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Expletive insertion: a morphological approach[1]

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English words containing inserted expletives, like *absobloodylutely* or *unbefuckinglievable*, are often said to be created by 'infixation'. One goal of this work is to argue that such claims are self-contradictory. Infixes are affixes, but the expletives are not. Rather, they are themselves morphologically complex, are not bound, and can occur with words from different syntactic categories. Hence, the expletives are full words, and the only property they share with infixes is their phonologically determined insertion point. Due to these factors, I suggest that words like *absobloodylutely* are discontinuous compounds instead, in which the expletive forms a new word with the word it interrupts. I further argue that discontinuous compounding is even rarer than actual infixation cross-linguistically, which makes English a typological outlier. On the other hand, I try to show that the apparently idiosyncratic properties of expletive compounds are compatible with English compounding at a more abstract level. In addition, the article seeks to establish some tentative diachronic and cognitive mechanisms that may have led to the emergence and retention of expletive insertion. The overall conclusion is that, once morphological phenomena are analyzed in sufficient detail, novel structural patterns and parallels may emerge.

Keywords: infixation, compounding, expressive morphology, word-formation, morphological typology

1 Introduction

It is commonly stated in the introductory literature that a small subset of the English lexicon is created by means of INFIXATION. The following quotes are representative of this idea.

(1) In highly colloquial speech, however, English also makes use of infixation: expressive (mostly obscene) expletives like *bleeding*, *bloody*, *blooming*, *friggin(g)*, *fuckin(g)*, *(god)damn*, *motherfuckin(g)*, *pissin(g)*, *soddin(g)*, *piggin(g)*, etc. (Baldi & Dawar 2000: 970)

[1] I express my gratitude to Thomas Berg and the two anonymous reviewers as well as to the editor Bernd Kortmann. Their feedback made this article much more coherent and substantive. All remaining shortcomings are solely my responsibility.

(2) In Modern English, infixes are used only for humorous purposes, as in *im-bloody-possible* or *abso-blooming-lutely*. (Brinton & Brinton 2010: 85)
(3) English does have a productive infixing process that incorporates swearwords. (Aronoff & Fudeman 2011: 117)
(4) Infixation, that is the placing of a suffix inside the base, is largely restricted to swearing: *absolutely* → *abso-bloody-lutely*. (Mair 2022: 49)

The structural phenomenon referred to in the above quotes is typically called 'expletive infixation' and was most famously discussed in McCarthy (1982). Its theoretical interest primarily derives from the fact that English does not otherwise show a propensity for infixation (cf. McCarthy 1982: 575). However, despite the attention that 'expletive infixation' has received, there appears to be a similarly large number of scholars who argue that these constructions do not exemplify infixation at all. Some quotes to that effect are given in (5)–(7).

(5) Infixes are bound morphemes that occur within stems. There are none of these in English … (Payne 1997: 30)
(6) There are no infixes in English: the closest we have is the use of expletives in the middle of words like *absobloominglutely* or *kangabloodyroo*. (Bauer 2003: 14)
(7) Morphologists usually agree that English has no infixes. (Plag 2003: 101)

The discrepancy between these two sets of quotes suggests that there is confusion (or at least indifference) about what infixation really is, and the problem might be serious if the different uses of 'infix' were actually based on conceptual differences. Yet, regardless of whether the statements in (1)–(4) are based on any kind of analysis, this article will argue that the second group, shown in (5)–(7), is in fact correct and that the constructions at issue are not instances of infixation. However, this claim raises the question as to what kind of morphological process leads to words like *abso-blooming-lutely* instead, and this will be the other major focus of this work.[2]

Overall, this work is couched within a comparative framework even though it focuses on a single phenomenon from a single language. Specifically, I will argue that the English expletive constructions force the recognition of a type of COMPOUNDING that is even less cross-linguistically frequent than actual infixes. The consequences of this analysis subsequently affect morphological theory, morphological typology and the description of English grammar. This approach also explains why I will exclusively speak of *inserted* (rather than *infixed*) expletives throughout this work (cf. Bauer 2015: 122) and why my argument will not rely on the investigation of empirical hypotheses but solely on the principles of basic grammatical analysis.

In section 2, I will provide some background information on the behavior and previous description of the expletive constructions at issue, which will be referred to in later parts of

[2] For the purposes of this article, I will ignore the different uses of the term WORD in the literature. Even though the strings at issue here show little inflectional potential, the intended meaning of 'word' throughout this work most closely corresponds to the notion of LEXEME, i.e. to an abstract unit as found in the (mental) lexicon.

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this work and/or helps to further motivate the research questions. That is, while I will suggest that some aspects of previous analyses are mistaken, it is important to explicitly spell out which of those aspects are and are not relevant to the actual argument proposed here. In section 3, I will sketch the standard definition of infixation and subsequently provide an argument for why the expletives are not infixes. In section 4, meanwhile, I will outline the standard definition of compounding and subsequently propose that words containing inserted expletives should be analyzed as compounds. The conclusion in section 5 summarizes the main points and suggests avenues for further research.

2 Expletive 'infixation' – background

Even though inserted expletives are often mentioned in the literature (see (1)–(7)), many of their properties are yet to be investigated in detail. The present section will briefly outline some of the known and unknown issues and how they will affect this work.

