1

Subjects, Expletives, and the EPP

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The literature on the three concepts named in the title of this book is vast. In this introduction, I simply provide a sketch (in §1.1-1.3) of the issues that set the scene for the papers in the volume. My discussion is judiciously larded at appropriate points with brief references to those papers, and each paper is summarized in §1.4. In §1.5, I discuss the papers in relation to each other, and then summarize some of their shared assumptions.

1.1. Subjects

The subject occupies a precarious position in generative linguistics; on the one hand it is an indispensable concept at a descriptive level, and is accorded basic status as a primitive notion in some frameworks (along with other grammatical relations); on the other hand it has defeated all attempts at a cross-linguistically valid definition and a substantial part of the field takes it to be no more than a descriptive label for an epiphenomenal collection of properties (cf. McCloskey 1997 for a clear overview of the issues).

Traditional grammarians distinguish between grammatical or formal subjects and logical or notional subjects; for example Jespersen notes (1927:227-228, 1949:107-110) that in a raising construction like (1a), the grammatical subject is *he*, but the notional subject of the main clause is the (discontinuous) infinitive clause *he to fall*; while in the most deeply embedded clause in (1b) (from Dickens), the grammatical subject is *there* while the logical subject is *what*.

(1) a. He happened to fall.
     b. I don't mean to say that I know what there is particularly dead about a door-nail.

At my present level of understanding, it seems that we can deconstruct the traditional subject into three components, one thematic-aspectual (the thematically most prominent argument of a predicate), one morpho-syntactic (classically identified by case and/or agreement), and one discourse-informational (the topical or the-

matic entity named in a proposition) (cf. the discussion of the V-domain, the I-domain, and the C-domain in Platzack 2000).

In the most straightforward cases, all of these components converge on a single noun phrase, prominent in all three components. In other cases they diverge. In a case like (2a), the morphosyntactic and discourse-informational systems converge on an entity which is not the thematically most prominent argument. In (2b), morphosyntactic marking is split: the thematically prominent argument controls agreement, but does not occupy the canonical subject position. In the reply in (2c), the discourse-informational topic neither occupies the subject position nor shows any other morphosyntactic subject marking. (2d) challenges theories of the thematic/aspectual system to determine which argument is prominent.

(2) a. Theater-goers were provoked by the performance.
     b. There were both kinds of wine at the party.
     c. Where's Odradek? – I left him under the stairs.
     d. Peach schnapps attracts bees.

Despite such permutations, English generally consistently uses position (along with what case and agreement it has) to mark the thematically most prominent argument (lexical selection and voice are commonly used to ensure that the resultant subject is topical). Different interactions among the different components give rise to different systems cross-linguistically, for example ergative systems where the transitive object patterns with the intransitive subject for case/agreement) and topic-prominent systems, where morphosyntactic marking is more robust for the discourse topic than for the thematic-aspectually highest argument (cf. Li & Thompson 1976, É. Kiss 1995b, and the other papers in É. Kiss 1995a).

Although the interactions between these components vary from language to language, the components are not independent of each other: each feeds the next. That is, firstly, the case/agreement system is sensitive to the thematic/aspectual system; there are 'active' or 'split' case-marking systems that distinguish agentive from patientive arguments, as well as ergative and accusative systems, but in each of these case-marking is determined by the thematic role of the argument, either in isolation (in an active system) or relative to other arguments (in accusative and ergative systems) (cf. Dixon 1994:28-35 for comments on semantic-based marking, and É. Kiss 1987 and in this volume for discussion of the situation in Hungarian).

Various grammatical processes, such as imperative formation, binding, causative formation, and control are part of the thematic-aspectual domain and are similarly cross-linguistically sensitive to this component (Anderson 1976), so that even in an ergative language like Inuit, the argument of a control-type predicate controls the thematic-aspectual Actor of a transitive clause[1] and even a topic-prominent language like Lahu can have accusative case marking on the Theme of a transitive verb (Matisoff 1973:155-158) and regularly forms causatives in which the Agent of the embedded verb is the controllee (cf. Matisoff 1973:436). In the familiar GB-based frameworks, the only way for the syntax to refer to thematic structure is indirectly, so it is important that the rules of VP projection are universally determined by properties of theta assignment. In the alternative theory adopted by Manzini and Savoia (this volume), thematic roles are aspectual features, allowing

theta-assignment to occur at a greater distance; this makes the actual structure of the VP irrelevant (cf. Borer 1994); characteristics of feature movement are then responsible for the observed connection between the thematic-aspectual system and such processes as control.

The second correspondence I alluded to above was that the discourse-informational component may universally be fed by the Case/agreement system. It is of course difficult to show that this is universal, but it seems that processes involving the informational domain (or C-domain), including relativization, topicalization, and other A-bar type operations, are not directly sensitive to the thematic-aspectual system but only as mediated by the morpho-syntactic system (cf. the 'topic' of Dixon 1972, 'pivot' of Dixon 1994; see also Manning 1996 for discussion), so that an ergative language may favor the absolutive, rather than the Actor, in such processes.

For example, ergative languages frequently require promotion of an Actor to absolutive case (through antipassive) for A-bar extraction (Nakamura 1996:92). É. Kiss argues in this volume that nominative in Hungarian is licensed not in the I-system as in English, but in the lexicon; consistently with this, the nominative argument shows no prominence for purposes of focusing or other movement processes.

In sum, the notion of subject is a multifaceted one. In the Government-Binding, Principles & Parameters, and Minimalist frameworks, subjecthood is generally a descriptive label, without theoretical status. Yet we can discuss, with Koster (1978), whether CPs can be subjects, without devolving into incoherence; just as we can say that the subject in Icelandic can be dative (Zaenen et al. 1985), that Warlpiri subjects of transitive verbs take the ergative case (Hale 1973), that Korean can have multiple subjects (Park 1973), or that English requires a subject. This last claim is the topic of §1.3; but before moving on to the subject requirement itself, I turn in §1.2 to one of its most important diagnostics, the expletive.

1.2. Expletives

Expletive, *pleonastic*, or *dummy* subjects have been pivotal in syntactic argumentation. They are identified by their lack of semantic content, and their resolutely grammatical nature makes them an excellent probe into the boundary between syntax and semantics. They are crucial, for example, in the identification of syntactic positions as thematic or non-thematic, so that the pattern in (3) shows that the position after *promise* is thematic and that the position after *suspect* is not (cf. Bresnan 1972, Chapter 3).

