

THE *XED OUT* CONSTRUCTION: BETWEEN PRODUCTIVITY AND CREATIVITY

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1. INTRODUCTION

The *Xed out* construction, as in *I'm all coffeed out*, can be paraphrased roughly as “having done something to excess”. This very productive construction (Jackendoff, 2002, 2010) seems to have a maximally open slot and to have the possibility of being instantiated in an endless variety of ways, even though a few morphological constraints have already been formulated (Chang, 2004). However, most analyses in the literature, insightful though they may be, have come from intuition and are based on decontextualized, fabricated examples.

Relying on the observation of extensive corpus data, the aim of this paper is to contribute to a better understanding of the synchronic productivity of the construction and of the range of constraints that may limit it. This study is based on a corpus of written texts, mainly blogs and forums on the Internet.

In section 2, we start with some background assumptions and briefly discuss the corpora which have provided the data for our analysis. Then, in section 3, an overview of constructional productivity is presented. Section 4 is devoted to more complex phenomena that the analysis of the corpus has revealed. Finally, section 5 draws together the findings and puts them in a more general perspective.

2. BACKGROUND ASSUMPTIONS AND CORPUS

2.1. *A constructional idiom*

The *Xed out* construction is a “constructional idiom” in the sense of Jackendoff (2002). This means that one slot is lexically fixed (*out*) and another one is open (the *X* variable). It is through exposure to several different instances of a construction that speakers eventually abstract a schema and

form generalizations (Goldberg, 1995, 2006; Booij, 2010). This schema then functions as a starting point for coining new instantiations.

Goldberg warns (1995: 120) that “[...] many constructions are used somewhat productively [...] yet resist full productivity”. Extension to novel items can only be done within limits, in accordance with the specifications provided by the construction. Of course, the speaker remains free to overextend and manipulate a construction “creatively”, which raises the question of the necessary distinction between “productivity” as a regular, transparent phenomenon and “creativity” as “the native speaker’s ability to extend the language system in a motivated, but unpredictable [...] way” (Bauer, 1983: 63). This dichotomy has been challenged (Bauer, 2001), but we suggest that a cline should be maintained.

Studying the *Xed out* construction within a constructional framework also implies that the use and the meaning of the morpheme *-ed* only exist as parts of the construction. In the same way, although *out* is not a bound morpheme *per se*, it is a word with a specific meaning *within* this construction.

<Animate subject + *be* + BASE-*ed* + *out* >
 “having done something to excess”¹

We will assume that *-ed* is an inflectional morpheme, which entails that any base inserted into the construction has to be either a verb (prior to unification) or an entity turned into a verb by conversion. In most cases, the output does not become conventionalized.

Following from this, unlimited productivity, or as we want to prove, almost unlimited productivity, is expected since inflectional *-ed* affixes itself to virtually all verbs except irregular verbs and modals. If we argue that conversion is a syntactic mechanism, which is in line with constructional approaches, high productivity is not surprising as syntactic patterns are said to be predictable and rather exceptionless. Moreover, the fact that inflectional *-ed* does not affect stress location or the phonological shape of the base can also be viewed as a major encouragement for productivity (cf. Bauer, 2001: 51-54 on the relationship between transparency and productivity). Finally, as has been stated repeatedly in the literature (e.g. Don *et alii*, 2000: 949; Schmid, 2011: 199), conversion is the most productive verbalizing process in present-day English.

¹ The semantics of the *Xed out* construction is more complex than this basic gloss, but this will not be addressed in this article for lack of space.

Keeping these definitions and caveats in mind, we will now try to determine whether the *Xed out* construction really lends itself to unlimited extension and if cases of “creative” language use can also be detected beyond the more stable areas of the construction.

2.2. *Corpus and methodology*

Our evidence was drawn from large web-based corpora (freely available blog and forum corpora as well as two self-compiled corpora; an overview is provided in the reference section). This choice was mainly motivated by the fact that “the web is a source of evidence of the very latest trends in language use and of new coinages not found in standard corpora” (Kehoe & Gee, 2009: 256). Concordancing was used to find all the instances of the search string **ed out* corresponding to the *Xed out* construction as previously defined. Results were then manually edited and sources were thoroughly verified. Note that the morphological categorization of the base was an arduous task. For instance, in example (1), although the noun *party* is used four times in the previous context, *party* in *partied out* was categorized as both a noun and a verb as this unit instantiates both parts of speech in present-day English.

