

A Minimalist, Distributed Morphology approach to intra-individual variation: expletives and agreement in an insular English variety*

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1. Introduction

This article is intended as a contribution toward an emerging program (Adger & Smith 2005, Adger 2006, 2007) that seeks to account for intra-individual (or, ‘Labovian sociolinguistic’) variation (e.g., Chambers, Trudgill & Schilling-Estes 2002) within a broadly Minimalist theoretical framework¹ (Chomsky 1995 et seq., and related work). Following a specific approach (Parrott 2007, Nevins & Parrott In press, Parrott To appear), I attempt to implement this objective by utilizing the theory of Distributed Morphology (DM, Halle & Marantz 1993, Embick & Noyer 2007).²

Expletive constructions and their verbal agreement properties are a potentially productive point of contact between variationist sociolinguistics and morphosyntactic theory (for some previous work, see e.g., Meechan & Foley 1994, Schütze 1999, Henry 2002, Henry & Cottell 2007, Sobin 2004, Rupp 2005, Tortora 2006). Expletives and agreement, both in English and cross-linguistically, have long been important and central topics for generative syntax (e.g., Chomsky 1981, Chomsky 1993, 1995, 2000, 2001, 2004, Belletti 1988, Lasnik 1992, 1995, Vikner 1995, Belvin & Den Dikken 1997, Cardinaletti 1997, Moro 1997, Castillo, Drury & Grohmann 1999, Hazout 2004, Kayne 2004, 2006, among many others, see Deal 2009 for numerous references). Moreover, as reviewed below, sociolinguists using variationist methods have documented abundant inter- and intra-individual variation in the forms of expletives and their corresponding agreement patterns for diverse varieties of English. This growing body of empirical data is evidently relevant for evaluating morphosyntactic-theoretical analyses of expletive constructions, as well as for developing a Minimalist theory of variation and change.

* This paper has been substantially revised from Chapter 4 of Parrott (2007). Thus, special thanks are due to my entire committee, but particularly to Natalie Schilling-Estes for introducing me to Smith Island. This work was presented, in various incarnations, at NWAV 30 in Raleigh, NC in 2001; at the University of Cologne, Germany in 2003; as posters at GURT 2004 and the first *InterPhases* conference in Nicosia, Cyprus, May 18 – 20, 2006; and in colloquia at Harvard University and MIT in Cambridge, MA, September 2006. I thank all those audiences for their valuable feedback, and I especially thank Kleanthes Grohmann for his Herculean efforts in conceiving, organizing, and executing the *InterPhases* Conference. I would also like to thank the anonymous reviewer for helpful criticism, which has improved the paper (I hope); all remaining flaws or errors are naturally my own fault.

¹ For approaches to intra-individual variation and change that are not necessarily Minimalist, but are generally situated within Principles and Parameters frameworks, see for example Kroch (1994, 2001), Henry (1995, 1996, 2002), Wilson and Henry (1998), Cornips (1998), Cornips and Corrigan (2005), Cornips and Corrigan (2005) along with articles and references collected in that volume, and Adger and Trousdale (2007). For alternative theoretical approaches to variation, see for example Bender (2001, 2007: Head Driven Phrase Structure Grammar) and Bresnan (2001, 2007: Optimality Theory).

² But compare Embick (2007) for a very different DM approach to variation as multiple competing grammars.

With these larger issues in the background, the present article takes a more narrow focus, concentrating on intra-individually variable *there*-expletive *it* (TEIT) (Parrott 2002) in a moribund English variety spoken on Smith Island, Maryland, U.S.A. (e.g., Schilling-Estes & Wolfram 1999).³ After showing that TEIT with categorical 3rd singular (3sg) associate agreement is problematic for two particular Minimalist approaches (Cardinaletti 1997, Chomsky 2000), I follow a somewhat radical DM approach that denies the existence of uninterpretable Case or Agreement (or, $\phi = \varphi$) features in the narrow syntax (McFadden 2004, Bobaljik 2008). I suggest that mechanisms of intra- and inter-individual variation are located in the semantically interpretable features of the expletive morphemes themselves and their interaction with language-specific, and sometimes variable, morphological ϕ -feature copying rules. These post-syntactic agreement operations are responsible for categorical 3sg agreement with TEIT, as well as for (variable) rightward associate agreement with expletive *there*. Thus, the proposed DM analysis captures not only the facts of TEIT on Smith Island, but accounts for a range of variation patterns attested in varieties of English.

The article is structured as follows. Section 2 defines intra-individual variation in morphosyntax, comparing it with the phenomena of inter-individual and allomorphic variation (§2.1), and briefly explains how the apparent time method allows us to observe change in progress (§2.2). Finally, the community of Smith Island is introduced (§2.3). Section 3 begins with a review of some documented patterns of intra- and inter-individual variation in the form, distribution, and agreement properties of English expletives (§3.1). The section then turns to a presentation of TEIT on Smith Island (§3.2), and its role in the ongoing change in progress taking place there (§3.3). The final subsection gives an empirical summary (§3.4) before we orient toward theoretical issues in Section 4. Out of the many previous analyses of expletives and agreement listed above, two are discussed in more detail. The first half of Section 4 looks at Cardinaletti's (1997) cross-linguistic Nominative Agreement Hypothesis (§4.1), while the second examines Chomsky's (2000) theory of Probe-Goal Agreement as it pertains to the analysis of expletives and agreement in English (§4.2). TEIT variation with categorical 3sg agreement, on Smith Island and elsewhere, is shown to be seriously problematic for both approaches. Neither approach, furthermore, provides mechanisms to account for variable associate agreement with expletive *there*, as attested in many (perhaps all) English varieties. Section 5 adopts a Minimalist theory of syntax augmented by a DM theory of the interface with Phonetic/Perceptual Form (PF), and presents a morphological analysis of expletives and agreement in English. The analysis provides mechanisms to account for the patterns of inter- and intra-individual variation that were presented in Section 3. After summarizing the proposed theoretical analysis of English expletives and agreement (§5.5), Section 6 concludes the article with some final remarks.

2. Intra-individual Variation and Change in Apparent Time

³ Some of the research reported here and in Parrott (2002, 2007) was financed in part with State Funds from the Maryland Historical Trust, an agency of the Department of Housing and Community Development of the State of Maryland. I am grateful for this support, but the contents of these works do not necessarily reflect the views or policies of the Maryland Historical Trust or the Department of Housing and Community Development.

2.1 Intra-individual Variation

The ubiquitous linguistic phenomenon of primary interest in this paper will be referred to as ‘intra-individual variation,’ and has also been called ‘variability,’ ‘inherent variation,’ ‘sociolinguistic variation,’ and ‘Labovian variation.’ The latter term is due to the seminal work of William Labov (e.g. Labov 1963, 1966, 1969, 1972), who pioneered the sociolinguistic study of variation and language change in progress (for a survey of this robust field see Chambers, Trudgill & Schilling-Estes 2002). Intra-individual variation can be described as “alternate ways of saying ‘the same’ thing” (Labov 1972: 118), or when “speakers use different forms to express the same meaning” (Labov 1995: 115). Below is a working definition, specifically applied to morphosyntactic variation, which will be adopted throughout this paper (from Parrott 2007).

- (1) Intra-individual variation in morphosyntax
 - a. (Populations of) individuals use variant morphosyntactic forms;
 - b. The variant forms appear in the same morphosyntactic environment (variants are not allomorphs in complementary distribution);
 - c. The variant forms do not express different lexical or truth-conditional semantics, nor different morphosyntactic functions.

Intra- (within) individual variation must be empirically distinguished from inter- (between) individual variation, where different populations use variant linguistic forms. In other words, intra-individual variation is not the same phenomenon as cross-linguistic or dialectal variation, which is addressed by parametric theories (see e.g., Kayne 1996, Baker 1996, 2001, 2003, among many others). Whether and to what extent the mechanisms underlying intra-individual variation are identical to, or overlap with, the mechanisms underlying inter-individual variation remains to be determined. It seems unlikely that the mechanisms underlying these two phenomena are totally distinct. It has been argued that competition between multiple grammars, perhaps as defined by parameter settings, is the cause of morphosyntactic change over time (Kroch 1989, 1994, 2001), or that intra-individual variation in morphosyntax arises from multiple settings for micro-parameters (Henry 1995, 1996, Wilson & Henry 1998).⁴ Under the Minimalist approach proposed by Adger and Smith (2005) and elaborated by Adger (2006, 2007), intra-individual variation arises from the features of lexical items and their subsequent computation in the syntax, a position consistent with parametric theories following Borer (1984) and Chomsky (1993). Under the Distributed Morphology (Halle & Marantz 1993, Embick & Noyer 2007) approach pursued by Parrott (2007) and Nevins and Parrott (In press), both intra- and inter-individual variation can arise from the properties of objects and operations in the post-syntactic morphological component. Whatever the case may turn out to be, this matter cannot be decided *a priori* and must be addressed by empirical research on intra-individual variation as a distinct phenomena.

⁴ See also Embick (2007) for a recent theoretical discussion of multiple/competing grammars.

Intra-individual variation must be distinguished from the familiar phenomenon of allomorphy, which also involves variant linguistic forms that express the same meaning or morphosyntactic function. The occurrence of variant allomorphic forms is totally determined by aspects of their morphosyntactic or morphophonological environment. In contrast, intra-individual variation is “the non-deterministic choice of form” (Adger 2006). Variant forms occur in the same linguistic environment and not in complementary distribution like allomorphs.

The appearance of variant forms can be probabilistically influenced, but is crucially not determined, by aspects of their morphosyntactic or morphophonological environment. Much variationist research tries to discover how such internal linguistic factors correlate with usage of variants (e.g. Labov 1994). But these issues, though significant, will be completely set aside here. The present analysis is solely concerned with the theoretical question of distinguishing between the mechanisms of intra-individual and allomorphic variation.

Intra-individual variation often involves the sociolinguistic choice of form: although variants “convey exactly the same grammatical meaning,” they may “convey very different social meanings” (Chambers 2002b: 3-4). Much variationist research tries to discover how social factors correlate with usage of variants. This sociolinguistic approach has identified many kinds of social factors that influence variation, such as age, sex, ethnic group, economic class, social-network relationships, *inter alia* (for an overview see e.g. Chambers 2002a). However, the perspective taken here maintains a strict modular distinction between the mechanisms of the language faculty and their use (Adger 2007), and so the social significance of intra-individual variation is not directly addressed.

2.2 Change in Apparent Time

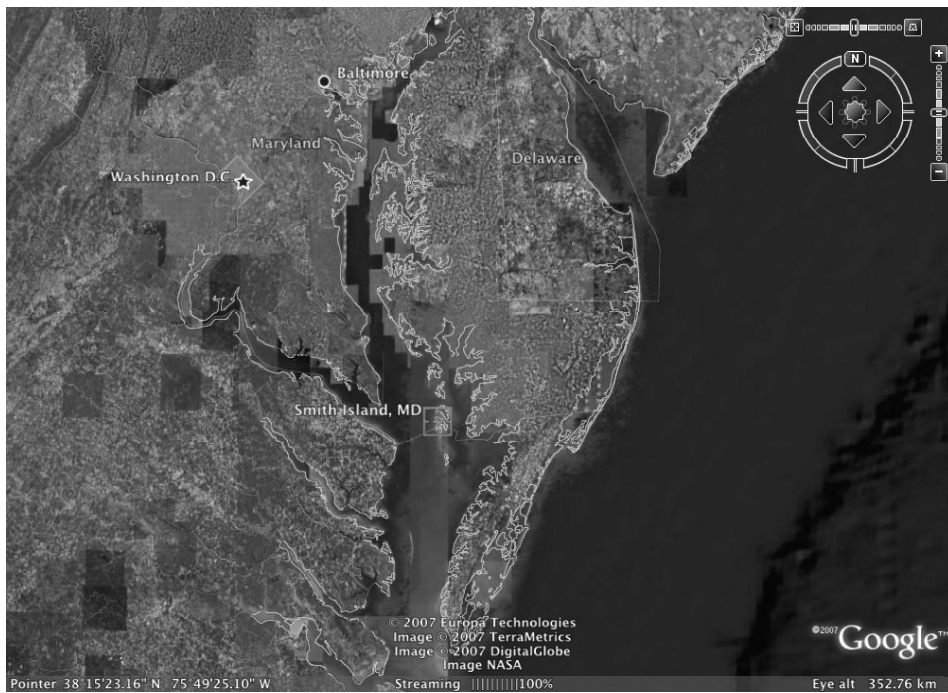
The sociolinguistic study of intra-individual variation yielded the apparent-time method for observing language change in progress, “one of the cornerstones of research in language variation and change” (Bailey 2002: 312). The apparent-time method requires collecting data from a cross section of age groups in the population under investigation. The variation data are then analyzed quantitatively. If the usage frequency of a variant increases or decreases across age groups, it can be inferred that a change is taking place. The speed of a change can be determined by looking at the slope of the increase/decrease in variant usage between age groups. When one variant is used 100% of the time in a population, the change is complete. The apparent-time method rests on the empirically verifiable assumption that older individuals use variants at approximately the same frequencies as when they were younger. The validity of the apparent-time method has been supported when apparent-time data have been checked against available real-time data (e.g. Bailey *et al.* 1992), and so the apparent-time method is by now a standard tool in variationist research.

Most variationist research on language change in progress has focused on phonology and not morphosyntax (e.g. Labov 1994, 2001), whereas most research on morphosyntactic change has focused on historical changes reconstructed from textual evidence (e.g. Lightfoot 1999, Kroch 2001). Thus far, Minimalist theorists have shown

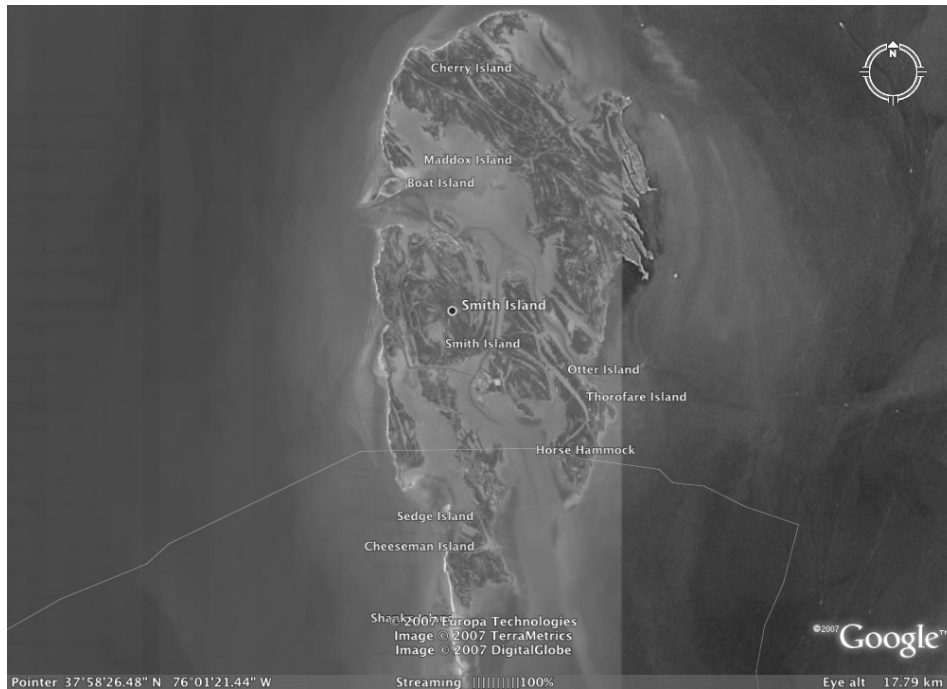
little interest in utilizing the apparent-time method to observe morphosyntactic change in progress.