(3)   a.   We suspect there to be a party next door
       b. *   We promise there to be a party next door

Three types of expletive subject are recognized in traditional grammars of English: Extraposition *it*, weather *it*, and impersonal *there*, distinct from locative *there* (shown in (4d)).

(4)   a.   It is obvious where you got that hickey.
       b.   It gets dark in November.

  c. There's a fly in your soup, isn't there?

  d. There's our bus (*isn't there?)

Expletives are by definition semantically empty. Chomsky (1981:323-325) has argued that weather *it* is not an expletive, but rather what he calls a *quasi-argument.* It can bind PRO in an adjunct, for example, unlike the true expletive *there* (cf. É. Kiss, this volume, for similar examples from Hungarian; also Bennis 1986 on extraposition *it* controlling PRO).

(5) a. It often clears up here right after snowing heavily.

  b. * There is often a party here right after being a wake.

There is also a possible argument from Burzio's Generalization, which states that all and only verbs which assign an external theta role can also assign Case to an object (Burzio 1986:178). Compare (6a), in which a weather predicate takes an object, to (6b), in which an unaccusative verb fails to; not even a resultative predicate can save (6c), though the resultative predicate is fine when the internal argument gets Case elsewhere, as in (6d) (i.e. the noun phrase *Mackerel* has moved from object to subject position; cf. Simpson 1983 on resultative predicates with unaccusative verbs).

(6) a. It rained mackerel.

  b. * Rain fell mackerel.

  c. * Rain fell mackerel thick on the ground.

  d. Mackerel fell thick on the ground.

This suggests that *it* gets a theta role from *rain*, specifically an external theta role. Thus, we might wish to disregard meteorological *it*, when considering the behavior of expletives. A positive result of this move is that it allows us to handle the most serious of Postal and Pullum's (1988) examples of apparent expletive objects; consider their examples in (7).

(7) a. We demand it of our employees that they wear a tie.

  b. I would really dig it if you tickled my toes.

  c. Beat it!

Examples like (7a) plausibly involve extraposition from a small clause subject position, thus being analyzeable as ECM (i.e. *it* is an embedded subject; cf. (3a) above). On the other hand, examples like (7b) more clearly suggest extraposition from object position, on which see below. What is immediately pertinent is (7c), where there is no CP. *Beat it* means, roughly, 'go away immediately,' and as Postal and Pullum point out, there is no word that could substitute for *it* and preserve that meaning. Thus, this might be another example of a quasi-argument, a subcategorized (or s-selected) pronoun with only idiomatic content (essentially following Bolinger 1973).

 Hoekstra 1983 argues that extraposition *it* is referential as well (cf. also Bennis 1986, Vikner 1995). It is always coindexed with a CP (Rosenbaum 1968), resembling in this sense a resumptive pronoun. In fact, É. Kiss (this volume) shows that in Hungarian, extraposition pronouns can even be focused, and must therefore have

semantic content (presumably, as she suggests, through the theta-chain that they form with the coindexed CP). This would eliminate Postal & Pullum's (7b) above, leaving uncontested the contention that expletives can only appear in subject position.

Thus the only really clear case of an expletive is the impersonal one, represented by two types. One type is the historically locative *there* in English, *er* in Dutch, and *der* in Danish and some dialects of Norwegian and Swedish (in the latter spelled *där*). In the other Germanic languages, the existential expletive is generally identical to the neuter pronoun (*det* in Norwegian and Swedish, *a* in Icelandic, *ta* in Faroese, *es* in German and Yiddish). This has consequences for agreement, in that locative-based expletives seem to correlate strongly with agreement with the associate, whereas pronoun-based expletives vary on this score (cf. French, where expletive *il* controls singular agreement).[2]

It might be thought that not even the impersonal expletive is strictly non-referential, since, like extraposition *it*, it is always linked to something, namely an associate NP; but this is only true of English. There are clear cases where the corresponding expletive is not associated with any nominal, as in the impersonal assertions in French (Kayne 1975:247, n. 56), Icelandic, Swedish (from Falk 1993:74), and Danish.

(8)   a.   Il sera   parlé   de vous par tout le   monde   *French*
           it will.be spoken of you by all   the world
           'The whole world will be talking about you'

      b.   a ver ur   tala   um   ig út um allan heim.   *Icelandic*
           it   becomes spoken about you out of all   world
           'The whole world will be talking about you'

      c.   Det kluckar i rören   av avloppsvatten.   *Swedish*
           it gurgles in the.pipes by drainwater
           'Drainwater is gurgling in the pipes'

      d.   Der må ikke ryges.   *Danish*
           there may not be.smoked
           'Smoking is not allowed'

English is quite unusual among the Germanic languages in disallowing impersonal statements without any associate NP (cf. Vikner 1995).

Analyses of expletive constructions abound. An important development was that of Safir 1982, 1985, 1987 involving a Case/agreement chain between the expletive and the associate; properties of such a chain are then argued to account for the definiteness effect. This approach successfully handles the fact that when Case is not transmitted, as in (8), there is no definiteness effect (a preposition assigns Case to the postverbal DPs in (8a-c)). However, Vangsnes (this volume) notes that in Icelandic, the definiteness restriction varies with the position of the associate, not with any property of the expletive; as a consequence, he argues, a Case-chain cannot be involved and the definiteness effect must receive a different analysis. He provides one, basing it on de Hoop's (1996) theory of strong and weak Case. Since the available Case licensing is predicted by that theory to vary with the position of the associate, this more naturally accounts for the observed facts in Icelandic, and extends easily to Safir's data as well (on the assumption that Passigns strong Case).

Chomsky 1986 proposed that the associate moves abstractly to the position of the expletive, which bears some subset of the features associated with nominal arguments. There have been many variations on this analysis, including different proposals regarding what features the impersonal expletive bears. In this spirit, Taraldsen, this volume, argues that the expletive bears only number features, and Vangsnes, in this volume, proposes that expletives have deictic features, and may also have Case-features, parametrized across languages. Holmberg and Nikanne, also in this volume, show that the division in Finnish expletives between (roughly) the impersonal type and the extraposition and weather type is overtly reflected in their case, with the impersonal type being partitive; this, they argue, is a default form, and the impersonal expletive in Finnish is actually caseless.

On the abstract movement analysis, an expletive with the requisite features may obviate movement, and therefore agreement with the associate will not obtain. However, Manzini and Savoia, in this volume, point out that agreement is always strict in person,[3] suggesting that the associate always raises, and that movement of the associate cannot be too closely linked to the checking of agreement features. In contrast, Vangsnes, also in this volume, argues that there is never associate movement, arguing for agreement at a distance. Agreement at a distance, in the form of feature movement, is also the solution opted for by Holmberg and Nikanne, in this volume.

