers/indefinite pronouns. So there is definitely a connection between negation of existence and indefinite pronouns (see also Haspelmath 1997 for a detailed discussion of this issue).

Finally, there are languages where one and the same negation strategy, SN, is used for the negation of verbal and existential predications. This is illustrated by Modern Greek in (20) below.

(20) Modern Greek (Indo-European, Hellenic)

- a. Tin agap-ó
she.ACC love-1SG
'I love her'
(Miestamo 2005: 267)
- b. Den tin agap-ó
NEG she.ACC love-1SG
'I don't love her'
(Miestamo 2005: 267)
- c. Iparh-un prásin-a liontári-a
exist-3PL green-PL.NOM lion-PL.NOM
'Green lions exist'/'There are green lions'
(Gerasimia Melissaritou-Matsson, p.c.)

- d. Prásin-a liontári-a den ipárh-un
 green-PL.NOM lion-PL.NOM NEG exist-PL
 ‘Green lions do not exist’/ ‘There are no green lions’
 (Gerasimia Melissaratou-Matsson, p.c.)

Table 1 provides a synopsis of the findings of the cross-linguistic survey on negation existential predications. The degrees of difference between the two types of negation are translated into structural types. Their geographic distribution is presented on the Online Map 1.

Table 1. Quantitative distribution of negative existentials.

TYPE OF NEGATIVE EXISTENTIAL	NUMBER OF LANGUAGES	
Formally and constructionally different from SN	42	63 (66.32%)
Negative existentials and SN are formally identical but morphologically different	4	
Negative existentials and SN are formally identical but are used in different constructions	17	
SN or a negative quantifier alternate for the negation of existence	1	1 (1.1%)
No special negative existential	31	31 (32.63%)
TOTAL	95	

The results presented in Table 1 show three groups of negative existentials. Among them the negative existentials which are both formally and constructionally different from SN predominate. Typically, a language has one negative existential only. However, it is also possible for a language to have more than one. In my current dataset, there are four languages, Khalkha (Mongolic, Mongolia), Hausa (West Chadic, Nigeria), Mokilese (Austronesian, [...] Ponapeic, Micronesia) and Warao (Isolate, Venezuela), that have two different negative existentials. This is exemplified by Hausa below.

(21) Hausa (Afro-Asiatic, Chadic, West), (Newman 2000: 361)

- a. Bábù mâi
 NEG.EX oil
 ‘There isn’t any oil’
- b. Bâ mâi
 NEG.EX oil
 ‘There isn’t any oil’

The forms *bābù* and *bá* appear to be in free variation. There is no agreement on whether the two forms are historically related.⁷ Further discussion of this particular issue goes beyond the scope of this section. For the purposes of identifying and classifying negative existentials, may it suffice to say that the co-occurrence of several negative existentials might be more common than it appears at a first glance, since the languages where they are observed are spoken in very different parts of the world and obviously come from very different language stocks. I will return to issue of double negative existentials in the section on diachrony (cf. section 4.3).

Special negative existentials occur in 63 languages, that is 66.32% of the samples. In addition to this quantitative predominance, they are also widely spread geographically. As shown on the Online Map 1, they show no special geographical or areal distribution, but rather occur in all the parts of the world. The languages without special negative existentials, on the other hand, are concentrated in Western Europe, parts of South East Asia and parts of Central and Southern South America. While it may be premature to draw strong conclusions about areal distribution based on a relatively small sample, some comment on what we currently see is still warranted. Both Europe and South East Asia are linguistic areas with rather distinct character that sets them apart from the rest of the world. The absence of special negative existentials, which are otherwise very common in the rest of the world, may be yet another property that should be added to the highly distinct profile of these areas. I am not aware of Southern South America forming such a linguistic area, so more data and research are necessary to offer a meaningful hypothesis for the absence of negative existentials there.

It should also be noted that special negative existentials outnumber the grammaticalized affirmative existential constructions by about 13%. According to the definition of a grammaticalized existential provided in section 2.1, there are 50 languages (52.63%) which have such a construction. The geographical distribution of grammaticalized affirmative existential constructions is shown on the Online Map 2. Observe that the occurrence of a special negative existential does not necessarily correlate with the occurrence of a grammaticalized affirmative existential. Rather, it is fully possible for a language not to have a grammaticalized existential construction, but to exhibit a special expression for the negation of existence. Such languages appear to be especially common in the Americas in the current sample, but they are also found in parts of North East Asia.

4. Negative existentials as a separate construction and functional domain

4.1. Semantic characteristics

4.1.1. General overview

As stated in 2.2 above, the semantic maps method is used for description of the semantics of the negative existentials. All in all, 26 functions were identified for negative existentials. They are listed in Table 2 below, in decreasing order of frequency. All of them are exemplified in the Online Appendix 2. Only some of the most frequently occurring ones are illustrated below. The spatial distribution suggested for these functions in a semantic map is shown in the example maps in Figure 1, as well as on the maps within the Online Appendix 1.

The headings in Table 2 indicate the name of a specific function (FUNCTION NAME), a short description of its content (SHORT DESCRIPTION), and the number of languages where this function is observed with the special negative existential in that language (NR OF LANGS).

Table 2. Functions of negative existentials identified on semantic maps.

FUNCTION NAME	SHORT DESCRIPTION	NR OF LANGS
NEG.EX	Negation of existence	63
NEG.POSS	Negation of possession	53
NEG.LOC	Negation of location	33
PRO-SENTENCE	The word used has the same propositional content as the preceding proposition	22
-TENSE	The negative existential does not admit any tense-aspect marking.	20
NO	The negative existential is also used as a short answer 'no'	16
NONE	The negative existential is also a negative indefinite pronoun	13
SN	The negative existential is also used as a standard negator	10
WITHOUT	Use of the negative existential as a pre-/postposition meaning 'without' or as a privative marker	10
ABSENT, AWAY, GONE	The negative existential is also used with any of these senses	9
NEG.EMPHATIC	The use of the negative existential produces an emphatic statement	9
NOTHING	The negative existential also has the sense 'nothing'	8

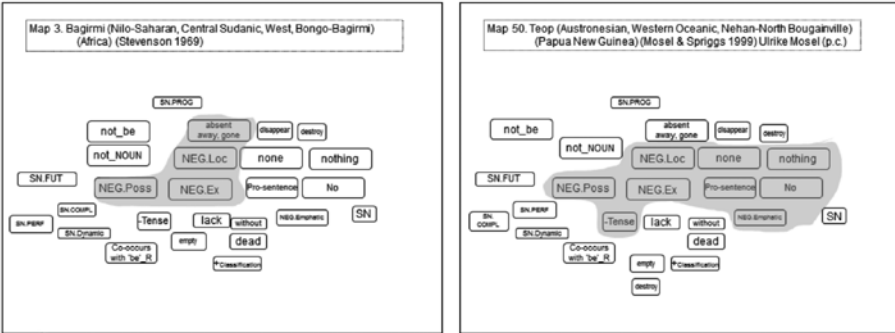
FUNCTION NAME	SHORT DESCRIPTION	NR OF LANGS
NOT_NOUN	Use of negative existentials as a negator for nominal constituents	8
NOT_BE	The negative existential is a general negative copula	7
LACK	The negative existential also has the sense 'lack'	6
SN.FUT	The negative existential is used as marker of SN for future constructions	3
SN.PRF	The negative existential is used as marker of SN for perfective or experiential constructions	2
DEAD	The negative existential also has the sense 'dead'	2
DESTROY	The negative existential also has the sense 'destroy'	1
DISAPPEAR	The negative existential is related to 'disappear'	1
EMPTY	This word is used with negative existential function as well	1
CO-OCCURS WITH 'BE'_RESTRICTED	The negative existential may be used to negate the copula verb	1
+ CLASSIFICATION	There are different negative existentials depending on the semantic properties of the noun phrase: animate, human, age	1
SN.DYNAMIC	The negative existential is used as a standard negator for dynamic verbs	1
SN.COMPL	The negative existential is used as a standard negator for completive aspect	1
SN.PROG	The negative existential is used as a standard negator for verbs in progressive aspect	1

As shown in Table 2, negative existentials show a rather high number of functions, especially when compared with the semantic maps of other linguistic phenomena, for instance Haspelmath's (1997) map for indefinite pronouns. The functions of negative existentials span from negating very general notions, such as existence, possession and location, to more specific lexical meanings such as 'dead', 'destroy' and 'disappear'. In order to achieve some economy of description when some senses were considered so close as to be almost identical, they were put in the same box, that is, they were considered to be the same function. This was done, for instance, with the grouping of 'absent', 'away' and 'gone'. In addition, the restriction

of a negative existential to a specific category is seen as a separate function. Specifically, in a number of languages, negative existentials are either restricted to the present tense or the predication as a whole does not admit any tense-aspect marking (cf. data from Māori in (7b) above). This is considered to be a separate function labelled *-TENSE*. In most grammatical descriptions this latter property is ascribed to morphology, and the negative existential in question is described as a defective lexical item. However, it is more appropriate to see this as a matter of semantics rather than morphology for the following reasons. First, this property of negative existentials is cross-linguistically very common. Second, existential predications in general, both affirmative and negative, are stative predications that postulate the presence or absence of something in an absolute way (see section 4.1.2). This does not combine well with tense-aspect marking, which may explain why such marking is banned in the existential structures of many languages.

The functions listed above are arranged on the semantic map in a way such that optimal cross-linguistic coverage is achieved. Senses that tend to co-occur were positioned in immediate adjacency to each other. The reader will have noticed that the senses identified for negative existentials show different degrees of cross-linguistic frequency. This too was a guiding principle in the establishment of their spatial arrangement. The most frequent ones, such as negation of existence (*NEG.EX*) and negation of possession (*NEG.POSS*), are put in the centre of the map. Another frequently recurring sense is negation of location (*NEG.LOC*), (see more on this issue in section 4.1.2). Other functions of negative existentials that appear to be cross-linguistically common are as follows: their use as pro-sentences, as indefinite pronouns, and, finally, their ‘timelessness’ as pointed out above. Senses that appear less frequently are nonetheless important, since they are indicative of the historical development of negative existentials. As we shall see in section 4.3 below many negative existentials appear to originate via re-analysis of lexemes with a negative content. Besides, one of the advantages of semantic maps is the possibility they offer to visualize different stages of language change. In this case, it can be shown that the less frequent senses represent a stage in the development of negative existentials. Spatially, less frequent senses are put in the periphery of the map. Some examples of semantic maps for negative existentials in specific languages follow in Figure 1.

Figure 1.



The maps for the negative existentials in Bagirmi (Nilo-Saharan, Chad) and Teop (Austronesian, [...] Nehan-North Bougainville, Papua New Guinea) show two different kinds of functional load. In Bagirmi, the negative existential *g^woto* is used for the negation of existential (22a), possessive (22b) and locative predications (22c); its (presumably older) lexical sense, ‘absent’ is still preserved and used in glosses in the grammar.

(22) Bagirmi (Nilo-Saharan, Central Sudanic), (Stevenson 1969: 165-166)

- a. Kabkinja-ge g^woto
egg-PL be.absent
‘There are no eggs’
- b. Ma g^woto-m-jo nyinja
I be.absent-1SG-POST spear
‘I have no spear’ (lit.: I absent-me-to spear)
- c. Ne g^woto lol(o)
he be.absent here
‘He is not here’

In Teop, the negative existential is used for the negation of existence (23a), possession (23b), and location (23c). However, it has a number of other functions as well: it is used as a pro-sentence (23d) and as the general word for ‘no’ (23e); it can also be used as an emphatic negator in an already negated sentence (23f), and it is also an indefinite pronoun (23g). The Teop data presented below provide a good illustration of a multifunctional negative existential. In addition, two other facts are noteworthy. First, when the negative existential

ahiki is used, even proper names such as *Gaagin* in (23c) are treated as common nouns, in that they have to be preceded by the indefinite/non-specific quantifier *ta* (Ulrike Mosel, p.c.). Thus, even with locative negation, the negative existential still requires an indefinite subject. Second, the use of the negative existential *ahiki* as an indefinite pronoun needs to be brought up. This topic has been discussed at length in (Haspelmath 1997). The author pointed that this is a special characteristic of the languages in Oceania, where indefinite pronouns do not exist as a separate class.