2.3 Dialect Death on Smith Island, Maryland

One in name and community identity, Smith Island, Maryland is actually a small cluster of islands and wetland marshes located in the Chesapeake Bay. Smith Island has a homogeneous population of 364 according to the U.S. Census (2000). The community has been geographically and socially isolated since the first British settlers arrived in 1657. The decline of the local small-scale seafood economy, along with severe land erosion, are causing ongoing population attrition. Indeed, Smith Island will almost certainly be uninhabitable in less than a century. (For non-linguistic sources on Smith Island's history and culture, see Horton 1987, Dize 1990, Wennersten 1992, Horton 1996, or Sheenan 1994. See also <http://www.smithisland.org>.)



Map 1. Smith Island, Chesapeake Bay, Delmarva Peninsula, and surroundings



Map 2. Smith Island, Maryland

The unique variety of English spoken on Smith Island will also ‘die’ as the community becomes so dispersed that there are no longer any native speakers. In contrast to the dissipation of characteristic variants seen in other cases (Wolfram 2002), dialect death on Smith Island is proceeding via a different process called ‘concentration’ (Schilling-Estes 1997). On Smith Island, the apparent time method reveals that usage of certain locally characteristic variants is increasing rapidly over a few generations in the shrinking population. As a result, “linguistic distinctiveness is heightened among a reduced number of speakers” (Schilling-Estes & Wolfram 1999: 488), presumably an expression of community solidarity. In other words, as the insular dialect approaches death because of ongoing population attrition, it becomes less, not more, like mainland dialects. The concentration process of dialect death by was first documented on Smith Island but has not been elsewhere. This is probably because the set of social circumstances that lead to concentration are more rare than the social circumstances that lead to dissipation. For more on the sociolinguistics of the concentration process on Smith Island, see Schilling-Estes (2000, 2005), Schilling-Estes and Wolfram (2003), Wolfram and Schilling-Estes (2003), Trester (2003), Mittelstaedt (2006).

3. Expletives and Associate Agreement in Varieties of English

This section presents some interrelated facts about inter- and intra-individual variation involving the form of expletive subjects and verbal agreement morphology in English. The main focus is on the variety spoken on Smith Island, where the expletive *there* varies with the form *it*. I will refer to this variant form (and to this sociolinguistic variable, in

the conventional Labovian sense) as *there*-expletive *it* (TEIT)⁵ for convenience of exposition, and also in order to distinguish it from the ‘ordinary’ expletive *it* that appears as the subject of weather predicates and other constructions. While number agreement with the associate nominal phrase is variable with *there* on Smith Island, as also documented in other English varieties, TEIT induces categorical 3rd-person singular (3sg) agreement. TEIT with categorical singular agreement is also observed in other English varieties, but has not previously been studied quantitatively. TEIT is evidently part of the concentration process on Smith Island, as its usage increases in apparent time at approximately the same rate as other variants.

3.1 An Overview of Expletives and Associate Agreement in English

3.1.1 Expletive forms and their distribution

There are at least two morphophonologically distinct expletive subjects that are found in all geographic and social varieties of English to my knowledge, including Smith Island and the other varieties mentioned in this paper.⁶ The first expletive (*it*) is homophonous with the 3sg neutral-gender pronoun (*it*), while the second expletive (*there*) is homophonous with a locative adverb (*there*). In varieties that lack TEIT or other variant expletive forms,⁷ these two expletives are in semi-complementary distribution. I am aware of no English variety where expletive *there* occurs in the syntactic environment of expletive *it*:

- (2) *It-expletive constructions: Weather verbs and predicate adjectives*
 - a. It (*there) rained in the marshes.
 - b. It (*there) is stormy tonight.
- (3) *It-expletive constructions: Raising predicates with finite complements*
 - a. It (*there) seems that these isles are haunted.
 - b. It (*there) is likely that wraiths are among us.

However, in many varieties of English, the expletive form *it* does in fact occur (variably) in *there*-expletive constructions:

⁵ Parrott (2002, 2007) used the term ‘weak-expletive *it*’ (WEIT), following Chomsky’s (2000) reference to “weak expletives Expl of the *there*-type” (quoted from Bošković & Lasnik 2007: 81). However, the term ‘weak expletive’ is employed by Tortora (2006, and references therein) to describe a completely different theory of expletives, following Cardinaletti and Starke’s (1999) proposals regarding ‘weak/strong’ pronouns. Thus I have abandoned WEIT in favor of TEIT.

⁶ In this case, the two expletives are evidently a supra-local feature of English, so strictly in that sense, they could be called features of ‘standard’ English. However, I am uncomfortable with the term ‘standard,’ which unavoidably invokes social and normative ideologies. The ideologies of ‘standard’ languages are certainly worthy of sociolinguistic investigation (e.g., Milroy & Milroy 1985, Lippi-Green 1997), but a normative convention cannot be the object of biolinguistic inquiry. For that endeavor, we need to be sure that the notion of ‘language’ we employ refers to the internal grammar of a real individual (or in aggregate, a population of individuals).

⁷ For example, a *there*-expletive form *they* is documented in African-American (Martin & Wolfram 1998) and Appalachian English varieties (Tortora 2006).

- (4) *There-expletive constructions: Copular existentials*
There (% it) is a poltergeist in this house.
- (5) *There-expletive constructions: Raising predicates with non-finite complements*
a. There (% it) seems to be a will-o'-the-wisp in the swamp.
b. There (% it) is likely to be a shade in the cemetery.
- (6) *There-expletive constructions: Passives*
There (% it) was a phantom seen on this beach.
- (7) *There-expletive constructions: Unaccusatives*
Every year, there (% it) appears on this bridge a malevolent apparition.

In all English varieties, and cross linguistically, expletive-*there* constructions⁸ are subject to a restriction such that the associate DP may not be definite; this fact is described as the ‘definiteness effect.’⁹

- (8) * There are the poltergeists in this house.
- (9) a. * There seem to be the will-o'-the-wisps everywhere.
b. * There are likely to be the shades in the cemetery.
- (10) * There were the phantoms seen on this beach.

⁸ An anonymous reviewer objects that there may also be a definiteness effect with expletive *it* in Swedish, and also offers the following judgments from British English.

- (i) a. ?? It swarmed with (*the) bees in the room.
b. * There swarmed with (the) bees in the room.

Although I am not a native speaker of British English I find (ia) a bit more marginal than ‘??’ even without definite *bees*. If it is difficult to formulate *it*-expletive constructions with definite associates, that is simply because *it*-expletive constructions don’t have nominal associates, but instead take finite clauses (3), weather verbs (2a), or predicate weather adjectives (2b). Verbs of the *swarm* type are analogous to weather constructions, except that *swarm* verbs take an apparently mandatory prepositional complement indicating which beast is involved (*It was crawling *[with maggots] in the wardrobe*). It seems true that the nominal object of a prepositional complement to *swarm* type verbs cannot be definite (iia). But this may not be the same definiteness effect observed with *there* expletives (iib).

- (ii) a. It was buzzing with (*the) flies in our attic.
b. There were (*the) flies in our attic.

For one thing, a definite nominal is fine when the locative PP is in the subject position instead of a *there* expletive (iiib). But this move will not allow a definite nominal with a *swarm* verb (iiia).

- (iii) a. Our attic buzzed with (*the) flies.
b. In our attic were (the) flies.

More could be said about *swarm* verbs, but I am forced to leave the matter here for reasons of space and scope. But it strikes me as fair to maintain that the definiteness effect is a property of *there*-expletive constructions and not of *it*-expletive constructions, despite examples like (ia).

⁹ Note that I am not claiming the definiteness effect is caused by the *there* expletive itself. There are various ways to account for the definiteness effect; for example, it could be because the associate is a NP rather than a DP (Kleanthes Grohmann, p.c.), or alternately, due to the associate’s low structural position (anonymous reviewer, p.c.). Theories of the definiteness effect will not be considered here.

(11) * Every year, there appear on this bridge the malevolent apparitions.

3.1.2 Verbal agreement in expletive constructions

Verbal agreement with expletive *it* is categorically third-person singular (3sg) in all English varieties, as illustrated in (8-9) below, with expletive *it* and the 3sg verb forms in **bold**.

(12) **It is** (*are) stormy tonight.

- (13) a. **It seems** (*seem) that these isles are haunted.
b. **It is** (*are) likely that wraiths are among us.

A characteristic and well known property of *there*-expletive constructions is (the possibility of) “apparently anomalous rightward agreement” (Chomsky 1995: 66) with a post-verbal ‘associate’ nominal phrase. This is illustrated in examples (14-17) below, with the plural associates and plural verb forms in **bold**.

(14) There **are poltergeists** in this house.

- (15) a. There **seem** to be **will-o’-the-wisps** in the swamp.
b. There **are** likely to be **shades** in the cemetery.

(16) There **were phantoms** seen on this beach.

(17) Every year, there **appear** on this bridge **malevolent apparitions**.

Because of the definiteness effect, however, we cannot observe whether associate agreement involves person or just number. English pronouns are morphologically distinguished by person and number.

(18)		<u>Singular</u>	<u>Plural</u>
	<u>1st</u>	<i>I/me</i>	<i>we/us</i>
	<u>2nd</u>	<i>you</i>	<i>y’all/yous/yins/you guys/you</i>
	<u>3rd</u>	<i>she/her/it</i>	<i>they/them</i>

All other nominals are 3rd person, and are morphologically distinguished only by number:

(19)		<u>Singular</u>	<u>Plural</u>
	<u>3rd</u>	<i>ghost</i>	<i>ghosts</i>

Pronouns are inherently definite, and are therefore ruled out independently in *there*-expletive constructions due to the definiteness effect.

(20) * There are we in this house. (1p)

Cf. We are in this house.

- (21) a. * There seem to be y'all everywhere. (2p)
Cf. Y'all seem to be everywhere.
b. * There are likely to be they in the cemetery. (3pl)
Cf. They are likely to be they in the cemetery.
- (22) * There was I seen on this beach. (1s)
Cf. I was seen on this beach.
- (23) * Every year, there appear on this bridge you. (2s)
Cf. Every year, you appear on this bridge.

3.1.3 Variable associate agreement in there-expletive constructions

Intra-individually variable 3sg verbal agreement morphology in expletive *there* constructions with plural associates has been documented in English varieties all over the world (e.g., Meechan & Foley 1994 in Canada, Hay & Schreier 2004 in New Zealand, Rupp 2005 in Britain). The following examples are attested, and have been adapted from Rupp (2005). Variant plural verb forms are indicated with a percent sign (%) in order to emphasize that this is a case of intra-individual variation: speakers can and do use both forms.

- (24) a. There's (% 're) so many useless degrees you can do now.
b. Well, there is (% are) children, but not babies.
c. There was (% were) pits everywhere.

Theoretical syntax has mostly ignored associate agreement variation in expletive-*there* constructions.¹⁰ Chomsky's well-known (1995: 384) footnote on the matter dismisses the variation as superficial and therefore irrelevant for syntactic theory. Without offering empirical evidence beyond (his own) intuitions, Chomsky claims that the variation does not occur with interrogatives (**Is there three books on the table?*) or negation (**There isn't any books on the table*), and implies that variation cannot occur with the past tense of *be* (**There was three books on the table*). This latter claim is contradicted by example (14c) above and similar examples in the sociolinguistic literature, discussed below. Without specifying the involved mechanisms, Chomsky concludes that the form *there's* is a "frozen option," but this is again contradicted by example (14b) above and similar examples in the literature.¹¹

¹⁰ For some attempts to provide a theoretical account of agreement variation in expletive-*there* constructions, see Meechan and Foley (1994), Sobin (1997), Schütze (1999), or Rupp (2005).

¹¹ From Chomsky's (and Sobin's and Schütze's) acknowledgement of (at least some kind of) agreement variation with *there*, it can be inferred that such variation occurs in US varieties; moreover, it could even be inferred that the variation occurs in literate, academic, professional or middle-class varieties, of which these authors are all native speakers. Thus, agreement variation with expletive *there* could be seen as a characteristic of 'standard' English in the supra-local sense of the term, or even in the sense of socially prestigious varieties. But of course this variation is not part of 'standard' English in the normative sense of

Most of what is known about associate-agreement variation with *there* expletives has come from sociolinguistic variationist research. Such quantitative approaches, however, have typically analyzed *there*-expletive constructions (what they call ‘existentials’) among several linguistic factors that may potentially condition the frequency of variable 3sg verbal agreement in general—that is, variable 3sg agreement in all kinds of sentences, and not just with expletives. As Meechan and Foley observe (1994: 64):

Virtually all previous quantitative studies of variable concord [agreement, JKP] in existentials in English are subsumed within larger studies of variable concord in all verbal environments, a feature of non-standard dialects.

Joined by a few others (e.g., Henry 2002, Cornips & Corrigan 2005, Rupp 2005), Meechan and Foley argue that agreement variation in expletive-*there* constructions should be analyzed separately from agreement variation with non-expletive subjects. All of these researchers point to the theoretical consensus that *there*-expletive constructions have a different syntactic structure than other kinds of sentences, and that this structural difference causes the rightward associate agreement unique to *there* expletives. But even from a variationist perspective, it is clear that “existential constructions exhibit different properties than other types of concord” (Meechan and Foley 1994: 64).

First of all, variable usage of 3sg agreement in expletive *there* constructions can be completely dissociated in apparent time from usage of variable 3sg agreement with non-expletive subjects. Consider Hay and Schreier’s (2004) study of variable agreement forms of *be* in New Zealand English over the past 150 years. Hay and Schreier found that usage of 3sg agreement forms with non-expletive plural subjects declined to near zero in the 20th century. There was a concomitant decline in usage of 3sg agreement forms with plural associates in *there*-expletive constructions, to about 50% usage at the turn of the century. But while usage of 3sg forms with plural non-expletive subjects remains at near zero, usage of 3sg forms with plural associates in *there*-expletive constructions has independently rebounded to about 80% in modern New Zealand English.

Furthermore, linguistic factors conditioning 3sg agreement variation with *there* expletives are different from those that condition agreement variation with non-expletive subjects. Rupp (2005) provides a review of this topic along with an empirical study on a Midlands variety of British English, using variationist observational methods augmented with various experimental techniques for eliciting acceptability intuitions. Rupp found that 3sg forms with plural associates were less likely to be used in *there*-expletive constructions containing contracted and full forms of clausal (as opposed to constituent) negation (e.g., *There isn’t many boats*); 3sg agreement was also less likely in interrogative *there*-expletive constructions with plural associates (e.g., *Is there many*

the term, since plural agreement morphology with a plural associate is prescribed; indeed, any variation from the normative ‘standard’ is stigmatized as ‘mistaken’ or worse (e.g., Garner 1998). This issue again shows why we should avoid the term ‘standard’ English (see fn. 6 above).

boats?).¹² These linguistic factors were not found to have a statistically significant conditioning effect on agreement variation with non-expletive subjects.