2.1 The frequency of expletive insertion

That little of substance is known about inserted expletives such as those listed in (1) may have to do with the fact that they are of low type and token frequency. So, while McCarthy (1982: 575) claimed that the process was productive, and Aronoff (1976: 69) called the insertion of *fuckin* 'very productive', an investigation of the relevant constructions in contemporary corpora shows that the picture is more complex than those claims suggest. For instance, the *Corpus of Contemporary American English* (COCA; Davies 2008–) consists of at least a billion words and generally contains a large number of expletives, but it only provides evidence for *fuckin(g)* and *bloody* as inserted elements. That is, it does not yield any hits for the other alleged types in (1), such as *friggin(g)* or *blooming*. Furthermore, even the inserted occurrences of *fuckin(g)* and *bloody* are largely limited to a few lexical hosts.[3] Table 1 shows the most frequent combinations involving these two expletives in COCA, based on a count performed in August 2022. The relevant search strings primarily consisted of the expletives plus a wild card asterisk on either side, e.g. **fucking** or **fuckin**. Crucially, the asterisk also captures any potential hyphens. The counts below conflate the various search strings, which is why hyphens and 'dropped *g*'s' are in parentheses.

An absolute frequency of 5, as found for hyphenated *abso-bloody-lutely*, should correspond to 0.005 tokens per million words in COCA. In addition, a few other word types that contain inserted expletives are hapax legomena, i.e. represented by only one token in the entire corpus.[4] However, unambiguous hapax legomena only amount to a

[3] I will refer to the lexical elements within which the inserted expletives occur as HOSTS. This is not meant to suggest that the expletives are clitics, but this choice crucially permits the avoidance of the alternative STEM, which would suggest that the expletives are affixes. It is precisely the latter claim that will be called into question here.

[4] Relevant examples are, for instance, *prebloodydicament* or *incon-fucking-siderate*.

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Table 1. *Words containing inserted expletives by token frequency in COCA*

Word	Token frequency (absolute numbers)
abso(-)fuckin(g)(-)lutely	40
fan(-)fuckin(g)(-)tastic	21
boo(-)fucking(-)hoo	12
unbe(-)fuckin(g)(-)lievable	9
abso(-)bloody(-)lutely	6

handful of tokens for both inserted *fuckin*(*g*) and *bloody*. In sum, it may be concluded that inserted expletives are generally rare (cf. also Bauer 2015: 123 for the same line of argument regarding the frequency of inserted expletives in corpora). On the other hand, McMillan (1980) and Bauer (2015) present far more types from natural language than are given in table 1, and the larger the number of types (and hapaxes) actually is, the more productive the overall process will have to be considered.

The crucial point about the frequency of expletive insertion is not its productivity (or lack thereof), but that its rather marginal status might be seen as a reason to apply a quick fix to its description and analysis. That is, it might be argued that inserted expletives constitute some sort of 'unsystematic' phenomenon that neither structurally oriented nor usage-based approaches would need to account for. Such a strategy would seem to be in line with McCarthy (1982: 574), who claims that the inserted expletives constitute 'little more than a curiosity as a morphological rule'. On that approach, then, the examples in table 1 would perhaps be considered lexicalized units that are morphologically idiosyncratic in much the same way that *by and large* or *all of a sudden* are syntactically idiosyncratic. However, while this might be a necessary shortcut for works that aim to describe English grammar as a whole, it is a fact that inserted expletives exist and that a comprehensive analysis will ultimately have to be offered for them. I will elaborate on this point in section 2.4.

2.2 *The prosody of expletive insertion*

While McCarthy (1982) was primarily interested in the phonological behavior of the inserted expletives, this topic will not have a major impact on the present argument. This is because the phonological distribution of the inserted expletives is indeed compatible with an infixation analysis, and hence that aspect does not constitute crucial evidence for the alternative proposed here (see also section 3.2). Yet, it needs to be pointed out in the interest of completeness that the expletives are typically inserted before a stressed syllable, where the stress in question is usually primary (see McCarthy 1982: 575–9 for details). In fact, this pattern is evidenced by all the examples cited so far.

However, it is of much greater interest to the present work that these prosodic specifications go a long way toward explaining why expletive insertion is rare. That is, English has rather many monosyllabic words, and primary stress in words of multiple

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syllables is typically initial (see section 4.3 for elaboration). As such, the number of hosts with non-initial primary-stressed syllables is bound to be small. Hence, there are relatively few potential hosts for the insertion process to begin with, and the number of actual hosts is then further reduced by the kind of factors that generally prevent marked structures and that impact productivity.

2.3 *The functions of expletive insertion*

With regard to the functional contribution of inserted expletives, perhaps the most succinct summary of the items listed in (1) is that they express some kind of intensity. As suggested by the data in section 2.1, the inserted expletives show a tendency to occur in adjectives and adverbs, and since these two word classes primarily serve to modify, their combination with similarly modifying expletives is unsurprising. Crucially, the function of intensity applies regardless of the semantics of the host. Hence, both *unbe-fucking-lievable* and *fan-fucking-tastic* are expressions of exceptionally great emotional involvement (or its opposite, in the case of sarcasm). This predictable functional contribution might technically be argued to align the expletives with inflectional morphology (cf. Bybee 1985), even though with respect to most other criteria, they would clearly fall toward the derivational end of the cline. However, this distinction will not be relevant to the present account because I will argue that expletive insertion is not a process of affixation at all.

In a second context, the expletives rather serve to convey the attitude of the speaker toward the relevant proposition and/or the speech situation, as noted by Aronoff (1976: 69) and Mattiello (2013: 192–3). When employed in that function, words containing an inserted expletive can often be replaced by the particle *yes*, as illustrated in (8) and (9) with *abso-fucking-lutely*. The following examples are from COCA.

(8) Did I watch it? Abso-fucking-lutely!
(9) Want a ride? – Abso-fucking-lutely!

