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Rah-rah! Investigating the variation in phonosemantic motivation in a set of iconic nouns expressing the concept <ENTHUSIASM ENERGY VITALITY>. A diachronic semantic approach

Chris A. Smith

### 1. Definitions and background of phonosymbolic motivation

- This paper focuses on phonosemantic motivation in the lexicon, attesting to the importance of taking into account multiple parameters of semantic motivation such as etymology, morphology, associations of sound and meaning, associations with other words in the context of use, and associations in the pragmatic or metapragmatic context. This combination of multiple factors of motivation is referred to as combinatorial motivation scenarios (Smith [2022]) or motivational networks (Umbreit [2011]). This means that motivation is not a one-size-fits-all system, but rather a combination of factors that can be triggered in a context of usage.
- We aim to study the evolution of a set of phonosemantic lexemes with iconic formmeaning associations either directly via iconic roots or via phonosemantic remotivation in English. We will use the term "iconic" rather than "phonosymbolic" for this study for reasons of clarity and to avoid terminological inconsistencies. In order to pursue this goal, a semantic field was selected with the aim of testing the coverage of iconic words within this field. A set of words referring to enthusiasm or vitality was generated using the *Historical Thesaurus of English* (HTOED), with the added criterion

that they display iconic roots or an iconic form-meaning association, i.e. an etymology or a form-meaning association consistent with iconic interpretation. We will now detail the background of motivation and iconicity before explaining why the field of <ENTHUSIASM ENERGY VITALITY> was chosen as an onomasiological entry point.

#### 1.1. Motivation in the lexicon

- Phonosemantic motivation is sometimes referred to as "phono-symbolism" or "iconicity" (Hinton *et al.* [1994], Ahlner & Zlatev [2010], and Monneret [2019]). Marchand [1960: 313] uses the term "phonetic symbolism". In a broad sense, phonosemantic motivation is a connection established between a phonetic form and a meaning, in other words, a sound-meaning association. Some word formations are influenced by, though not completely determined by, phonosemantic motivation, i.e. the correlation between sound and meaning. Among these word formation processes, there are a variety of phenomena belonging to "paradigmatic" morphology or extragrammatical morphology (Mattiello [2017] and Bauer [2019]) which rely on phonosemantic motivation. The following types of lexical forms illustrate some of the processes available in English:
  - rhyming forms: helter-skelter, willy-nilly;
  - interjections: gung ho, rah rah;
  - stretch: craaaaash (from Miller [2014]);
  - ker- or ka- prefixation: ka-pow, ker-plop (from Miller [2014]);
  - reduplication and binomials1: shilly-shally, flip-flops, spick and span;
  - onomatopoeic forms: crash, bang, scream (from Flaksman 2017);
  - phonesthemic words: snooze, sneeze, snort, sniff.
- Our purpose here is not to give an extensive overview of iconicity in the lexicon (see Miller [2014], Benczes [2019], and Flaksman [2017], [2020]). Rather, we will provide some essential definitions and background issues. Cognitive, historical, and typological linguistics have always shown interest in iconicity and analogy, with a growing number of key works on the subject, including Fonagy [1993], Waugh [1994], Hinton *et al.* [1994], Tsur [2006], De Cuypere [2008], Fischer [2013], Pleyer et al. [2017: 306], Nobile [2019], Monneret [2019], Smith [2019], Benczes [2019], and Flaksman [2020]. Despite this recent renewed attention and attempt to clarify terminology, iconicity studies remain fraught with terminological and theoretical issues. Labels for iconicity concepts continue to multiply, such as echoic, imitative, onomatopoeic, and mimetic, all describing lexical forms with the potential for sound-meaning relationships. A distinction is usually made between cases of conventional sound symbolism and imitative or onomatopoeic symbolism. In the former, there is no presupposition of extralinguistic motivation, while in the latter, there is some degree of perceived extralinguistic motivation. Primary iconicity (Hinton et al. 1994) is often described as a direct sound-meaning relationship in the form of interjections and onomatopoeias which are viewed as direct transpositions or copies of sounds, while secondary iconicity involves a more indirect sound-meaning connection (also see Waugh [1994], De Cuypere [2008] and Benczes [2019]). For instance, crash, smash are onomatopoeic words to the degree that their form-sense association is based on the direct analogy with the sound of an object falling or smashing. However, not all uses of these lexemes trigger the onomatopoeic motivation. -ash itself can be viewed as an indexical (or diagrammatic) analogical

segment leading to paradigm formation within the lexicon, leading Miller [2014] to list -ash under the subsection phonesthesia of his chapter on sound symbolism. According to Hinton et al. [1994: 5] phonesthesia "is the analogical association of certain phonemes and clusters with certain meanings" and implies some level of conventionalisation and paradigmatisation, which distinguishes it from **primary** iconicity.

One of the most commented classifications of iconicity is the four-part typology of sound symbolism proposed by Hinton *et al.* [1994], who distinguish bodily, imitative, synesthetic, and conventional sound symbolism. Alternative classifications of iconic words have also been provided, such as Voronin [2006] reported in Flaksman [2017: 19]. This typology distinguishes onomatopoeic words from sound symbolic words as can be seen in Table 1. The similarity with Hinton *et al.* [1994] is that onomatopoeic words are viewed as more direct, in that they rely on **acoustic** copying (or analogy), whereas sound symbolic words rely at least partly on **articulatory** analogy, and therefore exhibit some further degree of conventionalisation via the dependency on the phonological and graphic systems of a language. In this typology, sound symbolic words are further subdivided into two categories. Intrakinesemisms are sound symbolic 'gestures' accompanied by a sound (such as *cough*), and extrakinesemisms are purely articulatory 'gestures' such as *bubble*, which are not accompanied by a sound.

Table 1. Classification of iconic words according to Voronin [2006] from Flaksman [2017]

	Onomatopoeic	Sound symbolic word	s	
	words a sound acoustic copying	Intrakinesemisms	Extrakinesemisms	
Type of Denotatum	a sound	a non-sound accompanied by a sound	a non-sound	
Way of Imitation	acoustic copying	acoustic and articulatory copying	articulatory copying	
Type of Sense-Sound	a natural sound: a	a movement	a characteristic of an	
Correspondence	phoneme which – upon pronunciation – gives a speech sound with acoustic characteristics (measurably) similar to the sound imitated	accompanied by a sound: a phoneme which – upon pronunciation – gives both a speech sound with similar acoustic characteristics and requires the use of speech apparatus in a way of imitation of	object perceived by any sense modality except auditory (shape, movement): a phoneme which – upon pronunciation - requires the use of speech apparatus in a way of mimesis	
	P 1. 1	this movement	P 1: 1 1 111	
Example	English meow	English cough	English bubble	

Table 1. Classification of iconic words according to Voronin (2006)

Conventionalised iconicity is also at work in reduplications, which according to Hinton et al. [1994] emphasise the importance of rhythm perception in human cognition and human behaviour.

Certainly, rhythmic movement often directly produces sound. But beyond that, the rhythms of sound and the rhythms of movement are so closely linked in the human neural system that they are virtually inseparable. This is illustrated in the very natural human physical response to rhythmic music, in the forms of hand clapping,

foot tapping, dancing, rhythmic physical labor, etc. Just as humans are capable of translating rhythmic sounds into rhythmic movements, they are also capable of the reverse: translating rhythmic movements into sounds, including sound-symbolic language forms. Hinton, Nichols & Ohala [1994: 3].

Apophonic variation, or reduplication relying on vowel alternation, such as *sing-song* and *pitter-patter* is another instance of **conventional phonological motivation** (see Tournier [1985]). Monosyllabic apophonic variation involves a high to low pattern from /i/ to /a/ or /o/² such as in words like *ding-dong*, *flip-flop*, *sing-song*, and *pitter-patter* (see Miller [2014: 224]). According to Rhodes [1994: 284], "[f]orms with -i- signify high-pitched and/or low-amplitude sounds. Generally, they have a diminutive sense", whereas forms with low vowels have the contrasting sense of heaviness. From a diachronic perspective, Miller [2014: 208] points out that vowel alternation has led to the formation of sets of words that are indicative of differences in degree or intensity. For instance, *creak*, *crack*, and *croak* create a set of increasing intensity; *splash* [1699] and *splish* [1735] also convey a distinction in degree with *splash* referring to a louder and larger sound or motion than *splish*. Sets like *totter* [c.1200], *titter* [a1618], *teeter* [1843] and *didder* [c.1420], *dadder* [1483], *dodder* [c.1600] illustrate that vowel alternation can be interpreted as motion instability.

[A] degree word was formed after one or more of the others, as if to complete the set. For instance, bong [1924] was added shortly after bing [1922], click [1581] postdates both clack [a1250] and cluck [1481]. EME clap [?c.1225] antedates clip [c. 1440], and snap [1495] antedates snip [1587]. Miller [2014: 207]

Vowel alternation is rooted in Ohala [1994]'s **frequency code**, which assumes a correspondence between sound frequency and synesthetic properties. The crossmodal implications of the frequency code, shown by the famous *bouba kiki* experiment (Ramachandran & Hubbard [2001]), link high frequency with smallness, lightness, and swiftness, whereas low frequency is associated with the opposite properties of largeness, heaviness, darkness, slowness, and thickness. According to Ćwiek *et al.* [2021] "recent evidence shows that the effect may actually influence the vocabularies of modern languages". The origins of the frequency code itself are thought to be grounded in biological evolution (Hinton *et al.* [1994], and Miller [2014]). As for the principles behind the *bouba kiki* effect, experiments have shown that the differences call into play "strikingly different acoustic and articulatory profiles" (Ćwiek *et al.* [2021]).

These differences relate to vowel formants, vowel-intrinsic fundamental frequency, consonant-driven fundamental frequency perturbation, duration, consonant voicing, voice onset time, vowel rounding and place of articulation, all of which can influence the <code>bouba/kiki</code> effect in some fashion or another. Ćwiek <code>et al.</code> [2021: 3]

To conclude this section, iconicity is difficult to operationalise without a consensus around the framework and terminology. Monneret [2019] suggests using the term "analogy" to avoid falling into the semiotic difficulties surrounding the Peircean terms symbol and icon:

Le symbolisme phonétique iconique pourrait donc, dans une première approche, être défini comme une analogie binaire ou proportionnelle, homogène ou hétérogène qui implique le signifiant. Cette caractérisation permet bien de rendre compte de la dimension « phonétique » du symbolisme phonétique, qui est absente dans le cas de la motivation relative qui, elle, relève d'une autre fonction de l'analogie, la fonction régularisatrice. Si l'on souhaite éviter le caractère encombrant du mot « symbolisme », dont on a déjà dit l'inadéquation pour les recherches qui s'inscrivent dans une perspective inspirée de la sémiotique

peircienne, on pourra préférer: « analogie onomatopéique » et « analogie phonosémantique ». Monneret [2019: 17]

### 1.2. Expressiveness and motivation in the lexicon

From a strong embodied perspective view, language acquisition typically occurs in a spoken face-to-face situation where iconicity is embedded in users' experience of using words in context (Perniss *et al.* [2014]). Perniss *et al.* [2014: 3] propose that iconicity, in the broad sense of all iconic modalities (gestural, prosodic, sound symbolic), provides a "scaffolding for the cognitive system to connect communicative form with experience of the world, for the three core areas of language studies: phylogenesis, ontogenesis and language processing". Although it is well established that the English lexicon contains a variety of iconic forms (Benczes [2019] and Flaksman [2020]), the proportion of iconic words in the lexicon is more difficult to determine. Ahlner & Zlatev [2010] have noted that the proportion of iconicity is often either overemphasised or underevaluated, although it is of course dependent on what modalities of iconicity are being considered. Benczes [2019: 9] recalls the many marginalised words usually left out of traditional word-formation studies, which includes iconic words:

a) Words that have been typically left out of studies on English word-formation because they are not morpheme-based, such as sound symbolic words (e.g., glimmer and glisten) and blends (e.g., chortle – formed from chuckle and snort); b) Words that have been typically referred to as manifestations of "language play" or "expressive morphology", such as onomatopoeias (e.g., cuckoo) and rhyming compounds (e.g., snail mail); c) Words that have been typically considered as "non-productive", such as ablaut motivated compounds (e.g., flip-flop); d) Words that have been typically treated as "marginal" – this includes all of the above.

Non-standard layers of the lexicon are potentially more susceptible to iconicity since they exhibit lower levels of standardisation. The micro-system of slang and colloquial lexicon is itself thought to be strongly affected by analogical motivation particularly due to its great capacity for innovation via humour and playfulness, but also aggression and vulgarity, as argued by Mattielo [2008: 38]. While there is a strong tradition of studies of expressiveness and iconicity in poetry and literature (Leland [1988], Bauer [1999], Ljungberg [2001], and Tsur [2012]), informal discourse (including slang, and dialects) may be no less expressive, imaginative, and inventive, as demonstrated by Partridge [1933], Mattielo [2008], and Miller [2014]. In fact, it is thought that slang may be more resistant to standardisation and conventionalisation, making it potentially less prone to de-iconisation, or loss of iconicity.