Note that Vangsnes rejects the possibility of uninterpretable features, and so the expletive, with its deictic features, must have semantic content; thus the expletive status of *there* is not unquestioned. In fact, Bennis 1986 argues that *there* is an adverbial, and Hoekstra and Mulder 1990 and Moro 1997 similarly argue for a kind of content for *there* (though such accounts have problems with examples like (8d) above, cf. Falk 1993, Chapter 4). Consider also É. Kiss' (this volume) arguments that all-focus statements asserting the existence of an event are predicated over the event variable. On the basis of data from Hebrew and other languages, Borer similarly argued at the Tromsø conference (Borer 1997) that locative expressions could provide an anchoring for the event variable. A natural combination of these ideas would be to take the expletive as an overt expression of the event variable (cf. Kratzer 1995 and §1.5.3 below).

Taking impersonal-type expletives to be contentful would eliminate the question of why there are overt expletives but raise the new question of why they are so *rarely* overt. Even the Germanic languages make use of null expletives, particularly in inversion contexts. In fact, the expletives used in impersonal statements are obligatorily null when not clause-initial in Icelandic, German, and Yiddish, as indicated here for Icelandic (from Thráinsson 1979:477), with Norwegian for comparison (cf. Platzack 1985, Vikner 1995, Chapter 6).

(9) a. Í gær   voru (* a) m s í ba kerinu.   *Icelandic*

     b. I går   var *(det) mus på badekaret.   *Norwegian*
         yesterday were it   mice in the.bathtub
         'Yesterday, there were mice in the bathtub'

The expletive is strictly obligatory in initial position if no other element appears there (cf. (8b) above), consistent with the V2 requirement. However, the same expletive cannot appear, in German or Icelandic, if some other element occupies the

initial position, as indicated in (9a). This pattern led Platzack (1985) to analyze Icelandic expletives as topic expletives (but see Vangsnes, this volume). Norwegian, in contrast, requires the expletive subject regardless, as indicated in (9b), much as does English.

As Roberts and Roussou note in this volume, the appearance of expletives in SpecCPin V2 languages like Icelandic and in SpecIPin non-null subject languages like English suggests a unification of the two phenomena; they propose that both are the result of an identification requirement on Tense, which appears in T in languages like English but in C in V2 languages.

An important question that arises is whether the subject position in constructions like (9a) is occupied by any element, for example expletive *pro*, as in Jaeggli and Safir 1989, Christensen 1991, or Holmberg and Platzack 1995; the trace of the topicalized adverbial, as in Vangsnes, this volume, or nothing, as in Bennis 1986 (for Dutch), Haider 1987 (for German), and Roberts and Roussou, this volume (in general).

The difference between *pro* and trace and nothing may seem like an iota,[4] but what is at stake is the very universality of the EPP: if there is nothing in the subject position in (9a) or its German equivalent, then the EPP must not hold in that language, as the EPP is commonly understood. Thus it is time to turn to the EPP.

1.3. The EPP

The Extended Projection Principle of GB/P&P/MP work of the 80s and 90s states that a clause must have a subject; analogous statements can be found in many other theories, but what makes this situation volatile in the MP framework and its predecessors is exactly the absence of a primitive notion of subject, as discussed in §1.1 above.

An NPdaughter was stipulated as part of the expansion for S in each of the early instantiations of the generative framework (cf. Chomsky 1957:26, Chomsky 1965:72, Chomsky 1970:216 n. 7, Chomsky 1981:25; compare Jespersen 1924 inter alia and Harris 1946). The development of a theory of specifiers (Chomsky 1970, Stowell 1981:257 ff, 1983) and its extension to the clause, analyzed as IP (Stowell 1981, Chomsky 1981:111), generalized the subject-taking property of the clause to that of phrases in general, but a difference still remained. While the clause *requires* a subject, the various other categories do not.

Chomsky (1981:40) links the subject requirement (called "Principle *P*" on pp. 26-27 there) with the Projection Principle, a requirement for lexico-thematic isomorphism across levels of representation, and coins the term Extended Projection Principle for the combination (Chomsky 1982:10). In popular usage, the expression (usually abbreviated EPP) has come to refer to the requirement that every clause have a subject (and so it will be used here), and the connection between the EPP and the Projection Principle has remained turbid. The Projection Principle prevents, for example, theta-marked elements from disappearing during the course of a derivation, and prevents a single argument from receiving two theta-roles, but it is unclear why it should require that every clause have a subject.

In order to understand the EPP it is necessary to determine whether it is cross-linguistically valid or not. On the face of it, it seems manifestly implausible that it

should be; the vast majority of the world's languages are unlike English, and freely allow sentences without overt grammatical subjects.

For instance, Gilligan 1987 examines a genetically and areally diverse sample of about 100 languages and finds only eleven cases where thematic subjects cannot be null, and no cases where expletive subjects cannot be (he notes, p. 136, that Icelandic has overt expletives in initial position, and Classical Arabic has them in subordinate clauses).

Thus sentences like the Italian (10a) (from Rizzi 1982:126) or the Northern Sámi (10b) (from Nickel 1990:397) are typical of the world's conversations.

(10) a. Non voglio che venga nessuno.   *Italian*
     not want.1SG that come.3SG nobody
     '[I] don't want anybody to come'

    b. Arvigo ii.   *Northern Sámi*
     began.to.rain
     '[It] began to rain'

There has long been an intuition that even clauses without overt subjects have covert ones; witness Jespersen's (1937:20) analysis 'S^0 V' for an Italian sentence like *Vive* 'He lives,' where the superscripted zero indicates phonological silence. Taraldsen's Generalization (Taraldsen 1980) is the statement in the terms of generative grammar that overt agreement morphology licenses null subjects.

In the formal theory of null subjects that emerged from the work of Taraldsen (1980), Chomsky (1981), and Rizzi (1982), their distribution is subject to the same factors that constrain the distribution of other phonologically empty categories, as well as to (some of) the contraints on overt noun phrases; thus, in (11a) (from Rizzi's 1982:176 n. 14), in the embedded finite clause, an overt subject would be licensed, and so would a subject trace. In (11b) on the other hand (Rizzi's 1982:129 example (40b)), the embedded clause is an infinitival, and the licensing possibilities for subjects are much reduced. Accordingly, the null subject is impossible, and (11b) is bad, either because it violates the subject condition, or because the embedded verb fails to assign its quasi-theta role (cf. the discussion in §1.2).