Alternatively, it might be argued that there are two homophonous classes of inserted expletives: one that only marks intensity and one that (also) contributes a modal-like meaning. Yet, since the morphological behavior is identical across the two functions, this question does not bear on the major points made below.

2.4 *The status of expletive insertion in morphological theory*

While the phonological analysis of McCarthy (1982) has not been significantly altered in the decades since, a comprehensive morphological analysis of expletive insertion is still lacking. This may be a consequence of arguments such as those advanced by Zwicky & Pullum (1987), who establish a distinction between 'plain' and 'expressive' morphology. Throughout their paper, English expletive insertion is one of the major examples to illustrate expressive morphology (alongside *shm*-reduplication, as in *transformation shmansformation*). Crucially, their main point is that expressive morphology cannot be used as evidence for claims about the theory of grammar (Zwicky & Pullum 1987: 338).

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The difference between plain and expressive morphology, which the authors do not consider to be gradient, relies on a number of properties (cf. Zwicky & Pullum 1987: 335–8). For instance, the use of expressive morphology is said to be playful, poetic, or ostentatious, which is not true of plain morphology.[5] Furthermore, expressive morphology is not sensitive to word classes in that it can apply to hosts from different syntactic categories yet never changes the category of those hosts. Zwicky & Pullum (1987) elaborate on the latter point by arguing that expressive morphology can equally apply to inflected forms, compounds and phrases, unlike plain morphology. In addition, grammaticality judgments are said to differ widely for structures that involve expressive morphology, whereas this is not the case for plain morphology. Their list concludes with the claim that expressive morphology usually brings about 'special syntax', but this notion is neither defined anywhere nor illustrated for inserted expletives.

Zwicky & Pullum's (1987) arguments are not beyond reproach. For example, they point out themselves that evaluative morphology (i.e. diminutives and augmentatives) may have an expressive function even though it is traditionally considered a part of the 'plain' component (see Zwicky & Pullum 1987: 338). Also, the fact that expressive morphology can apply to (inflected) words from different classes without bringing about a change of class is an attribute it shares with CLITICS, as pointed out by the same authors in an earlier paper (Zwicky & Pullum 1983). Yet, clitics have traditionally been treated as a part of core grammar as well, and Zwicky & Pullum (1987) do not suggest that that practice has been mistaken. Meanwhile, the claim that expressive morphology leads to more strongly diverging grammaticality judgments is not quantitatively supported, and of course the question of whether grammaticality judgments should be used in linguistic analysis at all looms large (cf. Bolinger 1968). Finally, the idea of 'special syntax' is too poorly developed to be applicable in practice.

Overall, then, Zwicky & Pullum (1987) seem to be driven by the need to explain away certain recalcitrant facts. Yet, even if expressive morphology truly *were* different, it would still be an interesting object of study, as Zwicky & Pullum (1987: 338) themselves acknowledge. Now, it is precisely the recalcitrant nature of inserted expletives that this article intends to shed light on. As such, its main aim is not to make general claims about the theory of grammar but rather to provide a more precise classification of a specific morphological phenomenon. This goal derives from the uncontroversial idea that linguists will ultimately have to account for every aspect and phenomenon of human language.

The general idea of 'expressive' morphology has also been taken up by later scholars, if under different guises. For instance, Mattiello (2013) provides a thorough account of 'extra-grammatical' morphology in English, which includes expletive insertion. According to her definition, extra-grammatical morphology differs from core

[5] This idea is also echoed by Miller (2014: ch. 15), who emphasizes that expressive morphology is used and created deliberately. Presumably, this is taken to contrast with an 'automatic' use of plain morphology, which does not lend itself to conscious manipulation. If that is indeed the idea, though, there are reasons to question this line of argument as well (cf. Bauer 2001: 68).

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morphology in that the regularities found in the former component come about via relatively loose processes of analogy, whereas those in the latter follow from the application of rigid rules (e.g. Mattiello 2013: 20, 30, 198). With respect to inserted expletives in particular, she lists several of the points raised by Zwicky & Pullum (1987) in order to justify her classification. Crucially, though, she adds that the expletives differ from other potential and/or alleged infixes in English (for which, see section 4.2) in that the expletives can also occur as free words while expressing the same function as in the inserted cases (Mattiello 2013: 193–4). For the remainder of this work, I will adopt her analysis that free and inserted expletives are functionally equivalent, and I will indirectly engage with her formal analysis in section 3.2.

In sum, the few explicitly morphological accounts of expletive insertion are mostly concerned with pointing out that it is somehow different from the remainder of English morphology. Against this backdrop, the following sections will seek to spell out certain differences (and parallels) that have not been sufficiently discussed yet and that are of interest to several descriptive and theoretical issues.

3 Expletive insertion is not infixation

This section will outline why inserted expletives are not infixes. As such, it will radically depart from Bauer (1983: 90), who claims that 'there is no reason to call it [i.e. expletive insertion] anything other than infixation'.[6] My account will be based on three formal properties of the expletives, namely their structure, their status and their distribution. These notions will be explained and discussed in turn. At the end of the section, I will contrast the English expletives with a marker from another language, which behaves like an infix on all three of these parameters. Note that the discussion below will mostly rest on the expletive use of *fucking*, which is the item that accounts for the largest share of the available data (see Bauer 2015: 122).

