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Lexically Selected Expletives: Evidence from Basque and Romance¹

Abstract

This paper argues for the existence of lexically selected expletives, i.e. semantically vacuous elements subcategorized for by a predicate. It draws primarily on evidence from weather expressions in Basque and Italian, but it also uses independent evidence from Spanish existential *haber* ‘there is/are’ and French *falloir* ‘be necessary’ structures. These constructions are problematic for an analysis based on either quasi-arguments (Chomsky 1981) or ‘traditional’ (i.e. non-subcategorized) dummies, but they are amenable to an account with lexically selected expletives. Besides offering a unified analysis of seemingly unrelated phenomena, the proposal developed here yields a parsimonious theory of expletives. Moreover, the account provides additional evidence for Postal and Pullum’s (1988) claim that dummies can appear in strictly subcategorized positions, challenging the traditional assumption that syntactic licensing is necessarily concomitant with semantic role assignment.

1. Introduction and overview

Expletives have long been at the center of some the most important debates concerning the syntax/semantics interface, including the need for a putatively universal subject stipulation (i.e. the EPP or its equivalent in other frameworks), the legitimacy of movement to subcategorized positions (e.g. raising to object), and the relationship between syntactic subcategorization and theta-role assignment.

¹ I am very grateful to Carol Rosen, Nunzio La Fauci, Wayne Harbert, Brian Joseph, and several anonymous reviewers for their insightful comments on this paper or an earlier version thereof. Thanks are also due to all the native speakers who provided their judgments. Obviously, all errors and omissions are my sole responsibility.

Current syntactic theory has qualified the traditional view of expletives as non-referential, semantically vacuous elements in several respects. First, some recent analyses (particularly within Minimalism) have claimed that expletives may have featural content. For example, in some proposals dummy *it* has both case and person/number/gender features, whereas pleonastic *there* only carries case features (e.g. Chomsky 1995, Groat 1995; cf. Bennis's 1986 view of both dummies as full arguments). Second, a variety of accounts within different theoretical traditions have claimed that expletives can be associated with thematic arguments via chain formation. For example, in impersonal constructions like *there arrived three men* the dummy has been traditionally analyzed as forming a chain with the postverbal nominal (e.g. Chomsky 1981, 1986, 1995, Perlmutter 1983, Burzio 1986, Rizzi 1986, Postal and Pullum 1988, Authier 1991, Haider 1991, Lasnik 1992, 1995, Dubinsky and Nzwanga 1996, Groat 1995, Rothstein 1995, Svenonius 2002; but see, among others, Alsina 1996, Stroik 1996 and Chomsky 2000 for alternative proposals). Third, some recent (Minimalist) accounts have claimed that expletives such as English *it* or *there* formally denote a null element (Rothstein 1995) or "an interpretable instruction to do nothing" (Groat 1995), so that they actually have a semantic interpretation at LF. Despite these qualifications, however, the cross-theoretical consensus is that expletives do not occur in theta-marked positions.

Another traditional assumption about expletives is that, since they lack thematic content, they do not satisfy the selectional requirements of any predicate. Their presence in syntactic structure only contributes to the organization of old and new information in the sentence (Bennis 1986) and/or satisfies some structural requirement, most notably the need for every clause or syntactic predicate to have a subject (e.g. Chomsky 1981, 1995, 2000, Perlmutter 1983, Burzio 1986, Rizzi 1986, Groat 1995, Lasnik 1995, Rothstein 1995, Alsina 1996, Svenonius 2002, Hazout 2004). The claim that expletives cannot occur in lexically-projected positions follows from a more basic assumption of contemporary syntactic theory, i.e. that syntactic subcategorization necessarily entails theta-role assignment, so that syntactic licensing is entirely predictable on the basis of (semantic) argument structure.

One of the few studies to challenge this assumption is Postal and Pullum (1988). Working within GB, Postal and Pullum argue that certain English structures involve expletives in subcategorized syntactic positions. These structures include clausal extrapositions from direct object position

(1), prevention complements with *from* + *gerund* (2), extraposition of infinitival VPs across matrix clause dependents (3), certain objects of prepositions (4), extraposed irrealis clauses (5), and idioms such as (6), where the pleonastic does not form a chain with any argument (examples from Postal and Pullum 1988: 643, 645, 646, 648, 649, 651). According to Postal and Pullum, the expletive in (1)–(6) is not the subject of an embedded clause. Instead, it appears in a non-thematic object position projected by the main verb. As they note, the fact that expletives can occur in strictly subcategorized positions invalidates Chomsky's (1981) Projection Principle, whereby every position strictly subcategorized by a lexical head is theta-marked by that head.

- (1) *They never mentioned **it** to the candidate that there will be an appeal.*
- (2) *They kept **it** from becoming too obvious that she was pregnant.*
- (3) *I figured **it** out to be more than 300 miles from there to Tulsa.*
- (4) *You may depend upon **it** that we won't abandon him.*
- (5) *I would prefer **it** if Kim were not informed.*
- (6) *to buy **it** (= to be deceived)*

Building upon Postal and Pullum's proposal, Authier (1991) also analyzes the expletives in (1)–(6) as occurring in subcategorized object position. In his view, the dummies appear in positions projected by verbs that assign accusative case, but not a theta-role, to their object. This analysis, Authier claims, requires only a minor modification of the Projection Principle: allowing both theta-role assignment *and* case assignment to project syntactic positions.

The notion of expletives in subcategorized syntactic positions has been rejected in more recent generative accounts, particularly within Minimalism. The consensus appears to be that Postal and Pullum's examples can be reanalyzed in such a way as to preserve standard views on expletives and lexical selection. For example, cases like (2) and (3) have been claimed to involve expletives licensed as subjects of non-theta-assigning predicates within the clausal complements of ECM verbs, rather than as main clause objects. On the other hand, those cases where the pronoun is not the subject of an embedded predicate have been claimed to involve ordinary theta-marked pronouns, rather than expletives. For instance, in (6) the pronoun would have an unspecified referent (*buy **it** = buy **the story***), whereas in (1) and (5) our 'regular' pronoun would either be anaphoric to the extraposed CP or denote a specific event prominent in the discourse and identified explicitly by the clausal complement (for details,

see Rothstein 1995, Kiss 2002, Holmberg and Nikanne 2002, and Svenonius 2002, among others).

According to Rothstein (1995), this reanalysis allows us to preserve the generalization that expletives occur only in subject position, where *subject* is defined as the subject of a syntactic predicate, not as the subject of a clause. In her proposal, a predicate is a primitive defined in terms of syntactic projections of heads (including VPs, APs, PPs and NPs used predicationally), not in terms of the theta-roles assigned by those heads. For example, in *I consider it [obvious that you should have done that]*, pleonastic *it* is the subject of the bracketed adjectival phrase, which is a syntactic predicate. The object position where the expletive is realized is not projected by the matrix verb. Instead, it is projected to satisfy the Predication Condition, the requirement that all predicates must have subjects. Expletives, then, can only be licensed as subjects because subject position is projected syntactically and not thematically, so it must be filled even when it has no semantic relevance. Rothstein's Predication Condition has been widely adopted in recent Minimalist accounts. However, her analysis of object expletives has also been critiqued on both empirical and theory-internal grounds (see Stroik 1996 for details).

My goal here is to argue for the existence of lexically selected expletives. The evidence includes weather expressions in Italian (7) and Basque (8), French *falloir* 'be necessary' constructions (9), and a subset of existential *haber* 'there is/are' structures in Spanish (10)—all of which are natural and typical in the respective languages. As we will see below, (7)–(10) involve a dummy realized as an empty category in Spanish, Basque and Italian, and as an overt pronominal (*il* 'it') in French.²

(7) *Piove (acqua sporca)*
rains water dirty
'It's raining (dirty water).'

(8) *Atzo hotz handi-a egin zuen.*
yesterday cold big-det-abs(Ø) do have-past-abs(3sg)-erg(3sg)
'Yesterday it was very cold.'

² Some of the arguments developed in this paper appear in my doctoral dissertation (Alba-Salas 2002), where I briefly discuss the notion of lexically selected expletives using light *fare* 'do' in Italian and French *falloir* 'be necessary' expressions.

- (9) *Il faut des techniciens.*
 it is-needed some technicians
 ‘We need some technicians.’
- (10) *Había libros en cantidad.*³
 there-was books in amount
 ‘There were lots of books.’

A key element in my argumentation, weather expressions like (7) and (8) have received only marginal attention in syntactic theory (cf. Chomsky 1981, Perlmutter 1983, Burzio 1986, Belletti and Rizzi 1988, Rosen 1988, Farrell 1994, Levin and Rappaport 1996, Holmberg and Nikanne 2002, Kiss 2002, Svenonius 2002; but see Ruwet 1989, 1991). This situation presumably stems from two assumptions: (i) that weather predicates do not license full arguments, and (ii), and more importantly, that syntactic licensing is necessarily concomitant with semantic role assignment. Here I question both assumptions by arguing that weather predicates can license not only full arguments (as in the case of Italian), but also expletives (as in Basque and Italian).

As is well known, the empty category in Italian weather expressions such as (7), like English weather-*it*, and unlike typical dummies, can serve as a controller, so it cannot be analyzed as a ‘traditional’ expletive (e.g. Burzio 1986, cf. Chomsky 1981). This situation has led linguists within GB/Minimalism to analyze weather dummies as quasi-arguments. Yet, as some critics have noted, the quasi-argument analysis is ad-hoc and complicates our theory of semantic role assignment by positing a special type of theta-role without any independent motivation (Postal and Pullum 1988, Ruwet 1989). Moreover, as we will see below, such an analysis does not explain why quasi-arguments in Italian pattern together with true arguments with respect to control, but not with respect to cliticization.

Basque weather expressions like (8) are also problematic for accounts based on either quasi-arguments or traditional (i.e. non-subcategorized) expletives. As I show below, (8) is a syntactically transitive construction

³ Note that in (10) the postverbal nominal does not trigger verb agreement. As I show in section 5, this example has a counterpart where the nominal does trigger verb agreement. The agreeing and the non-agreeing constructions differ from each other with respect to several key properties, including the presence of a lexically selected-expletive (see details below).

with an expletive subject and the weather nominal as the direct object. Among other limitations, a traditional analysis would have to stipulate the obligatory presence of either a dummy or a quasi-argument subject—an ad-hoc solution that is both empirically and conceptually inadequate.

Equally problematic are *falloir* expressions like (9) and *haber* constructions such as (10). As I show below, (9) and (10) pattern together with transitive, rather than with unergative or unaccusative, structures. The subject position is filled by a semantically vacuous element, and the postverbal nominal is an underlying direct object. Importantly, (9) and (10), unlike impersonal unaccusative structures, do not have counterparts where the underlying object appears in subject position. Apparently, unaccusative advancement (i.e. object-to-subject movement) of the postverbal nominal is blocked by the expletive subject. The two key, interrelated questions are, first, why this should be the case, and, second, what the exact nature of this dummy subject is. As I argue below, a quasi-argument analysis is ad-hoc and undermines the already suspicious notion of a quasi-argument by proliferating its semantic properties. An alternative account with a non-subcategorized expletive is also ad-hoc, since it must stipulate the obligatory presence of an expletive, missing the insight that the dummy's presence is contingent upon the lexical properties of *haber* and *falloir*.

According to my proposal, the four structures under consideration involve an expletive licensed by the valence of the corresponding predicates, rather than by general principles of grammar such as the EPP or Rothstein's Predication Condition. This proposal is empirically and conceptually adequate, it provides a unified account of seemingly unrelated phenomena, and it yields a coherent, parsimonious theory of expletives.

My account uses the framework of Relational Grammar (RG), but it also considers alternative proposals made within other theoretical frameworks, particularly GB and Minimalism. The discussion does not assume in-depth familiarity with RG, whose principles will be introduced as they become relevant to the argumentation.

The analysis developed here is not meant to argue for a particular framework over another. However, my choice of RG is motivated by several considerations. First, this framework provides a simple analysis using minimal, yet powerful, theoretical machinery. Second, RG emphasizes the autonomy of syntactic subcategorization from semantic role assignment. Third, the theory does not a priori exclude the notion of lexically selected expletives, since it has abandoned a strong version of the Universal Alignment Hypothesis imposing an obligatory one-to-one

mapping of semantic roles onto initial grammatical relations (cf. Rosen 1984). This situation contrasts with what we find, say, in GB and Minimalism, where principles such as the Theta Criterion and the Projection Principle conspire to exclude subcategorized expletives by ensuring that lexical selection necessarily entails semantic role assignment (but see Hazout 2004 for a recent Minimalist revision of the Theta Criterion). In this sense, my proposal reexamines an important assumption of generative syntax by exploring a theoretical possibility that has not yet been pursued in the RG literature.

In what follows, section 2 discusses weather verbs in Italian, section 3 examines weather expressions in Basque, section 4 considers French *falloir* constructions, section 5 deals with Spanish existentials, and section 6 raises the possibility that lexically selected expletives are also found in English and German. Finally, section 7 sketches a new theory of expletives incorporating the notion of lexically selected expletives.

2. Weather verbs in Italian

The first source of evidence for lexically selected expletives involves weather verbs in Italian, e.g. *piovere* ‘rain’, *nevicare* ‘snow’ and *tuonare* ‘thunder’. In what follows I argue that, contrary to what is often assumed, these verbs can license full arguments and (phonologically null) expletives. First I consider the empirical properties of *piovere*-type verbs, next I show the limitations of previous analyses, and finally I propose an alternative account using lexically selected expletives.

2.1 Empirical properties of Italian weather verbs

As is well known, Italian weather verbs can be auxiliated with *essere* ‘be’ or *avere* ‘have’ (e.g. Perlmutter 1983, Burzio 1986, Rosen 1988). This is illustrated in (11) using *piovere* ‘rain’.⁴

⁴ According to Farrell (1994: 97), when weather verbs are auxiliated with *avere*, they tend to indicate activities and thus are compatible with temporal complements headed by *per* ‘for’, e.g. *ieri ha nevicato per un’ora* ‘yesterday it snowed for an hour’. By contrast, when they are auxiliated with *essere*, they usually express achievements, so they tend to reject *per* phrases, e.g. *ieri è nevicato (*per un’ora)* ‘yesterday it snowed (for an hour)’. However, not all native speakers share these judgments. In fact, some of my informants uniformly accept *per* phrases with *essere*, and they seem to make no aspectual distinction that correlates with auxiliary selection. Although the existence of

- (11) *Ha/è piovuto.*
has/israined
'It rained.'