(11) a. Non è chiaro quando pioverà.   *Italian*
     not is clear when rains
     'It is not clear when it rains'

    b. * Non è chiaro quando piovere.
     not is clear when rain.INF

The result was to give a formal characterization to the 'null subject' intuition shared by Jespersen and others, based on language-internal empirical evidence. This makes it possible to contemplate the possibility that some sort of subject requirement holds of sentences like (10a-b). In fact, even verb-subject ('Free Inversion') sentences in Italian, like the embedded clause in (10a), might have an expletive subject in a position to the left of V, though this is controversial (see Manzini & Savoia, this volume, for a critical assessment).

At any rate, it has often been assumed since the early eighties that all languages are subject to the EPP, some licensing *pro* while others do not. The first serious problem faced was the existence of languages like Chinese, which do not have rich

Agr, yet allow pro drop. Gilligan's (1987) cross-linguistic survey shows that of 26 languages with no subject agreement, fully 17 of them allow null thematic subjects, or about 65%. However, Huang (1984, 1987) analyzed Chinese null arguments, showing that they could be accommodated under GB licensing theory. Interestingly, this type of pro drop is an areal feature: all of Gilligan's 17 examples are from south and east Asia or Oceania (as Gilligan notes, p. 197), and 12 of them are also like Chinese in additionally allowing null objects, despite having no object agreement.

McCloskey (1996) challenges the view of the EPP as a universal, arguing that Irish allows truly subjectless sentences, such as that in (12).

(12)   Laghdaigh ar a   neart.   *Irish*
        decreased on his strength
        'His strength decreased'

It is possible to postulate a null expletive in (12), but McCloskey argues that there is no evidence for such an expletive element internal to Irish, and furthermore that there are reasons specifically to believe that expletive subjects (of the impersonal type) are systematically absent from Irish.

For some languages, it is possible to analyze agreement morphology as pronominal, possibly directly satisfying the EPP; Irish is known for the complementary distribution of overt subjects and overt agreement morphology (McCloskey and Hale 1984), but the verb in examples like (12) is in the 'analytic'form, which does not show agreement.

Nevertheless, the view that head movement is what obviates the EPP in examples like (12) is an attractive one (cf. Benedicto 1994 for an early exploration of this idea, and Svenonius 1994, Chapter 3, for another). Artemis Alexiadou and Elena Anagnastopoulou, in a paper presented at the Tromsø conference on which this volume is based (published as Alexiadou & Anagnostopoulou 1998), develop such a theory; on their theory, V-raising in Irish and other languages satisfies the EPP, because the finite verb bears the requisite nominal features for checking the EPP. Versions of this analysis are adopted by many of the papers in this volume: Manzini and Savoia, Roberts and Roussou, and Vangsnes, though each with some variation.

1.4. The papers

1.4.1. The Conference

The papers in this volume were all presented under a lingering arctic sun on June sixth and seventh, 1997, at the conference in Tromsø bearing the same name as this volume. There were four other papers as well, which could unfortunately not be included. They were Hagit Borer's 'Licensing events: The role of locatives,'Halldór Ármann Sigur sson's 'Stylistic fronting,' Tor A. Åfarli and Kristin M. Eide's 'The EPP and predication' and Artemis Alexiadou and Elena Anagnostopoulou's 'V-movement and EPPchecking.'Borer's paper is referenced here as Borer 1997, and Sigur sson's as Sigur sson 1997. A version of the paper presented by Åfarli and

Eide appears as Åfarli & Eide 2000, and Alexiadou and Anagnastopoulou's paper is represented by Alexiadou & Anagnostopoulou 1998.

Here I briefly summarize only the papers included in the volume, in the order of their appearance.

1.4.2. Taraldsen

Tarald Taraldsen, in his paper, 'The *que/qui* alternation and the distribution of expletives,' provides a unified analysis for several constructions in French in which there is no overt preverbal subject. It obviates the problematic account of Rizzi 1990 by which *qui* is an agreeing complementizer, and eliminates the null expletive and rightward movement needed by Kayne & Pollock 1978. Central to the analysis is the postulation of an expletive *i* in French, corresponding to the expletive *id* (*i* before consonants) in the Rhaeto-Romance language Vallader seen in (13a). The expletive is argued to appear in colloquial French expressions like the one in (13b) (with a morphophonological formative /t/ to its left).

(13) a. I turnaran   quei temps docts   *Vallader*
          it will.return those times learned
          'Those learned times will return'

      b. Pourquoi tu   dois -ti partir?   *French*
          why   you must ti leave
          'Why must you leave?'

This element is argued to account for the *que/qui* alternation in French, where *qui* appears when a subject has been wh-moved: *qui* is *que* plus the expletive *i*. The distribution of *qui* and of *ti* have in common that they both require that the actual subject be in SpecCP. Taraldsen suggests that in those cases, the subject checks number features in the C projection; the strong number feature responsible for the EPP raises from Infl to C when the subject enters SpecCP (separating from V, developing a suggestion in Taraldsen 1996 that feature movement is overt rather than covert as in Chomsky 1995). The expletive *i* occupies the SpecIP position without checking any (interpretable) features; it is a 'pure expletive,' required because the subject has been extracted.

In addition, Taraldsen treats cases of French Stylistic Inversion, where a subject may be postverbal in case some element has been wh-moved, as in (14a). In fact, there may even be no obvious candidate for subjecthood, as in (14b).

(14) a. Où   crois-tu   que vont se cacher les chats?   *French*
          where think you that will RFX hide   the cats
          'Where do you think the cats will hide?'

      b. Quand crois-tu   que sera   procédé   à un réexamen   de la
          when think you that will.be proceeded to a   reexamination of the
          question?
          case
          'When do you think that a reexamination of the case might occur?'

Again, this possibility hinges on there being wh-movement out of the clause. The classic analysis of Stylistic Inversion has a null expletive in SpecIP. Taraldsen ar-

gues, however, that the VP, along with some functional projections, occupies SpecIP in such cases, number features being checked by virtue of the percolation of the number features of the trace of the subject. In this way, Taraldsen eliminates the need for a null expletive in the analysis of French, and along the way provides a new account for *que*-trace effects.

