

Martin Schäfer

Scare Quotes as Markers of Creative Word-Formation: A Look at English *-ness* and *-ity* Hapaxes

Abstract: Creative modification involves the conscious manipulation of existing patterns in language use. This paper investigates whether consciously used new word formations fulfill this definition of creative modification. Focusing on novel English *-ness* and *-ity* derivations, conscious usage is operationalized as occurrences in scare quotes, and the patterns in the large synchronic ukWaC corpus are compared to known patterns for new *-ness* and *-ity* derivations. Quoted hapaxes do not differ from unquoted hapaxes, but both differ from the patterns found in neologisms. This is in line with the idea that on the way from a hapax to an accepted neologism adherence to standard patterns is of more importance than in ad-hoc coinages, be they conscious or unconscious. As for the role of scare quotes, a closer look at the contexts in which quoted and unquoted hapaxes with phrasal bases occur suggests that their usage is sensitive to the relative creativeness of a new form more than to its departure from general language standards.

1 Introduction

The starting point of this paper are the observations in Filatkina (2018) regarding linguistic patterns that have achieved a high degree of fixedness and conventionality. According to Filatkina, these can either become subject to variation or to modification by the speakers of a language. In particular, she sees modification as occasional, and “as an irregular, intentional and conscious intervention of a speaker into the form and/or meaning of a pattern directed at the violation of the existing norms” (Filatkina, 2018: 26–27). I will follow Filatkina and refer to modifications thus defined as creative modifications. And while Filatkina developed her defining criteria on the basis of formulaic patterns, I will here strictly focus on word formation. The aim of this paper is to investigate whether consciously used new word formations fulfill this definition of creative modification. In particular, I investigate instances of English *-ness* and *-ity* derivations in scare quotes in a synchronic written corpus, cf. examples (1) and (2). Both examples are from the ukWaC, the corpus also used in the two studies presented in this paper.

- (1) *Flat-bottomed boats have an air of practical simplicity, and a feel of functional “**boatiness**” that contrasts sharply with modern styles.* [ukWaC]
- (2) *[. . .] there can be no adsorbed oxide layers or films of any sort ! This is where the ‘**plateability**’ of metals becomes a factor . Very corrosion-resistant metals such as titanium [. . .]* [ukWaC]

-ness and -ity derivatives are chosen because they are both productive and well-described. In addition, since as a pair they constitute an instance of affix rivalry, it is also of interest whether scare quotes are used in different ways for these two affixes.

2 Background and Expectations

The aim of this paper is to investigate quoted hapaxes of -ness and -ity derivatives against Filatkina’s (2018) definition of creative modification. Other approaches to creativity in language use are not considered here, and the reader is referred to the relevant literature (for example, Körtvélyessy, Stekauer and Kamár 2022 on creativity in word formation and Eitelmann and Haumann 2022 on extravagant morphology). In order to be able to assess the extent to which the quoted instances deviate from established patterns, the established patterns are introduced in the next two sections. Of particular importance to this study are not only the general patterns, but also the detailed descriptions of -ity and -ness neologisms in Arndt-Lappe (2014). Since these neologisms were extracted from the Oxford English Dictionary, they can be taken to represent the routinization of new forms and are therefore an ideal foil to assess creative modification. What makes looking at -ity and -ness so attractive is their similarity: prototypically, both turn adjectives into nouns. In addition, their prototypical semantic effect is very similar, if not identical, forming abstract nouns “with the meaning ‘state, quality, condition of –’” (Marchand 1969, for -ity on page 312 and for -ness on page 334). The differences emerge in the details, with -ness being applicable across different parts of speech, and with both suffixes having clear preferences for specific forms of adjectival bases. In addition, on hapax-conditioned productivity measures, -ness is more productive than -ity (cf. Baayen and Renouf 1996; Plag 2006). Of course, not all hapaxes are new words, but new words typically come into existence as hapaxes. Therefore, I expect in general more new derivatives with -ness and will therefore always start with this suffix, using -ity mainly for verification and control. This section starts with short overviews of both affixes in sections 2.1

and 2.2, section 2.3 introduces Arndt-Lappe's neologism data, and section 2.4 states the expectations for the current study.

Before looking at *-ness/-ity* in detail, a short note on the status of scare quotes. It is clear that these are used to mark novelty in word-formation (Renouf and Bauer 2000, Kaunisto 2013). But this is not their only function, they also mark meta-linguistic usages or non-literal and/or ironic usages (see Wislicki 2023). These other usages are put aside for the purpose of this paper, with only meta-linguistic usages playing a role: these are used as exclusion criteria in the process of data preparation (see section 3.1).

2.1 *-ness* Fact Sheet

Prototypical occurrences of *-ness* forms are shown in (3) (examples are either directly from British English corpora or other media as indicated¹):

- (3) a. *It's not **happiness** but sorrow that I'm looking for.* [BNC: A18 138]
 b. *If you lose **consciousness**, even for a second, then you have suffered brain damage and must withdraw from further competition.* [BNC: A0M 1368]

These are prototypical instances, because the base of the derivatives are the adjectives *happy* and *conscious*, and their meaning is paraphraseable by replacing the forms with *the state of being happy* and *the state of being conscious*.

One and the same form can develop other usages than those resulting from prototypical derivation, cf. (4).

- (4) *His **consciousness** delivers paranoid images of aggression and hostility.* [BNC: A05 1609]

Here, *consciousness* refers not so much to a specific state, but to the mind. Established and high frequency forms (cf. also *business* and *illness*) seem especially prone to developing such (additional) meanings. While the usage of an estab-

¹ Examples from the British National Corpus (BNC) show the BNC-identifier, ukWaC examples come without identifier as the corpus has no sentence-level identifiers. The BNC was accessed via the web- interface provided by Lancaster University: the CQP-edition (Version 4.4) of BNCweb developed by Sebastian Hoffmann and Stefan Evert (cf. Hoffmann et al. 2008; BNCweb is accessible via <http://bncweb.lancs.ac.uk/>).

lished form with a new meaning can also qualify as creative modification according to Filatkina's characterization, these are not considered in this study because the focus is on new forms, i.e. new products of word-formation.

The affix *-ness* is not restricted to adjectival bases. Only verbs and bound bases are excluded (Bauer, Lieber, and Plag 2013: 246). Examples for *-ness* on nouns, on phrases, and on prepositions are given in (5)–(7).

