

EXISTENTIAL CONSTRUCTIONS AND THE PREDICATIVE NATURE OF NOUNS*

Michele Loporcaro and Nunzio La Fauci

Universität Zürich

Abstract: As has long been recognized, nouns can be either referential or predicative, both syntactically and semantically. Nouns, however, can also be *both* referential *and* predicative at the same time. We propose that a noun which is both referential and predicative is the kernel of an existential construction, and that the so-called 'existential predicate' is actually the auxiliary which the referential and predicative noun gets assigned in order for the clause to display finite verb morphology. Through comparison of three Romance varieties, we show that the occurrence of the 'existential predicate' is predicted by the same parametric generalization accounting for the distribution of perfective and passive auxiliaries.

Keywords: Auxiliary verbs, existentials, predicative nouns, Relational Grammar, Romance languages.

1. A THEORY OF EXISTENTIALS

The analysis of existential constructions has attracted considerable interest in recent syntactic studies. One of the reasons for this interest probably resides in the fact that this empirical domain has long resisted explanation in that it challenges some basic assumptions of many current approaches to the theory of syntax. Existentials prove very difficult to analyze in a

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satisfactory way if notions like 'argument' and 'predicate' (or, more generally, grammatical relations) are not acknowledged as primitives of syntactic theory; and the status of primitives is denied to such notions by all theoretical frameworks in which grammatical relations are conceived of as derived from configurational properties of syntactic constituents.

The theory of existential constructions put forward in this paper stems from a very simple starting observation: nouns have a referential function, from a semantic and syntactic point of view, but they can also fulfil a predicative function, both semantically and syntactically. For instance, the noun *(une) solution* in (1) is traditionally (and rightly) considered a predicate, whereas its argument, the noun *(la) retraite*, has a referential function:[1]

(1) *la retraite* *est* *une solution* 'retreat is a solution'
argument **predicate**

A noun with a predicative function meets the semantic requirements imposed by a clause: in particular, it assigns a semantic role THEME to its argument. From a syntactic point of view as well, a noun can be the clause's initial predicate; more precisely, it is an unaccusative predicate, which assigns the initial syntactic relation direct object to its argument. This is formally illustrated in the diagram (2) (which is cast in the formalism of Relational Grammar):[2]

(2)
2	P
...	...
la retraite	*une solution*

The noun, however, does not meet, in itself, all the morphosyntactic requirements of a finite clause, at least in many natural languages (Romance languages among them). In a language like French, the lexical category 'noun' has not the morphology which is necessary for the clause to have a final subject. But this is an inviolable morphological constraint: a finite clause must have a final subject. If then a structure such as (2), consisting of a predicative noun plus its argument, is simply projected into a finite clause, this morphological constraint makes it necessary that an auxiliary verb ('to be') appear in the clause, as shown in (3).

(3) a. *la retraite est une solution*

b.
2		P
1		P
1	P	Cho
la retraite	*est*	*une solution*

'To be' in (3) is a servopredicate, so to speak, which does not contribute to the semantics of the clause, at least as to semantic roles and syntactic relations of the argument(s) involved. Although this verb is traditionally labelled *copula*, it formally qualifies as an auxiliary, as it satisfies the formal definition of auxiliary in (4):

[1] To outline the basics of our theory, we will neglect here, for the sake of simplicity, the issue of (the occurrence vs. non-occurrence and the nature of) the determiner.

[2] More specifically, we assume the Clause Union framework developed by Davies and Rosen (1988). The attribution of an initial grammatical relation by a predicate to an argument is termed 'initialization' (Dubinsky, 1985); it also entails at the same time the assignment of a semantic role.

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(4) Auxiliary (definition; Rosen 1993):
An auxiliary is a **P**(redicate) which inherits its subject (= **1**).

Our next move is to incorporate into our framework a long-standing idea of the speculative tradition in logic and linguistics. The fact that a noun can fulfil a predicative function within a clause is the consequence of the general predicative property of nouns.[3] If we consider nouns in themselves, and focus on the implications of their intrinsic predicative power, then the following observation falls out naturally: the simplest case is that of a noun whose predicative function does not take as argument a distinct noun, but rather - in a reflexive fashion - the entity itself to which the noun refers, by virtue of its own referential function. In other words, to simply say *cat* means a) to predicate 'cat-hood' of an object of the world (i.e. the referent), which b) is at the same time referred to as a *cat*. This is also true within a developmental perspective. As Carol Rosen (p. c.) pointed out to us, children in their early acquisition stages do not have a surface contrast mirroring the difference between pure reference and reference plus predication. At this early time, an utterance like *cat!* (pointing to x) «is ambiguous between assigning x to the class of cats and simultaneously announcing both existence and class membership».

