

**Old words and new naming needs –
an onomasiological account of lexical creativity
in the English literature of the 16th – 19th century***

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Abstract

Creativity in word-formation is discussed controversially in a relatively small number of works. On the one hand, it is supposed to result in idiosyncratic ad hoc-formations which are unlikely to become institutionalized. On the other hand, it is considered to be as rule-governed as any regular word-formation process, with potential oddness of the output being ascribed to extra-linguistic facts. In this study, the contrasting characteristics identified in the morphological literature are conceived of as parameters in the more general concept of lexical innovation. Their relevance for the definition of lexical creativity will be tested by applying them to innovations ascribed to six famous English writers by the Oxford English Dictionary (OED). Based on the results, the contrasting theoretical positions will be evaluated. The analyses will be performed within the framework of Onomasiology.¹

Keywords: *word-formation, lexical innovation, lexical creativity, onomasiology, corpus representativeness.*

1 State of the art

Unlike productivity, the creative aspect of word-formation has gained comparatively little attention. In the discussion of lexical creativity, two contrasting positions become apparent. Representatives of the first position (e.g. Erben 1981, Bauer 1983, 2001,

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¹ The onomasiological approach to word-formation is associated with names like Miloš Dokulil, Ján Horecky, and especially Pavol Štekauer.

Hohenhaus 1996, 2007, Renouf 2007) claim that creativity is not (fully) rule-governed. Under this view, the most prominent aspect which distinguishes creativity from productivity is deviance from established patterns. Hohenhaus (1996) adds further features to the salient property ‘deviance’ and argues that they form the following hierarchy: ‘deviance’ > ‘context-dependence’ > ‘non-lexicalizability’ > ‘uniqueness’. The output of a creative word-formation process is not necessarily characterized by all of these features. Only prototypical *ad hoc*-formations like *nothingth* are marked to the highest degree and display the ensemble of creativity-defining features. According to Hohenhaus (2007: 16), productivity and creativity form a continuum which is reflected by the degree to which new words are noteworthy.

Representatives of the second position (e.g. Howden 1984, van Marle 1985, Štekauer 2002, Štekauer et al. 2005) assume that each word-formation process involves creativity. According to Štekauer et al. (2005: 2), nonce-formations – like any other naming unit – are regular, transparent coinages formed by productive rules and find their way into the lexicon from which they are retrievable on demand. If a form is perceived as odd (e.g. *to unmurder*), the reason is that its denotation is incompatible with the facts of extra-linguistic reality. This view is compatible with Munat’s (2007: 180) observation that creative coinages to be found in science fiction and children’s literature are mostly rule-governed, “giving no evidence of a net demarcation between productivity and creativity.”

Under the influence of the Netherland tradition, an important role is ascribed to the paradigmatic dimension of morphological structures (e.g. Bauer 1983, 1997, van Marle 1985, Booij 1997). According to Bauer (2001: 71), a paradigmatic relation or paradigm pressure arises for example if a new word is presented in the context of an existing word with a similar base, which helps the reader to process the innovation (e.g. *follower* vs. *followee*).

The positions sketched above suggest that lexical creativity lacks a consistent definition. In this article, a distinction will be drawn between **lexical innovation** – a hyperonym of productivity and creativity proposed by Bauer (2001: 64) – and the more specific concept of **lexical creativity**. The contrasting characteristics worked out for creativity in the linguistic literature will be conceived of as parameters in the concept of

innovation, which are available for any act of naming. Their relevance for the definition of lexical creativity will be tested by applying them to coinages ascribed to William Shakespeare, Ben Jonson, Samuel Taylor Coleridge, John Keats, Horace Walpole and Charles Dickens by the OED. It will be shown that creativity involves deviance at some level of representation, that it is not necessarily context-dependent and that it correlates with a relatively low frequency of occurrence. Moreover, a formal description of lexical innovation within the framework of Onomasiology will reveal that the degree of markedness (or “noteworthiness” in Hohenhaus’ terminology), i.e. the degree to which creativity is perceptible, can be lexically determined because it depends on the stage of the word-formation process at which the lexical ‘norm’ is modified.

The article is structured as follows. In section 2, the notion of ‘creativity’ will be discussed in more general terms. Section 3 will provide an overview of the onomasiological approach to regular word-formation. In section 4, instances of lexical creativity will be worked out on the basis of the relevant criteria developed by Hohenhaus and Štekauer. The ‘uniqueness’ criterion postulated by Hohenhaus will be tested by matching creative coinages against three modern corpora – the British National Corpus (BNC), the Corpus of Contemporary American English (COCA), the Corpus of Global Web-based English (GloWbE) – and the internet search engine Meltwater IceRocket (blogs). Further occurrences in the OED will be considered as well. In section 5, the extreme positions according to which lexical creativity ranges between nonceness and normality will be reconsidered.