- (5) *Or has, rather, **animalness** developed through limitation out of humanness that was maturing toward its universality?* [ukWaC]

- (6) *I saw them at Hammersmith Odeon in 1978 and my mate and I went to the stage door and met Geddy – he was lovely, talkative and had the long hair we wished we could have. Think he's never lost that **good-bloke-ness**.*
[Guardian; <https://www.theguardian.com/music/2018/dec/24/geddy-lee-on-rush-greatest-songs#comment-124085787>, accessed 2018/12/25 00:38]

- (7) *Principle of **aboveness**: if one thing is above the other, it's perceived as better.* [ukWaC]

For nouns and phrases, Bauer, Lieber, and Plag (2013: 261) note that “*-ness* does not so much denote the state or condition of being the kind of entity denoted by the noun; rather, it highlights or picks out the significant characteristics that make the entity what it is, denoting the abstract quality or state of those characteristics.” Accordingly, *animalness* is paraphraseable by “the significant characteristics that make an animal an animal”, and *good-bloke-ness* by “the significant characteristics that make one a good bloke”.

The exact wording of prototypical meanings differs slightly across accounts. While Marchand has *state, quality, condition of* –, Bauer, Lieber, and Plag (2013) just use *state or condition of*. Arndt-Lappe (2014: 508) operationalizes semantic transparency of *-ness* forms by looking for the signal words ‘property’, ‘quality’, ‘state’ or ‘condition’ in their definitions. It is not entirely clear whether these different possibilities to paraphrase correspond to different meanings or are meant to correspond to different meanings or rather provide just alternative formulations for the same basic standard meaning. In contrast, Aronoff (1976: 38), in discussing X-ous-ness derivatives (*callous/callousness*), points out that they have exactly three different paraphrases, exemplified with his examples in (8).

- (8) a. reading 1: the fact that Y is Xous
His callousness surprised me. = The fact that he was callous surprised me.
 b. reading 2: the extent to which Y is Xous
His callousness surprised me. = The extent to which he was callous surprised me.
 c. reading 3: the quality or state of being Xous
Callousness is not a virtue. = The quality or state of being callous is not a virtue.
 Cf. Aronoff (1976: 38)

Aronoff (1976: 38, fn5) leaves it open whether these three paraphrases present separate readings or one “tripartite or ambiguous one”. Importantly, these readings can be related to one another, and all three appear to be standard interpretations. And as the usage of the same example sentence for the first two readings shows, they are not exclusive in the sense that one context necessarily leads to just one reading. These three paraphrases are not restricted to X-ous derivations, and again, sometimes it is hard to decide which paraphrase fits best, or whether just one of the meanings is intended, cf. *physicalness* in (9).

- (9) *And I remember ski places, those overheated rooms and the books that people leave behind them and the galvanic excitement of **physicalness**.* [John Cheever: Falconer (1977), p. 79 of the First vintage international edition, october 1991]

In (9), all three different paraphrases seem possible: *the galvanic excitement of the fact that it is physical/of the extent to which it is physical/of the quality or state of being physical*. Ultimately, the context determines the exact readings. Nouns and phrases can sometimes also have state readings, cf. (10).

- (10) *“That’s a privilege of **old manness**”* [Comedians in cars getting coffee, Season 1, Episode 9 I Want Sandwiches, I Want Chicken, at 4:30]

Overall, these differences highlight the general difficulty of giving one fitting overall meaning description, which, in turn, is also related to the same form allowing closely related usages. At the same time, all of these different paraphrases are examples of standard, prototypical readings for *-ness* derivations.

Morpheme-level and other form-level properties There are little or no absolute restrictions on possible bases for *-ness*, but there are, even within adject-

tives, its prototypical base category, clear tendencies and preferences for specific patterns at the morpheme level and below. These will be discussed together with the corresponding properties of *-ity* in section 2.2.

2.2 *-ity* Fact Sheet

Prototypical occurrences of *-ity* forms are shown in (11):

- (11) a. *Perhaps in a foul world these men were seeking **purity**.* [BNC: A8F 800]
 b. *It is difficult for a woman to understand a man's sensitivity to any slur on his **virility**.* [BNC: ACS 853]

The bases are adjectives, and paraphrase with *state/condition of* are possible: *Perhaps in a foul world these men were seeking a state of being pure/It is difficult for a woman to understand a man's condition of being sensitive to any slur on his state of being virile*. In contrast to *-ness*, *-ity* is much more restricted, with adjectival bases often taken to be the only free morphemes it combines with (Marchand 1969). Further, more *-ity* forms than *-ness* forms are high frequency lexemes and have idiosyncratic, lexicalized meanings (Bauer, Lieber, and Plag 2013: 257).

Morpheme-level and other form-level properties Early discussion of the morpheme-level and form-level properties of the bases pointed to an aversion of *-ity* to native bases (Marchand 1969: 314) or even claimed that it is restricted to just Latinate bases (Aronoff 1976: 51). Lindsay (2012), investigating google hits for 3256 potential rival pairs, arrives at a more differentiated picture when looking more closely at potential bases in terms of their endings: while *-ness* is overall more productive (in terms of its distribution across bases), *-ity* dominates in some subdomains. For example, bases ending in *-ing*, *-ish* and *-ful* occur only with *-ness* in Lindsay's data, but both suffixes occur to a considerable extent with bases ending in *-ous/-os* and *-ive*, and *-ity* is dominant for bases ending in *-able*, *-al*, *-ic*, and *-ar* (see also Anshen and Aronoff 1981 for experimental support of an *-ity* preference for *-able/-ible* bases). In other words, for some bases, *-ity* is preferred even if they are not strictly speaking Latinate as long as they are formed with a Latinate affix, like in the case of *drinkable/drinkability*, with its Germanic root *drink*.

Lindsay (2012) discusses this distributional difference in terms of a morphological constraint on *-ity*, but Arndt-Lappe (2014) points out that previous studies do not allow for a distinction between a preference for either suffix based on the morphological makeup of the base, or just the form of the base. To take just one

example, is the decisive feature for the status of the adjective *affective* as a potential base for *-ity* or *-ness* just its form, that is, its ending on the string *-ive*, or that it consists of a base and the morpheme *-ive*? Arndt-Lappe here points to the derivative *perspectivity* in her own dataset, since *-ive* in the base *perspective* does not have morphemic status. As this example already illustrates, it is rather difficult to find examples that would allow one to clearly distinguish between morpheme-based and form-based approaches.