To further illustrate this, consider (3) again. Here, the predication of 'being a solution' is allowed to apply to a distinct noun (*la retraite* 'the retreat' in this case) only because the noun *solution* has no autonomous referential function itself. On the other hand, this predication would have applied to the referent of the noun itself, by definition, had this noun (*solution*) been at the same time referential.

Rosen (1987) has exploited this basic idea to propose that the interplay of predicativity and referentiality is the structural kernel around which the noun phrase is built (see also Blake 1990:123-6 for summary information on this point). This translates formally into the syntactic representation in (5), which (partially) displays the internal grammatical structure of the noun phrase:

(5) 2,P
...
(une) solution

Within the noun phrase, the noun has a syntactic predicate relation (**P**), while bearing at the same time the relation which the predicative function assigns to its own argument, that is, the direct object relation (= **2**, recall that nouns are unaccusative predicates). From a functional point of view, the predicative relation P enables the noun to assert class membership, whereas the argumental relation 2 makes it possible for the noun to refer to entities of the world.

Elaborating on Rosen's account, we propose that the scope of the syntactic projection of the structural pattern in (5) is not confined to the (inner structure of the) noun phrase. Rather, parallel to what we have seen in (3) with respect to copula constructions, also in this case a direct projection into clause structure is available: and this projection is the existential construction.

For this projection to result in a grammatically acceptable structure, however, it is necessary that a final subject be there, and that the same morphological constraint be satisfied which was

[3] This is a conception found in J. Stuart Mill's *System of Deductive Logics* which has been taken on by many modern logicians and philosophers (e.g. G. Frege, B. Russel).

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mentioned above when discussing copular constructions: there must be finite verb morphology. For languages like French, or Romance in general (and many others), this entails the occurrence of an auxiliary, in existential constructions, just as in copular constructions.

Summarizing, our basic claims can be synthetically expressed as in (6a-b):

(6) a. an existential construction is the projection into clause structure of a nominal which is at the same time referential and predicative;
b. the so-called 'existential predicate' (cross-linguistically mainly 'be' or 'have') is an auxiliary, which is assigned to the referential and predicative noun in order for the clause to display finite verb morphology (in compliance with the above-mentioned morphological constraint on finite clause structure).

To further elaborate on the former point, consider now (7):

(7)

a. ***une solution*** *est possible*
'a solution is possible'

b. *la retraite est* ***une solution***
'retreat is a solution'

c. *il y a* ***une solution***
'there's a solution'

	argumental	predicative
(7a)	+	-
(7b)	-	+
(7c)	+	+

(7a-c) displays the three basic semantico-syntactic ways in which a noun can be inserted into a clause: these are defined in terms of the combination of values for the two features [±argumental] and [±predicative]. A noun (e.g. *une solution* in (7)) can be [+argumental, -predicative] as in (7a), if it only has a referential, not a predicative, function within the clause: in this case, it is the argument of a predicate, either verbal or nominal.[4] Conversely, *une solution* is [-argumental, +predicative] when occurring as the predicate of a copular sentence like (7b). The third option, [+argumental, +predicative], is instanced by existentials ((7c)), in which the noun is at the same time referential (hence argumental) and predicative.

Note that within configurational approaches to syntax like the Principles and Parameters model, the contrast (7a-b) would be defined in terms of occurrence of the relevant nominal in an A vs. A' *position*. Intuitively, such a treatment poses serious problems for an analysis of (7c), in which the same noun is at the same time argumental *and* predicative: obviously, it is impossible for one and the same nominal to be simultaneously in an argumental *and* in a non-argumental *position* (say, in both DP positions of a small clause). To overcome such problems, diverse solutions have been put forward in recent years by generative grammarians. For instance Moro (1996), one of the scholars who has best realized the nature of the problem just underscored, has to resort to the following formal adjustment: he proposes that the argument of an existential is in the argumental position of an inverted copular sentence, whereas the predicative position of the same clause is occupied by an *abstract* existential predicate, which is required for the copula to be lexicalized. This abstract predicate, however, has nothing to do with existential meaning: consequently, the form and the meaning of existential constructions are not directly related to each other in Moro's approach: "[A]lthough it is true that the