- (1) I feel like I’m gonna die, I’m just that tired. Parties parties parties!!!
 This whole week and last week have been parties galore! I’m partied out (...)².

The procedure yielded 857 tokens, which formed a sound, quantitative basis for analysis.

3. OVERVIEW

3.1. *Quantitative results*

In this subsection, we want to show that restrictions of a general kind operate on the construction. The frequency figures in Figure 1 clearly show that two types predominate: *N-ed out* and *V-ed out*. This confirms previous findings on the construction (Jackendoff, 2002, 2010). At the other end of the frequency ranking, adjectives (*cuted out*, *happied out*), function words (*iffed out*) and phrases also occur, but only marginally. Again this follows general trends: converted function words are restricted in their syntactic occurrence

² Original text was not changed when quoting the construction.

(*don't what-if me!*), and not all adverbs readily convert to verbs (locative particles can – *to down a drink* –, but manner adverbs cannot – **to slowly*).

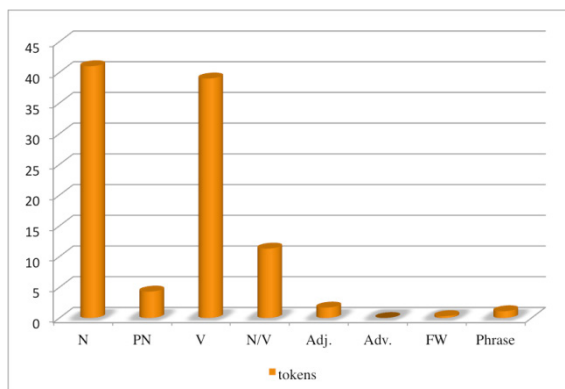


FIGURE 1. Distribution of tokens (in percent) according to word class (PN: proper noun; FW: function word)

What these figures suggest, however, is the increasing degree of openness of the construction to other syntactic classes. Concerning adjectives, the semantic and formal proximity of other conventionalized adjectival forms such as *tired out*, *pooPED out*, *drugged out*, *stressed out* may provide the impetus for a new series of *Adjective-ed out* formations.

Regarding the morphological make-up of the “base+*-ed*”, Figure 2 shows that monomorphemic bases of Germanic origin³ are strongly favored in all corpora. There is also evidence that derived bases are disfavored, but, concurring with earlier findings (Nevalainen, 2000: 428), suffixed Latinate bases seem to undergo conversion more readily, as is shown in (2). Finally, complex candidates such as lexicalized compounds (3) or free phrases which are constructed online (4) are also attested. Structural diversity is in no way surprising as it is a well-known feature of conversion to have very few syntactic restrictions, if any, so that simplex and complex words are in theory both acceptable inputs.

³ Hybrid combinations such as *gentleman* (Latinate + Germanic) defy strict categorization and have not been taken into account.

- (2) (...) we've also been faced with some tough decisions, and all this decision-making has left me feeling a bit decisioned-out.
- (3) All in all, I am Christmas partied out... and it has kept me busier than ever.
- (4) By that point I had started to feel a little interesting-animaled out (...), so trailed into the wildlife reserve without a great degree of enthusiasm.
- (5) I'm all CNN-ed out.

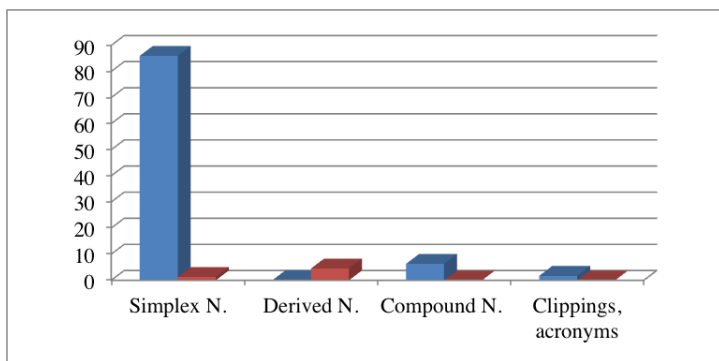


FIGURE 2. Distribution of Germanic (left) vs. Latinate (right) bases (in percent)

Finally, the construction is subject to size constraints: the size of the base *Xed* satisfies the “optimal size principle” of a lexical base, which is generally assumed to be one or two syllables (Dressler, 1981).