Similar to what Chomsky (1981) first noted with respect to English weather-*it*, the null subject of *piovere*-type verbs can control the empty subject of an embedded infinitival (12). In this respect, the subject of *piovere* patterns together with the null argument in (13) (*pro*), and differently from expletives such as those found in raising constructions (14).

- (12) [*e_i*] *piove sempre dopo* [[*e_i*] *avere/essere nevicato*].
rains always after to-have/to-be snowed
'It always rains after snowing.'
- (13) *Il canarino? [pro_i] canta sempre dopo [[e_i] aver mangiato]*.
the canary sings always after to-have eaten
'The canary? It always sings after eating.'
- (14) *[*e_i*] *sembra sempre che Eva canti dopo* [[*e_i*] *avere/essere sembrato*
che balli].
that dances
lit. 'It always seems that Eva sings after seeming that she dances.'

A third, less well-known property of Italian weather is that they can license overt nominals, both with a literal and figurative meaning (15) (Perlmutter 1983, cf. Svenonius 2002 for English). This pattern is entirely productive.

- (15) (a) *Sono piovuti sassi.*
are rained stones
'It rained hailstones.'
- (b) *Sono grandinate bombe e proiettili tutt'intorno a noi.*
are hailed bombs and missiles all-around to us
'Bombs and missiles hailed all around us.'

an aspectual contrast correlated with auxiliary selection would be consistent with my claim that weather verbs in Italian come in two shapes (see section 2.6), nothing in what follows hinges on this possibility.

The overt nominals licensed by *piovere*-type verbs are underlying direct objects, as evidenced by their behavior with respect to three well-known diagnostics: participial absolutes, participial adjective formation and *ne*-cliticization.⁵ As the examples below show, the nominal can be cliticized with partitive *ne* ‘of it/them’ when it is indefinite (16), and it can appear in participial absolute (17) and participial adjective constructions formed with the weather verb (18).

(16) *Ne sono piovuti tanti.*
 ne are rained so-many
 ‘It rained so many of them.’

(17) *Nevicata quella neve sporca, il cielo si è schiarito.*
 snowed that snow dirty the sky ref is cleared-up
 ‘After that dirty snow fell, the sky cleared up.’

⁵ The status of *ne*-cliticization as a diagnostic for underlying objects has been questioned by Lonzi (1985) and Saccon (1992) (both cited in Levin and Rappaport 1996). Lonzi and Saccon note that certain unergative verbs allow *ne*-cliticization when they occur in a simple tense (ia), but not when they appear with an auxiliary (ib) (examples from Levin and Rappaport 1996: 275-276). Despite this qualification, *ne*-cliticization still remains a reliable test. This is so because unaccusative verbs, unlike their unergative counterparts, allow *ne*-cliticization even when they are auxiliated (ii). Hence, we can still use *ne*-cliticization to test the unaccusative/unergative contrast in auxiliated environments. This is what I do throughout this paper.

(i) a. *Ne cammina tanta, di gente, su quei marciapiedi.*
 ne walk so-many of people on those sidewalks
 ‘So many of them (people) walk on those sidewalks.’

b. **Ne ha camminato tanta, di gente, su quei marciapiedi.*
 ne has walked so-many of people on those sidewalks
 ‘So many of them (people) walked on those sidewalks.’

(ii) a. *Ne arrivano tanti, di ragazzi.*
 ne arrive so-many of guys
 ‘So many of them (guys) arrive/are arriving.’

b. *Ne sono arrivati tanti, di ragazzi.*
 ne are arrived so-many of guys
 ‘So many of them (guys) arrived.’

- (18) *Le strade erano coperte dal fango piovuto la settimana scorsa.*
 the streets were covered-by-the mud rained the week last
 ‘The streets were covered by the mud rained last week.’

For most speakers, Italian weather verbs are obligatorily auxiliated with *essere* when they license an overt nominal, as in (15) above. However, some speakers also allow *avere* in such cases, with no apparent difference in meaning (19). This possibility has either been neglected in the literature (e.g. Perlmutter 1983, Rosen 1988, Farrell 1994) or categorically labeled as ungrammatical (Stussi and Cinque, both cited in Ruwet 1989: 341, note 23).⁶

- (19) *Ha piovuto sassi.*
 has rained stones
 ‘It rained stones.’

Cases like (19) pattern together with sentences containing a transitive verb. This is evidenced by three facts (cf. Perlmutter 1978, Burzio 1986, Rosen 1988). First, in (19) *piovere* is auxiliated with *avere*, just like transitive and unergative verbs, and unlike unaccusatives. Second, the postverbal nominal can be *ne*-cliticized (20), just like the underlying object of transitive and unaccusative verbs, and unlike the subject of unergatives.

- (20) *Di sassi, ne ha piovuto/i un sacco.*
 of stones ne has rained-sg/pl a lot
 lit. ‘Stones, it rained a lot of them.’

Third, the postverbal nominal in (19) does not control verb agreement, just like the direct object of a transitive verb, and unlike the subject of unergatives. This property is illustrated in (21), where agreement of *avere* with *sassi* ‘stones’ results in ungrammaticality regardless of whether the nominal appears in preverbal or postverbal position.

- (21) **Hanno piovuto/i sassi / (Quei) sassi hanno piovuto/i.*
 have-3pl rained-sg/pl stones those stones have-3pl rained-sg/pl

⁶ Nine out of the fifteen native speakers consulted accept *avere* with a postverbal nominal, whereas the others do not. The contrast in judgments does not seem to reflect any clear pattern of dialectal variation, but further research is needed. At any rate, this contrast should be accounted for by our analysis.

Taken together, these facts indicate that, in its surface structure or final stratum, (19) is a transitive construction with an empty category in subject position and the postverbal nominal as the direct object (*e ha piovuto sassi*).

To sum up, weather verbs in Italian license an empty category that has different control properties from typical expletives. Moreover, *piovere*-type verbs can optionally license an overt nominal that behaves like an underlying direct object. When weather verbs occur without an overt argument, they can be auxiliated with *essere* or *avere*. When they license an overt argument, some speakers seem to use only *essere*, but others also accept *avere*. In the latter case, the weather expression patterns together with transitive structures.

2.2 The standard GB/Minimalist account: quasi-arguments

The standard GB/Minimalist account of weather verbs in Italian goes back to Burzio (1986) (cf. Rizzi 1986). In turn, Burzio's proposal is based on Chomsky's (1981) analysis of English weather-*it*, which has been widely adopted in the literature (e.g. Svenonius 2002 for English, Holmberg and Nikanne 2002 for Finnish, and Kiss 2002 for Hungarian).

According to Chomsky (1981), weather-*it* is not referential, since it does not denote a designated member of D (D being a domain of individuals that serve as values of variables and as denotata). However, like true arguments and unlike expletives, it can bind PRO in an adjunct clause, e.g. *it_i sometimes rains after [PRO_i snowing]*. Thus, weather-*it* is a quasi-argument, "similar to arguments in that it can control PRO but unlike them in that it denotes no member of D, as a matter of grammatical principle", and it receives a special type of theta-role (1981: 325). Although Chomsky does not make it explicit, the assumption is that quasi-arguments, like true arguments and unlike expletives, are subcategorized-for syntactic dependents.

Following Chomsky, Burzio (1986) argues that the null subject of *piovere*-type verbs is not an expletive or a true argument, but a quasi-argument. This analysis, he claims, is corroborated by two facts. First, the subject of *piovere*-type verbs can also serve as a controller (cf. (12)–(14)). Second, this empty category, unlike *pro*, cannot be pronominalized with object clitics like *lo* 'it' (22). According to Burzio, the contrast in (22) follows from the assumption that object clitics in Italian can be coindexed with arguments, but not with quasi-arguments.

- (22) (a) Lo_i *ritengo* pro_i *partito*.
 3sg.masc believe-1sg left-masc.sg
 ‘I believe him to have left.’
- (b) * Lo_i *ritengo* e_i *piovuto*.
 3sg.masc believe-1sg rained-masc.sg
 ‘I believe it to have rained.’

In Burzio’s proposal, *piovere*-type verbs have both unaccusative and unergative uses (in his own terminology, *ergative* and *intransitive* uses, respectively). Whereas the unergative variant licenses the quasi-argument as a subject, unaccusative *piovere* licenses the quasi-argument as an underlying direct object.⁷

Under these assumptions, the choice of *essere* or *avere* follows from Burzio’s account of auxiliary selection in Italian: *essere* is used if, and only if, there is a binding relation between the subject and a “nominal contiguous to the verb” (a clitic or a base-generated direct object), otherwise we use *avere* (1986: 55–56). Thus, the quasi-argument licensed by unaccusative *piovere* moves to subject position ([Spec,TP] in current terms) to receive nominative case (*quasi-argument_i è piovuto t_i*). This movement creates a binding relation between the quasi-argument and its (postverbal) trace, so *essere* is selected. By contrast, unergative *piovere* is auxiliated with *avere* because there is no binding chain involving the quasi-argument, which is base-generated in subject position (*quasi-argument ha piovuto*).

Burzio’s analysis does not consider examples where the weather verb licenses an overt nominal, such as *sono piovuti sassi* in (15). This overt nominal is a true argument, not a quasi-argument, as evidenced by the fact that, among other properties, it can be cliticized with an object pronoun (23) (cf. (22)).

- (23) [*Quei sassi*]_i, li_i *ritengo* *piovut-i* *ieri* *sera*.
 those stones them believe-1sg rained-masc.pl yesterday evening
 lit. ‘Those stones, I believe them to have been rained last night.’

To account for cases like (15) and (23), Burzio’s proposal would presumably have to claim that the underlying object of unaccusative

⁷ Burzio uses the standard terms *external argument* and *internal argument* to designate, respectively, base-generated subjects and base-generated objects. Here I avoid this terminology so as to clearly distinguish semantic arguments from syntactic dependents.

piovere can be either a quasi-argument or a true argument (a theme). In principle, Burzio's proposal could also be extended to cases where, at least for some speakers, the weather verb licenses an overt nominal and is auxiliated with *avere*, as in *ha piovuto sassi* in (19). As we saw earlier, these structures are transitive, since they are auxiliated with *avere*, and the postverbal nominal cannot be *ne*-cliticized and does not control verb agreement. To explain these properties, we could claim that movement of the underlying object to subject position is precluded by the presence of a quasi-argument in base-generated subject position. This approach would allow us to maintain Burzio's Generalization, whereby all and only verbs that assign an external theta-role can also assign structural case to their object (Burzio 1986, cf. Svenonius 2002: 6 for a similar proposal for cases like English *it rained mackerel*). Since the weather verb assigns a quasi-argument theta-role to its subject, it can also case-mark its direct object. Thus, there is no movement to subject position.

Based on the observations made in the previous paragraph, our revised proposal would have to claim that speakers who accept *avere* with overt nominals have three, rather than two, uses of *piovere*: unergative (with a quasi-argumental subject), unaccusative (with either a true argument or a quasi-argument as the underlying object), and transitive (with a quasi-argumental subject and a theme object).

Even in its expanded version, such a proposal is problematic. An important limitation has to do with the very notion of a quasi-argument. As we saw earlier, quasi-arguments receive a special theta-role. The problem is that the nature and properties of such a theta-role have not been discussed in any detail in the literature beyond the vague notion that quasi-arguments "are special cases of arguments, *receiving atmospheric or temporal theta-roles* and being in the domain of the Theta-Criterion on a par with referential arguments" (Rizzi 1986: 528–529, my emphasis). As Ruwet (1989) notes, it is difficult to characterize the putative semantic content of an atmospheric theta-role in terms that are consistent with our traditional notion of theta-roles, and it is unclear whether this semantic role could be part of the very restricted and presumably innate set of concepts that we associate with semantic roles. Moreover, as Postal and Pullum (1988) note, quasi-arguments are ad-hoc and conceptually undesirable because they lack any independent motivation and they insulate the analysis from any possibility of disconfirmation.

Also problematic is the fact that quasi-arguments in Italian pattern together with true arguments with respect to control (cf. (12) and (13)), but

not with respect to *lo*-cliticization (cf. (22)). As we saw earlier, Burzio (1986) accounts for this contrast by stipulating that object clitics can be coindexed with arguments, but not with quasi-arguments. Does this mean that control and *lo*-cliticization are differentially sensitive to the theta-role of the quasi-argument, or is the contrast due to a more fundamental difference between true arguments and quasi-arguments? By leaving this and other key questions unanswered, the quasi-argument analysis is ad-hoc and incomplete, and it undermines our theory of semantic roles.

In what follows I show that the standard RG account, based on non-subcategorized-for expletives is also problematic. Before discussing the analysis, I introduce some basics of Relational Grammar for the sake of readers unfamiliar with the theory (other readers may go directly to section 2.4; for a more detailed introduction to RG, see Blake 1990 and Alba-Salas 2002).

2.3 Some basics of Relational Grammar

Like other generative theories, RG posits several levels of syntactic structure and seeks to uncover the universal principles underlying language-specific variation. However, RG claims that grammatical relations like subject and direct object are undefined primitives, not notions derived configurationally. Moreover, it posits a set of structures (e.g. passives and Inversion constructions) subject to language-specific and universal well-formedness conditions on syntactic representations. Each individual language selects its own subset of structures from this universal set, determining their morphosyntactic realization via language-specific rules.

RG distinguishes two basic types of grammatical relations: *term* and *non-term*. Term relations include Subject (or 1), Direct Object (or 2), and Indirect Object (or 3). Non-term relations belong to one of three types. The first one is the Predicate (or P) relation, which is borne by the dependent licensing the nominals of a clause. Importantly, the Predicate relation can be held not only by verbs, but also by adjectives, and nouns, prepositions and phrases used predicationally. Together with the three term relations (i.e. 1, 2 and 3), Predicates form a natural class known as foundational relations. The second type of non-term relations includes a variety of Obliques, including Benefactive, Instrumental, Locative, Temporal and Manner. The third type includes Chômeurs (abbreviated as Cho). This undefined primitive, which has no parallel in other theories, owes its

colorful name to the French name for ‘idle’ or ‘unemployed’. A *Chômeur* is a clause dependent that bears a foundational relation in a given stratum but which loses this grammatical relation to another clause dependent in a subsequent stratum. Simply put, a *Chômeur* is an *ex-1*, an *ex-2*, an *ex-3* or an *ex-P* (examples to follow).

RG uses different types of representations to show the grammatical relations held by each syntactic dependent. The example in (24) shows a tabular representation of *Eva eats an apple*, where *eat* (the Predicate) licenses *Eva* as its subject and *an apple* as its direct object.