[4] A nominal is argumental when a) it is assigned a grammatical relation and a semantic role by a predicate, which takes it as one of its arguments, and b) it refers to an object (or class of objects) of the world. Moreover, it has to be underscored that our definition of 'referential' is purely linguistic, not logical, in nature: it has nothing to do with the existence vs. non-existence of the entity referred to in the real world. In other words, even a *unicorn* can be referential, on our definition, provided it occurs in a clause of type (7a) or (7c).

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meaning of a *there*-sentence is springing up from the DP, by no means can we say [...] that DPs contain a predicative link in the same sense as sentences" (Moro 1996:144).[5]

Within such a framework, there is no conceivable way out of this *impasse*: given a configurational definition of grammatical relations, a noun is *either* argumental *or* predicative, as a consequence of its structural position. It cannot possibly be both at the same time.[6]

Our account, which elaborates on an entirely different conception of syntax, is totally free from such complications: *une solution* in (7c) is at the same time argumental and predicative, since an existential simply corresponds to the direct projection into clause syntax of an (auxiliated) noun, which covers both of these syntactic (and semantic) functions. The claim in (6b) directly follows from (6a), as already explained above.

The rest of this paper is devoted to the discussion of empirical evidence corroborating (6b). We will take into account empirical data from three Romance varieties: French, Italian and Logudorese Sardinian. Our discussion will pursue the following goals. Firstly, and more generally, we show that the diverging empirical properties displayed by existentials in the three varieties under consideration follow from our hypothesis on the structural representation of existentials ((6a)). Secondly, and more specifically, we shall demonstrate that the so called existential predicate has to be structurally represented as an auxiliary (as defined in (4)). Its occurrence, we show, is predicted by the same generalization that accounts for the auxiliary distribution in the relevant languages. A much debated cross-linguistic property of existential constructions, viz. the so-called Definiteness Effect, will also be touched upon in what follows. Our account of the syntactic structure of existentials, we will argue, opens up some promising perspectives for a better understanding of the Definiteness Effect.

2. ROMANCE VARIATION IN EXISTENTIAL CONSTRUCTIONS

Consider now the data in (8a-c), which exemplify existentials in the three varieties mentioned above:[7]

(8) a. *ci* *sono* *due problemi* (Italian)
there are:3pl two problems

b. *il* *y* *a* *deux problèmes* (French)
it *there* has two problems

c. *bb* *a* *dduos probblé'maza* (Logudorese Sardinian)
there has two problems
'there are two problems'

Observing the three clauses, from left to right, we can notice three main cross-linguistic differences, which are highlighted in (9a-c):[8],[9]

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[5] In Moro's (1996) theory, existential meaning results from a function linking D° and the NP within the DP. In our account, on the other hand, both form and meaning of existentials are explained by the same token.

[6] This applies to all proposals within that framework, which have been put forward over the last decades. For Belvin and den Dicken (1997), for instance, who take on an often assumed analysis of existentials, in the clause *There is no solution* the subject is *no solution* whereas the predicate is *there*.

[7] The third Romance variety taken into account here is the Logudorese Sardinian spoken in Bonorva (cf. La Fauci and Loporcaro, 1993). The syntactic features illustrated in what follows, however, seem to be representative of Sardinian as a whole (see the description in Jones, 1993:100-14; 1997:382).

[8] In (9) and henceforth, the Latin forms ESSE 'to be' and HABERE 'to have' (also shortened E and H, respectively) are used whenever appropriate as cover terms for the Romance outcomes thereof.

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(9)

		French	Italian	Sardinian
a.	occurrence of a phonetically realized dummy	+	-	-
b.	auxiliary verb	HABERE	ESSE	HABERE
c.	finite verb agreement with pivot nominal	-	+	-

The contrast between French, on the one hand, and Italian and Sardinian, on the other, in terms of the presence vs. absence of a phonetically realized dummy subject ((9a)), simply follows from the parameter which is currently called pro-drop (that is, the silent dummy parameter, as proposed by Perlmutter 1983): on the assumption that all the examples in (8a-c) are instances of an impersonal clause, the final subject is an overtly realized dummy in French, whereas it is a silent dummy in Italian and Sardinian.