(23) Teop (Austronesian, Western Oceanic, Nehan-North, Bougainville)

- a. Na hiki vakis nana ta inu vai ta mataa
 TAM NEG still IPFV:3SGNSP house DEM NSP good
 ‘There is still not a good house’
 (Mosel & Spriggs 1999: 49)
- b. Ahiki ta maa taba te-ara ta maa mataa
 NEG NSP PL thing PREP-1:INCL NSP PL good
 ‘We did not have good things’ (lit.: There were not our good things)
 (Mosel & Spriggs 1999: 49)
- c. Ahiki ta Gaagin ou
 there.is.not any Gaagin there
 ‘Gaagin is not there’
 (Ulrike Mosel, p.c.)
- d. Eamna va-kiu vatatananom geahiki
 2PL TAM COOP-work together IPFV.2PL OR NEG
 ‘Do you work together or not?’
 (Mosel & Spriggs 1999: 48)
- e. -a ba tama-riori? -ahiki, a maa moon koa
 ART PL father-3PL -NEG, ART PL woman only
 ‘Their fathers? No, only women’
 Mosel & Spriggs 1999: 48)
- f. Te-a vaasusus-ti o si vahara beiko saka
 PREP-ART teach-OBJ ART little group child NEG
 o top class haa-no ahiki
 ART top class NEG-IPFV.3SG NEG
 ‘To teach the little children, not the top class, no’
 (Mosel & Spriggs 1999: 49)

g. Ahiki ta peha te-nam to nata nana
 NEG NSP one PREP-1EXCL REL know IPFV.3SG
 ‘None of us knows it’ (lit.: there is not one of us who knows it)
 (Mosel & Spriggs 1999: 50)

i. Ahiki ta taba to tapaku,
 NEG NSP thing REL happen
 ahiki ta vaasusahun to tavus
 NEG NSP fight REL break out
 ‘Nothing happened, no fight broke out’ (lit.: There was not a thing
 that happened, there was not a fight that broke out)
 (Mosel & Spriggs 1999: 50)

The negative existentials in both Bagirmi and Teop can be said to reflect properties that are prototypical for negative existentials world-wide, in that they show functions which are cross-linguistically very frequent.

4.1.2. Negative existentials as predicators of absolute absence

The use of negative existentials to negate locative predications is frequently reported in grammars, usually without any detailed discussion. However, it has to be pointed out that in a number of cases, the negation of locative predications can be covered by either the existential or some other negator, depending on the intended sense.

Data from Uralic languages will be used to illustrate this. In Erzya, a Mordvin language from the Volga region in Russia, negation of locative predications can be done by all three available negators, i.e., the SN marker *a*, the ascriptive negator *avol’* and the existential negator *aras’*, as is shown in (24).

(24) Erzya (Uralic, Mordvin) (Hamari 2007: 91)

- a. Ezéme-ś a tarka-so-nzo
 bench-SG.DEF.NOM NEG place-INE-PX.3SG
 ‘The bench is not in its place’
- b. Ezéme-ś avol’ tarka-so-nzo
 bench-SG.DEF.NOM NEG place-INE-PX.3SG
 ‘The bench is not in its place’
- c. Ezéme-ś aras’ tarka-so-nzo
 bench-SG.DEF.NOM NEG place-INE-PX.3SG
 ‘The bench is not in its place’

Hamari (2007: 177) comments that “when *a* or *avol*” are used, the scope of negation is restricted to the locative phrase, whereas in clauses with *araś*, the negation is much more categorical”. Specifically, when speakers produce sentences such as (24a) or (24b), the most common interpretation is that ‘the bench’ is not in its place, but it is supposed to be in some other place. The contrast with some other location of ‘the bench’ is always present, even though the other location may not be mentioned explicitly. When a sentence such as (24c) is produced, the default interpretation is that the presence of ‘the bench’ is denied without any further reference to its possible presence or existence in another location. The English translations of the examples under (24) do not reflect these nuances of meaning, but Hamari (2007: 91) states that speakers of Erzya interpret these utterances differently. The important point to stress here with regard to the semantics of the negative existential *araś* is that it predicates absolute absence (24c). As such, it is banned from constructions with contrastive focus.

Similar data can be reported for Hungarian where the negative existential *nincs* is completely excluded from constructions of contrastive focus and the standard negator *nem* has to be used instead.

(25) Hungarian (de Groot 1994: 150)

- a. Nem Péter van itt, hanem János
NEG Peter be.3SG herebut John
 ‘It is not Peter who is here, but John’
- b. * Péter nincs itt, hanem János
Peter NEG.EX here but John

This observation about negative existentials appears to reflect a strong cross-linguistic tendency and may even be a universal. As shown in Table 2, negative existentials can be used in locative predications in 33 languages, that is to say, in half of the 63 languages with negative existential (cf. Table 1 above for quantitative estimates). For all of these 33 languages, it holds true that, if a negative existential is used in locative statements, it will deny the existence of an entity in an absolute, categorical way. No contrast with another entity or another location is possible. The use of negative existentials in locative predications typically involves some further complication regarding, for instance, the marking of pivot.⁸ As shown by data from Teop in (23c) above, repeated below as (26), proper nouns are treated as common nouns when negated by the negative existential. Specifically, the

indefinite quantifier *ta* has to precede the proper noun *Gaagin* in this construction; *ta* is otherwise not used with proper nouns.

(26) Teop (Austronesian, Western Oceanic, Nehan-North, Bougainville)

Ahiki ta Gaagin ou
there.is.not any Gaagin there
'Gaagin is not there'
(Ulrike Mosel, p.c.)

In Bulgarian, the pivot of this construction is marked by an object clitic when the negative existential is used; no such marking is either required or possible when the standard negator is used (cf. the data in (27) below). It should also be noted that contrastive focus with the negation of location is possible in (27a). No such contrast is possible when the negative existential is used in (27b). Further information about the location of the pivot has to be given in a new sentence.

(27) Bulgarian (Indo-European, South Slavic) (own data)

- a. Todor ne e v kəšti a na kino
Todor NEG is in home but at cinema
'Todor is not at home but at the movies'
- b. Todor go njama (v kəšti).Toj e na kino
Todor 3.SG.OBJNEG.EX (in home) he is at cinema
'Todor is not at home. He is at the movies'

The encoding of absolute negation in negative existentials is made even more apparent in languages where negative existentials simply cannot be used for the negation of locative predications. As already pointed out, half of the languages with the negative existentials allow their use in locative predications; however, in the other half, such use is banned and some other negator has to be used instead. This is illustrated by Turkish below.

In Turkish, the particle *değil-* is used to negate locative predications as shown in (28b), which is the negated counterpart of (28a). The negative existential *yok* may be used for their negation only in very special cases (van Shaaik 1994: 41-45). For instance, the context for the statement in (28c) is that the speaker is looking at holiday pictures and makes the observation that the listener is missing on them. Thus, the statement in (28c) is a statement about absolute

absence and consequently the existential negator is chosen. In (28d), the speaker is talking about not being present at a party; again the statement is about categorical absence and the negative existential is preferred for its predication.

(28) Turkish (Altaic, Turkic), (van Shaaik 1994)

- a. Ev-de-ydi-k
house-LOC-PST-1PL
'We were at home'
- b. Ev-de değil-di-k
house-LOC not-PST-1PL
'We were not at home'
- c. Amasen yok-sun
But you not.exist-2SG
'But you are absent'
- d. O zaman ben yok-tu-m
then I not.exist-PST-1SG
'Then I wasn't there'

Finally, data from Kiowa (Kiowa-Tanoan, New Mexico, USA) shed further light on the marking of absolute negation in negative existentials.

(29) Kiowa (Kiowa-Tanoan) (Stassen 1997: 94, citing Watkins 1980: 261)

- a. E:go yi: ol è-cel kicoy-ka
here two hair 3DU-be in soup-in
'There are two pieces of hair in the soup'
- b. Kóyǵú háyá á-t'ó-dê nó pày+hé gyà-dǵ-mê
kiowa.INV somewhere 3PL-stay.HSY and sun+without PL-be-HSY
'The Kiowas were living somewhere and there was no sun'

There is no grammaticalized existential construction in Kiowa; existence is predicated by intransitive sentences. An example of such a predication is shown in (29a). The statement in (29b) is about the absence/non-existence of the Kiowas at a certain mythic time. There is no negative element in this sentence. The postposition *-hé* 'away,

gone' can be used with either incorporated or non-incorporated subject to express the sense of non-existence. When used with an incorporated subject as in (29b), the non-existence is of more stable/permanent nature. Thus (29a) represents a predication of affirmative existence in Kiowa while (29b) shows an expression of negated existence. These examples are very instructive about the nature of negative existentials: they are used to make a statement about the absence of something, rather than negate its existence.

4.1.3. Negative existentials and their interaction with SN

It is commonly noted that negative existentials interact with SN synchronically and diachronically. Croft (1991) suggests that negative existentials are one possible source for SN markers via the Negative Existential Cycle. A full discussion of this cycle falls outside of the scope of this paper (see Veselinova 2010, Veselinova *under revision*). As suggested by the inventory of functions in Table 2 above, negative existentials are used as markers of SN in 10 languages, that is, 15.87% of the languages with negative existentials. There are also languages where the negative existential is used as a SN marker for a specific tense-aspect category or a major group of verbs. All together, the languages in this latter group amount to 6, that is, about 10% of the languages with negative existentials. In the semantic maps, SN as a function is listed apart from the functions where the negative existential is used as SN marker for a specific category. The reason for this is that data both from the macro- and micro-samples suggest that there are different paths by which negative existentials come to be used as general markers of SN and as markers of SN for a specific category.

Negative existentials appear to evolve into general markers of SN via their uses as pro-sentences and then as general words for 'no', typically used as clause external tags. This hypothesis is based on the cross-linguistic frequency of these senses paired up with corpus data. The use as a pro-sentence is more frequent than the use as a short word for 'no' (cf. Table 2). As indicated in the same table, both of these senses are cross-linguistically more common than the use of negative existential as SN marker. Following the theory on semantic maps, these facts are taken to represent different diachronic stages in the interaction of negative existentials with SN. Data from the micro-samples support this hypothesis. It is illustrated below by data from Russian (Indo-European, East Slavic, Russia) and Sino-Russian (Russian-based Pidgin, Kyakhta and vicinity, Russian-Mongolian Border).

In the Russian National Corpus,⁹ the negative existential *net* is tagged either as a predicate (30a), or as a sentence particle/short word ‘no’ (30b) or as a pro-sentence (30c).

(30) Russian (Indo-European, East Slavonic) (Russian National Corpus)

- a. Sil u neë net
strength.F.PL.GEN in her NEG.EX
‘She does not have any strength’ (lit.: Strengths in her there-is-not)
(Russian National Corpus [Ordinamenti // “Screen and scene”,
2004.05.06])
- b. Net ja tak ne дума-l i tak ne мечта-l
no I so NEG think-PST.SG.M and so NEG dream-PST.SG.M
‘No, I neither thought nor dreamed that way’
(Russian National Corpus, Evgenij Grishkovets, Odnovremenno
(2004))
- c. I tut my ne zna-em v kak-oj
and PART we NEG know-1PL.PRS in what-SG.M
moment my почувству-ем а v kak-oj net
moment we feel-1PL.PRS but in what-3SG.M not
‘And we don’t know at which moment we feel and at which not’
(Russian National Corpus, Evgenij Grishkovets, Odnovremenno
(2004))

Frequency counts on the disambiguated part of the corpus show that *net* is used much more frequently as a sentence particle/pro-sentence than as a main predicate. Although this tendency is especially noticeable in informal speech, the same tendency is observed in formal speech as well as in fiction. Non-fiction texts are the only part of the corpus where the use of *net* as a main predicate prevails over its use as a sentence particle. These texts include technical, business, and non-fiction texts.¹⁰ In Table 3 below, the percentages indicate the proportion of the hits of *net* for a particular function (predicate or sentence particle/pro-sentence) and the total hits for *net* in each genre.

