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METAPHODIOMS: CONNECTING METAPHOR AND IDIOMS

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Abstract

This paper aims to formulate the notion of *metaphodiom* and establish operational criteria for its definition by combining key insights emanating from quantitative corpus linguistics, the cognitive theory of metaphor, and a cognitive linguistic approach to idioms. To this end, the author selects boxing idioms for analysis, extracts their occurrences in the Corpus of Contemporary American English (COCA), and determines their structural, semantic, distributional, and discourse-functional properties. The paper makes a significant contribution to a growing body of literature on metaphorical idioms by systematically integrating all definitory parameters for their identification, description, and extraction from a large corpus of naturally-occurring data.

Key words

Metaphor; idioms; metaphodiom; corpus-based analysis; COCA

1. Introduction

The last three decades have witnessed the proliferation of publications on metaphorical idioms (e.g., Gibbs & O'Brien 1990; Kövecses & Szabó 1996; Kövecses 2002; Dobrovolskij & Piirainen 2005; Moon 1998, to mention a few). Some researchers sought to determine semantic and structural features of such idiomatic phrases (e.g., Langlotz 2006; Moon 1998), while others aimed to establish the cognitive motivation behind their meanings (e.g., Kövecses 2002: 199–212; Kövecses & Szabó 1996). Many researchers also attempted to develop cognitive semantic methods of teaching idioms (e.g., Boers 2001, 2013; Boers et al. 2009; Guo 2007; Kövecses 2001) and cognitive semantic ways of presenting and arranging idiomatic words and phrases in dictionaries (e.g., Kövecses & Csabi 2014; Wiliński 2015).

Thus far, however, these researchers have tended to conduct qualitative analyses of metaphorical idioms, with the primary focus on their metaphorical motivation and their semantic and/or formal properties. No single study has attempted to postulate the existence of so-called *metaphodioms* in a constructional cline, to establish all the criteria for their identification and description, and to define their features on the basis of their use in linguistic corpora. The primary aim of this paper is therefore twofold: first, to formulate the notion of metaphodiom by laying down operational criteria for its identification and description, and second, to determine structural, semantic, distributional, and discourse-functional

properties of idioms coming from the same source domain of boxing and occurring in the target domain of politics (i.e., in the contexts of politics).

The rest of this paper consists of three sections. Section 2 discusses the theoretical assumptions. Section 3 considers the methodology used in this study. Section 4 formulates the notion of metaphodiom, establishes criteria for its definition, describes its structural and semantic properties, and puts forward a proposal concerning its place in a constructional cline. Section 5 summarizes the findings, emphasizes their significance, considers the limitations of the current study, and presents some recommendations for further research.

2. Theoretical assumptions

This study integrates the basic assumptions of the conceptual theory of metaphor and a cognitive usage-based perspective on idioms. The term *conceptual metaphor* is used in this study to refer to understanding one concept or conceptual domain (a target one) in terms of another concept or conceptual domain (a source domain). A target domain is usually an abstract domain, while a source domain is a more concrete domain from which linguistic metaphors (words and expressions) are derived to understand the target domain (Kövecses 2002). However, in addition to this view, the study accepts the assumption that the use of metaphors in discourse is affected by multiple contextual factors, such as situational context, discourse context, conceptual-cognitive context, and bodily context (Kövecses 2015, 2020), which can prime, motivate, prompt, facilitate or shape the use of particular metaphors in discourse (Kövecses 2017: 20).

Cognitive linguistics holds that idioms are constructions that show different degrees of idiomaticity (opacity/transparency and fixedness/flexibility) and share a fuzzy boundary between productive and reproductive aspects of grammatical knowledge (see Yoon 2014 for a similar claim). Their typical properties are conventionality (non-compositionality), inflexibility, figuration, proverbiality, informality, and affect (see Croft and Cruse 2004: 230–31 for a detailed explanation of these terms). The view on a fuzzy nature of idiomaticity especially prevails in usage-based constructional models of grammar which assume that there is no strict separation between grammatical knowledge and lexicon (Goldberg 1995, 2006). Grammar consists of symbolic units or constructions, pairings of a form and a meaning/function, i.e. conventionalized associations of a phonological structure and a semantic/conceptual structure (Goldberg 1995, 2006). Constructions differ in terms of their degrees of complexity and schematicity (or lexical specification). Morphemes and words are simple constructions, whereas idioms and argument structure constructions are complex. Words are fully lexically specified, whereas argument structure constructions are maximally unspecified with respect to the lexical units that can be inserted. Idioms occupy the position in between these two poles, with some such as *all of a sudden* or *once in a blue moon* being fully lexically specified and others such as *at/on sb's heels* or *by the scruff of sb's/the neck* being only partially specified. Usage-based construction grammar strongly emphasizes the importance of actual frequencies of usage or

occurrence (see Bybee 2013): that is, exposure to, or use of, constructions is considered to shape the linguistic system of speakers and hearers, while sufficient frequency is a decisive factor influencing the entrenchment (Langacker 1987) and the achievement of construction status of a linguistic expression. However, sufficient frequency (extreme high, medium, or low) fails to remain a completely objective parameter since “it is only a function of our state of knowledge” (Boas and González 2014: 3).

Since the acquisition, representation, and processing of idiomatic constructions are shaped by usage, a usage-based perspective underlines the idea that different features such as syntactic idiosyncrasy, variability, semantic irregularity, lexical specification, and cognitive entrenchment prevail at all levels of constructions, including idioms, in particular not fully lexically specified ones, in varying degrees of prominence and significance. Thus, each idiom can be described individually relative to these features, resulting in “a multi-dimensional continuum of differently formally and semantically irregular and cognitively entrenched expressions” (Wulff 2013: 279).