3.1 The structure of inserted expletives

This subsection deals with the fact that the expletives are morphologically complex. This is particularly clear in the case of the two most commonly inserted expletives, *bloody* and *fucking*, which each consist of a lexical stem and the segmentable suffixes *-y* and *-ing*, respectively. While it might be argued that expletive *fucking* and *bloody* are lexicalized monomorphemic elements that simply happen to be homophonous with their segmentable ancestors, this idea can be rejected on functional and formal grounds. For instance, *-y* and *-ing* are affixes that often (or even predominantly) create modifying expressions, and since the function of the inserted expletives is to modify, it is plausible to assume that these affixes are part of the expletives. Also, inserted *fucking* alternates with *fuckin'* (see section 2.1) in the same way that the free expletive or verb form *fucking* does. Since this alternation is largely limited to this particular suffix, the

[6] As shown in (6), though, Bauer has since rejected this analysis.

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expletive is most likely made up of the same suffix as the free elements and is therefore morphologically complex.

The problem that this internal structure raises for an infixation analysis is that a single affix (and hence also a single infix) is conventionally defined as a single morph, i.e. as a minimal sign. This clearly emerges from the entries in standard linguistic dictionaries. For instance, Bauer (2004: 13) states that '[a]n affix is a type of obligatorily bound morph', while Crystal (2008: 15–16) posits that 'affixes are a type of "bound" morpheme'. Neither of these definitions seems to permit an interpretation on which a *sequence* of morphs could be a single affix, and this of course reflects the practice followed in the vast majority of linguistic descriptions. With regard to this issue, Bauer (1988) proposes that a combination of multiple formal processes that jointly express a single function be conceived of as a 'synaffix'. One relevant example of this type can be seen in *children*, where the plural morpheme is instantiated by the combination of a stem change and a suffix. Crucially, the main point of Bauer (1988) is to argue that synaffixes are not captured by the regular notion of affixation, which further suggests that the inserted expletives are not affixes (cf. also McCarthy 1982: 579, 580; Miller 2014: 246; Bauer 2017: 17; Kalin 2022: 645).

Finally, the internal morphological structure of the expletives is also intricately bound up with their insertion point. That is, since the usually monosyllabic roots of the expletives are stressed and the monosyllabic suffixes of the expletives are unstressed, the latter items guarantee that a pretonic insertion point of the expletive does not lead to stress clash. The avoidance of stress clash is a major structural principle in English (e.g. Schlüter 2005), which might explain why there are few simplex and monosyllabic expletives among those that can be inserted (with *damn* as a possible exception).

3.2 *The status of inserted expletives*

By the 'status' of the inserted expletives, I refer to their position within the linguistic hierarchy, especially to the question of whether they are free or bound. This argument will center on two claims that are presumably accepted by all linguists. The first claim is that infixes are a subtype of affix, like prefixes, suffixes and circumfixes.[7] This is the classification explicitly adopted by Bauer's (2004: 13–14), ten Hacken's (2005: 12) and Crystal's (2008: 16) dictionary entries. The second claim is that affixes are by definition morphologically bound to a specific word class (see section 3.3 for references and discussion). From the combination of these two claims, it follows that, in order for the expletives to be considered infixes, they would have to be morphologically bound. Yet, it is obvious from the following examples, again drawn from COCA, that *fucking* in its expletive function is not bound. As mentioned in section 2.4, I will assume that the intensifying function of the free forms of *fucking* in

[7] Note that the term 'infix' is sometimes applied to non-peripheral prefixes or suffixes (as pointed out by Jensen 1990: 24, fn. 2; Moravcsik 2000: 546; Ultan 1975: 159). This is an unnecessary source of confusion. However, since the expletives are not affixes of any kind, this will not impact the overall analysis.

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(10) and (11) is the same as the one that it contributes in inserted position; see Mattiello (2013: 194, 196); Bauer (2017: 17) for support.

(10) The Most Important Election of Our Generation was in 2000, and we completely fucking blew it.

(11) He's a fucking used car salesman, recycling old shit and pretending it's something new and awesome.

In (10), expletive *fucking* occurs as part of the predicate, following an adverb and preceding a finite verb. Meanwhile, in (11), expletive *fucking* acts as a modifier within an NP, following an article and preceding a complex noun. This clearly shows that expletive *fucking* is not bound to other words or word classes in the way that actual affixes (like the rigidly noun-final plural *-s*) are. If anything, the above data illustrate that *fucking* in its expletive use is particularly mobile and thus very different from a real affix.[8]

At this stage, it is useful to discuss how the connection between inserted expletives and infixation might have arisen even though the structural facts presented throughout this section clearly argue against it. Presumably, this conflation has to do with the fact that the insertion point of the expletives is governed by the same phonological principles that determine the location of actual infixes (for which, see Anderson 1990: 21; Stump 2001: 711; Bauer 2004: 54–5; Yu 2007: 10; Stewart 2016: 25; Beck 2017: 332). As outlined in section 2.2, the expletive is typically placed before the syllable in the host that bears stress. In those cases, then, the location of the expletive is blind to morph boundaries within its host and may thus introduce the otherwise marked phenomenon of discontinuous morphology 'by accident'. It is this prioritization of phonology over morphology that may lead to an intramorphic position, as in the case of actual infixes (but see Bauer 2015 for the factors that impact the choice between phonologically and morphologically determined insertion points for the expletives).

3.3 *The distribution of inserted expletives*

The point at issue here is closely related to the one addressed in the preceding subsection. Specifically, even if one were to argue that the syntactically free expletives in (10) and (11) are functionally different from the inserted variants in some way, the inserted expletives are still less restricted in their syntagmatic patterns than real affixes are. This is due to the range of word classes in which they can occur. As will be recalled from section 2, the inserted expletives can, at the very least, perform the same function across nouns (*prebloodydicament*), adjectives (*unbefuckinglievable*), and adverbs (*absofuckinglutely*).