The two further distinctive features in (9b-c)) are selection of 'to be' (in Italian) vs. 'to have' (in French and Sardinian) and agreement of the finite verb form (henceforth **FVF**) of 'to be' with the pivot nominal, in Italian, vs. lack of agreement of the forms of 'to have' in French and Sardinian.

Based on the discussion in §1, we propose for Romance existential constructions, as exemplified in (8a-c), the structural representation in (10):

(10)

		P,2
2		P, Cho
1		P, Cho
1	P	Cho
D	*ci sono*	*due problemi*
il	*y a*	*deux problèmes*
D	*bb a*	*dduos probblé'maza*

This representation follows automatically from a set of universal principles of Relational Grammar (Final 1 Law, Stratal Uniqueness Law, Active Dummy Law, Nuclear Dummy Law, Motivated Chômage Law; cf. Perlmutter & Postal, 1983:103; Blake, 1990: ch.1), combined with the general hypothesis on the predicative and argumental nature of nominals expounded above in §1 and summarized in (6a). The structure in (10) simply expands the one presented above in (5), in which only the first stratum was included.

Assuming the representation in (10), we are in a position to give a straigthforward account for the morphosyntactic features we have listed in (9), which differentiate Italian, French and Sardinian.

Lack of finite verb agreement in French and Sardinian depends on the fact that the clause is impersonal (i.e., its final subject is a dummy, as apparent in (10): following Perlmutter (1983), an impersonal clause is defined as a clause whose final subject is a dummy). And only in Italian, not in French and Sardinian, the pivot nominal of an impersonal clause is allowed to control agreement.[10] This is a well-known fact about Romance syntactic variation (cf. e.g. Perlmutter, 1983; La Fauci and Loporcaro, 1997:§3.2.1), which is illustrated by the examples in (11):

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[9] A further property of existentials in the three varieties at issue, which will not be discussed here, is the occurrence of a locative clitic. This clitic is analyzed in La Fauci and Loporcaro (1997:§2) as the morphological correlate of the projection into clause syntax of the predicative relation of the noun.

[10] In early Relational Grammar, this kind of pivot-concord was termed Brother-in-Law agreement.

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(11) a. *sono morte tre oche durante l'inverno*
are:3pl died:fpl three geese:fpl during the winter
'three geese have died during the winter'
b. *il est mort trois oies pendant l'hiver*
it is died three geese:fpl during the winter
c. *kk a mmoltu _uol bèøeze*
there has died two oxen
'two oxen have died'

Let us now concentrate on the distribution of 'to be' vs. 'to have' in (8a-c). As is well known, the occurrence of 'to be' and 'to have' is by no means specific to existentials. Rather, we find complementary distribution of these two verbs in a variety of empirical domains, as shown in (12):

(12)

a. 'existential predicate'	ESSE	HABERE
b. perfective auxiliary	ESSE	HABERE
c. passive auxiliary	ESSE	
d. 'copula'	ESSE	
e. 'possession verb'		HABERE

This empirical observation has not received any comprehensive and satisfactory explanation, to the best of our knowledge. Such an explanation, however, is readily available in our framework given the premises we have set in §1. In fact, the distribution of 'to be' vs. 'to have' in existentials falls within the scope of the parametric generalization, which has been established independently from the study of existentials: it was originally devised to cover the distribution of perfective and passive auxiliaries only (cf. La Fauci, 1989, 1994; La Fauci and Loporcaro, 1993, 1997):

(13) ESSE/HABERE distribution in Italian, Sardinian, and French:
The auxiliary is **ESSE** 'be' iff there is a nominal a which is a 1 and:
a) [Italian] has been a 2 in the clause;
b) [Sard.] has been the first 2 in the clause;
c) [French] i) has been a 2 in the preceding P-sector and
ii) is an argument of the initial predicate.
It is **HABERE** 'have' otherwise.

To illustrate the working of (13) beyond the empirical domain of existentials, let us now consider the structure of the passive clause(s) in (14) (with parallel examples for Italian, Sardinian, and French).