2 The philosophy of creativity

The resistance of creativity to a generally accepted definition does not imply a deficiency in linguistic research. Nor is it restricted to the domain of morphology. The problem is rather rooted in the philosophy of creativity – a concept whose nature has been subject to controversy since antiquity (Brodbeck 2012). Brodbeck’s discussion of numerous approaches suggests that there are no efficient strategies to explain, convey or learn creativity because creativity is the result of either cognitive processes based on previous work/experience or of a sudden illumination. According to Brodbeck (2012:

15), “[...] der Gedanke, Ursachen für kreative Produkte des Geistes oder der Tat entschlüsseln zu wollen, ist ein grundlegender Irrweg.”² This insight is linguistically mirrored by the logical well-formedness of *mir kommt eine Idee* “I have an idea” and the markedness of *?ich mache eine Idee?* “I make an idea”.

Holm-Hadulla (2013) attempts to decode the mystery of creativity by considering an interaction of neurobiological, psychological, socio-cultural and practical aspects. He states that creative processes result from the dissolution and restructuring of established cognitive, emotional or behavioural patterns. In word-formation, the dialectic of creativity, i.e. the interplay between stabilization and destabilization, coherence and incoherence, or construction and deconstruction is mirrored by the opposing parameters ‘regularity’ vs. ‘deviance’ (cf. 4.1). Modifications of established word-formation patterns (which define the ‘norm’) give rise to innovative rearrangements of morphological structures or form-meaning relations.

Given this brief overview, we may conclude that creativity is a highly complex phenomenon (in linguistics and elsewhere) which requires interdisciplinary research. Moreover, it is assumed here that lexical creativity is optimally described in relation to a particular subject or context (in a broader sense). Evidence comes from the articles published by Munat (2007), each of which deals with a specific communicative, textual or socio-linguistic context. For example, as shown by López Rúa (2007: 147ff), morphological deviance such as *lossage*, *winnage*, *rehi*, or *mysteriosity* is typical of hacker jargon. Context-specific analyses (including the present study) are certainly not exhaustive. However, as in philosophy, it is the diversity of complementary approaches which leads to a deeper understanding of creativity.

On the other hand, the role of the linguistic context (or co-text in Hohenhaus’ terminology) should not be overestimated because each naming unit is somehow context-dependent in speech (Štekauer 2002: 98). The linguistic context may help to select the meaning component intended by the coiner or to specify abstract meaning components obtained by context-free processing (cf. 4.2).

² “[...] any attempt to decode the causes of creative products of mind or deed is definitely bound to fail.” [Translation by HB]

3 An outline of onomasiological word-formation

One of the most central aspects which distinguishes Onomasiology from most generative approaches is that word-formation processes are not described independently of a speech community's need to denote concepts of the extra-linguistic reality (naming need). We are dealing here with word-formation *par excellence*, which focuses on the active (i.e. cognitive and linguistic) involvement of the coiner in the act of naming a new object, action, or quality. Every naming act necessarily begins at the conceptual level, where the distinctive properties of the concept to be named are mentally scanned (intellectual processing). The properties abstracted from extra-linguistic reality give rise to a **logical spectrum**. This is a type of knowledge representation which displays four basic conceptual categories, namely SUBSTANCE, ACTION (subdivided into ACTION PROPER, PROCESS and STATE), QUALITY, and CONCOMITANT CIRCUMSTANCE (e.g. Place, Manner, Time etc.). The output of this prelexical level is passed down to various levels of the word-formation component, where semantic, morphological and phonological information is processed (Štekauer 2005: 43ff). The abstract predicates of the logical spectrum are mapped onto the semantic level in the form of **semes**, e.g. [+Material], [+Animate], [+human]. These features are arranged hierarchically, ranging from the most general features to prototypical features. The most important linguistic level is the onomasiological level, which is at the interface of semantic and morphological information and provides the word-formation patterns available within a language. Following Dokulil (1962: 29), Štekauer assumes that this level consists of the **onomasiological base** ('head', 'determinatum'), which is always simple, and the **onomasiological mark**, which is either simple or complex (2005: 49).

- (1) Determining – Determined – Onomasiological
 constituent constituent base
 of the mark of the mark

At this level, the semantic relations holding between the onomasiological constituents are represented. A fully-fledged onomasiological structure is optimally

represented by the semantic information associated with synthetic compounds like *candle-waster* “someone who wastes candles by reading late at night” coined by William Shakespeare.

(2) [(Logical) Object ← Action – Agent]

The morphological material (i.e. actual naming units and affixes) required to express the new concept is provided by the Lexical Component – a separate module which interacts with the word-formation component. The assignment of morphemes to the constituents of the onomasiological level takes place at the **onomatological level**. In the case of our Williamism, the semantic categories ‘Object’, ‘Action’ and ‘Agent’ are morphologically realized as *candle*, *waste* and *-er* respectively.

(3)	‘Object’	‘Action’	‘Agent’
	<i>candle</i>	<i>waste</i>	<i>-er</i>

The assignment of lexical items to semantic categories, which reflects the bilateral character of the linguistic sign, is governed by the **Morpheme-to-Seme-Assignment-Principle**. Vertically, this principle has to account for an adequate matching of form and meaning. Horizontally, the subcategorial properties of affixes have to be observed (Štekauer 2000: 342).