[8] An anonymous reviewer holds that there are many affixes that also occur as free forms, using pronouns as an example. However, free and bound pronouns typically differ in their usage as well as in their form in that the free form is stressed and used for emphasis, unlike the bound form (cf. Siewierska 2004: ch. 2). Such alternations would thus not be analogous to the behavior of the expletives. Yet, even if they were, this does not mean that the items subject to such alternations would be adequately described as affixes given that definitions of the latter typically include the very fact that they are bound (see section 3.1).

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Due to this freedom, inserted expletives do not behave like inflectional affixes. Yet, they do not behave like derivational affixes either because English derivational affixes that can occur with stems from different categories typically determine the class of the resulting form. Examples of this are *en-* and *-ize*, which convert nouns and adjectives into verbs (e.g. *entomb*, *endear*, *lionize*, *polarize*). By contrast, the inserted expletives do not determine the category of the word form in which they occur; *unbefuckinglievable* is an adjective like the corresponding form without the expletive, and *prebloodydicament* is a noun just like *predicament* itself is.

Given this conundrum, one might posit that the expletives are endoclitics instead (see Harris 2002). This concept refers to elements that phonologically behave like infixes but can occur inside hosts from different classes. And since clitics are typically conceived of as syntactic units (see Zwicky & Pullum 1983: 503), they crucially do not change the word class of their hosts. Yet, while this analysis seems appealing on the surface, it also misses the mark. This is because the expletives that can be inserted have an internal morphological structure, as discussed in section 3.1. However, clitics are also understood as minimal signs. This fact is perhaps so widely assumed that it is rarely explicitly mentioned. Hence, the best way to gauge that this is indeed the standard assumption is the posited existence of CLITIC CLUSTERS (see Spencer & Luís 2012: 112–26). Put differently, if individual clitics could be internally complex, the concept of clitic clusters would be redundant. It thus follows that the expletives cannot be clitics, which eliminates the possibility of an endoclitic analysis.

Based on the discussion in this subsection and the preceding one, it can now be summarized that the expletives behave like words on the criterion of NON-SELECTIVITY. The notion underlying this term has traditionally been used to distinguish words and clitics on the one hand from affixes on the other (see Haspelmath 2011: 45–7). Specifically, the idea is that affixes are bound to words from a single word class (selective), whereas clitics and words can occur with words from multiple categories (non-selective); see also Spencer & Luís (2012: 1); Zingler (2022a). As shown, the expletives are clearly not limited to co-occurrences with a specific word class and thus violate one of the central criteria used to define affixes. (That they cannot occur with function words, as pointed out by a reviewer, presumably owes to the fact that the vast majority of function words simply do not have the required phonological structure to permit an insertion.) On the other hand, the expletives are not clitics because they are morphologically complex. In section 4, I will propose that this apparent stalemate can be resolved by analyzing the insertion constructions as compounds.

3.4 Interim summary

So far in this section, I have argued that inserted expletives are not monomorphemic, not morphologically bound and not tied to a single word class. Each of these facts independently argues against an infix analysis, but their conjunction does so particularly strongly. That is, even if affixes and infixes are understood as prototypical

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categories (which they should be), the inserted expletives are too far removed from those prototypes to merit those labels.

At this point, it might be helpful to illustrate an instance of an actual infix so as to render the difference between infixes and the inserted expletives maximally clear. The example in (12) is from Wayana, a Cariban language spoken in northern Brazil, southern Suriname and southern French Guyana (ISO 639-3: way). Like the expletives, the inserted item occurs intramorphically and expresses intensification (translated here as 'really'). But unlike the expletives, this marker can only occur in adverbial roots (da Silva Tavares 2005: 116), specifically after the first open syllable of the root (da Silva Tavares 2005: 407).[9] Due to this combination of facts, the Wayana intensifier has both the status and the distribution of an infix. And since the relevant item consists of a single consonant, it is almost inevitably a single morph and thus also has the internal morphemic structure of an infix (which is to say, no morphemic structure at all). On that analysis, then, the Wayana intensifier satisfies precisely the three criteria that are necessary for an infix analysis and that the English expletives violate.

(12) (a) ipok (b) i <h>pok
<REALLY> good
'good' 'really good' (da Silva Tavares 2005: 407)

The next section will argue that it is best to separate straightforward infixation as found in Wayana from the kind of process observed in English expletive insertion. In addition, I will suggest that the latter is an even greater challenge for morphological analysis than regular infixation of the Wayana type.

4 Expletive insertion is compounding

In this section, I will argue that English words containing inserted expletives are compounds, and I will outline why such an analysis is more satisfactory than one on which these words contain infixes. As such, the argument outlined in this section will be diametrically opposed to McMillan (1980: 166), who with respect to expletive insertion states that 'compounding is clearly not the process at issue'. He arrives at this conclusion because a compounding analysis would require the recognition of discontinuous members within compounds and because it would complicate the stress rule for compounds. Apart from the general question of whether such concerns about 'elegance' or 'economy' should bear on scientific analyses, the latter argument seems irrelevant because English compound stress is less homogeneous than commonly stated (e.g. Plag *et al.* 2008; Bauer 2017: 126–32; Carstairs-McCarthy 2018: 65–6). Hence, it is not the case that a compounding analysis of the expletives would undermine an otherwise neat and exceptionless pattern.

[9] Note that the root in example (12) is translated as an English adjective. However, this does not mean that the Wayana intensifier can actually occur in adverbs *and* adjectives, in which case it would also be non-selective and violate the distributional principles of an affix. The explanation is rather that no separate class of adjectives is described for Wayana (da Silva Tavares 2005: 113), and hence the issue is purely terminological.