[...S]lang, as to the greater part of its vocabulary and especially as to its cuckoocalling phrases and it's<sup>3</sup> parrot-sayings, is evanescent; it is the residuum that, racy and expressive, makes the study of slang revelatory of the pulsing life of the language. Partridge [1933] quoted in Dalzell & Victor [2007: xvi]

Expressiveness and iconicity are also often intertwined and difficult to distinguish. Southern [2000] refers to the expressive dimension of language as a crucial aspect:

Language clearly has an expressive dimension, including affective or 'emotional-flavoring' forms. Iconicity equally clearly does exist in grammatical dynamics, beyond mere echoic onomatopoeia. The descriptive linguistic reality of expressive forms and iconicity cannot therefore be ignored by any comprehensive account of a language's grammatical structure. Southern [2000: 252]

- We follow Monneret [2019] in viewing **expressiveness** as a function of language and **iconicity** as a specific type of analogy in the lexicon, also referred to as analogical motivation. Monneret [2019] defines expressiveness as a function of language aimed at increasing **semiotic efficiency**. When expressive function arises, there is often convergence of **communicative tools**, leading to crossmodal correspondences. Dingemanse's [2012: 665] cross-linguistic work on ideophones has shown that "far from being mere stylistic flourishes, ideophones were found to be a vivid and versatile communicative tool". Aryani *et al.* [2018] demonstrated in their psycholinguistic study that there was a significant correlation between affective sounds and interpretation by explaining why *piss* is ruder than *pee* to hearers and concluding that "words' acoustic profiles provide affective perceptual cues that language users may implicitly use to construct words' overall meaning".
- We argue, in a usage-based cognitive view, that expressive function does not arise from a single source, but rather arises though a blend of processes such as clipping and affixation forming diminutives, nicknames, and marks of pejoration, the process of domain blending via metaphorisation or metonymisation, and iconic phenomena such as onomatopoeic formation, rhyme formation, reduplication, and phonestheme patterning. This intertwining is a solid bedrock for crossmodal correspondences as defined by Ahlner & Zlatev [2010], relying on natural phenomena such as metaphors or metonymies that often involve multiple motivations. If we take examples of metaphors like TRAIN JOURNEY IS A FAST TRACK OF GUNG-HO IS A WAR CRY, we can observe from our corpus excerpts that the semantic interweaving in use is manifold.

The most commonly occurring functional values of expressives are diminution/affection, pejoration, emotional or physical proximity to the speaker/agent, increased subjectification (Traugott 1981), modality/deixis, and iteration/intensity or immediacy. Southern [2000: 255]

We subscribe to the view that motivation (including demotivation and remotivation) are dynamic analogical processes occurring in a usage-based cognitive view of language. The remotivation cycle is viewed by Bolinger [1988: 241] as an essential feature of human cognition, which tends to reject total arbitrariness: "the larger the unit, the less speakers seem to be willing to tolerate complete arbitrariness. Human beings are perversely eager to make sense of what they hear and say." In the usage-based cognitive model, the remotivation of signs is also viewed as a fundamental feedback loop, as explained by Hoffmann [2017: 6]:

Regardless of the way that form-meaning correspondences are achieved, either through entrenched prefabs stored in long-term memory or through assembly in the working memory, they are always the result of the human symbolic instinct that creates mental pairings of form and meaning through cross-modal association. Hoffman [2017: 6]

This "human symbolic instinct" (Hoffmann [2017]) is one of the major foundations of construction grammar and construction morphology (Booij [2016] and Booij & Audring [2018: 67]), leading to the emergence of multidirectional motivational ties which are operationalised via the construction model which defines a construction as an association of form and meaning. In this system, the lexicon is a "complex web of relations between words and morphological schemas" in the words of Booij [2016: 435]:

We thus see that the lexicon is a complex web of relations between words and morphological schemas: words are instantiations of schemas and may contain other words as building blocks; they are paradigmatically related in word families, and belong to morphological classes (like deverbal nouns in *-er*); schemas can be instantiated by subschemas, and there are second-order schemas as well. This makes the lexicon a well-structured whole of words and classes of words. Booij [2016: 435]

This perspective of interconnected paradigmatic and syntagmatic ties aligns with that of complex adaptive systems, which are characterised by constant feedback loops, adaptation and innovation, as developed in Goldberg [2019], Langacker [2018], and Schmid [2020]. The question at stake for this study is how to develop methods capable of identifying the combinatorial effects of motivation. The entrenchment and conventionalisation (EC) routine detailed in Schmid [2020] is the backdrop for innovative uses, triggering new motivation in context.

### 1.3. De-iconisation pathways from interjections to grammatical categories

Our research question here is related to the role of iconicity in the development of the lexicon. Loss of iconicity has been suggested as a natural language change mechanism (Bolinger [1988] and Waugh [1994]) whereby iconicity may decrease over time. Flaksman [2017] proposes that there is a demotivation *treadmill* in place, leading to loss of iconicity and a tendency towards increased indexical or diagrammatic values (Waugh [1994] and Hoffmann [2017]). Ahlner & Zlatev [2010: 336] argue there is an evolutionary process at stake, whereby de-iconisation is the inevitable counterpart of conventionalisation in languages that have strong standardization:

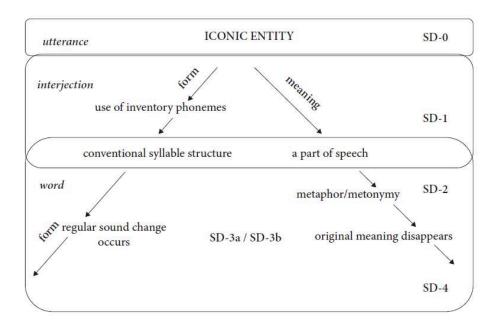
What is much more plausible, we propose, is an evolutionary explanation. Iconicity is a key factor in the emergence of new expressions – as can be seen in signed languages (where new signs emerge from gestures), or on the basis of iconicity not between sound and meaning, but between the meanings of different expressions, as (computer) mouse. At the same time, with conventionalization, the role of iconicity diminishes – as again seen in signed languages, where 'arbitrary' signs are deemed to be at least as many as 'iconic' signs (Woll, Kyle 2004). Ahlner & Zlatev [2010: 336]

Flaksman [2017: 17] also argues that loss of iconicity is inevitable in iconic words due to two factors, namely regular sound change and regular semantic change. This in her view leads to de-iconisation of iconic words, by which "their development is marked by a gradual acquisition of the symbolic conventional traits of the language they belong to". Flaksman [2020] identifies four stages of de-iconisation of words based on the increasing loss of iconic associations from the original etymological sense to secondary senses derived from semantic change processes such as metaphor and metonymy:

[T]he semantic de-iconization of iconic words starts already with them beginning to function as verbs, nouns, adjectives etc. (Flaksman 2017a: 28); as iconic interjections (or ideophones) have a closer link between their form and meaning... Becoming a part of speech other than an interjection is already a small step towards polysemy and, consequently, towards de-iconization. Flaksman [2020: 83]

The four diachronic stages of de-iconisation (SD) affect both the form and the meaning of the word as can be seen in Figure 1. Stage SD0 is the pre-lexical stage of the sound itself, SD1 is the lexical stage of the interjection conventionalised into phonemes and graphemes, followed by syllable structure. SD2 is the lexeme belonging to a part of speech followed by conventional meaning and sound changes whereby the lexeme loses its etymological sense.

Figure 1. De-iconisation stages in Flaksman [2017: 29]



- The steps in the de-iconisation of meaning are broken down in Flaksman [2020: 84] as the following. Step 1 - word becomes a part of speech other than interjection; Step 2 diffusion of the word's meaning through metaphor and metonymy (primary and secondary); Step 3 - loss of the word's original sense and thus shift out of the semantic field of sound (sound-articulatory) denotation. This inevitable de-iconisation process once a lexeme enters SD1 does not however lead to a global loss of iconicity in the lexicon. Rather, according to Flaksman [2017: 2020], this loss is counterbalanced by iconic innovation. However, it is still debatable if there is a straightforward unidirectional pathway leading to global decreased iconicity for two reasons. First, from a usage-based perspective, words find their meaning in context, which is therefore negotiated in the context of usage where remotivation can be triggered by the context since motivation is always an iconic potential, becoming a countermechanism to loss of expressivity. Motivation is always a potential rather than an instruction (see Radden & Panther [2004], De Cuypere [2008], Panther & Radden [2011], and Pleyer et al. [2017]). As argued by Waugh [1994: 59] "any part of a word has the potential to be iconic, a potentiality which may be fully actualized, partially actualized, or not actualized." Second, innovation does not occur within a vacuum in the lexicogrammatical system of language, which implies that there are other analogical mechanisms at work, which call into question a simple equation of loss or gain.
- With these issues in mind, we set out to study a set of nominal lexemes with phonosemantic properties expressing the concept <enthusiasm energy vitality>. This paper seeks to gather data regarding the behaviour of this set of iconic words in the narrow context of usage, following the assumption that expressiveness and iconicity is a **potential** triggered in context and is multifactorial (Tsur [2012], also Smith [2022]). To achieve this, first we use lexicographic material to identify the subset of words and analyse their properties, such as etymology, morphological structure, senses, with the attestation date of the first sense of the lexeme and the attestation date of the target sense. For clarity, we will designate the words expressing the concept of <enthusiasm

ENERGY VITALITY> as EEV words, and the target sense as the EEV sense. Then we study their diachronic frequency and contexts of use, with the aim of identifying the motivational links that influence their emergence, survival, frequency of use, and their usage in context.

# 2. Data and method for selecting expressions of enthusiasm and vitality in the lexicon

In order to investigate the diachronic development of a set of words expressing a similar concept, i.e. investigating the motivations behind the coexistence of similarity in the lexicon, we opted for an onomasiological approach focusing on variation within a semantic field. We will now detail the choice of onomasiological field and the method used for generating the dataset.

### 2.1. Onomasiological semantic approach: field of <ENTHUSIASM ENERGY VITALITY>

- Variation studies such as Geeraerts *et al.* [1994] and Geeraerts [2016: 171] consider "onomasiological salience" to be a fundamental feature of language production". Onomasiological salience provides a qualitative parameter for the evaluation of the semantic adequacy of an expression within the set of alternative expressions available to express the idea. Blank [2003: 39] highlights two main benefits, the first being that the onomasiological method of inquiry focuses on the discovery of pathways of emergence of lexical forms within a semantic field, and secondly that it "is also chosen for typologies of the motives of lexical change". Our current study aligns with these objectives stated by Blank [2003] and Geeraerts [2016].
- This paper poses the question of the **incidence** of iconicity within a specific onomasiological field. Hinton *et al.* [1994: 10] conclude that movement, size, shape, color, and texture are more likely to be expressed by a sound-symbolic word. Dingemanse [2012] also suggests that certain lexical fields may be more consistent with iconic strategies, and Dingemanse *et al.* [2016: 118] propose that "the potential for iconic associations differs across semantic domains". In his cross-linguistic study of sound iconicity, Dingemanse's [2012: 663] "Implicational Hierarchy" implies that the conceptual categories of sound, movement, visual, inner feelings and cognitive states are more likely to be expressed by iconic words. This Implicational Hierarchy offers a "multi-faceted semantic map [...] with multiple possible trajectories of semantic extension and change". Following this model, we propose to consider the field of vitality and enthusiasm, which can be identified as an emotional cognitive state. A preliminary consideration of iconic nouns referring to what can be described roughly as <enthale serve as a test bed for the study of iconic variation.

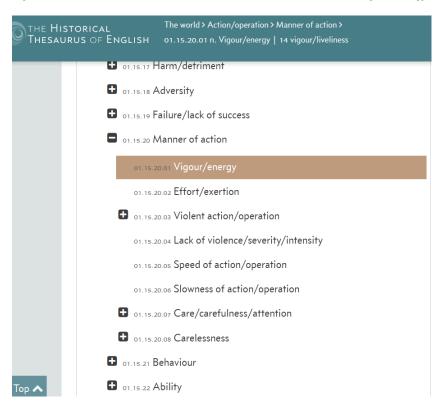
### 2.2. The tools for extracting the data set

The Historical Thesaurus of English HTOED (Kay [2015], also Kay & Allan [2016]) was used as a tool to generate the nouns to be included in the study. The conceptual category of

<ENTHUSIASM ENERGY VITALITY> is nevertheless far from easy to pin down, as are most conceptual categories. The structure of the HTOED provides a top-down architecture of categories ranging from broad to specific headings. From the basis of the words extracted from the HTOED, we then verified the iconic words in this category, using the etymological information in the OED to assess if iconic roots are present.

- First, we verified the classification in the HTOED of our preliminary target words pizzazz, rah-rah and oomph. A search confirmed their classification under different categories and subcategories. In the HTOED, pizzazz falls under VIGOUR / ENERGY and TASTE; rah-rah 'characterized by riotous excitement' falls under the category EMOTIONS, then EXCITED, then RIOTOUS EXCITEMENT. Finally, oomph attested from 1937 is categorised under MANNER OF ACTION: VIGOUR / ENERGY: VIGOUR / LIVELINESS.
- After careful consideration, the HTOED thematic category AO21a VIGOUR / ENERGY within the category MANNER OF ACTION was selected as the most pertinent category for the study of sound symbolic words referring to vitality. The architecture of the thematic category AO21a VIGOUR / ENERGY<sup>4</sup> is shown in Figure 2. There are 38 words belonging to this level, all of which are nouns. Out of these 38 words in this thematic category there is a proportion of monosyllabic iconic words such as *jizz*, *dash*, *feck*, *snap*, *fizz*, *zip*, *pep*, *jazz*, *zap*, and *zoom*. In addition, within this thematic category, the subcategory 14 LIVELINESS<sup>5</sup> also displays a number of expressive words, namely *oomph*, *pizzazz*, *vavoom*, and *zing* which are shown in Table 2.

Figure 2. Screenshot of the HTOED architecture for manner of action + vigour energy



In total, after semi-automatic extraction and manual verification of etymological origins and OED definitions, we are left with 16 words. Out of these 16 words 12 are listed in the HTOED under the HTOED subcategory VIGOUR / LIVELINESS, and 4 (zest, pizzazz, rah-rah and oomph) are listed in other categories relating to <ENTHUSIASM ENERGY

VITALITY». These words were included because the OED definitions confirm that they carry the target EEV sense (see Table 2).

24 words were excluded from the dataset including five OE words, and several more recent words such as force, lustiness, vigour, vivacity, greenness, vogue, throughput, energy, steam, and energeticism. We also excluded vim [1843] from Latin, feck [1488] a variant of effect, and verve [1697] from French, itself of obscure origin. This means that the final subset of iconic words that fit our criteria is limited to a relatively small set overall although not an insignificant proportion of the field. All 16 words in the dataset are listed in Table 2 in chronological order of attestation dates of each word.