The different word-formation types result from different strategies of realizing the constituents of the onomasiological level (cf. (1)). As far as English word-formation is concerned, Štekauer (2005: 52f) distinguishes five **onomasiological types** (henceforth abbreviated as OT), each of which corresponds to a particular word-formation pattern. OT1 is optimally reflected by synthetic compounds, as illustrated above. Further literary examples of this type are *thunder-bearer* “Jupiter”, *spirit-stirring* (Shakespeare), *manner-painter*, *self-involution* (Coleridge), or *manty-making* (Dickens). As far as OT2 is concerned, the determining constituent of the onomasiological mark is left unexpressed, e.g. *confirmer* (Shakespeare), *celebrator* (Jonson). OT3 is characterized by specifying the determining constituent of the onomasiological mark

This kind of word-painting is also frequently applied by the English authors. The relations between the original and the new conceptual category are manifold and include not only ‘Agent’, but also ‘Object’ (*punch* “drink punch”), ‘Instrument’ (*nese* “smell”), ‘Manner’ (*moudebank* “behave like a mountebank”), ‘Result’ (*fragment*), ‘Direction’ (*chapel* “put (bury, etc.) in a chapel”), or ‘Location’ (*climate* “to reside in a particular region” < *climate* “region”). In the following section, aspects of creativity will be worked out and discussed on the basis of the parameters introduced in section 1.

4 Aspects of creativity

A strategy for revealing and evaluating aspects of creativity involved in the literary word-formation processes will be to establish the following oppositions from the works of Hohenhaus (1996) and Štekauer (2002):

Hohenhaus	Štekauer
‘deviance’	‘regularity’
‘context-dependence’	‘predictability’
‘uniqueness’	‘lexical offer (to the speech community)’

Functional parameters such as the achievement of metrical/stylistic effects (which are less relevant for our purpose) or paradigm pressure will be related to the first two oppositions. As far as Hohenhaus’ parameter ‘non-lexicalizability’ is concerned, it is agreed here with Štekauer (2002: 13) that every word coined to satisfy a concrete naming need is in principle available for further use and thus worth listing. Moreover, while ‘uniqueness’ vs. ‘lexical offer’ can be evaluated by consulting modern corpora, there is no empirical evidence for ‘non-lexicalizability’.

4.1 ‘Deviance’ vs. ‘regularity’

According to Hohenhaus, ‘deviance’ is the most prominent characteristic of lexical creativity. Following Kastovsky (1978), he points out that deviance from the norm may occur at the morphological, semantic and pragmatic level of representation (e.g. *treeoid*,

ultra-alphabetically, to unmurder). Phonological deviance (e.g. *wispy-misty*) is typical of children's literature (Munat 2007: 175ff).

According to Štekauer (2002: 98f), the output of the word-formation component is always regular and structurally transparent. If a naming unit is perceived as odd, there is a mismatching between (a) a language and the extra-linguistic reality, or (b) a language and a speech community.

The literary corpus provides evidence for both positions. A general observation is that the literary coinages, each of which serves to satisfy a creative naming need, predominantly follow regular word-formation patterns. Nevertheless, there is a set of formations which clearly deviate from the norm at some level of representation and thus reflect the dialectic of creativity.

Morphological deviance results from a violation of subcategorical restrictions at the onomatological level. For example, the prefix *out-* "surpassing" is subcategorized for verbs, which appear on its right-hand side. To a lesser extent, *out-* also selects concrete nouns (Marchand 1969: 96f). Shakespeare made use of both options when he coined *outswell*, *outlustre*, *outsweeten*, *outpeer*, *outvillain*, and *out-breast*. His verb *out-Herod* "outdo (Herod) in cruelty, evil, extravagance, etc." uttered by Hamlet clearly deviates from this pattern because its input constitutes a proper noun.

The naming unit *razorable* also ascribed to Shakespeare is marked because it is derived from a noun although a verbal input (i.e. *shave*) would have been available. We are dealing here with a coinage of OT3 whose meaning has to be constructed from the function prototypically associated with the class of Instruments referred to as *razor*. Obviously, this creative act of naming was motivated by metrical considerations.

The man i'th Moone's too slow, till new-borne chinnes Be rough and Razor-able.

Further examples of Shakespeare's morphological creativity are *appearer* and *seemer*, which were derived from unaccusative verbs. Thus, the input only licenses an internal argument not typically realized by *-er*.

As far as conversion (OT5) is concerned, a morphological curiosity is Shakespeare's verb *to off-cap* "to take off or doff the cap, in reverence or respect *to* (a

person)”, which combines the particle *off* (< *take off*) with a noun in order to denote Direction of Action.

From a semantic and morphological point of view, *undeserver* is noteworthy because the nominal input to *un-* is restricted to abstract nouns, most of which end in *-ness* or *-ity*. According to Marchand (1969: 204), there are only a few derivatives in which *un-* negates a concrete noun – as in the case of *undeserver*, which was coined in analogy to *undeserving*.

Furthermore, there is a small set of Williamisms which violate the Redundancy Restriction formulated by Lieber (2004: 161): “Affixes do not add semantic content that is already available within a base word (simplex or derived).” The derivatives in question are *vasty*, *brisky*, and *plumpy*. Crystal (2008: 150) supposes that these forms were coined for metrical reasons and hence “do not usually have much semantic consequence”. Since there is no two-syllabic adjective meaning “very big” in English, adjectival *-y* was attached to a lexical item of the same category. However, since *vasty* established a small Shakespearian word-formation pattern, we might take into consideration that *-y* adopts the function of an intensifier in the context of an adjectival mark.