(24)	1	P	2
	Eva	eats	an apple

According to RG, clauses involve a sequence of levels or strata in which a given dependent may bear distinct grammatical relations. Each stratum is represented with a separate line. Our example in (24) contains a single stratum. By contrast, the structure in (25), where the past participle of *eat* occurs with the auxiliary *have*, contains two strata. The first stratum has the same array of grammatical relations in (24). In the second stratum, however, the past participle no longer holds the Predicate relation. In fact, the P relation has been ‘usurped’ by the auxiliary, which inherits *Eva* as a subject and *an apple* as a direct object (the auxiliary is needed because past participles in English, unlike finite verbs, cannot bear tense morphology and cannot be the final predicate of the clause). In RG terms, we say that the past participle (the initial predicate of the clause) has been *chômeurized* by the auxiliary (the final predicate), so *eaten* is a *Chômeur* in the final stratum. By convention, we use a dotted line to separate the strata where each predicate holds the P relation.

(25)	1	P	2

	1	P	Cho
	Eva	has	eaten
			2
			an apple

In (25) the past participle loses the Predicate relation to the auxiliary by virtue of the Stratal Uniqueness Law, a universal principle that prohibits two syntactic dependents from bearing the same foundational relation (1, 2, 3 or P) in the same stratum (Perlmutter and Postal 1983). If *eaten* kept the

predicate relation here, the second stratum would contain two dependents bearing the P relation, thus violating the Stratal Uniqueness Law.

The process whereby *eaten* becomes a Chômeur is also constrained by two other universal conditions. The first one is the Chômeur Law. This principle mandates that if a dependent is demoted to another grammatical relation, it must acquire the Chômeur relation, unless a language-specific rule prescribes another alternative (Perlmutter and Postal 1983). The second condition is the Motivated Chômage Law, which imposes that a clause dependent can only acquire the Chômeur relation if it has lost its foundational relation to another dependent (Perlmutter and Postal 1983). This principle prevents Chômeurs from either appearing in the initial stratum of the clause or appearing ‘spontaneously’ in a non-initial stratum. The representation in (25) obeys the Chômeur Law and the Motivated Chômage Law because *eaten* becomes a Chômeur only after the past auxiliary usurps its P relation.

As noted earlier, in RG a given syntactic dependent may bear more than one grammatical relation in the same clause. In (25), for example, the past participle bears the P relation in the first stratum and the Chômeur relation in the second. Similarly, in passive structures like *the apple was eaten by Eva*, the noun phrase *the apple* bears the direct object relation in the first stratum (just as in (25)), but it subsequently undergoes 2-1 advancement, usurping the subject relation from *Eva*, the underlying subject (cf. passive movement in GB theory). Hence, *the apple* bears both the 1 and 2 relations in the clause.

A given syntactic dependent may also bear up to two distinct grammatical relations *in the same stratum*. This possibility is illustrated in the Italian example in (26), which involves the reflexive clitic *si* ‘himself/herself/itself’. As we can see, here *Eva* bears both the subject and direct object relations in the first stratum, so we say that it is 1,2 multiattached. Since syntactic dependents in Romance cannot bear more than one grammatical relation in the final stratum of the clause, this multiattachment must be resolved. The resolution is always in favor of the higher relation in the relational hierarchy (1>2>3>Cho). Thus, *Eva* loses the 2 relation and keeps only the subject relation in the final stratum. The reflexive clitic—which is part of the verb morphology, rather than an

argument in its own right—signals the resolution of 1,2 multiattachment of *Eva* (for independent evidence for all these claims, see Rosen 1988).⁸

- (26) a. *Eva si guarda nello specchio*
 Eva ref looks in-the mirror
 ‘Eva looks at herself in the mirror.’
- b.
- | | | |
|-----|-----------|----------------|
| 1,2 | P | Loc |
| 1 | P | Loc |
| Eva | si guarda | nello specchio |

And just as a given syntactic dependent may hold more than one grammatical relation, it can also bear more than one theta-role (cf. Alsina 1996). For example, in (26) *Eva* receives two theta-roles from *guardare* ‘look’ (agent and theme), since it bears both the subject and direct object relations to this verb in the initial stratum of this verb (i.e. in the stratum where *guardare* assigns a theta-role to its subcategorized dependents). An NP/DP can also receive distinct theta-roles from different predicates if it satisfies the selectional requirements of each predicate. For instance, in a control structure like *John forced Eva to swim*, *Eva* receives a theme role from *force* (since the nominal bears the direct object relation to this verb in the initial stratum of the matrix clause) and an agent role from *swim* (since *Eva* also bears the subject relation to this predicate in the initial stratum of the embedded clause). It is worth emphasizing that a syntactic dependent may be theta-marked by more than one predicate if and only if it satisfies the argument structure of each predicate, as is the case in our control example. By contrast, in (25) *Eva* does not receive a semantic role from the auxiliary *have* because this verb does not assign any semantic role to its subject. Hence, *Eva* is simply inherited by the auxiliary as a 1 without any additional theta-role assignment.

Among other information, the lexical entry of a predicate specifies both its semantic argument structure and its syntactic subcategorization. On the one hand, the entry supplies a syntactic valence that states in terms of

⁸ Italian also has constructions where the reflexive element is not a clitic, but an NP, i.e. an argument in its own right, e.g. *Eva guarda [sé stessa] nello specchio* ‘Eva looks at herself in the mirror’. Contrary to what we saw in our example above, here *Eva* bears only the subject relation and *sé stessa* ‘herself’ is the direct object, just as in any plain transitive structure (Rosen 1988).

grammatical relations (subject, direct object, etc) what dependents it can or must take in the stratum where it first bears the Predicate relation (Davies and Rosen 1988). On the other hand, the entry specifies the semantic roles licensed by that predicate, and their mapping onto each subcategorized-for syntactic dependent (Alba-Salas 2002, see also section 2.5). For example, the entry of *like* specifies that this verb licenses a subject linked to an experiencer and a direct object mapped onto a stimulus. Importantly, the lexical entry of certain predicates also includes an extended valence specifying which revaluations of their underlying syntactic dependents are allowed or disallowed in non-initial strata (Davies and Dubinsky 1991). To understand this notion, consider the Spanish example in (27), which includes the verb *gustar* ‘like’. As the glosses show, this structure differs from its English equivalent (*Eva likes blond guys*) in that the experiencer (*Eva*) is realized as an indirect object (as evidenced by dative case-marking), whereas the stimulus (*los chicos rubios* ‘blond guys’) is the surface subject. In RG terms, (27) is an Inversion structure, where the initial subject undergoes 1-3 demotion, triggering other syntactic manipulations in the clause (Blake 1990; for a sample representation, see (53) below).

- (27) *A Eva le gustan los chicos rubios*
 to Eva to-her like-3pl the guys blond
 ‘Eva likes blond guys.’

The fact that the underlying subject of *gustar* must obligatorily revalue to an indirect object is a lexical property of this verb vis-à-vis other predicates, including its English equivalent *like*. Simply put, *gustar* is just like English *like* in that it licenses an experiencer subject and a stimulus direct object, but it differs in that it also requires its initial subject to revalue to 3 in a subsequent stratum so that it surfaces as an indirect object. This requirement is encoded in the extended valence of *gustar* (see Davies and Dubinsky 1991 for details and a formal implementation). Importantly, extended valences are regulated by the Valence-Initiality Principle or VIP, a universal constraint that restricts the satisfaction of extended-valence statements included in the lexical entry of a particular predicate to syntactic dependents that bear an *initial* grammatical relation to that predicate. In practical terms, the VIP prevents natural languages from allowing predicates or classes of predicates that positively require the appearance of non-subcategorized-for syntactic dependents (Davies and Dubinsky 1991).

As in other frameworks, in traditional RG theory, expletives or dummies are elements inserted in a non-initial stratum to contribute to the distribution of old and new information in the sentence and/or to satisfy well-formedness constraints on syntactic representations, most notably the requirement that every clause must have a subject in the final stratum (i.e. the Final 1 Law, roughly equivalent to the EPP). Such dummies have been postulated for a variety of structures, including existential constructions (e.g. *there is a book on the shelf*), extrapositions (e.g. *it's ridiculous the way they all talk all at once* or *I took it for granted that you had a license*), raising structures (e.g. *there seems to be only one car in the street*) and impersonal constructions (e.g. *there arrived three men*) (Perlmutter 1980, 1983, Perlmutter and Postal 1983, Rosen 1988, Blake 1990, La Fauci 2000). In all these structures the presence of the expletive is explained with the notion of Dummy Birth, a colorful term emphasizing the status of the dummy as a non-initial syntactic dependent.

To illustrate Dummy Birth, consider the Italian impersonal construction in (28), which involves a phonologically null expletive. Like other impersonal structures, (28) is characterized by the fact that the final subject is an expletive coindexed with a postverbal NP/DP (*due ragazzi* 'two guys'). As (29) shows, this sentence has a personal counterpart where *due ragazzi* appears in preverbal subject position.

(28) *[e_i] sono arrivati [due ragazzi]_i ieri.*
 are arrived two guys yesterday
 'Two guys arrived yesterday.'

(29) *Due ragazzi sono arrivati ieri*
 two guys are arrived yesterday
 'Two guys arrived yesterday.'

According to RG, (28) and (29) involve the same initial stratum where unaccusative *arrivare* 'arrive' licenses *due ragazzi* as an object. As (30) shows, in the personal construction *due ragazzi* undergoes 2-1 advancement and becomes the subject of the clause in the second stratum in order to satisfy the Final 1 Law (this is the equivalent of unaccusative object-to-subject movement in GB/Minimalism). In the third and last stratum the structure is auxiliated with the past auxiliary, which

chômeurizes *arrivare* by ‘usurping’ its P relation and inherits *due ragazzi* as a subject.⁹

(30)	2 1		P P	
	1	P	Cho	
	due ragazzi	sono	arrivati	

The impersonal construction involves Dummy Birth. As (31) shows, here there is a dummy (*D*) that is ‘born’ (i.e. inserted) as a 2 in the second stratum, chômeurizing *due ragazzi*. In the third stratum the expletive undergoes unaccusative advancement to fulfill the Final 1 Law. The fourth and final stratum involves auxiliation.¹⁰

(31)		P P P	2 Cho Cho	
	2 1			<i>DUMMY BIRTH</i>
	1	P	Cho	Cho
	<i>D</i>	sono	arrivati	due ragazzi

Dummy Birth is constrained by two universal principles. The first one is the Nuclear Dummy Law (32), which allows expletives to be subjects or direct objects, but never Obliques, Chômeurs or indirect objects (Perlmutter 1980, Perlmutter and Postal 1983). The impersonal construction in (31) satisfies the Nuclear Dummy Law because the expletive bears only the 1 and 2 relations (in different strata). The second principle is the Active Dummy Law in (33) (Perlmutter 1983). This constraint applies to structures where there is a nominal bearing the 1 or 2 relation in a stratum prior to the ‘birth’ of the expletive. Combined with (32), the Active Dummy Law effectively imposes that in such cases the expletive must ‘usurp’ the subject or direct object relation from this nominal. The impersonal structure in (31) obeys the Active Dummy Law because the expletive chômeurizes the 2 relation held by the postverbal nominal.

⁹ As we will see in section 2.4, the unaccusative advancement of the underlying object determines the selection of the ‘be’, rather than the ‘have’, auxiliary.

¹⁰ This analysis is motivated by a variety of empirical arguments that are irrelevant here (for details, see Perlmutter 1983, and Perlmutter and Zaenen 1984, among others).

- (32) NUCLEAR DUMMY LAW: Expletives can only bear the 1 or 2 relation.
- (33) ACTIVE DUMMY LAW: A dummy must chômeurize some nominal if the first stratum where the dummy bears a grammatical relation (i.e. its departure stratum) contains a 1 or a 2.

Note that in (31) the auxiliary must agree in person and number with the postverbal nominal, as is characteristic of impersonal unaccusative constructions in Italian, cf.

- (34) *Sono arrivati* / **è arrivato* [*due ragazzi*].
 are arrived is arrived two guys
 ‘Two guys arrived.’

This property follows from the fact that Italian has brother-in-law agreement (Perlmutter 1983, Perlmutter and Zaenen 1984). Informally, the expletive is the *brother-in-law* of the postverbal nominal by virtue of the fact that it chômeurizes this nominal (in traditional GB/Minimalist terms, the expletive forms a chain with the postverbal nominal, its associate; cf. Chomsky’s 2000 new analysis based on Agree, and Hazout’s 2004 critique thereof on empirical grounds). In languages with brother-in-law agreement, the postverbal chômeurized nominal controls verb agreement if the expletive is the final subject, i.e. if it holds the 1 relation in the last stratum of the clause. In (31) the dummy is born as a 2 and usurps the direct object relation previously held by the postverbal nominal, so the expletive is the brother-in-law of *due ragazzi*. Since Italian has brother-in-law agreement, and since the dummy is the final subject of the clause by virtue of its unaccusative advancement, the postverbal nominal controls verb agreement. The postverbal position of *due ragazzi* follows straightforwardly from Italian linearization rules, which impose that only final subjects can be preverbal (Rosen 1987).

Equipped with this information, we can return to weather verbs in Italian.

2.4 The standard RG account: dummy birth

The standard RG account of weather verbs goes back to Perlmutter (1983) and Rosen (1988). To the best of my knowledge, it is the only analysis that has been proposed in this framework.¹¹

The analysis claims that weather expressions in Italian (as well as in other languages) involve traditional expletives, i.e. the same type found in extrapositions and existential, raising and impersonal constructions (cf. section 2.3). Under this proposal, Italian weather verbs subcategorize a direct object that is optional.¹² When *piovere*-type verbs license a 2, we have sentences like *sono piovuti sassi* ‘it rained stones’ in (15). When they do not license an object, we have cases like *è/ha piovuto* ‘it rained’ in (11). As (35) shows, cases like *sono piovuti sassi* are analyzed as impersonal unaccusative constructions, on a par with *sono arrivati due ragazzi* in (31) above. Here the weather verb licenses the overt nominal as a direct object in the first stratum, and this nominal is chômeurized by a dummy that is born as a 2 in the second stratum. The expletive then undergoes unaccusative advancement (third stratum) to satisfy the Final 1 Law, and in the fourth and final stratum the clause is auxiliated with *essere*.