Table 2 provides several data columns for each lexeme based on the OED information. Column 2 provides the part of speech (PoS): V is used for verb, N for noun, Adj for adjective, and Int for interjection. Column 3 indicates the date of attestation of the word, and Column 4 gives the date of attestation of the target EEV sense. Column 5 provides the etymological data and Column 6 indicates the other senses listed.

Table 2. Subset of 16 imitative words expressing <ENTHUSIASM ENERGY VITALITY>

	PoS	Date word	Date of EEV sense	OED key words	OED etymology	Variations and other senses
dash	N	1375	1796	action; capacity for	From the verb dash 1295, which may be a comparatively recent onomatopoeic word, expressing the action and sound of striking or driving with violence and smashing effect: compare clash, crash, bash, pash, smash, etc.	Sense 1 A violent blow, stroke, impact, or collision, such as smashes or might smash.
snap	N	1495	1865	Alertness, energy, vigour, 'go'. Originally U.S.		or teeth in biting,
jizz	N	1842	1842	Energy, strength.	Variant of jizm, origin unknown.	None.
rah-rah	V, Adj	1892	1892	Enthusiasm, excitement.	Reduplication of <i>rah</i> interjection 1870	Rah int 1870.
pep	N	1908	1908	Energy and high spirits; liveliness, vigour, power.	Shortening of pepper.	No other senses.

jazz	N	1912	1912	Energy, excitement, pep.	Of uncertain origin. Perhaps a variant or alteration of <i>jasm</i> .	Now rare in sense energy <i>pep</i> .
pizzazz or pizazz	N	1937	1937	attractive, energy, vigour.  Of unknown origin.		Pezazz.
oomph	N	1937	1937	attractive, energy, vigour.	Expressive or imitative.	Umph int 1568.
gung-ho	Adj, N	1942	1942	enthusiastic, eager, zealous.	Loanword from Chinese kung work + ho together.	None.
zhuzh	N, V	1968	1968	attractive, exciting, glamourous.	Expressive or imitative.	Compare senses zing n. B.2, pizzazz n., zap n. 1.
fizz	V, N	1665V 1734 N	1856	Go or animal spirits.	From v fizz An imitative or expressive formation.	Sense 1 Disturbance, fuss.
zip	Int, V, N	1678 Int	1899	Energy, vigour; liveliness.	An imitative or expressive formation.	Sense 1 Representing a sharp whining, buzzing, or ripping sound.
zoom	Int, V, N	1856 Int 1886 V	1926	Zest, vivacity, vigour; zip; gusto.	From v and int An imitative or expressive formation.	Sense 1 v and int sound of travelling at speed.
zing	Int, V, N	1875 Int 1902 N	1917 N	Energy, enthusiasm, or vibrancy; a stimulating or invigorating quality which adds to the enjoyment or agreeableness of something.	An imitative or expressive formation.	Sense 1 Representing a sharp, high-pitched ringing or twanging sound, esp. one made by a rapidly moving object.
zap	Int, V, N	1929 Int 1968N	1968 N	Liveliness, energy, power, drive; also, a strong	Noun from verb/int An imitative or expressive formation.	Sense 1 Used to represent the sound of a ray gun, laser, bullet.

				emotional effect.		
vavoom	Int, Adj, N	1954 Int	1962 N	Vigour, sex- appeal; oomph.	An imitative or expressive formation.	Sense 1 Expressing admiration for something regarded as excitingly appealing, esp. a woman's curvaceous figure. Also: representing the sound of an engine being revved.

- A brief synthesis of the information in Table 2 provides a heterogeneous picture of the 16 words belonging to the <ENTHUSIASM ENERGY VITALITY> category.
- Firstly, the part of speech (PoS) categorisation is more heterogeneous than anticipated. Most words are given as having multiple part of speech tags, including interjections, nouns, adjectives and verbs. Secondly, the etymological information in the OED is equally heterogeneous as not all selected iconic words are identified as having "expressive" or "imitative" roots, i.e. root iconicity.
  - Imitative roots (8): oomph, zhuzh, fizz, zip, zoom, zing, zap, vavoom
  - Onomatopoeic (1): dash
  - Clipping (1): pep
  - Unknown or variant (2): jazz and jism/jizz
  - Borrowing/loanword (2): snap and gung-ho
  - Reduplication (1): rah-rah
  - Unknown (1): pizzazz

This heterogeneity of etymologies is not however immediately significant since etymologies are not single trajectory word histories as explained by etymologist Liberman [2010]. We know that words that do not originate from imitative roots (such as clips or loans) may also be **reanalysed** as iconic via analogical mechanisms.

- Thirdly, an analysis of the OED senses shows that not all words carry the EEV sense as their primary sense, since in some cases the EEV sense emerges after the attestation of the word. <code>jizz, rah-rah, pep, jazz, pizzazz, oomph, gung-ho</code> and <code>zhuzh</code> are attested in their primary sense relating to <code><ENTHUSIASM ENERGY VITALITY></code>, whereas the other 8 words develop the EEV sense after the initial attestation of the word.
- We now move on to a description of the method of corpus analysis from a usage-based perspective, which assumes that usage in context is key to determining behaviour.

### 2.3. Selection of corpora for distributional semantic analysis

The words selected for the study present certain features that dictate the choice of tools for analysis. First, the emergence of the EEV sense is fairly recent. The oldest attested sense of <enthusiasm energy vitality> among the 16 nouns listed, that of the

noun dash, dates back to 1796. The diachronic profile of the dataset means that the COHA (1820-2010) (Davies [2010]) is an ideal corpus to study distributional behaviour. Second, many of the words are tagged as colloquial US, or slang US, suggesting a likelihood that the usage will be found in a corpus which has a good representation of oral language and a good representation of American language sources. This can mean dialogues in a novel, plays but also TV and movies, as well as blogs and online articles and opinion pieces. The COHA, comprised of 475 million words, is the largest balanced historical corpus of the English language, and therefore presents the advantage of having a wide selection of sources and genres across decades.

In addition to the COHA, we will use the contemporary OEC (Oxford English Corpus 2000-2010), a very large electronic corpus of English of 2 billion words, available via Sketch Engine (Kilgarriff *et al.* [2014]). Sketch Engine offers the benefit of more in-depth collocational behaviour analysis. The Thesaurus and Word Sketch functions in Sketch Engine allow us to investigate the extent of distributional similarities between words in the corpus.

## 3. Lexicalisation patterns and pathways of emergence of <ENTHUSIASM ENERGY VITALITY>

In this section, we now turn to the study of pathways of development of <ENTHUSIASM ENERGY VITALITY> in our 16 iconic-word dataset. By determining pathways of emergence, we will question how patterns of change affect the iconic dataset. We will start with the set of words corresponding to the interjection to noun development pattern, and then deal with the words which have the primary EEV sense.

### 3.1. Patterns of development of the nouns and their sense of enthusiasm

### 3.1.1. Interjections to PoS

We first look at the lexicalisation patterns of the set of words which are attested as interjections, nouns, adjectives and verbs. The first pathway appears to be the initial emergence as an interjection; this concerns the 5 words zip, zap, zoom, zing and vavoom all shown in Table 3. Note that zhuzh and gung-ho are not classified as interjections by the OED. All of these are initially noted as interjections and are associated with the sound of something moving fast, as shown in the Sense 1 listed in the final Column. Interjections are thought to be in SD category 1 according to Flaksman [2017] as they are conventionalised to some degree but do not show signs of syntactic integration into the system via part of speech classification.

Table 3. Words attested initially as interjections

Iconic word	PoS	Attestation date	EEV attestation date	Sense 1 in the OED
zip		1678 int	1899	

	Int, verb, noun			Sense 1. Representing a sharp whining, buzzing, or ripping sound.
zoom	Int, verb, noun	1856 int 1886 V	1926	Sense 1. The sound of travelling at speed.
zing	Int, verb, noun	1875 int 1902 N	1917 N	Sense 1 Representing a sharp, high-pitched ringing or twanging sound, esp. one made by a rapidly moving object.
zap	Int, verb, noun	1929 int 1968 N	1968 N	Sense 1. Used to represent the sound of a ray gun, laser, bullet.
vavoom	Int, adj, noun	1954 int	1962 N	Sense 1. Expressing admiration for something regarded as excitingly appealing, esp. a woman's curvaceous figure. Also: representing the sound of an engine being revved.

40 An analysis of the OED entries of these 5 words shows that most have some degree of polysemy with the EEV sense finding its way through various chains into the sense of the lexeme:

Zap [1968] is given in the primary sense "liveliness energy", and is followed by several semantic extensions, a "demonstration" attested in 1972, "a change in [computer] programming" attested in 1983, and the fourth and final sense provided is that of the sound itself. The citation from 1984 for this sense refers to video games "zaps".

Zing is attested in 1875 as an interjection, and emerges as a noun a few years later in 1902. Sense 1 provided by the OED relates to the sound of a rapidly moving object. The EEV sense occurs around 1917 with the sense "Energy, enthusiasm, or vibrancy; a stimulating or invigorating quality which adds to the enjoyment or agreeableness of something".

Zoom and zip are given as having a primary sense relating to speed, with the EEV sense originating from a metonymic meaning shift. Zip [1678] is given initially as an interjection in the sense "Representing a sharp whining, buzzing, or ripping sound". The noun attested in 1850 has the initial sense "A sharp whining, buzzing, or ripping sound", then is attested from 1899 with the target sense "energy liveliness". The third sense [1925] is that of a zipper, and finally the last sense is that of a computer file "named with the file extension zip" attested in 1989.

Zoom is attested in 1856 as an interjection relating to speed "Representing a zooming sound, as made by something travelling at speed". The noun zoom is attested in 1917 with the sense of speed specifically relating to aircraft "A steep climb by an aircraft flying at high speed". The sense "vigour" is attested 10 years later in 1926, and finally the final sense is related to camera photography from 1930.

Vavoom originates from a sound of engine revving rather than the sound of speeding itself, and develops into a metaphorical sense of biological attraction. Vavoom [1954] is classified as interjection, noun and adjective. The first attested sense "Expressing admiration for something regarded as excitingly appealing" suggests a reference to an

interjection. The adjective *vavoom* is attested in 1955 in the sense "curvaceously sexy", and the noun *vavoom* is attested in 1972 in the sense "vigour sex appeal, oomph".

- 41 From a semantic change perspective, among the 5 words initially attested as interjections in Table 3, the emergence of the EEV sense is related to the metaphorical / metonymical pathway SPEED IS VITALITY OR ENTHUSIASM. From a grammatical class perspective, the semantic development is also correlated with an increased integration into the lexical system with the classification as a noun. All word origins are given as conversions into verb and noun PoS and the original root is expressive or imitative.
- This means 11 out of the total of 16 words in our dataset in Table 2 are not listed as interjections, such as for instance the imitative words fizz, zhuzh and oomph. However, oomph is seen as related to the interjection umph [1568] and rah-rah fits partly into this category as it is a reduplication of the interjection rah. The semantic development of rah-rah diverges from standard interjections of sound (Stange [2016]), in that there is no reference to speed and sounds, but rather to an exclamative reaction. Pizzazz, jazz, jism/jizz which are given as being of uncertain origin, appear to illustrate the presence of analogical influences on etymological factors leading to what Croft [2000] referred to as "sliding roots". This sliding or interference of roots is also attested by Liberman [2010], Smith [2014; 2016], and Flaksman [2020]. Croft [2000: 152] argues that usage-induced analogies over time lead to new patterning in the lexicon, which he calls "lexical intraference". Liberman [2010: 25] goes as far as to warn against the desire to simplify word histories by backtracking to a single root since many usage-induced phenomena make this impossible and even undesirable as "there was never a beginning":

Finally, the period of "first words" is an uninspiring construct. There have always been many words that influenced one another, people have always had neighbors from whom they borrowed words, and conflicting impulses have always been at crosspurposes. There never was a beginning. After all, we are not characters in Kipling's *Just So Stories*. Liberman [2010: 25]

- For Waugh [1994: 57] and Fried [2009: 265], these intraferences are the result of a constant reanalysis of words induced by usage, leading to what they refer to as indexical or a diagrammatic phenomenon, leading to re-organisation. In other words, the motivation cycle is not a win or lose system but constant re-adaptation of ties.
- Finally, the dataset includes two words that are described as originating from a loanword in the case of *snap*, and as a borrowing from Chinese for *gung-ho*.
- We now consider the words whose EEV sense co-emerges with the attestation of the word followed by the words with most polysemy *snap* and *dash*.

#### 3.1.2. Primary sense of <ENTHUSIASM ENERGY VITALITY>

Table 4 recalls the 8 iconic words in the dataset of 16 words which have a primary sense relating to the concept of <ENTHUSIASM ENERGY VITALITY>, with identical dates of attestation of the word (Column 2) and date of attestation of the target sense (Column 3). The OED register information is added to the table, showing that most words are tagged as *colloquial* and occasionally *slang* by the OED.