1.4.3. *Vangsnes*

In 'Icelandic expletive constructions and the distribution of subject types,' Øystein Vangsnes discusses Icelandic expletive constructions, in particular the distribution of different types of subjects (quantified, definite, and so on) in two different positions: one, the 'intermediate' position, follows the position of the verb in second position and is identified with SpecTP (following Bobaljik & Jonas 1996); the other, the 'postverbal' position, is lower down, presumably inside the VP. Vangsnes demonstrates that the restrictions on the two positions are different.

The lower, postverbal position shows the classical definiteness effects as discussed by Milsark: weakly quantified DPs are allowed, and strongly quantified DPs, as well as names, possessed DPs, definite descriptions, and partitives are excluded. However, the intermediate position shows a different type of restriction. Here, although definite descriptions, partitives, names, and possessed DPs are impossible, strongly quantified DPs are permissible. McNally (1992) pointed out that examples of strongly quantified noun phrases in existential statements in English, like that given in (2b) in §1.1 above, are restricted to 'kind' expressions (in Carlson's 1977 sense). Vangsnes makes it clear that this is not the case in Icelandic.

As Vangsnes argues, this is a serious problem for accounts in which the definite effects noted in existential constructions are linked crucially to the presence of an expletive, since the expletive is the same whether the associate is in the intermediate or the postverbal position. There is an additional, surprising constraint on the intermediate position: 'bare' indefinites, which in Icelandic appear with no determiner at all even when singular (there is no indefinite article in Icelandic), are degraded in the intermediate position, but perfect in the postverbal position. This apparently has nothing to do with the determiner per se, as a modified noun is acceptable. For example, (15a) is degraded, but (15b) is good.

(15) a. ? a er fiskur elda ur í eldhúsinu.   *Icelandic*
          it   is   fish   cooked   in the.kitchen
          'There has been fish cooked in the kitchen'

     a.   a er úldinn fiskur elda ur í eldhúsinu.
          it   is   rotten   fish   cooked   in the.kitchen
          'There has been rotten fish cooked in the kitchen'

This is reminiscent of the observation made by É. Kiss (this volume) that Hungarian bare N subjects remain VP-internal and cannot appear in higher subject positions.

Vangsnes develops an account in which the definiteness effect on the low position comes from de Hoop's 1996 strong and weak Case; T can license strong Case, allowing strongly quantified elements in the high position. The restrictions on associates in the high position come from a licensing requirement that is specific to

definite expressions: unlike strongly quantified noun phrases, they must check deictic features as well as person and number features. Only in SpecAgrSP can these features be checked.

1.4.4. Holmberg & Nikanne

Anders Holmberg and Urpo Nikanne discuss 'Expletives, subjects, and topics in Finnish.' They show that Finnish has overt expletives, both of the *it*-type and the *there*-type, despite the fact that it is a richly agreeing pro drop language in the sense that first and second person subjects are freely omissible. Furthermore, under certain conditions these expletives are obligatory. This is unexpected on several accounts of the 'pro drop parameter.' For example, in systems descending from Taraldsen's 1980 proposal, such as that of Rizzi 1982, pro drop is possible when empty categories can be licensed in subject positions. In such a language, overt expletives, if present at all, would necessarily be optional. Similarly, in Alexiadou and Anagnostopoulou 1998, pro drop is the result of a language checking the EPP feature through verb-movement; this leaves unexplained the Finnish facts.

Holmberg and Nikanne carefully show that the expletive competes with various topical elements for the structural position of the subject in Finnish, a position which can be distinguished from the operator position in SpecCP, from the specifier of TP, and from various focus positions. They argue that the topic position is the specifier of AgrSP, which they call FP (following Holmberg et al. 1993).

Holmberg and Nikanne propose that EPP effects in Finnish are generally due to a negatively specified Focus feature, [-Foc]. The feature is semantically defined, but by the absence of content: an element that does not contribute any new information is minus focus. This feature must be checked by a topical element or an expletive in SpecFP, when present in F. It is not present in case the sentence is all-focus, in which case there are no EPP effects. Although the F head is responsible for nominative case and for subject agreement inflection, they argue that these can be assigned at a distance, so the nominative subject need not move to SpecFP if some other element serves as the topic.

1.4.5. É. Kiss

Katalin É. Kiss'paper, 'The EPP in a Topic-Prominent language,'examines the relevance of the EPP for Hungarian, a topic-prominent language. The EPP as stated by Chomsky (1981, 1995) is a condition on IP, or on Infl, the locus of verbal inflectional morphology, and affects the thematically most prominent argument (requiring it to appear in SpecIP).

Hungarian seems problematic for the EPP as stated in three respects. First, not all clauses have a VP-external subject: there are topicless (active) sentences in which no argument is external to the VP; though topics generally do have to move to a VP-external position. Second, sentences in which some element moves to a VP-external position do not seem to involve SpecIP; the positions are apparently distinct for quantified elements, focused elements, and topics, and there is no obvious link to Infl (i.e. there is no connection between the fronting of these elements and verbal morphology). Third, the movement of some element to a VP-external

position is not limited to the thematically highest argument, although the thematically highest argument does always show morphological nominative case.

É. Kiss splits the EPP into two different parts: one, a requirement that the VP be predicated over some argument, possibly the Davidsonian event argument, and two, a constraint on argument structure, requiring the thematically most prominent argument to be morphosytactically subject-marked.

É. Kiss shows that Hungarian is consistent with the first aspect of the EPP, the predication requirement, if it is assumed that (i) in Topicless sentences, the VP is predicated over the event argument, and (ii), quantification (in sentences with quantifiers or focused elements) counts as predication in the relevant sense. Hungarian is consistent with the second version of the EPP, the subject-marking of the most prominent argument requirement, if it is assumed that this subject-marking (in the form of nominative case marking) can be instantiated without movement to SpecIP. É. Kiss argues that this occurs in the lexicon in Hungarian, where nominative case is associated with the thematically most prominent argument. Consistent with this analysis, there are no grammatical function changing processes in Hungarian, such as passive, raising, ECM, or *tough*-movement; the surface case of the thematically most prominent argument of a verb is always nominative.

Thus, Hungarian differs from English in two parameters: one, in English, predication of a VP over the event argument can only occur in *there*-insertion contexts, and there are language-specific constraints on *there*-insertion, whereas in Hungarian, an active (not stative) VP can be predicated of the event argument with no expletive; and two, in English, subject-marking is effected by movement to SpecIP, while in Hungarian, it is effected by lexical assignment of nominative case.