2.3 Patterns in *-ness* and *-ity* Neologisms

The study by Arndt-Lappe (2014) on the *-ity/-ness* suffix rivalry provides overviews of the characteristics of *-ity/-ness* bases for twentieth-century neologisms in the Oxford English Dictionary (OED). This is a particular valuable resource, because it presents patterns that show up in new forms that made it into the language. I hypothesize that their patterns are more conservative and in line with prototypical word-formation processes than the typical occasionalism that is formed creatively. Of course, the adoption of neologisms to the pool of established derivatives also changes that pool itself, but the idea is that this change is a very gradual one, precisely because these neologisms tend to be not consciously-formed, creative formations, but result from a routine, plausibly sub-conscious, use of these affixes. In Table 1, I reproduce her Table 3, giving an overview of the syntactic category of the bases in the 344 *-ity* and 220 *-ness* derivatives in her set of twentieth-century neologisms. The category ‘minor category’ subsumes adverbs, prepositions and pronouns.

Table 1: Base categories of *-ity* and *-ness* derivatives in OED twentieth century neologisms, cf. Table 3 in Arndt-Lappe (2014).

syntactic category	<i>-ity</i> derivatives (n=344)		<i>-ness</i> derivatives (n=220)	
	n	%	n	%
Adjective	326	94.8	186	84.5
Noun	7	2	14	6.4
bound form	11	3.2	0	0
Phrase	0	0	10	4.5
minor categories	0	0	10	4.5

Table 1 very clearly shows that *-ness* takes a wider range of bases, including not only nouns and adjectives but also phrases and minor categories like adverbs,

prepositions, and pronouns. Of the two most frequent free bases, adjectives dominate for both suffixes, but much more clearly so for *-ity* which only shows 2% of nominal bases while *-ness* has 6.4% nominal bases.

Of the 512 adjective bases, 42 are without a suffix, while those 445 whose suffixes appear at least ten times distribute across the two suffixes as shown in Table 2. This distribution of bases and morphological classes within the adjective bases gives us a baseline to compare the quoted hapaxes against.

Table 2: Morphological categories of *-ity* and *-ness* adjectival bases in OED twentieth century neologisms, cf. Table 4 and Figure 1 in Arndt-Lappe (2014).

morph class	total	<i>-ity</i>	<i>-ness</i>
-ar	12	100%	
-ic	55	>95%	<5%
-able	109	>95%	<5%
-al	78	>95%	<5%
-ive	51	>70%	<30%
-ous	24	>60%	<40%
-ed	29		100%
-ing	12		100%
-ish	10		100%
-less	10		100%
-y	55		100%

2.4 Expectations and Hypotheses

The general expectation is that the quoted hapaxes are markedly different from the neologisms, either in their preferences for specific types of bases, or in their semantics. This expectation rests on the assumption that neologisms that are accepted into the language are typically not the product of creative, conscious word formation, but of more routine-usage of existing affixes in accordance with how they are regularly used. For the bases, this difference can emerge on the level of part of speech preferences, or, for adjectival bases, on the level of preferences for specific form patterns.

3 Study 1: Quoted *-ness* Hapaxes in the ukWaC

3.1 Materials and Techniques

All occurrences of *-ness* forms were extracted from the ukWaC, a web-derived 2 billion word corpus of English (Baroni et al. 2009; available via <https://wacky.sslmit.unibo.it/>). This corpus was chosen because it is, to my knowledge, one of the few freely available and annotated large corpora. Of the material made available, I used the full corpus without annotation, the version with part of speech annotation, and the unigram lemmata frequency list. For all further steps, R and Python scripts were used. These scripts and the final dataset of hits with their contexts is available at <https://doi.org/10.6084/m9.figshare.25549474.v1>.

To identify the hapaxes of interest, I proceeded as follows:

- A. I created a list of all *-ness* derivatives and their bases in the ukWaC. The list of ukWaC unigram lemmata and a second, POS-tagged lemmata list derived from the tagged ukWaC was used to identify all derived *-ness* forms and add their base lemmata. In the process of this, all *-ness* forms that did not have a base in the ukWaC were excluded. Further, forms that contained obvious artifacts (for example, starting with a hyphen) or proper names like *McGuinness* were excluded. In addition, lexicalized high-frequency *-ness* items like *witness* and *business* that often form the head of more complex words were used to exclude such more complex forms (e.g. *expert-witness* or *charity-business*). This yielded a list of 8785 *-ness* lemmata. This list contains overall 3758 hapaxes.
- B. Python scripts were used to extract all occurrences of quoted *-ness* forms from the tagged corpus. Any occurrence of a form ending in *-ness* and immediately preceded and followed by either single or double quotes was collected.
- C. The lists resulting from steps A and B were cross-checked so that only those items that are true quoted hapaxes remained, that is, lemmata that occurred only once, and that one time in scare quotes. For items in the quoted *-ness* hapaxes for which step A not already provided a POS-tagged base, a base and its POS tag were added manually.
- D. The identified target words were used to extract the contexts for the words from the tagged ukWaC corpus for further inspection and annotation of the targets.
- E. All quoted hapaxes were checked in their context. In the process of annotating the data, quoted forms were excluded whenever the quotes were used to indicate metalinguistic usages, as in (12), where the quotes indicate different translation possibilities for a specific word.

- (12) *There are many reminders of Germany’s new Unbefangenheit – a word that hovers untranslatably somewhere between “unencumberedness”, “relaxedness”, and “unbotheredness”. [ukWaC]*

Further, misspellings (*agressiveness* instead of *aggressiveness*) and spelling variants (*clueless-ness* besides *cluelessness*) were excluded, as well as one occurrence in the quoted hapaxes of the unrelated *-ness* suffix indicating female gender (*Solomoness*).

As a result, 214 hapaxes in scare quotes were identified, either in single or in double quotes, cf. (13).

- (13) a. *Judicious hedge grubbing can open up cast-off fields and create more regular patterns without destroying the overall ‘hedginess’ of the farm. [ukWaC]*
b. *The central theme of the day is to explore the value of flagships, the concept of “flagshipness” and its implications for industry, design and future research. [ukWaC]*

3.2 Results [Study 1]

The distribution of the base POS, against the numbers from Arndt-Lappe (2014, Table 3), is shown in Table 3 (see Table 9 in the appendix for the full list of hapaxes). The coding here reproduces the categories used by Arndt-Lappe, but note that in contrast to her data, the minor category is mostly (4 out of 7) made up of abbreviations and acronyms, cf. (14) for two examples.