Table 3. Counts for ‘net’ in the Russian National Corpus.

			NET ‘PREDICATE’		NET ‘SENTENCE PARTICLE’ & ‘PRO-SENTENCE’	
	<i>T1</i>	<i>T2</i>	<i>T3</i>	% of <i>T2</i>	<i>T4</i>	% of <i>T2</i>
Fiction	314294	6622	2757	41%	3865	58,37%
Non-fiction	2162109	2918	1695	58,09%	1219	41,78%
Formal speech	229663	874	342	39,13%	532	60,87%
Informal speech	17356	143	45	31,47%	99	69,23%

T1 Total number of word tokens in each genre

T2 Total hits of *net* in each genre

T3 Total hits of *net* tagged as a predicate

T4 Total hits of *net* tagged as a sentence particle/pro-sentence

The data on the Russian negative existential *net* show that *net* is expanding its domain of use towards functions that are cross-linguistically common for negative existentials. As shown above, it is increasingly used as pro-sentence, (30c), or sentence particle/short word for ‘no’ (30b). The latter use can also be described as a sentence tag, external to the proposition. A form related to *net*, *netu*, is adopted as SN in some Russian-based pidgins such as Sino-Russian.

- (31) Sino-Russian (Pidgin, Kyakhta and vicinity, Russian-Mongolian Border), (Stern 2002: 23)

Naša ego ponimaj netu
 1PL 3SG understand NEG
 ‘We don’t understand him’

The use of negative existentials as negators for a particular tense-aspect category appears to result from their tendency to be used in specific constructions. This is illustrated by data from Hawai’ian (Austronesian, [...] Nuclear Polynesian, Hawai’i, USA) below. In this language, the SN marker ‘*a’ole* and the negative existential ‘*a’ohe* alternate in several constructions shown in (32) and (33).

- (32) Hawai’ian (Austronesina, Malayo-Polynesian, Polynesian, Nuclear, Eastern, Marquesic), (Elbert and Pukui 1979: 142)

a. ‘A’ohe o kana mai
 NEG LOC tens towards.speaker
 ‘There is no limit (idiom)’

- b. 'A'ole o kana mai
NEG LOC tens towards.speaker
'There is no limit (idiom)'

As the data in (32a-b) show, the negative existential 'a'ole alternates with the SN marker 'a'ole for the negation of existential predications. However, 'a'ole is also used as a SN when the predication is about an action and the subject is marked by the possessive marker o or a¹¹ (cf. (33b-d)).

(33) Hawai'ian (Polynesian, Nuclear, Eastern, Marquesic)

- a. 'A'ole i hele ke kanaka
NEG PFV.NEG go DET man
'The man did not go'
(Elbert and Pukui 1979: 142)
- b. 'A'ohe o lākou hana
neg.ex POSS 3PL work
'They didn't work'
- c. 'A'ohe ā lākou hana
NEG.EX POSS 3PL work
'They had no work'
(Kahananui and Anthony 1975: 372)
- d. 'A'ohe o'u 'ike/lohe au iā ia
NEG.EX 1SG.POSS see/hear I OBJ 3SG
'I can't see/hear him/her'
(Kahananui and Anthony 1975: 346)

It is unclear what triggers the selection of 'a'ole or 'a'ohe. Obviously, the predication in (33a) is a verbal one, whereas the constructions in (33b-d) show some properties of action nominals (cf. Comrie & Thompson 1985: 383, and Koptjevskaja-Tamm 1993: 209, 211, 256), in that the subjects are marked by the genitive marker. In the current literature, the only source in which it is suggested that the two negators 'a'ole and 'a'ohe stand in complementary distribution is Kahananui & Anthony (1970: 346). These authors observe that when 'a'ohe is used in sentences with genitive subjects, the action expressed by the verb is incomplete. Thus the examples in (34) contrast with those in (35) in terms of aspect: (34a-b) are imperfective, by contrast with (35a-b), which are not.

(34) Hawai'ian (Polynesian, Nuclear, Eastern, Marquesic), (Kahananui and Anthony 1970: 346)

- a. 'A'ohe o'u 'ike/lohe aku iā ia
NEG.EX 1.POSS see/hear DIR.away.from.speaker PART 3SG
 'I can't hear him/her' (lit.: not-exist my seeing/hearing away from him/her)
- b. 'A'ohe ona 'ike/lohe mai ia'u
NEG.EX 3.POSS see/hear DIR.towards.speaker 1SG
 'S/he can't hear me' (lit.: not-exist his/her seeing/hearing towards me)

(35) Hawai'ian (Polynesian, Nuclear, Eastern, Marquesic), (Kahananui and Anthony 1970: 346)

- a. 'A'ole hiki ia'u ke 'ike/lohe aku iā ia
NEG can 1SG PART.MOD see/hear DIR.away.from.speaker PART 3SG
 'I can't hear him/her'
- b. A'ole hiki iā ia ke
NEG can PART 3SG PART.MOD
 'ike/lohe mai ia'u
see/hear DIR.towards.speaker 1SG
 'S/he can't hear me'

What is of particular interest in this context is how the special existential negator *'a'ohe* expanded into the domain of verbal negation. Speculations concerning the possible ways in which such expansion might have evolved are offered below, beginning with a discussion of the frequency of use of the two negators.

According to Schütz *et al.* (2005: 23-24), *'a'ohe* is substantially less frequent than *'a'ole*, and it is used with noun phrases only. Both of these generalizations are confirmed by my counts in newspaper texts from 1864. In blogs dated 2010, *'a'o'he* exhibits very low frequency as well, but a greater variation in the kinds of words it collocates with is observed (see Table 1 and Table 2 in Appendix at the end of this paper). The frequency counts reported here were done on the following kinds of text: Bible translations (see <http://baibala.org>), and concordances of *'a'ole* and *'a'ohe* as keywords in context in newspaper texts from 1864, and blogs dated 2010. The frequency counts in the Bible translations are summarized in Table 4. In this table, the

numbers under *‘a’ohe* or *‘a’ole* indicate the number of verses in which these forms occur. The summary of the frequency counts in newspaper texts from 1984 and blogs dated 2010 follow in Table 5.

Table 4. Frequency counts in Hawai’ian Bible translations.

YEAR	‘A’OLE	% OF T1=31103		‘A’OHE	% OF T1=31103
1839	5924	19,05%		507	1,63%
1868	5959	19,16%		544	1,75%
1994	5915	19,02%		547	1,76%

T1 = Total number of verses

Table 5. Frequency counts in Hawai’ian newspaper texts from 1864 and blogs dated 2010.

YEAR	T2	‘A’OLE		‘A’OHE	
		N	% of T2	N	% of T2
1864	66997	773	1,15%	28	0,04%
2010	391854	2139	0,55%	173	0,04%

T2 = total number of word tokens in each text collection

N = number of hits of *‘a’ole/‘a’ohe*, respectively

A’ohe is very infrequent in the texts studied here (0.04-1.76% of the total number of word tokens). It appears to be more frequently used in the Biblical texts than in newspapers and blogs, so its frequency may be genre dependent. However, there is not much difference between the findings of the analysis of Bible texts and those of the analysis of the newspapers and blogs. Consequently, it is cautious to hypothesize that the frequency of *‘a’ohe* has not changed very much in the past 150 years. *‘A’ohe* is nonetheless used for the negation of existential and possessive predications, cf. (36) below, and also as SN, when the predication is about an action and has a genitive subject. As cited above, Kahananui & Anthony (1970) consider the latter use to imply that the action expressed by the verb is incomplete. Since there is no doubt that *‘a’ohe* was first used for the negation of existential and possessive predications, it seems reasonable to suggest that it has a stable association with the constructions shown in (36).

(36) Hawai’ian (Austronesian, Malayo-Polynesian, [...] Polynesian, Nuclear, Eastern, Marquesic), (Elbert and Pukui 1979: 142)

- a. ‘Elua a’u keiki
 two 1.SG.POSS child
 ‘I have two children’

- b. 'A'ohe a'u keiki
NEG.EX 1.SG.POSS child
'I have no children'

The said association led to the use of 'a'ohe in verbal predications with genitive subjects such as the ones shown in (33) and (34), since those are modeled on possessive constructions. As shown by the text counts, the frequency of 'a'ohe has remained very low through the passage of time. So its use as a SN (negator of actions) most probably depends on the expansion of the possessive construction. Similar developments whereby the negative existential is carried over to a specific category of the domain of SN are also observed in Slavic and Uralic languages (cf. Veselinova 2010, Veselinova *forthcoming*). Likewise, Croft (1991: 17) brings up Tamil data¹² to highlight this issue.

4.2. Morpho-syntactic properties of negative existential

Morpho-syntactically, negative existentials show the following characteristics. First, they are commonly argued not to fit in any wider morphological class, but rather to form separate morphological classes, in their respective languages. When they take on pertinent verb morphology, especially person-number agreement markers, as in Turkish (cf. (28c-d) above), this is typically indicative of them being used outside the realm of negated existence proper. The special negative existentials are incompatible with tense-aspect marking in 20 languages, that is, in approximately one-third of the 63 languages with special negative existentials. In section 4.1.1 above, I argued that this should be considered a matter of semantics rather than simply defective morphology. Even when they are used in non-present tense contexts, they may still not take any tense-aspect marking (cf. data in (37) below from Mari (Uralic, Russia)). In this language, the negative existential *uke* is supposed to be restricted to the present tense according to textbooks. However, in actual usage it may occur even in non-present tense contexts but it does not take any pertinent morphological marking (Jeremy Bradley, p.c.). Languages like Turkish, Bulgarian and Makedonian, where the negative existentials admit of tense marking, are rare in both the macro- and the micro-samples. In fact, in the current macro-sample they amount to 3: Barasano (Tucanoan, Colombia), Turkana (Nilo-Saharan, Kenya) and Kuot (Isolate, Papua New Guinea/New Britain).

(37) Eastern Mari (Uralic, Mari)

- a. Kvorum uke-lan köra jükl-ə-maš əš lij
quorum NEG.EX-DAT due.to vote-EPH-NOM NEG.3SG.PST be.CONNEG
'Due to the lacking quorum, there was no vote'
(Jeremy Bradley, p.c., citing Galkin 1990-2005)
- b. žap-em uke əl'e
time-1.SG.GENNEG.EX be.3SG.PST
'I didn't have the time'
(Jeremy Bradley, p.c., citing (Riese et al. 2010))

Secondly, negative existentials tend to replace the affirmative existential that they negate. This can be seen from the Turkish example in (16c-d), which we repeat here for convenience as (38a-b).

(38) Turkish (Altaic, Turkic) (van Schaaijk 1994: 44-45)

- a. Su var-dı
water exist-PST
'There was water'
- b. Su yok-tu
water NEG.EX-PST
'There was no water'

Further illustration of this is given in (39):

(39) Kuot (Kuot), (Eva Lindström, p.c.)

- a. Ame tomato-p mi- lə blu-meŋ
exist tomato-PL 3PL.SBJ-RELR blue-3PL.SBJ
'Blue tomatoes exist'
- b. Karuk ma tomato-p mi- lə blu-meŋ
is.not of.3PL tomato-PL 3PL.SBJ-RELR blue-3PL.SBJ
'Blue tomatoes do not exist'

If there is no affirmative existential, the negative ones simply come to replace a zero-encoded predicate. This is shown in the data from Māori in (18), which we repeat here as (40), and in Maybrat (Maybrat, Indonesia / Northwestern Papua) (cf. (41)).