TABLE 1. Size of the “base + -ed” form in number of syllables

	Nb of syllables	Distribution of tokens (in %)
Non-derived and derived bases	1	51.1
	2	33.2
	3	7.7
	4	1.5
	> 4	0.1

	Nb of syllables	Distribution of tokens (in %)
Compounds	2	4.2
	3	1.3
	4	0.4
	> 4	0.5

3.2. Interaction between constraints

Restrictions do not work independently. For instance, the combinability of derived words with the morpheme *-ed* hinges on the application or non-application of a set of constraints. Table 2 summarizes a tentative explanation of how such an interaction might work – some restrictions inhibit unification with the construction (–) while others do not (+). For lack of space, only two affixes have been selected: *-ion* and *-ee*.

TABLE 2. Interaction between constraints. The case of derived words.

Suffix (w / nb of tokens in the corpora)	Semantics	Phonology	Syntax (N-to-V conversion)
<i>-ion</i> (4)	Process (+)	Stress on penult (+)	(+/-)
<i>-ee</i> (1)	Patient (–)	Stress on ult (–)	(–)

Table 2 shows that the constraints seem to converge to disallow the process of unification. For example, one instance of an *X-ee* base (*attende*) has been collected. How can we account for this isolated case in the corpora? First, prosodic structure might be affected since the suffix *-ee* is auto-stressed, so the resulting construction does not conform to an “ideal” prosodic scheme where stressed syllables alternate regularly with unstressed syllables: *attendeed out* /əten'di:d 'aut/ is not felicitous. Semantic restrictions may also have a say in the matter since *-ee* words do not denote an activity, which would satisfy the semantic properties of the construction (see section 2). Finally, this suffix is never used to form verbs (**she attendees every day*).

On the other hand, *-ion* nouns, as in example (2), are more easily favored: they can denote an activity or be coerced by the construction into having an event interpretation; in addition, stress is on the penult, which allows for stress

alternation. The only restriction would be that noun-to-verb conversion is not a common phenomenon with *-ion* nouns, which are deverbal nouns, but this restriction is only partial and might be weaker⁴.

We will now turn our attention to a few less straightforward cases that do not behave in a completely predictable fashion. Our exploration of constraint interaction will also involve pragmatic factors.

4. MORPHOLOGICAL VARIATION: CASE STUDIES

4.1. *Irregular verbs*

Logically, inflectional *-ed* should trigger irregular forms when an irregular verb is inserted into the construction. But this is not always the case:

(6) *Crap, now I feel obligated to write. But I'm all writed out today.*

(7) *I am all thinked out (bad grammar but I have lost the ability to think!)*

The occasional regularization of irregular verbal forms and the more general drive toward regularity in language may provide the beginning of an explanation. Irregular forms might also be preempted by existing forms (ambiguity avoidance). For example, *thought out* might be avoided because of the existence of a more entrenched *thought out* as in '*my plan was all thought out*'. However, irregular verbal forms do occur in the construction and are more common – *writed out* (2 tokens) vs. *written out* (5 tokens); *thinked out* (2 tokens) vs. *thought out* (4 tokens); *sleped out* (2 tokens) vs. *slept out* (3 tokens).

In fact, speakers may have to consider both options to fill the slot:

- either they choose to use a “regularized” form to leave the construction intact, *i.e.* analyzable and transparent, but to the detriment of grammar, as the metalinguistic comment in (7) humorously underlines;
- or they choose the irregular form but then constructional iconicity is lessened.

In the former case, the morphological analysis reveals two morphs, *think* and *-ed*, and the morphemic analysis two morphemes, {*think*} + {past participle}, as opposed to the latter case, in which there are one morph, *thought*, and two morphemes, {*think*} and {past participle}. But are there any

⁴There might be paradigm pressure effects caused by such verbs as *commission*, *audition* or *question*.

marked preferences? We hypothesize that in cases of weak suppletion (*sleep / slept*), phonological similarities between *-t* and *-ed* could be sufficient to allow speakers to use either form interchangeably (a case of free variation). On the other hand, in cases of stronger suppletion (*write / written*, *think / thought*), the “regularized” forms might be preferred to help construction recognition. However, a cautious *Google* search (the databases being too small for analyzing such variants), as well as consultation with informants, did not lend support to this claim. Preferences, if there are any, might be ascribed to the presence of the irregular form in the previous co-text. Measuring the effect of the co-text requires, however, complex psycholinguistic tests and measures which could not be carried out for the present study.