Table 3: Base categories of *-ness* derivatives in the ukWaC quoted hapaxes and in Arndt-Lappe’s OED 20th century neologisms.

ukWaC scare quote hapaxes (n=214)		OED neologisms	
syntactic category	n	percentage	percentage
adjective	139	65	84.5
noun	59	27.6	6.4
phrase	9	4.2	4.5
minor category	7	3.3	4.5

- (14) *And no matter how many court rulings go against MS, the “**IEness**” is so entrenched into XP that it’s difficult for the average Joe User to escape.* (IE = Internet Explorer) [ukWaC]
- (15) *. . . certain operations and types of code, while RISC chips have grown in size and complexity while retaining a core “**RISC-ness**”.* (RISC = Reduced Instruction Set Computer) [ukWaC]

While the percentage of phrases and minor categories is similar, there is a clear difference in the two dominant categories of bases, nouns and adjectives. This difference is significant (Pearson’s Chi-squared test, X-squared = 33.022, df = 1, p-value = 9.112e-09).

For any patterns in the bases themselves, Table 4 shows the distribution of endings of the adjectival bases in the data corresponding in form to the suffixes reported by Arndt-Lappe, with the addition of *-ful*.

Table 4: Endings corresponding to morphological suffixes in the set of adjectival bases in the ukWaC *-ness* derivatives, ordered by frequency.

ending	frequency	percent
-y	39	28.06
other	33	23.74
-ed	31	22.3
-ish	7	5.04
-al	6	4.32
-ing	6	4.32
-less	5	3.6
-ive	4	2.88
-ic	3	2.16
-ful	2	1.44
-ous	2	1.44
-ble	1	0.72

If we just consider the three most frequent patterns, it is noticeable that: a) Adjective bases without an ending corresponding to a noticeable morphological pattern constitute 24% of the bases. b) Overall, the ranking is similar to the one in Arndt-Lappe’s dataset, with the same order of the two most frequent endings, *-y* followed by *-ed*, dominating the distribution.

As far as the meanings of the new forms are concerned, it was impossible to discern any special patterns. Since definitions of the meanings are not indepen-

dently available, the only viable technique was to explore whether paraphrasing with any of the paraphrases discussed in section 2.1 was possible or not. This was always possible. Especially, it was always possible to use one of Arndt-Lappe’s signal words for semantic transparency in the paraphrases. For example, *hedginess* and *flagshipness* in example (13) can be paraphrased with *the quality of being hedgy* or *the state of being a flagship*.

3.3 Discussion [Study 1]

The data so far suggests that the main difference between creative word formation in the sense of this paper and standard word formation, for which we used the OED neologism data, lies in the relative preference of creative formations for an unusual base, the noun. But there might be other factors at play that pave the way for a form to become an accepted neologism, and it therefore seems prudent to check first whether the unquoted hapaxes in the ukWaC pattern with the OED neologisms, or with the ukWaC hapaxes, or show yet another pattern. Table 5 shows the distribution across the non-quoted ukWaC hapaxes, against the distributions of OED neologisms and quoted hapaxes from Table 3.

Table 5: Base categories of *-ness* derivatives (in percent).

syntactic category	OED 20th century neologisms (n=220)	ukWaC scare quote hapaxes (n=214)	ukWaC hapaxes unquoted (n = 3544)
adjective	84.5	65	58.9
noun	6.4	27.6	34.5
phrase	4.5	4.2	2.1
minor category	4.5	3.3	4.5

Note that the difference in the percentage of phrases between the quoted and the unquoted hapaxes must be taken with a grain of salt. As explained in section 3.1, the quoted hapaxes were manually checked and the amount of phrases therefore maximized, similar in quality to the OED data. In contrast, the unquoted hapaxes were only checked against existing hyphenated or concatenated forms in the corpus, which likely leads to some misrepresentation of specifically this category, because the phrases are hyphenated or possibly concatenated in the derivatives but occur spaced outside of complex word forms. The differences across the two ukWaC datasets in the two main categories are small and not statistically significant (X-squared = 3.7643, df = 1, p-value = 0.05236), whereas the difference be-

tween the main categories in the unquoted hapaxes and the OED is again significant (X-squared = 72.617, df = 1, p-value < 2.2e-16).

What about the endings of the adjectival bases? In the unquoted hapaxes, there is again the category “other” in second place, with 21.26%. And the two dominant categories again are in the same order, with -y with 22.2% before -ed with 21.26%, cf. Table 6.

Table 6: Two top endings across the three -ness subsets with adjectival bases.

ending	OED neologisms	quoted hapaxes	unquoted hapaxes
-y	55	39	464
-ed	29	31	423

For the two most frequent endings, the difference between the two ukWaC subsets is not significant (X-squared = 0.30135, df = 1, p-value = 0.583), and the difference between the quoted ukWaC subset and the OED set is also not significant (X-squared = 1.53, df = 1, p-value = 0.2161). Only the difference between the OED set and the unquoted ukWaC hapaxes is significant (X-squared = 5.3452, df = 1, p-value = 0.02078). Note, however, that during manual correction of the coding for the ukWaC hapaxes it was noticeable that many bases in -y were automatically tagged as nouns. Since the tagging of the full set of hapaxes was not manually corrected, it is likely that the proportion of -y adjectives is actually higher, so I do not think this difference means much.

So far then, against the original hypothesis, the comparison of quoted and unquoted hapaxes in the ukWaC corpus seems to show that there is nothing special about the quoted hapaxes. That does not necessarily mean that there are no differences between the two datasets. Two issues that complicate the picture are the use of quotes for morphological explicitness and the role of the surrounding text. We will look at both in turn.

3.3.1 Morphological Explicitness: Avoid Doublets/Ambiguity

In a few cases, the usage of quotes occurs to make clear that other readings than existing ones are intended, without these readings themselves occurring to be particularly special. Two such examples are *bass-ness*, one of the quoted hapaxes, and *pointed-ness*, which occurs quoted but is not a hapax, cf. (16) and (17). In both examples, a hyphen is used in addition. It seems that both means, the quotes and the hyphen work together here: the hyphen indicates that it is a reading that is

different from another possible reading (cf. also Kaunisto 2013 on the usage of hyphens as indicators of special characteristics), and the quotes indicate that this makes it something special and it is not just a typo or spelling-variant.

- (16) *[It's] not as aggressive as the Snarling Dogs nor as wide as the Morley but it does help retain the “bass-ness” of your bass and it does a good job on those “Pulling Teeth”-style solos [ukWaC]*
- (17) *However, one diviner did not use this interpretation. He disregarded the “pointed-ness” of the cards, concentrating instead on whether the cards had been turned over; [ukWaC]*

Bass-ness can be contrasted with *bassness*, which does not occur in the ukWaC, but for which we find the dictionary definition *the quality of being low-pitched* (Collins English Dictionary²). That is, the base here is the relational adjective *bass*, whereas for *bass-ness*, it is the noun denoting the musical instrument, giving rise to the reading *quality of being a prototypical bass*. Similarly, *pointed-ness* contrasts with the established *pointedness* as *quality of having an end that comes to a point*, cf. (18).