Finally, from these empirical studies we can draw one conclusion and pose one question, both relevant to formulating the theoretical proposal that follows below. First, the conclusion: it seems clear that variable agreement in expletive-*there* constructions can occur in English varieties lacking concurrent 3sg agreement variation with non-expletive subjects. In other words, there is inter-individual variation between populations of English speakers that have intra-individual variation in general agreement, and those that have it only with expletive constructions. The Midlands English dialects examined by Rupp (2005) exhibit 3sg agreement variation with non-expletive subjects. Meechan and Foley (1994) combined data from African-American enclave communities in Nova Scotia (Poplack & Tagliamonte 1991) with data from Canadian English speakers of mostly British descent in Ottawa, Ontario. The African-American Nova Scotians have agreement variation with non-expletive subjects (Tagliamonte & Smith 2000). Citing DeWolf (1992), Meechan and Foley state that Canadian English, a “quintessential standard” (Chambers 1991), “is not a dialect that generally exhibits a lack of concord between subject and verb” (1994: 70). Their Ottawa speakers do exhibit 3sg variation with plural associates in *there*-expletive constructions. And, as pointed out above, Hay and Schreier (2004) document New Zealand English speakers who have agreement variation at high rates with expletives, but virtually no agreement variation otherwise.¹³

As for the question: is there inter-individual variation with respect to agreement in *there* expletive constructions? That is, do we find any populations of individuals lacking this kind of intra-individual variation, where plural verbal agreement with a plural associate is categorical? The answer is unclear at present. It should be borne in mind that (self-)elicited intuitions alone will not resolve the matter (Labov 1996); among other reasons, in this case there is a real danger of mistaking normative attitudes for properties of internal grammars.¹⁴ The strongest evidence for the absence of intra-individual variation involving *there*-expletive agreement would come from a sufficiently large quantitative analysis of observed usage in combination with a sufficiently rigorous procedure for indirect elicitation of intuitions from informants (e.g., Schütze 1996, Cowart 1997). Thus, variable associate agreement in expletive-*there* constructions warrants more cooperative variationist and theoretical research of the kind advocated by Meechan and Foley, Rupp, Henry, and Cornips and Corrigan, among others. Although this paper focuses more narrowly on the variant expletive *it* and its agreement properties,

¹² It is important to note, however, that Rupp (2005) does not claim to establish that 3sg agreement is impossible with clausal negation or interrogative inversion, but only that these grammatical factors disfavor the frequency of its use. That is, there is no ‘categorical/variable split’ (Adger 2006, Adger & Smith 2005) that needs a mechanistic account on the perspective taken here. It is still debatable (e.g., Hudson 2007, Adger 2007, Embick 2007, Nevins & Parrott In press) whether, or how, observed differences in usage frequency that are conditioned by linguistic factors ought to be explained in terms of grammatical mechanisms. As mentioned above, such issues will not be addressed in the present work; the analysis offered in Section 5.4 below does not attempt to account for disfavoring effects of negation and interrogative inversion on agreement variation with expletive *there*.

¹³ As noted in fn. 11 above, there is also theoretical work (Chomsky 1995, Sobin 1997, Schütze 1999) discussing agreement variation with expletives in ‘standard’ US English varieties, which lack general agreement variation.

¹⁴ See fns. 6, 11, 13 above.

the latter section presents a tentative analysis regarding the mechanisms of variable 3sg agreement with *there* expletives.

3.2 Variable *There*-expletive *It* and Categorical Agreement on Smith Island

Now we will examine the distribution and agreement patterns of the variant form *there*-expletive *it* (TEIT), so named because it varies intra-individually with expletive *there*. Although TEIT on Smith Island is the empirical focus of this paper, TEIT used in copular-existential constructions has been attested for several varieties of U.S. English (e.g. Wolfram & Schilling-Estes 1998). To take a well-known example, TEIT is a feature of African-American English (AAE) varieties (e.g. Martin & Wolfram 1998, Green 2002).¹⁵ Example (25) below is attested;¹⁶ the variant expletive *there* is again given with a percent sign (%) to indicate that this is a case of intra-individual variation.

- (25) It was (% there were) about three times that Chauncey and Rip had to tell me where to go on certain plays.

On Smith Island, the variant form TEIT is attested in several syntactic environments of expletive *there*. All of the following specimens were collected from sociolinguistic interviews (see Parrott 2002). TEIT varies with *there* for all individuals on Smith Island, as indicated with a percent sign (%):

- (26) *Copular existentials*
In winter, it's (% there's) nothing to do.
(27) *Raising predicates with non-finite complements*
It (% there) just happened to be a EMT on this part of the Island....
(28) *Passives*
And it was (% there were) sharks seen down there that day.
(29) *Unaccusatives*
Then you go straight on down, and it (% there) comes this white house here....¹⁷

TEIT is unattested (and was judged unacceptable by one native-speaker informant) with a definite associate, supporting the view that TEIT is a variant form of the expletive *there*.¹⁸

- (30) * In summer, it's the big barbecue.
(31) * It just happened to be the doctor on the island.

¹⁵ As mentioned above, use of *they* as a variant form of expletive *there* has also been documented in AAE (Martin & Wolfram 1998), as well as in Appalachian English (Tortora 2006).

¹⁶ Professional basketball player Rasheed Wallace speaking to the *Oregonian* newspaper; specimen collected by the author on 3/3/2004 (oregonlive.com).

¹⁷ In this example, *this* is being used as an indefinite—as in, for example, *There's this book that I want to consult*.

¹⁸ See fns. 8, 9 above.

(32) * And it was that shark seen down there.

(33) * Then you go straight on down, and it comes John's house.

Consistent with above-mentioned findings for other English varieties, number agreement with plural associates in expletive-*there* constructions is variable on Smith Island.¹⁹

- (34) a. There are two older than me and one younger.
b. I believe there's spirits though.

However, unlike expletive *there*, TEIT occurs with categorical (i.e. non-variable) 3sg agreement. Rightward agreement with a plural associate DP is completely unattested with TEIT on Smith Island (and was rejected by two native informants).

- (35) a. It's no...separate burial plots on Tylerton.
b. * It're no separate burial plots on Tylerton.

Categorical 3sg agreement with TEIT is not limited to 'contracted' forms of agreement.²⁰

- (36) a. Is it any funny things you remember...?
b. * Are it any funny things you remember?

Parrott (2000) analyzed 46 *there*-type expletive constructions with plural associates, extracted from transcripts of sociolinguistic interviews with 12 Smith Islanders (originally conducted in 1983). 42 out of 46 verbal elements had the 3sg form, while only four had the plural form. Of the 3sg forms, half occurred with *there* and half with TEIT; all four of the plural forms occurred with *there*.

Expletive form	Plural verbal form	3sg verbal form
TEIT	0	21
<i>there</i>	4	21

Table 1. Plural-associate agreement with expletives (adapted from Parrott 2000)

Parrott (2000) also analyzed past-tense *be* (*was/were*) data from Schilling-Estes (2000) extracted from interviews with 24 Smith Islanders. Only instances of *there*-type expletive sentences with plural associates and past-tense *be* were counted. 50 of 60 total past-tense *be* forms were singular, while 10 were plural. All 10 plural forms occurred with *there*.

¹⁹ Unfortunately, this kind of variation was not quantitatively analyzed in Parrott (2002, 2007).

²⁰ Notice that this example involves interrogative inversion, a factor studied by Rupp (2005) as mentioned above. Again, unfortunately, Parrott (2002) did not specifically investigate putative conditioning effects of negation or inversion on TEIT variation and agreement, so these factors cannot be addressed here. But (36) shows that TEIT is possible with inversion, and other examples show that it is possible with sentential negation, in particular with the leveled forms *weren't* and *ain't* (Mittelstaedt 2006).

Expletive form	Plural <i>were</i>	Singular <i>was</i>
TEIT	0	28
<i>there</i>	10	22

Table 2. Past-tense *be* agreement with expletives (adapted from Parrott 2000)

The Oxford English Dictionary (OED)²¹ reports that the expletive form *it* was “formerly” used as a variant of the form *there*. The earliest citation given is from 1300, and the last is from 1617. All of the citations given by the OED have a singular associate and 3sg agreement. Interestingly, there is one exception in an entry from 1435: “It were two dragons stiff and strong....” It seems reasonable to suppose that TEIT was retained on Smith Island from the English dialects spoken by British settlers who first settled there in the 1650s. Because virtually no African Americans currently or have ever lived in this isolated insular community, the use of TEIT on Smith Island is probably not due to contact with AAE varieties. Indeed, TEIT may in fact be another piece of evidence for the hypothesis that modern AAE developed from exposure to earlier British dialects (e.g., Poplack 2000) rather than from a creole (e.g., Rickford 1998).

3.3 TEIT in Apparent Time on Smith Island

As reported by Parrott (2002), TEIT is evidently part of the socially-motivated process of concentration on Smith Island. The data given below were analyzed according to an individual’s age, utilizing the apparent-time method mentioned above (Bailey *et al.* 1992, Bailey 2002). In order to facilitate comparison, the 17 speakers were divided into the same generation groups used by Schilling-Estes and Wolfram (1999) and Schilling-Estes (2000). These data were extracted from transcripts of sociolinguistic interviews conducted in 1983 by Rebecca Setliff and another interviewer who was an island resident. All and only expletives were extracted and analyzed. Potential tokens were collected by using the ‘find’ function of word processor to search for all instances of *there* and *it* in a transcript. Non-expletive instances of both *there* and *it* were discarded. These included locative *there* (e.g., *I was there*), pronominal *it* (e.g., *I love it*), and ‘ordinary’ (i.e., not TEIT) expletive *it* (e.g., *It’s raining*). Instances of *it* that were ambiguous between a pronominal and expletive interpretation were also discarded (e.g., *It was a lot to learn.*). Repeated expletives,²² expletives isolated in sentence fragments, and self-corrected expletives were counted only when both the expletive and an agreeing verb occurred. The results of apparent time-analysis show that usage of the TEIT variant is increasing at a rate comparable to phonological changes in progress on Smith Island, and in the same characteristic ‘S’ shaped curve (Schilling-Estes & Wolfram 1999, see Parrott 2007 for comparison with two phonological and one other morphosyntactic variable).

²¹ I consulted the online edition.

²² In hindsight, this was not the best decision. Immediate repetitions should have been discarded from the count so that they would not artificially inflate the frequency of TEIT. Parrott (2002) did not code or count the number of immediate repetitions, so it is not possible to determine whether the few instances of repetition in those data significantly affected the apparent-time results. Any future quantitative research on TEIT will certainly discard immediate repetitions.

Generation Group	#TEIT / # <i>there</i> -expletive environs	%TEIT
<i>Generation I</i> <i>b. 1899-1916</i> <i>(4 persons)</i>	73 / 135	54%
<i>Generation II</i> <i>b. 1944-1961</i> <i>(6 persons)</i>	133 / 172	77.3%
<i>Generation III</i> <i>b. 1966-1971</i> <i>(7 persons)</i>	109 / 139	78.4%
<i>Totals</i> <i>(17 persons)</i>	315 / 446	70.6%

Table 3. TEIT in apparent time on Smith Island (adapted from Parrott 2002)

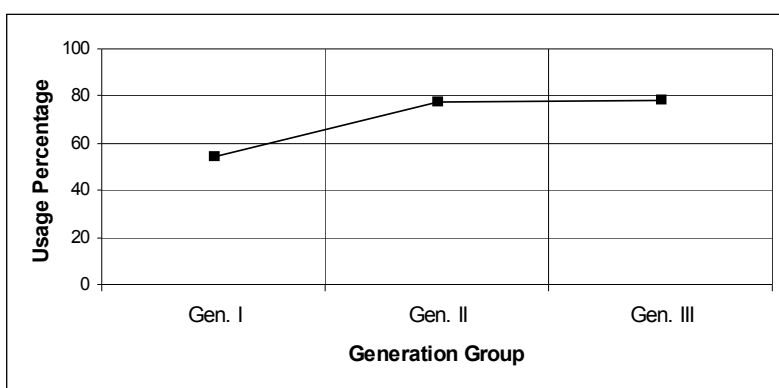


Figure 1. TEIT in apparent time on Smith Island (adapted from Parrott 2002)

3.4 An Empirical Summary

The empirical conclusions of the preceding section are summarized in examples (37-42) below. First, in ‘ordinary’ expletive-*it* constructions, verbal agreement is categorically 3sg (37-38a,c) and the form *there* cannot occur (37-38b,d). This apparently holds for all English varieties, as indicated by an asterisk ‘*’:

- (37) *It-expletive constructions: weather verbs and predicate adjectives*
- It rains (*rain) in the marshes.
 - * There rains (rain) in the marshes.
 - It is (*are) stormy tonight.
 - * There is (are) stormy tonight.
- (38) *It-expletive constructions: raising predicates with finite complements*
- It seems (*seem) that these isles are haunted.
 - * There seems (seem) that these isles are haunted.
 - It is (*are) likely that wraiths are among us.
 - * There is (are) likely that wraiths are among us.

Both inter- and intra-individual variation are documented in *there*-expletive constructions. For many—perhaps all—varieties of English, rightward number agreement with a plural associate is intra-individually variable (39-42a.) Certain English varieties have intra-individual variation in the forms of expletive *there*; this difference between varieties is an instance of inter-individual variation. Both inter- and intra-individual variation are indicated below with a percent sign ‘%’. Verbal agreement is categorically 3sg with TEIT in all varieties that have this variant expletive form (39-42b), as indicated with an asterisk ‘*’.

- (39) *There-expletive constructions: copular existentials*
 - a. % There are (% is) poltergeists in this house.
 - b. % It is (*are) poltergeists in this house.
- (40) *There-expletive constructions: raising predicates with non-finite complements*
 - a. % There seem (% seems) to be will-o’-the-wisps in the swamp.
 - b. % It is (*are) likely to be shades in the cemetery.
- (41) *There-expletive constructions: passives*
 - a. % There were (% was) phantoms seen on this beach.
 - b. % It was (*were) phantoms seen on this beach.
- (42) *There-expletive constructions: unaccusatives*
 - a. % There appear (% appears) on this bridge malevolent apparitions.
 - b. % It appears (*appear) on this bridge malevolent apparitions.