As for the semantics of idioms, a cognitive linguistic perspective accepts the traditional view that idioms are non-compositional (i.e., they have meaning that cannot be completely predicted on the basis of their constituents (Kövecses 2002: 210). However, it also assumes that idiomatic meaning shows various degrees of opacity/transparency (Moon 1998), can be analysable or unanalysable (Langacker 1987: 457), and is at least partly motivated by metaphor, metonymy, and/or conventional knowledge (Kövecses & Szabó 1996; Kövecses 2001, 2002; Kövecses & Csabi 2014). The term *motivation*, as defined by Lakoff (1987), is used in a cognitive linguistic framework to refer to motivational principles or motivational links that explain the meaning of an idiomatic expression, or that clarify the reason why a particular meaning is expressed by a certain idiom.

3. Methodology: data, methods and tools

The current study adopts the corpus-based methodology and exploits data from an earlier version of the well-balanced corpus of Contemporary American English (COCA), covering the years between 1990 and 2015. This version contains more than 520 million words; it is equally divided among spoken, fiction, popular magazines, newspapers, and academic texts. The method used in this investigation consisted of five steps. The first step entailed collecting data: in total, 145 boxing idioms (e.g., *infighting*, *down for the count*, or *throw/toss in the towel*) and their possible variants, such as *in-fighting*, *out for the count*, or *throw/toss in the sponge*, were collected from existing word-lists (e.g., <https://www.englishclub.com/vocabulary/sports-boxing.htm>), online glossaries of sporting terminology (see data sources), and current dictionaries of idioms (Collins Cobuild Dictionary of Idioms and The Farlex Dictionary of Idioms).

The second step involved searching for these 145 idioms in COCA and extracting their occurrences in concordance lines. Figure 1 below illustrates a screenshot with some concordance lines for the term *heavyweight*. The third step entailed

examining concordance lines (along with their co-text) manually, finding other idiomatic variants, and determining the distribution of all boxing idioms occurring in the contexts of politics. The corpus search uncovered 86 types of boxing idioms, out of which 8 occurred only once in the contexts of politics. The metaphorical nature of the idioms was determined on the basis of a lexical semantic analysis that considers distinct but comparable senses of boxing terms: a boxing expression is metaphorically used when its most basic literal sense (derived from a source domain of boxing) stands in contrast to its current contextual meaning (a political context), and there is a cross-domain correspondence between these two senses (cf. Steen et al. 2010).

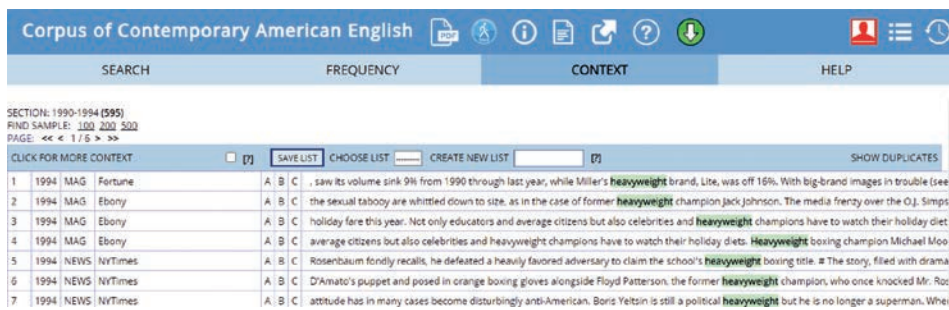


Figure 1. A screenshot illustrating concordance lines in COCA

The fourth step was to calculate the raw frequencies: the occurrence of a given idiom in the contexts of politics (e.g., a = 131 occurrences of *square off*), the total frequency of each idiom in all other contexts (e.g., e = 582 occurrences of *square off*), and the total frequency of all boxing idioms in the contexts of politics (e.g., x = 1591 occurrences), as rendered in Table 1 below (see section 4). These frequencies were counted manually by reading concordance lines and their co-text. Frequencies of idiomatic variants such as *infighting* or *in-fighting* and *rough and tumble* or *rough-and-tumble* were counted separately, while the frequencies of *knock-out* and *knockout* in the combination with *blow* were calculated together.

The next step was to compute measures of attraction and reliance (Schmid 2000; Schmid and Küchenhoff 2013). For this purpose, the observed frequencies were introduced into an Excel spreadsheet and subjected to statistical analysis. Attraction is expressed as the proportion in which a certain boxing term appears in a target domain, while reliance is the proportion in which a boxing term occurs solely in a particular domain (cf. Schmid and Küchenhoff 2013: 548). In the current study, the first proportion can be comprehended as reflecting the attraction exerted by the target domain on a metaphorical idiom, and the latter as reflecting the reliance of this idiom on the target domain in question. The second formula was employed to capture, in quantitative terms, the intuition that some domains or contexts can be more significant for certain boxing idioms than the target domain of politics in which these idioms occur.