Of course, there are also Williamisms which do not have referents in the extra-linguistic world, e.g. *sea-maid*, *sea-wing*, *fairyland*. In cases like these, the non-existence of the denoted entities has to be specified at the conceptual and semantic level. An extract from the logical spectrum formed by Shakespeare for *sea-maid* is presented below:

- (5) The located object is SUBSTANCE.
 SUBSTANCE is partly human and partly animal.
 It is Female.
 It has the tail of a fish.
 Its Location is the sea.
 etc.

The semantic level provides the marked feature-constellation [–Material], [+Animate], [+Human], [+Animal], [+Female], which indicates that the referent of *sea-maid* is a fictitious being. At the onomasiological and onomatological level, this naming unit is processed like any other endocentric compound.

(6)	CONCOM. CIRC. 'Location' <i>sea</i>	'Action' 0	SUBSTANCE 'Patient' <i>maid</i>
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Deviation at the conceptual and semantic level is also observed for exocentric compounds. According to Bauer (1983: 30) a compound of this type constitutes a hyponym of some unexpressed semantic head. In Štekauer's (1998: 149ff) theory, exocentric compounds do not exist because they are considered to be elliptical endocentric constructions. For example, *redskin* is a clipping of the endocentric compound *redskin person*, whose onomasiological base is deleted but remains implied in the interpretation "Native American". Shakespeare's formations *lady-bird* "a female sweetheart (freq. as a term of endearment). Also (*derogatory*): a kept mistress; a lewd or wanton woman; a prostitute", *flirt-gill* "a woman of light or loose behaviour" and *land-rat* "a rat that lives on land. †Also used as a term of abuse" would be described analogously.

Strictly speaking, the realization and deletion of [person] is not necessary because Onomasiology explicitly distinguishes between conceptual and lexical information. Since the metaphorical reference to human beings is part of the logical spectrum (i.e. SUBSTANCE₁ in (7a)), it does not have to be expressed temporarily at the onomatological level. As in the case of *sea-maid*, the conceptual peculiarity is implied throughout the (regular) word-formation process.

Svb. How know you him [*sc.* mercury]? *Fac.* By his viscositie, His oleositie, and his suscibilitie.

Name the vexations, and the Martyrizations of Mettalls, in the Worke...Putrefaction, Solution, Ablution...Calcination, Ceration, and Fixation.

As far as affixes are concerned, Jonson's use of the Latin suffix *-aster* in *grammaticaster* and *poetaster* is noteworthy. This suffix has rarely been used in English and conveys a pejorative connotation. The practice of activating unproductive patterns is referred to as "non-productive creativity" by Bauer (2001: 64). Another curiosity is the humorous derivative *foolado*, which combines the Spanish suffix *-ado* (masculine singular of the past participle of verbs in *-ar*) with a native input and playfully imitates the borrowing *soldado*.

You must haue your Poets, and your potlings, your soldado's and foolado's to follow you vp and downe the citie.

Jonson also introduces two forms of address, namely *Your Monstership* and *Your Silkness*, which – like Shakespeare's *Moorship* – are pragmatically deviant.

The romanticists provide further examples of morphological creativity. Violations of subcategorical properties are observable for *budder* "that which buds, or is in bud" (onomasiological mark = unaccusative verb), *so-soish* (Keats), *ourishness*, *Sir-Thomas-Brown-ness*, and *out-of-the-way-ness* (Coleridge). Moreover, the OED ascribes the phrasal compounds *heart-in-mouth*, *might-have-been* to Coleridge and *fly-the-garter*_N to Keats. According to Štekauer (2001: 26f), such coinages are processed in the word-formation component just like regular naming units. The only difference is that their phrasal constituents are not provided by the lexicon, but by the syntax, which interacts with the lexical component.

It is a well-known fact that the suffix *-ness* is extremely flexible with respect to its input (Marchand 1969: 334ff, Aronoff 1976: 37ff, Baeskow 2012). If the input is a phrase, as in the case of *out-of-the-way-ness*, it is assigned to a conceptual class (e.g.

QUALITY) at the prelexical level, and the subsequent word-formation process follows the rules of regular *-ness* derivation (*sweetness, kindness, happiness* etc.).

Verbal curiosities coined by Coleridge are *to flatter-blind* “to flatter so as to make blind; to blind with flattery” and *to flounder-flat* “to make ‘as flat as a flounder’”. It is assumed here that the naming acts involved take place in two steps. First, the naming units *blind* and *flat*, whose original category is QUALITY, are recategorized as ACTION and enter the lexicon as verbs. Thus, we are dealing with ordinary processes of conversion involving the relation of ‘Result’.