(35)		P	2	
	2	P	Cho	<i>DUMMY BIRTH</i>
	1	P	Cho	
	1	P	Cho	Cho
	D	sono	piovuti	sassi
		are	rained	stones

As in other impersonal unaccusative constructions, in (35) the final (i.e. surface) subject is the expletive, not the postverbal nominal. Among other properties, the analysis explains why in (35) the auxiliary must agree in person and number with the postverbal nominal, cf. (36). As we saw in

¹¹ Farrell (1994) proposes that English weather verbs license expletives in an initial stratum. However, his claim is relegated to a very brief footnote (1994: 148, note 13), and it remains at the level of speculation.

¹² In RG, contrary to what we find in other theories, subcategorized syntactic dependents may be optional. A typical example involves the direct object of *eat*, as in *John ate (his supper) and then left*.

section 2.3, this requirement follows from the fact that Italian is a brother-in-law language, so the verb agrees with the postverbal nominal chômeurized by the dummy (again, in generative terms, the associate controls verb agreement via chain formation with the expletive subject).

- (36) *Sono piovuti* / **è piovuto* [sassi].
 are rained is rained stones
 ‘It rained stones.’

The analysis in (35) also explains why the clause is auxiliated with *essere* ‘be’, rather than *avere* ‘have’. As is well known, the ‘have’ auxiliary in Italian occurs with transitive and unergative verbs, whereas ‘be’ appears with unaccusatives. RG accounts for this distributional asymmetry with a simple rule: *essere* is used if the final subject is also a 2 in the clause, otherwise we use *avere* (Perlmutter 1978, Rosen 1988, 1990). A more precise formulation from Rosen (1990) is given in (37).

- (37) AUXILIARY SELECTION IN ITALIAN: A perfective auxiliary is *essere* ‘be’ iff its P-initial 1 bears the 2 relation in the same clause. Otherwise, it is *avere* ‘have’.

The term *P-initial 1* designates the subject of the auxiliary in the first stratum where this verb bears the Predicate relation. In (35) the expletive bears the subject relation in the first (and only) stratum where the auxiliary holds the P relation (the fourth stratum), so the dummy is the P-initial 1 of the auxiliary. Since the expletive also bears the 2 relation in the clause before its unaccusative advancement, (35) is auxiliated with *essere*.

Let us now turn to cases like *è/ha piovuto* ‘it rained’, where the weather verb does not license an overt nominal. According to the standard RG analysis, in such cases the initial stratum contains only a predicate (the weather verb), and nothing else. The auxiliary alternation follows from Dummy Birth. As (38) illustrates, in *ha piovuto* the dummy is born as a subject. Since the expletive only bears the 1 relation in the clause, the structure is auxiliated with *avere*. By contrast, in *è piovuto* the dummy is born as a direct object and then advances to 1 to become the final subject (38). This unaccusative advancement determines the choice of *essere*.

obligatory presence of a dummy to prevent the postverbal nominal from advancing to subject. Such as stipulation violates the Valence Initiality Principle. As we saw in section 2.3, this independently motivated universal constraint bans predicates from requiring the obligatory appearance of non-subcategorized-for syntactic dependents in a given structure. On the other hand, and more importantly, the traditional RG account of all weather expressions in Italian—and not just cases like (39)—cannot explain why weather dummies, like true arguments and unlike typical expletives, can control the empty subject of an embedded infinitival clause (cf. (12)–(14)). If the expletive found with weather verbs is the same type of dummy found, for example, in raising constructions like (14), the contrast in their control properties remains unexplained.

Clearly, the traditional RG analysis is inadequate on empirical, conceptual and theory-internal grounds. In what follows I develop an alternative account with lexically selected expletives. I start by introducing the notion of an initial expletive in the context of some further assumptions about argument structure.

2.5 Initial expletives and argument structure

As we saw in section 2.3, in RG the lexical entry of a predicate specifies, on the one hand, the semantic arguments licensed by that predicate, and, on the other, the grammatical relations borne by those elements in the predicate's initial stratum. Since traditional RG has yet to articulate a comprehensive theory of lexical semantics, in this section I sketch some additional assumptions about argument structure that are relevant to my argumentation.

Under my proposal, a predicate's argument structure includes the array of theta-roles (e.g. agent, theme, beneficiary) licensed by the predicate. The notion of a 'theta-role' is understood as a convenient label for a cluster of semantic properties that are prototypically associated with each role (for example, 'agents' are canonically associated with properties such as animacy, sentience, volition, movement, and existence independent of the event designated by a predicate, among others, cf. Dowty 1991). Argument structure serves as an interface between a predicate's syntactic subcategorization frame (formalized in terms of primitive grammatical relations) and its conceptual structure, a 'lower' level of semantic representation that decomposes the predicate's meaning and includes syntactically implicit arguments, along the lines proposed by Jackendoff

(1990) and Jackendoff and Culicover (2003), among others (cf. Grimshaw 1990, Alsina 1996). Semantic arguments are linked to grammatical relations following a canonical mapping between theta-roles and the syntactic dependents licensed by the predicate, a mapping possibly mediated by a universal hierarchy of theta-roles. By default, a subject is mapped onto an agent, a direct object onto a theme, and an indirect object onto a goal or recipient (e.g. in the case of English *give*). Any deviations from this canonical mapping are explicitly indicated in the lexical entry of the predicate (for example, the entry of *perceive* would indicate that its subject is mapped onto an experiencer, rather than an agent).

A crucial assumption here is that semantic licensing and syntactic subcategorization are independent of each other. Thus, a predicate licenses an array of theta-roles *and* a set of grammatical relations linked to each theta-role. Although in the default case there is a one-to-one correspondence between theta-roles and initial grammatical relations, in a few lexically-marked cases a predicate may license a syntactic dependent that does not bear a theta-role, i.e. a grammatical relation that has no correspondence in argument structure (cf. Alsina 1996: 45, 72). Formally, this situation could be construed as involving the mapping of an initial grammatical relation onto either an unspecified set of the thematic features that constitute a theta-role, or an interpretable instruction to do nothing in Groat's (1995) sense (cf. section 1). At any rate, what is important is that such a dependent is a lexically selected expletive. It is what I call an *initial expletive*, i.e. a syntactic dependent of the clause that (i) does not receive a theta-role, but (ii) is licensed by the valence of a predicate, so (iii) it bears an *initial* grammatical relation to the predicate.

As we will see below, initial expletives are licensed by a small set of lexically-marked predicates, and they are subject to some universal constraints to be discussed below. My assumption is that initial expletives and non-subcategorized dummies (which, of course, are still needed in the theory) do not necessarily differ in terms of their lexical properties. In other words, we do not have separate lexical entries for each type of expletive characterized, say, by different featural content. However, this assumption is not critical to the analysis. What is important is that initial expletives are licensed by a predicate's valence, whereas traditional expletives are not. As we will see below, this difference plays an important role in their syntactic behavior.

2.6 A new analysis of Italian weather verbs: lexically selected expletives

My claim is that weather verbs in Italian, and possibly also in other languages, can license expletives. Like the standard GB/Minimalist account, I claim that the empty category found in weather expressions is lexically selected by *piovere*-type verbs, so it is not a traditional expletive. However, like the standard RG analysis, I argue that this subcategorized dependent does not bear a theta-role, so it is an initial expletive, not a quasi-argument.

For clarity, my discussion below distinguishes between two groups of speakers: those who accept *sono piovuti sassi* in (15) but not *ha piovuto sassi* in (19); and those who accept both auxiliaries with an overt nominal (cf. section 2.1).

For speakers who only accept *sono piovuti sassi*, *piovere*-type verbs have both an unergative and an unaccusative variant.¹³ The subject of unergative *piovere* is an initial expletive. This is shown informally in (40). The same information is given in (41) using more formal notation. Because (40) is easier to understand for readers unfamiliar with RG, hereafter I use this informal notation.

(40) $\text{piovere}_{\text{unergative}}$: 1 -- Expletive

(41) $[\text{P}(\text{piovere}_{\text{unergative}}, \text{b}) < \text{c}_i >] \rightarrow [1(\text{a}, \text{b}) < \text{c}_i >] \text{ -- Theta}_\emptyset$

As (42) illustrates, the underlying object of unaccusative *piovere* can be a true argument (mapped onto a theme) or an initial expletive.

(42) $\text{piovere}_{\text{unaccusative}}$: 2 -- Theme/Expletive

Cases like *ha piovuto* involve unergative *piovere*. As (43) shows, here the weather verb licenses the initial expletive (*InExp*) as a subject, according to its valence in (40). In the second stratum the structure is auxiliated with *avere*, which chômeurizes *piovere* and inherits the initial

¹³ Positing two valences is not an ad-hoc solution for weather verbs, since dual valences are also needed for a handful of other Italian verbs that display a similar auxiliary alternation, such as *correre* ‘run’. Remember also that Burzio’s (1986) account too must posit two different uses of weather verbs (unaccusative and unergative).

expletive as a subject. The choice of *avere* follows from our auxiliary selection rule in (37), since the initial expletive bears only the 1 relation in the clause.

(43)	1		P
	1	P	Cho
	<i>InExp</i>	ha	piovuto
		has	rained

Cases like *è piovuto* involve unaccusative *piovere*. As (44) illustrates, here the weather verb licenses the initial expletive as a direct object, according to its valence in (42). The initial expletive undergoes unaccusative advancement to satisfy the Final 1 Law and is subsequently inherited by the auxiliary as a subject. As predicted by our auxiliatio rule, *essere* is chosen because the initial expletive bears both the 1 and 2 relations in the clause by virtue of its unaccusative advancement.

(44)	2		P
	1		P
	1	P	Cho
	<i>InExp</i>	è	piovuto
		is	rained

Cases like *sono piovuti sassi* also involve unaccusative *piovere*, but with a thematic argument. Their representation is identical to the traditional RG analysis in (36), repeated here as (45). As we saw earlier, here the initial 2 of *piovere* (the postverbal nominal) is chômeurized by a ‘regular’ dummy born as a 2. The choice of *essere* follows straightforwardly from the fact that the subject of the auxiliary is also a 2 in a previous stratum. It is important to note that a traditional expletive is needed here because (45) is an impersonal construction, not because it involves a weather verb (cf. section 2.3).¹⁴

¹⁴ This fact is corroborated by the existence of *personal* unaccusative constructions with weather predicates –constructions which have been typically ignored in explanatory accounts. Two examples appear in (i) ((ia) taken from Dogliotti and Rosiello 1988: 842). Here the overt nominal precedes, rather than follows, the weather verb. Although these constructions are less common than their impersonal counterparts, they are perfectly acceptable. As (ii) shows, cases like (i) involve unaccusative advancement of

the expletive and a direct object, we have examples like *ha piovuto sassi*. The corresponding representation is given in (47). Since the initial expletive does not bear the 2 relation elsewhere in the clause, the sentence is auxiliated with *avere*, as predicted by (37).

(47)	1		P		2
	1	P	Cho		2
	<i>InExp</i>	ha	piovuto		sassi

Evidence for the analysis above comes from participial agreement facts. As (48) illustrates, when *piovere* is auxiliated with *essere*, there is obligatory agreement between the past participle of the weather verb and the postverbal nominal. By contrast, participial agreement is impossible if the clause is auxiliated with *avere* (49).

(48) *Sono piovut-i/*o sassi.*
 are rained-masc.pl/sg stones
 ‘It rained stones.’

(49) *Ha piovut-o/*i sassi.*
 has rained-masc.sg/pl stones
 ‘It rained stones.’

Past participle agreement in Italian follows a simple rule: a past participle agrees with a clausemate 2 whenever its P-final stratum is intransitive, i.e. when the last stratum where the past participle holds the Predicate relation does not contain both a 1 *and* a 2 (La Fauci 1989, Rosen 1990). In the representation of *sono piovuti sassi* in (45) the P-final stratum of the past participle (i.e. the last stratum where *piovere* bears the Predicate relation) is the third stratum. This stratum contains a 1, but not a 2, so it is intransitive. Thus, as predicted by our rule, the past participle agrees with *sassi* ‘stones’, which bears the 2 relation in the clause. By contrast, in the representation of *ha piovuto sassi* in (47) the P-final stratum of the past participle (the first stratum of the clause) contains both a 1 and a 2, so there is no participial agreement.

The analysis of *ha piovuto sassi* in (47) requires a trivial revision of the Active Dummy Law in (33). Note that (47) seemingly violates this principle because the expletive does not usurp the 1 or 2 relation from another nominal. This violation, however, is only apparent if we assume

that the Active Dummy Law applies only to non-subcategorized-for dummies (cf. section 7). Unlike the traditional RG analysis, my account satisfies the Valence Initiality Principle: (47) requires the obligatory presence of an expletive subject because the expletive is subcategorized for (though not theta-marked) by the weather verb.¹⁵

My proposal offers other advantages over the standard RG analysis. First, it accounts for auxiliary selection in a non-circular manner. Here the auxiliary alternation exhibited by *piovere*-type verbs follows from their dual valence, thus constraining this phenomenon to a small and relatively homogenous class of lexical items (cf. notes 4 and 13). Second, my proposal offers a more satisfactory account of cases like *ha piovuto sassi*. According to my analysis, the differences in native speaker judgments with respect to auxiliary selection follow from the lexical properties of *piovere*-type verbs. All speakers have two variants of these verbs. One variant is unaccusative (42). The other one is either unergative (40) (for those who only accept *essere* with an overt nominal) or transitive (46) (for those who accept both *essere* and *avere* in such contexts). Third, my analysis explains the unique control properties of weather expletives: the expletive subject of weather verbs is lexically selected, whereas the dummy found in raising constructions is not. Given this critical difference, we can posit a principle that accounts for the shared control properties of arguments and initial expletives:

- (50) CONTROL PRINCIPLE:
 Only P-initial (i.e. lexically selected) syntactic dependents can control PRO in embedded non-finite clauses.