(14) a. *Mario è stato picchiato dalla moglie*
Mario is been beaten by-the wife
b. *Tore ´l bista_u ©olpa_u _ae muddz´re zua*
Tore is been beaten by wife his
c. *Mario a été battu parsa femme*
Mario has been beaten by his wife
'Mario has been beaten by his wife'

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d.

2			P	1	← 1st P-sector
1			P	Cho	
1		P	Cho	Cho	← 2nd P-sector
1	P	Cho	Cho	Cho	← 3rd P-sector
Mario	*è*	*stato*	*picchiato*	*dalla moglie*	
Tøre	*'l*	*bista_u*	*®olpa_u*	*_ae muddz´re zua*	
Mario	*a*	*été*	*battu*	*par sa femme*	

The perfective auxiliary of the passive auxiliary is ESSE in Italian and Sardinian, but is HABERE in French: all this is predicted by (13). The final subject is a direct object in (14); this suffices, given (13a), for ESSE to be selected in Italian, both as a passive auxiliary and as the perfective auxiliary of the passive auxiliary. The same nominal is also the first (and only) nominal to bear the 2 relation in the clause: this complies with condition (13b), holding for Sardinian: hence ESSE is selected, in both functions, in this language too.

But in French the condition for ESSE selection is more restrictive. The crucial condition here is (13c-i): for ESSE to be selected, it is not sufficient that the final subject be a direct object. Rather, the nominal concerned must bear the direct object relation in the predicate sector immediately preceding that of the auxiliary.[11] It should by now be clear that structure (14) meets condition (13c-i), exclusively for the passive auxiliary, but not for the perfective auxiliary. In fact, the latter is 'to have', not 'to be', because the predicate sector of the perfective auxiliary is not *immediately* preceded by the initial P-sector, the one in which *Mario* is a direct object. There is one more P-sector, that of the passive auxiliary, lying in between. Hence, condition (13c-i) is fulfilled in French exclusively for the passive auxiliary, which surfaces as ESSE, not for the perfective auxiliary of the passive auxiliary, which consequently surfaces as HABERE.

The occurrence of the perfective auxiliary (again, 'to have' vs. 'to be') in all perfective verbal periphrastics as well as the occurrence of the possession verb 'to have' fall within the scope of (13) as well. This can be easily seen by considering the structural representations in (15a-g), that provide a representative sample of clause types in which 'to have' and/or 'to be' occur in language after language:

(15) a.

1		P	**unergative**	
1	P	Cho		
Maria	*ha*	*lavorato*	auxiliary:	H
Maria	*a*	*ttribaÁÁa_u*		H
Marie	*a*	*travaillé*		H

'M. has worked'

b.

1		P	2	**transitive**	
1	P	Cho	2		
Maria	*ha*	*visto*	*la casa*	auxiliary:	H
Maria	*a*	*bbi_u*	*za _ømo*		H
Marie	*a*	*vu*	*la maison*		H

'M. has seen the house'

[11] As explicitly illustrated in diagram (14), the **predicate sector** of a given predicate is defined as the set of strata in which that predicate bears the P-relation (cf. Davies and Rosen, 1988).

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c. **unaccusative**

2		P		
1		P		
1	P	Cho		
Maria	*è*	*caduta*	auxiliary:	E
M.	is	fallen:fsg		
Maria	*´*	*rrutta*		E
Marie	*est*	*tombée*		E
'M. has fallen'				

d. **direct reflexive**

1,2		P		
1		P		
1	P	Cho		
Maria	*si è*	*lavata*	auxiliary:	E
M.	REFL is	washed:fsg		
Maria	*z ´*	*ssamuna_a*		E
Marie	*s'est*	*lavée*		E
'M. has washed herself'				

e. **indirect reflexive (initially transitive)**

1,3		P	2		
1,2		P	Cho		
1		P	Cho		
1	P	Cho	Cho		
Maria	*si è*	*scritta*	*due lettere*	auxiliary:	E
M.	REFL is	written:fsg	two letters		
Maria	*z a_*	*iskrittu*	*_ual litteraza*		H
M.	REFL has	written	two letters		
Marie	*s'est*	*écrit*	*deux lettres*		E
M.	REFL is	written	two letters		
'M. has written two letters to herself'					

f. **indirect reflexive (initially unergative)**

1,3		P		
1,2		P		
1		P		
1	P	Cho		
Maria	*si è*	*parlata*	auxiliary:	E
M.	REFL is	spoken:fsg		
Maria	*z ´l*	*faeQQa_a*		E
Marie	*s'est*	*parlé*		
M.	REFL is	spoken		E
'M. has talked to herself'				