(40) Māori (Austronesian, Malayo-Polynesian, [...] Nuclear Polynesian, Eastern, Tahitic), (Harlow 2007: 153-154)

a. He whare wānanga kei Kirikiriroa

DET house learning PREP Hamilton

‘There is a university in Hamilton’

b. Kāore he whare wānanga i Taihape

NEG DET house learning PREP Taihape

‘There’s no university in Taihape’

(41) Maybrat (Maybrat) (Dol 1999: 127)

a. Fiam aya ete

catfish water below

‘There are catfish under the water’ (lit.: Catfish the water’s below)

b. Arko m-fe

firewood3.unmarked.NEG

‘There is no firewood’

A similar situation is found in Sentani (East Bird’s Head Sentani, Indonesia/Papua), Kayardild (Australian, Pama-Nyugan) and Mara (Australian, Gunwingguan, Northern Australia). There is only one language in my dataset, Mandarin Chinese (Sino-Tibetan, China), where the negative existential may either replace the affirmative existential or co-occur with it.

(42) Mandarin (Sino-Tibetan, Chinese), (Wiedenhof 1994)

a. Dàn shì zhěngge fángzi

but be whole CLF house

dōu méi yǒu shéme dōngxi

all NEG.EXexist what thing

‘But there wasn’t anything worthwhile in the whole house’

b. Wǒ shuō: ‘wǒ méi liángpiào

I say I NEG.EX grain coupon

‘I said: I don’t have grain coupons’

A final morphosyntactic property of negative existentials is that they appear to be closely associated with specific constructions. This was pointed out in the discussion of Hawai'ian and other languages in section 4.1.3. As shown by the Hawai'ian data, in this language the negative existential always occurs with a subject marked by the possessive/genitive. When used with a definite subject in Bulgarian, the subject has to be marked as an object (cf. discussion in section 4.1.2 and data in (27) above). Similarly in Teop, proper nouns, when used with negative existentials are treated as common noun and have to be preceded by a non-specific marker (cf. (23) above).

4.3. Diachronic notes

Negative existentials appear to originate mainly from two processes: coalescence (univerbation) of SN and a lexical item that is part of the existential construction, or re-analysis of a lexical item with an appropriate sense. There are negative existentials which are clear univerbations between SN and another word (17 languages, i.e., 27% of all negative existentials). Typically, the univerbation is between SN and an existential marker or a HABEO verb. A few of coalesced forms are shown in (43) below.

Negative existentials which are clear univerbations between SN and another word

- (43) a. Ket (Yeniseian, Russia)
bən's'aŋ < *bənj* 'SN' + *us'aŋ* 'there'
- b. Samoan (Austronesian, [...] Polynesian Outlier, Samoa)
lāi < *lē* 'SN' + *ai* 'exist'
- c. Ukrainian (Indo-European, East Slavic, Ukraine)
nema / *nemae* < *ne* 'SN' + *mae* 'have.3SG.PRS'

There are also negative existentials which are completely separate from SN (25 languages, i.e., 39% of all negative existentials). Many are associated with a specific lexical meaning or can be shown to have a diachronic connection to a word with a particular lexical meaning. Some examples are cited in Table 6 below.

Table 6. Negative existentials which are formally distinct from SN and are still associated with a lexical meaning

	LANGUAGE	SN	NEGATIVE EXISTENTIAL	LEXICAL SENSE FOR THE NEGATIVE EXISTENTIAL
a.	Bagirmi	(e)li	g ^w oto	absent
b.	Turkana	ni-	a-mamaka-ḡ	lack
c.	Nez Perce ¹³	wéeʔu	cáʔya	absent
d.	Kewa ¹⁴	na-	dia	there is not

A lexical sense can be listed for a negative existential even if it is identical with SN. For instance, the negative existential in Kannada *illa* is said to be derived from an old Dravidian root meaning ‘die’ (cf. Burrow & Emeneau 1984). Nivkh (Isolate, Eastern Asian Russia) *-qavr-* is said to mean ‘not have’ (Ekaterina Gruzhdewa, p.c.).

The tendencies described above are based on data from the macro-sample. They are summarized in Table 7 below.

Table 7. Summary of the origins of negative existentials.

SOURCE	NR OF LANGUAGES
Univerbation of SN and another word	17 (27%)
Lexical item with a negative content	25 (39.7%)
Formally identical with SN (origin unknown)	21 (33.3%)

Another source for negative existentials suggested by data in the micro-samples is borrowing. For instance, in Mari (Uralic, Mari, Russia), the negative existential *uke* is a borrowing from Turkic (cf. Turkish *yok* ‘not exist’) (Kangasmaa-Minn 1998: 231, Vasikova 1990: 72-73). While borrowing does not surface as a source in the world-wide sample used here, it might be more common in another sample and in a more in-depth study of languages in contact. For example, one of the negative existentials in Hausa, *bâ* may be a borrowing from Kanuri (Nilo-Saharan, Nigeria), a language with which Hausa speakers have close contact. The Russian negative existential *net* is reported, albeit sporadically used, as an alternative negative existential form in Forest Enets (Uralic, Samoyedic, Russia) (Florian Siegl, p.c.). This issue cannot be fully investigated in this paper, although it definitely deserves further inquiry.

The tendencies on the origin of negative existentials reported above suggest that their origin is a matter of lexicalization rather than any other process. The most widespread source appears to be the reanalysis of words with a negative content such as ‘lack’, ‘absent’, ‘there is not’, ‘empty’ or ‘dead’. Another very common source, and one which is well known (Croft 1991), is the creation of negative exis-

tentials via the fusion of SN and a collocate, typically, the copula or the affirmative existential particle. This particular pathway shows that SN and the copula or the affirmative existential co-occur so frequently that they easily merge. It has to be added that the resulting fusion is also conceptually strong and can gain a lexical force on its own. Markers of SN can fuse easily with words they collocate with often (cf. also van der Auwera 2010). For instance, in Old English the SN marker fused with the verb *willan* ‘want’ to yield *nille* ‘not want.1.SG.PRS’, with a full paradigm in the present tense. The fused forms were in use for a while, but did not survive in later stages of the development of the language. Similarly, Latin *nolle* ‘not-want, disfavour’ and its related forms are all fusions between the SN marker and forms of *velle* ‘want’. One can claim that there is functional pressure towards the creation of negative existentials. For instance, in Khalkha (Mongolic, Mongolia), one of the negative existentials, the noun *üyei* ‘absence, non-being’ (cf. (44a)), while still being used as a negative existential, has evolved into the SN marker *-güi* in modern Khalkha (cf. (44b)). At the same time, a new negative existential, *alya* ‘absent’ has been introduced. This is shown in (44c-d).

(44) Khalkha (Altaic, Mongolian), (Beffa & Hamayon 1975: 199)

- a. Miniḡ üyüḡ-d
1.SG.GEN absence-DAT
‘When I wasn’t there’ (lit.: in my absence)

- b. Luu geḡ am’tan bai-dag-güi
dragon COMP living.being be.there-HAB.PTCP-NEG
‘Dragons do not exist’
(Benjamin Brosig, p.c.)

- c. Nḡg č xun alyḡ
here CONTR.PART person absent
‘There is no one’

- d. Axynd očixoos biš öör alyḡ alyḡ
older brother go than other means there is not
‘There is no other way but to go to older brother’

4.4. Negative existentials: a special negator or a separate semantic domain

In individual language descriptions, negative existentials are typically seen as negators of their own kind, or as a special property of affirmative existential predications. However, as I have been arguing in the preceding sections, they also show a number of features that make them look more like a conceptual domain of their own rather than prototypical negation markers. The motivations for this claim are as follows. Morphologically, negative existentials tend to fall outside traditional word classes, and generally form a class of their own. Semantically, negative existentials predicate the absence of an entity rather than negate its existence. In addition, it is fully possible to outline a prototype of their content. Specifically, by using the semantic maps method, we are able to point out functions that recur with negative existentials world-wide. Thus a proto-typical negative existential is used for the negation of existence, possession and location; it is also a pro-sentence and the short word 'no'. In terms of syntax, negative existentials replace the lexical items they are supposed to negate, and are bound to specific constructions. Historically, negative existentials show similar origins in a number of unrelated languages. Specifically, most of them can be successfully traced to lexicalizations, which result from fusions between a negative element and a collocate meaning 'be' or 'exist', or to reanalyses of lexical sources meaning 'absent', 'lack', 'poor'. Some of them are still used with these senses on occasion. Also, they appear to be re-created all the time.

The use of negative existentials as predicates can explain why they acquire phrasal properties easily, and are frequently interpreted as short answers for 'no'. Because of their semantics they are often included in other periphrastic constructions whereby they appear to break into the domain of verbal negation. Thus, they fall in between the domain of existence and the domain of negation, but are neither. Given their semantic and structural properties, it is justified to describe negative existentials as a separate semantic domain, which I call here the 'domain of absence'.

5. Summary and conclusions

In this paper I presented a cross-linguistic study of negative existentials. The starting point of the study was to outline negation strategies used for existential predications, as it is commonly pointed out that those may differ from SN. While it is possible to use SN for the negation of existential predications, cross-linguistically this is the least common option, which is both quantitatively and geographically restricted. In the current dataset, SN is used to negate existential sentences in Western Europe, parts of South East Asia and parts of Central and Southern South America. In the rest of the world a special strategy is employed for the negation of existential predications. As we have seen in the sections above, the negative existentials identified here share a number of properties in terms of their semantics, morpho-syntax, use and origin. In light of these similarities it was suggested that they are better described as a functional domain of their own. They interact with both the domain of existence and the domain of negation, but are in essence a separate grammatical and conceptual phenomenon.

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Appendix: Hawai'ian text counts

In Table 1 and Table 2 below, *N* shows the number of times a particular collocation is encountered and % represents the proportion of the total; down-arrows are used to indicate a decrease in the frequency of a particular collocation in 2010 relative to its frequency in 1864; upward arrows are used to indicate increases in frequency.

Table 1. Collocations of 'a'ole

COLLOCATION	1864		2010		
	<i>N</i>	%	<i>N</i>	%	
'a'ole LEXICAL ITEM	221	29%	211	10%	↓
'a'ole TAM particle	168	22%	465	22%	
'a'ole ADVERBIAL PARTICLE	145	19%	734	35%	↑
'a'ole PERSONAL PRONOUN	94	12%	416	19%	↑
'a'ole LOCATIVE OR DIRECTIONAL PARTICLE	52	7%	94	4%	↓
'a'ole PREPOSITION	25	3%	80	4%	
'a'ole ARTICLE	24	3%	68	3%	
'a'ole POSSESSIVE PRONOUN	14	2%	11	1%	
'a'ole POSSESSIVE MARKER <i>o</i>	17	2%	45	2%	
'a'ole POSSESSIVE MARKER <i>a</i>	3	0%	2	0%	
'a'ole DIGIT	2	0%	6	0%	
'a'ole EXISTENTIAL PARTICLE <i>ai</i>	1	0%	3	0%	
'a'ole unclear word	7	1%	4	0%	
Total	773	100%	2139	100%	

Table 2. Collocations of 'a'ohe

COLLOCATION	1864		2010		
	<i>N</i>	%	<i>N</i>	%	
'a'ohe BARE NOUN	18	63%	78	46%	↓
'a'ohe <i>mea</i> 'thing'	7	25%	58	34%	↑
'a'ohe <i>i</i> , highly polysemous word	1	4%	2	1%	
'a'ohe POSSESSIVE MARKER <i>o</i>	1	4%	6	4%	
'a'ohe <i>nui</i> 'plenty, a lot'	1	4%	2	1%	
'a'ohe <i>ona</i> '3.SG POSSESSIVE PRONOUN' or 'PL marker'	-	-	12	7%	
'a'ohe <i>like</i> 'similar'	-	-	11	6%	
'a'ohe <i>hoi</i> 'also, too, besides'	-	-	4	1%	
Total	28	100%	173	100%	

Notes

¹ For the genealogical affiliation of the languages presented here I follow the Ethnologue classification, <http://www.ethnologue.com>.