(8)	<i>blind</i> _A		<i>blind</i> _V
	<i>flat</i> _A		<i>flat</i> _V
	[QUALITY	<u>Result</u>	ACTION]

In a next step, new logical spectra are formed in which the Actions associated with *blind*_V and *flat*_V are conceptually combined with *flatter* and *flounder*. The form *flatter-blind* is a playful concatenation of two ACTION concepts, either of which could represent the onomasiological mark or base (as suggested by the OED definitions). The semantic markedness of *flatter-blind* results from its incompatibility with the Argument-Linking Principle (ALP) postulated by Lieber (1983: 258), according to which a compound involving a verb is well-formed only if the non-verbal constituent satisfies the internal argument of the “argument-taking stem” (*drawbridge*) or allows for an interpretation as a semantic argument, like ‘Manner’ (*hand-weave*), ‘Instrument’ (*spoon-feed*), or ‘Location’ (*stream-wade*). Of course, none of the verbal constituents of *flatter-blind* could satisfy the argument structure of the other. Given the ALP, the interpretation of *to flounder-flat* is more straightforward because *flounder* may serve as a semantic argument (‘Manner’) of *to flat*. Nevertheless, the construction is awkward because there is a verb *to flatten* which would have been a more appropriate (though less playful) base than the converted verb *to flat*. The two verbs occur in the following contexts:

My next Friday's lecture will, if I do not grossly flatter-blind myself, be interesting.

Warburton could never have wooed by kisses and won, or he would not have flounder-flatted so just and humorous...an image into so profound a nihility.

A semantic deviation is also observable for *rappee*. Although *-ee* typically serves to form patient nouns, *rappee* is assigned an agentive interpretation by Keats.

I heard a rap at the door... There came a louder rap... A little girl in the house was the Rappee – I assure you she had nearly made me sneeze.

Most instances of lexical creativity appear among the coinages ascribed to Walpole. A derivative typically associated with this author is *serendipity* “the faculty of making happy and unexpected discoveries by accident”, whose onomasiological mark is allusive to the title of the fairy tale *The Three Princes of Serendip*. Since *-ity* is subcategorized for adjectives, it is incompatible with (geographical) proper nouns. Another playful *-ity* derivative is *betweenity*, whose input is a native preposition. Like *-ity*, the suffix *-(at)ion* is incompatible with native naming units. Walpole deliberately violated this restriction when he coined *talkation*.

From an onomasiological point of view, forms like *gardenhood*, *bookhood* and *brickhood* are less typical than *cousinhood* or *tutorhood* because their mark lacks the semes [+Animate] and [+Human] preferred by *-hood*. Next, consider Walpole's derivatives *balloonism* and *gardenist*, which are semantically deviant, too.

How posterity will laugh at us...if...balloonism is exploded.

The domestic called a *Gardiner*...will remain *the Gardiner*, the projector I should propose to denominate *a Gardenist*.

The suffix *-ism* is polysemous because the derivatives it forms “generally stand for a system or doctrine or movement” (Jespersen 1942: 336). Given the framework of Onomasiology, it is assumed here that *-ism* generally represents a State (as a subtype of ACTION) and that the diversity of intellectual concepts associated with this suffix is

specified by semes like [+Belief], [+Doctrine], [+Philosophical Concept], [+Cultural Movement] etc. at the semantic level. The corresponding *-ist* derivatives are conceptualized as SUBSTANCE and frequently denote the adherents or representatives of the relevant system, doctrine, or movement. Thus, the semes associated with the input are expected to be compatible with the semantic structure displayed by *-ism* and *-ist*. Since *balloon* and *garden* denote everyday concepts, they do not fit the intellectual paradigm of *-ism* and *-ist* derivatives. If we compare the derivatives *cosmotheism*, *myriotheism*, *Moravianism*, *Plotinism*, *Psilanthropism* and *theanthropism* coined by Coleridge to Walpole's creations *balloonism* and *gardenist*, it is obvious that the latter lack the academic flavour of the former and thus adopt a humorous connotation.³

Furthermore, Walpole tends to reanimate unproductive patterns. Since the suffix *-th* ceased to be productive after the Middle English period, Walpole's coinages *greenth*, *blueth* and *gloomth* clearly display "non-productive creativity" in the sense of Bauer (2001: 64). Two further coinages which follow unproductive patterns are *awaredom* and *Raphaelware*. According to Marchand (1969: 262), *-dom* derivatives formed from adjectives were outnumbered by denominal *-dom* derivatives already in Old English. As pointed out by Lieber (2004: 40), the semi-suffix *-ware* is the only word-formation element which serves to form a restricted number of concrete nouns in English. Apart from *Raphaelware*, the OED only lists five further nouns ending in *-ware* for the period between 1700 and 1800. Thus, we may conclude that this pattern was not productive when Walpole made use of it.⁴

A noteworthy coinage ascribed to Dickens is *coach-horser* "one who 'horses', or provides horses for, stage-coaches", which ranges between OT1 and OT3. On the one hand, its structure is similar to that of synthetic compounds like *candle-waster*. On the other hand, the Action associated with *horse* is not expressed, as in the case of *coachman*, and the meaning is unpredictable.

³ The non-learned input should not be an obstacle to a serious interpretation because there are quite a few neutral derivatives whose mark is not of Latin or Greek origin (e.g. *mannerism*, *deaf-mutism*, *truism*, *harpist*, or Jonson's *tobacconist*).

⁴ Since the 1960s, *-ware* reappears in some neologisms referring to IT-technology, e.g. *hardware*, *software*, *spyware*, *malware*, *adware*.