1.4.6. Roberts & Roussou

Ian Roberts and Anna Roussou's contribution is called 'The EPP as a condition on tense.' Roberts and Roussou argue that the EPP and V2 are both manifestations of the same condition, and furthermore that this condition derives naturally from the analysis of T as containing a tense variable, as in work by Enç. This unification of the EPP and V2 is motivated by a straightforward observation: they both involve the obligatory filling of the specifier of the head containing tense (T). Halldór Sigur sson, at the Tromsø conference, independently argued on the basis of Stylistic Fronting data from Icelandic for a merger of V2 and the EPP, though he analyzed them formally in terms of the checking of an Event feature E (Sigur sson 1997).

The basic idea is that the variable in T must be bound; if it is not, then it receives an arbitrary interpretation, which they argue to be the case in V1 declaratives. A variable in a head position, for Roberts and Roussou, can be bound either by a higher head or by an element in a specifier position. As an example of the former, T in a subordinate clause is bound by C. In German, a subordinate clause with an overt complementizer shows no V2 effect, and in fact even the EPP is called off, in that expletives do not appear (cf. §1.2 above). An example of binding by an element in a specifier is provided by German main clauses: V moves to C, because of an independent requirement, taking T along with it; but V does not have the ap-

propriate content to bind T, in Germanic. Therefore SpecCP must be filled with something that can bind T. This is the V2 requirement. Roberts and Roussou account for a wide range of patterns of subject realization and main and embedded V2.

One important proposal they put forth is that the PF-realization of functional features is a point of parametric variation, where at least Agr_S, Force, Fin, and Wh are functional features (cf. Rizzi 1997). A feature X that requires PF realization is indicated thus: X*. For example, V2 languages have Fin*, requiring something with PF-features (the verb) to appear overtly in the Fin node, whereas languages like English have Fin.

In the standard Minimalist Program, the difference between overt realization of features in a particular location and their absence at PF is dependent on two factors: one, whether the relevant features are 'strong' or 'weak'(in more recent parlance, whether there is an EPP feature or not), and two, whether there happen to be any elements with the appropriate features that are not phonologically pronounced. Thus, in principle, a language with in which the subject remained quite low (in the VP, say) could either be one in which all D features were weak, or one in which there were strong D features but null expletives. For Roberts and Roussou, on the other hand, this difference is expressed directly, in the form of a single parameter, whether a feature requires PF realization or not.

They refine this proposal in a variety of ways. For instance, it interacts with their assumption that Merge is more economical than Move: if there is an element that can realize X* by simply being inserted, it will be, but if not, some element may be moved into X* (or its specifier). Another proposal is that it is the highest F* in a dependency that must instantiate the LF feature of that dependency. In other words, it won't do just to have any pronounceable material in a node marked *; it must have inflection or content corresponding to the LF value of the functional feature. Verbal agreement can be pronominal and can have a referential interpretation, and when it does, verb movement satisfies the subject requirement directly, as in Alexiadou & Anagnostopoulou 1998, without *pro* (as in Manzini & Savoia, this volume).

They discuss cross-linguistic variation in the satisfaction of various features in the C system, for example Force, comparing cases in which there are dedicated particles for this purpose (e.g. Welsh) with cases in which movement is forced (e.g. Danish) and cases in which the Force features are weak (e.g. German).

1.4.7. Manzini and Savoia

Rita Manzini and Leonardo Savoia, in their paper, 'Parameters of subject inflection in Italian dialects,' draw on a very detailed analysis of a large number of Italian dialects, especially northern ones, to propose a number of important developments of the Minimalist Program, considering in particular the empirical and theoretical status of the EPP.

Northern Italian (NI) dialects show verbal agreement with the subject, as in Standard Italian, but in addition have a preverbal subject clitic which also indicates the person, number, and gender of the subject. This clitic appears regardless of whether there is also an overtly realized subject DP.

Manzini and Savoia continue the deconstruction of Infl begun by Pollock (1989), splitting the traditional agreement categories up into separate projections. Each projection is motivated by the overt realization of clitics, e.g. the realization of first and second person clitics following negation, while third person clitics are above negation, gives a Number head higher than the Person head. The highest head is D, the locus of definiteness, followed by N, followed by Num[ber], followed by P[erson] – all nominal categories, yielding an inversion, of sorts, of Abney 1987, who introduced sentential-type functional heads into the noun phrase.

On Manzini and Savoia's account, D is strong universally, requiring that something appear there overtly (following Roberts & Roussou, this volume, this has to do with PF realization rather than movement prior to Spell-out). The element may be a subject clitic, in NI, or a full DP in as in English, or the finite verb, as in standard Italian.

Theta role assignment, following Manzini & Roussou 1999 and drawing on Borer 1994, is modelled as association of an Asp[ectual] feature on the verb with D features, which enables the element bearing D features to be interpreted as an argument. This leads to some major differences between the system proposed here and Chomsky's model. First, since features, including Asp, can move from the nodes hosting them, there is no longer any need for arguments to be projected inside VP at any level; a subject may be Merged in a specifier position in the I-domain and Asp may be moved up to it (taking agreement features along with it as free riders). Second, there is no need for *pro*, since the functional heads may be filled by items bearing D features; Asp can move to D and associate directly with the clitic there.

Manzini and Savoia also discuss the distribution of overt subjects in the varieties under discussion. Examing preverbal subject, they show reason to believe that preverbal subjects in NI are topics, occupying a higher specifier position, whereas the preverbal subject in English and the full DP subject in French are in the specifier of I.

Turning to postverbal subjects, they present a detailed and original account of impersonal constructions, contrasting their account with those of Chomsky 1995 and 1998. They argue, in particular, that person agreement is obligatory in constructions with a postverbal subject (as mentioned briefly in §1.2. above; cf. fn. 3), whereas number agreement varies cross-linguistically in such constructions. On their analysis, this is because agreement is effected by the movement of Asp features to different inflectional heads. Parametrically, Asp may or may not carry with it number features; they motivate this in terms of a distinction between features with referential import (including number) and predicative features (including the basic denotation of a noun).

1.4.8. Svenonius

In 'Subject positions and the placement of adverbials,' I examine issues of adverbial placement and the patterns of adverb-subject ordering within IP in various Germanic languages. Adverb placement in general and adverb-subject ordering in particular have been used to motivate analyses of clause structure in many influential accounts. I take a critical look at the reliability of adverbs as a diagnostic for

clause structure, arguing that their distribution warrants a more semantically based treatment than is usually offered.

Specifically, I suggest that the strict relative ordering of adverbials should not be taken as an indication of separate functional heads, as in Cinque 1999. I argue that to do so requires the abandonment of the Head Movement Constraint, which is otherwise well motivated. I opt instead for a model in which multiple adjunction is permitted (contra Kayne 1994), and allow the relative ordering of adverbials to be determined by their semantics.