² In this paper, the following abbreviations are used: ART: article; CLF: classifier; COMPL: completive; CONNEG: connegative; CONTR: contrastive; COOP: cooperative prefix. Indicates that people do something together or to each other; DAT: dative; DEF: definite; DEM: demonstrative; DET: determiner; DIR: direction / directional; DU: dual; EPHE: epenthetic; EQ: equality; EX: existence; EXCL: exclusive; F: feminine; FUT: future; GEN: genitive; GENR: generic tense-aspect marker; GER: gerund; HAB: habitual; HSY: hearsay; I: class inclusion; IMPF: imperfect; INCL: inclusive; INDF: indefinite; INE: inessive case; INF: infinitive; INV: inverse. This is a morpheme that indicates a number category opposite to the inherent number of the noun to which it is attached. In Kiowa, every noun stem has an inherent or implicit number, either singular / dual or dual / plural; IPFV: imperfective; LOC: location / locative; M: masculine; MOD: modal; NEG: negative; NOM: nominative; NSP: non-specific; OBJ: object; PART: particle; PL: plural; POSS: possession; PREP: preposition; PRET: preterite; PRF: perfect; PROG: progressive; PRS: present; PST: past; PTCP: participle; PX: possessive suffix; REL: relative / particle which introduces relative clauses; RELR: relator; SBJ: subject; SG: singular; SN: standard negation; TA: tense-aspect; TAM: tense-aspect-mood.

³ The online material to which this article makes reference can be found on the Italian Journal of Linguistics web page within the Table of Contents of this special issue (http://linguistica.sns.it/RdL/Riviste_anni.htm). It includes the following items: Online Appendix 1, Online Appendix 2, Online Map 1, and Online Map 2.

⁴ The term *ascriptive* to cover these predications is suggested by Hengeveld (1992).

⁵ The translation questionnaire can be found at the following web page <http://www2.ling.su.se/staff/ljuba/negation_questionnaire.pdf>.

⁶ For the purposes of this paper I adopt the approach of van der Auwera (*forthcoming*). The theoretical debate on different kinds of semantic maps reflected in recent works on this method is considered outside the scope of the current inquiry. For a more detailed discussion, cf. for instance Wälchli (*forthcoming*), Sansò (2009) and also Malchukov (2009).

⁷ Etymologically, the relation between *bābù* and *bâ* is in dispute. One analysis takes *bābù* as original and interprets *bâ* as a phonologically reduced form restricted to certain syntactic environments. Support for this analysis comes from the fact that some dialects only have *bābù* but not *bâ*. The other analysis, which is the traditional one and the one to which Newman (2000) subscribes, views *bābù* as a historically fused, grammaticalized word derived from *bâ* and *àbù* 'thing'. Comparative support for this view is provided by the existence of other Chadic languages, e.g., Gude, in which the negative existential is made up of a negative marker plus the word for 'thing'. Internal evidence against the interpretation of *bābù* as a basic, monomorphemic function word comes from the fact that it uses independent rather than object pronouns as its object/complement. Newman takes this to be an example of a grammaticalization, and provides details of use from the Sokoto dialect of Hausa. Finally, according to Newman, there is also the possibility that *bâ* is a borrowing from Kanuri (whose negative existential has this same shape), which would preclude its having developed from *bābù* by internal means.

⁸ The term 'pivot' typically refers to the verb argument around which the sentence 'revolves'. This usually means any of the following: (i) pivot refers to the only argument of the verb; (ii) the verb agrees with the pivot if agreement is expected; (iii) in coordinated propositions, in languages where an argument can be left out, the omitted argument is the syntactic pivot.

⁹ The Russian National Corpus is an online resource of some 300 million words and multiple stratification according to genre and modality. It can be found at <http://www.ruscorpora.ru/en/index.html>.

¹⁰ These cover a number of domains typically covered by non-fiction writing such as official business, technical manuals, journalism, advertising, law, academic, theological, everyday life, electronic communication. The types of texts have been proportioned to reflect real life use. A full list of the types of text included can be seen here <http://www.ruscorpora.ru/en/reqattr.html> (last accessed 28-10-2012).

¹¹ Subjects marked by possessive markers are also referred to as genitive subjects in the literature.

¹² Tamil is a South Dravidian language spoken in Southern India.

¹³ Penutian, Northern Idaho, USA.

¹⁴ Trans-New Guinea, Angal-Kewa, Papua New Guinea.

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Eventive existentials in Catalan and the topic-focus articulation

Xavier Villalba

The role of codas in existential sentences has been a matter of debate since the early 70's, but under this label a quite heterogeneous set of material has been included, leading to much misplaced discussion. A case which is so far unresolved is that of eventive existential sentences: *Yesterday, there was a live pig roasted*. This existential construction asserts the existence of a situation involving the pivot (*a live pig*) and the coda (*roasted*) rather than just the existence of the individual denoted by the pivot. In this article I will revisit this construction in light of partially unattested data from Catalan, a Romance language which is well-known for showing a systematic violation of the Definiteness Effect in existentials. I will concentrate on extraction facts and information structure to show that recent proposals favouring a small clause analysis of eventive existentials in Catalan (Leonetti 2008) are weak on syntactic grounds, and inconsistent on semantic and informational grounds. Given this evidence, I will defend a VP-adjunct analysis of codas in eventive existentials, where both the pivot and the coda form part of the assertion, and a null stage topic, optionally restricted by an overt locative, counts as the topic of the sentence*.

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1. Introduction: eventive existentials

1.1. The theoretical problem

The role of codas in existential sentences has been a matter of debate since the early 70's, particularly with regard to the role played by their aspectual properties, such as the stage-level vs. individual-level predicate contrast in the following examples by Milsark (1974: ex. 108):

- (1) a. There was a man sick/*tall.
- b. There are people sick/*tall.

Yet, under the coda label quite a heterogeneous set of material has been included, leading to much misplaced discussion (see Francez 2007: ch. 2 for illuminating methodological insights). One outstanding case is that of eventive existential sentences, like the following from McNally (1992):

- (2) a. There has just been a man shot. (McNally's ex. 310)
- b. Yesterday, there was a live pig roasted. (McNally's ex. 293)

In this existential construction the coda is typically a past participle (or a gerund), and the existence of a situation involving the pivot (*a live pig*) and the coda (*roasted*) is asserted, rather than the existence of the sole individual denoted by the pivot. Moreover, the eventive nature of the coda is supported by the natural occurrence of event modifiers like *just* or *yesterday*.²

Two basic proposals have been put forward for dealing with eventive existentials. These proposals differ from each other with respect to the level and the means by which the eventive reading is obtained: a syntactic proposal, based on a small clause (**SC**) structure where the pivot is the subject and the coda is the predicate (Stowell 1978, Chomsky 1981, Safir 1985, Freeze 1992, Moro 1997, Leonetti 2008), and a semantic proposal, where, as in other existential constructions, the pivot is the complement of the existential verb, and the coda is either a VP adjunct (McNally 1992; Francez 2007, 2009) or a complement of the existential verb *be* (Keenan 1987; Pollard & Sag 1994).³ Here I will consider again the exact articulation of eventive codas in light of the observations raised by Leonetti (2008), regarding the connection between the Definiteness Effect (**DE**) and the coda. More specifically, Leonetti shows that Catalan existentials, which are commonly held to violate the DE, do respect this restriction in certain

circumstances. When a prototypical locative coda is present, definite NPs are fine if the coda is dislocated (3a-b), but odd if the coda is in canonical position (3c):

- (3) a. Hi havia el degà, a la reunió.
LOC had the dean at the.F meeting
'The dean was at the meeting.'
- b. A la reunió, hi havia el degà.
at the.F meeting LOC had the dean
- c. ?? Hi havia el degà a la reunió.
LOC had the dean at the.F meeting

Notwithstanding, when an eventive coda is present forming a SC with the pivot, definite DPs and even proper names are fine (Leonetti 2008: ex. 21):

- (4) Hi ha la Maria molt enfadada / al telèfon / que espera.
LOC has the Maria very angry / to-the phone / that waits
'Mary was very angry/at the phone/waiting.'

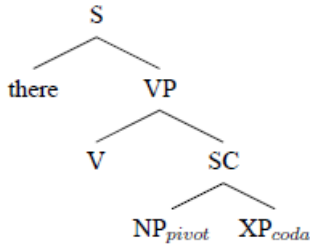
In this article, I will concentrate on this eventive existential subtype, which Leonetti (2008: 24) characterizes as follows (see Cruschina 2012 for similar insights and a fine-grained typology of Italian existential sentences):⁴

The second basic type is the eventive existential. I believe that the only thing that changes here, with respect to proper existentials, is that the post-verbal expression is propositional and of the Stage-Level kind. The syntactic format of the propositional content is a small clause with its own Topic/Focus articulation. Inside the small clause the DP acts like an internal topic, thus eliminating any motivation for the DE: we noticed that names and definite DPs are possible in these contexts (i.e. (4); XV).

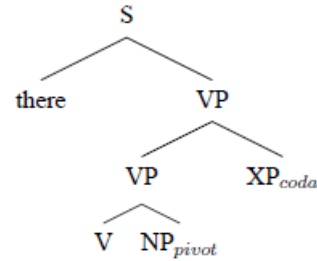
My goal will be to test the predictions of Leonetti's hypothesis against the formal and informational properties of the Romance SC, on the one hand, and of pivots and codas on the other. I will consider the results of some formal tests in section 2, and the topic-focus articulation of eventive existentials in section 3. On the basis of my findings, and the comparison with uncontroversial subject-predicate structures, we will be able to discard a SC analysis of eventive existential (5a), in

favour of a VP-adjunct approach along the lines suggested by McNally (1992) and Francez (2007, 2009), among others (5b):

(5) a.



b.



However, I will depart from Francez (2007, 2009) in taking both the pivot and the coda to be part of the assertion, as suggested by their being within the scope of adverbial quantifiers:

- (6) Habitualmente, als col·legis hi ha un director
 usually at.the.PL schools LOC has a principal
 criticant els pares.
 criticizing the parents

‘Usually, in schools there is a principal criticizing the parents.’

- i. “Usually, if there is somebody in schools, it is a principal criticizing the parents.”
- ii. #“Usually, if there is somebody criticizing the parents in schools, it is a principal.”

Before going into the details of the analysis, I shall delimit the exact nature of my object of study: what counts as an eventive existential?

1.2. The empirical domain

There is no widely accepted answer to the question of what counts as an eventive existential. For instance, McNally (1992: 4.4) restricts its scope to past participles (7), leaving aside relative clauses. On the basis of examples like (8), she claims that “DPs with full relative clauses do not give rise to ‘eventive’ existentials” (McNally 1992: 185):

- (7) a. #There has just been a man who was shot.
- b. #Yesterday there was a man who was shot.
- c. #Yesterday, there was a live pig that was roasted.