- (18) *“Following a brief conversation, during which Hyde-Wollastone exhibited a number of interesting, though seemingly harmless fascinations, notably with toys and origami, the **pointedness** of his remarks concerning his financial influence led this agent to run a standard-Procedure exhaustive background check on him.” [ukWaC]*

In contrast, *pointed-ness* in (17) can be paraphrased as *the extent to which the cards were pointed*. While this reading uses a prototypical pattern, it clearly contrasts with the lexicalized standard reading of *pointedness*.

3.3.2 Phrasal Bases and the Role of Context

Yet a different factor emerges if we compare the nine phrasal quoted forms, cf. (19) with unquoted phrasal forms.

2 <https://www.collinsdictionary.com/dictionary/english/bassness>; last accessed 2023-09-14.

- (19) *broad-mindness, like-thisness, sugary-sweetness, to-be-heard-of-ness, to-be-looked-at-ness, too-much-ness, up-side-downness, when-where-ness, women-only-ness*
[all quoted phrasal -ness forms]

The nine formations show a variety of different phrasal constructions, so a first question is whether the set of unquoted phrasal forms is perhaps more limited in phrasal patterns. This does not seem to be the case. There are comparative phrasal bases of different kinds, cf. (20-a), and also patterns not shown in the nine quoted examples, for example verb-object, verb-particle, and preposition-pronoun bases, cf. (20-b). Beside the constructional variety, the phrasal bases in the unquoted set also show more colloquial elements like the constructions with *fuck-*.

- (20) a. *too-coolness, too-hotness, cool-as-fuckness, cooler-than-thouness*
b. *do-it-yourselfness, do-nothingness, fuck-off-ness, fuck-you-ness, up-itself-ness*
[selection of unquoted phrasal -ness forms from the ukWaC]

If we zoom in on the contexts of some examples, we note an interesting difference. Consider the *too-X-ness* forms first, with the quoted example in (21), and the unquoted examples in (22).

- (21) *He was particularly aware of how much of a break-through it was and large-minded enough to be quite satisfied with the result. Some Rindviecher (block-heads), as he called them, had clearly drawn “the wrong conclusions in their five-finger exercises on the pulse of British public opinion”. Evidently, there was the usual “**too-much-ness**” of German eagerness and too little knowledge of what the British are really like. [ukWaC]*
- (22) a. *Do you believe in rock n’ roll, can music save your mortal soul? Sure, but as Three One G gives it, it can also pulverize you, bear hug your guts into mush, and take your choirboy virginity with no promise of respect or love come morning. But that’s all hype and fan-drooling and gushing and who needs that? Facts: Three One G operates completely removed from the flaky, style-over-substance, **too-coolness** laid down by a lot of their peers’ labels. [ukWaC]*
b. *I was outside earlier and it was so hot that someone quite literally burst into flames before my very eyes. Well sort of. All right, not at all. They did sweat a bit, though, and go quite, quite puce, so I was worried. There’s nothing to do but sit on the sofa and enjoy the **too-hotness**. [ukWaC]*

An obvious difference is the general style of the context. For the quoted form, the language and style in the immediate contexts is a straightforward, no-nonsense prose style in which the *too-X-ness* form looks and feels out of place. Since, for want of a better word, it is used anyways, the quotes are used too indicate that stylistically this form does not fit. In contrast, the style of the two unquoted *too-X-ness* passages is almost flamboyant, mixing colloquial forms, unusual grammar and inventive language. The *too-X-ness* do not occur out of place in these contexts.

This role of the local context is also apparent if we look at the *fuck-X-ness* phrases, cf. (23) and (24).

- (23) *Man, there are so many ideas packed into this 8 track debut EP coming from The Bumblebees, a band whose members span continents and whose sound spans genres with such **fuck-you-ness** that the end result works like a dream. Sounding like early Beastie Boys/Beck/Missy Elliot/Timberland/The Hives/NERD and lord knows what else, White Printz is the culmination of a month long one mic/one take recording frenzy that saw each member of the 'bees collective stepping up and bringing to the mix their own individual take on the music in their heads. [ukWaC]*
- (24) *And by day, grey against the grey that passes for sky in Cambridge, the cranes are like cranes. Bird-like, long-legged, flapping in the wind. [. . .] The cranes are so improbably close to each other that they interact like some giant sculpture. [. . .] So they're not there as useful engineering tools, but as art. From afar, the cranes seem gracefully flimsy, until you cycle underneath them, when their hulking **fuck-off-ness** gives them the awesome majesty of a super tanker mowing down a dinghy in a shipping lane. [ukWaC]*

Both are embedded in very long sentences, and while the first one is more colloquial in style and contains also other unusual forms, like the forward-slash use in the next sentence, the second one prepares us for the unusual form more via its unusual, wildly creative imaginative prose. As one reviewer remarks, one could even question whether in such a context it is still a case of creative modification in Filatkina's sense, because the existing norms here could be seen as having already been shifted.

Across these examples, the common theme is that quotes are unnecessary when the surrounding text is already clearly creative and therefore full of conscious new combinations. In a way, the creativity of one specific form then becomes more a question of relative creativity in relation to the surrounding context than of creativity against the general standard norms of the language.

3.3.3 Other Factors

In at least one case, the quotes could plausibly simply indicate that attributing a property based on origin and/or ethnicity is considered as not politically correct. This example is *Fulani-ness* in (25)

- (25) *that most strikingly sets the Fulani apart from other peoples. It is the ethic or soul of “Fulani-ness”, and involves complex rules of interaction within Fulani society.* [ukWaC]

This is plausible because we find many instances of common formations such as *Britishness* in quotes, and often the function of the quotes seems to be to distance oneself from this concept, cf. (26) for a very clear example.

- (26) *I don’t really know where to start with Gordon Brown’s half-baked plan to celebrate “Britishness”. For a start what does Brown mean by “Britishness”? Does such a thing even exist?* [ukWaC]

All in all, there are therefore a number of suggestive differences between the quoted and unquoted hapaxes despite their overall similarity in their preferences for the part of speech of their bases. Whether these differences still obtain when looking at all unquoted hapaxes in detail must be left open here.

4 Study 2: Quoted *-ity* Hapaxes in the ukWaC

4.1 Materials and Techniques

Data extraction and annotation proceeded parallel to study 1, except that this time, I looked for *-ity* forms. Again, scripts and results are available in the repository accompanying this paper (<https://doi.org/10.6084/m9.figshare.25549474.v1>). Overall there were 7262 *-ity* lemmata, with 2634 hapaxes, of which 2591 were unquoted, and 43 quoted. In a marked contrast to the *-ness* forms, the quoted hapaxes contained a higher number of new *-ity* forms that were not the result of derivation but of other processes, notably compound formation and blends, cf. the examples in (27) and (28).