Another morphological creation, namely *ological*, should be ruled out by the word-formation component because it consists of the Final Combining Form (FCF) *-olog(y)* borrowed from Greek and the adjectival suffix sequence *-ic-al*. However, as pointed out by Bauer (1983: 35f), linguistic change may cause either the reduction of a lexeme to a suffix (e.g. OE *dōm* > *-dom*, *hād* > *-hood*) or the development of a suffix into a lexeme. Examples of the latter process are *ism*, *ology*, or German *Ex*. When Dickens coined his adjective *ological* in 1854, the corresponding noun *ology* was already attested (cf. OED). Since *ology* has “undergone a kind of objectification resulting in acquiring the status of a noun” (Štekauer 2002: 105), it can function as an input to inflection (*ologies*) and derivation (e.g. *ological*). As far as the interpretation of *ology* and its variants is concerned, the relevant semes [+Academic Discipline] and [+Field of Knowledge] were abstracted from the numerous nouns in which *-ology* functions as an FCF.

A Dickensian noun which definitely deviates from the morphological norm is *yaw-yawdom*, which occurs in the following context:

The word ‘shindy’, or any similar yaw-yawdom.

As indicated above, *-dom* typically selects nouns and tolerates adjectives (if non-productive creativity is intended). The mark of *yaw-yawdom* is the affected exclamation *yaw-yaw!* – a sequence of meaningless syllables which is incompatible not only with *-dom*, but with suffixes in general. Nevertheless, an adequate interpretation may be derived from the seme [+Collectivity] associated with *-dom* if *yaw-yawdom* is conceived of as the collectivity of affected expressions and any instance of it (cf. Baeskow 2010 for a more detailed analysis of the suffix *-dom*).

The data indicate that deviance is indeed a characteristic of lexical creativity. Moreover, the degree of markedness obviously depends on the stage of the word-formation process at which the lexical ‘norm’ is modified, i.e. it increases from the conceptual level down to the onomatological level. Coinages like *fairyland* or *sea-maid* clash with the facts of the extra-linguistic world, but they are semantically transparent and follow regular word-formation patterns. Semantic creativity is more prominent because marked constellations of semes have to be mapped onto the onomasiological

level and coerced into unmarked morpheme sequences (e.g. *rappee*, *flatter-blind*, *balloonism*). The most prominent instances of creativity occur ‘overtly’ at the onomatological level if subcategorical properties of affixes are violated (e.g. *talkation*, *yaw-yawdom*, *out-of-the-way-ness*). This empirical observation is consistent with Kastovsky’s (1978: 358f) view that most irregularities are of a morphological nature. Thus, the multidimensional conception of Onomasiology offers a lexical explanation for the interplay between ‘regularity’ and ‘deviance’, which is inherent to the philosophical and linguistic concept of creativity (cf. sec. 2).

4.2 ‘Context-dependence’ vs. ‘predictability’

It is assumed here with Štekauer (2005) that a context-free interpretation of novel complex naming units is primarily governed by world-knowledge and the prototypical semes of the concepts involved. Interestingly, most of the creative coinages identified in 4.1 – even those which display a high degree of markedness (e.g. *talkation*, *betweenity*, *foolado*) – are straightforwardly interpretable without contextual information. Of course, there are exceptions like *to elf*, *serendipity*, or *coach-horser*, which convey very specific meanings.

On the other hand, there are regular innovations (especially those of OT3) whose meaning is less predictable. For example, Walpole’s compound *tent-bed* does not convey the expected prototypical meaning “bed located in a tent”, but denotes “a bed having an arched canopy and covered sides”. Similarly, Shakespeare’s use of *bedroom* “room in bed” does not meet our expectations. If context-free processing gives rise to multiple interpretations, the context will serve to select the relevant meaning from a set of possible meaning components.

Moreover, if context-free processing provides no more than a rough idea of the intended meaning, the context will help to specify the relevant meaning component. For example, the OT3 derivative *bosomer* (Keats) is defined in the OED as “one who or that which bosoms, in various senses”. This definition is comparable to a context-free interpretation, which correctly predicts some ‘Action - Agent’ relation but remains rather abstract. At this point, the context provides further information and adjusts the result obtained by context-free processing to the intended meaning:

Blue! 'Tis the life of heaven...The bosomer of clouds.

The metaphorical relation of protection poetically established between *-er* and the referent of *heaven* is certainly not predictable without access to the context. In quite a few cases, the authors provide a clue to the interpretation of their coinages by presenting them paradigmatically (cf. Bauer 2001: 71ff) or by offering an explanation, e.g.

Eyther by Chartell, Sir, or ore-tenus, Wherein the Challenger, and Challengee...haue their seuerall courses. (Jonson)

There is a sort of unhired fidelity, an *our* ishness about it that makes it rest pleasant in one's feelings. (Coleridge)

The data suggest that ‘context-dependence’ in the sense of Hohenhaus is not necessarily associated with creativity. In principle, all novel naming units (regular or idiosyncratic) are interpretable in isolation at least to a certain degree of abstraction. However, if a coinage is polysemous or very specific, the meaning obtained by world-knowledge and prototypical seme constellations should be matched with the linguistic context, which will provide additional, non-predictable information.