Table 4. 8 words with the primary sense of enthusiasm

	date word	date EEV sense	OED etymology	OED register	
jizz	1842	1842	Variant of <i>jizm</i> , origin unknown.	Colloq orig US	
rah-rah	1892	1892	Reduplication of <i>rah</i> interjection 1870	Colloq orig US	
рер	1908	1908	Shortening of pepper	Slang US	
jazz	1912	1912	Of uncertain origin. Perhaps a variant or alteration of <i>jasm</i>	Colloq US	
pizzazz or pizazz	1937	1937	Of unknown origin.	Colloq orig US	
oomph	1937	1937	Expressive or imitative		
gung-ho	1942	1942	Loanword from chinese kung work + ho together.	Slang	
zhuzh	1968	1968	Expressive or imitative	Slang	

- In all 8 words in Table 4, the EEV sense co-emerges with the first attestation of the noun. Of these 8 lexemes, jizz, jazz, zhuzh, and pizzazz to a lesser extent share some phonological and acoustic similarities. Jizz, jazz and zhuzh begin with an affricate or sibilant onset /dʒ/ or /ʒ/ and end with a voiced sibilant /ʒ/ or /z/. Pizzazz rhymes with jazz, with the addition of a syllable in pre-stressed position. Jazz is suggested as being an alteration of jasm, and jizz an alteration of jism.
- Oomph appears to exhibit articulatory iconicity and possibly is a conventionalisation of an interjection, rah-rah is likely a reduplication of an interjection signifying vigour, which also exhibits some articulatory properties of a cry. As for pep, its acoustic and articulatory properties are consistent with iconic remotivation as the aspirated plosive onset followed by a short lax vowel is suggestive of high energy. Gung-ho is the outlier, as a word form that does not share any similarities with other words in the lexicon, thereby preserving its status as a foreignism.
- We will now develop the pathways of emergence of the EEV sense in the most polysemous nouns in our dataset *dash* and *snap*. Then we will develop two specific case studies of *rah-rah* and *gung-ho* using the diachronic COHA and the contemporary OEC. Finally, a brief overview of pathways of emergence of <ENTHUSIASM ENERGY VITALITY> in our 16-word dataset will be provided.

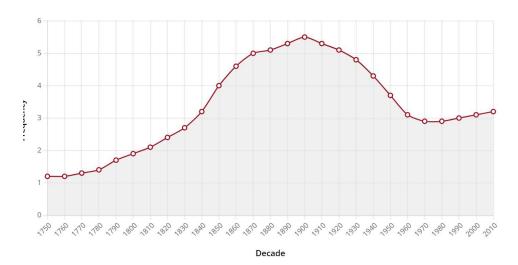
### 3.1.3. Polysemous dash and snap: late emergence of <ENTHUSIASM ENERGY VITALITY>

The nouns *dash* and *snap* in our dataset have the highest number of senses in the OED: the EEV sense is also attested much later than the primary sense. *Snap* noun [1495], a

"borrowing from Dutch or German" according to the OED etymology, has the most senses by far. The sense "vigour" is attested much later than the first sense in [1865]. The first sense of *snap* [1495] is initially given as "quick sudden action" relating to teeth and eating, and followed by no fewer than 10 related senses such as "something worth securing", i.e. a job. Many other senses are particular to certain fields or disciplines, such as theatre, angling, and American football.

Dash noun [1375] is given from dash verb [1297], itself a borrowing from Scandinavian. However, the OED etymologist suggests it may have arisen as a recent onomatopoeic formation based on -ash words, illustrating the intermingling of roots observed by Croft [2000]. The analogical pull of pre-existing -ash words in the lexicon may have led to the reanalysis of dash as an onomatopoeic (iconic) word, demonstrating the remotivation or re-iconisation process. The sense "Spirited vigour of action; capacity for prompt and vigorous action" emerges around 1796. From the OED citations alone, it is clear that dash and snap differ in their semantic behaviours, as they both trigger different aspects of the lexical field of vigour. The semantic development may be tied to the success and longevity of both words: they both remain frequent in English as can be seen by the diachronic frequency graphs (1750-2010) taken from the OED. However, it is impossible at this stage to compare the two associations of form-meaning since the target EEV sense cannot be isolated in both of these graphs.

Figure 3. Frequency of the noun dash (1750-2010) according to the OED frequency indicator



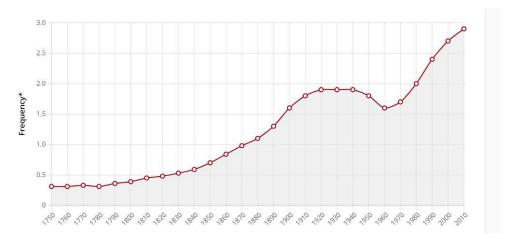


Figure 4. Frequency of the noun snap (1750-2010) according to the OED frequency indicator

Therefore, it is likely that *snap* and *dash* attest to the presence of multiple motivational ties at work in the lexicogrammatical continuum, including phonosemantic associations with other words in the lexicon (such as *dash*, *dashing*, referring to smart appearance).

As we cannot provide an in-depth overview of the semantic distributional development of all 16 words, and since the EEV sense is difficult to pin down in the case of polysemous words, we will now develop two case studies of words which do not have significant semantic variation, *rah-rah* and *gung-ho* using the OEC and COHA.

### 3.2. The case study of rah-rah

- The emergence of *rah-rah* follows a particular pathway within the subset of words in the category of <enthalance energy vitality>. It is a reduplication of *rah*, itself a potential clipping of *hurrah*. The lexeme *rah-rah* is listed in the OED as a verb [1892], an adjective [1896] but not classified separately as a noun. The word formation process of *rah-rah* is not unambiguous: the verb is potentially a reduplication of the interjection *rah* and the adjective is potentially a conversion of the verb. Given the closeness of the dates of attestation of verb and adjective, it is very difficult to assume a unidirectional conversion as argued by Umbreit [2010]. Etymologically, the lexeme is described as a reduplication or compounding of the interjection *rah*, which is a marker of enthusiasm with a pejorative connotation, suggesting fervour or even fanaticism. It is associated with college sporting events: "Marked by or relating to the expression of enthusiasm or excitement, as in cheering for a college sports team; excited, (overly) enthusiastic, upbeat; (hence) of or relating to college, collegiate" (OED).
- There are 63 occurrences of *rah-rah* without word class specification in the COHA. The occurrences include two attestations in 1910 and 1911 in the context of *rah-rah* boys, referring to a spirited and ostentatious mentality. There is a strong tendency for *rah-rah* to attract nominal collexemes related to the American college environment, as seen in excerpts (1) and (2):
  - (1) Honest, I didn't take you for one of them **rah-rah** boys. Well, if it's that ails you, you're up against it. I don't wonder you had to be jammed into a job with a flyin' wedge. (1911, *Torchy*)

(2) Football in its early and undeveloped state lasted, with changes of a minor nature, from 1890 to about 1910. Let us call this period the **Rah-Rah** period; the term almost exactly connotes the condition of the sport during those approximate years. (1929, Football on the wane?)

Rah-rah is also used as an interjection in exclamative utterances in oral discourse in (3) to (5), in initial left position as in (3) and (4) and in final position to the right as in (5):

- (3) Applauding. Yeigh! OTHERS Rah-rah team, team! (1935, Enchanted Maze)
- (4) Yolande and Maribeth laughed for a long time. The twins, landing in a semi-split after a leap, said together, "Rah, rah-rah. Fight' em, fight' em, fight' em." (1953, Cress Delahanty)
- (5) Hey! Get off of me! Ow! Lose the attitude or you're gonna eat it. I don't have no money. Money? We're done talking money, honey. You know what the man wants. Excellent. Rah-rah [...] (1989, Miami Vice)
- As far as the behavioural profile is concerned, *rah-rah* appears to be strongly associated with physical description of enthusiasm for sporting events (potentially due to the association with cheerleading) as in (6):
  - (6) They start pumping each other up. There's a lot of **rah-rah**. It's almost like a college team. (1995, *Denver Post*)
- Rah-rah appears to be used only as an interjection and does not develop lexicalised uses. Usage in the COHA is decreasing rather than increasing, although the drop should not be interpreted to signify obsolescence but rather limitation to a given context of use. Partington [2014] argues that absence of data in corpus linguistics has multiple causes which should be investigated, and Tichý [2018] underlines the need to establish degrees of obsolescence which should be viewed as a process not a state. There is evidence that a construction can remain active, meaning a construction can remain available to speakers, despite low productivity. As argued by Fernández-Domínguez [2010] and [2013] the measure of availability should be opposed to that of profitability, which is a more quantitative measure of success. The low frequency of a construction does not necessarily imply lack of availability of the construction. This explains the resurgence of -some adjective formation (Smith [forthcoming]), and also the potential for new phonesthemic formations such as new fl- words (Smith [2016]). Signs of lexical innovation are present with rah-rah. For instance, in (7) I'm all rah-rahed out, taken from Charmed S07E16, rah-rah is used in the X slot of the construction all Xed out. This slot can be filled by either nouns, verbs and adjectives, leading to rah-rah being interpreted as one of these. The context in (7) is a conversation between two Halliwell sisters attempting to reassure their elder sister Piper, whose marriage with husband Leo is in danger due to his amnesia (brought on by the Elders who aim to separate the couple in a bid to restore the balance of power in the universe).

(7) Phoebe: we could... just.... I don't know...

Paige: This is your idea of a **rah-rah** speech? You're supposed to be cheering her up not pushing her off the ledge.

Phoebe: Well, you know what Paige? Maybe I'm just rah-rahed out.

Paige: Huh?

Paige uses the term rah-rah speech (i.e. a cheering speech) to which Phoebe replies with an innovative use of the construction to be all Xed out. We did not, however, find any

- occurrences of interjections in the variation position among the 18 occurrences of *all*  $r^*ed$  out identified in the COHA.
- The contemporary corpus OEC faces a challenge with word class tagging of *rah-rah*. OEC provides 279 occurrences of *rah-rah* with a frequency of 0.11 per million tokens. *Rah-rah* is frequently used as a premodifier of nouns such as *posturing*, *slogan*, *cheerleader*, *consumerism*, *propaganda*, etc. In (8) *rah-rah* belongs to a sequence of adjectives premodifying the noun *column*:
  - (8) What now? A: No one likes to see the glass as half-full more than me, but this is no time for a **rah-rah**, Let's think positive! cheer-you-up column. (No date, USA Today Small Business)
- In (9) *rah-rah* is found alongside another adjective from our set of words, *gung-ho*, and in (10) *rah-rah* is premodified by the intensifier *very*:
  - (9) He's a smart man, an extremely smart man. And he's an artist of the first order. And, you know, he loves military stuff. Not in some gung-ho **rah-rah** kind of way. He just he appreciates the qualities that go why we need a military, why wars are thought. (No date, *CNN transcripts Campbell Brown No Bull*)
  - (10) The insurance industry has been on board with health care reform, being very **rah-rah**. And now all of a sudden, right before a vote in the Senate, they're saying, eh no you know what, we changed our minds. (No date, *CNN transcripts Newsroom*)<sup>7</sup>
- Based on OEC hits, rah-rah is less frequently used as a noun, as in (11) the rah-rah and the drama. Even more rarely (only one occurrence) is it used as a speech verb in (12), denoting enthusiasm (likely related to advertising campaigns promoting the films in question). There is also a creative formation of the derived adjective rah-rah-us in (13), which bears some similarities to raucous in terms of semantics and morphology:
  - (11) Where Hoop Dreams showed a system out of control and its immediate and long term effects, this movie spends a little too much time on the **rah-rah** and the drama, and not enough on the blatant unrealities of this town. (2002, DVD Verdict)
  - (12) Sony can **rah-rah** all they want, but I hated "Spider-Man", "Men in Black II," and am not even interested in "Mr. Deeds", "Stuart Little 2", or "XXX". (2002, *The Hot Button*)
  - (13) The persuasive power inherent to visual communications is put almost exclusively into the service of the market, and is used in churning out and selling things for companies. This's all well and good and worthy and **rahrah** us, but as far as relevance to the greater world of ideas and the vast potential of design, it's pretty boring and severely limited. (2005, *Design Observer*)
- In (14), *rah-rah* appears as a discourse marker introducing a reported speech statement. *Rah-rah* serves as a reformulation marker and serves to convey the enthusiastic tone or attitude of the speaker:
  - (14) He has told people a lot more of the truth: This is going to be hard, bloody, awful, but still worth it. The president seems to always reflect back to his old days as a cheerleader at Andover. And he says, rah-rah, we're

winning. And that engenders cynicism. (No date, CNN transcripts - The Situation Room)

The concept of discourse marker in the literature refers to various types of expressions, often in spoken language, that punctuate discourse. These include categories such as connectors and punctuation markers (as mentioned in Boula de Mareüil *et al.* [2013]). Dostie & Push [2007: 5] explain that they are essential in conversational contexts:

Les MD doivent être envisagés dans un tout autre cadre, celui de la langue orale, où la coprésence de l'interlocuteur influence la façon dont le locuteur construit son discours. Ils apparaissent à des endroits stratégiques et ils contribuent à rendre efficaces les échanges conversationnels, ainsi qu'à aider l'interlocuteur à décoder la façon dont le locuteur conçoit le sens purement propositionnel exprimé et se positionne par rapport à celui-ci [...]

In (15), *rah-rah* is used as an interjection, more or less explicitly stemming from the reformulation of the illocutionary attitude, following the speech verb *yell*:

(15) As a country we love to wave the flag and yell **rah-rah**, but relatively few really know who it is who wears the uniform, and what those people are really like, and why they're in the uniform to begin with. (No date, *Bookslut*)

Rah-rah remains a lesser-known discourse marker, posing challenges in terms of partof-speech labelling. It occupies a boundary between discourse marker and interjection, a complex lexical category often defined by default in relation to other grammatical categories.