On Smith Island, TEIT is an example of intra-individual variation and change in apparent time. Using the methods of sociolinguistic variationists, we can observe that two variant morphosyntactic forms, *it* and *there*, appear in the syntactic environments of expletive *there*. The variant forms are not in complementary distribution, nor do they express different semantics or morphosyntactic functions. Plural associate agreement with *there* is variable on Smith Island, but there is not a single instance of plural associate agreement with TEIT in all of the data that have been analyzed to date. Moreover, the informants consulted so far reject plural associate agreement with TEIT. These results support the conclusion that that plural associate agreement with TEIT is impossible. 3sg associate agreement is categorical with TEIT even independently of general agreement leveling variation on Smith Island, where variable leveling to the 3sg agreement form is observed in verbs, past-tense *be*, present-tense *be*, and present-tense *have* (Parrott 2007). For all these, 3sg agreement leveling is at low usage levels, and is stable or declining in apparent time on (Schilling-Estes 2000, Parrott 2001b, Trester 2003, Mittelstaedt 2006).

4. TEIT on Two Minimalist Approaches

The following section provides a closer inspection of two previous Minimalist approaches to expletives and agreement in English and cross-linguistically, namely Cardinaletti (1997) and Chomsky (2000). There are two primary reasons that I have

selected these particular works for contrast with the variation data examined in Section 3 above. First, both make clear empirical predictions that are evidently contradicted by TEIT. Cardinaletti's Nominative Agreement Hypothesis (NAH) predicts that, across language varieties, an ambiguously nominative/accusative expletive form should induce categorical verbal agreement with the associate nominal. Chomsky's system of Case and ϕ -feature valuation/checking by the syntactic operation Agree predicts categorical verbal agreement with the associate nominal—and conversely, the impossibility of verbal agreement with the expletive subject—in *there*-expletive constructions. Second, both approaches have been influential and widely discussed, so their evaluation in light of the variation facts has consequences for other theories that adopt them. For example, Tortora (2006) argues for the NAH in spite of apparently contradictory expletive data from Appalachian English varieties. Moreover, Cardinaletti's empirical claims (if not the technical details of her analysis) are an implicit premise of Chomsky (2000). The system of Agreement proposed in that work and subsequently developed (e.g. Chomsky 2001, 2004, 2005, 2008) is the currently accepted standard in many Minimalist theories of syntax (e.g., Adger 2003, Pesetsky & Torrego 2007, among many others).

4.1 Cardinaletti (1997): The Nominative Agreement Hypothesis

4.1.1 Agreement and control in expletive constructions

Cardinaletti (1997) contrasts expletive forms and agreement in French and German, among several other languages.²³ In French, the verb agrees with its 3sg expletive subject *il* 'it'²⁴ (43a), but in German the verb agrees not with its 3sg expletive subject *es* 'it,' but rather with the associate (43b), as in English *there* expletive constructions. The following examples are adapted from Cardinaletti (1997: 521, 522):

- (43) a. Il arrive (*arrivent) trois filles.
*it_{EXPL} arrives (*arrive) three girls*
 'There arrive three girls.'
- b. Es sind (*ist) wohl viele Leute angekommen.
*it_{EXPL} are (*is) probably many people arrived*
 'There have probably arrived many people.'

Furthermore, Cardinaletti claims that a correlation holds between agreement and control, such that an associate nominal in an expletive construction can co-refer with the (null) subject of a *without*-adjunct clause in German (44b), but not in French. The '??' judgment in (44a) is as reported by Cardinaletti (1997: 524), who does not explain the question mark or whether the intuition is her own.

²³ For instance, Cardinaletti also discusses (null) expletives and agreement in varieties of Italian, Icelandic, Galician, and Faroese.

²⁴ Perhaps *il* could be translated as 'he,' but this would be misleading since French has grammatical gender, not merely semantic gender as in English.

- (44) a. *? Il est entré trois hommes sans s'excuser.
it_{EXPL} is entered_{SG} three men without themselves-excuse
 'There have entered three men without excusing themselves.'
- b. Es sind gestern viele Leute angekommen,
it_{EXPL} are yesterday many people arrived
 ohne sich ausgewiesen zu haben.
without themselves identified to have
 'There have arrived many people yesterday without identifying themselves.'

On the basis of this putative correlation between agreement and control, she argues that mainland (Germanic) Scandinavian languages have associate agreement in expletive constructions, despite the fact that these languages do not morphologically distinguish person or number in verbal inflection. Danish has two expletive subjects *det* 'it' and *der* 'there' whose distributions are (essentially) the same as in English; however, in certain Norwegian and Swedish varieties, the *there*-type expletive is 3sg *det* 'it.' The following example from Swedish shows that an associate may control into an adjunct (Cardinaletti 1997: 525).²⁵

- (45) Det inträdde tre män utan att identifiera sig.
it_{EXPL} entered three men without to identify themselves
 'There entered three men without identifying themselves.'

4.1.2 Expletive case and agreement

The French expletive *il* is homophonous with the 3sg masculine subject pronoun, which has morphologically distinctive object forms (clitic *le* and 'strong' *lui*).²⁶ However, the German expletive *es* is homophonous with the 3sg neuter pronoun, which lacks morphologically distinctive nominative or accusative case forms.²⁷ The mainland (Germanic) Scandinavian 3sg neuter expletive/pronoun *det* also has no object form. Thus,

²⁵ There may some reasons to doubt Cardinaletti's alleged correlation between associate agreement and control. For one thing, all of her examples involve expletives in unaccusative (or, ergative) constructions. However, control into a *without* adjunct is quite a bit more marginal in existential constructions.

(i) a. There arrived three men without indentifying themselves.

b. ?? There were three men in the hotel without registering themselves.

I have consulted native speakers who confirmed that the equivalent of (ib) is significantly worse than (ia) in Danish; indeed, one Norwegian speaker rather emphatically rejected (ib). It is unclear how to interpret or compare these acceptability reactions. Should (ib) have a full '*' in Norwegian, or '?*' perhaps? What about Danish? If Cardinaletti's '*?' for French is interpreted as 'ungrammatical' should my '??' for English still be interpreted as 'grammatical'? For reasons of space and scope, I cannot further discuss these matters here, though they deserve examination in my view. For more on empirical and theoretical problems with 'grammaticality judgment' methodologies, see especially Schütze (1996).

²⁶ For more on 'strong' pronouns in French and other languages, see Cardinaletti and Stark (1999). Tortora (2006, and references therein) extends the 'strong/weak' pronoun idea to expletives.

²⁷ There are, however, morphologically distinctive dative (*ihm*) and genitive/possessive (*sein[er]*) case forms; and in fact, both are syncretic with the 3sg masculine dative and genitive/possessive forms.

Cardinaletti advances what she calls the Nominative Agreement Hypothesis (NAH), which is stated in two different ways in her paper (1997: 522, 526):

- (46) a. The verb agrees with the expletive if and only if the expletive morpheme is not ambiguous with an object morpheme.
b. Only those expletives that are unambiguously marked as nominative trigger agreement with the verb.

English expletive *there* (also Danish *der*) is homophonous with a locative adverb and not a pronoun, so *there* has no case forms whatsoever. Therefore, this kind of expletive falls under (46b)—*there* is not morphologically marked as nominative, unambiguously or any other way. Associate agreement in English expletive constructions is thus predicted by the NAH.

Cardinaletti provides a theoretical implementation of the NAH within an early Minimalist framework (Chomsky 1995), where covert LF movement of the associate to the higher expletive position allows control into an adjunct clause. Her theory will not be discussed further, since this paper concentrates on a more recent Minimalist theory that has eliminated covert movement as a mechanism of associate agreement in expletive constructions (Chomsky 2000 et seq.). The central theoretical conclusion Cardinaletti draws is that “Case [on the associate, JKP] and ϕ -features on the I [for ‘Inflection’ or T for ‘Tense’ as below, JKP] head are checked by one and the same element” (1997: 531). This idea is clearly reflected in Chomsky’s (2000) theory of expletives, where long distance Agreement checks both the uninterpretable ϕ features of T and the uninterpretable Case feature of the associate, as discussed in 4.2 below.

4.1.3 TEIT and other problems

TEIT, documented on Smith Island and in many other English varieties, constitutes *prima facie* empirical counterevidence to Cardinaletti’s NAH, with consequences for theories that take this hypothesis as a premise (Tortora 2006).²⁸ Subject *it* is ambiguous with object *it*, and *it* is not unambiguously marked as nominative. Nonetheless, in contradiction with the NAH, the verb always agrees with 3sg TEIT. Indeed, plural associate agreement with TEIT is impossible on Smith Island, and the same is evidently true in other TEIT varieties.

There are some additional empirical lacunae in the NAH. Cardinaletti does not attempt to explain associate agreement variation in English (as discussed in 3.1 above), and it is not obvious how this phenomenon could be accounted for on the NAH. Nor does she mention the English expletive *it* that appears in weather predicates and other constructions. Presumably *it* is a different sort of expletive than *there* and thus exempt from the NAH, but it is unclear why this should be the case. Finally, Cardinaletti does not discuss other kinds of expletive/existential constructions with a non-copular verb, where

²⁸ Tortora (2006) defends Cardinaletti’s NAH against another apparent counterexample, the Appalachian variant expletive form *they*. However, the entire analysis hinges on interpreting expletive *they* as a 3pl pronoun and not as a mere phonological variant of *there*. The latter interpretation does not seem terribly implausible to me, and if adopted, the problem disappears.

the verb sometimes agrees with an expletive subject regardless of whether it is unambiguously nominative in form (e.g., African-American English *they* have, Green 2002) or not (e.g., German *es gibt* ‘it gives’).²⁹

4.2 Chomsky (2000): Expletives, Case, and Agreement

4.2.1 Case and Agree

Following the usual conventions, names of abstract syntactic features, values, objects, and operations are capitalized in what follows. The operation Agree applies in the narrow syntax, checking semantically uninterpretable features before Spell Out to the interface components. Agree applies to elements in a C-command configuration. The uninterpretable features of the higher element ‘probe’ the interpretable features of a lower element, the ‘goal.’ If all of the features on the probe match up with (a subset of) features on the goal, the probe’s features are checked, and thereby valued the same as the goal’s. In this system, Case is an uninterpretable feature on the determiner phrase (DP) goal, checked and valued upon being probed. The role of Case is to make the interpretable features of the goal ‘visible’ or ‘active’ for a probe. By stipulation, the Case feature is valued Nominative when probed by finite T. Syntactic feature checking by Agreement is schematized in (47-49) below. A checked feature is indicated with strikethrough font. Vertical arrows indicate that the operation in all capitals (below, AGREE) has applied between syntactic derivational stages (which are presented in bracket notation for reasons of space).

(47) [~~u(n)interpretable~~feature:value]

(48) [PROBE = T_[Past:±, uφ:α] ... [GOAL = DP_[φ:α, uCase:]]]
 \Downarrow
 AGREE
 \Downarrow
 [PROBE = T_[Past:±, ~~uφ:α~~] ... [GOAL = DP_[φ:α, ~~uCase:Nom]~~]]

In this system, Case does not drive movement. Movement is the result of an uninterpretable feature EPP on T, checked by Merge of a DP. A stipulation, the EPP feature follows from nothing else in the theory and is merely a technical mechanism to express the empirical fact that English sentences need structural subjects. According to the now widely accepted VP-internal subject hypothesis, (most) subject DPs are Merged low in the specifier of a verb phrase (VP), and only later moved to their overt position in the specifier of T.

Chomsky (2000) explicitly formulates a corollary of the Agree theory.³⁰

²⁹ There are moreover issues regarding the putative correlation between agreement and control, on which I cannot comment further for reasons of length; see fn. 25 above.

³⁰ Quoted from Bošković and Lasnik (2007: 81).

We take deletion [of uninterpretable features, JKP] to be a “one fell swoop” operation, dealing with the ϕ -set as unit. Its features cannot selectively delete: either all delete, or none. The ϕ -features of T do not agree with different NPs, for example. In the same spirit, we assume that only a probe with a full complement of ϕ -features is capable of deleting the feature that activates the matched goal.

Among the reasons for this ‘all or nothing’ clause is that it allows successive movement through the specifiers of ϕ -deficient heads, for instance in multiple raising constructions. Because they do not have a full set of ϕ features, ϕ -deficient heads cannot check the Case feature of the moving phrase, which is free to continue moving until it is probed by a head with a full set of ϕ features, such as finite T. Other reasons for this condition concern expletives, as we will see below.

For concreteness, let us go through an example derivation. I will not discuss any putative internal structures of VP or TP here, focusing on Case and Agreement. At the derivational stage in (49a), the subject DP *monster crabs* is in its Merged position at the specifier of VP. T consists of a semantically interpretable Tense feature and a set of uninterpretable agreement (ϕ = ϕ) features: Person (Pers:) and Number (Num:). T’s ϕ features are not valued. The DP *monster crabs* has an identical set of interpretable ϕ features, all of which are valued: its Person feature has the value Third (3) and its Number feature has the value Plural (p). The DP’s Case feature is uninterpretable and unvalued. Applying the operation Agree, T’s uninterpretable ϕ features probe and find the interpretable ϕ -feature set of the goal DP *monster crabs*. T’s ϕ features, matching the set in DP, are valued 3pl and then checked (49b). DP’s Case feature, probed by finite T, is valued Nominative (Nom) and checked. Applying the operation Move, DP raises to the specifier of T (its pronounced position) in order to check T’s EPP feature (49c).

- (49) *Monster crabs eat mainlanders.*
- a. [TP T_[u ϕ : , EPP] ... [VP monster crabs_[ϕ :3pl, uCase:] eat mainlanders]]
- ↓
- AGREE
- ↓
- b. [TP T_[ϕ :3pl, EPP] ... [VP monster crabs_[ϕ :3pl, #Case:Nom] eat mainlanders]]
- ↓
- MOVE
- ↓
- c. [TP monster crabs_[ϕ :3pl, #Case:Nom] T_[ϕ :3pl, EPP] ... [VP <DP> eat mainlanders]]

What is most relevant about this feature-checking system, for present purposes, is the way it explains verbal agreement and connects it to Case. After Spell Out, T will be lowered to adjoin with the main verb; the morphophonological exponent for affixal T will be determined the value of its agreement ϕ features. On this theory, the uninterpretable ϕ features of T are valued in the narrow syntax by Agreement with the interpretable ϕ features of the subject DP. This reflects the intuition that verbs agree with their subjects, and not vice versa. In the above example, the finite verbal morphology appears in the 3pl form -Ø (*eat*) because T is valued 3pl by the subject. If the subject DP had 3sg ϕ features

(50a), T's ϕ features would be valued 3sg by Agree (50b), and the finite verb would take the 3sg agreement form *-s* (*eats*) (50c).

(50) *The monster crab eats mainlanders.*

a. [TP T_[u ϕ : , EPP] ... [VP the monster crab_[ϕ :3sg, uCase:] eat mainlanders]]

↓
↓
AGREE
↓
↓

b. [TP T_[# ϕ :3sg, EPP] ... [VP the monster crab_[ϕ :3sg, #Case:Nom] eat mainlanders]]

↓
↓
MOVE
↓
↓

c. [TP the monster crab_[ϕ :3sg, #Case:Nom] T_[# ϕ :3sg, EPP] ... [VP *t* eat mainlanders]]

Crucially, the uninterpretable ϕ features of the T probe, which are checked and valued by the goal DP *the monster crab*, are themselves responsible for checking and valuing the probe's uninterpretable Case feature. This makes Case and Agreement inextricably linked on the theory.