Attraction was calculated by dividing the observed frequency of occurrence of a boxing idiom in the target domain (i.e. in all political contexts identified in the corpus) by the total frequency of boxing idioms in politics (i.e. a/x in Table 1). Reliance, in turn, was measured by dividing the frequency of occurrence of a boxing idiom in the target domain by the frequency of its occurrence in the whole corpus: i.e. a/e in Table 1 (cf. Schmid 2000: 54). The results of these calculations are converted to percentages by multiplying the observed frequency of a particular idiom in the target domain in each case by one hundred. The percentages provided by these calculations were taken as indicators of association strength, i.e., the strength of the mutual association between boxing idioms and the target domain of politics: the higher the percentage, the stronger the attraction to, and reliance on, the domain in question. As shown in Table 1 (see Section 4.1.3), the percentages obtained from the computation of attraction and reliance for the idiom *square off* are very high: 8.35% and 22.51%, respectively. This means that the idiom occurs in 8.35% of the uses of boxing idioms in politics: in other words, *square off* is very strongly associated with this domain. Moreover, 22.51% of the occurrences of the same idiom are found in this domain, which means that *square off* relies on other domains in a proportion of 77.49%. Finally, the results were interpreted qualitatively and different features of metaphorical idioms in COCA were identified according to the criteria set in section 4.

4. A definition of metaphodioms

The rationale for devising a definition of metaphodiom is the observed necessity to develop theoretical and methodological frameworks for a systematic account of the nature of metaphorical idioms used in naturally-occurring written and spoken discourse.

4.1 Criteria

The following definitory parameters can be established for the identification, description, and extraction of metaphodioms in computer corpora (cf. Howarth, 1998: 25 and Gries 2008: 4 for a similar proposal of defining criteria in phraseological research): types of constituents, the number of constituents, the frequency of occurrence, the distance between constituents, the degree of lexical and syntactic flexibility of components (frozenness, fixedness, restricted collocability), and semantic unity and semantic non-compositionality (opacity or transparency).

4.1.1 The nature of components

As for the nature of components making up a metaphodiom, this study adopts the broadest definition conceivable. In other words, there are no restrictions on the nature of parts that constitute a metaphodiom on condition that it is a metaphor-based complex word, compound, phrase or clause containing at least one lexical item or element from the (metaphorical) source domain and its complex

form is paired with a meaning/function. Thus, a metaphodiom can be considered to be the co-occurrence of a lemma, or a form, of a lexical unit and any other type of linguistic component, which can be, for example,

- (1) a prefix in a complex word (e.g. *in* as in *infighting*);
- (2) a word in a compound (*heavy* in *heavyweight*);
- (3) another (form of a) lexical unit (*glass jaw* and *sucker punch* are examples of a co-occurrence of two lexical units);
- (4) a particle in a phrasal verb (*knock sb down* or *square off*);
- (5) a phrasal verb in a complex phrase (*take off the gloves*);
- (6) a grammatical pattern, i.e. when a particular lexical item or items tends/tend to occur in/co-occur with a particular grammatical construction (the fact that the idiom *box clever* is mostly used in a progressive aspect).

Lexical components can involve either all forms of the same lexeme (e.g., *knock*, *knocks*, *knocking*, *knocked*, as in *knock sb down*) or solely particular morphological forms (e.g., the plural form *the gloves*, as in *the gloves are off*).

4.1.2 The number of constituents

The second criterion concerns the number of constituents involved in a metaphodiom. Generally, idioms are defined as “grammatical units larger than a word which are idiosyncratic in some respect” (Croft and Cruse 2004: 230). In this study, thus, it is assumed that metaphodioms must consist of at least two components (complex words, compounds, word pairs), or they can include a larger number of constituents (as in, say, *to take off the gloves*, which contains a verb slot filled with some form of *to take*, a direct object slot filled with DET *gloves*, and a slot for the particle *off* complementing the transitive phrasal verb). Occasionally, they can include multiple components if they have the form of a saying or proverb. For example, the popular boxing saying *Float like a butterfly, sting like a bee. The hands can't hit what the eyes can't see*, used commonly to describe Muhammad Ali's style in the ring, consists of several clauses that can be interpreted metaphorically.

A speaker or hearer must consider these constituents as one symbolic unit. However, it is noteworthy that the figurative meaning of an idiom processed as one single unit is activated only when “the idiom is itself recognised as a configuration, i.e. as a linguistic unit that is composed of simpler lexical elements” (Langlotz, 2006: 21). This view is held by Cacciari and Tabossi (1988: 678), who claim that every idiom includes one or more lexical “keys”. A key functions as “a kind of mental signal that makes the hearer evoke the idiomatic configuration as a whole, which leads to the activation of the idiomatic meaning”.

4.1.3 The frequency of occurrence

Regarding the number of times a metaphorical idiom must be observed in a target context before it is treated as a metaphodiom, no rigorous operationalization of a sufficient frequency threshold is necessarily required. However, we must assume that the more often a speaker/hearer uses or hears a particular metaphorical idiom in a target domain, the more entrenched this idiom becomes in this domain and thus the faster it achieves the status of metaphodiom, a metaphorical idiomatic construction. Thus, metaphodioms can be either common metaphorical idioms (e.g. *heavyweight*, *square off* and *infighting*: 122, 131, and 223 occurrences in politics) or other less entrenched metaphorical constructions (*throw in the towel* or *go the distance*: both 26 occurrences). They can be described on the basis of their frequency of occurrence or characterized by additional frequency information. For example, we can report sufficiently high frequencies or percentages of occurrence of metaphodioms in a particular target context (even when no strict frequency threshold is provided), as shown in Table 1 below.