This leads to the possibility that relative subject-adverb orders in the IP in Germanic are not the result of multiple specifiers positions, as is assumed in Bobaljik & Jonas 1996, but simply the result of two alternative orders of attachment of the subject and the adverb.

I show that the conditions on adverb-subject order involve a notion of topicality, grammaticized to different extents in different languages. For instance, in Norwegian, the formal topicality of an argument is determined by its discourse function. I provide an account in which topicality is linked to the EPP, in the form of a +Topic feature, and to the model-theoretic semantic interpretation of the clause.

The connection of the topic feature to the model-theoretic interpretation provides the foundation for the analysis of the restrictions on adverb-subject order. The basic idea is that an adverb cannot attach to a clause that already has a topic specified, as that denotes a unit of the wrong semantic type. I link this analysis to earlier work (Svenonius 1994) on the (contextual) anchoring of propositions.

I conclude that there is no evidence from adverb placement for two specifier positions in Germanic, calling into question one plank of support for Pollock's 1989 split-Infl hypothesis. This brings the paper into a certain tension with those of Vangsnes and Manzini and Savoia, in this volume, as they are built substantially around versions of that hypothesis. However, my findings do not establish the absence of multiple heads; Manzini and Savoia, in fact, even show that those heads can simultaneously be filled (as opposed to other work which demonstrates either specifiers, adjuncts, or alternate head positions). The presence of additional inflectional heads would not actually contradict the account.

1.5. What is the EPP?

It is clear that the EPP straddles the interfaces, PF and LF – its PF nature is manifest in its requiring that a position be filled by an overt element, as is most clearly seen with expletives; and its LF nature is revealed by the connection to the topicality of the element satisfying it, or the lack of topicality in expletive constructions.

Here I examine the different ways in which the authors in this volume have sought to deal with the empirical issues that subjects raise in their respective papers.

1.5.1. The PF side of the EPP

The EPP, as Holmberg (2000) puts it, clearly has a 'phonological half'; there are many cases in which phonologically null elements are motivated for languages but

where those same elements do not satisfy the EPP, for example trace in many cases. Taraldsen's article here can be taken as a case in point: on his analysis, the French complementizer *qui* includes an expletive, which means that cases in French which were previously analyzed as containing a subject gap don't actually have one.

The usual assumption is that the EPP is satisfied by a trace bound by an overt subject or operator in an A-bar position, but cases such as these raise the possibility of reanalyzing some other cases of apparent subject traces; compare Taraldsen's 1990 analysis of Danish relative *der* as filling the subject position in relative clauses like *manden der stjal bogen*, literally 'the man there stole the.book,' with the well-known fact that the relative complementizer *that* in English cannot be omitted in the context of a subject gap, in e.g. *the man *(that) stole the book*. Conceivably, then, *that* fills the subject position overtly in English, and there are no real subject gaps. The reverse pattern in sentences like *Who did you say left?* might then be amenable to an analysis along the lines of Taraldsen's, in this volume, for Stylistic Inversion.

Taraldsen also eliminates the possibility of LF satisfaction of the EPP, as he abandons covert movement, arguing that the strong/weak distinction can be recast, as a question of how much material is pied-piped by feature movement (as in Taraldsen 1996).

Roberts and Roussou, it will be recalled, also argue that a model which allows both a covert/overt movement distinction and a null/overt PF distinction for lexical items is inadequately restrictive. The phonological side of the EPP, on their account, is expressed by their diacritic '*,' which requires PF-interpretable (i.e. pronounceable) material and replaces the strong/weak feature distinction. One part of the EPP, in their system, is the universal requirement that some member of the T dependency bear *, i.e. be PF-interpretable.

Manzini and Savoia follow the same general line of thinking, in particular in eliminating *pro* entirely, opting for theta-feature identification in functional heads. My account in this volume would be compatible with this; in particular, the difference between a language with overt expletives and one without them might be cast in terms of whether type-shifting were allowed without the overt insertion of a nominal element.

Holmberg and Nikanne, however, do retain *pro*; they argue that AgrS in Finnish bears person features, and is sufficient to license first and second person *pro*, but not third. On their account, *pro* actually fills the EPP position in sentences like their example (7a) *Olin väsynyt*, '[I] was tired.'

1.5.2. The LF side of the EPP

Many of the papers in this volume connect the EPP, in one way or another, to discourse notions such as topicality.

Here the papers on Finno-Ugric languages are perhaps the most explicit; É. Kiss argues that part of the EPP comes from the semantic fact that declarative statements must be predications, and a predicate must be predicated of something. In Hungarian, this requirement can be satisfied by various types of quantification, or by predication over an event, or by predication over a topic. In English, licensing in SpecIP is formally associated with being the subject of predication. Manzini and

Savoia also link subjects with topicality in that they argue that preverbal subjects in various Romance languages occupy a topic position.

Holmberg and Nikanne connect the EPP in Finnish to the notion of focus, which is in effect the inverse of topicality. Non-focus elements evacuate the VP, and a high functional head F attracts a non-focus element to its specifier.

For Roberts and Roussou, Tense is a kind of pronominal element and in order to get a specific reference, it must be bound. The usual binder, in a V2 language, is a topical element, as this gives the right kind of anchoring to the context of the utterance. In a non-V2 language like English, the Case system conspires to make the subject the only possible binder for T.

Similarly, Vangsnes postulates a licensing requirement on AgrS that forces it to enter into a checking-type relation. This relation may be satisfied by a variety of elements; a definite subject can satisfy all of them, or an expletive or adverbial may supply deictic features while a logical subject supplies such features as Case.

Finally, in my own account I link the EPP with a topic feature, but argue that that feature has become grammaticized in languages like Danish and English to the point where it no longer corresponds to discourse topicality.

1.5.3. The Syntactic Nature of the EPP

The usual treatment of the EPP is syntactic. Chomsky (1995) suggested an uninterpretable categorial D feature as the formal core of the EPP, while Rothstein 1983 has modeled it as a syntactic predication requirement; Åfarli and Eide, at the Tromsø conference, argued that the predication requirement is semantic, but allowed it to be satisfied in a purely formal way by expletive subjects (Åfarli and Eide 2000). Various other accounts have tried to derive the EPP from Case requirements, e.g. Lasnik 1992, Martin 1999.

The most serious problem for a Case-based account is the fact that EPP effects are observed in small clause environments, as I discussed in Svenonius 1996. Some examples are shown in (16).