4.2.2 Expletives

For Chomsky (2000), expletives are Determiners (D) which can be Merged from the Lexical Array to check the EPP feature of T. Expletive *it*—a 'quasi-argument' according to Chomsky (1981)—is identical to pronominal *it*, with interpretable 3sg ϕ features and an uninterpretable Case feature. Expletive *there* has a single uninterpretable Person feature. Note that the reasons for attributing Person to expletive *there* are theory internal, since this feature is never morphophonologically realized on the expletive or any other element.

- (51) a. *it* = D[ϕ :3sg, uCase:]
b. *there* = D[uPers:]

Chomsky's analysis connects the apparent complementary distribution of English expletive forms with *there* expletives' characteristic property of rightward associate agreement. Consider the following example derivations. Expletive *there* is Merged at the specifier of T to check T's uninterpretable EPP feature (52a).³¹ The uninterpretable Person feature of *there* probes T, finds a full set of features to match with (i.e., a single Person feature), and is checked (52b).³² But T's uninterpretable ϕ features cannot be checked by *there*, since the expletive does not have a full set of ϕ features. Therefore, T's

³¹ On Deal's (2009) analysis, in contrast, expletives are Merged lower.

³² One potential objection might be that uninterpretable features should only be checked by matching interpretable features. If so, how is the uninterpretable Person feature of expletive *there* checked and valued '3rd' by Agreement with the uninterpretable ϕ features of T? Perhaps T's features must be checked and valued first by associate Agreement. Does that mean that (52c) takes place before (52b), or that all features are checked and valued simultaneously on the application of Agree? The answer is not clear.

uninterpretable ϕ features must probe the lower associate DP *monster crabs*. This checks T's uninterpretable ϕ features—and, crucially, the DP's uninterpretable Case feature. T's features are valued 3pl by the lower DP *monster crabs* (52c).

(52) *There are monster crabs in the pot.*

- a. [TP there_[uPers:]] [T_[u ϕ : , EPP] ... [VP monster crabs_[ϕ :3pl, uCase:] ...]]]
 \Downarrow
 AGREE
 \Downarrow
 b. [TP there_[uPers:]] T_[u ϕ : , EPP] ... [VP monster crabs_[ϕ :3pl, uCase:] ...]]]]
 c. [TP there_[uPers:3]] T_[u ϕ :3pl, EPP] ... [VP *t* ... monster crabs_[ϕ :3pl, uCase:Nom]]]]]]

This theory explains why verbal agreement in *there*-expletive constructions is with the associate DP: *there* has too few ϕ features to check T's ϕ features, so T must always be valued by a lower DP with a full set of ϕ features.

Now, consider expletive *it* (53), which is Merged in the matrix VP, before Merge of finite T. The uninterpretable features in the embedded clause have all been checked independently of the higher clause. Expletive *it*'s complete ϕ -feature set is probed by the highest T, valuing T's ϕ features 3sg and checking them (along with *it*'s Case feature). The system explains why agreement in *it*-expletive constructions is categorically 3sg: T's features are always valued by expletive *it*, which has a full set of ϕ features valued 3sg.

(53) *It seems that monster crabs eat mainlanders.*

- [TP T_[u ϕ : , EPP] ... [VP ... *it*_[ϕ :3sg, uCase:] ... seem ...
 [CP that [TP monster crabs_[ϕ :3pl, uCase:Nom] T_[u ϕ :3pl, EPP] ...
 [VP *t* ... eat mainlanders]]]]]
 \Downarrow
 AGREE, MOVE
 \Downarrow
 [TP *it*_[ϕ :3sg, uCase:Nom] T_[u ϕ :3sg, EPP] ... [VP ... <*it*> ... seem ...
 [CP that [TP monster crabs_[ϕ :3pl, uCase:Nom] T_[u ϕ :3pl, EPP] ...
 [VP *t* ... eat mainlanders]]]]]

The analysis gives a clear account of the apparent complementary distribution of English expletives *it* and *there*. If the wrong expletive form is Merged, uninterpretable features will not be checked, causing a crash at the interfaces.

What happens if expletive *there* is Merged to an *it*-expletive structure with a finite complement clause (54)? Uninterpretable ϕ and Case features in the embedded clause have been independently checked. In the highest clause, T probes *there*. But the expletive's single Person feature cannot check the complete ϕ set of T (because of the "one fell swoop" condition above). T still lacks a goal with a full set of matching ϕ features, so T's uninterpretable ϕ -feature set is never checked or valued. *There* might raise, but it cannot check its uninterpretable Person feature since T is not valued. The structure crashes with uninterpretable features at the interface (unchecked features are double underlined in the examples).

(54) * *There seem that monster crabs eat mainlanders.*

[_{TP} there_[μPers:..] T_[μφ:, EPP] ... [_{VP} t ... seem
[_{CP} that [_{TP} monster crabs_[φ:3pl, #Case:Nom] T_[#φ:3pl, EPP] ...
[_{VP} t ... eat mainlanders]]]]]

Now consider what happens if expletive *it* is Merged into an expletive *there* structure (55). T probes *it*, valuing and checking T's uninterpretable φ set. But now there is nothing to probe the DP *monster crabs*, and so its uninterpretable Case feature remains unchecked. The derivation crashes with an uninterpretable feature at the interfaces. The same fate should befall all *there* expletive structures with *it*: T's φ-feature set is checked by probing *it*, and so an uninterpretable Case feature of the associate DP remains unchecked at the interface.

(55) * *It is monster crabs in the pot.*³³

[_{TP} it_[φ:3sg, #Case:Nom] T_[#φ:3sg, EPP] ... [_{VP} monster crabs_[φ:3pl, μCase:] ...]]

To summarize, Chomsky's (2000) analysis accounts for the apparent complementary distribution of expletive forms in certain varieties of English, as well as for their different agreement properties. Expletive *there* has a single uninterpretable Person feature and thus cannot check the φ features of T. T's φ features are valued and checked when T probes the associate DP, resulting in rightward associate agreement. *There* can occur with copular and other non-finite complement clauses, since DP's Case feature is checked by T. In contrast, expletive *it* has its own complete set of interpretable φ features, valued 3sg, that can check and value the uninterpretable φ features of T. The result is categorical 3sg agreement with expletive *it*. *It* can occur with finite complement clauses because there are no lower DPs whose Case features are left unchecked without the probe of T.

4.2.3 TEIT and other problems

TEIT, on Smith Island and elsewhere, constitutes a significant problem for Chomsky's (2000) analysis of English expletives. The two expletive forms *it* and *there* are not in strict complementary distribution as predicted: *it* occurs variably in the environments of expletive *there*, although *there* does not appear in the environments of expletive *it*. Moreover, 3sg agreement is categorical with TEIT, although associate agreement is variable with expletive *there*. Both of these facts are unexpected on the theory outlined above.

In the one hand, suppose TEIT has a full set of φ features valued 3sg, as suggested by categorical 3sg agreement with TEIT and by its homophony with 3sg pronominal *it*. Then, TEIT's occurrence in *there*-expletive environments is not predicted: just as we saw above, TEIT should be probed by T, leaving an unchecked Case feature on the associate DP.

(56) *It is monster crabs in the pot.*

³³ Obviously, this only applies to non-TEIT varieties.

* [TP TEIT_[φ:3sg, #Case:Nom] T_[#φ:3sg, EPP] ... [VP monster crabs_[φ:3pl, #Case:] ...]]

On the other hand, suppose TEIT has only a single Person feature like expletive *there*. Then T should probe the associate DP and check its Case feature. Since T's φ features will be valued by the associate, this predicts at least the possibility of plural associate agreement with TEIT—even if it might be variable, as with expletive *there*. But this prediction is contrary to fact. As established above, 3sg agreement is categorical with TEIT on Smith Island, and apparently in every English variety that has TEIT.

(57) * *It are monster crabs in the pot.*

[TP TEIT_[#Pers:3] T_[#φ:3pl, EPP] ... [VP *t* ... monster crabs_[φ:3pl, #Case:Nom]]]]

Thus, both inter- and intra-individual TEIT variation are a problem for Chomsky's (2000) analysis of expletives and agreement in English. An additional problem, as noted in Section 3.1 above, is that Chomsky offers no account of intra-individually variable associate agreement with *there* expletives, found on Smith Island and in many other (perhaps all) English varieties.

It might be possible to modify this particular system of Agreement in order to allow for TEIT (and by extension, variable associate agreement with *there*). For instance, we could assume that TEIT has a number feature valued singular, and lacks a valued person feature. But this is not sufficient, for further assumptions are required to capture the agreement facts. Certainly we would have give up the condition that bundles of φ features in T must Agree 'in one fell swoop' (as in Section 4.2.1 above). Then, the Person feature of TEIT could be checked and valued by Agreement with the associate, in turn checking the associate's Case feature. The Number feature of T would be checked and valued singular by TEIT.³⁴

Empirical problems for this kind of solution arise immediately, however. First of all, the fact that TEIT is homophonous with 3sg pronominal *it* would be a coincidence on the 'partially valued TEIT' analysis, as would the fact that TEIT induces categorical 3sg agreement just like pronominal *it*. Of course, on Chomsky's (2000) approach it is unclear whether 'ordinary' expletive *it* has the same 3sg φ features as pronominal *it*. In any case, it must also be a coincidence that locative and expletive *there* are homophones, with the expletive having only a semantically uninterpretable Person feature as discussed above.

Moreover, because of the definiteness effect, as mentioned above, it cannot be determined whether Person and Number Agree separately in a WEIT construction. On such a theory, relying on the mechanics of Agreement alone, we might predict the attestation of sentences like *It am us down in the crypt*, where the verb *am* Agrees in singular Number with TEIT, and in 1st Person with the associate *we*. Such sentences are not attested on Smith Island or in any variety of English to my knowledge; but of course their non-attestation and unacceptability may be attributed to the definiteness effect, quite independently of Agreement or Case.

Thus, we do not have any compelling empirical evidence for the 'partially valued TEIT' analysis. We are left only with a theory-internal motivation, namely to capture the TEIT and agreement facts with the narrow-syntactic mechanism of Agree.

³⁴ This solution was suggested by the anonymous reviewer. Coincidentally, I proposed the same thing in Parrott (2000), adopting Castillo, Drury, and Grohmann's (1999) system of feature valuation/checking.

5. TEIT on a Distributed Morphology Approach

In the section above, we saw that TEIT, along with other patterns of inter- and intra-individual variation attested in English varieties, pose considerable difficulties for both Cardinaletti's (1997) and Chomsky's (2000) Minimalist approaches to expletives and agreement. I do not claim that a substantial modification to Chomsky's system could not offer a conceivable solution to the problem of TEIT (e.g., partially valued expletives and multiple feature Agreement as discussed above). Instead of pursuing that kind of way out, however, I want to suggest an alternative analysis that dispenses entirely with uninterpretable Case and Agreement checking in the narrow syntax. I will try to show that the empirical facts of intra- and inter-individual variation in expletive forms and agreement variation in English varieties can be captured most plausibly by augmenting a narrow Minimalist syntax with the theory of Distributed Morphology (DM, Halle & Marantz 1993, Embick & Noyer 2007, and related work).

In general, DM provides an articulated model of the primitive elements that undergo syntactic computation, as well as the operations of the morphological component, which is the post-spell out computation that must interface with Phonetic/Perceptual Form (PF). DM is a non-lexicalist theory (Marantz 1997)—that is, 'words' are assembled from (bundles of) features in both the narrow syntax and during the computation to PF. Phonological features are 'late-inserted' into abstract functional morphemes in the morphological component.

More specifically, I will adopt a strong version of DM which holds that there are no semantically uninterpretable Case or Agreement features active in the narrow syntactic computation. On such a theory, language-particular post-syntactic mechanisms are solely responsible for observed case and agreement morphophonology. This idea is already present in seminal works of DM (e.g., Halle 1997, Halle & Marantz 1993), as well as in more recent formulations of the theory (e.g., Marantz 2000, Embick & Noyer 2007, Bobaljik 2008).

5.1 TEIT and Case

Thus, let us begin with the Case problem for Chomsky (2000) that was pointed out in Section 4.2.3 above. Why doesn't the unchecked Case feature of the associate DP cause an interface crash when 3sg *it* appears in a *there*-expletive construction? On the approach followed here, there are simply no such objects as uninterpretable syntactic Case features. Consequently, no uninterpretable features on the associate DP must be checked in the narrow syntax. This diverges quite radically from standard Minimalist treatments of Case/case. But in a DM framework, case morphology can be seen as merely 'ornamental,' with no role in the narrow syntax or semantics.

According to one implementation of this idea (McFadden 2004, 2007), so-called 'dissociated' case features (or, morphemes) are inserted by language-specific rules during

the morphological computation, after the narrow syntax.³⁵ One consequence of this DM theory of dissociated case—a desirable one in my view—is that case morphology is not endowed by UG, and so language-specific dissociated case rules must be learned during development from adequately transparent environmental linguistic input. For this reason, following Emonds (1986), I have argued that despite having pronominal ‘case’ allomorphs, English and Danish lack dissociated case morphology of the kind found in German or Faroese (Parrott 2007, 2008).

Adopting such a DM analysis of dissociated case, TEIT with categorical 3sg agreement is no longer a problem. Either *it* or *there* will satisfy both the syntactic EPP (whatever it turns out to be) and the semantic or argument-structure requirements (whatever they turn out to be) in a *there*-expletive construction. Categorical 3sg agreement with TEIT, as well as variable associate agreement is due to specific mechanisms of subject-verb agreement in English, which are elaborated below.

5.2 (Interpretable) Features of Expletives *It* and *There*

In order to analyze agreement in expletive constructions, we must first determine the features of the expletive subject terminals themselves. The morphological facts of English—both the morphophonological forms of expletives and their patterns of verbal agreement, on which more below—indicate that expletives *it* and *there* have the same features as their corresponding pronominal and locative homophones.

To begin with TEIT, it seems both plausible and parsimonious to assume that both the ‘ordinary’ and *there*-type expletive *it* are featurally identical to pronominal *it*. Thus, all are abstract terminals with the syntactic category D, and all have agreement features that are valued 3sg by the time they reach the morphological component.

What about expletive *there*? Its syntactic category is likely adverbial, but I will not attempt a more precise answer to this question here. As above, Chomsky (2000) analyzes expletive *there* as a ϕ -feature deficient D in part because it can satisfy the EPP as a structural subject. However, it seems odd to attribute ϕ features to *there*—even a single Person feature—since morphophonologically, *there* never agrees with a verb or any other element, and nothing ever agrees with *there*.³⁶ Furthermore, phrases of other categories than DP can also satisfy the EPP. For example, a prepositional phrase (PP) can fill the subject position of a copular construction (58a) just as well as an expletive *there* (58b) or a DP (58c).³⁷

- (58) a. [_{PP} Under the bed] is a good place to hide.
 b. There is a good place to hide [_{PP} under the bed].
 c. [_{DP} A good place to hide] is under the bed.

³⁵ See also Sigurðsson (2006, 2008) for a similar post-syntactic approach to case, but in a different theory of the morphology-syntax interface.

³⁶ Thanks to Donna Lardiere (p.c.) for this observation.