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g. 3 P,2 **transitive**
1 P,2
1 P 2
Maria *(ci')ha* *una figlia* auxiliary: H
Marie *a* *une fille* H
'M. has a daughter'[12]

The reader is referred to La Fauci (1989), La Fauci and Loporcaro (1993:§3) for more detail, concerning both the motivation of the structural representations in (15) (all maximally simple and supported by independent empirical evidence) and the exact working of (13) in the varieties at issue. While we cannot comment on (13) and (15) at length now, we will just add one short remark concerning 'possessive *have*', just to give a flavour of the scope of our proposal. Compare our account with any one of the many recent attempts at a unified analysis of the properties and distribution of *have/(be)* within other frameworks. Ritter and Rosen (1997:316-7), for instance, concluding their discussion on the syntax of main verb *have*, admit that "there remain outstanding problems for a unified analysis [of auxiliary and main verb *have*: M.L.]. One difference between main verb *have* and Aux *have* is that while main verb *have* introduces a new subject argument, there is ample evidence that auxiliary *have* is a raising verb.". This is of course (an updated version of) the way these facts have been conceived for centuries, as reflected in the very terminological contrast 'main verb' vs. 'auxiliary' *have*. In our approach, as argued in La Fauci and Loporcaro (1997:15-17), La Fauci (1997:24-6), what is traditionally called 'main verb' *have* is formally an auxiliary, the only difference residing in the fact that it is assigned to a predicative noun rather than to a verbal predicate. *Have* never introduces a new subject into the clause, but rather inherits its subject (a 3→1 advancee, as shown in (15g)). And it must be so, for the simple reason that the only lexical predicate in (15g) is the predicative noun.

Crucial to our present concern is the fact that (13), a generalization which has been established on totally independent grounds, accounts straightforwardly for ESSE/HABERE distribution in existentials. This is in keeping with our starting hypothesis (6b), as the so-called 'existential predicate' actually is an auxiliary. More precisely, it is the auxiliary which is assigned to a noun which cumulates the referential and predicative functions. As already made clear in §1, the occurrence of this auxiliary is necessary in order to satisfy the inviolable morphological constraint imposing that a finite clause must have finite verb morphology.

Crucial empirical confirmation for this account is provided by Romance varieties, such as Sardinian, in which in existential constructions too, much like in perfective verbal periphrastics, a regular alternation of two auxiliaries is found. This is illustrated by a comparison of (16a) and (8c), the latter here repeated for the reader's convenience as (16b):

[12] The Sardinian counterpart of (15g) is not included in the list because of a lexical accident. Sardinian, in fact, belongs to the sub-group of Romance languages (including Spanish, Portuguese, central-southern Italian dialects) in which HABERE was replaced by TENERE as a possession verb.

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(16) a. *bbi zun sos pittsínnozo (no llos po_ímoz ilmenti©are)*
there are the children (we cannot forget them)
'the children are there (we cannot forget about them)'
b. *bb a dduos probblè'maza*
there has two problems
'there are two problems'

Comparing (16a-b), we can extract the picture of differential empirical properties summarized in (17):

(17)

	a. (16a)	b. (16b) = (8c)
	bbi sun sos pittsínnos	*bb a dduos probblè'maza*
nominal	DEFINITE	INDEFINITE
auxiliary	ESSE	HABERE
verb agreement	+	-

A first remark is that (17) immediately raises the question of the so called Definiteness Effect, which is exhibited by many languages, and typically in the domain of existential constructions (cf. e.g. Belletti, 1988; Moro, 1993:66-70, among many others). In fact, the (in)definiteness of the nominal in (16a-b) directly correlates with the occurrence of HABERE/ESSE and with the presence vs. absence of finite verb agreement. The pattern in (17) is not a peculiarity of Sardinian existentials. Rather, the diverging properties listed in (17) systematically oppose two series of clause types, as exemplified by the pair of initially unaccusative constructions in (18a-b):

(18) a. *kk ' rresta_a issa in dømo*
there is remained:fsg she at home
'SHE has stayed at home'
b. *kk a rresta_u ddz'nte in dømo*
there has remained:msg people at home
'(some) people have stayed at home'

This contrast has been analyzed in La Fauci and Loporcaro (1993:165-172) by proposing that the reason for the differences between (18a-b) ultimately resides in the personal vs. impersonal nature of the corresponding structural representations. This is shown by the diagrams in (19a-b), which analyze (18a-b), respectively:

(19) a.