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4.1 *Defining the terms*

As in previous sections, it will be helpful to look at standard definitions of basic grammatical terms to support the analytical strategy advocated here. With regard to compounds, Crystal (2008: 96) states that they consist of two or more free morphemes, and one of the compound examples he offers is *washing machine*. Similarly, Kortmann (2020: 63) defines compounding as a process in which two or more free morphemes create one complex lexeme, and one of the examples he provides is *computer nerd*. Finally, Leech (2006: 23–4) defines a compound as a 'word which contains two or more other words', and one of the representative examples he gives is *gas cooker*.

Focusing on the examples in the above paragraph, it is clear that the constituent words in English compounds can themselves be affixed. That is, *washing machine* contains the nominalizing/participial suffix *-ing*, whereas *gas cooker* and *computer nerd* contain the nominalizer *-er*. Each of the three compounds thus consists of two free morphs and one affix. Yet, since each component of a compound could potentially be (multiply) affixed, the exact number of affixes found in an English compound has to be left unspecified. Once this basic definition has been laid out, it can be seen that the structural template consisting of at least two free morphs and a variable number of affixes is also met by words with inserted expletives, such as *unbefuckinglievable* and *fan-fucking-tastic*. Hence, the structure of words with inserted expletives falls within the standard definition of compounds, whereas it violates the standard definition of affixes. The parallels between compounds as traditionally conceived and words containing inserted expletives are summarized in table 2.

To the extent that the expletives act as modifiers in these alleged compounds, this would explain why they do not impact their word class. More importantly, though, the obvious difference between the two types of compounds in table 2 is the order of the morphs involved. That is, in all recognized (English) compound types, the morphs occur consecutively, and an analysis on which words containing inserted expletives are compounds is thus required to posit a novel type, in which the expletive interrupts the non-expletive. I propose the term DISCONTINUOUS COMPOUND for this novel type. While the overall phenomenon also calls to mind the NON-CONCATENATIVE morphology of Semitic, there are reasons against using that term here. Specifically, Beck (2017: 341) reserves that label for the range of processes that do not add but rather manipulate material in the root, as in cases of ablaut. This is of course not the kind of process in question here, which is clearly additive in nature.

Table 2. *Structural parallels between compounding and 'expletive infixation'*

Traditional term	Word 1	Word 2	Affix(es)
Compounding	*wash*	*machine*	*-ing*
'Expletive infixation'	*fuck*	*absolute*	*-ing*, *-ly*

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4.2 *Benefits of the proposal*

One argument in favor of the above analysis is straightforward. Describing expletive insertion as 'infixation' is self-contradictory because infixes are affixes but the inserted expletives are words. By contrast, the concept of discontinuous compounding might be novel, but it is logically possible and follows from the consistent application of established terminology.

Yet, there are also more substantive reasons for the proposed analysis, one of which concerns the behavior of so-called PHRASAL COMPOUNDS like *run-of-the-mill* or *dyed-in-the-wool*. Each of these consists of multiple phrases, but they can nevertheless be used attributively, just like simplex adjectives. (Constituency tests would show that the head nouns themselves are not part of the compound.) In the following two examples from COCA, *run-of-the-mill* could be replaced by *casual*, while *total* could be substituted for *dyed-in-the-wool*.

(13) It doesn't seem like that big a deal, the sort of run-of-the-mill ignorance I've gotten quite used to with this president.

(14) Unless you're a professional athlete, coach or dyed-in-the-wool fitness enthusiast, I'll bet you agree.

Crucially, *run-of-the-mill* seems to have internal syntax while functioning like a single modifying word. This, of course, is an unexpected combination of attributes. Yet, in conjunction with the inserted expletives, which are also syntactic units that form part of a morphological structure, this might testify to a larger pattern. Specifically, the interaction of morphology and syntax in English may be such that it gives rise to several otherwise 'marked' compounding structures, and there is a possibility that the loose boundary between these two levels leads to mutual reinforcement of such structures.

The second compound type that bears on the present argument concerns pairs that are largely or entirely semantically equivalent and in which one member is a compound consisting of a verb preceded by a preposition/adverb/particle and the other is a syntactic combination of the same elements in the opposite order. One example is *downplay* vs. *play down* (see Bauer 2017: 139). What is relevant to the present account is that such pairs show that there is a degree of positional flexibility in English compounds. That is, while the expletives illustrate that morphs may be interrupted even though they usually are not, the particle verbs show that morphs may assume different positions relative to one another even though this is not generally an option. Hence, these examples, too, strengthen the claim that English compounding is a domain of unexpected formal freedom (or more strongly: of formal idiosyncrasies).

The idea that the idiosyncratic nature of expletive insertion aligns this phenomenon with compounding finds particularly strong support in comparative work on the topic. Based on a number of structural tests, Berg (2012) shows that English compounds are considerably more phrase-like (i.e. less 'cohesive') than German compounds. Crucially, Berg (2012: 28) extends this general idea and argues that expletive insertion illustrates that English morphs are also less cohesive than their German counterparts, given that

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there are no structures targeting intramorphic positions in German. As such, expletive insertion would indeed seem to fall out from a much more general English pattern, which is the relative lack of cohesiveness of its structural units (see also Berg 2014 for an expansion of this idea). Berg (2012, 2014) ultimately explains this property of English with reference to its impoverished inflectional morphology, and the comparatively low number of languages with similarly little inflection might then help to explain why phenomena such as discontinuous compounds are so rare cross-linguistically (see section 4.4).