Table 1. The thirty most frequent metaphodioms in politics

a = Frequency of term (e.g. <i>infighting</i>) in politics; x = Total frequency of all boxing terms in politics; e = Total frequency of term (e.g. <i>infighting</i>) in corpora						
rank	metaphorical idioms	a	x	e	attraction	reliance
1.	<i>infighting</i>	223	1568	548	14.22%	40.69%
2.	<i>square off</i>	131	1568	582	8.35%	22.51%
3.	<i>heavyweight</i>	122	1568	2374	7.78%	5.14%
4.	<i>come out swinging</i>	76	1568	157	4.85%	48.41%
5.	<i>rough and tumble</i>	52	1568	165	3.32%	31.51%
6.	<i>rough-and-tumble</i>	50	1568	332	3.19%	15.06%
7.	<i>lightweight</i>	40	1568	207	2.55%	19.32%
8.	<i>counterpunch</i>	39	1568	136	2.49%	28.68%
9.	<i>knock sb down</i>	38	1568	2800	2.42%	1.36%
10.	<i>catch sb off guard</i>	36	1568	752	2.30%	4.79%
11.	<i>fighting chance</i>	31	1568	251	1.98%	12.35%
12.	<i>have sb in your corner</i>	31	1568	287	1.98%	10.80%
13.	<i>in-fighting</i>	29	1568	85	1.85%	34.12%
14.	<i>put/toss/throw your hat in the ring</i>	29	1568	55	1.85%	52.73%
15.	<i>stick your neck out</i>	29	1568	129	1.85%	22.48%
16.	<i>take the gloves off</i>	28	1568	59	1.79%	47.46%
17.	<i>on the ropes</i>	27	1568	226	1.72%	11.95%
18.	<i>toss/throw your hat into the ring</i>	27	1568	42	1.72%	64.29%

a = Frequency of term (e.g. <i>infighting</i>) in politics; x = Total frequency of all boxing terms in politics; e = Total frequency of term (e.g. <i>infighting</i>) in corpora						
rank	metaphorical idioms	a	x	e	attraction	reliance
19.	<i>throw in the towel</i>	26	1568	293	1.66%	8.87%
20.	<i>go the distance</i>	26	1568	167	1.66%	15.57%
21.	<i>knockout punch</i>	21	1568	127	1.34%	16.54%
22.	<i>below the belt</i>	20	1568	131	1.28%	15.27%
23.	<i>punching bag</i>	19	1568	254	1.21%	7.48%
24.	<i>the gloves come off</i>	19	1568	45	1.21%	42.22%
25.	<i>pull no punches</i>	19	1568	108	1.21%	17.59%
26.	<i>take off the gloves</i>	18	1568	40	1.15%	45.00%
27.	<i>take it on the chin</i>	18	1568	109	1.15%	16.51%
28.	<i>knock-out/knockout blow</i>	16	1568	62	1.02%	25.81%
29.	<i>push into a corner</i>	16	1568	41	1.02%	39.02%
30.	<i>win on points</i>	14	1568	22	0.89%	63.64%

As can be observed in Table 1, the results are arranged according to the measure of attraction. The top positions in the ranking list are occupied by relatively common idioms, such as *infighting*, *square off*, or *heavyweight*. The most logical explanation for this is that the total frequency of these idioms in COCA overall is likely to affect the probability of their occurrence in the target domain in question. For example, *push into a corner* (attraction score 1.02%) and *knock-out/knockout blow* (attraction score 1.02%) gained much lower scores for attraction than *infighting* (attraction score 14.22%) and *square off* (attraction score 8.35%), since their frequencies observed in political discourse are lower than the frequencies of *infighting* and *square off*. Furthermore, *push into a corner* and *knock-out/knockout blow* are domain-specific boxing idioms that carry stronger emotional overtones and express higher degrees of aggressiveness than *infighting* and *square off*. Hence, journalists and politicians might avoid using them to stay politically correct in today's world media. *Infighting* and *square off* in turn seem to be dead metaphors, metaphors that lost their original meaning, metaphoric force, and imaginative effectiveness through extensive, repetitive and frequent usage. Thus, currently, they do not evoke a domain-specific boxing scenario, but they are rather used in the contexts of different confrontations and disagreements, including the rivalry between politicians.

By contrast, the scores for reliance are much higher in the case of less frequent idioms such as *toss/throw your hat into the ring* (reliance score 64.29%), *put/toss/throw your hat in the ring* (reliance score 52.73%), and *take the gloves off* (reliance score 47.46%), as the statistical test used for computing reliance took the total frequency of each idiom in the corpus into consideration. It is likely that their high reliance scores in politics were affected by the restrictive domain-specific nature of these boxing idioms (primarily confined to the domains of boxing and politics) and their

lower overall frequency of occurrence in the corpus. For example, unlike *infighting*, *toss/throw your hat into the ring* obtained a much higher score for reliance because it occurs less frequently (42 occurrences) than *infighting* (548 occurrences) in the whole corpus. In consequence, the reliance of *toss/throw your hat into the ring* on the target domain in question also appears to be stronger (64.29%). One possible rational explanation for this is that this idiom evokes a domain-specific boxing scenario that is mainly mapped onto a political confrontation, whereas *infighting* is not boxing-specific *per se*, but it is used more broadly in the contexts of many different types of confrontations to refer to disagreements over who has power or control among the members of various groups or organizations.