	P	2	Obl
	P	1	Obl
P	Cho	1	Obl
kk '	*rresta_a*	*issa*	*in dømo*

b.

		P	2	Obl
2		P	Cho	Obl
1		P	Cho	Obl
1	P	Cho	Cho	Obl
D	*kk a*	*rresta_u*	*ddz'nte*	*in dømo*

The former is a personal clause, in which the argument *issa* is the final subject, whereas the latter, whose final subject is a dummy, formally qualifies as an impersonal clause given the current definition of impersonal assumed here (cf. Perlmutter, 1983). Since the empirical

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differences observed in the unaccusative constructions in (18a-b) are the same as in the pair of existentials (16a-b), it is fairly natural to extend the same theoretical explanation of these empirical divergencies to existentials as well. Consider (20a-b), the structural representations we propose for Sardinian existentials:

(20) a.

	P,2
	P,1
P	1
bbi zun	*sos pittsínnozo*

b.

		P
2		P,Cho
1		P,Cho
1	P	Cho
D	*bb a*	*dduos probblè'maza*

(20a) is a personal structure, in which there is no silent dummy, and the nominal *sos pittsínnozo* 'the children' is the final subject. On the other hand, the representation (20b) of the construction with an indefinite nominal (16b) is an impersonal structure, the same which has been proposed in (10) for French and Italian existentials as well.

All of the differential properties of (16a-b) follow directly from the analyses in (20a-b). Note first that the contrast in (im)personality is not assumed ad hoc; rather, it follows from independently established facts about Sardinian syntax. As we have seen in (9c), in Sardinian the finite verb does not agree with the pivot nominal of an impersonal construction (see also (19b)). Consequently, since the nominal *sos pittsínnozo* 'the children' in (16a) does control verb agreement, it must be the final subject. This implies that the structural representation of this clause cannot, by definition, be impersonal. It necessarily has to be as shown in (20a).

From this structural representation, all remaining morphosyntactic features of (16a) follow as well. In particular, the occurrence of the auxiliary 'to be', rather than 'to have', falls out directly from the parametric account of HABERE/ESSE distribution in Romance, presented above in (13).

Condition (13b), the one crucially concerning Sardinian, is satisfied by (20a). There is a nominal, here (*sos pittsínnozo*), which is the final subject while being at the same time the first nominal to hold the direct object relation in the clause. This is not the case in (20b): hence, condition (13b) is not met in the latter structure. It becomes evident, thus, that the contrast in the occurrence of 'to be' vs. 'to have' in the two existentials in (16a-b) is but one specific aspect of the general issue of auxiliary selection in the varieties under discussion. In Sardinian, the structural reason for the occurrence of 'to be' in (16a) vs. 'to have' in (16b) is the same reason which explains the contrast between, say, (15d) [a direct reflexive: *Maria z ' ssamuna_a* 'Mary has washed herself'] or (15f) [an indirect reflexive, initially unergative: *Maria z 'l faeQQa_a* 'Mary has talked to herself'], on the one hand, and (15e) [an indirect reflexive, initially transitive: *Maria z a_ iskrittu _ual litteraza* 'Mary has written two letters to herself'], on the other hand. In all of these clauses, the auxiliary is 'to be' iff there is a nominal in the clause which is a 1 and has been the first 2, as predicted by (13b). Elsewhere the auxiliary surfaces as 'to have'.

As noted above, the choice of ESSE/HABERE in (16a-b) co-varies with the definiteness of the nominal. Consequently, the two distinct structural representations in (20a) vs. (20b)

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correspond to the syntactic correlate we propose for the Definiteness Effect: in other words, there is a direct link between (in)definiteness (of the argument) and (im)personality (of the clause). While the interplay between these two factors clearly plays a crucial role in determining the Definiteness Effect, the exact details of this connection remain to be worked out. Closer investigation of this topic will be left for further research.