In case these parallels between discontinuous compounding and some of the well-established compounding types are still felt to be insufficient to accept the former type, it might be instructive to spell out the alternatives. If the most offending aspect about the idea of discontinuous compounds is that they rely on the notion of discontinuity (see McMillan 1980: 166), it has to be reiterated that an infixation analysis would do the same because infixes also divide other morphs, by definition. Hence, the question is not whether an adequate and comprehensive description of English could do without the notion of discontinuity at the morphological level. The expletives as well as ablaut patterns as in *sing-sang-sung* show beyond doubt that this is inevitable. And at a broader level, the classification of the expletives as infixes renders the term 'infix' ambiguous at best, given the influence that English has on linguistic analysis in general and the impact that expletive insertion has had on the study of infixation in particular.

Another example may help to illustrate the general point at stake. Givón (1993: 59–60) suggests that many English monomorphemic prepositions as well as most determiners are 'prefixes'. If accepted, this analysis would require a major reconsideration of English morphology. That is, the language is traditionally assumed not to have any inflectional prefixes, but if the prepositions and determiners were analyzed as prefixes, they might have to be seen as inflectional in light of their highly grammatical(ized) status. Hence, an imprecise use of terminology can have major repercussions for linguistic description. While Givón's (1993) analysis represents a minority view, the idea of 'expletive infixation' has been widely accepted. But the claim that English has determiner prefixes is every bit as unfounded as the idea that it has expletive infixes, and hence both analyses should be discarded.

Finally, English has also been claimed to have infixes other than the expletives. This raises the possibility that an infixation analysis of the expletives might be embedded within a larger context after all, both empirically and theoretically. The putative additional infixation processes are described by Yu (2007). One of them, which he calls 'Homeric infixation', inserts a syllable *ma* into morphs and was reportedly put to prominent use on the TV show *The Simpsons*. The other process is called 'Hip Hop *iz*-infixation' and inserts a syllable *-iz* into morphs. This seems to be restricted to lyrics of the eponymous musical genre. In both cases, however, it is unclear what kind of functions these syllables might express in words like *viomalin* or *sizoldiers* (see Yu 2007: 1). That is, these two elements may well satisfy all the formal requirements of infixes, but if they do not have consistent and describable functions, they are not form–meaning pairings and hence not affixes. (And note that a lack of function seems

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somewhat likely in a musical context, where the extra syllable might simply be used to meet a metrical requirement.) As it stands, therefore, these constructions do not seem to provide independent support for an infixation analysis of the expletives. Rather, these units might have to be termed 'formatives', which Bauer (1983: 16–17) defines as distributional segments that recur across word forms but may not be morphs (such as the linking 'fugue' elements in German compounds).

4.3 Cognitive and diachronic perspectives

The question remains as to how the phenomenon of discontinuous compounding may have come about, though it needs to be emphasized that what follows is perforce mostly speculative. One conceivable path is based on the kind of prosodic conditions that were the focus of McCarthy (1982) and briefly referred to in section 2.2. Specifically, the most token-frequent English words are monosyllabic, with the other most frequent ones no longer than disyllabic (Minkova & Stockwell 2006: 467; Minkova 2014: 40–1). On an exemplar approach (e.g. Bybee 2010), according to which the mental representation of linguistic units is shaped by their usage (frequency), this would be predicted to lead English users to the generalization that a word does not extend over more than two syllables. In addition, it is crucial that many short words in English are grammatical and do not bear stress, whereas most English words that do have stress bear it on the initial syllable (cf. Cutler 1987; Harley 2006: 78–9).

Taken together, these facts suggest that, in the mental representation of English users, the non-initial, pretonic position at which expletives are inserted might correspond to a boundary between an unstressed grammatical word and a following stressed lexical word. It is noteworthy that the free variants of the expletives are common in that prosodic environment. COCA, for instance, contains many instances of *what a bloody waste* or *this fucking guy*, where the expletive follows (an) unstressed syllable(s) and immediately precedes a stressed one. Hence, expletive insertion might ultimately derive from a kind of 'prosodic reanalysis', whereby the intonational pattern of *what a bloody waste*, etc. was mapped onto *bloody absolutely* to give *absobloodylutely*, thus relocating the expletives from the syntactic to the morphological level. Note that this idea is perfectly compatible with McCarthy (1982: 579). He points out that positioning the expletives before a prosodic foot (as is the case on his account) would often be equivalent to placing them before a phonological word. Of course, it is precisely this type of structural ambiguity that gives rise to reanalysis.

Yet, given the low frequency of expletive insertion (see section 2.1), the retention of morphemic integrity seems to be a much more important factor in language processing than are phonological word templates or the analogical pressures they may create. Obviously, this also tallies with the fact that true infixation tends to be a rare process even in the languages that have it. Some of these ideas will be taken up in the next subsection. For now, the emergence of expletive insertion appears to be another case in which certain necessary aspects of an explanation might be found but in which sufficient conditions seem out of reach.

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4.4 *Typological aspects*

Finally, the question arises as to how many other languages have discontinuous compounds. Unfortunately, this is rather difficult to answer because constructions analogous to the inserted English expletives would probably not be classified as compounds in most descriptions. Hence, it must suffice for the time being that Bauer (2017: 17–18) explicitly points out the apparent cross-linguistic rarity of the phenomenon and that Miller (2014: 244) claims that 'language play [in English] can insert entire words, which is not part of core morphology in any natural language'.