³⁷ Thanks to Kleanthes Grohmann (p.c.) for pointing this out to me and suggesting examples. For a different analysis of similar examples see Moro (2000), which is based on Kayne’s (1994) Linear Correspondence Axiom theory.

Therefore, let us conclude that expletive *there* is not a D and that it has no ϕ features whatsoever. Instead, the features of both locative and expletive *there* are ‘proximate’ (near the speaker) [\pm prox] and ‘distal’ (away from the speaker) [\pm dist]. Locative/expletive *there* has the features [$-\text{prox } -\text{dist}$], and locative *here* has the features [$+\text{prox } -\text{dist}$]. In this featural analysis I am following fairly standard practice in DM theory (e.g., Halle 1997, Nevins 2008, Nevins & Parrott In press, among others), where it has been observed that two binary-valued features can yield a three-way distinction, with one of the four possible feature/value combinations ruled out semantically. In this case, the combination [$+\text{prox } +\text{dist}$] is impossible because nothing can be simultaneously close to and far from the speaker. Unlike other languages such as Korean, English does not morphologically distinguish the combinations [$-\text{prox } -\text{dist}$] and [$-\text{prox } +\text{dist}$]. It could be that *there* is a homophone with both meanings available. Alternately, English could lack any syntactic terminal item with (or, exponent for) the features [$-\text{prox } +\text{dist}$], requiring a periphrastic strategy for expressing this semantic meaning (e.g., *over there*). I will not attempt to resolve these issues here.

If the features of expletives *it* and *there* are identical to those of their pronominal and locative counterparts at the PF interface, then what about at the LF interface? Contrary to usual assumptions, and following Eriksen (2008b, 2008a, and work in progress, p.c.), I maintain that the features of both expletives are semantically interpretable. This might not seem so objectionable in the case of expletive *it* with weather constructions, already acknowledged as a ‘quasi argument’ in Chomsky (1981). Eriksen points out that in a wide variety of non-European languages, subjects of weather constructions can refer to the world or the land, a place or village, the weather, the sky or air, nature, god(s), or the day or other times. Even in English, the subject of a weather construction can have a clear referential semantics under certain conditions. For example, Eriksen quotes the following from *Harry Potter and the Deathly Hallows* (254-255, bold emphasis added): “‘**Yaxley’s office** is raining,’ said Ron.[...] ‘Yes, **a lot of offices** have been raining lately,’ said Mr. Weasley.” Similar examples abound. So English expletive *it* in a weather construction simply refers to the generic, unmarked (and thus 3sg) ‘world’ where the weather happens. Other kinds of expletive *it* are slightly less straightforward, but in those cases the 3sg features could either refer to a generic ‘world’ or perhaps to the clausal complement itself.

Again, what about expletive *there*, and crucially, its variant form TEIT? Arguably the locative features of *there* refer to the generic, unmarked (and thus [$-\text{prox } -\text{dist}$]) ‘place’ where a predicate applies—for instance, where something is asserted to exist in an existential construction, or where something arrives or stands, etc., in an unaccusative construction. Evidently, existential or other semantics do not come from the expletive itself, but are compositional from the structures involved.³⁸ As we have already seen in (58a-b) above (and 63a-b below), it is well known that semantically referential locative expressions and phrases can be the subject of existential and other *there*-expletive constructions in English. Furthermore, Eriksen observes that in Bokmål (and other Norwegian varieties), “one [expletive] type fits all [expletive constructions]”—in other words, 3sg expletive *det* ‘it’ may appear with weather predicates and clausal complements, as well as in what are *der* ‘there’ expletive constructions in Danish and

³⁸ See, for example, Deal (2009) for a theory about verbal heads in expletive constructions; however, expletives are semantically uninterpretable on her theory, and must Agree with the associate.

English (e.g., in copular existentials). These and similar cross-linguistic facts can be taken to show that 3sg *it/det* is a semantically unmarked expletive form. Other relatively more specific forms, including locative *there/de*, are accordingly more marked and therefore may have a more restricted distribution. I must refrain from further discussion of the semantics of expletives, referring the reader to Eriksen for additional empirical details and more precise analyses.³⁹

Summarizing the analysis advanced so far, the English expletives *it* and *there* are abstract syntactic terminals (not Roots). Expletive/pronominal *it* is a D with semantically interpretable 3sg ϕ features [–auth –part –pl].⁴⁰ Expletive/locative *there* is some kind of adverb (represented as ‘A’), with the semantically interpretable locative features [–prox –dist], but with no ϕ features. Vocabulary Items for *it* and *there* are provided below. Because these Vocabulary share no morphosyntactic features, they do not compete for insertion according to an ‘elsewhere’ subset principle (e.g., Halle 1997).

- (59) a. [D –auth –part –pl] ⇔ /ɪt/
 b. [A –prox –dist] ⇔ /ðeɪ/

Notice that this analysis involves features of the expletive terminals prior to Vocabulary Insertion, and not to the Vocabulary Items that will supply phonological exponents for the expletives later during the morphological computation. It is not the case that expletives *there* and *it* are mere phonological variants. Rather, the two exponents correspond to distinct sets of semantically interpretable features, which have consequences for morphological operations like dissociated feature insertion (as we will see below). Thus, the same mechanism is responsible for both intra- and inter-individual variation between TEIT and *there*, namely the choice of which terminal—[D –auth –part –pl] or [A –prox –dist]—is selected into the lexical array for syntactic computation. In other words, the mechanism of TEIT variation is ‘lexical,’ though in a very specific sense of this term. Such a mechanism of variation is conceptually similar to Adger and Smith’s (2005, and Adger 2006), though obviously checking of uninterpretable features plays no role on the current approach, by hypothesis.⁴¹

5.3 Expletive *There* and Dissociated Associate Agreement

Continuing, let us suppose that in addition to Case, there are furthermore no uninterpretable Agreement features in the narrow syntax (as proposed in Bobaljik 2008, though I will give a different implementation of the idea here). Only those person and number features necessary for semantic interpretation of nominals are retained on this

³⁹ I do not share Eriksen’s functionalist interpretation, however.

⁴⁰ The ϕ features for person and number are [±author], [±participant], and [±plural]. For more details and discussion see Halle (1997), Nevins (2008), or Nevins and Parrott (In press), and references cited therein.

⁴¹ The anonymous reviewer is concerned about the alleged ‘ungrammaticality’ of TEIT in “standard” English. I hope to have already cast sufficient doubt on the notion of standard English (fns. 6, 11, 13 above), but what about the many varieties which do not have TEIT? On the current approach, TEIT is not ‘ungrammatical’ in such dialects but merely unused. It must be borne in mind that unacceptability, an empirical observation, does not simply entail ungrammaticality, which is a theoretical analysis. There may be many reasons why an informant does not accept a certain form. For more discussion about these issues, see Sobin (1994) and Schütze (1996).

theory. For languages with verbal agreement morphophonology, dissociated agreement features or morphemes are inserted by language-specific rules during the morphological component.⁴²

English does have some verbal agreement, but unlike in other languages such as German, verbal agreement exponence is never distinct from tense exponence. For example, as illustrated below, the form *-s* is a productive exponent of 3sg present tense on (regular) verbs. Note that the following examples represent English varieties that lack independent patterns of agreement leveling variation (something documented on Smith Island, see e.g., Mittelstaedt 2006, Parrott 2007, Nevins & Parrott In press for details and discussion). Finiteness in T will be represented below with the semantically interpretable feature ‘past’; past tense is represented by the feature value ‘plus’ [+past] and present tense by the feature value ‘minus’ [–past].

(60)	<u>[–past]</u>	<u>[+past]</u>
<u>1sg</u>	<i>I haunt</i>	<i>I haunted</i>
<u>2sg</u>	<i>you haunt</i>	<i>you haunted</i>
<u>3sg</u>	<i>(s)he/it haunts</i>	<i>(s)he/it haunted</i>
<u>pl</u>	<i>we/you/they haunt</i>	<i>we/you/they haunted</i>

The forms *am*, *is*, and *are* are the exponents of person and number in the present-tense of *be*, and the forms *was* and *were* are the exponents of agreement in the past-tense.

(61)	<u>[–past]</u>	<u>[+past]</u>
<u>1sg</u>	<i>I am</i>	<i>I was</i>
<u>2sg</u>	<i>you are</i>	<i>you were</i>
<u>3sg</u>	<i>(s)he/it is</i>	<i>(s)he/it was</i>
<u>pl</u>	<i>we/you/they are</i>	<i>we/you/they were</i>

In light of these facts, there is no compelling reason to think that dissociated agreement rules insert a distinct terminal morpheme for agreement in English. Moreover, although the *-ed* exponent of past-tense on verbs does not distinguish agreement at all, we still need agreement for the past-tense forms *was/were*. Thus, we should not restrict the insertion of dissociated agreement features to the present tense in English. Since an exponent of non-finite tense (*to*) does not distinguish person or number, however, we must limit dissociated agreement feature insertion to finite tense (i.e., T with a feature [±past]).

As a first approximation for English, let us suppose that dissociated agreement features are copied into T[±past] with the values of those semantically interpretable ϕ features that are on the structural subject DP. This is formalized in the rule (62a) below, which states that ϕ features valued α [α_{auth} α_{part} α_{pl}] (right side of the arrow) are

⁴² Consequently, mainland (Germanic) Scandinavian languages such as Danish simply lack any dissociated subject-verb agreement rules. Of course those languages do retain grammatical gender agreement, for example between subjects and predicate adjectives. Conversely then, English simply lacks gender agreement rules on this approach, so there is no need to postulate abstract gender Agreement in the syntax. Gender agreement can also be modeled with DM feature insertion or copying rules, though I won’t pursue the topic here.

inserted (indicated by ‘→’) into the terminal morpheme T[±past] (left side of the arrow) when it is in the morphosyntactic context of a DP with ϕ features valued α in the specifier of T[] (on the right side of the forward slash). Rightward associate agreement in English is the result of another dissociated agreement rule that copies agreement features from an associate DP lower in the VP. This is formalized in (62b) below, which states that ϕ features valued α are inserted into the terminal morpheme T[±past] when it is in the morphosyntactic context of a DP with ϕ features valued α in the VP complement of T[]. A modification to (62) will be introduced directly below, as indicated by the roman numeral (I) in parentheses.

(62) *Dissociated agreement feature insertion rules in English (I)*

- a. T[±past] → T[±past $\alpha\phi$] / [TP DP[$\alpha\phi$] [T[] [...]]]
b. T[±past] → T[±past $\alpha\phi$] / [TP ... [T[] [VP ... DP[$\alpha\phi$]]]]

Because the rules in (62) refer to and insert the same terminals and features, they should compete for application, just as Vocabulary Items compete for insertion under subset or elsewhere conditions (e.g., Halle 1997). However, the contextual information contained in both rules is apparently of equal specificity, the only difference being the morphosyntactic structural position of the DP from which feature values are copied. Thus, neither of the rules wins by knock out or by default; the rules are complementary, applying if and when their contextual conditions are met. The proposed rules refer to hierarchical syntactic phrase structures that are input to the morphological component after Spell Out from the narrow syntax (as do, e.g., the dissociated case assignment rules proposed by McFadden 2004). Therefore, dissociated agreement feature insertion rules must be among the ‘structural’ operations that apply prior to the first round of Vocabulary Insertion and subsequent linearization of the morphosyntactic terminals.⁴³

Before proceeding, note that the rules in (62) model hypothetical varieties where agreement is categorically plural with a plural associate. However, it is not empirically established whether such varieties in fact exist (as in Section 3.1 above). Even with this contingency in mind (further discussed immediately below), the rules in (62) explain a number of the expletive agreement phenomena observed in English.

First, 3sg agreement is categorical with pronominal and (*there*-)expletive *it* because whenever *it* is a subject, even in a *there*-expletive construction, the agreement rule for English (62a) will copy 3sg features into T during the morphological computation. Because (62a) can apply, (62b) does not, and vice versa.

Second, rule (62b) does not mention expletive *there*, and so it should apply whenever any phrase without agreement ϕ features occupies the subject position. The examples below illustrate that this is indeed the case: plural associate agreement occurs with PP subjects (63a), just as it does with plural DP subjects (63b), and *there*-expletive subjects (63b).

- (63) a. [PP Under the bed] are good places to hide.

⁴³ Another structural operation in morphology is lowering Merger, as in Embick and Noyer (2001). For more on the ordering of morphological operations, see Kandybowicz (2007) and Arregi and Nevins (2008).

- b. [_{DP} Good places to hide] are under the bed.
- c. There are good places to hide [_{PP} under the bed].

Third, the rules in (62) help to explain the semi-complementary distribution of the expletive forms *it* and *there* in English varieties. The patterns of inter-individual variation in expletive forms observed across varieties of English resembles those seen in mainland (Germanic) Scandinavian, except that in English there is the additional factor of morphophonologically distinctive agreement morphology. As we have seen, in TEIT varieties the expletive form *it* can appear in (all) syntactic environments of expletive *there*—but crucially, with categorical 3sg agreement regardless of the number features on the associate. Conversely, I am aware of no English variety that allows the form *there* to appear in the syntactic environments of expletive *it*, regardless of verbal agreement. Such a pattern is completely unattested on Smith Island.

- (64) a. * There is (are) raining over the bay tonight.
- b. * There seem(s) that the islands are cursed.

Therefore, on the present approach, the dissociated agreement insertion rules in (62) (as well as in 65 below) restrict the distribution of expletive forms in addition to any effects of semantic markedness. Rule (62b) copies features from a DP in the VP complement of finite T. But in a weather construction, there is no DP in the VP complement of finite T, only the adjectival or verbal weather predicate itself or possibly a prepositional or adverbial phrase. In a raising predicate with a finite complement phrase, finite T has a CP complement rather than a VP complement. Therefore, the associate agreement insertion rule cannot apply in either type of *it*-expletive construction. Using an expletive *it* subject in these constructions allows rule (62a) to apply, since the terminal *it* has 3sg agreement features to be copied. But the expletive *there* terminal never has ϕ features, only [–prox –dist], and so neither dissociated agreement rule can apply. Without the insertion of dissociated agreement features, no Vocabulary Item can be inserted in the terminal morpheme T[±past]. Thus, the expletive form *there* is predicted not to occur, and to be unacceptable, in the syntactic environments of expletive *it*.

5.4 Intra-individually Variable 3sg Associate Agreement with Expletive *There*

What about intra-individually variable 3sg agreement with plural associates in expletive-*there* constructions, observed on Smith Island and in many other varieties of English, as discussed above? A (necessarily tentative) DM analysis could utilize a kind of variable morphological rule. Nevins and Parrott (in press) propose that variable markedness-induced Impoverishment operations are among the mechanisms of intra-individual variation in morphosyntax. In the present case, rather than a ϕ -feature deleting rule with variable (non-)application, suppose that rule (62b) has a variable outcome, with two structural changes possible in the same structural environment. Either the ϕ features inserted into T[±past] have their values copied from a lower DP, resulting in agreement exponence matching the associate, or the ϕ features inserted into T[±past] are set to their unmarked ‘minus’ values [–auth –part –pl], resulting in 3sg agreement exponence

irrespective of the associate. This is formalized in (65) below, where a percent sign indicates that the structural changes contained in brackets are variable.