- (8) a. There has just been a man shot. (McNally's ex. 310)
b. Yesterday, there was a live pig roasted. (McNally's ex. 293)

Here we can appreciate that the eventive value of the existential is linked to the presence of temporal delimiters like *yesterday* or an aspectual adverb like *just*, which favour the punctual reading of the perfect tense (on *just* see also the comments by Milsark 1974: 78ff). Other scholars (e.g. Beyssade 2004: 69ff, Leonetti 2008 or Cruschina 2012) take a broader stand and include relative clauses (9) or even locative PP codas (10):

- (9) a. Il y a le telephone qui sonne. [French]
it LOC has the phone that sounds
b. Il y a le chat qui meurt de froid dehors.
it LOC has the cat that dies of cold outside
- (10) a. C'è Gianni in giardino/al telefono /che aspetta. [Italian]
LOC-is John in garden /at-the phone /that waits
b. Hi ha la Mariamolt enfadada /al telèfon /que espera. [Catalan]
LOC has the Mary very angry /at-the phone /that waits

One can easily appreciate that the inclusion of locative PPs is a major source of ambiguity, since it makes really hard to distinguish eventives from purely locative existentials. Moreover, as Leonetti (2008) correctly points out, there is a lot of cross-linguistic variation here, as the Spanish case demonstrates: Spanish does not accept any of the options in (9) or (10). All this calls for a clear-cut battery of tests able to identify eventive existentials, which I cannot develop here, due to space restrictions. Therefore, to rely on uncontroversial evidence, in this paper I will restrict the discussion to participial and gerundival codas, which naturally possess eventive properties, giving preference to the latter for a practical reason: unlike English, gerunds in Catalan cannot be noun modifiers, and this allows us to remove from the picture the analysis of codas as modifiers of the pivot defended by Williams (1984). Hence, existentials like the following will serve as running examples thorough the paper:

- (11) a. Hi ha la Maria esperant-se fa estona.
LOC has the.F Mary waiting-REFL makes while
'Mary has been waiting for a while.'

- b. Hi ha la Maria adormida des d'ahir.
LOC has the.F Mary slept from of-yesterday
'Mary is sleeping since yesterday.'

Here the pivot is a proper name, which in Catalan is typically preceded by a definite article, and the coda is a verbal gerund (11a) or past participle (11b) (the presence of a temporal adverbial clearly suggests that we are dealing with verbal, and not adjectival forms see also § 2.1). Nonetheless, as one anonymous reviewer pointed out, participles in general and some gerunds in particular may be reanalysed as adjective modifiers. For instance, *vigilant* 'watching' can be both a verbal gerundive form and an adjectival one:

- (12) a. El vaig enxampar vigilant les veïnes.
him PST.1SG catch watching the.F.PL neighbour.F.PL
'I caught him watching the neighbours.'
- b. una persona vigilant
a.F person vigilant
'a vigilant person'

To avoid the latter reading, I will exclusively use transitive gerundive forms with direct object and with no adjectival use. As for participle codas, I will combine them with proper name pivots, thus avoiding a restrictive modification interpretation.

2. Formal tests of the eventive reading

Even though the SC analysis of existential sentences has a long-standing tradition, stemming from Stowell (1978) (see e.g. Chomsky 1981, Safir 1982, 1985, Freeze 1992, Moro 1997), its defenders do not offer much solid empirical evidence for this analysis, other than the availability of 'propositional' paraphrases. One notable exception is Safir (1983), who argues for the SC analysis on the basis of pairs like the following:

- (13) a. There are [workers angry about the pay].
b. [Workers angry about the pay] is exactly the kind of situation we are trying to avoid.

He claims that the constituent between brackets is a SC and not an NP, as the agreement pattern in (13b) suggests. Yet, as Contreras (1987) and Baltin (1998) point out, Safir's argument is deviant for several reasons. On the one hand, they note that the agreement facts have nothing to do with syntactic structure, but rather with the possibility of interpreting the expression in subject position as a situation, as the following examples make clear (the first one is from Baltin 1998, the others are from Francez 2007):

- (14) a. [Several angry workers] is just the sort of situation that the ad campaign was designed to avoid.
b. [No students] means you won't be nervous (when you give the talk).
c. [Few cars] means we'll get there faster.
d. [Many guests] means many presents.

On the other hand, Safir's (1983) SC analysis raises one crucial question: what forces plural agreement in the existential in (13a)? If the existential verb selects a SC, the verb should surface as singular (**There is workers angry about the pay*), exactly as in (13b).

In this paper, I will explore a more formal approach to this issue checking the SC hypothesis for eventive existentials against three standard tests regarding constituency: extraction, scope assignment, and negative polarity items (NPI) licensing.

Moreover, in order to refine the tests, I will compare the results of the eventive existentials with those of perception SCs like the following:⁵

- (15) a. Vaig veure [la Maria espiant els veïns].
PST.1SG see the.F Mary spying the neighbours
'I saw Mary spying the neighbours.'
- b. Vaig veure [la Maria asseguda a una cadira].
PST.1SG see the.F Mary seated to a.F chair
'I saw Mary sitting in a chair.'

Obviously, as Josep M. Brucart (p.c.) and one anonymous reviewer point out, one should be cautious on the conclusions regarding the comparison between eventive existentials and perception SCs, since we could be dealing with different subtypes of SCs with a great deal of internal variation (see for instance the approaches in Moro 1997, Rothstein 2001 or den Dikken 2006). Yet, beyond these relevant differences, the basis of the comparison remains unchallenged as long as we focus on con-

stituency beyond other factors. The SC analysis, whatever the flavour it comes with, makes clear testable predictions concerning the structural relations between the pivot and the coda, and their respective behaviour regarding extraction or scope. Moreover, these predictions are sharply different from the ones made by the VP-adjunct analysis. Henceforth, although tentative, the evidence in this section will help us test the respective values of each hypothesis, pending a more complete comparative study involving different kinds of SC structures.

2.1. *Extraction*

2.1.1. Extraction of pivot and coda as a constituent

When it comes to extraction, the most obvious test we can conduct is displacement of both the pivot and the coda as a single constituent. Yet, the facts are contradictory. On the one hand, extraction is entirely bad when the pivot is definite, but it improves when the pivot is indefinite:⁶

- (16) a. Hi havia [el/un policia espiaant els sospitosos].
LOC had the/a policeman spying the.PL suspects
- b. Era [*el /?? un policia espiaant els sospitosos]
was the / a policeman spying the.PL suspects
el que hi havia.
the that LOC had
- c. El que hi havia era [*el/ ? un policia espiaant els
the that LOC had was the/ a policeman spying the.PL
sospitosos].
suspects

This state of affairs is not reproduced with SCs of perception verbs, which do allow extraction of both the subject and the predicate as a unit regardless of the definiteness of the former:

- (17) a. Vaig veure [el/un policia espiaant els sospitosos].
PST.1SG see the/a policeman spying the.PL suspects
- b. Era [el/un policia espiaant els sospitosos]
was the/a policeman spying the.PL suspects
el que vaig veure.
the that PST.1SG see

- c. El que vaig veure era [el/un policia espiant
the that PST.1SG see was the/a policeman spying
els sospitosos].
the.PL suspects

If we consider a verb like *imagine*, the results are similar:

- (18) a. M'imaginava [el/un policia espiant els sospitosos].
to.me-imagine the/a policeman spying the suspects
- b. Era [el/un policia espiant els sospitosos]
was the/a policeman spying the.PL suspects
el que m'imaginava.
the that to.me-imagine
- c. El que m'imaginava era [el/un policia espiant
the that to.me-imagine was the/a policeman spying
els sospitosos].
the.PL suspects

Yet, one must note that SCs depending on verbs of judgment cannot be extracted:

- (19) a. Considerava [el/*un policia corrupte].
consider.1/3SG the/a policeman corrupt
- b. *Era [el/un policia corrupte] el que considerava.
was the/a policeman corrupt the that consider.1/3SG
- c. *El que considerava era [el/un policia corrupte]
the what consider.1/3SG was the/a policeman corrupt

On the other hand, as Manuel Leonetti pointed out to me, in Spanish, the following clefts are fine with the neuter article:

- (20) a. Era un policía durmiendo lo que había.
was a policeman sleeping the.N what had
- b. Lo que había era un policía durmiendo.
the.N what had was a policeman sleeping

Yet, this observation cannot be interpreted as evidence for his proposal for Catalan, for a basic reason: as he himself argues (Leonetti 2008: 24) the existential verb cannot select a SC as its argument in Spanish. Hence, in (20) we are confronted with the awkward situation in which the test supporting a SC analysis works fine in a language where no SC is predicted to exist. In any event, the main conclusion from the evidence provided so far is that the cleft test is inconclusive regarding the presumed SC formed by the pivot and the coda.

Focus fronting does not fare better, given that the same unexpected asymmetry is found with regard to definiteness, which does not appear in perception SCs:

- (21) a. No t'ho creuràs: [*el/?? un policia
 not to.you-it believe.FUT.2SG the/a policeman
 perseguint-los a tots dos] hi havia.
 pursuing-them to all.PL two LOC had
- b. No t'ho creuràs: [el/un policia
 not to.you-it believe.FUT.2SG the/a policeman
 perseguint-los a tots dos] vaig veure.
 pursuing-them to all.PL two PST.1SG see
- c. No t'ho creuràs: [el/un policia
 not to.you-it believe.FUT.2SG the/a policeman
 perseguint-los a tots dos] es va imaginar.
 pursuing-them to all.PL two REFL PST.3SG imagine

2.2.1. Extraction from within the coda

Another piece of evidence against the SC analysis comes from the fact, well attested in the literature, that, whereas extraction of a complement of the coda is more or less fine in existentials, extraction of an adjunct is out (examples from McNally 1992: 68; see also Hartmann 2008: 173):

- (22) a. To whom has there just been a celebrity introduced?
 b. *How badly has there been a man shot?

Hartmann (2008: 172) notes that this argument/adjunct extraction asymmetry is exactly what happens with non-tensed adjuncts generally:

- (23) a. Which topic_i did you leave [without talking about t_i]?
b. *How_i did you leave [without behaving t_i]?

If we apply these extraction tests to Catalan eventive existentials, we find that extraction from the coda is even more restricted than in English, given that neither arguments (24a) nor adjuncts (24b) yield a good result:

- (24) a. * En què_i hi havia la Maria interessada t_i ?
in what LOC had the.F Maria interested.F
b. * Com_i hi havia la Maria d'interessada t_i ?
how LOC had the.F Maria of-interested.F

Yet, this is not the case with past participle perception SCs, which allow extraction of both arguments and adjuncts:

- (25) a. En què_i vas veure la Maria interessada t_i ?
in what PST.2SG see the.F Maria interested.F
b. Com_i vas veure la Maria d'interessada t_i ?
how PST.2SG see the.F Maria of-interested.F

Nevertheless, with gerunds, extraction seems less straightforward, regardless of the argumental status of the extracted constituent (note also the obligatory inversion of the subject of the gerundival phrase):

- (26) a. * Què_i hi havia comprant t_i el policia?
what LOC had buying the policeman
b. * Com_i hi havia comprant el diari t_i el policia?
how LOC had buying the newspaper the policeman
(27) a. * Què_i vas veure comprant t_i el policia?
what PST.1SG see buying the policeman
b. * Com_i vas veure comprant el diari t_i el policia?
how pst.1sg see buying the newspaper the policeman

To sum up, even though clefting and focus fronting are inconclusive tests for the SC analysis, when *wh*-extraction from the coda is considered, one can safely conclude that eventive codas are islands, unlike predicates of perception clauses. Obviously, this fact runs against the SC analysis of eventive existentials.

2.2. Scope

Scope relations within existential sentences have played a major role in supporting particular details of several semantic proposals, as is the case with McNally's (1992: §§ 3.2.2-3.4.2) analysis of pivots as property-denoting elements or Francez's (2007, 2009) analysis of codas as modifiers. Here, I will consider what scope relations between the pivot and the coda can tell us with regard to their syntactic placement and constituent structure. First, one must note that, as discussed at length by Francez (2007: ch. 5; 2009), building on original insights by Kuno (1971) and Heim (1987), the coda must scope over the pivot:

- (28) Hi ha un policia perseguint cada lladre.
 LOC has a policeman pursuing every thief
- a. 'For every thief there is a policeman tracking him down.'
 b. #'There is a policeman who is tracking every thief down.'