The latter claim notwithstanding, I am aware of one credible instance of discontinuous compounding in another language. The relevant evidence comes from Cuiba, a Guahiboan language spoken in Colombia and Venezuela (ISO 639-3: cui). The existence of this example is crucial to the description of the English expletives because claims that any given phenomenon is unique to a single language are usually based on flawed analyses. Furthermore, the construction in question does not show any of the properties that might suggest that it falls outside the domain of 'core' or 'plain' morphology. If it really does not, Miller's (2014) above-cited claim would seem to be falsified, and the entire distinction between plain and expressive morphology would be further eroded (see section 2.4). The relevant token of discontinuous compounding involves noun incorporation, a subtype of compounding (Beck 2017: 328), and it is given in (15). Note that this construction is described as infixation in the source. The structural details will be discussed below.

(15) a–cobe–tane
hurt$_1$–hand–hurt$_2$
'His hand hurts.'
(Aikhenvald & Dixon 1999: 376)

The verb form in the above example is described as *atane*, which suggests that the noun *cobe* is inserted within the verb root. However, the source does not provide any further information about the morphological structure of these elements, and so the example has to be treated with caution. On the one hand, it might be that *cobe* is actually an affix, given that LEXICAL AFFIXES – i.e. formal affixes with lexical meanings – are attested, especially in the Americas (see Mithun 1997). On the other hand, it is conceivable that the verb is/was morphologically complex, with the initial *a* perhaps an eroding prefix. In the former case, (15) would simply show a case of infixation, whereas in the latter case the noun might occur at a (weak) morph boundary, which would render the overall structure similar to *im-bloody-possible* in (2). If both of these caveats turn out to be true, (15) would simply constitute a stem with two prefixes. Put differently, (15) is only a discontinuous compound if both of the caveats are unjustified. Yet, while these issues cannot be further investigated here, the idea that (15) shows an incorporating construction is somewhat bolstered by the fact that verbs with the meaning 'feel pain', of which *atane* appears to be a clear-cut instance, are frequently incorporating verbs (Olthof *et al.* 2021: 226, 228).

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If discontinuous compounds are indeed exceedingly rare in the languages of the world, the inserted expletives have considerable theoretical implications. First and foremost, they would mark English as a language with morphological structures not found in any of its relatives or in any of the numerous languages that it has been in contact with throughout its history. One reason why English of all languages has developed this feature might be that its words are significantly shorter than German words, for instance (Berg *et al*. 2012: 293). This might increase the likelihood of 'prosodic reanalysis' suggested in section 4.3. Yet, this idea would obviously need to be greatly substantiated (not least because Berg *et al*.'s 2012 count includes compounds, which might obscure the true length differences across Germanic lexicons).

In any case, it seems safe to conclude that the phenomenon discussed here is considerably rarer than infixation proper. While I know of no systematic catalog of languages that have infixes, the appendix in Yu (2007: 231–3) suggests that there are at least more than 100 infixing languages in the world. Meanwhile, Zingler (2022b: 203) finds infixes from 48 different languages just in the Americas. The discrepancy between those numbers and the number of languages that might have discontinuous compounds has interesting cognitive implications. Specifically, language users seem to cope better with affixes that interrupt morphs than with words that interrupt morphs. Given the general processing advantages that continuous (i.e. concatenative) morphology affords (see Cutler *et al.* 1985: 751–2), this would seem to follow from the fact that interruptions by a word will usually be longer than interruptions by an affix and that the former type thus constitutes a more severe deviation from the concatenative ideal (compare English *fucking* to the Wayana intensifier /h/ in (12)).

The rarity of discontinuous compounding could also be accounted for by probabilistic models such as those developed by Harris (2008; 2010). She argues that a structure is cross-linguistically infrequent at any synchronic stage to the extent that it depends on a large number of diachronic scenarios to emerge. One example that Harris uses to illustrate this idea is infixation. Infixes often derive from prior prefixes or suffixes, and infixes thus rely on one more diachronic step than these other affixes (i.e. the movement of the former prefix or suffix into another morph). Crucially, since diachronic developments can stop at any time, and the emergence of infixes takes longer than that of prefixes and suffixes, infixes arise less frequently than ADFIXES (i.e. peripheral affixes; see Plank 1999: 320 for this term). On the other hand, adfixation as such is of course very widespread, and this might explain why even infixation develops much more frequently than discontinuous compounding, whose structural prerequisites, whatever they are exactly, seem to manifest themselves but rarely.

5 Conclusion

I have argued that the insertion of English expletives into root morphs (as in *unbefuckinglievable*) is not an instance of infixation, even though much of the relevant literature describes it as such. My argument relied on the claim that the expletives are not infixes but words, which in turn owes to the fact that they are morphologically

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complex, not necessarily bound, and free to occur with different word classes. Instead, I proposed that words like *unbefuckinglievable* meet the definition of compounds, i.e. of words made up of several independent words including their affixes. However, unlike in well-known compounds, the constituent words do not occur in order because the expletive interrupts the non-expletive that it modifies. For want of an established term, I suggested the label 'discontinuous compound' for these structures. I subsequently argued, to the extent possible, that this kind of compounding is much less frequent cross-linguistically than actual infixation, which puts English in a rather unique position from the perspective of morphological typology. It might also be added here that English is particularly unusual in that it seems to lack actual infixation. Simply put, this undermines an intuitively plausible implicational relationship such that each language that inserts words into morphs also inserts affixes into morphs.

However, in order to arrive at substantive explanations for the behavior of the inserted expletives, a great amount of additional work will be required. First and foremost, diachronic investigations of the phenomenon would promise to provide a much better idea of the specific forces that continue to shape it than could be offered above. Ideally, the insights gained from such research would also be able to inform the synchronic workings of the process. Here, it should be highlighted again that all aspects of this construction other than its phonological behavior are underexplored. It is hoped that future work will seek to clarify these issues.

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