Since *pro* and initial expletives are licensed by a predicate's valence and thus are P-initial dependents, both empty categories can control the subject of an embedded infinitival. The fact that initial expletives, unlike *pro*, are thematically vacuous is irrelevant, since the Control Principle applies to any and all subcategorized syntactic dependents regardless of

¹⁵ In its precise formulation the VIP claims that for a syntactic dependent to satisfy the extended valence of a predicate, it must bear an initial grammatical relation to that predicate, but it need not receive a semantic role. This clarification is important because at certain points in their discussion Davies and Dubinsky (1991) assume the default state of affairs where each lexically selected syntactic dependent is mapped onto a theta-role.

their semantic properties. By contrast, traditional expletives cannot serve as controllers because they are not lexically selected.¹⁶

An initial expletive analysis also explains why, as Burzio (1986) notes, the empty subject of *piovere*-type verbs cannot be coindexed with a direct object clitic (e.g. **lo_i ritengo e_i piovuto* ‘I believe it to have rained’ in (22)(b), contrary to what we find in the case of *pro* (e.g. *lo_i ritengo pro_i partito* ‘I believe him to have left’ in (22)(a)). The contrast stems from the fact that object clitics in Italian can only pronominalize *thematic arguments*, but not expletives. This claim is corroborated by the observation that the overt nominal (optionally) licensed by *piovere*-type

¹⁶ Note that the Control Principle also accounts for raising constructions such as *John_i always seems [t_i to understand [without PRO_i really having understood]]*. At first sight, this example appears to violate the Control Principle, since *John* is not subcategorized by *seem*, and yet it can control PRO. The contradiction is only apparent. In fact, the Control Principle only requires the controller to be lexically selected, but it does not say *by which predicate*. In fact, the principle mandates that a controller must be a P-initial dependent, but it does not specify whose P-initial dependent it must be. In our example *John* can be a controller because this nominal is lexically selected by the embedded verb, *understand*. Importantly, my proposal is relevant to the current debate over whether control is primarily a syntactic phenomenon, with semantics playing only a secondary or minor role (e.g. Hornstein 1999, Boeckx and Hornstein 2003), or whether it is ultimately reducible to lexical semantics (e.g. Jackendoff and Culicover 2003). Within this second approach, Jackendoff and Culicover (2003) (hereafter J&C) have claimed that argument/conceptual structure determines controller choice and the contrast between obligatory and non-obligatory control in English. J&C argue that predicates selecting action complements show obligatory control, whereas those that select situations (a category including both actions and non-actions) show non-obligatory control. Moreover, J&C also claim that in cases of obligatory control the controller is always the character to which the control predicate assigns the role of Actor for the event designated by its action complement, regardless of its syntactic position. Although J&C’s evidence suggests a robust correlation between argument structure and controller choice, control phenomena cannot be reduced to argument/conceptual structure. In fact, as Boeckx and Hornstein (2003) note, the distribution of controllees (i.e. PRO) is ultimately a syntactic issue, since controllees are always subjects with no apparent thematic restrictions. Moreover, as Hornstein (1999), Boeckx and Hornstein (2003) and others argue, lexical semantics cannot account for control in adjunct clauses like *John_i saw Mary [before PRO_i leaving the party]*, which show obligatory control even though (by definition) they are not selected by the matrix predicate. My analysis is more consistent with the syntactocentric approach to control, but it does not discount the role of argument structure, whether it be in addition to the requirements imposed by the Control Principle and other syntactic constraints, or as an epiphenomenon of the default mapping of semantic roles onto initial grammatical relations.

verbs, which is mapped onto a theme, *can* in fact be pronominalized, as in [*quei sassi*]_i, *li*_i *ritengo piovuti ieri sera*, literally ‘those stones, I believe them to have been rained last night’ in (23). Unlike Burzio’s analysis, my account explains why the empty category licensed by weather verbs is treated differently by control and *lo*-cliticization. As we just saw, the Control Principle is sensitive only to the P-initial status of the controller, but not to its thematic properties, so initial expletives can serve as controllers. By contrast, *lo*-cliticization can only target syntactic dependents that are mapped onto a theta-role, thus excluding initial expletives. Another important advantage of my proposal is that it avoids the problematic notion of a quasi-argument. In fact, my analysis does not need to posit a special type of empty category and theta-role only for weather predicates, since, as we will see below, lexically selected expletives are independently needed for non-meteorological predicates such as French *falloir* and Spanish *haber*.

By acknowledging the possibility that certain predicates can license non-theta-marked dependents, my analysis echoes Torrego’s (1989) GB account of weather expressions such as *hacer calor* ‘be hot’ (literally ‘do heat’) in Spanish. Torrego argues that, cross-linguistically, weather predicates do not assign theta-roles but can still license semantically vacuous dependents—what she calls an external hidden argument or d-argument. In other words, weather verbs are [- theta-assigners, + d-assigners]. This analysis, she claims, provides “a way of capturing the import of Chomsky’s proposal about the quasi-argument role of weather verbs without assuming that weather verbs assign any theta-role” (1989: 261). Torrego’s proposal neglects the fact that weather verbs in Romance *can* license thematic arguments, as in Italian *piovono sassi* ‘it’s raining stones’ or Spanish *llovieron ranas* ‘it rained frogs’. In principle, her analysis could be modified to accommodate such cases by claiming that weather verbs are [\pm theta-assigners, \pm d-assigners], so they can license true arguments. However, Italian examples like *ha piovuto sassi*, where the verb is auxiliated with *avere*, would present theory-internal problems. Since such cases behave like transitive constructions, our revised proposal would have to claim that here the verb licenses both a true argument (in object position) and a hidden argument (as a subject). Such an analysis violates Burzio’s Generalization, since *piovere* would not license an external theta-role, and yet it would be able to assign structural case to its object (the postverbal nominal). Hence, an expanded version of Torrego’s proposal would force us to either claim that *piovere*-type verbs assign partitive case

to their object (assuming, as Belletti 1988 does, that partitive is not subject to Burzio's Generalization) or revise Burzio's Generalization so that all and only verbs that assign *an external argument* (narrowly construed as a syntactic dependent in [Spec,VP], not as a theta position) can also assign structural case to their object. At any rate, Torrego's analysis would require a modification of the Projection Principle so as to allow not only theta-role assignment, but also case assignment to project syntactic positions, as proposed by Authier (1991) (cf. Hazout 2004). Under this proposal, for example, the equivalent of my unergative *piovere* in (40) would license nominative case, but not an external theta-role, so it would project a subject position filled by an expletive. Since Burzio's Generalization and the Projection Principle have no status in RG theory, I do not pursue these options any further.

3. Weather expressions in Basque

Weather expressions in Basque typically involve a light verb combining with a nominal designating a meteorological phenomenon. Of these verbs, three are relevant here: *egin* 'do/make', *bota* 'throw' and *ekarri* 'bring' (51) (cf. note 23 below). Before analyzing these expressions, we need some background information about Basque morphosyntax and the non-meteorological uses of *egin*, *bota* and *ekarri*. I turn to these issues in the next subsections.

- (51) a. *euria egin* 'rain' (lit. 'do rain'), *haizea egin* 'be windy' (lit. 'do wind')
 b. *euria bota* 'rain' (lit. 'throw rain'), *elurra bota* 'snow' (lit. 'throw snow')
 c. *ekaitza ekarri* 'storm' (lit. 'bring storm')

3.1 Case-marking, verb agreement and auxiliary selection in Basque

A pro-drop language with both null subjects and null objects (Oyharçabal 1991, 1993), Basque has a relatively free word order, though it favors SOV as the unmarked order (Ortiz de Urbina 2003b). There are a wide variety of cases, including ergative, absolutive and dative, among others. With a few exceptions (*ekarri* 'bring' being one of them), finite verbs are typically periphrastic, and they usually consist of an invariable participial form and an auxiliary that carries all the agreement marking. Verb agreement can register the grammatical relations of up to three nominals in the clause,

which are usually marked with ergative, absolutive and dative (Levin 1983, Mejías-Bikandi 1990, Zubiri-Ibarrondo 1991, Etxepare 2003b).

Nominals (or, more precisely, noun phrases) are case-marked according to the rule in (52), adapted from Mejías-Bikandi (1990: 263).

- (52) CASE-MARKING ON NPs: The case of a noun phrase is determined by the lowest term relation it holds in the clause, according to the relational hierarchy 1>2>3. If the lowest relation the NP holds in the clause is a 1, it bears ergative case; if it is a 2, it is marked with absolutive; and if it is a 3, it has dative case.

The operation of this rule is exemplified in Inversion structures like (53), which involves the verb *gustatu* ‘like’ (example from Mejías-Bikandi 1990: 268–269). As I noted in section 2.3, in Inversion structures the nominal that was initially the subject becomes an indirect object via 1-3 demotion. In (53) *neska* ‘girl’ undergoes 1-3 demotion in the second stratum, triggering unaccusative advancement of the underlying direct object (*mutila* ‘boy’) in the third stratum to satisfy the requirement that all clauses must have a surface subject. As predicted by the rule in (52), *neska* shows dative case because the lowest term relation that this nominal holds in the clause is a 3. *Mutila* bears (zero-marked) absolutive case because the lowest term relation it bears is a 2.

(53)	2	1	P
	2	3	P
	1	3	P

	1	3	Cho P
	Mutil-a	neska-ri	gustatu zaio
	boy-det-abs(3sg)	girl-dat(3sg)	be-abs(3sg)-dat(3sg)
	‘The girl likes the boy.’		

In (53) the clause is auxiliated with *izan* ‘be’ in the final stratum. Verb agreement in Basque follows the rule in (54) (C. Rosen p.c., cf. Mejías-Bikandi 1990: 264). Note that this rule requires that the nominals registered in verb morphology bear a term relation in the *final* stratum of the clause, not just in any stratum.

- (54) VERB AGREEMENT: The verb bearing the Predicate relation in the last stratum registers all final terms according to the lowest term grammatical relation they hold in the clause. A 1 determines ergative case, a 2 absolutive case, and a 3 dative case.

In (53) the auxiliary registers the two nominals that bear a term relation in the final stratum (*mutila* and *neska*) according to the lowest term relation they hold in the clause (2 and 3, respectively). Thus, *mutila* is registered as an absolutive, and *neska* as a dative.

Like Italian, Basque also exhibits an unaccusative/unergative contrast (Levin 1983, Mejías-Bikandi 1990, Hualde and Ortiz de Urbina 2003, cf. Laka 1993). Among other properties, the contrast is marked by case-marking on the surface subject. Thus, the subject of unergatives like *dirdiratu* ‘shine’ (55) bears ergative case, just like the subject of transitives (56). By contrast, the sole argument of unaccusatives like *etorri* ‘come’ is marked with absolutive (57), just like the direct object of transitives (examples from Mejías-Bikandi 1990: 271). Given the case-marking rule in (52), this contrast reveals that the surface subject of unergatives is an initial 1 (an underlying subject), whereas the argument of unaccusatives is an initial 2 (an underlying direct object).

- (55) *Izarr-ak dirdiratu du.* *unergative*
 star-erg shine have-erg(3sg)
 ‘The star shined.’

- (56) *Miren-ek ni ikusi nau.* *transitive*
 Miren-erg me-abs(1sg) see have-abs(1sg)-erg(3sg)
 ‘Miren saw me.’

- (57) *Gizon-a etorri da.* *unaccusative*
 man-det-abs come be-abs(3sg)
 ‘The man came.’

As (56)–(57) show, the transitivity contrast is also marked by auxiliary selection and verb agreement. Unaccusative verbs are auxiliated with *izan* ‘be’ and show absolutive agreement with their sole argument, whereas unergatives occur with *edun/ukan* ‘have’ and register their subject as an ergative, just like transitive verbs (Levin 1983, Mejías-Bikandi 1990, Etxepare 2003b). The rule for auxiliary selection in Basque is the same as in Italian: a sentence is auxiliated with the ‘be’ auxiliary if, and only if, it

contains a nominal bearing both the 1 and 2 relations in the same clause, otherwise it is auxiliated with ‘have’.

Similar to what we find in Italian, the transitivity contrast is confirmed by the distribution of partitive case. Since this case marks only underlying direct objects, it can be assigned to the direct object of transitive verbs (58) and the sole argument of unaccusatives (59), but not to the subject of unergatives (60) (Levin 1983, Etxepare 2003a).¹⁷

(58) *Ez du gizon-ak ikusi ikasler-ik.*
 not have-abs(3sg)-erg(3sg) man-erg see student-part
 ‘The man didn’t see any student/a (single) student.’

(59) *Ez da gizon-ik etorri.*
 not be-abs(3sg) man-part come
 ‘No man/men came.’

(60) **Katur-ik ez du kurritu.*
 cat-part not have-erg(3sg) run
 ‘No cat ran.’

3.2 Non-meteorological uses of *egin*, *bota* and *ekarri*

Egin ‘do/make’, *bota* ‘throw’ and *ekarri* ‘bring’ are often used as heavy (i.e. semantically full) verbs. As (61) illustrates, heavy *egin*, *ekarri* and *bota* are transitive verbs that can also license an optional dative-marked recipient/beneficiary (Etxepare 2003b). As expected, these verbs take the ‘have’ auxiliary, which registers the subject as an ergative, the direct object as an absolutive, and the indirect object (if any) as a dative. Also as expected, their direct object can bear partitive case (62).

(61) a. *Jon-ek Maria-ri ogi-a egin zion.*
 Jon-erg Maria-dat bread-det-abs make have-past-abs(3sg)-dat(3sg)-erg(3sg)
 ‘Jon made some/the bread for Maria.’

¹⁷ As Levin (1983) and Etxepare (2003a) note, partitive case requires licensing by some polar element and is found primarily under the scope of negation in alternation with absolutive. Like Italian, Basque has a further diagnostic for underlying objects: participial adjective formation. I ignore this test here due to space considerations.

- b. *Jon-ek ogi-a ekarri du.*
 Jon-erg bread-det-abs bring have-abs(3sg)-erg(3sg)
 ‘Jon brought some/the bread.’

- (62) *Jon-ek ez zion Maria-ri ogi-rik*
 Jon-erg not have-past-abs(3sg)-dat(3sg)-erg(3sg) Maria-dat bread-part
egin.
 make
 ‘Antonio didn’t make any bread for Maria.’

Egin and, to a lesser degree, *bota* and *ekarri* are also used as light or semi-light verbs when they combine with a noun predicate, as in *hitz egin* ‘speak’ (lit. ‘do a word’), *madarikazioak bota* ‘curse’ (lit. ‘throw curses’) and *manu ekarri* ‘order’ (lit. ‘bring an order’). These structures are illustrated in (63) using light *egin*, which is extremely productive in Basque. As in other Light Verb Constructions (LVCs), here the argument structure is determined by the noun predicate in object position, not by the verb (Levin 1983, Ortiz de Urbina 1989, Laka 1993, Alonso Ramos 2001, Etxepare 2003b, cf. Rodríguez and García Murga 2001). Thus, in (63) the nominal *argazkia* ‘photograph’ licenses the two semantic arguments of the clause: *Jon* (the photographer), and *Maria* (the photographee). (Note that, as (64) shows, *Maria* is optional, just like the indirect object of heavy *egin*.) Like their heavy counterparts above, these LVCs are auxiliated with ‘have’, and their surface subject is marked with ergative case. The noun predicate (typically a bare NP) can bear partitive case (65), subject to some aspectual restrictions (Ortiz de Urbina 1989, Etxepare 2003b).¹⁸ This possibility reveals that the nominal is the underlying object of the light verb.