4.3 ‘Uniqueness’ vs. ‘lexical offer’

The efficiency of these parameters was tested by matching sixty coinages against three large modern corpora – the BNC, the COCA, the GloWbE – and the internet search engine Meltwater IceRocket originally conceived for blog searches⁵. Moreover, since ‘uniqueness’ implies that a new word is never used beyond the special occasion for which it was coined, the number of quotations following the original context in the

⁵ Although IceRocket was expanded to search the social networks Twitter and Facebook, the search for the present study was restricted to blogs. The results obtained from the other sources are more numerous but not necessarily representative.

OED was also considered. Strictly speaking, even one additional hit calls the ‘uniqueness’ criterion into question.

The matching process was performed for the coinages which turned out to be deviant at some level of representation (sec. 4.1). Proper nouns (e.g. *Lady Bird Lake*), brand names, quotations from the source and coinages which have assumed a different meaning (e.g. *lady-bird* in the sense of “beetle”) were excluded from the results.⁶ In the following tables, white cells indicate ‘no hit’, grey cells ‘one hit only’, and black cells ‘more than one hit’.

Table 1 William Shakespeare

Naming Unit	BNC	COCA	GloWbE	OED	IceRocket
out-Herod					
razorable					
appearer					
seemer					
undeserver					
to off-cap					
vasty					
brisky					
plumpy					
fairyland					
sea-maid					
sea-wing					
His Moorship					
to elf					
flirt-gill					
lady-bird					
land-rat					

⁶ There is one exception, namely *Ological Studies*. Although this is the name of a jazz trio, its playful reference to the scientific domain is obvious.

Table 2 Ben Jonson

Naming Unit	BNC	COCA	GloWbE	OED	IceRocket
aqueity					
terreity					
sulphureity					
oleosity					
suscitability					
ceration					
inceration					
grammaticaster					
poetaster					
foolado					
Monstership					
Silkness					
hedge-bird					
challengee					

Table 3 Samuel Taylor Coleridge

Naming Unit	BNC	COCA	GloWbE	OED	IceRocket
ourishness					
heart-in-mouth					
might-have-been _A					
Sir-Th.-Brown-ness					
out-of-the-way-ness					
to flatter-blind					
to flounder-flat					

Table 4 John Keats

Naming Unit	BNC	COCA	GloWbE	OED	IceRocket
so-so-ish					
rappee					
budder					
whipship					
fly-the-garter _N					

Table 5 Horace Walpole

Naming Unit	BNC	COCA	GloWbE	OED	IceRocket
serendipity					
betweenity					
talkation					
gardenhood					
bookhood					
brickhood					
gardenist					
balloonism					
greenth					
blueth					
gloomth					
awaredom					
Raphaelware					

Table 6 Charles Dickens

Naming Unit	BNC	COCA	GloWbE	OED	IceRocket
coach-horser					
ological					
yaw-yawdom					
butter-fingers					

Of the 60 creative coinages, only 17 did not appear in the corpora. For most of the attested coinages, the number of actual occurrences ranges between 1 and 10, but *vasty*, *fairyland*, *plumpy*, *poetaster*, *might-have-been*, and *serendipity* are used much more frequently. Some examples of old words in new contexts are presented below [italics by HB]:

FLIGHT OF CITIZENS. Memphis to-day "*out-Herod's Herod*," and surpasses the Gulf cities in animosity and deadly hatred to all loyalty to the Government. (IceRocket)

The NBN will allow us to create new cities in the vast, *vasty* country, that will still access modern services. (GloWbE)

"He's a nice person, and he sort of reminds me of my father, a sort of *plumpy* old man, sitting there, scratching a toe, eating peanuts." (COCA)

Thus sang a *poetaster* in Lille (France). (BNC)

enjoyeth this chapman guitars full-on demo and revieweth! also *enwheel'd* is a nice charvel/chapman shoot-out (IceRocket)

[...] a body guard of "*Your Monstership*" was caught with a hanky-covered pistol (GloWbE)

The *might-have-been* laws and *might-have-been* judges and *might-have-been* catastrophes matter a great deal. (GloWbE)

ANY-way, below I've supplied a drawing of my current mood regarding my life, which is *so-so-ish*. (IceRocket)

If a *gardenist* can make this mistake, imagine how many others make it! I find the lack of basic knowledge about plants and their life cycles rather alarming. (GloWbE).

The data presented in Tables 1–6 show that the ‘uniqueness’ criterion postulated by Hohenhaus is too restrictive as it stands. A lexical item displaying creative deviance at some level of representation may be reactivated even centuries after its coinage. As stated by Štekauer, each lexical item created for a particular purpose is in principle available for further use – even if a reactivation has not yet occurred or only occurs sporadically. Lexical creativity seems to correlate with a relatively low frequency of occurrence, but again, this is not vital for its definition because there are many regular formations in the literary corpus which have not been reactivated either, e.g. *outsweeten* (Shakespeare), *sermoneer* (Jonson), *piazzian* (Keats), *coachfulness* (Dickens). An obvious extra-linguistic reason is that there is little or no need for these coinages.