[Interjections] are indispensable, for they fulfil important functions. In very basic terms, they act as 'symptoms' of the speaker's state of mind, but they may also assume important pragmatic and social functions. Their semantic wealth is undeniable and what else is language for but to share ideas and to express one's state of mind? Interjections, then, despite their formal particularities, are definitely essential to language and to human interaction. Stange [2016: 205]

- The lexicalization of onomatopoeic discourse markers results in conventionalization in terms of word classes. Conventionalised usages often correspond to the following motivational pattern: an interjection X is transformed into a speech verb that is glossed as "say / utter X." This pattern can be observed in instances (21) and (22).
- Innovative usages of *rah-rah* are also found, corresponding to the activation of different motivational patterns. For example, in (7), it is used as a possible verb or adjective in *I'm rah-rahed out*, and in (13), it is used as a creatively derived adjective, *rah-rah-us*, possibly following the model of *raucous*. In these specific occurrences, the innovation is motivated by the activation of a hyper-construction. The *Xed out* construction and the analogical construction *raucous / rah-rah-(o)us* play a role in this innovation. The *Xed out* construction involves extending the structure <I'm all X (verb or Adj)ed out> to *I'm rah-rahed out* based on the usage of *rah-rah* as verb or adjective (similar to constructions like *I'm all cried out* or *talked out*; see Hugou [2013] for more on this construction).
- 67 However, not all interjections share the same criteria. Stange [2016] proposes a classification of interjections based on the nature of their pragmatic motivations:

Emotive, cognitive, conative and phatic interjections all pertain to the speakers' states of mind in that their use reveals how the speakers feel, what they want or think at the moment of the utterance (or that they are paying attention to what is being said). Onomatopoeic expressions, on the other hand, are simply imitations of non-human noises [...]. These include animal sounds (e.g. *Eeyore!* as a donkey's cry)

or noises caused by objects or events (*Splash!*, for instance, imitates the sound of a relatively heavy object falling into water, and *Boom!* the sound of an explosion). Stange [2016: 16]

The criterion of collocational restriction distinguishes onomatopoeias from onomatopoeic interjections. Onomatopoeias (primary) are typically constructed with "go", whereas interjections use "say" and "go" as predicates. This distinction between onomatopoeic formations with referential functions and interjections with illocutionary (speech act) functions is supported by this pattern. The findings of Stange's [2016] corpus study demonstrate that interjections exhibit the same variation in usage as other linguistic expressions:

First and foremost, the data have shown that there are pronounced differences in use within and across all three registers, both as regards the relative frequency of the contexts in which speakers use the respective interjection and the general frequency of use. Second, the analyses of the contexts of use have shown that any of the emotive interjections included in this study has a broad range of functions, their number varying between five for *Wow!* and ten for *Ow!* and *Ouch!*. Stange [2016: 201]

We will now compare *rah-rah* with another interjection that expresses <ENTHUSIASM ENERGY VITALITY> *gung-ho*. *Gung-ho* does not follow the trajectory of *rah-rah* and does not emerge as a speech verb complementiser.

### 3.3. The case of gung-ho

The lexeme *gung-ho* [1942] differs from the other words in the category as far as its etymology is concerned, and also in terms of word class. It is a borrowing from Chinese referring to a war cry. As the borrowing into English expresses a concept that is already expressed by other lexical forms namely <ENTHUSIASM ENERGY VITALITY>, it confirms the thesis that borrowings do not simply fill a lexical gap as argued by Durkin [2014]. *Gung-ho* is therefore not directly an imitative or expressive word in the donor language – which could indeed question its inclusion in the data selection. Given its proximity with *rah-rah*, and presence in the HTOED list, we have chosen to keep it in the subset for comparison purposes. According to the OED, *gung-ho* is a slogan, in other words, a conventionalised idiomatic phrase: "A slogan adopted in the war of 1939–1945 by the United States Marines under General E. Carlson (1896–1947); hence as an adjective: enthusiastic, eager, zealous." A comparison of the usage evolution in the COHA of *rah-rah* and *gung-ho* (without category distinction) produces Figure 5.



Figure 5. Frequency of gung-ho and rah-rah in the COHA

- If we compare *gung-ho* and *rah-rah*, there are major distinctions from the outset. Firstly, as we have pointed out the origins are different since *gung-ho* originated as a direct loanword from Chinese whereas *rah-rah* is a reduplicated structure of an interjection. Secondly, the distributional behaviour of the two words highlights the differences in PoS classification.
- Gung-ho has 92 occurrences in the COHA between 1960 and 2010. These occurrences can be categorised as direct interjections, reported speech markers, premodifying adjectives, or noun bases. It is immediately evident that gung-ho does not function as an interjection in the same way as rah-rah. Gung-ho is more conventionalised, entering into syntactic structures beyond "say X" or "go X." The uses of gung-ho are characterised by three distributional categories shown in Table 5: 1) uses as an adjectival premodifier to nouns, 2) uses as a predicative complement, and finally 3) uses as a noun head. The frequency of these three types of usage is provided for each decade from 1960 to 2000.

Table 5. Evolution of gung-ho in the COHA

	1960	1970	1980	1990	2000
Frequency	3 100% adjectival	16 (increase) 15/16 adjectival	21 (increase) 4 nouns 17 adjectives	22 Development of gung ho about/for	Development of gung ho about/for Extension to non military contexts

Uses as a premodifier	Noun Collexemes WARRIORS TYPE	Noun Collexemes PEP TALK LIST CHASER JOCKS GESTURE EXHORTATIONS DINOSAURS CAREER ATTITUDE ACTIVIST DEMON TOGETHERNESS	Collexemes STATE ROWDIES REPORTER MAGAZINE LIEUTENANT DISNEY COLLEAGUES CEO ATTITUDE PHILOSOPHY POLICY SCOUTING REPORT	Collexemes SURGEONS STYLE SHIT GIRLS ENERGY COUNTRY BOY COMPETITOR CHALLENGE BRITS ANGLERS ARRIVISTES RUGBY CAPTAIN  I talked about him a few	Noun Collexemes REPUBLICANS RANGERS RADICAL PFC LOVE BOOTS ATTITUDE GROUP MONOLITH
Predicative use	I was eighteen years old and all gung-ho. He enlisted. Gung-ho. They got Waxer too.	They could send out a surgeon who's even more <b>gung-ho</b> than Frank	Why should a President be more gung-ho about extinguishing all earthly life than a military officer?  I don't know a veterinarian who's not gung-ho. they both wanted to be here. Gung-ho, huh? Yes, sir.	desk, reading over my shoulder.  That's a little gung-ho for a guy who ate too many burritos.  You're really gung-ho about this	he's so gung-ho on the whole Drake Tribe  While Gates is more dry and cerebral, Ballmer is gung-ho and tactile.  Our kids may be gung-ho, but the older ones haven't got a clue about campaign-finance reform  Nor have employees been particularly gung-ho.  That was a big part of why I was so gung-ho on leaving early, I had to admit.

			is <b>gung-ho</b> on fabric maker Cone Mills.	
Uses as a noun head		4 uses as proper nouns (from GI Joe) This is for Gung-Ho, Alpine, and Bazooka!		

To an be observed that *gung-ho* is clearly distinguishable from nominal *rah-rah* and tends to correspond to an adjectival use. It is employed in contexts related to war in the literal or figurative sense, in contexts of combat or struggle. In these contexts, *gung-ho* takes on the meaning of 'reckless'. The adjective *gung-ho* is initially used as a premodifier of nouns related to the military domain, particularly in the context of the Vietnam War. The extension of its usage to a more figurative use occurs through use within an extended adjective phrase containing synonyms. As seen in (16), *gung-ho* readily combines with other phraseological structures, including *damn-the-torpedoes* and *full-speed-ahead*, which mirror and reinforce the battle metaphor:

(18) The Administration is pursuing a **gung-ho**, damn-the-torpedoes, full-speed-ahead policy. (1981, *Time Magazine*: Will Reagan's Plan Work?)

- 74 *Gung-ho* is also frequently followed by prepositional complements beginning with *about* and *for*. Furthermore, the adjective phrases in which *gung-ho* is inserted tend to involve enumeration and expressive reformulation. In other words, *gung-ho* is rarely used in isolation and is typically found within an adjective phrase as an expressive reformulation, as is the case in (16).
- 75 When we examine *gung-ho* in the contemporary OEC corpus, there are 1,693 occurrences classified as adjectival. The columns in Table 6 show the collexemes of *gung-ho* in several pertinent syntactic positions. Column 1 "and/or" shows the significant collexemes that are coordinated with *gung-ho* and therefore tend to share the same PoS and potentially meaning. Column 2 provides the nouns modified by *gung-ho*, and Column 3 provides the prepositions directly following *gung-ho*.

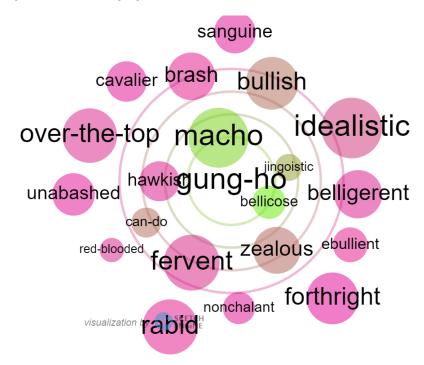
Table 6. Collexemes for gung-ho in the OEC

and/or	Freq	Score	X* mod N	Freq	Score	ADJ* PREP	Freq	Score
go-for-it	3	8.4	heroic	6	6.4	about	go-for-it	3
rightist	4	7.8	jingoism	3	6.2	gung-ho about	rightist	4
macho	4	6.3	militarist	3	6.1	on	macho	4
mindless	3	5.8	militarism	6	6.1	gung-ho on	mindless	3

earnest	4	5.5	patriotism	4	5.1	over	earnest	4
typical	6	3.7	patriot	4	4.9	for	typical	6
vibrant	3	3.3	attitude	64	4.9	gung-ho for	vibrant	3
American	17	2.2	gung-ho attitude				American	17
gung-ho American		cowboy	5	4.8			gung-ho American	
foreign	5	1.6	wartime	3	4.8		foreign	5
young	8	1.1	marine	3	4.3		young	8
military	5	0.7	imperialist	3	4.3		military	5
			enthusiasm	9	4.2			

- The collexemes in Table 6 confirm that the adjectives used in coordination ("and / or" position) such as mindless, macho, and typical are compatible with a negative reading. This is also confirmed by the collexemes in noun position as can be seen in Column 2 (joingoism, militarism, and attitude). In Column 3, the complementisers of gung-ho appear to be key elements in its usage with gung-ho about, gung-ho on, and gung-ho over.
- The Thesaurus in Figure 6 shows lexemes sharing the distributional behaviour of *gungho* in the OEC. Lexemes with the closest behavioural pattern to *gung-ho* are also related to contexts of aggression and war (*belligerent*, *macho*, *brash*, and *sanguine*).

Figure 6. Thesaurus of gung-ho in the OEC



If we compare the data in the COHA and in the contemporary OEC, the results confirm the tendency towards the accumulation of phraseological units within adjective phrases. In (17), *gung-ho* is associated with the adjectival sequences *draw your sword* and *fight to the death* which both serve to vividly describe the type of expected action movie:

(17) Imagine my shock when I realized this was not going to be a **gung-ho**, draw your sword and fight to the death movie. (2001, *ChartAttack Live Reviews*)

This phraseological structure corresponds to a verb phrase composed of two coordinated predicates *draw your sword* and *fight*, both triggering the COMBAT frame. *Gung-ho* is reformulated via this phraseological expansion, which also serves to reinforce the battle metaphor, the transfer or superimposition of the military domain onto a civilian domain. The effect of this superimposition is hyperbolic through the conceptual metaphor X IS WAR.

- In (18) to (21) the verb patterns be + gung-ho or go + gung-ho are followed by a complementation clarifying the purpose behind the enthusiasm. These are infinitival complementisers in (18), and also prepositional complementisers such as gung-ho about (19), or gung-ho on Ving (20), and finally gung-ho for X (21):
  - (18) How amped about that album could I have been if, a week after I was all **gung-ho** to write about it, I couldn't even remember what it was? (2004, *Freaky Trigger*)
  - (19) Thomasville was not exactly **gung-ho** about the idea of licensing a collection of furniture when Maria Metzner, president of Fashion Licensing of America, N.Y., approached the company with the idea for an Ernest Hemingway line. (2000, *Brandweek*)
  - (20) We were **gung-ho** on launching DailyCandy London, until I realized the toll it would take on our little company to run in three time zones. (2004, *Inc. Magazine*)

(21) Aurora thought of all the anime and manga craze she had noticed back home. Not that she was into it but back in high school many girls had gone **gung-ho** for things like that and even the boys too! (2005, *Behind Hazel Eyes*)

In all of these occurrences except (21), *gung-ho* is used to introduce eventive complements, i.e. complements that carry an event reading (such as non-finite clauses), and is interpreted as 'keen on doing' or 'bent on doing.' These uses are indicative of a bleached meaning, in that they do not reflect the initial warlike metaphor implied by *gung-ho*. The sense of "battle cry" of the borrowing *gung-ho* is reinterpreted based on the pragmatic context and tone. In contexts where there is no explicit battle, *gung-ho* takes on a hyperbolic sense "keenness" or "brashness".

Rah-rah and gung-ho both share a tendency to combine with other polylexical sequences, phraseological units of predicative nature that tend to correspond to explicit expressions of <enthusiasm energy vitality>. These phraseological units also share an expressive function conveying vividness.

### 3.4. Summary

- The emergence of nouns of <enthusiasm energy vitality> (Table 2) follows several pathways. One of the pathways is that of imitative words belonging to different parts of speech (interjections, verbs, adjectives, nouns) whose meaning evolves from sound and speed to enthusiasm. These nouns (including snap and dash) follow the metaphorical / metonymical pathway speed is vitality or enthusiasm. A similar pathway of emergence is that of fizz, which does not follow speed is vitality, but rather sound is energy. A second pathway includes the emergence of an imitative reading via blending or clipping in jazz and pep. A third pathway of conceptual blending maps energy onto fashion, such as in pizzazz and zhuzh. This pathway is possibly related to the similarity with sass, snazzy, with a correlation between similar sounding words and both trendiness and attitude.
- Out of the 8 nouns to emerge with the EEV sense jizz, jazz, rah-rah, pep, pizzazz, oomph, gung-ho and zhuzh, both jizz and jazz have developed other more common senses.
- Based on this brief overview, the quantitative frequencies of usage in corpora will provide a better understanding of how the semantic space of <ENTHUSIASM ENERGY VITALITY> is shared by the subset of imitative and non-imitative iconic words.