- (27) *cryptoidentity, cybercreativity, dot-density, launch-on-warning-capability, well-waterquality*

- (28) a. *coppertunity, honourtunity, operatunity; ecotricity*
b. *horsepitality, onfinity*

All examples in (27) are best analyzed as compound formations, with the right-most element being an *-ity* noun, all of which are well-established (*identity, creativity, density, capability, quality*). Similarly, all examples in (28) are best analyzed as blends, from the more conventional formations in (28-a) to those in (28-b).

Since only new derivations are of interest in this paper, these forms were excluded, leaving only 44 quoted *-ity* derivatives.

4.2 Results [Study 2]

Table 7 shows the distribution of the parts of speech of the *-ity* bases in percent, again in contrast to the OED neologisms and with the numbers for the bases of the unquoted hapaxes in the ukWaC corpus already added (see Table 10 in the appendix for the full list of hapaxes).

Table 7: Base categories of *-ity* derivatives (in percent).

syntactic category	OED 20th century neologisms (n=344)	ukWaC scare quote hapaxes (n=43)	ukWaC hapaxes unquoted (n = 2591)
adjective	94.8	74.4	68.4
noun	2	25.6	28.7
bound form	3.2	0	0
phrase	0	0	0
minor category	0	0	2.86

Note that while the quoted hapaxes did not show any bound bases, the annotation routine for the unquoted ukWaC hapaxes was not able to capture bound forms, as, in parallel to study 1, derivatives were only kept if the base occurred as a free form by itself in the corpus. The most notable result is that the quoted occurrences descriptively fall in-between the OED neologism pattern and the unquoted hapaxes pattern. If we only consider the two major categories of bases, the differences between the OED data and both ukWaC subsets are significant (OED vs. quoted: X-squared = 46.059, df = 1, p-value = 1.147e-11; OED vs. unquoted: X-squared = 114.24, df = 1, p-value < 2.2e-16). In contrast, the difference between the two ukWaC subsets is not significant (X-squared = 0.32167, df = 1, p-value = 0.5706).

Table 8 shows the distribution of endings across the 32 adjectival bases in the dataset.

Table 8: Endings corresponding to morphological suffixes in the ukWaC *-ity* quoted hapaxes, ordered by frequency.

ending	frequency	percentage
-ble	18	56.2
-al	7	21.9
-ic	3	9.4
other	2	6.2
-ive	1	3.1
-ous	1	3.1

The numbers are small here, with the two endings *-ble* and *-al* with 56.2% and 21.9% already accounting for 75% of the adjectival bases. Descriptively, the *-ble* and *-al* endings, in that order, are also the most frequent endings in the OED neologisms from Arndt-Lappe’s study, where we find overall 109 *-able* endings and 78 *-al* endings, with both endings almost exclusively (>95%) combining with *-ity* (see Table 2 in section 2 of this paper). In the unquoted *-ity* hapaxes, these two endings are also the most frequent, with 722 *-ble* bases and 379 *-al* bases within the adjectival bases. These two similarly dominate the distribution, with 40.6% and 21.3%, with the next most frequent ending, *-ic*, at 12.05% (213 bases). While I do not have the exact numbers for the OED data (they are not reported in Arndt-Lappe 2014), the difference between the quoted and unquoted hapaxes for these two top categories is not significant (X-squared = 0.44424, df = 1, p-value = 0.5051).

4.3 Discussion [Study 2]

The number of quoted hapaxes that are *-ity* derivatives is relatively small. Even so, study 2 shows overall the same pattern as study 1: as far as the part of speech of the bases is concerned, the ukWaC quoted and unquoted datasets, though descriptively less similar than the *-ness* datasets, pattern together against the OED neologisms. One other result that is only peripherally related to the general finding is that of the 43 *-ity* derivatives 26% have noun-bases. This is rather unexpected given that Marchand (1969) claims *-ity* takes only adjectival bases, and in Bauer, Lieber, and Plag (2013, p. 247), it is claimed that *-ity* occurs “only infrequently on nominal bases”.

5 Summary and Conclusion

The main aim of this article was to investigate whether consciously formed new word formations fulfill the definition of creative modification “as an irregular, intentional and conscious intervention of a speaker into the form and/or meaning of a pattern directed at the violation of the existing norms” (Filatkina 2018). Using quoted hapaxes as operationalization of consciously formed new forms, this is clearly not the case: When it comes to the distribution of the bases in terms of part of speech and the endings of the adjectival bases, there is no notable difference between quoted and unquoted hapaxes in the huge ukWaC corpus. For both suffixes, the unquoted and quoted hapaxes in the ukWaC corpus pattern together and contrast especially with the part of speech distribution across the bases in the OED. This is in line with the idea that on the way from a hapax to an accepted neologism adherence to standard, routine patterns is of much more importance than in ad-hoc coinages, be they conscious or unconscious. When zooming in on phrasal bases in the *-ness* ukWaC hapaxes, some other reasons for the usage of quotes emerged. When the context itself is standard prose, quotes are used to signal non-standard usages. However, when the linguistic context already is non-standard, no quotes are necessary since an unusual new formation is not unexpected in such a context. That is, it is not so much creativity in an absolute sense but relative creativity that is reflected in the use of quotes. In other cases, quotes seem to be used simply as explicit pointers to a non-standard internal structure in order to avoid ambiguity, or to indicate some distance to the appropriateness of the word-formation product as such.

The aim of this study was modest in focusing on one specific concept of creative modification, and investigating this concept through one of the functions, marking novelty, of one single formal marker, the scare quotes. Further avenues for research and open questions not only concern the interpretation of the data against other concepts of creativity and routine in word formation, but also a closer look of the interplay of scare quotes with other means of marking novelty and with other usages of scare quotes themselves.