4.1.4 The distance between constituents

As far as the next criterion is concerned, this study adopts a broader perspective that introduces no restrictions upon the distance between the components involved in a metaphodiom as long as the speaker/hearer categorizes the constituents as forming one symbolic unit. Hence, the elements of a metaphodiom do not have to co-occur adjacently but they may occur in different positions: namely, a metaphodiom can consist of immediately adjacent constituents or non-adjacent (separate, discontinuous, or distant) ones. For example, the verb *win* and the prepositional phrase *on points* can occur right next to each other or with intervening material, e.g. with *the debate*, as in (7) and (8). A similar view on different levels of flexibility in idioms' grammatical structure is presented in the modern compositionality theory of idioms (Nunberg et al. 1994: 500–503), which proposes numerous syntactic modifications of idioms (e.g. anaphora, VP-ellipsis, passivisation, or quantification).

- (7) You know, you can say Gore *won the debates on points*, but they liked Bush better. (SPOK: CNN_Dobbs)
- (8) In boxing terms, the White House had clearly *won on points*, Kurtz writes. (NEWS: Houston)

4.1.5 The degree of lexical and syntactic flexibility

As to the degree of lexicogrammatical flexibility of the constituents involved in metaphodioms, their form can show restricted syntactic, morphosyntactic and lexical variability or impose no such constraints on condition that these constituents are concrete instances of a particular schema that instantiates them. For instance, if three expressions (e.g. *box*, *force*, or *push sb into a corner*) are specific instances of the English caused-motion construction [V OBJ_{1 into} PP Complement], it is not important that these three instances may include different verbs in different tenses with different objects. Thus, metaphodioms can be considerably frozen, i.e. fixed or inflexible, or more flexible. In addition, they can feature syntactic idiosyncrasy or irregularity (the violation of grammatical rules) and restricted collocability (paradigmatic constraints on the selection of lexical items).

The following boxing metaphodioms can display different degrees of frozenness, i.e. fixedness (syntactic and morphosyntactic restrictions) and restricted collocability (lexical constraints):

- (9) *blow by blow* and *below the belt* are inflexible patterns, while *down for the count* exhibits restricted collocability: *down* only replaced by *out* (as in *John, are you still out for the count, or can the Democrats do something here this week?*);
- (10) *pull one's punches*: a relatively flexible pattern which allows different tenses, negation, passivization, and the use of the determiner *no* or possessive determiners such as *his* or *their* (as in *Barack Obama and Hillary Clinton are pulling no punches* or *Senator McCain doesn't pull his punches*);
- (11) [V POSSESSIVE DET *hat/cap in/into the ring*] and [V DET *low blow(s)*] are partially lexically-filled metaphodioms requiring the insertion of additional lexical material and allowing for lexical and syntactic variation: the verb slot of the first expression can be filled by verbs such as *throw*, *toss*, or *put* (as in *Texas Governor Rick Perry threw his hat into the ring in an announcement on Saturday* or *Warren, Castro, and Sen. Kirsten Gillibrand have already tossed their hats into the ring*), while of the second one by a wider variety of verbs (*throw*, *deliver*, *give*, *land*, *strike*, *receive*, etc.) in various grammatical forms (as in *McCain is going to throw as many low blows as he can get away with* or *They've attacked Perry by delivering a low blow implying racism*);
- (12) *take the gloves off*: the verb, the direct object, and the particle need not be adjacent in that these constituents can be arranged in different word order: alternatively, the particle can precede the object, as in *He's taking off the gloves on the Democrats*. This phrase also appears to have two other variants: *the gloves are off* and *the gloves come off*. The first expression allows for the omission of the verb *are* in the structure *with the gloves off* (as in *With the gloves off on both sides, the final month of the campaign was a good old-fashioned political mudbath*), whereas the second one for the use of the verb *come* in different tenses (as in *The gloves are about to come off in Kentucky* or *The gloves are coming off: The GOP presidential candidates squaring off in Iowa*).

4.1.6 Semantic unity and semantic non-compositionality

With regard to the next criterion, a symbolic unit or a construction, by definition, must have a semantic pole, carry a meaning, or perform a certain function. Thus, a metaphodiom should function as one semantic unit in exactly the same way as a single morpheme or a word does. Its meanings should be treated as being non-compositional to a certain degree when used metaphorically in a particular target context (or a target domain). However, complete non-compositionality is not considered as a necessary condition for an expression to count as a metaphodiom: this parameter should rather be understood as a semantic continuum showing varying degrees of transparency and analysability or different semantic levels of fitting into a fuzzy category of metaphodioms. Hence, some metaphorical expressions can be more opaque; others more transparent when used and interpreted in a target domain.

Consider, for example, decoding idioms and encoding idioms (Fillmore, Kay, and O'Connor 1988). Decoding idioms are opaque idioms whose meanings cannot be deduced from the meanings of their parts. A typical example is *up to scratch*, the meaning of which cannot be decoded by the hearer. The word *scratch* was used in early nineteenth-century boxing to denote “the line in the ring which the boxers have to come to when they start to fight” (see <https://idioms.thefreedictionary.com/up+to+scratch>). Currently, this word is no longer used in this sense in English. Thus, a hearer will not be able to figure out the meaning of the whole ‘reaching an acceptable standard’ from the meaning of its parts. In other words, there are no direct correspondences between the literal meanings of the parts and the idiomatic meaning. The idiom is only analyzable if we consider the etymology of the word *scratch*. Encoding idioms in turn are more transparent expressions whose meanings are interpretable by knowing the words and grammar of the language (cf. Croft and Cruse 2004: 231). They are analyzable because each component clearly contributes to the overall figurative meaning. An example is the idiom *glass jaw*. This is an idiom a hearer could figure out upon hearing it in a political context. However, a speaker would not have guessed that this expression is a conventional way of conveying the meaning ‘vulnerability of a public figure to destructive criticism’, without knowing that fact.