- (63) *Jon-ek Maria-ri argazki-a egin zion*
 Jon-erg Maria-dat photograph-det-abs do have-past-abs(3sg)-dat(3sg)-erg(3sg)
 ‘Jon took a picture of Maria.’

- (64) *Jon-ek argazki-a egin zuen*
 Jon-erg picture-det-abs do have-past-abs(3sg)-erg(3sg)
 ‘Jon took a picture.’

¹⁸ According to Etxepare (2003b), partitive can be assigned to nominals denoting delimited events (e.g. *eztul/salto egin* ‘cough/jump’), but not to those designating achievements (e.g. *leher egin* ‘explode’) or activities with no clear delimiting point (e.g. *gogoeta egin* ‘think’).

- (65) *Antonio-k ez zion*
 Antonio-erg not have-past-abs(3sg)-dat(3sg)-erg(3sg)
Maria-ri argazki-rik egin.
 Maria-dat photograph-part do
 ‘Antonio didn’t take any pictures of Maria.’

Though these LVCs involve different degrees of lexicalization and syntactic freedom, many have the same basic properties as regular verb + direct object sequences (Ortiz de Urbina 1989, Uribe-Etxebarria 1989 cited in Laka 1993, Laka 1993, Etxepare 2003b, Alonso Ramos 2001, Zabala 2004, cf. Rodríguez and García Murga 2001).¹⁹ Besides the possibility of partitive case-marking on the noun predicate, the transitivity of these LVCs is corroborated by two facts. First, as (66) illustrates, the noun predicate can be targeted by a number of syntactic operations, e.g. *wh*-movement (a) and focalization (b), just like a ‘regular’ direct object (Ortiz de Urbina 1989, Uribe-Etxebarria 1989 cited in Laka 1993, Etxepare 2003b; examples from Laka 1993: 153). Second, when these LVCs are causativized, the causee bears dative case and is registered as a dative by verb morphology (67), just like causativized transitive verbs, and unlike causativized unergatives, whose causee is an absolutive (Ortiz de Urbina 1989, Etxepare 2003b; example from Etxepare 2003b: 398–399).²⁰

¹⁹ This point has been sometimes obscured by the fact that some descriptive and explanatory accounts fail to distinguish true LVCs—where the noun predicate alone determines the argument structure, as in *lan egin* ‘work’, literally ‘do work’—from idioms, where the nominal in object position is not an autonomous predicate licensing the participants, e.g. *hanka egin* ‘get out’, literally ‘do/make a leg’ and *turrut egin* ‘make fun’, literally ‘do/make trumpet’ (cf. Alonso Ramos 2001, Rodríguez and García Murga 2001).

²⁰ Importantly, the transitivity of these LVCs is independent of the (presumed) syntactic valence of the noun predicates involved. For example, some *egin* LVCs contain nominals that are morphologically related to unergative verbs (e.g. *dantza egin* literally ‘do a dance’ / *dantzatu* ‘(to) dance’), whereas others involve nouns associated with unaccusative verbs (e.g. *solas(ean) egin* literally ‘do a chat’ / *solastu* ‘(to) chat’). The status of these nominals with respect to the unaccusative/unergative contrast is somewhat controversial in the literature (see, among others, Laka 1993, Rodríguez and García Murga 2001 and Etxepare 2003b; cf. Alba-Salas’ 2002 claim that noun predicates in Romance are uniformly transitive, regardless of whether they are morphologically related to transitive, unergative or unaccusative verbs). At any rate, what is crucial here is that, regardless of the valence of the nominals involved, the LVCs analyzed behave as transitive structures, with the nominal as the (underlying) object of the light verb.

- (66) a. *Nork egin du lan?*
 who-erg do have-abs(3sg)-erg(3sg) work
 ‘Who has worked?’
- b. *Oso ondo egin duzu lan.*
 very well do have-abs(3sg)-erg(2sg) work
 ‘You have worked *very well*.’
- (67) *Jon-i dantza egin-arazi diote.*
 Jon-dat dance do-cause have-abs(3sg)-dat(3sg)-erg(3pl)
 ‘They made Jon dance.’

As we can see, LVCs with *egin*, *bota* and *ekarri* are syntactically transitive, and the noun predicate behaves both as a predicate and as the underlying direct object of the light verb. RG has long recognized the dual nature of noun predicates both as predicates capable of licensing their own arguments and as syntactic dependents that can function as arguments of other predicates.²¹ Building upon Dubinsky’s (1990) analysis of Japanese LVCs, I capture this property by claiming that noun predicates in Basque bear both the Predicate and direct object relations simultaneously, i.e. that they are P,2 multiattached. The analysis is illustrated in (68), which corresponds to (64). This structure is serial in Rosen’s (1997) sense. Simplifying matters a good deal, a serial structure is a monoclausal construction involving two or more predicates ‘stacking up’ one after the other. Each predicate inherits the dependents licensed by the embedded predicate (the predicate holding the P relation in the previous stratum). Of these inherited dependents, at least one (but not necessarily all) must satisfy the argument structure of the inheriting predicate. Inherited dependents that satisfy the argument structure of the inheriting predicate receive an additional theta-role from this predicate (cf. section 2.3). On the other hand, inherited dependents that do not satisfy the argument structure of the inheriting predicate simply ‘fall through’ without any additional theta-marking.

²¹ As La Fauci (2000) notes, this dual function, which has a long tradition within semantic theory, was first formalized by Carol Rosen in the late 1980s in unpublished work that is partly summarized in Blake (1990). For a recent Minimalist analysis that has some important parallels with Rosen’s proposal, see Hazout (2004).

(68)

	1	P,2		
	1	Cho,2	P	
	1	2	P	
	1	2	Cho	P
	Jon-ek	argazki-a	egin	zuen
	Jon-erg	picture-det-abs	do	have-past-abs(3sg)-erg(3sg)
	'Jon took a picture.'			

In (68) the nominal *argazkia*, the initial predicate of the clause, bears both the P and 2 relations simultaneously and licenses *Jon* as a subject.²² In the second stratum *argazkia* loses its P relation to the light verb, the new predicate of the clause. Light *egin* inherits *Jon* as a subject and the noun predicate itself as a direct object. In the third stratum the resulting 2,Cho multiattachment of *argazkia* is resolved in favor of the 2 relation, since it is higher than a Chômeur in the relational hierarchy (see section 2.3). Finally, in the fourth stratum the clause is auxiliated. Since the subject of the auxiliary does not bear also the 2 relation in the clause, 'have' is selected. The auxiliary registers the two syntactic dependents that bear a grammatical relation in the final stratum, i.e. *Jon* (as an ergative) and *argazkia* (as an absolutive), according to our rule in (54).

Now we can return to weather expressions.

3.3 Weather expressions with *egin*, *bota* and *ekarri*

As in the LVCs above, in meteorological expressions with *egin*, *bota* and *ekarri* the weather nominal behaves both as a predicate and as the underlying direct object of the verb. This claim is corroborated by two facts. First, the weather nominal can license locative and temporal adverbials (69). Second, the nominal can be marked with partitive case (70).

(69) *Atzo hotz handi-a egin zuen.*
 yesterday cold big-det-abs do have-past-abs(3sg)-erg(3sg)
 'Yesterday it was very cold.'

²² There is evidence that in Basque, contrary to what Dubinsky (1990) posits for Japanese, P,2 multiattachment of the noun predicate occurs in the initial, as opposed to an intermediate, stratum. However, this claim is irrelevant to my argumentation.

- (70) *Ez zuen elurr-ik egin/bota.*
 not have-past-abs(3sg)-erg(3sg) snow-part do/throw
 ‘It didn’t snow.’

As (71) illustrates, these weather expressions are obligatorily auxiliated with ‘have’ (Etxepare 2003b). Crucially, the auxiliary registers not only a (zero-marked) absolutive corresponding to the weather nominal, but, more importantly, also an ergative, similar to what we find with transitive verbs. Since the independently motivated verb agreement rule in (54) requires dependents registered by verb morphology to bear a term (1,2 or 3) relation in the *final* stratum of the clause, the element triggering ergative agreement in these LVCs must be an empty category holding the subject relation in the final stratum. In other words, the structures must contain a phonologically null surface subject. This fact, together with the possibility of partitive case on the weather nominal, leads us to conclude that weather LVCs with *egin*, *bota* and *ekarri* are syntactically transitive in their final stratum.

- (71) a. *Elurr-a egi-ten du* / **da.*
 snow-det-abs do-habit have-abs(3sg)-erg(3sg) be-abs(3sg)
 ‘It (usually) snows.’
- b. *Euri-a bota zuen* / **zen*
 rain-det-abs throw have-past-abs(3sg)-erg(3sg) be-past-abs(3sg)
 ‘It rained.’

Under my proposal, these weather expressions have the representation illustrated in (72). Similar to what we saw in (68), here the weather nominal is the initial predicate of the clause and also bears the direct object relation simultaneously. The difference is that here the weather nominal licenses an expletive subject in the initial stratum, just like *piovere*-type verbs in Italian. The Predicate relation borne by the nominal is usurped by the light verb, which inherits the initial expletive as a subject and the nominal itself as a direct object (second stratum). Since the initial expletive only bears the subject relation in the clause, the sentence takes the ‘have’ auxiliary, which registers the empty subject as an ergative.²³

²³ Not all weather nominals in Basque subcategorize for an expletive subject. For example, nouns like *lainoa* ‘fog’ and *sargoria* ‘sultry weather’ do not license a dummy. According to my native speaker informants, these nominals do not combine with transitive *egin*, *bota* and *ekarri*. Instead, they appear in existential constructions with

(72)

	1	P,2		
	1	Cho,2	P	
	1	2	P	
	1	2	Cho	P
InExp	elurr-a	snow-det-abs	egin do	zuen have-past-abs(3sg)-erg(3sg)

izan ‘be’ and *egon* ‘be (in a location)’, e.g. *sargori egon/izan* ‘be sultry weather’. In my analysis weather expressions with *sargoria*-type nominals are intransitive constructions with the representation illustrated in (i). Here the weather noun is still the initial predicate of the clause and bears the 2 relation—P,2 multiattachment being a defining property of noun predicates in Basque and Romance (cf. Alba-Salas 2002). The fact that this nominal holds the 2 relation explains why it bears absolutive case, given our case-marking rule above. Because of an independently motivated principle banning predicates from holding the subject position (see Dubinsky 1990, Alba-Salas 2002 for details), the weather noun cannot undergo unaccusative advancement. Hence, the direct object relation held by the weather noun must be chômeurized by a traditional expletive that is born as a 2 (second stratum), in accordance with the Active Dummy Law. After subsequent unaccusative advancement of the dummy (third stratum), the resulting P,Cho multiattachment of the weather noun is resolved in favor of the higher P relation (fourth stratum). In the last stratum the P relation held by the weather noun is usurped by the verb, the final predicate of the clause, which registers the dummy as an absolutive according to the verb agreement rule above.

(i)

	P,2			
	P,Cho		2	
	P,Cho		1	
	P		1	
	Cho	P	1	
	Sargori-a	zegoen	<i>Dummy</i>	
	sultry.weather-det-abs	be-past-abs(3sg)		
	‘It was sultry.’			

This proposal can also explain why weather nouns like *euria* ‘rain’ and *elurra* ‘snow’, which (as we saw above) do combine with *egin*, *bota* and *ekarri*, can also appear in existential constructions with *izan* and *egon*, though with some apparent variation across dialects and speakers, e.g. *euria izan* ‘rain’, literally ‘be rain’ (cf. Ortiz de Urbina 2003a). The alternation follows from the fact that (for those speakers who allow *izan* and *egon*) the initial expletive licensed by nouns like *euria* is optional. If the nominal licenses its expletive subject, it appears in LVCs with *egin*, *bota* or *ekarri*, and the clause is auxiliated with ‘have’, as discussed above. On the other hand, if the nominal does not license an expletive, it appears with *izan* or *egon*, just like *sargoria* in (i).

As in the case of weather verbs in Italian, an analysis that treats the empty category in these weather expressions as a quasi-argument licensed by the weather nominal must rely on the poorly-defined, ad-hoc notion of a quasi-argument (cf. section 2.2). An alternative analysis based on traditional expletives is also problematic. First, it must posit an obligatory dummy subject only in these weather expressions, but not in other light and heavy *egin*, *bota* and *ekarri* structures (cf. section 3.2). This construction-specific stipulation misses an important insight captured by my analysis, i.e. that the obligatory presence of an expletive is contingent upon the presence of a weather predicate (the nominal in object position). Moreover, the analysis also violates the Valence Initiality Principle by requiring the appearance of a non-subcategorized expletive (cf. section 2.3). Second, the account must stipulate that the expletive does not form a chain with the weather nominal. In RG terms, the dummy must obligatorily be born as a 1, not as a 2 (if it were born as a 2, the dummy would undergo unaccusative advancement, so the clause would be auxiliated with ‘be’ and the auxiliary would only register an absolutive, but not an ergative).

So far I have argued that initial expletives can be licensed by a fairly restricted, semantically homogeneous class of lexical items, i.e. (a subset of) weather predicates in Basque and Italian (cf. Hazout 2004 and my discussion thereof in section 6). In the next sections I show that lexically selected expletives can also be licensed by non-meteorological predicates in French and Spanish.²⁴

4. French *falloir* constructions

French *falloir* ‘be necessary’ constructions include a postverbal nominal and a phonologically overt expletive (*il* ‘it’) in preverbal position (73).

²⁴ An anonymous reviewer suggests that the case for lexically selected expletives in Basque is reinforced by weather verbs such as *berotu* ‘warm up’, *hoztu* ‘cool down’, *ilundu* ‘get dark’ and *atertu* ‘stop raining/snowing’. As the reviewer himself notes (see also Etxepare 2003b), these verbs are obligatorily auxiliated with ‘have’, and they register a phonologically null ergative subject. Moreover, as Ortiz de Urbina (2003a: 577) argues, these verbs sometimes appear with a direct object in structures that “show all of the earmarks of regular transitive constructions”. Under my analysis, *berotu*-type verbs would subcategorize for an expletive subject and an optional theme object, just like transitive *piovere* in Italian (cf. (46)). Due to space considerations, I cannot develop this analysis any further.

- (73) *Il faut des techniciens.*
 it is-needed some technicians
 ‘We need some technicians.’