6 Appendix

Table 9: Quoted -ness hapaxes in the ukWaC.

nessLemma	basePOS	baseLemma
ieness	abbreviation	ie
mmorpgness	abbreviation	mmorpg
risc-ness	abbreviation	risc
wodkness	abbreviation	wodk
adverbialness	ADJ	adverbial
altness	ADJ	alt
apparentness	ADJ	apparent
astoundedness	ADJ	astounded
audit-mindedness	ADJ	audit-minded
banklessness	ADJ	bankless
belarusianness	ADJ	belarusian
blaséness	ADJ	blasé
blinkeriness	ADJ	blinker
blue-whiteness	ADJ	blue-white
boatiness	ADJ	boaty
bohemian-ness	ADJ	bohemian
botheredness	ADJ	bothered
browiness	ADJ	browy
caring-ness	ADJ	caring
cheekyness	ADJ	cheeky
civilianness	ADJ	civilian
clanginess	ADJ	clangy
clawedness	ADJ	clawed
coensiness	ADJ	coensy
commensurateness	ADJ	commensurate
computer-friendliness	ADJ	computer-friendly
curriculum-embeddedness	ADJ	curriculum-embedded
cuspieness	ADJ	cuspy
customer-consciousness	ADJ	customer-conscious
differencelessness	ADJ	differenceless
disproportionateness	ADJ	disproportionate
dopyness	ADJ	dopy
drawlingness	ADJ	drawling
earnedness	ADJ	earned
earth-boundedness	ADJ	earth-bounded
earth-friendliness	ADJ	earth-friendly
elementalness	ADJ	elemental
emotionalness	ADJ	emotional
enculturedness	ADJ	encultured
entrepreneur-readiness	ADJ	entrepreneur-ready
establishedness	ADJ	established

Table 9 (continued)

nessLemma	basePOS	baseLemma
existlessness	ADJ	existless
family-centredness	ADJ	family-centred
far-out-ness	ADJ	far-out
fulani-ness	ADJ	fulani
gaelicness	ADJ	gaelic
gappiness	ADJ	gappy
goddishness	ADJ	goddish
handmadeness	ADJ	handmade
hedginess	ADJ	hedgy
high-level-ness	ADJ	high-level
holier-than-thouishness	ADJ	holier-than-thou
homemadeness	ADJ	homemade
honours-worthiness	ADJ	honours-worthy
hoofedness	ADJ	hoofed
housewifeliness	ADJ	housewifely
hybridness	ADJ	hybrid
insidedness	ADJ	insided
institution-wariness	ADJ	institution-wary
internationalness	ADJ	international
jogginess	ADJ	joggy
joined-up-edness	ADJ	joined-up-ed
kentishness	ADJ	kentish
literal-mindedness	ADJ	literal-minded
malaysianness	ADJ	malaysian
mappy-ness	ADJ	mappy
mayanness	ADJ	mayan
middlingness	ADJ	middling
mildheartedness	ADJ	mildhearted
mingingness	ADJ	minging
minoan-ness	ADJ	minoan
moddiness	ADJ	moddy
moreishness	ADJ	moreish
n-connectedness	ADJ	n-connected
newbie-friendliness	ADJ	newbie-friendly
non-expansiveness	ADJ	non-expansive
non-naturalness	ADJ	non-natural
non-sweatiness	ADJ	non-sweaty
nouniness	ADJ	nouny
on-demand-ness	ADJ	on-demand
one-footedness	ADJ	one-footed
one-wayness	ADJ	one-way
orientalness	ADJ	oriental
other-worldly-ness	ADJ	other-worldly

Table 9 (continued)

nessLemma	basePOS	baseLemma
overthoughtoutedness	ADJ	overthoughtouted
pearshapedness	ADJ	pearshaped
perfectiveness	ADJ	perfective
picture-friendliness	ADJ	picture-friendly
placedness	ADJ	placed
plunginess	ADJ	plungy
polyexpressiveness	ADJ	polyexpressive
poofiness	ADJ	poofy
post-ness	ADJ	post
prisonerishness	ADJ	prisonerish
proportionateness	ADJ	proportionate
quakerliness	ADJ	quakerly
quasi-faithfulness	ADJ	quasi-faithful
retroness	ADJ	retro
rewatchableness	ADJ	rewatchable
ringy-ness	ADJ	ringy
rogueishness	ADJ	rogueish
rusticness	ADJ	rustic
self-reflectiveness	ADJ	self-reflective
sidgwickedness	ADJ	sidgwicked
skullcaplessness	ADJ	skullcapless
slovenlymindedness	ADJ	slovenlyminded
sorbianness	ADJ	sorbian
sovietness	ADJ	soviet
specklediness	ADJ	speckledy
squashyness	ADJ	squashy
squirreliness	ADJ	squirrely
steppiness	ADJ	steppy
strategicness	ADJ	strategic
stroppy-ness	ADJ	stroppy
stuckedness	ADJ	stucked
student-directedness	ADJ	student-directed
surf-consciousness	ADJ	surf-conscious
tailiness	ADJ	taily
tamilness	ADJ	tamil
tapselteerieness	ADJ	tapselteerie
tellingness	ADJ	telling
terracedness	ADJ	terraced
thinglyness	ADJ	thingly
toastedness	ADJ	toasted
tuscanness	ADJ	tuscan
uncenteredness	ADJ	uncentered
unencumberedness	ADJ	unencumbered

Table 9 (continued)

nessLemma	basePOS	baseLemma
unenglishness	ADJ	unenglish
unfinishedness	ADJ	unfinished
unfoundedness	ADJ	unfounded
unperfectness	ADJ	unperfect
unscottishness	ADJ	unscottish
unsuccessfulness	ADJ	unsuccessful
upmarketness	ADJ	upmarket
verbiness	ADJ	verby
way-outness	ADJ	way-out
wholiness	ADJ	wholy
whylessness	ADJ	whyless
winningness	ADJ	winning
wispiness	ADJ	wispy
woman-centredness	ADJ	woman-centred
wordyness	ADJ	wordy
wyrd-ness	ADJ	wyrd
ambridge-ness	N	ambridge
amiganess	N	amiga
applianceness	N	appliance
arrowness	N	arrow
bass-ness	N	bass
blackpoolness	N	blackpool
bodhisattvaness	N	bodhisattva
button-ness	N	button
colness	N	col
compleatness	N	compleat
coupley-ness	N	coupley
cyrusness	N	cyrus
dwam-ness	N	dwam
flagshipness	N	flagship
futureness	N	future
get-togetherness	N	get-together
giraffeness	N	giraffe
god-almightiness	N	god-almighty
grrness	N	grr
guardianness	N	guardian
happeningness	N	happening
hmongness	N	hmong
imageness	N	image
immortality-ness	N	immortality
john-ness	N	john
junction-ness	N	junction
lancashireness	N	lancashire