In addition to transparency and analyzability, semantic properties of metaphors should be construed broadly to include cognitive factors: e.g., the fact that metaphors have a metaphorical basis or that metaphor may interact with metonymy, blending, or symbols to construct a complex metaphorical conceptualization of the target domain (cf. Gibbs 1994; Gibbs & Colston 2012). All the idioms in Table 1 are motivated by the metaphor POLITICS IS A BOXING BOUT, in which different aspects of politics are conceptualized in terms of boxing. For example, *take it on the chin* in rank 27 has the metaphorical sense: ‘to bravely accept criticism or a difficult situation’, as in *So while Sarah gets beaten up by the Left, Obama is taking it on the chin from the Right*. The analogy here is made to a boxer receiving a physical blow on the chin. *Push into a corner*, ranked number 29, means ‘to force or be forced into a difficult situation from which one cannot easily escape’, as in *Obama was pushed into a corner when Vice President Biden declared his support on NBC’s Meet the Press*. This idiom alludes to a boxer being forced into a corner of the ring and having no way of escaping.

The expression *on the ropes* in turn can be considered as an example of a metaphor reflecting a complex conceptual interaction of different cognitive models. This idiom associates one phase of a boxing fight in which a boxer is pushed back against the ropes around the edge of the ring with a more general stage of competition in which a particular political leader or organization has serious problems countering their opponent’s argumentation, and thus, is likely to fail in their endeavour. However, in the source domain of the metaphor POLITICS IS A BOXING BOUT, the expression metonymically stands for being very close to a defeat in a fight due to a series of powerful blows and punches. This idiom can therefore be regarded as metaphonymy or a metaphor from metonymy (cf. Goossens 1990: 323), or as a metonymically motivated metaphor shaped by a process of metaphonymic blending (cf. Turner & Fauconnier 2000): a stage

of a political campaign or dispute in which a politician or party is likely to fail can thus be construed metaphonymically as a phase in which a boxer leans against the ropes of the boxing ring and is close to being defeated, as in *If this were the early rounds of a boxing match, Romney is on the ropes and Obama's throwing all the punches.*

4.1.7 Discourse-functional properties and social and cultural parameters of use

In addition to cognitive factors, metaphodioms such as *heavyweight*, *the gloves are off*, *below the belt*, or *throw in the towel* can serve different discourse functions. Journalists and commentators can make use of these boxing idioms as an effective tool for deepening the reader's understanding of political issues, for arousing their interest in a political election (as in *Rick Santorum throws in the towel, ending his quest to be the GOP's pick* or *The gloves are coming off: The GOP presidential candidates squaring off in Iowa*), for provoking positive or negative emotions among potential readers and political supporters (as in *This was a grueling campaign, a hard-fought campaign, at times, an ugly campaign where both of the two campaigns hit below the belt*), displaying positive or negative attitudes to politicians (as in *Medvedev has generally been regarded as a political lightweight beholden to Putin*), or for encouraging and inspiring readers to vote for a particular leader or party (as in *This guy's a real political heavyweight. He's a two-term governor of the most important swing state in the country*). Politicians, in turn, can use boxing expressions as an effective means for clarifying political decisions, heightening the political spectacle, communicating a particular political argument, or persuading the adoption of particular political stances (cf. Wiliński 2016).

Apart from discourse functional properties, another aspect of meaning playing a significant role in structuring the semantics of some metaphodioms is the phenomenon of cultural and linguistic symbolism. According to Dobrovol'skij and Piirainen (1997), the meaning of metaphorical idioms should be interpreted within the framework of cultural semiotics and cultural factors connected with background knowledge underlying such idioms. For example, the meaning of the phrase *glass jaw*, as in *Trudeau and Bush have the same glass jaw when attacked*, can be motivated by elements of relevant cultural knowledge related to the concept *glass* that may provide crucial motivational links for understanding this metaphorical expression. This concept in turn can be treated as a symbol, a stereotypical conceptual prototype functioning as the material representation of a very abstract property or attribute (cf. Dobrovol'skij & Piirainen 1997). The expression *glass jaw* not only rests on the cognitive metaphor POLITICS IS A BOXING BOUT, but also derives its meaning from the conventionalized symbolic values ascribed to the concept *glass*. In the Western world, *glass* is regarded as a symbol of the very abstract quality *brittleness* or *fragility*: in other words, it can be seen as an emblem that functions as a figurative vehicle to represent the stereotypical property ascribed to this concept within a particular culture (Langlotz 2006: 124).

Finally, metaphodioms can also be described by features such as proverbiality, informality, and affect (Nunberg, Sag, and Wasow 1994: 493-93; Croft and Cruse 2004: 230-31). For example, *throw in the towel* or *throw one's hat into the ring* are

typically used to describe a recurrent situation of particular social interest (e.g., admitting defeat or failure in a campaign or becoming a candidate in an election, respectively). The situation is compared to a concrete activity (throwing a towel into the ring for signaling surrender or throwing a hat into the ring for indicating a challenge). The bulk of boxing idioms are also associated with informal or colloquial speech styles or registers. In COCA, for instance, they primarily occur in spoken discourse, magazines, newspapers, TV and Movies subtitles, blogs, and other web pages. Some are commonly used to imply a certain evaluation or affective stance toward the entities they describe. For example, *punching bag* disparagingly refers to a politician that is routinely abused and defeated (as in *His role in the race is as a punching bag for Republicans and as an off-camera fund-raiser for Democrats*), while *below the belt* and *low blow* are commonly used by journalists to show disapproval of a politician's actions, comments, or remarks that are considered to be unfair, insulting, or abusive (as in *She hit below the belt and defended Obama with all her might*, or in *They're just getting started because they're all over the high points and low blows of Clinton versus Trump round two*).