The postverbal nominal can be cliticized with partitive *en* ‘of it/them’ (74), just like the direct object of a transitive verb (75), and unlike the postverbal nominal in a typical idiom chunk (76). Moreover, the postverbal nominal can take *de* + *noun* under the scope of negation (77). As Abeillé (1997) and Marandin (2001) note, in French only (underlying) objects can both be targeted by partitive *en* and take the form *de N* in negative contexts. We thus conclude that the postverbal nominal in (73) is the underlying direct object of *falloir*.

- (74) *Il en faut.*
 it en is-needed
 ‘We need some (of them).’

- (75) (a) *Marie veut des techniciens.*
 Marie wants some technicians
 ‘Marie wants some technicians.’

- (b) *Marie en veut.*
 Marie en wants
 ‘Marie wants some (of them).’

- (76) (a) *Marie fait du cinéma.*
 Marie does some movie
 ‘Marie is pretending/putting it on.’

- (b) **Marie en fait.*
 Marie en does [idiomatic interpretation]

- (77) *Il ne faut plus de techniciens.*
 it not is-needed more of technicians
 ‘We don’t need more technicians.’

Falloir does not pattern together with unaccusative verbs.²⁵ As (78) shows, unaccusative verbs such as *arriver* ‘arrive’ allow their sole argument to be either preverbal (in personal constructions) or postverbal (in impersonal structures with expletive *il* ‘it’, cf. section 2.3). This argument

²⁵ I thank Carol Rosen (p.c.) for first bringing this fact to my attention.

controls verb agreement in the personal construction (a), but not in its impersonal counterpart (b). By contrast, the nominal licensed by *falloir* cannot be preverbal, regardless of whether it triggers verb agreement or not (79). The impossibility of (79) indicates that the object of *falloir* cannot undergo unaccusative advancement, contrary to what we find with *arriver*-type verbs.

- (78) (a) *Des choses comme ça arrivent.* *personal*
 some things like that arrive
 ‘Things like that happen.’
- (b) *Il arrive des choses comme ça.* *impersonal*
 it arrives some things like that
 ‘Things like that happen.’
- (79) **Des techniciens faut / faillent.* **personal*
 some technicians is-needed are-needed
 ‘We need some technicians.’

In my analysis the unique properties of *falloir* stem from the fact that it is a transitive verb that licenses a theme object and an expletive subject. Like the subject of weather nominals in Basque and *piovere*-type verbs in Italian, the 1 of *falloir* is an initial expletive. The only difference is that it is realized as an overt pronoun (*il*) because French, unlike Basque and Italian, is not *pro*-drop. Thus, *falloir* constructions have the representation in (80).

- (80) 1 P 2
 il faut des techniciens

The impossibility of unaccusative advancement of the postverbal nominal follows from independently motivated conditions on syntactic representations. Specifically, the ungrammaticality of (79) follows from the Nuclear Dummy Law in (32), which prevents expletives from bearing any grammatical relation other than subject or direct object. As (81) shows, if the postverbal nominal underwent unaccusative advancement, it would leave the initial expletive bearing the Chômeur relation, violating the Nuclear Dummy Law.

(81)	1	2	P	
	Cho	1	P	*by Nuclear Dummy Law
	*InExp	des techniciens	faut/faillent	

A quasi-argument analysis would be inadequate here. Suppose that we claimed that movement of the postverbal nominal is blocked by a quasi-argument (*il*) merged or base-generated in subject position. Given its lack of thematic content, it is impossible to characterize the special theta-role presumably borne by this quasi argument in any meaningful terms. At any rate, the subject of *falloir* cannot be the same atmospheric quasi-argument posited for weather verbs. Thus, we would have to posit at least two types of quasi-arguments associated with different semantic properties: an atmospheric quasi argument for weather predicates, and a quasi-argument with unidentified thematic properties for *falloir*. If we claimed that the *falloir* quasi-argument is semantically vacuous (as suggested by the evidence), we would be implicitly acknowledging the existence of non-argumental, subcategorized-for syntactic dependents, i.e. lexically selected expletives. At any rate, positing two different kinds of quasi-arguments further undermines the ad-hoc notion of a quasi-argument by proliferating its semantic properties.

An account using non-subcategorized expletives would also be inadequate. Under such a proposal, unaccusative advancement of the object of *falloir* would be blocked by a ‘traditional’ expletive in subject position. The problem is that we would have to stipulate that *falloir* constructions, unlike *arriver*-type structures, obligatorily require an expletive subject. Similar to what we saw in the case of weather predicates in Basque and Italian, this ad-hoc stipulation misses the insight (captured by my analysis) that the expletive’s presence follows from the lexical properties of *falloir*. Moreover, the analysis violates the Valence Initiality Principle by requiring the obligatory presence of an expletive that does not bear an initial grammatical relation to *falloir* (or to any other predicate, for that matter). Finally, the analysis has to require the expletive to be born as a 2 so that it chômeurizes the postverbal nominal, as required by the Active Dummy Law (82). As we know by now, if the dummy were born as a subject, as in (83), the structure would violate the Active Dummy Law, since the expletive would not chômeurize any nominal.

(82)

	P	2	
2	P	Cho	
1	P	Cho	
il	faut	des techniciens	

(83)

	P	2	
1	P	2	*by Active Dummy Law
il	faut	des techniciens	

As we have seen, *falloir* expressions are problematic for analyses using a quasi-argument or a traditional expletive, but they are amenable to an account with initial expletives. The initial expletive analysis is not ad-hoc, since lexically selected expletives are also needed for *piovere*-type verbs, weather expressions in Basque, and (as I argue below) existential *haber* in Spanish.²⁶

²⁶ At first sight, my analysis seems to be inconsistent with the fact that *falloir* constructions cannot occur with embedded infinitival clauses (i). The ungrammaticality of (ia) would seem to suggest that the expletive licensed by *falloir* cannot control the empty subject of the embedded infinitival, so it is not an initial expletive. However, (i) is not counterevidence against my proposal. Indeed, the ungrammaticality of (ia) follows from independent reasons, i.e. the fact that the infinitival form of *falloir* can only appear in the frozen expression *il va falloir* ‘it will be necessary’ (ii).

- (i) a. **Il faut des techniciens [sans [e] falloir des mécaniciens]*
 it is-needed some technicians without be-needed some mechanics
 / *en falloir beaucoup.*
 en be-needed many
 lit. ‘Technicians are needed without mechanics being needed/too many of them being needed.’
- b. *Il faut des techniciens [sans qu’il faille des mécaniciens/ en faille beaucoup].*
 it is-needed some technicians without that-it be-needed-3sgsome mechanics en be-needed-3sg many
 lit. ‘Technicians are needed without mechanics being needed/too many of them being needed.’
- (ii) a. **sans falloir / après avoir fallu / il semble falloir*
 without be-necessary after have been-necessary it seems be-necessary
 lit. ‘without/after it being necessary / it seems to be necessary’

5. Existential *haber* in Spanish

In contemporary Spanish existential *haber* ‘there is/are’ appears in two different constructions: one where the verb shows number agreement with the postverbal nominal (hereafter the agreeing construction), and another one where there is no such agreement (the non-agreeing construction). Although non-agreeing constructions are preferred by prescriptive grammarians (e.g. Seco 2000), both structures are entirely productive.²⁷ Importantly, these two constructions differ with respect to their syntactic properties (cf. Treviño 2003). As (84) shows, in the agreeing construction the postverbal nominal (*libros* ‘books’) cannot be cliticized with a direct object pronoun. In this respect, (84) patterns together with unaccusative structures like (85), where the underlying object controls verb agreement (a) and cannot be pronominalized with an object clitic (b).

(84) a. *Habían libros en cantidad.*
 there-were books in amount
 ‘There were lots of books.’

b. **Los habían en cantidad.*
 them there-were in amount
 ‘There were lots of them.’

(85) a. *La semana pasada llegaron/*llegó esos/unos/dos chicos.*
 the week past arrived-3pl/3sg those/some/two guys
 ‘Those/some/two guys arrived last week.’

b. **Los llegaron/llegó la semana pasada.*
 them arrived-3pl/3sg the week past
 ‘They arrived last week.’

b. *Il va falloir que tu lui téléphones.*
 it goes be-necessary that you him call
 ‘It will be necessary for you to call him.’

²⁷ As is typical in existential constructions, both agreeing and non-agreeing *haber* constructions tend to resist definite nominals (Suñer 1982, Treviño 2003; cf. Safir 1985, 1987, Belletti 1988, Lasnik 1995, Vangness 2002). However, it is important to note that, cross-linguistically, definiteness restrictions in existentials reflect robust preferences determined by pragmatic/semantic considerations, rather than absolute constraints (Pollard and Sag 1994, Ward and Birner 1995, Borschev and Partee 2002, Hazout 2004).

By contrast, as (86) shows, in the non-agreeing construction the postverbal nominal can be cliticized with a direct object pronoun. As (87) shows, this nominal patterns together with the direct object of transitive verbs, which does not control verb agreement (a) and can be pronominalized with an object clitic (b).

- (86) a. *Había libros en cantidad.*
 there-was books in amount
 ‘There were lots of books.’
- b. *Los había en cantidad.*
 them there-was in amount
 ‘There were lots of them.’
- (87) a. *La semana pasada Rosa leyó/*leyeron esos/unos/dos libros.*
 the week past Rosa read-3sg/pl those/some/two books
 ‘Last week Rosa read those/some/two books.’
- b. *Rosa los leyó la semana pasada.*
 Rosa them read the week past
 ‘Rosa read them last week.’

Agreeing constructions are perfectly amenable to an analysis with traditional dummies, since they are impersonal unaccusative structures (cf. section 2.3). As (88) illustrates, they involve an unaccusative existential verb that licenses the postverbal nominal as a direct object. A dummy inserted as a 2 usurps the object relation from this nominal (second stratum) and then undergoes unaccusative advancement (third stratum). Among other properties, the analysis explains why *haber* shows number agreement with the postverbal nominal. Like Italian, Spanish has brother-in-law agreement. Hence, as we saw in section 2.3, the verb must agree with the nominal chômeurized by the expletive (its associate, in GB/Minimalist terms). In (88) the dummy chômeurizes *libros* in the second stratum, so the postverbal nominal is the brother-in-law of the expletive. Since the dummy is the final subject of the clause, *libros* controls verb agreement.

(88)		P	2
	2	P	Cho
	1	P	Cho
	D	habían	libros
		there-were	books

On the other hand, non-agreeing constructions are problematic. As a first approximation, we could claim that these structures involve the same unaccusative *haber* found in agreeing constructions. The difference would simply involve the fact that *haber* can optionally show number agreement with the postverbal nominal. However, such an analysis is ad-hoc and empirically inadequate. First, it does not explain why *haber* should be different from other unaccusative verbs in Spanish, which show obligatory number agreement with their sole argument (cf. (85) above). Second, the analysis does not explain why in non-agreeing constructions the postverbal nominal can be pronominalized (86), just as in transitive sentences (87), and contrary to what we find with unaccusative verbs (85) and in the agreeing construction (84).

Given the parallels between non-agreeing constructions and transitive sentences, it is reasonable to conclude that the former, like *falloir* expressions, have a finally transitive stratum with an empty category bearing the subject relation and the postverbal nominal as the direct object (*e había libros*). Again, the issue is what type of empty category we have here. This empty subject is devoid of any thematic content, and it cannot be claimed to bear the same atmospheric theta-role posited for weather predicates. As in the case of *falloir*, positing a different type of quasi-argument for *haber* would further undermine the already problematic notion of a quasi-argument. Moreover, positing a semantically vacuous quasi-argument is simply a notational variant of my initial expletive analysis.

An alternative analysis of non-agreeing constructions with traditional expletives is inadequate for two reasons. First, an analysis with traditional expletives does not explain why the empty subject of *haber*, like the subject of *piovere*, can be a controller (89). Second, to account for the lack of verb agreement, we would have to stipulate that the structure obligatorily contains a dummy, and that the expletive must be born as a 1, not as a 2 (90). (Again, in traditional GB terms, we would have to stipulate that the expletive and its associate do not form a chain. In more recent Minimalist proposals, we would have to stipulate that Agree does not apply here.) As

As (92) shows, in the non-agreeing construction the postverbal nominal is a 2 in a transitive stratum (with the initial expletive bearing the 1 relation), so it can be targeted by an object clitic. By contrast, as (88) above shows, in the agreeing construction the postverbal nominal is a 2 in the first stratum, but this stratum is not transitive because there is no subject. Thus, it cannot be pronominalized (cf. Treviño 2003).

Importantly, my account of *haber* structures is compatible with La Fauci and Loporcaro's recent RG analysis of Romance existentials, where the postverbal nominal is both the initial predicate of the clause and the underlying object of the existential verb, so it bears both the P and 2 relations simultaneously (La Fauci and Loporcaro 1997, Loporcaro and La Fauci 1997, La Fauci 2000; cf. Hazout 2004 for a similar proposal within Minimalism). Adapting my analysis to La Fauci and Loporcaro's proposal only requires some trivial modifications to the structures posited above. Thus, the agreeing (impersonal unaccusative) construction would have the representation in (93). This is exactly like the Dummy Birth structure in (88). The difference is that here the postverbal nominal *libros* bears both the P and 2 relations simultaneously in the initial stratum. The 2 relation held by *libros* is chômeurized by the dummy (which becomes the final subject of the clause), and its P relation is usurped by existential *haber* (the final predicate of the clause).²⁸

(93)		P,2	
	P		2,Cho
	P		2
2	P		Cho
1	P		Cho
<i>D</i>	habían		libros

²⁸ Since La Fauci and Loporcaro regard existentials as auxiliated, as opposed to serial, structures in Rosen's (1997) technical sense, (i) is a more accurate representation. The difference between (i) and (93) is irrelevant to my argumentation.

(i)		P,2	
	2		P,Cho
	1		P
	1	P	Cho
<i>D</i>	habían		libros

The non-agreeing construction would have the representation in (94). As in (93), here the postverbal nominal is also the initial predicate of the clause but loses the P relation to the existential verb. The difference is that here *haber* licenses an expletive subject, according to its valence in (91), so *libros* keeps the 2 relation and is thus the direct object of *haber* in the final stratum.

(94)		P,2
1	P	2,Cho
1	P	2
<i>InExp</i>	había	libros

6. Lexically selected expletives in English and German?

Because the default option is for syntactic dependents to be mapped onto a theta-role, predicates subcategorizing for an expletive are expected to occur only sporadically in natural languages. For the sake of offering a more complete picture of the phenomenon, in this section I consider the possibility that such predicates can also be found in English and German. Since space considerations preclude a full discussion of the facts, I must limit myself to sketching an analysis to be elaborated in future research.