### 4. Quantitative frequencies in the COHA

After these case studies of *rah-rah* and *gung-ho*, we now move on to the frequencies of usage of all 16 words in the subset of iconic nouns expressing <enthusiasm energy vitalitys. The diachronic frequency patterns will give us an indication of how the words share the semantic space of nouns denoting <enthusiasm energy vitalitys. We test the use of these words in the COHA, following Geeraerts [2016] in the pursuit of an assessment of the onomasiological productivity of iconic words within this field.

### 4.1. Diachronic productivity in the COHA

In this section, we collect the raw frequencies for the 16 iconic nouns in the COHA range from 0 to 4654. The relative frequencies show the gap between low frequency,

medium frequency and very high frequency for that morphosemantic category. For comparison purposes, the standard nouns *enthusiasm*, *energy* and *vitality* have relative frequencies of 34.20, 93.24 and 9.53 respectively.

Table 7. Compared frequencies of the subset of 16 iconic nouns in the COHA

Noun	Raw frequency	per mil			
Zhuzh	0	0			
Gung-ho	0	0			
Vavoom	3	0.01			
Jizz	13	0.03			
Rah-rah	25	0.06			
Pizazz	28	0.07			
Zap	101	0.25			
Zing	103	0.25			
Oomph	117	0.29			
Fizz	195	0.48			
Zoom	278	0.69			
Snap	514	1.27			
Рер	679	1.68			
Dash	3804	9.39			
Jazz	4654	11.49			

- The search for each word tagged with noun POS in the COHA provides the dataset in Table 7 sorted from the lowest to highest frequency. However, two major confounding factors appear:
  - The POS selection is not always reliable;
  - The target EEV sense is not always present, especially with polysemous nouns.
- sense relating to <enthusiasm energy vitality>, it does provide some degree of clarification of the issues with a corpus analysis focusing on specific senses of lexemes. Zhuzh and vavoom are both in the lowest frequency set. Although gung-ho has 71 hits, none of these are recognised as nouns (or adjectives) in the COHA. In the highest frequency group (jazz, zoom) issues of polysemy cloud the data set. Jazz has a well-known primary meaning related to a genre of music, and the EEV sense is not the main

sense. Zoom also has a frequent primary meaning distinct from the target sense. However, it is difficult to assess the percentage of uses devoted to each sense. As for pep, it is the only noun in the set given as being monosemic, i.e. having no more than one sense. The polysemous nouns snap and dash are amongst the most frequent but the EEV sense is not the most commonly found sense.

### 4.2. Summary

We have argued that some of the higher frequencies are overinflated due to *jazz*, *zip*, and *zoom* whose most common sense is not the target EEV sense. The results of a search in the COHA confirm that only a very small proportion of occurrences for *jazz*, *zip* and *zoom* are associated with the EEV sense in the case of the less polysemous words, the target EEV sense is more prominent and uses tend to confirm the co-occurrence with other iconic EEV nouns. We will now investigate the collocational behaviour of the EEV nouns in the COHA and the OEC using a distributional semantic analysis.

# 5. Testing semantic space and similarity in context in the COHA and OEC: comparing degrees of similarity

We now test semantic similarity within the subset of the 16 iconic nouns identified within this set of words denoting <enthusiasm energy vitality>. First of all, we start with the strictly non-imitative forms *pizzazz* and *jazz* to investigate their behaviour. Do imitative words become less iconic, following the de-iconisation process? Do non-imitatives behave differently? What other motivational expressive processes are at stake? And finally, what is the degree of similarity between the words selected?

### 5.1. Pizzazz and jazz (non-imitative)

Pizzazz is listed in the OED as dating back to 1937. The OED etymology does not list the origins as directly imitative, echoic or expressive but rather "of unknown origin". It is defined as "An attractive combination of vitality and glamour; sparkle, effervescence; (also) flashiness, showiness." As with zhuzh, there are spelling variations such as pizazz, pizzazz, bezazz, and pezazz. All these variations share the same stress pattern /01/ with stress falling on the tonic vowel <a>. In the COHA, there are 44 occurrences of pizzazz and 30 occurrences of pizazz from 1959 onward. A search for graphic variations \*zazz produces Table 8 in the COHA, with no occurrences before 1959.

Table 8. Raw frequencies of \*z\*azz in the COHA

ALL		1820	1830	1840	1850	1860	1870	1890	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010
PIZZAZZ	44														1	3	- 4	13	9	10	- 4
PIZAZZ	30															1	- 4	7	10	5	3
RAZZMATAZZ	22												1	1	3	3	3	3	5	1	2
PAZAZZ	3															2			1		
RAZZ-A-MATAZZ	2														2						
RAZZAMATAZZ	2																- 1			1	
ZAZZ	2															1				1	
WOMAN-WITH-PIZZA	1																- 1				
SPAZZIA ZZ	1																		1		
RAZZAMADAZZ	1													1							
RAZMATAZZ	1																	1			
PZAZZ	1															1					
PAZZ AZZ	1																		1		
JIZZJAZZ	1																			1	
JAZZMATAZZ	1															1					
BEZAZZ	1																				1
TOTAL	114	0	0	0	0	0	0	0	0	0	0	0	1	2	6	12	13	24	27	19	10

- The orthographic variations involve the number of consonants, either <z> or <zz>, as well as the unstressed reduced vowel in the first syllable, usually <i> or <e> and occasionally <a>. The form pzazz without a vowel appears to be an informal variation resulting from syllabic compression: we do not assume that variations form new distinct lexemes unless there is a standardised spelling that emerges and unless the variant has become distinctive in its behaviour. The form zazz may be a phonetic variation of sass, meaning "insolence" in (22), but it can also be a clipping of pizazz or pizzazz as in (23), where the sense "energy" is retained:
  - (22) Rojack, don't give me any more of that upper-class **zazz**. I know where you were born. (1965, *An American Dream*, Noman Mailer)
  - (23) [Laughing] Well done, monkey. That other panda gave some unexpected **zazz** to the festivities, eh? Maybe for you. How come you didn't rescue me? (2000, *The Simpsons*).
- 92 The Thesaurus for pizzazz from the OEC in Figure 7 illustrates the connections of combinatorial relationships, in other words, the lexemes that share the most contexts with pizzazz:

Figure 7. Thesaurus for pizzazz in the OEC



Razzmatazz is the closest candidate sharing the most contexts with pizzazz, although less frequent. Another contender for similarity is the onomatopoeic oomph, which is more distant. In the outermost circle, there is the word sass (referring to insolence / attitude) as well as the series of forms sparkle, dazzle, and glitz, referring to light or brilliance and presenting phonesthemic or onomatopoeic elements. This chart provides an indication of the clustering of similar sounding words, i.e. the attraction of several phonosemantic analogical associations. Although pizzazz and jazz are not etymologically

phonosemantic, the analogical associations indicate a solid tendency towards remotivation.

### 5.2. Pep (non-imitative)

The 679 occurrences of *pep* n in the COHA are analysed for collocates in positions -4 to +4. Many of the top ranking significant collocates for *pep* immediately follow nouns *talk*, *rally* / *rallies* and *pills*.

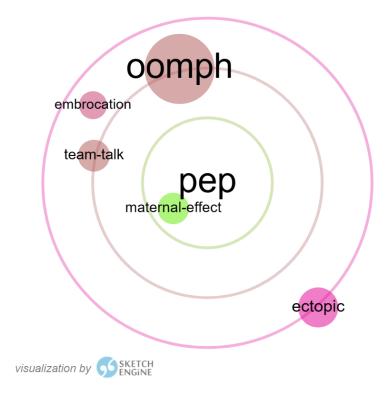
Table 9. Significant collocates of pep -5 to 5 in the COHA+

	ALL +	PER MIL	ALL	%	MI
GUARDIOLA	3	0.01	32	9.38	13
CHUDZINSKI	1	0	11	9.09	12.96
SUB-STANCE	1	0	14	7.14	12.61
V.F.W.	1	0	14	7.14	12.61
PEPSICO	5	0.01	89	5.62	12.26
BACK-TO-SCHOOL	2	0	67	2.99	11.35
JUGHEAD	2	0	70	2.86	11.29
RALLIES	21	0.05	881	2.38	11.03
SADDLER	3	0.01	127	2.36	11.01
BARBITURATES	3	0.01	131	2.29	10.97
FEATHERWEIGHT	3	0.01	143	2.1	10.84
ROCKNE	2	0	141	1.42	10.28
GUSSIE	4	0.01	310	1.29	10.14
RALLY	56	0.14	4497	1.25	10.09
CHEERLEADERS	3	0.01	264	1.14	9.96
TRANQUILIZERS	2	0	194	1.03	9.82
PILLS	27	0.07	4450	0.61	9.05
BRIEFINGS	2	0	342	0.58	9
BENNET	3	0.01	536	0.56	8.94
COMICS	4	0.01	957	0.42	8.51

TALKS	53	0.13	14293	0.37	8.34
TAB	5	0.01	1403	0.36	8.28
PEP	2	0	746	0.27	7.87
CEREALS	2	0	797	0.25	7.78
PIP	2	0	824	0.24	7.73
PARADES	2	0	864	0.23	7.66
ROUSING	3	0.01	1456	0.21	7.49
ONE-MAN	2	0	1005	0.2	7.44
COORDINATOR	3	0.01	1576	0.19	7.38
SQUADS	2	0	1258	0.16	7.12
TALK	175	0.43	135556	0.13	6.82
PILL	3	0.01	2645	0.11	6.63
ZEST	2	0	1848	0.11	6.56

- 95 Many of the collocates in Table 9 belong to the two major semantic frames. These frames are on the one hand barbiturates, pills, coke, cereal, and zest (i.e. drugs, foods, and sugar rush); and on the other hand, talk, rally, squad, cheerleader, and rousing (i.e. phraseological habits relating to creating enthusiasm, supporting a team). It is interesting that energy is also found in the collocate list, although the MI score is not very high (3,79) for the 6 co-occurrences in the corpus. Pip is also a notable collocate which occurs twice in Time Magazine (1931) and (1935) in the use pip vs pep.
- The Thesaurus for *pep* in Figure 8 tends to confirm that there are few words that share distributional similarities with *pep*, making it both fairly infrequent and also formulaic as it is found essentially in lexicalised nominals (*pep talk*, *pep rally*) that have features of phraseological units or prefabricated chunks (Wray [2002] and [2017]) namely noncompositionality, fixedness and pragmatic function. In view of this, the phonosemantic associations appear less solid, although the phonological properties of the monosyllabic *pep* no doubt played a role in the success of the word.

Figure 8. Thesaurus for pep in the OEC



## 5.3. Jizz and jism

- 97 Jizz and jism show similarities with the previous two: according to the OED, jizz is thought to be a variant of jism, which is of unknown etymology. Both have an initial sense of "energy strength" and a secondary sense denoting "semen, sperm". In the COHA both of these forms are rare although jism (31 tokens) outnumbers jizz (13 tokens). The diachronic usage patterns in both cases show that jism is attested over a longer period from 1930 as in (24) until 2010 as in (25), whereas jizz is attested from the early 2000s and especially since the 2010s. All of the uses correspond to the sense "semen" and are associated with colloquial and highly dysphemistic (i.e. crude, potentially offensive language) usage.
  - (24) White stuff called **jism** comes out, and that makes the baby inside of Mama. (1936, *World I never made*, James T Farrell)
  - (25) Harold nodded gravely to Alastair, who he knew would be first in line to spackle that freshly broken heart with **jism**, and left the little Chelsea apartment forever. (2019, *Mighty Are the Meek and the Myriad*, Cassandra Khaw)
  - (26) They were doing it in one long shot, and we needed to find a way to get a substance on my hand. So Joel, our props guy, was kneeling below the bed and I'd have to sneak my hand out of the shot so he could squirt all this fake **jizz** on my hand. (2016, *Hollywood Reporter*)

#### 5.4. Zhuzh

Zhuzh is not attested in the COHA. Zhuzh (also spelled tjuzs) made its appearance in the list of words of the year in 2003 by The American Dialect Society, alongside words like manscaping, SARS (Severe Acute Respiratory Syndrome), flexitarian (someone who eats meat occasionally), and torture lite (torture short of bodily harm). The OED, on the other hand, lists zhuzh both as a noun and a verb, with attestations around 1968, with the sense of stylish dress. Its origins are not entirely clear, which is often the case with words labelled as imitative or echoic. Merriam-Webster comments on the resemblance with words like whoosh or zoom, indicating a dynamic movement, or perhaps more appropriately, a ruffling of hair or fabric. The unique spelling of zhuzh might suggest it is a loanword. Its pronunciation /303/ reflects the challenge of graphically representing the voiced fricative /3/ at the beginning and end, which is less common compared to its voiceless counterpart /ʃ/ found in words like shush, for example. The integration of zhuzh into the lexicon is likely facilitated by the similarities with shush or buzz, which both use another neutral vowel  $/\Lambda$ . The evolution of zhuzh differs from shush or buzz, in that the latter two have stabilised and become conventional, while the former has remained at the stage of innovation and has not (currently) spread widely to everyday vocabulary.