As suggested by an anonymous reviewer, the results obtained in this section also make predictions as to corpus representativeness. A closer look at Tables 1–6 reveals that the creative formations are not equally distributed across the corpora selected for this study. Given the fact that all the naming units examined here were coined by speakers of British English, it is remarkable that the BNC displays the lowest type frequency. The COCA is not fully reliable either because it lacks some products of creativity listed in the GloWbE and in IceRocket (blogs). On the other hand, it is surprising that quite a few formations appear in blogs, which constitute a modern form of internet communication and thus reflect actual naming needs. As far as lexical creativity is concerned, we may state that the corpora differ in representativeness.⁷ But

⁷ Representativeness is a key notion in corpus linguistics (e.g. Biber 1993: 243, Scherer 2006: 5f). According to Biber (op. cit.), it refers “to the extent to which a sample includes the full range of variability in a population.”

why should this be so, and what does it mean for a corpus to be representative with respect to lexical creativity?

Obviously, the differences in representativeness result from differences in design, purpose and balance. The BNC and the COCA represent the use of British English and American English respectively, while the GloWbE makes reference to twenty different English-speaking countries (including New Zealand, South Africa, Jamaica, Bangladesh etc.). Moreover, the GloWbE is based on words from 1.8 million web pages. Unlike the BNC, which is described as a “microcosmos of current British English in its entirety”,⁸ it neglects texts which are not as easily accessible as texts from the internet (e.g. letters, memoranda, school essays, university essays) and spoken English. The OED is a historical dictionary, but the wealth of quotations it contains also makes it a suitable diachronic corpus (cf. Hoffmann 2004). Meltwater IceRocket is an internet search engine. The search may be performed for twenty different languages, including English. As far as corpus analyses are concerned, a disadvantage is that IceRocket specializes in real-time search, i.e. the result lists are continually updated. Thus, the results once obtained are not permanently available and have to be stored elsewhere. Given the achievements and failures of large corpora, which cannot be discussed in this study, we may conclude that a hypothetical corpus which is representative as to lexical creativity should fulfil at least four criteria: It should (1) include all the varieties of the language under examination, (2) display synchronic information as well as results which are of diachronic relevance (such as pre-twentieth-century texts or quotations), (3) include material from the internet, and (4) allow for information retrieval.

As far as the contents are concerned, the texts serving as an input to the hypothetical corpus should be selected from domains typically associated with lexical creativity, e.g. literature, the media, interactive communication, advertising. Since lexical creativity obviously correlates with low frequency of occurrence in general corpora, the aspect of specialization is considered here to be more important than corpus size.

⁸ <http://www.natcorp.ox.ac.uk/docs/URG.xml>

5 Evaluation and conclusion

In this study, the controversial views on lexical creativity to be found in the morphological literature – especially in the works of Hohenhaus (1996, 2007) and Štekauer (2002) – were tested on the basis of coinages ascribed to six famous English authors by the OED. Proceeding from the philosophical works of Brodbeck (2012) and Holm-Hadulla (2013), it was argued that the theoretical controversy is rooted in the philosophy of creativity.

The literary coinages analysed in this study strongly suggest that the positions adopted by Hohenhaus and Štekauer are complementary rather than mutually exclusive if we consider productivity and creativity to be hyponyms of lexical innovation (cf. Bauer 2001). On the one hand, most of the literary coinages follow regular word-formation patterns, but nevertheless give an impression of the creative power, poetic energy and imagination of their famous inventors. On the other hand, we find playful modifications of the norm at all levels of representation. This state of affairs reflects the “dialectic of creativity” (Holm-Hadulla 2013), i.e. the interplay between stabilization and destabilization, coherence and incoherence, or regularity and deviance which is typical of creativity in all its manifestations and opens up new forms of expression (not only in linguistics). The data suggest that ‘regularity’ and ‘deviance’ are parameters in the concept of lexical innovation, which are chosen according to a particular naming need, and that deviance or markedness gives rise to lexical creativity. Moreover, the degree to which a creative coinage deviates from the norm is lexically traceable because it increases from the conceptual level down to the onomatological level.

‘Context-dependence’ and ‘predictability’ are parameters in the concept of lexical innovation as well, but they are irrelevant for the definition of creativity. In principle, all the literary coinages (regular or idiosyncratic) allow for a context-free interpretation, but contextual support may be required to optimize the results obtained by context-free processing if a coinage is polysemous or highly specific.

Two parameters postulated by Hohenhaus – ‘non-lexicalizability’ and ‘uniqueness’ – had to be rejected because they are irrelevant not only for creativity, but

for lexical innovation in general. Since word-formation, unlike inflection, is relatively flexible, there are no instances of ungrammaticality which might prevent a new naming unit from entering the lexicon. ‘Uniqueness’ is not tenable either. Since most of the creative coinages reappear in modern English corpora, it is assumed here with Štekauer that products of lexical creativity should be conceived of as an offer to the speech community. Relatively low frequency of occurrence, which is observable for a number of regular coinages as well, is due to the extra-linguistic fact that there is little or no need for the naming units in question.

From a corpus linguistic point of view, it was concluded that a specialized corpus, i.e. a corpus based on domains from which lexical creativity is expected, would be more representative than general corpora such as the BNC or the COCA, which display deviant formations only to a small extent.

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