(65) *Dissociated agreement feature insertion rules in English (II)*

- a. $T[\pm\text{past}] \rightarrow T[\pm\text{past } \alpha\phi] \quad / \quad [_{\text{TP}} \text{DP}[\alpha\phi] [T[__] [\dots]]]$
- b. $T[\pm\text{past}] \rightarrow \left\{ \begin{array}{l} T[\pm\text{past } \alpha\phi] \\ \% \\ T[\pm\text{past } -\phi] \end{array} \right\} \quad / \quad [_{\text{TP}} \dots [T[__] [_{\text{VP}} \dots \text{DP}[\alpha\phi]]]]$
- b'.

Crucially, while the variable rule (65b-b') makes two possible structural changes, its structural environment is the same: valued ϕ features are inserted into $T[\pm\text{past}]$ when its specifier has no ϕ features (otherwise 62a would apply) and its VP complement contains a DP with ϕ features. This means that (65b') does not function as a general 'elsewhere' rule for agreement—it is part of a particular associate-agreement rule that applies only when finite T has a VP complement with a ϕ -featured DP. Therefore, (65b') cannot not come to the rescue if *there* is Merged into an *it*-expletive construction such as a weather predicate, as discussed in the preceding section; *it*-expletive constructions do not match the contextual environment required to trigger (65b-b').

In Section 3.1 above, it was observed that not only does variable associate agreement occur with expletive *there* in dialects that lack general 3sg agreement 'leveling' variation (e.g., in 'standard' U.S., Canadian, or New Zealand English), but that even in such dialects, agreement variation with expletive *there* is conditioned by different linguistic factors than general agreement variation in non-expletive constructions (e.g., in British Midlands, African-American, or Smith Island English). These discrepancies are plausibly explained if the mechanism of intra-individual agreement variation in *there*-expletive constructions is a variable associate-agreement rule (65b-b'), across all varieties, with another rule responsible for general agreement (65a). Section 3.1 also pointed out an unresolved but relevant empirical question, namely whether there are any English varieties that lack intra-individual variation in associate agreement with expletive *there*. If such dialects do in fact exist, the inter-individual variation can be explained if those individuals have agreement rule (62) while others have (65).

On the current analysis, general 3sg agreement leveling variation would have to be due to an additional mechanism independent of (62) or (65). A detailed explication is beyond the scope of this paper, but for the sake of discussion let us assume that the mechanism is an Impoverishment rule with variable application, just as in Nevins and Parrott (in press). For (populations of) individuals who have it, the Impoverishment rule in (66) will variably reset all marked 'plus'-valued ϕ features of $T[\pm\text{past}]$ to their unmarked 'minus' values [$-\text{auth } -\text{part } -\text{pl}$], resulting in variably leveled 3sg agreement across all verb types and syntactic constructions. Variable rule application is indicated with a percent sign in front of the arrow.

- (66) $+\phi \quad \% \rightarrow \quad -\phi \quad / \quad T[\pm\text{past } __]]$

Notice that (66) changes the values of ϕ features already present in finite T, unlike (62/65), which are rules that insert valued ϕ -features into finite T. Consequently, (66) must apply after (62/65), and this is consistent with the theory that structural operations like dissociated feature insertion take place early in the ordering of morphological operations.⁴⁴ Another consequence is that, in varieties with general agreement variation, any given instance of 3sg agreement with a plural *there*-expletive associate would have two ambiguous morphological derivations. (59b) could apply but be voided by subsequent application of (60); or (59b') could apply and bleed (60), which cannot apply to unmarked minus-valued ϕ features: either would have the same result.

5.5 A Theoretical Summary

To summarize the analysis advanced above, English TEIT is pronominal/expletive *it*, a D with semantically interpretable 3sg ϕ features. Expletive *there* is not a D, and has the semantically interpretable features [–prox –dist], but no ϕ features at all. There are no uninterpretable Case or Agreement features in the narrow syntax; in languages that have it, case and agreement morphology is the result of dissociated feature/morpheme insertion rules that apply in the post-syntactic morphological component. On such an approach, TEIT with categorical 3sg agreement poses no Case problems. In English, verbal agreement morphology is the result of feature insertion rules that copy agreement features into finite T from a subject DP in the specifier of finite T. An additional associate agreement rule copies agreement features from a DP in the VP complement of finite T. Therefore, 3sg verbal agreement is categorical with 3sg pronominal/expletive *it*. Expletive *there* has no ϕ features, resulting in agreement with an associate DP. The form *it* can occur in *there*-expletive environments since it has 3sg ϕ features to be copied. The form *there* cannot appear in *it*-expletive environments because (possibly among other reasons) the *there*-expletive terminal has no ϕ features and no other DP is available in the specifier of a lower DP, so that neither dissociated agreement rule can apply.

Two distinct mechanisms of variation were proposed. For both intra- and inter-individual variation between the forms TEIT and *there*, the variable mechanism is ‘lexical’ selection of terminal morphemes prior to syntax. For intra-individual variation in associate agreement with expletive *there*, the variable mechanism is a post-syntactic feature valuation rule.

6. Concluding Remarks

Perhaps the most outstanding issue raised in this article concerns the status of case and agreement in morphosyntactic theory. The analyses of expletive variation presented above are based upon the independently motivated DM hypothesis that there are no semantically uninterpretable Case or ϕ features in the narrow syntax. Is this going too far? Minimalist syntax relies upon uninterpretable Case and Agreement features to perform many tasks, for example the identification of phrases and landing sites for

⁴⁴ See footnote 43 above.

movement. Eliminating uninterpretable Case and features as theoretical objects might seem excessively radical, and such a move would certainly require significant mechanical modifications to Minimalist theories.

There are intuitively compelling Minimalist conceptual arguments against uninterpretable Case and ϕ features, however. Why do such semantically superfluous objects exist in an ‘optimal’ computational system? Why don’t they violate Full Interpretation, or the Inclusiveness Condition? How can features with no meaning be acquired, most especially if they are not pronounced?⁴⁵ From a morphology-theoretic perspective, moreover, the elimination of uninterpretable features may not appear so radical. Semantically meaningless morphophonological forms, such as person and number agreement on verbal elements and case on nominal elements, are pervasive in human language. Their empirical properties—including paradigmatic syncretisms and other kinds of mismatches—must be accounted for by any adequate theory of morphosyntax. As Embick and Noyer (2007) point out, it is already accepted that certain kinds of non-semantic information relevant to phonology, such as syllabic and prosodic structure, is established after syntax (see Chomsky 1995: 228, 381 fn. 10). The absence of semantic meaning in case and verbal agreement morphology can be easily explained if such morphology is determined by language-specific mechanisms after the narrow syntax, during the PF-interface computation.

Thus, it can be argued that a Minimalist theory of the human language faculty should do without such objects as uninterpretable features. The core syntactic computation of the human language faculty is then extremely minimal, reduced to the absolute conceptual necessity of a recursive structure-building operation, namely Merge (cf. e.g., Hauser, Chomsky & Fitch 2002, Hornstein 2009). In narrow syntax, Merge applies to terminal elements (i.e., primitive features or bundles of features) that are interpretable at the LF interface. Phrasal movement is a result of ‘internal’ Merge and is motivated by LF-interface or information structure requirements, as suggested by Chomsky (2004).⁴⁶ Relegating the mechanisms of morphological phenomena—including, significantly, both inter- and intra-individual variation—to the PF-interface component is a strongly Minimalist hypothesis on this view.

References

2000. Table DP-1. Profile of General Demographic Characteristics: 2000, Geographic area: Smith Island CDP, Maryland: U.S. Census Bureau.
- Adger, David. 2003. *Core Syntax: A Minimalist Approach*. Oxford: Oxford University Press.

⁴⁵ Chomsky (1995) gives similar arguments against AgrS and AgrO heads.

⁴⁶ What about head movement, which typically does not seem semantically motivated? Would it be possible to relegate head movement to PF, as suggested by Chomsky (2001) and Boeckx and Stjepanovic (2001), for example? Parrott (2001a) contains some speculation about a DM theory of V-to-I head raising; see Matushansky (2006) for proposals that split mechanisms of head movement between syntax and morphology.

- Adger, David & Jennifer Smith. 2005. Variation and the Minimalist Program. In Leonie Cornips & Karen P. Corrigan (eds.), *Syntax and Variation: Reconciling the Biological and the Social*. Amsterdam: John Benjamins.
- Adger, David. 2006. Combinatorial variability. *Journal of Linguistics* 42: 503-530.
- Adger, David. 2007. Variability and modularity: A Response to Hudson. *Journal of Linguistics* 43: 695-700.
- Adger, David & Graeme Trousdale. 2007. Variation in English syntax: theoretical implications. *English Language and Linguistics* 11: 261-278.
- Arregi, Karlos & Andrew Nevins. 2008. A Principled order to postsyntactic operations Ms. University of Illinois at Urbana-Champaign and Harvard University.
<http://ling.auf.net/lingBuzz/000646>
- Bailey, Guy, Tom Wike, Jan Tillerly & Lori Sand. 1992. The apparent time construct. *Language Variation and Change* 3: 241-264.
- Bailey, Guy. 2002. Real and apparent time. In Jack K. Chambers, Peter Trudgill & Natalie Schilling-Estes (eds.), *The Handbook of Language Variation and Change*. Malden, MA: Blackwell.
- Baker, Mark C. 1996. *The Polysynthesis Parameter*. Oxford Studies in Comparative Syntax. Oxford: Oxford University Press.
- Baker, Mark C. 2001. *The Atoms of Language: The Mind's Hidden Rules of Grammar*. New York, NY: Basic Books.
- Baker, Mark C. 2003. Linguistic differences and language design. *Trends in Cognitive Sciences* 7: 349-352.
- Belletti, Adriana. 1988. The Case of Unaccusatives. *Linguistic Inquiry* 19: 1-34.
- Belvin, Robert & Marcel Den Dikken. 1997. There, happens, to, be, have. *Lingua* 101: 151-183.
- Bender, Emily M. 2001. Syntactic Variation and Linguistic Competence: The Case of AAVE Copula Absence, Stanford University: Doctoral Dissertation.
- Bender, Emily M. 2007. Socially meaningful syntactic variation in sign-based grammar. *English Language and Linguistics* 11: 347-381.
- Bobaljik, Jonathan David. 2008. Where's Phi? Agreement as a post-syntactic operation. In Daniel Harbour, David Adger & Susana Béjar (eds.), *Phi Theory: Phi-features across Modules and Interfaces*. Oxford: Oxford University Press.
- Boeckx, Cedric & Sandra Stjepanovic. 2001. Head-ing toward PF. *Linguistic Inquiry* 32: 345-355.
- Borer, Hagit. 1984. *Parametric Syntax*. Dordrecht: Foris.
- Bošković, Željko & Howard Lasnik (eds.) 2007. *Minimalist Syntax: The Essential Readings*. Malden, MA: Blackwell.
- Bresnan, Joan. 2001. Explaining morphosyntactic competition. In Mark Baltin & Chris Collins (eds.), *The Handbook of Contemporary Syntactic Theory*. Malden: Blackwell.
- Bresnan, Joan, Ashwini Deo & Devyani Sharma. 2007. Typology in variation: a probabilistic approach to *be* and *n't* in the *Survey of English Dialects*. *English Language and Linguistics* 11: 301-346.
- Cardinaletti, Anna. 1997. Agreement and control in expletive constructions [Summer97]. *Linguistic Inquiry* 28: 521.

- Cardinaletti, Anna & Michal Starke. 1999. The typology of structural deficiency: A case study of the three classes of pronouns. In Henk van Riemsdijk (ed.) *Clitics in the Languages of Europe*. Berlin and New York: Mouton de Gruyter.
- Castillo, Juan Carlos, John Drury & Kleanthes K. Grohmann. 1999. Merge Over Move and the Extended Projection Principle. In Sachiko Aoshima, John Drury & Tuomo Neuvonen (eds.), *University of Maryland Working Papers in Linguistics*.
- Chambers, J. K. 2002a. *Sociolinguistic Theory: Linguistic Variation and its Social Significance (Second Edition)*. Malden, MA: Blackwell.
- Chambers, J. K., Peter Trudgill & Natalie Schilling-Estes (eds.) 2002. *The Handbook of Language Variation and Change*. Malden, MA: Blackwell.
- Chambers, Jack. 1991. Canada: Introduction. In Jenny Cheshire (ed.) *English Around the World*. Cambridge: Cambridge University Press.
- Chambers, Jack K. 2002b. Studying Language Variation: An Informal Epistemology. In Jack K. Chambers, Peter Trudgill & Natalie Schilling-Estes (eds.), *The Handbook of Language Variation and Change*. Malden, MA: Blackwell.
- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, Noam. 1993. A Minimalist program for linguistic theory. In Ken Hale & S. J. Keyser (eds.), *The View from Building 20: Essays in linguistics in honor of Sylvain Bromberger*. Cambridge: MIT Press.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: The Framework. In Roger Martin, David Michaels & Juan Uriagereka (eds.), *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.) *Ken Hale: A Life in Language*. Cambridge: MIT Press.
- Chomsky, Noam. 2004. Beyond explanatory adequacy. In Adriana Belletti (ed.) *Structures and Beyond: The Cartography of Syntactic Structures*. Oxford: Oxford University Press.
- Chomsky, Noam. 2005. Three factors in language design. *Linguistic Inquiry* 36: 1-22.
- Chomsky, Noam. 2008. On phases. In Robert Freidin, Carlos P. Otero & Maria Luisa Zubizarreta (eds.), *Foundational Issues in Linguistic Theory: Essays in Honor of Jean-Roger Vergnaud*. Cambridge, MA: MIT Press.
- Cornips, Leonie. 1998. Syntactic variation, parameters and their social distribution. *Language Variation and Change* 10: 1-21.
- Cornips, Leonie & Karen Corrigan. 2005. Toward an integrated approach to syntactic variation: A Retrospective and prospective synopsis. In Leonie Cornips & Karen P. Corrigan (eds.), *Syntax and Variation: Reconciling the Biological and the Social*. Amsterdam: John Benjamins.
- Cowart, Wayne. 1997. *Experimental Syntax*. Thousand Oaks, CA: Sage Publications.
- Deal, Amy Rose. 2009. The origin and content of expletives: evidence from "selection". *Syntax* 12.
- DeWolf, Gaelan Dodds. 1992. *Social and Regional Factors in Canadian English*. Toronto: Canadian Scholar's Press.
- Dize, Frances W. 1990. *Smith Island, Chesapeake Bay*. Centerville, MD: Tidewater Publishers.