This situation is quite uncommon in Catalan, which generally disallows inverse scope with distributives, as in the following secondary predicate structures:

- (29) ?? He descobert un policia molt enfadat amb cada lladre.
 have.1SG found a policeman very angry with every thief
- a. #'For every thief I have found a policeman who is angry at him.'
 b. 'There is a policeman who I have found that he is angry at every thief.'

Here, it is impossible to get the distributive reading (29a). This leaves us with the awkward non-distributive reading of *cada* 'every' (29b), which, as is well-known, always has wide scope in Catalan. This description seems accurate when we consider the alternative sentence with the non-distributive universal quantifier *tot el N* 'every N' (lit. 'all the'):

- (30) He descobert un policia molt enfadat amb tots
 have.1SG found a policeman very angry with all.PL
 els lladres.
 the.PL thieves
 a. #‘For every thief I have found a policeman who is angry at him.’
 b. ‘There is a policeman who I have found that he is angry at every thief.’

In this case the position of the quantifier correlates with its preferred non-distributive reading in (30b). In any event, the evidence reviewed with regard to scope relations clearly indicates that the coda occupies a privileged scope position with respect to the pivot, which seems scopally inert, as suggested in the literature. Leaving aside the details of the denotation of the pivot and the coda, one can conclude that from a purely structural point of view, scope facts nicely follow from an analysis that places the coda in a higher VP position from where it c-commands the pivot, and can hardly be accounted for in a SC analysis.

2.3. NPI licensing

Another structural test that helps us ascertain the structural relations between the pivot and the coda in eventive existentials is the licensing of negative polarity items (NPIs), which must be in the scope of a downward entailing operator (see the ‘classic’ analysis in Ladusaw 1980, 1996 and a good critical review of the subject in Penka & Zeijlstra 2010). When we consider an NPI in pivot position, licensing is fine thanks to negation (NPIs are italicised for the ease of reference):⁷

- (31) a. En aquesta ciutat no hi ha *cap* policia
 in this.F town not LOC has no policeman
 perseguint crims.
 investigating crimes
 ‘In this town, there are no police officers investigating crimes.’
 b. En aquesta ciutat no hi ha *ningú* / *cap* policia
 in this.F town not LOC has nobody/no policeman
 perseguint crims.
 investigating crimes
 ‘In this town, nobody/no police officer is investigating crimes.’

One can safely conclude that the pivot is under the scope of negation. Compare, now, what happens when the NPI is in the coda:

- (32) a. ??En aquestaciutat no hi ha policies
in this.F town not LOC has policemen
perseguint *cap* crim.
investigating no crime
'In this town, there are no police officers investigating any crime.'
- b. ??Ara no hi ha policies perseguint *cap* crim.
now not LOC has policemen investigating no crime
'Nowadays, there are no police officers investigating any crime.'

The impossibility of licensing NPIs in the coda strongly suggests that the coda is out of the scope of negation in eventive existentials, which is in accordance with the VP-adjunct analysis, but seems unexpected under the SC analysis. Now, compare the behaviour of perception SCs:

- (33) a. En aquesta ciutat no he vist policies
in this.F town not have.1SG seen policemen
perseguint *cap* crim.
investigating no crime
'In this town, I have not seen police officers investigating any crime.'
- b. Ara no veus policies perseguint *cap* crim.
now not see.2SG policemen investigating no crime
'Nowadays, you do not see police officers investigating any crime.'
- c. No m'imagino un policia perseguint *cap* crim.
not to.me-imagine a policeman investigating no crime
'I can't imagine a police officer investigating any crime.'

Here, licensing within the complement of the gerund is fine. Exactly as is the case with quantifier scope, if we take the standard assumption that negation scope must involve c-command, the NPI licensing data leads us to conclude that the eventive coda is too high in the structure to form a SC with the pivot, by contrast with what happens with perception eventive SCs.

3. Information status of the pivot and the coda

In section 1, we briefly discussed Leonetti's (2008: 24) characterization of eventive existentials in terms of the topic/focus articulation. He crucially argued that "[i]nside the small clause the DP acts like an internal topic". Unfortunately, Leonetti is not very specific about the content and properties of this 'internal topic'. My impression (shared by an anonymous reviewer) is that we can interpret Leonetti's internal topic in terms of Erteschik-Shir's (1997, 2007) concept of SUBORDINATE TOPIC, but this merits a brief discussion of Erteschik-Shir's system (see Lambrecht 1994 for similar insights, and Nikolaeva 2001 and Basilico 2003 for refinements), which I will provide in the next subsection. Then I will provide three pieces of evidence for analysing the pivot as part of the assertion of the sentence: the interaction with adverbs of quantification (§ 3.2), the nature of the pivot (§ 3.3), and focus oriented adverbs (§ 3.4).

3.1. Primary and secondary topics

Let us begin with the concept of stage topic by Erteschik-Shir's (1997: 26):

Spatio-temporal arguments (à la Kratzer) may play the role of a topic. [...] A card which signifies the "here and now" of the discourse situation is always located on top of the file. It follows that spatio-temporal arguments may play the role of topic and that the truth value of sentences with such topics is determined by examining a card with a spatiotemporal heading. Such topics I call Stage topics.

Interestingly, Erteschik-Shir presents existential sentences as a prototypical case of a construction involving a stage-topic and focusing the pivot, in the sense of informational focus, together with clefts, which involve contrastive focus (Erteschik-Shir 2007: 81):

- (34) a. There is a FLY in my soup.
b. It was a MOSQUITO that bit me.
c. What I saw was A BIG WASP.

So, for Erteschik-Shir, pivots of existentials are unmistakable foci. Let us now consider subordinate topics. Erteschik-Shir (1997, 2007), like Lambrecht (1994), argues that the topic-focus articulation is recursive under certain conditions. Hence besides the stage topic, sentences allow subordinate (or secondary) topics, as in the following example:

- (35) Q: Tell me about your brothers John and Bill.
A: JOHN is the smart one.

Here, Erteschik-Shir argues for the following focus-structure (2007: 48):

- (36) [{John_{loc}, Bill}_{top}]_{top} [is the smart one]_{loc}

The main topic is the contextually salient set {John, Bill}, from where the focus *John* is obtained. The other element of the set, *Bill*, becomes then the subordinate topic, which can be dropped (35) or be pronounced:

- (37) JOHN, not Bill, is the smart one.

Notably, in Erteschik-Shir's system, the subordinate topic is a proper subset ({Bill}) of the main topic ({John, Bill}). Consider a second case from Lambrecht (1994: 148):

- (38) a. Whatever became of John?
b. He married Rosa,
c. but he didn't really love her.

While *John* is the (main) topic in both (38b) and (38c), the informational status of *Rosa* changes: it is a focus in (38b), but becomes topical in (38c), and it is realized as pronoun. Since the latter sentence is still about John, Lambrecht suggests that *her* (= *Rosa*) is a secondary topic (a subordinate topic in Erteschik-Shir's 1997, 2007 terms), namely a topic that is less salient than the main topic (e.g. *John*). The function of secondary topic is typically realized in English by object pronouns, but is conventionally realized by means of scrambling in Dutch or German, and by object shift in Scandinavian (see Erteschik-Shir 2007: § 3.4).

When we compare the role and content of secondary/subordinate topics with the behavior of pivots in eventive existential sentences, the conclusion is very clear: pivots are not secondary/subordinate. On the one hand, if we want to maintain, as Erteschik-Shir does, that the main topic of existential is a null stage topic (optionally restricted by a locative PP), then no obvious relation can be established between the main and the subordinate topic. It comes without surprise then that Erteschik-Shir (1997, 2007) takes existential sentences as prototypical examples of all-focus predications. On the other hand, as a quick comparison with the above cases of subordinate topics makes

clear, pivots cannot be dropped, nor can they be realized as pronouns or dislocated:

- (39) a. Hi ha *(la Maria) passejant-se pel jardí.
LOC has the.F Mary walking-REFL by-the garden
- b. *Hi ha ella passejant-se pel jardí.
LOC has she walking-REFL by-the garden
- c. *Hi ha passejant-se pel jardí, la Maria.
LOC has walking-REFL by-the garden the.F Mary

Hence, there is every reason to discard the idea that pivots of eventive existential form a natural class with clear-cut topical elements like weak pronouns in English, scrambled DPs in German and Dutch, shifted objects in Icelandic or right-dislocates in Romance. All in all, the evidence clearly suggests that we are not dealing with a secondary/subordinate topic as defined by Lambrecht (1994) or Erteschik-Shir (1997, 2007).

3.2. Interaction with adverbs of quantification

There exists a great deal of work (see, among others, Hajicová *et al.* 1998, Partee 1999 and Herburger 2000) on the interaction between quantification and information structure. Among the findings, it has been firmly established that topics and background material map into the restriction of adverbs of quantification, whereas focus maps into the scope, sometimes with detectable truth-conditional effects. Moreover, it has been noted in the literature (Francez 2009: 39) that the pivot is projected into the scope of adverbs of quantification, whereas the coda is projected into the restriction. Hence, a sentence like (40a) gets the interpretation that most zoos have a zoo-keeper (40b) (from Francez 2009: 38):⁸

- (40) a. There is usually a zoo-keeper in a zoo.
b. USUALLY_x[zoo(x)][**a**(\exists y[zoo-keeper(y)],<x)]

Francez's observation fits nicely with the original intuition by Rigau (1988, 1994) that in existential sentences the topic is the locative, be it overt (i.e. the locative PP coda) or null (i.e. a stage topic in Erteschik-Shir's 1997 terms).

Yet, when it comes to eventive existentials, where the coda is not locative, things are different: both the pivot and the coda project into the scope of the quantifier:

- (41) Als col·legis sempre hi ha un director rondinant.
 at-the.PL schools always LOC has a principal grumbling
- $[_{operator} \text{always}]$, $[_{restriction} \text{in schools}]$, $[_{scope} \text{there is a principal grumbling}]$
 - $\#[_{operator} \text{always}]$, $[_{restriction} \text{grumbling in schools}]$, $[_{scope} \text{there is a principal}]$
 - $\#[_{operator} \text{always}]$, $[_{restriction} \text{a principal in schools}]$, $[_{scope} \text{there is one grumbling}]$
- (42) A les reunions de col·legi habitualment hi ha un pare
 at the.PL meetings of school usually LOC has a father
 queixant-se dels horaris.
 complaining-REFL of-the.PL timetables
- $[_{operator} \text{usually}]$, $[_{restriction} \text{at school meetings}]$, $[_{scope} \text{there is a father complaining about timetables}]$
 - $\#[_{operator} \text{usually}]$, $[_{restriction} \text{complaining about timetables at school meetings}]$, $[_{scope} \text{there is a father}]$
 - $\#[_{operator} \text{always}]$, $[_{restriction} \text{a father at schools meetings}]$, $[_{scope} \text{he is there complaining about timetables}]$

The fact that both the pivot and the coda project into the scope of the quantifier in (41) and (42) strongly suggests that they are both part of the assertion, unlike what happens with locative codas of non-eventive existentials (e.g. Francez's 2009 example in (40)), and the locative adjuncts in (41-42).⁹ This nicely fits in with Rigau's (1988, 1994) insight that the topic of the existential sentence is the locative phrase or with the hypothesis by Erteschik-Shir (1997) that the topic is a null stage-topic, sometimes restricted by means of a locative PP (as suggested by an anonymous reviewer).

In any event, the behaviour of Catalan existentials with respect to adverbs of quantification runs counter to Leonetti's claim that "[i]nside the small clause the DP acts like an internal topic" (Leonetti 2008: 24), since his hypothesis wrongly predicts that the pivot should project on the restriction of the quantifier. Again, even though the evidence is subtle, the odds are clearly against the SC analysis, offering a straightforward answer to the facts reported.