Table 9 (continued)

nessLemma	basePOS	baseLemma
lawness	N	law
liftshaftness	N	liftshaft
logosness	N	logos
luvvierness	N	luvvie
madonnaness	N	madonna
maverickness	N	maverick
moneyness	N	money
mumness	N	mum
nicaraguaness	N	nicaragua
nottinghamness	N	nottingham
novice-ness	N	novice
our-ness	N	our
peasantness	N	peasant
pilgrimness	N	pilgrim
plusness	N	plus
poetry-ness	N	poetry
refugeeness	N	refugee
request-scopeness	N	request-scope
rileyness	N	riley
roverness	N	rover
sissiness	N	sissy
snakeness	N	snake
somebodiness	N	somebody
spikeness	N	spike
system-ness	N	system
theloniousness	N	thelonious
toreadorness	N	toreador
turkness	N	turk
twitness	N	twit
vectorness	N	vector
waviness	N	wave
zoneness	N	zone
c-ness	other	c
broad-mindness	phrase	broad-mind
like-thisness	phrase	like-this
sugary-sweetness	phrase	sugary-sweet
to-be-heard-of-ness	phrase	to-be-heard-of
to-be-looked-at-ness	phrase	to-be-looked-at
too-much-ness	phrase	too-much
up-side-downness	phrase	up-side-down
when-where-ness	phrase	when-where
women-only-ness	phrase	women-only
beness	V	be
sent-ness	V	sent

Table 10: Quoted -ity hapaxes in the ukWaC.

ityLemma	basePOS	baseLemma
aspatiality	ADJ	aspatial
attritability	ADJ	attritable
cherubicity	ADJ	cherubic
convincibility	ADJ	convincible
deservability	ADJ	deservable
designability	ADJ	designable
dextrality	ADJ	dextral
discardability	ADJ	discardable
discipline-centricity	ADJ	discipline-centric
dispatchability	ADJ	dispatchable
draftability	ADJ	draftable
equiprobability	ADJ	equiprobable
eurocompatibility	ADJ	eurocompatible
exocentricity	ADJ	exocentric
extra-legality	ADJ	extra-legal
freudianity	ADJ	freudian
imposability	ADJ	imposable
inscriptivity	ADJ	inscriptive
intralinguality	ADJ	intralingual
makeability	ADJ	makeable
meltability	ADJ	meltable
photoreality	ADJ	photoreal
plateability	ADJ	plateable
policeability	ADJ	policeable
post-nationality	ADJ	post-national
preconditionality	ADJ	preconditional
simulatability	ADJ	simulatable
sphericosity	ADJ	sphericious
tackability	ADJ	tackable
unalienability	ADJ	unalienable
vendability	ADJ	vendable
worthwhility	ADJ	worthwhile
arch-enmity	N	arch-enemy
bandity	N	band
chavity	N	chav
hamockuity	N	hamock
liftshafticity	N	liftshaft
motority	N	motor
plosivity	N	plosive
polyvisuality	N	polyvisual
second-year-icity	N	second-year
spirality	N	spiral
tackity	N	tack

References

- Anshen, Frank & Mark Aronoff. 1981. Morphological Productivity and Phonological Transparency. *Canadian Journal of Linguistics/Revue canadienne de linguistique* 26(1). 63–72. DOI: 10.1017/S0008413100023525.
- Arndt-Lappe, Sabine. 2014. Analogy in suffix rivalry: the case of English -ity and -ness. *English Language and Linguistics* 18 (03). 497–548. DOI: 10.1017/S136067431400015X.
- Aronoff, Mark. 1976. *Word Formation in Generative Grammar*. Cambridge, MA: MIT Press.
- Baayen, R. Harald & Antoinette Renouf. 1996. Chronicling the Times: Productive Lexical Innovations in an English Newspaper. *Language* 72(1). 69–96.
- Baroni, Marco, Silvia Bernardini, Adriano Ferraresi & Eros Zanchetta. 2009. The WaCky wide web: a collection of very large linguistically processed web-crawled corpora. *Language Resources and Evaluation* 43(3). 209–226. DOI: 10.1007/s10579-009-9081-4.
- Bauer, Laurie, Rochelle Lieber & Ingo Plag. 2013. *The Oxford Reference Guide to English Morphology*. Oxford: Oxford University Press.
- BNC. 2007. *The British National Corpus, version 3* (BNC XML Edition). <http://www.natcorp.ox.ac.uk/>.
- Eitelmann, Matthias & Dagmar Haumann, eds. 2022. *Extravagant Morphology: Studies in rule-bending, pattern-extending and theory challenging morphology*. Amsterdam: John Benjamins.
- Filatkina, Natalia. 2018. Expanding the Lexicon through Formulaic Patterns: The Emergence of Formulaicity in Language History and Modern Language Use. In: *Expanding the Lexicon. Linguistic Innovation, Morphological Productivity and Ludicity*. Ed. by Sabine Arndt-Lappe, Angelika Braun, Claudine Moulin & Esme Winter-Froemel, 15–42. Berlin & Boston: De Gruyter Mouton.
- Hoffmann, Sebastian, Stefan Evert, Nicholas Smith, David Lee & Ylva Berglund Prytz. 2008. *Corpus Linguistics with BNCweb – a Practical Guide*. Frankfurt am Main: Peter Lang.
- Kaunisto, Mark. 2013. Scare quotes and glosses: Indicators of lexical innovation with affixed derivatives. In *Selected proceedings of the 2012 symposium on New Approaches in English Historical Lexis* (HEL-LEX 3), 97–106.
- Körtvélyessy, Lívia, Pavol Stekauer, and Pavol Kamár. 2022. *Creativity in word formation and word interpretation: Creative potential and creative performance*. Cambridge: Cambridge University Press.
- Lindsay, Mark. 2012. Rival suffixes: synonymy, competition, and the emergence of productivity. In: *Morphology and the architecture of grammar: Proceedings of the 8th International Morphology Meeting*. Ed. by Angela Ralli, Geert Booij, Sergio Scalise & Athanasios Karasimos. Vol. 8. University of Patras. Patras, 192–203.
- Marchand, Hans. 1969. *The Categories and Types of Present-Day English Word-Formation. A Synchronic-Diachronic Approach*. 2nd, completely revised and enlarged. München: C.H. Beck'sche Verlagsbuchhandlung.
- Oxford English Dictionary. 1989. Oxford University Press. 2nd ed. 20 vols. Also available at <http://www.oed.com>. Oxford.
- Plag, Ingo. 2006. The variability of compound stress in English: structural, semantic, and analogical factors. *English Language and Linguistics* 10(1), 143–172.
- Renouf, Antoinette and Laurie Bauer. 2000. Contextual clues to word-meaning. *International Journal of Corpus Linguistics* 5(2), 231–258.
- Wislicki, Jan. 2023. Scare quotes as deontic modals. *Linguistics* 61(2), 417–457. DOI: doi:10.1515/ling-2021-0083.