(27) A zhooshy quean is a grand quean, to **zhoosh** up is to get ready. (P. Burton, *Lang. of their own: Polari, West End Homosexual Slang* (typescript) (O.E.D. Archive) p. ii)

According to the sources from the OED in (27), the use of the lexeme was originally limited to a specific slang employed within the homosexual community. However, it is now spreading as evidenced in Google Books Ngrams shown in Figure 9. It appears to be spreading in oral form on social networks in the fashion and beauty community, as is evident from the number beauty and lifestyle Youtube videos mentioning *zhuzh*, and the number of #zhuzh posts found on Instagram. The graphic variation (*zhoosh*, *zhuzh*, *tzhuj*, and *tjuzs* are suggested spellings in *Merriam-Webster*) makes it challenging to trace its evolution in the COHA and elsewhere. A search in the COHA does not yield any occurrences of *zhuzh*, *zhoosh*, *tzhuj* or *tjuzs*. A search for *zh\*zh* or *zh\*sh* confirms no alternative spellings were found based on these assumed patterns. *Tz\** was found, but none of the occurrences were found to be pertinent. In the OEC, there are two occurrences from 2003, discussing the innovative and strange nature of the term *zhuzh*, alongside words like *manscaping*, a blend of *man* and *landscaping*, referring to male hair grooming as in (28):

(28) The Fabs took the U. S. by storm this summer, making like style superheroes to rescue straight men from lives of self-made squalor and introducing the rest of us to fun new terms like "manscaping" and "zhuzh" a sound somewhere between Zsa-Zsa and luge. (2003, Winnipeg Sun)

Whereas zhuzh appears only twice in the OEC, the spelling zhoosh has 12 occurrences which, however, correspond to no more than three sources. The first source in (29) is an excerpt from a linguistic blog article by Mickael Quinion<sup>8</sup> entitled "World Wide Words" which discusses Polari<sup>9</sup> slang (from the verb "parler" in French meaning to speak):

- (29) Perhaps you might like to be able to count to ten in Polari: una, duey, trey, quater, chinker, sey, setter, otto, nobber, dacha. Now you can have a go at translating this: As feely homies, we would **zhoosh** our riahs, powder our eeks, climb into our bona new drag, don our batts and troll off to some bona bijou bar. (2002, *World Wide Words*, Michael Quinion).
- 100 A second source in (30) is a transcript of the televised exchange during the 2010 football World Cup in South Africa between CNN correspondent Josh Levs and CNN producer Nadia Bilchik:

(30) BILCHIK: Zhoosh. Zhoosh is. LEVS: Oh, well, wait, say it again? Zhoosh. BILCHIK: **Zhoosh**, like you look sharp, you look smart, you look amazing, like it's a very zhoosh outfit. (2010, CNN transcripts)<sup>10</sup>

The conversation illustrates the unconventional nature and the opacity of the term *zhoosh* for outsiders. It is a segment where Nadia Bilchik explains to her colleague some words of South African slang during the World Cup, including *zhoosh*, used in the sense "stylish". The third source in (31) is taken from a website dedicated to celebrity gossip and stars, describing one of the characters participating in the reality TV show *Big Brother* 6:

- (31) Kemal, 19 Male belly dancer. He's a bit from Turkey and a bit from Liverpool. He's all about "zhoosh". Islamic, but doubts his faith. He wears stilettos and calls his headscarf a bitch. (May 2005, Hecklerspray)
- 101 A *Google Books* search confirms that *zhuzh* is being used more frequently since the early 2000s, as shown in Figure 9 since the first occurrence of *zhuzh* around 1940.

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Figure 9. Google one grams for zhuzh

Figure 10 shows the uses of pizazz or pizzazz compared to zhuzh in Google Books.

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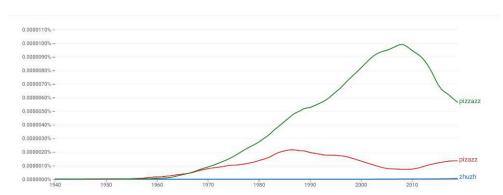


Figure 10. Google n grams for pizazz, pizzazz and zhuzh

Although zhuzh is developing, its propagation remains well below that of pizzazz or pizazz.

#### 5.5. Zip, zap, zoom, zing

- Although all four words are given as phonosymbolic in the OED, the terms zip, zap, zoom are not consistently associated with the EEV sense. They have a higher degree of polysemy and the EEV sense is not the most common. For instance, the Thesaurus of zip shows that zip is either frequently associated with sound and velocity (whiz, hurtle, and zoom) or when filtered to the category noun zip is associated with clothing (zipper, strap, and flap). One of the reasons for this is that all four terms are specified in the OED entries as being either colloquial or slang. Occurrence (32) illustrates the tendency towards an accumulation of expressive words, and specifically a binary rhythm of pairs of similar sounding words (as pointed out by Gries [2011]):
  - (32) Newspaper offices in a cluster, store windows flooded with light, filled with advertising devices of the most amusing originality, cars, taxis, crowds, it has all the earmarks of the main street of any big American city, with the addition, at intervals, of the pretty "islands" so typical of the boulevards of Paris and with, last of all, a zip and a zest, a pep and a punch, a go and a ginger that is distinctively Californian. (1916, *The Calforniacs*, Inez Gillmore)
- The coordinated nominal *zip* and *zest* occurs twice elsewhere in the COHA in (33) and (34), consistently in a context of rhyming structures and repetition of initial consonants (*zip* and *zest*, *waltz* and *schmaltz*):
  - (33) Abe Lyman, 59, onetime bandleader at Hollywood's famed Cocoanut Grove, organizer of the Californians, a group known for **zip and zest** in the '20s, waltz and schmaltz in the '30s. (1957, *Time Magazine*)
  - (34) Those two alone should provide enough color and controversy to give the campaign **a zip and zest** New Yorkers haven't seen for years. (1976, New Yorker)
- Zoom in the EEV sense is also found in close proximity with the same terms. It is also worth noting that these sources in (33) to (35) are magazines or newspapers, conveying a punchy journalistic style:
  - (35) Their readers who demand **pep and punch and zip and zoom**, and art can go hang. (1926, *Harpers*)

The collocates for zoom-n (5x, 10x, zoom, Nikon, Minolta) indicate that zoom is mainly associated with the sense "camera zoom", the only exception being the collocate zing which appears with an MI score of 12 towards the end of the list.

Table 10. Collocates of zoom n in the COHA

ALL +	ALL	%	MI
SPACEBOY	21	47.62	16.63
5X	19	15.79	15.04
10X	39	15.38	15
6X	16	12.5	14.7
3X	41	12.2	14.67
ZOOM	693	10.25	14.42
30X	10	10	14.38
EQUIPMENT	12	8.33	14.12
KAFIRIS	12	8.33	14.12
9X	26	7.69	14
60MM	13	7.69	14
RIDGECREST	13	7.69	14
ELECTROLIER	14	7.14	13.9
KERTESZ	14	7.14	13.9
MUGSHOT	15	6.67	13.8
4X	39	5.13	13.42
8X	21	4.76	13.31
\$449	22	4.55	13.25
200X	23	4.35	13.18
COOLPIX	24	4.17	13.12
25MM	24	4.17	13.12
2X	53	3.77	12.98
MINOLTA	27	3.7	12.95
UNMOTIVATED	57	3.51	12.87
LAMMERS	30	3.33	12.8
PULOWSKI	31	3.23	12.75
SLO-MO	33	3.03	12.66
AFTERBURNERS	34	2.94	12.62
3-IN.	37	2.7	12.5
NIKON	156	2.56	12.42

40	2.5	12.38
84	2.38	12.31
189	2.12	12.14
412	1.7	11.83
2967	1.35	11.49
184	1.09	11.18
1686	1.07	11.16
ALL	%	MI
21	47.62	16.63
19	15.79	15.04
	84 189 412 2967 184 1686 ALL 21	84 2.38 189 2.12 412 1.7 2967 1.35 184 1.09 1686 1.07 ALL % 21 47.62

Zoom is listed among the significant collocates of zing n in Table 10. However, all 4 occurrences are in fact from the same extract from *Time Magazine* referring to a song title as in (36):

(36) His lush, middlebrow tunes ranged from rousing ballads (StoutHearted Men) to glowing sentiment (When I Grow Too Old to Dream) to this year's jukebox favorite **Zing Zing**, **Zoom**, but the standard favorites were the coyly romantic. (1951, *Time Magazine*)

A Sketch Difference search in the OEC for *zing* and *zap* shows that *zest* is often found in the same context as both target words, although *zest* was not part of the original dataset and not present in HTOED.

### 5.6. Oomph

109 The 117 occurrences of *oomph* in the COHA demonstrate that the word is used as an interjection as well as a noun. A search for the significant collocates in -5 to +5 position ranked according to MI score provided the data in Table 11.

Table 11. Collocates of oomph in the COHA

Collocates -5 to + 5		MI score
ECONOLINE	1	15.25
ООМРН	8	15.08
SMIDGE	2	14.71
1938-39	1	14.15
SATZ	1	13.78
PIZZAZZ	1	13.49
WAFFLING	1	13.2

OUTERWEAR	1	13.07
SUNROOF	1	13.05
GARDEN-VARIETY	1	12.63
SUPERCOMPUTER	1	11.92
PROPELS	1	11.65
MEYNER	1	11.23
CINEMACTRESS	1	11.13
THREE-QUARTER	1	10.83
TWEAK	1	10.79
ENDER	1	10.75
FAIRY-TALE	1	10.46
INJECTING	1	10.43
TUMMY	1	10.21
COMPRESS	1	10.17
HOSSES	1	10.17
BUTTERY	1	10.17
SORORITY	1	10.1
SQUASHED	1	10.06
RENEWABLE	1	10.05
CORES	1	10.02
SHORTCUT	1	9.97
FLEX	1	9.96
SWIFTER	1	9.9
SWIMMERS	1	9.62
INTERCOM	1	9.28
BACKSEAT	1	9.2
MAESTRO	1	9.1

TAD	1	8.9
REWARDING	1	8.74
OPERAS	1	8.74
INJECTION	1	8.73
COMPUTING	1	8.72
AUDIO	1	8.6
DELIVERS	1	8.52
BATHTUB	1	8.5
JANITOR	1	8.46
STUFFING	1	8.41
TIGHTEN	1	8.4
THUD	1	8.28
LOOSEN	1	8.24
JOCKEY	1	8.23
BOASTS	1	8.18
BOULDERS	1	8.15
BOUNCE	1	8.14
EXTRA	11	8.13
SUB	1	8.09
RHYME	1	8.07
TAPS	1	7.99
INSTRUMENTAL	1	7.98

The significant collocates fall into **two main groups**: the **quantifiers** such as *smidge*, amount, plenty, and tad as in (37); the **verbs** entering into patterns with oomph. These significant verb collexemes are add, need, turn, deliver, provide, and got as in (38), (39) and (40) where oomph can be interpreted as <enthusiasm energy vitality>. Another type of structure occurs in (41) where hear a rewarding "oomph" introduces the triggering of a more literal sense "sound of". In this instance, oomph refers to the utterance of the sound oomph, thereby triggering its phonological motivation. There is also an explicit reformulation of oomph with the synonym pizzazz (38) and the phrase up-and-at-'em (39):

- (37) Today's turbo-charged home PCs make games and DVDs come alive, while less powerful machines deliver good value and **plenty of oomph** for garden-variety productivity tasks. (2002, *PCs with Personality*)
- (38) It still seems so empty. There's still something missing. It's this bench. There's no wino. Tonight I'll go to the Officers Club and rent you one. No, no, no, we need **oomph**, pizzazz. It's gotta look more parkish. Like maybe a statue. (1981, MASH TV)
- (39) I'd always given your intelligence a top rating, but you got no **oomph**, no up-and-at-'em. What he means is your ears don't stick out. Really, sir, I don't understand. Romantically, Brewster, you're a lug. (1938, *Give Me a Sailor*)
- (40) Meanwhile last week some other U.S. operas delivered the **oomph**. (1940, *Time Magazine*)
- (41) I'm easygoing and slow to anger, but this was getting annoying. So I put an elbow where it would do the most good and heard a rewarding "oomph" from the jockey on my back. (1975, Goodey's Last Stand)
- 111 In (42) *oomph* is used as an oral interjection in a dialogue of a play:
  - (42) Please let go, Dolly. You've got to let go sometime! Love is more than mere possession. Love is giving rather than taking. (Her arms go around his neck, and she begins to bend him forward.) Freeing rather than enslaving. Love is **oomph** please loosen your grip, Dolly. If you're afraid to let go it means you don't trust me. (1977, *Hold Me*, Jules Feiffer)
- 112 *Oomph* is used as a premodifier in (43), where the meaning of *oomph* is described and reformulated explicitly:
  - (43) Los Angeles' swank Town House staged, at Warners' instigation, a dinner for 26 males who decided she had more "oomph" than any girl in town. "Oomph," said Dudley Field Malone," is a very beautiful thing that convention demands be clothed." Said Screenwriter Graham Baker: "Oomph is something in a girl which begets propositions not proposals, gets her chased instead of chaste." As the Oomph Girl, Cinemactress Sheridan was more photographed, talked about, gossip-columned than any recognized Hollywood star. (1939, The New Pictures, *Time Magazine*)
- In (44) the process of replacement of the term *morale* by *oomph* is also evident. The term is further explicitly developed via other **phraseological sequences**, *sparkle in your eye*, *spring in your step*, *zip in your soul*. The deliberate use of these terms is also underlined by the nature of the discourse, described as a *jingle*, *a slogan*, whose purpose is to convey excitement for what is being touted (i.e. thiamin). The accumulation of expressive terms leads to literal overemphasis, a form of argumentative power rather than light suggestion:
  - (44) Before the Second World War, America was swept by a craze for thiamin -- the so-called "morale vitamin"; Dr. Russell Wilder declared that a policy of thiamin deprivation of subject peoples was "Hitler' secret weapon." Vice President Henry Wallace endorsed the jingle "What puts the sparkle in your eye, the spring in your step, the zip in your soul? The **oomph** vitamin." "Vitamins will win the war" was a slogan of the U.S. Food Agency. (2002, Near a thousand tables: a history of food)
- 114 From these occurrences and the general behaviour profiles and sources, the uses appear to coincide with a desire for increased communicative efficiency, mostly from

magazine sources trying to capture the attention of their readers with trendy words and concepts which are explained and reformulated. The Thesaurus for the noun *oomph* in the OEC confirms *pizzazz* as one of the closest candidates sharing the most distributional contexts with the target word *oomph*.

chutzpah vibrancy poignancy finesse glitz levity pizzazz crispnes wallop oomph leeway heft verisimilitude gravitas piquancy fizz panache dosh headroom

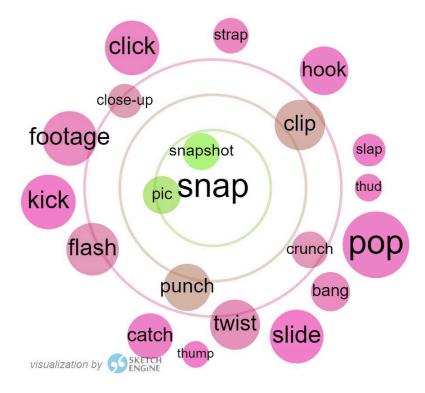
Figure 10. Thesaurus of oomph in the OEC

#### 5.7. Snap and dash

risualization by SKETCH

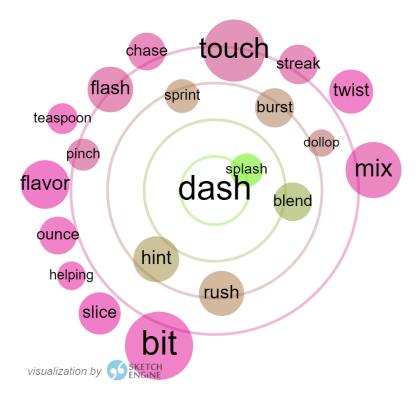
Finally *snap* and *dash* are among the most frequent nouns in the COHA corpus. Given the issue of their polysemy, we will use the Thesaurus function to determine the semantic behaviour of the nouns in the OEC. Their frequency as nouns in the OEC is very similar with approximately 10,000 tokens each. However, their similarity is otherwise very limited as is shown in Figures 11 and 12.