One group of predicates that seem amenable to an analysis with lexically selected expletives includes the adjectives found in English meteorological expressions such as *it's cold today*, *it's getting dark* and *it's very hot*. As Hazout (2004) notes, here the pronoun *it* shows all the properties that Postal and Pullum (1988) attribute to English expletives, since it cannot support emphatic reflexives (**it is itself too cold today*), it cannot appear in nominalization *of*-phrases (**my observation/description of it being cold*), and it cannot appear as *tough*-movement subjects (**it was tough to prevent from becoming dark in this room*). According to my proposal, adjectives like *cold*, *dark* and *hot* would license an underlying object that is mapped either onto an expletive (in weather expressions like *it's cold today*) or onto a theme (in their non-meteorological uses, as in *the tea is cold*). The claim that the expletive licensed by *cold*-type predicates is an underlying object is consistent with the independently motivated assumption that adjectives in English and Romance are uniformly

unaccusative (C. Rosen p.c.).²⁹ As (95) illustrates, in weather expressions *cold*-type adjectives would license an expletive direct object that becomes the final subject of the clause after undergoing unaccusative advancement. This analysis echoes Rothstein's (1995) view that adjectives (like other syntactic categories) can act as predicates defined in purely syntactic terms (see section 1). The difference is that my proposal claims that (at least in English and Romance) adjectival predicates license their syntactic argument (whether it be a theme or an expletive) as a direct object, not as a subject, where both grammatical functions are understood as syntactic primitives in the traditional RG sense.

²⁹ Among other sources, evidence for the unaccusative status of adjectives in these languages comes from auxiliary selection in Italian. As is well-known, Italian adjectives appear with *essere* 'be', not with *avere* 'have' (e.g. *Paolo è/*ha intelligente* literally 'Paolo is/has intelligent'). According to RG, the presence of the auxiliary follows from the fact that adjectives in English and Romance cannot be the final predicate of the clause, since they cannot bear tense and aspect inflection (cf. Mirto 1990). The choice of *essere* follows straightforwardly from the auxiliary selection rule in (37) above, which applies not only to structures where the auxiliated predicate is a verb (e.g. *Paolo è arrivato* 'Paolo arrived', *Paolo ha visto Eva* 'Paolo saw Eva'), but also to those where the auxiliated predicate is an adjective or a nominal (e.g. *Paolo è intelligente* 'Paolo is intelligent', *Paolo è un professore* 'Paolo is a teacher', *Paolo ha fiducia in Eva* 'Paolo has trust in Eva'). As we saw in section 2.4, the 'be' auxiliary is selected if the final subject also bears the direct object relation elsewhere in the clause, otherwise we choose 'have'. As (ia) illustrates, in a sentence like *Paolo è intelligente* 'Paolo is intelligent' the adjective is the initial predicate of the clause and licenses its sole arguments (*Paolo*) as a 2. *Paolo* subsequently undergoes unaccusative advancement and is inherited as a subject by the auxiliary, which usurps the Predicate relation from the adjective. Since *Paolo* bears both the 1 and 2 relations, the clause is auxiliated with *essere*. Importantly, the auxiliary selection facts wouldn't follow if the adjective licensed its argument as a subject (ib).

(i) a. [correct representation]

2		P
1		P
1	P	Cho
Paolo	è	intelligente

b. [incorrect representation]

1		P
1	P	Cho
Paolo	è	intelligente

(95)	a.	2	P	cf. b.	2	P
		1	P		1	P

	1	P	Cho		1	P
	it	is	cold		the tea	is
	<i>(InExp)</i>				cold	

My analysis also differs from Hazout's (2004) proposal. According to Hazout, weather expressions such as *it is cold (today/in Siberia)* involve an expletive subject that is merged into the specifier of a Predicative Phrase headed by *cold* (the predicate head) and subsequently moves to [Spec, IP] for feature-checking. In his view, these weather expressions illustrate a more general phenomenon involving the use of a predicate with an expletive subject. Hazout understands a subject-predicate relation as a purely formal syntactic relation between a head and a dependent that participates in case checking and, for the purposes of that relation, occupies a certain structural position. Semantically, such a configuration does not involve the attribution of a property to some specific entity. Instead, it involves choosing a location (either implicit or explicitly specified by an adjunct such as *today* or *in Siberia*) as the perspectival center, so that the situation is viewed in terms of this location and 'what's in it' (e.g. the instantiation of the property of being cold). Besides weather expressions like *it's cold (today/in Siberia)*, this use of a predicate with an expletive subject is also found with adjectives indicating color (e.g. *it's so green in Scotland*) and mood (e.g. *it's sad here*), among others. Although appealing, Hazout's proposal has two limitations. First, it does not explain why the locative phrase can be absent (or, in his analysis, syntactically implicit) with *cold*-type weather adjectives (e.g. *it's cold*), but not in color and mood expressions involving an expletive. In fact, in examples like *it's so green* and *it's sad* (contrary to what we find in *it's cold*), the absence of a locative phrase forces an argumental reading of the pronoun. This contrast indicates that weather expressions with *cold*-type adjectives are fundamentally different from color and mood expressions, i.e. that the expletive found in the former is not licensed by the same general mechanism presumably found in the latter. Second, given these considerations, it is unclear why the expletive found with *cold*-type adjectives must merge into the specifier of the Predicative Phrase (which encodes the 'core' of a syntactic predication) in the first place. My proposal avoids both problems by claiming that the expletive found in these weather expressions is licensed by *cold*-type

predicates, whereas the expletive found with *green-* and *sad-*type adjectives is a traditional dummy coindexed with the (obligatory) locative PP.

As an anonymous reviewer notes, certain German predicates also seem to provide additional evidence for lexically selected expletives. As is well known, in German (a non-pro-drop language) expletive *es* ‘it’ is obligatory in clause-initial position if no other element appears there, consistent with the V2 requirement (e.g. Bennis 1986, Svenonius 2002). There is, however, an important contrast in cases where some other element occupies the initial position: although pleonastic *es* is excluded clause internally in impersonal constructions (96) and existentials with *sein* ‘be’ (97), it can appear postverbally with existential *geben* ‘there is/are’ (literally ‘give’) (98) and weather verbs like *regnen* ‘rain’ (99).

(96) a. *Es/*Ø lebte hier einmal ein Mann.* [Bennis (1986: 309)]
 it lived here once a man
 ‘A man once lived here.’

b. *Hier lebte Ø/*es einmal ein Mann.*
 Here lived it once a man
 ‘A man once lived here.’

(97) a. *Es/*Ø waren Mäuse in der Badewanne.*
 it were mice in the bathtub
 ‘There were mice in the bathtub.’

b. *Gestern waren Ø/*es Mäuse in der Badewanne.*
 Yesterday were it mice in the bathtub
 ‘Yesterday there were mice in the bathtub.’

(98) a. *Es/*Ø gab Mäuse in der Badewanne.*
 it gave mice in the bathtub
 ‘There were mice in the bathtub.’

b. *Gestern gab es/*Ø Mäuse in der Badewanne.*
 yesterday gave it mice in the bathtub
 ‘Yesterday there were mice in the bathtub.’

(99) a. *Es/*Ø regnete.*
 it rained
 ‘It rained.’

- b. *Gestern regnete es/*Ø*.
 yesterday rained it
 ‘It rained yesterday.’

As the reviewer notes, this contrast follows straightforwardly if we assume that German has two types of expletives: a purely structural type inserted (in the specifier of C) to satisfy the V2 requirement, as in (96) and (97), and lexically selected expletives licensed by predicates like *geben* (98) and *regnen* (99). Importantly, my analysis does not require any additional machinery, since initial expletives are independently needed for predicates in other languages. By contrast, other proposals must posit a special type of category (e.g. our problematic weather quasi-argument, presumably found in (99)), an exceptional mechanism that may contradict some important theory-internal assumptions (e.g. Bennis’s 1986: 310–311 claim that pleonastic *es* always bears a theta-role but, unlike all other NPs, it does not require case), or some other stipulation (e.g. Svenonius’s 2002 claim that cases like (96) and (97) involve a phonologically null expletive, even though German is not a pro-drop language).

7. Towards a new theory of expletives

So far I have argued that lexically selected expletives are needed in order to account for weather predicates in Basque and Italian, French *falloir* expressions, a subset of existential *haber* constructions in Spanish, and possibly also for certain predicates in English and German. Although inadequate for the structures under consideration, non-subcategorized-for expletives are obviously still needed to account for existential constructions (e.g. *there is a book on the shelf*), extrapositions (e.g. *it’s ridiculous the way they all talk all at once* or *I took it for granted that you had a license*), raising structures (e.g. *there seems to be only one car in the street*) and impersonal constructions (e.g. *there arrived three men*) (cf. section 2.3).³⁰

³⁰ Under my analysis, traditional dummies are also found in most structures where Postal and Pullum (1988) posit an expletive in object position, e.g. extrapositions like *they never mentioned it to the candidate that there will be an appeal* and *they kept it from becoming too obvious that she was pregnant*. As (i) illustrates, here the extraposed clause is the initial direct object of the matrix verb and is subsequently chômeurized by a dummy born as a 2 (internal structure of the embedded clause omitted for simplicity). Like Postal and Pullum (1988), I argue that here the expletive is the direct object of the matrix verb at some level. However, the expletive is not an *initial* syntactic dependent

Given these considerations, our theory must include two types of expletives: traditional expletives, which I descriptively call *intrusive dummies* (100), and lexically selected, or initial, expletives (101). As I noted earlier, initial expletives and intrusive dummies may or may not differ in terms of their lexical (i.e. featural) properties. The key difference, however, is that initial expletives are licensed by a predicate's valence, whereas intrusive dummies are not.³¹

(100) INTRUSIVE DUMMY (D): A syntactic dependent of the clause that
 (i) does not receive a theta-role and (ii) is not licensed by any predicate, so
 (iii) it does not bear an initial grammatical relation to any predicate.

(101) INITIAL EXPLETIVE (InExp): A syntactic dependent of the clause that
 (i) does not receive a theta-role but (ii) is licensed by the valence of a
 predicate, so (iii) it bears an *initial* grammatical relation to the predicate.

An important task here is to properly constrain the licensing and distribution of each type of expletive. As I noted earlier, initial expletives are only licensed by a handful of lexically-marked elements that are predicted to occur only sporadically in natural languages, since the default option is for syntactic dependents to be mapped onto a theta-role.

Like intrusive dummies, initial expletives are constrained by the Nuclear Dummy Law (32), which requires *all* expletives—whether intrusive or lexically selected—to bear only the subject or direct object

of this verb (cf. section 1). My analysis remains agnostic as to whether the pronoun found in idioms such as *John didn't buy it* is a lexically selected expletive or whether it's a regular pronoun with an unspecified referent (*buy it = buy the story/lie*), as discussed in section 1.

(i)	1	P		3	2
	1	P	2	3	Cho
	they	mentioned	it	[to the candidate]	[that there will be...]

³¹ It is possible that the contrast between initial expletives and intrusive dummies may be marked morphologically in some language. This is an empirical question open to future research. At any rate, we could speculate that the fact that morphology does not mark the difference between initial expletives and intrusive dummies in Romance and possibly in other languages follows from two factors: the lack of a lexical contrast between both types of expletives, and the homophony that typically pervades pronominal systems (the same reason why, for example, English *it* is an expletive and a referential pronoun).

relations. As we saw in section 2.3, this principle constrains not only the grammatical relations that expletives may bear in their departure stratum, but also the types of revaluations that they can undergo in the clause. The distribution of expletives is also restricted by the Active Dummy Law. In its traditional formulation in (33) this principle requires all expletives to chômeurize a 1 or a 2. However, as I noted earlier, the Active Dummy Law must be trivially reformulated so that it applies only to intrusive dummies, but not to their lexically selected counterparts (102).

(102) ACTIVE DUMMY LAW (REVISED): An intrusive dummy must chômeurize some nominal if the first stratum where the dummy bears a grammatical relation (i.e. its departure stratum) contains a 1 or a 2.

A further constraint on expletives has to do with their categorial status. Here I identified two surface realizations of lexically selected expletives: as empty categories (e.g. the subject of *piovere*-type verbs), and as phonologically overt pronouns (e.g. French *il*). Both realizations are consistent with the traditional view that expletives belong to the class of pronominals. Yet, my claim that syntactic licensing is not necessarily concomitant with theta-role assignment opens up the theoretical possibility that non-pronominal elements (i.e. NPs or DPs) could be licensed as syntactic dependents without receiving a semantic role. To exclude this possibility, I propose the principle in (103).

(103) Expletives must be pronouns (where a pronoun is defined as a nominal whose content is given exhaustively by a matrix of morphological features).

My analysis has identified lexically selected expletives holding the two grammatical relations permitted by the Nuclear Dummy Law: subject and direct object. Most of the predicates that we have studied here select expletive subjects (French *falloir*, Spanish *haber*, weather nominals in Basque, and the unergative and optionally transitive variants of *piovere*-type verbs in Italian). However, my analysis has also attested predicates licensing expletive objects, i.e. unaccusative weather verbs in Italian (cf. (42)), and possibly also *cold*-type adjectives in English. This picture is consistent with Postal and Pullum's (1988: 654) observation that subcategorized-for expletive objects seem to be "less frequent (in terms of some rather obscure notion of frequency of construction types or triggering predicates in a language)" than their subject counterparts, just as, for

example, agreement of verbs with direct objects is more ‘sporadic’ than their agreement with subjects.

8. Conclusion

Here I have argued for the existence of lexically selected expletives, using evidence from weather predicates in Basque and Italian, existential *haber* in Spanish, and French *falloir* constructions. Analyses based on either quasi-arguments or traditional (i.e. non-subcategorized-for) expletives are problematic on empirical, conceptual and theory-internal grounds. These problems can be easily resolved by acknowledging the possibility that certain predicates can license syntactic dependents that are not mapped onto a semantic role, i.e. lexically selected expletives. Besides providing a unified account of a variety of seemingly unrelated phenomena, the initial expletive analysis yields a parsimonious theory of expletives. By arguing that certain predicates can license expletives as subjects or underlying objects, my proposal contradicts the view that dummies can only occur as the subject of a clause or a syntactic predicate in Rothstein’s (1995) sense and provides additional support for Postal and Pullum’s (1988) claim that expletives can also appear in strictly subcategorized positions, thus challenging the traditional assumption that syntactic licensing is necessarily concomitant with semantic role assignment.

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