4.2 Metaphodioms in a constructional cline

Metaphodioms should be treated as being scalar or gradable and thus can be presented along a horizontal and vertical continuum. Figure 2 below shows the place of different metaphorical constructions in a multi-dimensional constructional cline along horizontal and vertical axes. The horizontal line/axis represents a constructional view of grammatical structure along two parameters, complexity and schematicity: i.e., different levels of complexity and schematization. The vertical line presents a cognitive-linguistic conception of idiomaticity and shows the position of expressions according to the degree of idiomaticity (opacity/transparency and fixedness/flexibility). The triangle with the two dashed lines reflects a scalar view on metaphodioms and illustrates their position in a multi-dimensional constructional cline along horizontal and vertical axes. This view is broad but it excludes morphemes, simple words, and also lexically unspecified patterns (schematic constructions).

As can be observed in Figure 2, the difference between metaphodioms is a matter of degree rather than quality, and hence it can be described by means of parameters of complexity, schematicity (lexical specification), idiomaticity (opacity/transparency and semantic and syntactic irregularity). First, metaphodioms differ in their degree of complexity: compounds (e.g., *infighting* or *heavyweight*), phrasal verbs (*square off* or *knock out*), and phrases (e.g., *a glass jaw*) are less complex constructions in comparison to partially filled patterns (e.g., *V sb into a corner* or *V DET low blow*) and fully lexically specified expressions consisting of three or more lexical morphemes (e.g., *take it on the chin*). Second, metaphodioms differ in terms of their schematicity or lexical specification: complex words, complex phrases, and complex expressions such as *take off the gloves* and *throw in the towel* are fully lexically specified, whereas complex constructions such as *V POSSESSIVE DET hat/cap in/into the ring* are only partially filled. Finally, metaphodioms are different in respect of degrees of idiomaticity: while *up to scratch* is completely opaque

and structurally fixed, *win sth on points* is more transparent and flexible. The first is completely frozen, whereas the latter allows for the inclusion of additional lexical material and for the use of the verb *win* in different tenses. *Down/out for the count* is relatively frozen: *down* can only be replaced by *out*. *Come out swinging/fighting* is more flexible since it allows for the use of the verb in different forms, in the same way as *throw in the towel* and *take it on the chin* do.

Idioms are viewed in Figure 2 as relatively transparent if we can notice a direct connection between literal word meanings and idiomatic meanings. Idioms are perceived as opaque when, from the meaning of the component parts, we cannot reconstruct the whole idiomatic meaning. For example, idioms such as *square off*, *up to scratch*, and *rope-and-dope* are almost completely opaque for those who are unfamiliar with the etymology of these idioms, while others, such as *down/out for the count*, *come out swinging/fighting*, or *throw in the towel*, seem to be relatively transparent even if hearers are not familiarized with boxing.

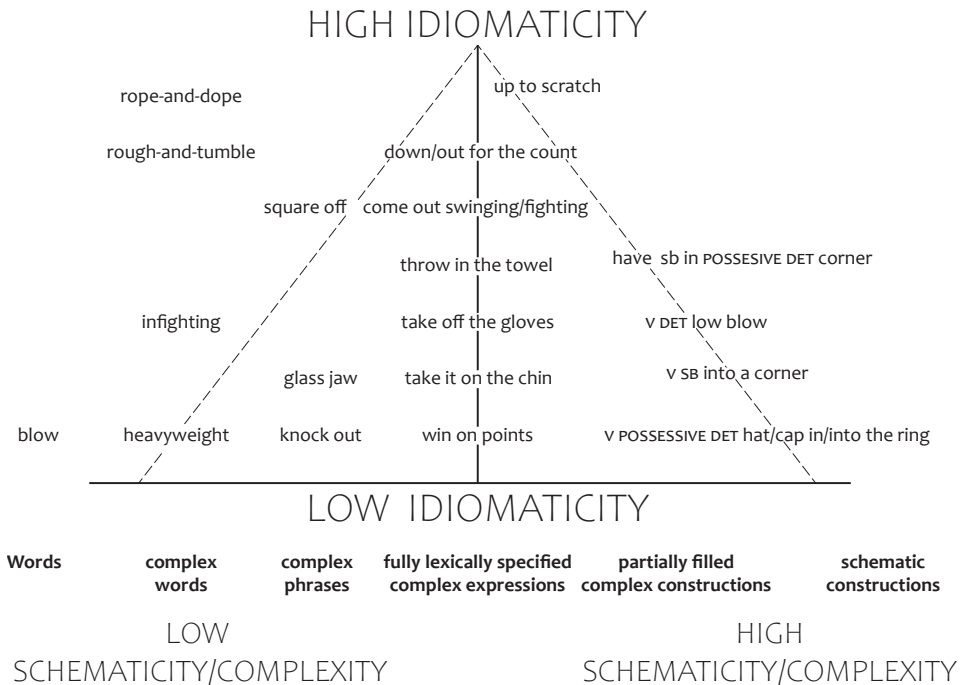


Figure 2. The classification of metaphors and idioms in a multi-dimensional constructional cline