Figure 11. Thesaurus of snap in the OEC



- The collexeme analysis confirms that *snap* is used most significantly in the sense "sound" rather than in the sense "vigour". Idiomatic noun phrases such as *cold snap*, or *holiday snap* appear in the most significant co-occurrence patterns. Much like *zoom*, *snap* is often associated with photography, and has become a prominent subject matter of discussion in modern times.
- Dash on the other hand has a very different Thesaurus makeup in the OEC. The usage of dash appears focused on culinary concerns as it evident from the candidates with similar collocational behaviour dollop, blend, splash, flavour, and touch to name a few.

Figure 12. Thesaurus of dash in OEC



The most common uses of *snap* and *dash* in the OEC confirm that the EEV sense is not the core meaning. From the Thesaurus, it is evident that their usage as synonyms is difficult to attest.

#### 5.8. Summary

119 The questions we set out to answer are the following questions:

Do imitative words become less iconic following the de-iconisation process? Do non-imitatives behave differently? What other motivational process are at stake? And finally, what is the degree of similarity between the words selected? We compared the behavioural profiles of non-imitatives *pizzazz*, *jazz* and *pep*, with imitative nouns. The profiles tended to show a clustering between similar sounding words. Most of the uses in context co-occurred with other expressions in context, either phraseological units or other phonosemantic words. The commonalities are that expressive strategies tend to co-occur and combine in a given context; some of these strategies are those quoted by Southern [2020], namely pejoration, affection, intensity, and immediacy. This means that the motivation behind the use of a word form cannot be limited to its phonosemantic profile, but depends on pragmatic intent and text type. We observed that most occurrences tended to be argumentative, affiliative or humorous.

Do imitative words become less iconic following the de-iconisation process? Do non-imitatives behave differently? Since all the words in the subset are lexicalised, they all undergo some form of conventionalisation and entrenchment which is apparent in their collocational profiles. This is consistent with the iconicity treadmill, and de-iconisation of lexicalised words. This process does not undermine remotivation processes whereby new analogies can be triggered in context. Whether imitatives and

non imitatives undergo the same degree of de-iconisation depends on their resistance to conventionalisation, namely their phonological or spelling variation of lexemes. The degree of conventionalisation may be inversely correlated with the spelling anomalies, as for instance pizzazz, zhuzh, oomph.

What other motivational process are at stake? The frequency of usage, the acoustic and articulatory properties of the words and their similarity to other sets of words affect the demotivation cycle. Communicative strategies influence the remotivation process, as well as analogical paradigmatic tensions within the lexicon (jazz, jism/jizz, pizzazz/pezazz form a set).

And finally, we asked what the degree of similarity between the words selected is.

The Thesaurus showed that the subset of nouns expressing <ENTHUSIASM ENERGY VITALITY> have their own specific usage niches, entering in metaphorical associations, phraseological associations, and analogical associations. In addition, one of the major confounding factors is that the usage of the nouns in the EEV sense is not always present in the corpora.

# 6. Conclusions: similarity and dissimilarity within a set of iconic nouns

This paper posed the question of the pathways of development of a set of phonosemantic nouns. We started with a set of nouns referring to <enthusiasm energy VITALITY> that exhibit phonosemantic motivation. We used the HTOED, and key words in the OED definitions to generate a set of 16 nouns to investigate these patterns of semantic change. We identified several pathways of emergence of enthusiasm in our dataset: 1) the metaphorical / metonymical pathway speed is VITALITY OR ENTHUSIASM and SOUND IS ENERGY (which affects most of the iconic words in the set); 2) the pathway energy is fashion and attitude (pizzazz and zhuzh); and 3) the emergence of analogical blending and clipping (pep, and jazz).

A lexicographic study of emergence followed by a distributional semantic analysis in the COHA and the OEC tested the similarity of the frequencies and the contexts of usage. The dataset of nouns proved to have varying profiles, both lexicographic and distributional behaviours differ. One of the main concerns is that all of the nouns in the dataset belong to the non-standard layer of the lexicon and therefore do not occur with great frequency in any of the corpora, some being extremely rare (like *zhuzh*). The onomasiological incidence of each word for the category of <ENTHUSIASM ENERGY VITALITY> is difficult to measure, especially for imitative nouns like *zip*, *zoom* which have other more conventional uses in the corpora, namely the sense "speed", and for highly polysemous frequent words such as *snap* and *dash*.

Despite its limitations, due to the difficulty in filtering out the EEV sense, the corpus study did however confirm the tendency towards the clustering of sound imitative effects, such as repetition of rhymes or initial consonants in collocational combinations. The bias towards similar sounding words seems to be associated with the communicative effect intended in context. Most occurrences demonstrate the intent for vivid slogan-like expressions with argumentative, affiliative or humorous functions. Our case study illustrates the importance of motivation as a multifactorial consideration, and also points to the need for further research into the emergence and

semantic development of sound imitative words in relation to conceptual space, and diastratic and diatopic contexts. The level of expressiveness, or iconicity, may be affected by lexicalisation and conventionalisation, however a motivational scenario can be triggered in context by the neighbouring associations. This points to the need to develop the analysis of iconicity with a fine-grained approach with respect to conceptual fields. In order to test Dingemanse *et al.* [2016: 118]'s conclusion that "the potential for iconic associations differs across semantic domains", this study could be pursued by comparing the proportion and development of iconic words across various conceptual domains to establish a degree of comparison. Selected fields could include other emotion concepts and more literal concepts such as <SPEED OF MOTION> for instance, or even <MOTION> in general.

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#### **NOTES**

- **1.** See Bauer [2019: 55] for a description of multi-word expressions in English and so-called binomials.
- **2.** The notation i/, a/, o/ is Miller's [2014: 224].
- **3.** Note: this spelling error appears in the source text.
- **4.** "01.15.20.01 (n.) Vigour/energy". *The Historical Thesaurus of English*. 2<sup>nd</sup> ed. (version 5.0), University of Glasgow, 2024. Web. 1 February 2024. https://ht.ac.uk/category/?id=84478.
- 5. "01.15.20.01|14 (n.) Vigour/energy: vigour/liveliness". The Historical Thesaurus of English.  $2^{nd}$  ed. (version 5.0), University of Glasgow, 2024. Web. 1 February 2024. https://ht.ac.uk/category/?id=84515.
- **6.** Many thanks to one of the editors for their discussion on the word class of lexemes filling the X slot in this construction, which does not automatically lead to X being interpreted as a verb.
- 7. http://transcripts.cnn.com/TRANSCRIPTS/0910/12/cnr.05.html
- 8. http://www.worldwidewords.org/articles/polari.htm
- **9.** According to Michael Quinion, this eclectic slang is likely derived from the theatre and circus communities, and propagated by sailors. The vocabulary is borrowed from various sources such as Italian, Cockney, Romani, Shelta (Irish tinker slang), Yiddish, and other varieties of non-standard English. According to Quinion, its dissemination then occurred within the homosexual community, possibly through the theatre, and some forms entered semi-standard language, such as *karsey*, meaning 'a lavatory'; *mankey*, meaning 'poor, bad, or tasteless'; *ponce*, meaning 'a pimp'; and *scarper*, meaning 'to run away.' This theory is supported by the popularization of *zhuzh* through the Netflix show *Queer Eye*. (https://www.smh.com.au/opinion/you-say-tsuz-i-say-tszuj-20041106-gdk253.html).
- 10. https://transcripts.cnn.com/show/cnr/date/2010-06-20/segment/01

#### **ABSTRACTS**

This paper aims to describe and compare phonosemantic motivation in the English lexicon within a group of nouns expressing enthusiasm. From an emergent cognitive usage-based perspective (Bybee [2013], Traugott [2014] and Schmid [2020]), the lexicon is motivated by multiple motivational ties that are both syntagmatic and paradigmatic (see Booij & Audring [2018]), building a network of interconnected expressions of varying degrees of morphosyntactic

complexity in the lexicon. The resulting structure is part of the larger CONSTRUCTICON of a language (Hoffmann [2017]), constantly evolving under the pressures of usage and changing networks of motivational ties. The phonological aspect of lexical items is an essential component in the makeup and the storage of words (Bybee [2013]). Diachronic lexical iconicity studies such as Flaksman [2017], [2020] suggest there is an iconic treadmill in place leading to loss of iconicity associated with regular sound change and semantic change. In order to test the iconicity within a set of words expressing enthusiasm this study carries out a lexicographic analysis followed by a diachronic corpus study of sixteen phonologically motivated expressions using the COHA and the OEC. Our study will focus on a dataset of nouns with iconic roots expressing <ENTHUSIASM ENERGY VITALITY>, including rah-rah, gung-ho, zhuzh and pizzazz. The lexicographic analysis using the OED determines dates of emergence, etymological origins and semantic development of the expressions (also see Smith [2020]), and the COHA and the OEC corpora provide a distributional semantic analysis of the target words (Hilpert & Perek [2017]). The results show that there is some shared semantic space (i.e. similar collocational behaviour) amongst expressive nouns denoting <ENTHUSIASM ENERGY VITALITY>, but frequencies and productivities vary. In addition, these nouns have strong diastratic (colloquial, slang) and diatopic properties (American English). This study illustrates that iconicity is tied to the global issue of competition and regulation within the lexicogrammatical continuum - the balance between innovation, creativity and expressivity on the one hand, and economy, stability and convention on the other hand (Goldberg [2019]).

Cet article vise à décrire et à comparer la motivation phonosémantique au sein du groupe des noms iconiques exprimant l'enthousiasme dans le lexique anglais. Dans une perspective émergente cognitive fondée sur l'usage (Bybee [2013], Traugott [2014], et Schmid [2020]), le lexique est motivé par de multiples liens motivationnels à la fois syntagmatiques et paradigmatiques (voir Booij & Audring [2018]), constituant ainsi un réseau d'expressions interconnectées ayant des degrés variés de complexité morphosyntaxique dans le lexique. Cette structure résultante fait partie de l'architecture constructionnelle ou constructicon lexicogrammatical d'une langue (Hoffmann [2017]), lequel évolue constamment sous les pressions de l'usage et des réseaux évolutifs de liens motivationnels. L'aspect phonologique des éléments lexicaux représente un composant essentiel du système lexical et de son stockage (Bybee [2013]). Des études diachroniques sur l'iconicité lexicale telles que Flaksman [2017] et [2020] suggèrent qu'il existe un système de désiconisation associé aux changements phonologiques et sémantiques réguliers dans la langue. Afin de tester les degrés d'iconicité au sein de l'ensemble des mots iconiques exprimant l'enthousiasme, cette étude propose de mener une analyse lexicographique associée à une étude de corpus diachronique de seize expressions motivées sur le plan phonosémantique. Notre étude se concentre sur les noms exprimant le concept d'<enthousiasme énergie vitalité> (EEV) qui possèdent des racines iconiques, tels que rahrah, gung-ho, zhuzh et pizzazz. Les profils lexicographiques (voir Smith [2020]) sont constitués à partir des données de l'OED (dates d'émergence, origines étymologiques et développement sémantique des expressions), puis une analyse sémantique distributionnelle (voir Hilpert & Perek [2017]) est menée à partir des corpus COHA et OEC. Les trajectoires d'émergence du sens EEV, les comportements collocationnels en contexte, et l'étude de la fréquence et de la productivité, montrent que les seize noms iconiques exprimant le concept d'EEV se partagent l'espace sémantique de façon différenciée. De plus, ces noms se caractérisent par des propriétés diastratiques (usage familier, argotique) et diatopiques (anglais américain) spécifiques. Cette étude confirme que l'iconicité lexicale relève fondamentalement de l'équilibre entre deux principes de concurrence et de régulation dans le continuum lexicogrammatical : d'une part, les principes contribuant à l'expressivité, l'innovation et la créativité et, d'autre part, les principes contribuant à la stabilité, l'économie, et la convention (Goldberg [2019]).

# INDEX

 $\textbf{Mots-cl\'es:}\ d\'esiconisation, motivation\ phonos\'emantique, ono masiologie, analyse$ 

distributionnelle, COHA

**Keywords:** iconicity treadmill, motivation, onomasiology, collexeme analysis, COHA

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