4.2. *Plural marking*

Brinton (2000: 92) notes that

converted forms will always take the regular, productive inflection, never a remnant or irregular inflection

as in *highlighted* vs. **highlit*; *walkmans* vs. **walkmen*. The preservation of the plural marking should then not be allowed in the construction, all the more so because lexemes and not word-forms instantiate it. This is true with *man* (*manned out* vs. ?*menned out*), but does not hold for *child* (4 tokens in our corpora):

(8) Some weeks I am just “childrened” out. Anywho—The pics were great and I marvel at your patience.

This may echo the fact that the historically strong ablauted plurals and weak plurals in *-en* tend to occur more freely in compounds and derivational formations than do regular or foreign plurals: *flea-infested* (but ?*fleas-infested*) vs. *lice-infested* (but ?*louse-infested*) (Bauer, 2006: 489-490). Euphonic reasons, on the other hand, may discourage the use of *menned out*. Once again, constraints play against each other to produce an optimal output.

4.3. *Consecutive identical morphemes*

The *-ed* morpheme may also be sensitive to the morphological structure of the base, especially if it ends in *-ed* itself (**amazeded out*). As recursion of identical suffixes is not allowed in English, a phenomenon akin to haplology is at work:

- (9) My husband and I have been flying with United for almost 12 years. To be honest, we're kind of "United" out.

Wicked in (10) fares much better:

- (10) This will be the third time I've seen *Wicked* and I must say I'm just about all *Wicked-ed* out.

Wicked-ed out is felt to be a derivational affix, to which an inflectional affix can theoretically be attached, whereas in **united-ed* two inflectional affixes are used consecutively.

4.4. Syntactic units

Two marginal (but by no means isolated) examples deserve our special attention⁵. They are utterly strange as they seem to violate the so-called *No Phrase Constraint* (Botha, 1983), which stipulates that syntax does not have access to the internal structure of words:

- (11) But right now I am feeling a little vacationed out. And a little childre~~ned~~ out. And a little familied out. And a little errands and logistics and bills to pay-ed out.
- (12) My buddy said "I don't know what I could do with all that time off, same with retirement, I have to have a schedule, something to do"! (...) I wanted to see what I've done and am going to do, perhaps a hint of things to come?? I'm toy-car boarded out, napped out, walked out, bicycled out, rental movied out, theatre movied out, magazined out, dog played out, cat chasing outed, remote control car playing outed, rumed out, beered out, Long Island Iced Teaed out, texted out, photographed out, youtubed out, huled out, grocery shopped out, beard growed out, partied out, new car looked out, soft porned out, hard porned out, nachoed out, bathroom fixed/painted out, cleaned out, argued out, pooped out and???

This is an unusual state of affairs: on the one hand, *-ed* is omitted after *errands* and *logistics* (11). On the other hand, it does appear after *bills to pay* (11) and is moved away from its base and attached at the end of the construction in *cat chasing outed* and *remote control car playing outed* (12).

⁵ The oddity of these examples, which are taken from our corpora, prompted us to contact their authors. Both responded and assumed responsibility for what they wrote.

This creates a sense of surface incoherence, but closer inspection reveals some regularity and patterning. By instantiating the construction in (11), *bills to pay* violates the No Phrase Constraint. But what else could have been done? Inflectional *-ed*, as a contextual inflection, is obligatory in that it is forced on the speaker by the syntactic context in which it occurs. This is clearly a case of “*ad hoc* stereotypification” (Hohenhaus, 2007): the No Phrase Constraint is suspended and even a free syntactic phrase can be treated as if it were part of the lexicon, on an *ad hoc* basis. The absence of *-ed* after *errands* and *logistics* is more puzzling as they are proper lexical units which can easily fuse with the construction. The *-s* ending may be a hindrance, but, more plausibly, the speaker views the whole sentence as a chunk of language, “holistically”, hence the appendage at the very end only.