- Embick, David & Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32: 555-595.
- Embick, David. 2007. Variation and morphosyntactic theory: Competition fractionated. *Language and Linguistics Compass* 2: 59-78.
- Embick, David & Rolf Noyer. 2007. Distributed Morphology and the Syntax/Morphology Interface. In Gillian Ramchand & Charles Reiss (eds.), *The Oxford Handbook of Linguistic Interfaces*. Oxford: Oxford University Press.
- Emonds, Joseph. 1986. Grammatically deviant prestige constructions. In Michael Brame, Heles Contreras & Fredrick J. Newmeyer (eds.), *A Festschrift for Sol Saporta*. Seattle: Noit Amrofer.
- Eriksen, Pål Kristian. 2008a. How to talk about the weather and other worldly matters: Expletives as representations of the world. Paper presented at *Expletives as Particles Conference*, Univeristy of Helsinki, Finland.
- Eriksen, Pål Kristian. 2008b. Meteorological typology: Comparing global and local weather patterns. Paper presented at *Typology and Nordic Dialect Variation Workshop*, University of Helsinki, Finland.
- Garner, Brian A. 1998. *A Dictionary of Modern American Usage*. New York: Oxford University Press.
- Green, Lisa J. 2002. *African American English: A Linguistic Introduction*. Cambridge, UK: Cambridge University Press.
- Halle, Morris & Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In Ken Hale & Samuel Jay Keyser (eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*. Cambridge, MA: MIT Press.
- Halle, Morris. 1997. Distributed Morphology: Impoverishment and Fission. *MIT Working Papers in Linguistics*.
- Hauser, Marc D., Noam Chomsky & W. Tecumseh Fitch. 2002. The faculty of language: What is it, who has it, and how did it evolve? *Science* 298: 1569-1579.
- Hay, Jennifer & Daniel Schreier. 2004. Reversing the trajectory of language change: Subject-verb agreement with *be* in New Zealand English. *Language Variation and Change* 16: 209-235.
- Hazout, Ilan. 2004. The syntax of existential constructions [Summer 2004]. *Linguistic Inquiry* 35: 393-430.
- Henry, Alison. 1995. *Belfast English and Standard English: Dialect Variation and Parameter Setting*. Oxford: Oxford University Press.
- Henry, Alison. 1996. Imperative Inversion in Belfast English. In James R. Black & Virginia Motapanyane (eds.), *Microparametric Syntax and Dialect Variation*. Amsterdam: John Benjamins.
- Henry, Alison. 2002. Variation and syntactic theory. In Jack K. Chambers, Peter Trudgill & Natalie Schilling-Estes (eds.), *The Handbook of Language Variation and Change*. Malden, MA: Blackwell.
- Henry, Alison & Sibohan Cottell. 2007. A new approach to transitive expletives: evidence from Belfast English. *English Language and Linguistics* 11: 279-299.
- Hornstein, Norbert. 2009. *A Theory of Syntax: Minimal Operations and Universal Grammar*. Cambridge: Cambridge University Press.
- Horton, Tom. 1987. *Bay Country*. Baltimore: The Johns Hopkins University Press.

- Horton, Tom. 1996. *An Island Out of Time: A Memoir of Smith Island in the Chesapeake*. New York: W.W. Norton & Co.
- Hudson, Richard. 2007. Inherent variability and modularity. A comment on Adger's 'Combinatorial variability'. *Journal of Linguistics* 43: 683-694.
- Kandybowicz, Jason. 2007. Fusion and PF architecture. In Tatjana Scheffler, Joshua Tauberer, Aviad Eilam & Laia Mayol (eds.), *University of Pennsylvania Working Papers in Linguistics, Volume 13.1: Proceedings of the 30th Annual Penn Linguistics Colloquium*. Philadelphia: University of Pennsylvania Working Papers in Linguistics.
- Kayne, Richard S. 1994. *The Antisymmetry of Syntax*. Cambridge: MIT Press.
- Kayne, Richard S. 1996. Microparametric syntax: Some introductory remarks. In James R. Black & Virginia Motapanyane (eds.), *Microparametric Syntax and Dialect Variation*. Amsterdam: John Benjamins.
- Kayne, Richard S. 2004. Here and there. In Christian Leclère, Éric Laporte, Mireille Piot & Max Silberztein (eds.), *Lexique, Syntaxe et Lexique-Grammaire / Syntax, Lexis & Lexicon-Grammar*. Amsterdam: John Benjamins.
- Kayne, Richard S. 2006. Expletives, datives, and the tension between morphology and syntax. Ms. New York University. <http://ling.auf.net/lingBuzz/000286>
- Kroch, Anthony. 1989. Reflexes of grammar in patterns of language change. *Language Variation and Change* 1: 199-244.
- Kroch, Anthony. 1994. Morphosyntactic variation. In Katharine Beals (ed.) *Papers from the 30th Regional Meeting of the Chicago Linguistics Society*. Chicago: Chicago Linguistic Society.
- Kroch, Anthony. 2001. Syntactic Change. In Mark Baltin & Chris Collins (eds.), *The Handbook of Contemporary Syntactic Theory*. Malden: Blackwell.
- Labov, William. 1963. The Social motivation of a sound change. *Word* 19: 273-309.
- Labov, William. 1966. *The Social Stratification of English in New York City*. Washington, DC: Center for Applied Linguistics.
- Labov, William. 1969. Contraction, deletion, and inherent variability of the English copula. *Language* 45: 715-762.
- Labov, William. 1972. *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.
- Labov, William. 1994. *Principles of Linguistic Change: Internal Factors*. Cambridge, MA: Blackwell.
- Labov, William. 1995. The two futures of linguistics. In Ik-Hwan Lee (ed.) *Linguistics in the Morning Calm 3: Selected Papers from the Seoul International Conference on Linguistics (SECOL) 1992*. Seoul: Hanshin Publishing Company.
- Labov, William. 1996. When intuitions fail. In L. McNair, K. Singer, L. Dolbrin & M. Aucon (eds.), *Papers from the Parasession on Theory and Data in Linguistics, CLS 32*. Chicago: Chicago Linguistic Society.
- Labov, William. 2001. *Principles of Linguistic Change: Social Factors*. Cambridge, MA: Blackwell.
- Lasnik, Howard. 1992. Case and expletives: notes toward a parametric account. *Linguistic Inquiry* 23: 381-405.
- Lasnik, Howard. 1995. Case and expletives revisited: On Green and other human failings. *Linguistic Inquiry* 26: 615-633.

- Lightfoot, David. 1999. *The Development of Language: Acquisition, Change, and Evolution*. Oxford: Blackwell.
- Lippi-Green, Rosina. 1997. *English with an Accent: Language, Ideology, and Discrimination in the United States*. London: Routledge.
- Marantz, Alec. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. In A. Dimitriadis, L. Siegel, C. Surek-Clark & A. Williams (eds.), *Proceedings of the 21st Penn Linguistics Colloquium*. Philadelphia: University of Pennsylvania Working Papers in Linguistics.
- Marantz, Alec. 2000. Case and licensing In Eric Reuland (ed.) *Arguments and Case: Explaining Burzio's Generalization*. Amsterdam: John Benjamins.
- Martin, Stefan & Walt Wolfram. 1998. The Sentence in African-American Vernacular English. In Salikoko S. Mufwene, John R. Rickford, Guy Bailey & John Baugh (eds.), *African-American English*. New York: Routledge.
- Matushansky, Ora. 2006. Head movement in linguistic theory. *Linguistic Inquiry* 37: 69-109.
- McFadden, Thomas. 2004. The Position of Morphological Case in the Derivation: A Study on the Syntax-Morphology Interface, University of Pennsylvania: Doctoral Dissertation.
- McFadden, Thomas. 2007. Default case and the status of compound categories in Distributed Morphology. In Tatjana Scheffler, Joshua Tauberer, Aviad Eilam & Laia Mayol (eds.), *University of Pennsylvania Working Papers in Linguistics, Volume 13.1: Proceedings of the 30th Annual Penn Linguistics Colloquium*. Philadelphia: University of Pennsylvania Working Papers in Linguistics.
- Meechan, Marjory & Michele Foley. 1994. On resolving disagreement: Linguistic theory and variation--"there's bridges". *Language Variation and Change* 6: 63-86.
- Milroy, James & Lesley Milroy. 1985. *Authority in Language: Investigating Language Prescription and Standardisation*. New York: Routledge.
- Mittelstaedt, Jennifer. 2006. Auxiliary Leveling and Morphological Theory: The Case of Smith Island English, Georgetown University: Doctoral Dissertation.
- Moro, Andrea. 1997. *The Raising of Predicates: Predicative Noun Phrases and the Theory of Clause Structure*. Cambridge: Cambridge University Press.
- Moro, Andrea. 2000. *Dynamic Antisymmetry*. Cambridge, MA: MIT Press.
- Nevins, Andrew. 2008. Cross-modular parallels in the study of Phon and Phi. In David Adger, Daniel Harbour & Susana Bejar (eds.), *Phi Theory: Phi-features across Modules and Interfaces*. Oxford: Oxford University Press.
- Nevins, Andrew & Jeffrey K. Parrott. In press. Variable rules meet Impoverishment theory: Patterns of agreement leveling in English varieties. *Lingua*.
- Parrott, Jeffrey K. 2000. A Partial solution to the theoretical paradox posed by Smith Island weak expletive *it*. Ms. Georgetown University.
- Parrott, Jeffrey K. 2001a. A Morphological theory of head movement. Ms. Georgetown University.
- Parrott, Jeffrey K. 2001b. A Preliminary sketch of variation in the verbal agreement system of Smith Island English. Ms. Georgetown University.
- Parrott, Jeffrey K. 2002. Dialect death and morpho-syntactic change: Smith Island weak expletive *it*. In Daniel Ezra Johnson & Tara Sanchez (eds.), *University of*

- Pennsylvania Working Papers in Linguistics, Volume 8.3: Papers from NWAV 30*. Philadelphia: University of Pennsylvania Working Papers in Linguistics.
- Parrott, Jeffrey K. 2007. Distributed Morphological Mechanisms of Labovian Variation in Morphosyntax, Georgetown University: Doctoral Dissertation.
- Parrott, Jeffrey K. 2008. Vestigial case and the acquisition of Vocabulary in Distributed Morphology. Paper presented at *Biolinguistics: Acquisition and Language Evolution (BALE)*, University of York, York, England.
- Parrott, Jeffrey K. To appear. Danish Vestigial case and the acquisition of Vocabulary in Distributed Morphology. *Biolinguistics*.
- Pesetsky, David & Esther Torrego. 2007. The syntax of valuation and the interpretability of features. In Simin Karimi, Vida Samiian & Wendy K. Wilkins (eds.), *Phrasal and Clausal Architecture: Syntactic Derivation and Interpretation*. Amsterdam and Philadelphia: John Benjamins.
- Poplack, Shana & Sali Tagliamonte. 1991. African American English in the diaspora: Evidence from old-line Nova Scotians. *Language Variation and Change* 3: 301-340.
- Poplack, Shana (ed.) 2000. *The English History of African American English*. Malden, MA: Blackwell.
- Rickford, John R. 1998. The Creole Origins of African-American English: Evidence from Copula Absence. In Salikoko S. Mufwene, John R. Rickford, Guy Bailey & John Baugh (eds.), *African American English: Structure, History and Use*. London: Routledge.
- Rupp, Laura. 2005. Constraints on non-standard -s in expletive *there* sentences: A Generative-variationist perspective. *English Language and Linguistics* 9: 225-288.
- Schilling-Estes, Natalie. 1997. Accommodation vs. concentration: Dialect death in two post-insular island communities. *American Speech* 72: 12-32.
- Schilling-Estes, Natalie & Walt Wolfram. 1999. Alternative models of dialect death: Dissipation vs. concentration. *Language* 75: 486-521.
- Schilling-Estes, Natalie. 2000. Exploring morphological change: The *was/weren't* pattern in Smith Island English. Paper presented at *New Ways of Analyzing Variation (NWAV)* 29, Michigan State University.
- Schilling-Estes, Natalie & Walt Wolfram. 2003. Language change in "conservative" dialects: The Case of past tense *be* in Southern enclave communities. *American Speech* 78: 209-228.
- Schilling-Estes, Natalie. 2005. Language change in apparent and real time: The Community and the individual. In Keelan Evans, Giang Nguyen, Maciej Baranowski & Uri Horesh (eds.), *University of Pennsylvania Working Papers in Linguistics 10.2: Papers from NWAV 32*. Philadelphia: University of Pennsylvania Working Papers in Linguistics.
- Schütze, Carson T. 1996. *The Empirical Base of Linguistics: Grammaticality Judgments and Linguistic Methodology*. Chicago: The University of Chicago Press.
- Schütze, Carson T. 1999. English expletive constructions are not infected. *Linguistic Inquiry* 30: 467-484.
- Sheenan, Kevin. 1994. Order and disorder on Smith Island. *Raritan* 14: 109-134.

- Sigurðsson, Halldór Ármann. 2006. The Nom/Acc alternation in Germanic. In Jutta Hartmann & Laszlo Molnarfi (eds.), *Comparative Studies in Germanic Syntax*. Amsterdam and Philadelphia: John Benjamins.
- Sigurðsson, Halldór Ármann. 2008. The No Case Generalization. Ms. Lund, Sweden. <http://ling.auf.net/lingBuzz/000554>
- Sobin, Nicholas. 1994. An acceptable ungrammatical construction. In Susan D. Lima, Roberta L. Corrigan & Gregory K. Iverson (eds.), *The Reality of Linguistic Rules*. Amsterdam: John Benjamins.
- Sobin, Nicholas. 1997. Agreement, default rules, and grammatical viruses. *Linguistic Inquiry* 28: 318-343.
- Sobin, Nicholas. 2004. Expletive constructions are not "Lower Right Corner" movement constructions [Summer 2004]. *Linguistic Inquiry* 35: 503-508.
- Tagliamonte, Sali & Jennifer Smith. 2000. Old *was*, new ecology: Viewing English through the sociolinguistic filter. In Shana Poplack (ed.) *The English History of African American English*. Malden, MA: Blackwell.
- Tortora, Christina. 2006. The Case of Appalachian expletive *they*. *American Speech* 81: 266-296.
- Trester, Anna Marie. 2003. Dialect loss in Smith Island English: A Look at non-standard subject-verb concord. Paper presented at *New Ways of Analyzing Variation (NWAV)* 32, University of Pennsylvania.
- Vikner, Sten. 1995. *Verb Movement and Expletive Subjects in the Germanic Languages*. New York: Oxford University Press.
- Wennersten, John R. 1992. *Maryland's Eastern Shore: A Journey in Time and Place*. Centerville, MD: Tidewater Publishers.
- Wilson, John & Alison Henry. 1998. Parameter setting within a socially realistic linguistics. *Language in Society* 27: 1-21.
- Wolfram, Walt & Natalie Schilling-Estes. 1998. *American English: Dialects and Variation*. Malden: Blackwell.
- Wolfram, Walt. 2002. Language death and dying. In Jack K. Chambers, Peter Trudgill & Natalie Schilling-Estes (eds.), *The Handbook of Language Variation and Change*. Malden, MA: Blackwell.
- Wolfram, Walt & Natalie Schilling-Estes. 2003. Parallel development and alternative restructuring: The Case of *weren't* intensification. In Jenny Cheshire & David Britain (eds.), *Sociolinguistic Dialectology: Papers in Honour of Peter Trudgill*. Amsterdam: John Benjamins.