4.3. Definition

In the light of the criteria established above, a metaphodiom can be defined as a complex metaphorical construction, a pairing of form and meaning/function, where both form and meaning are construed broadly. The former is subject to no restrictions upon nature, distance, and flexibility of constituents on condition that it functions as one symbolic unit, is composed of two or more linguistic elements, has the composite structure of a complex word, idiomatic compound, phrase or clause, and comprises at least one lexical item from the source domain. The latter is non-compositional to some degree when interpreted in the target context in which a metaphodiom is uttered, since “strict compositionality is rarely, if ever, encountered” (cf. Taylor 2002: 550), but it is motivated by conceptual metaphors and on the basis of the conceptual knowledge associated with a particular source domain or concept. Its semantic structure covers cognitive factors, discourse-functional properties, and social and cultural parameters of use. In other words, it depends on a multitude of contextual factors, including the situational, discourse, and conceptual-cognitive contexts (cf. Kövecses 2015, 2016, 2020), and hence it should be interpreted from a linguistic, cognitive, discourse-functional, and socio-cultural perspective (cf. González-García, Peña-Cervel & Pérez Hernández 2013).

Given the broad definition proposed above, it might seem as if now all metaphorical units are idiomatic and a metaphodiom is a useless catch-all term devoid of an empirical basis and unworthy of an empirical study. On the contrary, unlike the definition of construction, this definition excludes metaphorical single words, because they are not complex, and completely unspecified patterns such as argument structure constructions, since they are maximally flexible and schematic. In addition, the definition serves as a convenient cover term for capturing the occurrence of complex metaphorical constructions (such as compounds, complex phrases, proverbs, fully lexically specified complex expressions, and partially filled schematic complex constructions) representing varying degrees of idiomaticity (opacity and transparency) or different levels of belonging to a fuzzy category of metaphorical idioms, i.e. metaphorical idiomatic constructions holding a position between the lexicon and syntax and sharing a fuzzy boundary between productive and reproductive aspects of linguistic knowledge.

5. Conclusions

This study has sought to formulate the concept of metaphodiom and systematically integrate all definitory criteria for the identification, description, and extraction, of metaphorical idioms in a large corpus of naturally-occurring data. These criteria had only been partially or separately applied in the field literature. Thus, in this respect, the present study makes a noteworthy contribution to a growing body of literature on metaphorical idioms by integrating all the parameters in the single research.

This goal has necessitated determining structural, semantic, functional, and distributional properties of metaphorical idioms derived from boxing on the basis of their use in linguistic corpora. The results of qualitative analysis have shown that metaphorical idioms can be composed of many different constituents (the occurrence of a lemma and any other type of linguistic component: e.g., a prefix in a compound word or a phrasal verb in a complex word), can consist of at least two components (complex words, compounds, or word pairs) or more than two constituents (e.g., *take the gloves off* or *catch sb off guard*), should occur frequently in a particular target domain and gradually become entrenched in this domain, can consist of immediately adjacent constituents or nonadjacent ones, can exhibit various degrees of frozenness (syntactic and morphosyntactic restrictions) and restricted collocability (lexical constraints), must function as one semantic unit, can display varying degrees of opacity or transparency, should be viewed as being non-predictable to a certain extent when used metaphorically in a particular target domain (e.g., in political contexts), and can serve different discourse functions and be motivated by cultural and social factors.

The quantitative findings in turn have revealed that there are boxing idioms that occur relatively frequently in the domain of politics. The bulk of them constitute idioms connected with a boxing fight, boxers, strategies adopted by fighters, and different phases involved in a boxing fight: for example, *infighting*, *rough and tumble*, *square off*, *heavyweight*, *lightweight*, *knock sb down*, *catch sb off guard*, *have sb in one's corner*, *put/toss/throw your hat in the ring*, *take the gloves off*, *the gloves come off*. Apart from these idioms, the ranking list in Table 1 contains metaphorical expressions denoting the outcome of a boxing game (*throw in the towel*, *go the distance*, *knockout punch*, *knock-out/knockout blow*, and *win on points*), referring to an unlawful blow (*below the belt* and *low blow*), and designating a piece of equipment used for hitting (*a punching bag*).

Finally, several limitations of this study need to be acknowledged, due to the limited space allotted to this paper. First, it was impossible to present and assess the quantitative findings for all the boxing idioms found in the contexts of politics in the space here ascribed. Hence, this paper only reported the results for the 30 most strongly attracted idioms of the target domain under discussion. Second, the current study was unable to describe all boxing idioms in politics and determine their cognitive and semantic motivation. Thirdly, the study did not discuss discourse-functional properties of boxing idioms in much detail. Lastly, the investigation was solely restricted to the examples of idioms found in an American variety of English.

Future research should therefore concentrate on the investigation of metaphors in greater detail. A further study could determine other metaphors that are significantly attracted to, or loosely associated with, the target domain of politics or other domains, clarify their specific figurative meanings in these contexts, and establish different metaphorical mappings underlying the metaphor POLITICS IS A BOXING BOUT or other metaphors. It would also be interesting to examine the function of boxing idioms in political discourse by conducting a sentiment analysis of the degree of aggressiveness of each boxing idiom. Such an analysis would explain positive or negative sentiments expressed by speakers

using the idioms in particular contexts. Lastly, given that the present study was confined to COCA, it is recommended that a further comparative study of boxing idioms in COCA and BNC (The British National Corpus) be undertaken, in view of the possible existence of linguistic and cultural variation in the use of boxing idioms in these two varieties of English.

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