3.3. *The nature of the pivot*

We have just seen that both the pivot and the coda project into the restriction of adverbial quantifiers, which is at odds with Leonetti's suggestion that the pivot is the topic of the SC selected by the existential verb. Another piece of evidence comes from the kind

of nominals we find as pivots, which are by no means those that one would standardly consider typical candidates for topichood. Without going into the details (see Villalba 2009: ch. 2) for extensive discussion), only quantifiers allowing a partitive reading are easily found as clitic left-dislocates. Consider, for instance, the contrast between monotone increasing quantifiers, on one hand (43), which allow a partitive reading, and monotone decreasing (44) or excess quantifiers (45), on the other, which do not:

(43) Alguns/ Molts (dels) llibres, els vam trobar al calaix.
some many of-the.PL books them PST.1PL find at-the drawer
 ‘Some/Many (of the) books, we found in the drawer.’

(44) *Menys de quatre/*Pocs (dels) llibres, els vam trobar
less of four few of-the.PL books the PST.1PL find
 al calaix.
at-the drawer
 ‘*Less than four/Few (of the) books, we found in the drawer.’

(45) *Massa/*Excessius (dels) llibres, els vam trobar
too.many excessive.PL of-the.PL books them PST.1PL find
 al calaix.
at-the drawer
 ‘Too many (of the) books, we found in the drawer.’

In conclusion, only quantifiers that can be interpreted partitively make good topics in Catalan. Now, let us return to eventive existentials.

Given the evidence just reviewed, if pivots of eventive existentials were topics, as argued for by Leonetti (2008), the prediction could be made that only monotone increasing quantifiers would be fine in this position. Yet, this prediction is not confirmed at all by the evidence:

- (46) a. Hi ha alguns (dels) policies perseguint
LOC has some.PL of-the.PL policemen pursuing
 els lladres. [monotone increasing]
the.PL thieves
- b. Hi ha pocs (*dels) policies perseguint
LOC has few.PL of-the.PL policemen pursuing
 els lladres. [monotone decreasing]
the.PL thieves

- c. Hi ha massa (*dels) policies perseguint
LOC has too.manyof-the.PL policemen pursuing
els lladres. [excess]
the.PL thieves

Note that the argument that the problem has to do with clitic left-dislocation can be easily discarded, given that this state of affairs extends to other Romance non-verbal subject-predication structures like the ‘N-of-an-N construction’ or non-verbal exclamatives, where it is well-established that the inverted predicate-subject structure parallels a comment-topic structure (see Villalba & Bartra-Kaufmann 2010 for details and references):

- (47) a. Els idiotes d’alguns (dels) alcaldes. [monotone increasing]
the.PL idiots of-some.PL of-the.PL mayors
‘Those idiots of some mayors’
b. *Els idiotes depocs (dels) alcaldes. [monotone decreasing]
the.PL idiots of few.PL of-the.PL mayors
c. *Els idiotes de massa (dels) alcaldes. [excess]
the.PL idiots of too.manyof-the.PL mayors
- (48) a. Magnífics, alguns (dels) llibres! [monotone increasing]
terrific.PL some.PL of-the.PL books
‘Terrific, some books’
b. *Magnífics, pocs (dels) llibres! [monotone decreasing]
terrific.PL few.PL of-the.PL books
c. *Magnífics, massa (dels) llibres! [excess]
terrific.PL too.manyof-the.PL books

To be fair, we should note that perception SCs do not show a contrast with existentials regarding this feature:

- (49) Vaig veure pocs/ massa nens esperant-se
PST.1SG see few.PL too.manychildren waiting-REFL
al passadís.
at-the corridor
‘I saw few/too many children waiting at the corridor.’

A further piece of evidence against analysing pivots as topics comes from the interpretation we obtain with bare nouns. As Basilico (2003: 4) notes, while bare plurals in bare verbal SCs are interpreted as existentials (as expected from athetic – i.e. all-focus – context), bare plurals in adjectival SCs receive a generic interpretation (as expected from a categorical – i.e. topic-focus – context):

- (50) a. The guard saw prisoners leave.
b. The guard considers prisoners intelligent.

This contrast is expected from the different information structure of the SC involved. While bare verbal SCs as (50a) involve a categorical predication with an explicit topic and a focus, adjective SCs as (50b) involve a thetic predication, with an implicit stage topic, so that the bare plural subject forms part of the focus.

Interestingly, Catalan does not allow bare plurals (which cannot be interpreted generically; see Espinal 2011, and references therein) as subjects of SCs (see Ramos 2002: 2018 for Catalan and Demonte & Masullo 1999: 2502 for Spanish):

- (51) a. ??/*Vaig veure presoners escapant per la finestra.
PST.1SG see prisoners escaping by the.F window
'I saw prisoners escaping through the window.'
- b. *Considero presoners intel·ligents.
consider.1SG prisoners intelligent.PL
'I consider prisoners intelligent.'
- c. *Semblen presoners intel·ligents.
seem.3PL prisoners intelligent.PL
'Prisoners seem intelligent.'

When we move to existentials, we are confronted with the well-known fact that bare plurals are perfect in pivot function, and only get the existential interpretation:

- (52) Hi havia nens jugant al jardí.
LOC had children playing at-the garden
'There were children playing in the garden.'

Since Leonetti's SC analysis crucially assumes the bare plural in (52) to be the topic of the SC, and bare plurals cannot be topics as long as they cannot get a generic interpretation in Catalan (see Espinal 2011), he incorrectly predicts (52) to be totally impossible, contrary to fact.

Taken at face value, the evidence reviewed in this section casts serious doubts on Leonetti's claim that pivots of eventive existentials are topics.

3.4. (In)compatibility with focus particles

We have seen in the preceding subsections that pivots of eventive existentials do not behave as topics in any clear sense. In this subsection we will consider the behaviour of the pivot and the coda regarding focus particles like *només* 'only'. On the one hand, under a SC analysis, one could expect that the focus operator *només* 'only' would scope over both the pivot and the coda. Yet, it is far from clear that we have such a reading:¹⁰

- (53) A l'habitació, hi ha només en Pere dormint...
- at the-room LOC has only the Peter sleeping
- a. #i no pas la Maria estudiant.
and not NEG the.F Maria studying
- b. i no pas la Maria.
and not NEG the.F Maria
- c. #i no pas estudiant.
and not NEG studying

This impossibility seems even clearer when we make sure that the whole existential sentence is in focus, as in the following dialogue:

What's going on here?

- (54) a. Res. Només hi ha en Pere dormint.
nothing only LOC has the Peter sleeping
'Nothing. It's just Peter sleeping'.
- b. Res. #Hi ha només en Pere dormint.
nothing LOC has only the Peter sleeping
'Nothing. It's just Peter sleeping'.

In (54a) it is the whole sentence that gets under the scope of *només* ‘only’. Yet, the presumed SC formed by the pivot and the coda, which according to Leonetti should be granted propositional status, cannot, as shown in (54b).

On the other hand, as far as the coda is concerned, both the SC and the VP-adjunct analyses predict association with focus particles like *només* ‘only’. Even though in a previous version of the paper I suggested that the prediction was possibly wrong, as Yurena Gutiérrez pointed out to me, this association seems in fact acceptable:

- (55) A l’habitació, hi ha en Pere només dormint
at the-room LOC has the Peter only sleeping
i no pas estudiant.
and not NEG studying

Again, even though subtle, the data concerning focus particles do not wholly confirm the predictions by Leonetti’s (2008) with respect to the information structure of eventive existentials. Particularly, adverbs like *només* ‘only’ can associate not only with the coda, as expected, but with the pivot as well, making a crucial difference in terms of empirical coverage between the SC and the VP-adjunct analysis.

4. Conclusions

In this article we have reviewed Leonetti’s (2008) proposal that eventive existentials in languages like Catalan, French or Italian select a SC, where the pivot is an internal topic and the eventive coda is a predicate. We have tested this hypothesis against two types of evidence: tests regarding the structural relation between the pivot and the coda (section 2), and tests concerning the information status of the pivot and the coda (section 3). As for the structural tests, we have discovered that extraction, scope, and NPI licensing suggest that the SC analysis is unwarranted, whilst the VP-adjunct analysis of the coda is clearly favoured. As for information status tests, neither the interaction of pivots and codas with quantifiers and focus particles nor the kinds of nominal found in pivot position support Leonetti’s (2008) claim that the pivot is an internal topic of a selected SC. Rather, a different conclusion seems to be correct, namely that both the pivot and the coda are part of the assertion, and a null stage topic is the topic of the existential sentence.

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Note

¹ Note, for the sake of clarity, that the presence of an eventive coda is incompatible with a locative coda *in situ*. Hence, in examples where both an eventive coda and a locative final PP are present, either the PP modifies the eventive coda (ia) or it is a right-dislocated locative adjunct of the whole existential sentence (ib):

- (i) a. Hi ha la Maria esperant-se al jardí.
LOC has the.F Mary waiting-REFL to-the garden
b. Hi ha la Maria esperant-se, al jardí.
LOC has the.F Mary waiting-REFL to-the garden

² I will not consider E. Williams' (1984) proposal that the eventive coda is a modifier of the pivot for reasons to be discussed below.

³ As Manuel Leonetti (p.c.) correctly points out, a source of misunderstanding might arise here concerning the extension of the pivot and coda constituents. Whereas I will follow common practice, and I will consider the DP following the existential verb to be the pivot, and the post-pivot constituent(s) to represent the coda(s), one should take into account the possibility that the pivot is the SC, including the DP and the eventive phrase, and the coda is an external locative PP. In any event, the terminological issue does not affect the empirical and theoretical core of the paper, which disputes the very possibility that eventive existentials select a SC.

⁴ Cinque (1995) offers interesting tests for pseudo-relatives after perception verbs, which are only partially relevant to our discussion, as Cruschina (2012: fn. 21) acutely notes when considering Italian existentials. Basilico (2003) is also a good source of comparison between verbal and adjectival SCs in English and Italian. I thank one anonymous reviewer for pointing out to me the relevance of Cinque's (1995) and Cruschina's (2012) work.

⁵ As one anonymous reviewer points out, this definite/indefinite asymmetry might suggest the existence of two subtypes of the eventive existential construction. The question certainly merits further research within the fine-grained typology of existential constructions developed by Cruschina (2012).

⁶ As one anonymous reviewer points out to me, Cruschina (2012: 15) claims that presentational *ci*-sentences, which according to his typology, include eventive existentials as a subtype, cannot be negated in Italian:

- (i) * Non c'è Gianni infuriato.
not LOC-is John angry

Yet, as far as I can tell, the problem has to do with the definiteness pivot, since examples like (i) are equally bad in Catalan, and examples with NPIs are good in Italian (the Italian example is drawn from a Google search for "*non c'è nessuno aperto*", which obtained 165 results):

- (ii) a. ?? No hi ha en Joan perseguint els lladres.
not LOC has the John pursuing the.PL thieves
b. ma qui di domenica non c'è nessuno aperto!
but here of Sunday not LOC-is no-one open

⁷ The quantifier 'a' is Francez's abbreviation of the standard Davidsonian '∃e'.

⁸ Josep M. Brucart (p.c.) suggests to me that this behaviour gives (indirect) support to the SC analysis, as one could argue that the pivot and the coda are projected *as a constituent* (i.e. a SC) in the scope of the quantifier. Yet, the conclusion is unwarranted as we have no way to ascertain whether they are projected as a constituent or as independent constituents (together, for instance, with the locative PP). Hence, this particular data tells us nothing about constituency, but rather is significant in terms of information status.

⁹ I have not included the version with pre-verbal *només* 'only', as it would introduce an unwanted ambiguity with a VP ellipsis contrast:

(i) Només hi ha en Pere dormint i no (hi ha)
only LOC has the Peter sleeping and not LOC has
pas la Maria estudiant.
NEG the.F Mary studying

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