(16) a.   His efforts only got him glared at.
      a.' * His efforts only got glared at him.
      b.   With *(it) as cold as it is, even warm coffee freezes quickly.
      c.   *(It) being Easter break makes *(it) likely that they won't be home.

Case requirements are satisfied in the starred examples, yet they are still bad. All of these examples are plausibly handled by semantic requirements of the type discussed here. In (16a), the matrix verb s-selects for a complement denoting a State of Affairs (cf. Svenonius 1994 for discussion and references); the participial predicate *glared at him* in (16a') does not denote a State of Affairs, but the small clause *him glared at* can; compare Heycock 1992 and É. Kiss' (this volume) predication requirement.

Assuming that weather predicates like *cold* assign quasi-theta roles, as discussed in §1.2 above, leaving the subject out of the absolute construction in (16b) would violate the s-selectional restrictions of the predicate. Similarly, the gerundive expression in (16c) does not contain a true expletive. The extraposition *it* in the com-

plement of (16c) is required by the fact that *make* s-selects a State of Affairs, as with (16a).

However, there are also small clause examples with pure expletives, like those in (17). As with the examples in (16), the expletives are obligatory.

(17) a.   If the band cancels, we can watch *(there) be a huge brawl.

b.   Jeg hørte *(det) bli   snakket om   deg.   *Norwegian*
      I   heard   it   become spoken   about you
      'I heard people talking about you'

c.   Jag såg *(det) dansas   på skeppet.   *Swedish*
      I   saw   it   be.danced on the.ship
      'I saw there be dancing on the ship'

Given that the expletives here are 'pure' expletives, not forced by selectional requirements of the embedded predicate, and not contributing any content for predication, such examples seem to represent the irreduceable core of the EPP.

Note that such examples are only possible with *verbal* predicates; even participles are excluded, as indicated in (18). (18a) shows that a passive participle is a legitimate predicate in a small clause complement to *have*; (18b) shows that *there* is excluded from this type of small clause. (18c-d) show that this is not due to some incompatibility between the impersonal construction and the s-selectional requirements of the matrix verb. (18d-e) show that gerunds are verbal in the requisite sense.

(18) a.   They had horns blown upon their arrival.

b. * They had there blown horns upon their arrival.

c.   They had there be horns blown upon their arrival.

d.   They had there being horns blown upon their arrival.

e.   There being a riot shouldn't deter you.

Nor are adjectives, nouns, or prepositional phrases possible impersonal predicates, in the absence of a verb.[5]

(19) a. * I want there available a fireman at all times.

b. * We would consider there a woman the best candidate.

c. * There seems a draft in this room.

Scandinavian shows the same restriction. Infinitives, including s-passive infinitive forms, are possible in Scandinavian (cf. (17b-c) above and (20b) below), though just as in English, passive participles are not (cf. (20a) below).

(20) a. * Jeg hørte det snakket om   deg.   *Norwegian*
            I   heard it   spoken about you

b.   Jeg hørte det snakkes om   deg.
      I   heard it   be.spoken about you
      'I heard people talking about you'

Without an expletive, an example like (20a) would violate the s-selectional requirements of the matrix verb, because the complement would not denote a State

of Affairs. But an expletive cannot be inserted anyway. Apparently, a verb is necessary (in the small clause) in order for an impersonal expletive to appear, in contrast to the situation for extraposition and weather expletives. One characteristic that separates verbs from other categories is the possibility of specifying them for tense; this can be represented by saying that all and only verbs carry the Davidsonian e, and that tense binds e; this connects impersonal expletives with É. Kiss' (this volume) predication over the event as well as with Roberts and Roussou's (this volume) connection between the EPP and binding of T.[6]

1.6. Conclusion

At its core, the EPP stands out as a canonical example of a doughtily syntactic requirement, irreduceable to any constraints of logic, discourse, or phonology; so much so that Chomsky (1998) has adopted the expression 'EPP-feature' for strong features in general, those which trigger overt movement.

Strikingly, the authors in this volume have nevertheless resisted postulating uninterpretable features to account for EPP effects, arguing in most cases that it is a semantic requirement at some level. The autonomy of the syntax generally resides in what makes the satisfaction of the requirement overt rather than covert, that is, why the PF material must be pied piped, for Taraldsen, why D is strong for Manzini and Savoia, why the T dependency must be * for Roberts and Roussou, and so on.

To a certain extent, the shifting of the burden of the EPP to such notions as event anchoring, categorical predication, and discourse topicality may be an act of sweeping the syntactic problems under a semantic carpet; certainly, those semantic notions need to be better understood before we can claim to have solved the riddle of the EPP. But the contributions in this volume (along with the other work referenced here, and much more that I have only alluded to) have clearly made progress not only in defining the problems but in narrowing the range of plausible solutions.

Notes

1. Cf. Woodbury 1977 and also Dixon 1994:137; the thematic system may underdetermine the possibilities; Kibrik 1985 shows that Tindi also allows Theme controllees.

2. See Christensen & Taraldsen 1989 for the Scandinavian facts, McCloskey 1991 on agreement with *it* vs. *there* in English, Cardinaletti 1997 on the distinction in general, Manzini & Savoia (this volume) for comment.

3. Cf. Sigur sson 1990-1991, 1992, Taraldsen 1994 for similar observations about Icelandic, and Holmberg & Nikanne, this volume, on Finnish.

4. Though blood was shed in the fourth century over whether the essences of the Father and the Son were *homoousious* (i.e. of the same substance) or *homoiousious* (i.e. of similar substance), today's academic debates rarely lead to homicide.

5. In fact, the requirement in modern spoken English is even stronger: many if not most speakers require *be* in order for impersonal *there* to occur, rejecting sentences like *There exist three counterexam - ples* or *There emerged a gopher from its hole* as irredeemably literary. Even so, there is a contrast between the literary *I saw there emerge a gopher* and the impossible examples in (19); furthermore, examples of the *There emerged a gopher* are ordinary in the other Germanic languages, while those of the type in (19) are impossible.

6. See Svenonius 1994, Chapter 1, on the formal dependency of verbal small clauses as opposed to non-verbal ones. If non-verbal stage-level predicates do not bear e, then e cannot be used for adverbial

modification in examples like *I want him off my boat immediately*. Furthermore, if all verbs carry e, then it cannot be used to distinguish stage-level from individual-level predicates. These observations suggest that Kratzer's 1995 locative *l* for stage-level predicates should be distinguished from the verbal e.

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