To conclude, we have developed a theory of existential constructions which has proven capable of accounting in a simple fashion for the intricate set of empirical properties displayed by existentials across Romance. An 'existential predicate' is indeed an auxiliary verb, as its occurrence is predicted by the same generalization accounting for the occurrence of auxiliaries elsewhere in the language. The only difference between the verb occurring in an existential construction, on the one hand, and a perfective or passive auxiliary, on the other hand, is the fact that the former occurs in a clause whose initial predicate is a noun which is at the same time argumental/referential and predicative. Once this is recognized, most of the features of existentials which have long resisted a satisfactory account explain straightforwardly. Note, finally, that a simple explanation such as the one developed here only becomes possible if the notions 'predicativity' and 'argumentality' are recognized as fundamental to the study of syntax.

REFERENCES

Belletti, A. (1988). The Case of Unaccusatives. *Linguistic Inquiry* **19**, 1--34.

Belvin, R. and M. den Dicken (1997). *There* happens, *to, be, have*. *Lingua* **101**, 151--183.

Blake, B. J. (1990). *Relational Grammar*. Routledge, London.

Davies, W. and C. Rosen (1988). Unions as Multi-Predicate Clauses. *Language* **64**, 52--88.

Dubinsky, S. (1985). *Union Constructions in Japanese: a Unified Analysis of* ***-sase*** *and* ***-rare***. PhD Thesis, Cornell University, Ithaca (N.Y.).

Jones, M. (1993). *Sardinian Syntax*. Routledge, London.

Jones, M. (1997). Sardinia. In: *The Dialects of Italy* (M. Maiden and M. Parry, (Eds.)), 376--384. Routledge, London.

La Fauci, N. (1989). Ausiliari perfettivi e accordo del participio passato in italiano e in francese. In: *L'Italiano tra le lingue romanze*. Atti del XX Congresso Internazionale di Studi della Società di Linguistica Italiana (Bologna, 25--27 settembre 1986) (F. Foresti, E. Rizzi and P. Benedini, (Eds.)), 213--242. Bulzoni, Rome.

La Fauci, N. (1994). *Objects and Subjects in the Formation of Romance Morphosyntax*. IULC, Bloomington.

La Fauci, N. (1997). *Per una teoria grammaticale del mutamento morfosintattico*, Edizioni ETS, Pisa.

La Fauci, N. and M. Loporcaro (1993). Grammatical Relations and Syntactic Levels in Bonorvese Morphosyntax. In: *Syntactic Theory and the Dialects of Italy* (A. Belletti (Ed.)), 155--203. Rosenberg & Sellier, Turin.

La Fauci, N. and M. Loporcaro (1997). Outline of a theory of existentials on evidence from Romance. *Studi italiani di linguistica teorica e applicata* **26**, 5--55.

Moro, A. (1996). *The raising of predicates. Predicative noun phrases and the theory of clause structure*. Cambridge University Press, Cambridge.

Perlmutter, D. M. (1983). Personal versus Impersonal Constructions. *Natural Language and Linguistic Theory* **1**, 141--200.

Perlmutter, D. M. and P. Postal (1983). Some proposed laws of basic clause structure. In: *Studies in Relational Grammar 1*(D. M. Perlmutter (Ed.)), 81-128. University of Chicago Press, Chicago.

ISBN: 0 08 043 438X

Ritter, E. and S. T. Rosen (1997). The function of *have*. *Lingua* **101**, 295--321.

Rosen, C. (1987a). Star means bad: a syntactic divertimento for Italianists. *Italica* **64**, 443--476.

Rosen, C. (1987b). Possessors and the Internal Structure of Nominals. ms. Cornell University, Ithaca (N.Y.).

Rosen, C. (1989). La proposizione semplice con più di un predicato: tipo ausiliare e tipo seriale. paper read at the University of Palermo, Istituto di Filosofia e Scienze dell'Uomo.

Rosen, C. (1990). Italian Evidence for Multi-Predicate Clause. In: *Grammatical Relations. A Cross-Theoretical Perspective* (K. Dziwirek, P. Farrell and E. Mejias-Bikandi, (eds.)), 415--444. The Stanford Linguistics Association, Stanford.

Rosen, C. (1993). Auxiliation and serialization: on discerning the difference. ms. Cornell University, Ithaca (N.Y.).

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