The *-ed* in (12) may have been displaced because the combination (V-*ing* + *-ed* + *out*) is not felicitous (?*cat chasinged out*) even though it may be argued that *cat chasing* is almost nominal⁶. A word-order alternative, V-NP, as in **chasing catted out*, may not be satisfactory either, as it is unambiguously syntactic. The speaker has to fall back on another strategy: in *cat chasing outed*, the suffix may very well be “preferred” after the particle *out* to “improve” grammaticality. Of course, this last-resort solution remains hardly grammatical and reminds one of performance errors which show that inflections are often attached in the process of speech production. The phenomenon can be observed with adults and children (*wash-upping the dishes; I am sit downing!*. Aitchison, 2003: 128-129) or in deverbal agent nouns (*washer-upper, pick-me-upper*, Los *et alii*, 2012: 134).

Note that (11) and (12) emerge in specific patterns of talk such as (a) syndetic coordination. Repetition in excess of the same pattern may allow some structural constraints to be broken. In other words, it allows the writer’s creativity not only to be accepted but also to be seen as necessary and motivated in order to preserve euphony, to provide a pragmatically felicitous utterance, or simply to facilitate processing.

A few final remarks may be added about genre effects. By being unabashedly creative in (12), the forum user probably wants to achieve different communicative purposes to enhance group solidarity or to make his presence felt (Baym, 1999). Humor plays a key role. It emerges if and only if the reader perceives the difference between the “deviant” form and the prototypical version of the construction. The latter is presumably accessible

⁶ This illustrates Bauer (2003: 95)’s discussion over the blurry status of the *-ing* morpheme (derivational, inflectional, or hybrid?) in such sentences as *the shooting of the clay pigeons was dramatic*.

from one's mental lexicon (*i.e.* it is tacitly agreed upon) or retrieved from the previous co-text where it is perceptually accessible (*walked out, magazined out, etc.*). Differently put, an effect is achieved if the reader understands and accepts that the never-ending, self-dramatized series iconically satirizes the effect of dizziness and control loss that is felt when you experience too much of something. Morphological "creativity" is therefore purposeful and meaningful. It has interpersonal and social functions.

5. CONCLUDING REMARKS

The present article has provided empirical support for the hypothesis that the *Xed out* construction does not lend itself to unlimited productivity. The construction is indeed very promiscuous (a fact that was never denied), nominal and verbal bases being most common. Upon closer inspection, we found that it does exhibit certain tendencies and preferences and that novel candidates (adjectives, function words) may slowly extend its applicability. As was also seen, restrictions are often a mixture of phonological, morphological and semantic constraints, some of them being of a very general kind and others being more construction-specific.

We have conducted a small-scale study of selected complex cases that do not apply across the board to all the candidates filling the syntactic slots (*childrened out; thought out / thought out*). There are, however, massive deviations from general principles (*cat chasing outed*). They are closer to the creativity end of the productivity/creativity cline. But once again, this can only be done within limits: a lot of these odd cases are accommodated with contextual support. Moreover, most "ill-formed" constructions are coined for comic effect, maybe as "pseudo-morphological errors", and certainly as overt attention-seeking devices, especially in blogs and forums. All this makes it abundantly clear that the study of productivity and creativity should never be decontextualized, that some instances of creative use can be attributed partly to genres and that creativity *lato sensu* is a "demotic activity" (Carter, 2004: 109) involving several people.

More research is needed to pry apart the effects of genre and to confirm or disconfirm many of our hypotheses. For instance, the full significance of the results can only be appreciated through a comparison with multigenre corpora such as the *Corpus of Contemporary American English*. Discussing such transient and quantitatively elusive phenomena also shows that massive amounts of data are needed if we want to provide a complete picture of the construction.

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CORPORA

- Birmingham Blog Corpus (628 558 282 words) <<http://webcorp.org.uk>>
- Blog Authorship Corpus (> 300 000 000 words) <<http://u.cs.biu.ac.il/~koppel/BlogCorpus.htm>>
- Blogspot Corpus (106 000 0000) <vincent.hugou@univ-paris3.fr>
- Diachronic Web Corpus (blogs and forums / 128 951 238 words) <<http://webcorp.org.uk>>
- Forum Corpus (63 000 000 words) <vincent.hugou@univ-paris3.fr>
- LiveJournal Corpus (exact size unknown) <dylanglynn@englund.lu.se>
- Synchronic Web Corpus (blogs and forums / 467 713 650 words) <<http://webcorp.org.uk>>