

CHARM OF LINGUISTIC METAPHORS — A CORPUS-BASED STUDY

Abstract. The Cognitive/Conceptual Metaphor Theory (hereafter CMT) aims at generalizing linguistic metaphors into highly covering cognitive metaphors to investigate how humans perceive, organize, save and retrieve information metaphorically. Conceptual Metaphors are undoubtedly critical for human cognition, but linguistic metaphors are equally important for their vividness and diversity in language use. The paper looks at the metaphorical uses of the verbal and adjectival forms of the three concepts embodied by dog, hound and bitch: they are close conceptually, but behave differently metaphorically, and no proper conceptual metaphor can generalize their metaphorical variations except the too general ANIMAL metaphor. It is time cognitive metaphor researchers minded the richness of linguistic metaphors, the study of which is increasingly feasible with corpus resources and techniques.

1. Introduction

It can be inferred from Stefanowitsch¹ that corpus-based methods have «established themselves as the major empirical paradigm in linguistics» for two decades. Their pairing with metaphor studies formally began with the publications of Charteris-Black² and Deignan³. While most researchers deploy corpus approaches for cognitive metaphors, Deignan mainly works on the grammar of linguistic metaphors to shed light on CMT. Although it is not her intention, her research does remind us of the importance of linguistic metaphors. This paper chose the verbal and adjectival forms of three

¹ *Stefanowitsch A.* Corpus-based Approaches to Metaphor and Metonymy // *Corpus-based Approaches to Metaphor and Metonymy.* Berlin, 2006. P. 1.

² *Charteris-Blak J.* *Corpus Approaches to Critical Metaphor Analysis.* New York, 2004.

³ *Deignan A.* *Metaphor and Corpus Linguistics.* Amsterdam, 2005.

closely related concepts embodied by *dog*, *hound* and *bitch* to show why linguistic metaphors cannot be ignored.

2. Method

The British National Corpus (hereafter BNC), Wmatrix and eMargin were employed. BNC used is the web edition at <http://bncweb.lancs.ac>. It is too widely used to need further introduction. Wmatrix⁴ is a corpus tool developed by Doctor Paul Rayson at Lancaster University, the first and only online semantic annotation tool to date. It was designed for content analysis and comparison, very useful for discourse analysis, but strengthened on purpose for metaphor identification. A rough equivalence is assumed between the semantic domains the tool assigns to each word⁵ and the source and target domains of metaphor per CMT.

[E]Margin⁶ is a qualitative online annotation tool stationed at Birmingham City University, UK, with which researchers «can highlight, colour-code, write notes and assign tags to individual words or passages of a text». It has 6 colour codes for different collaborators or the same user. Words in notes are displayed as tags under Tag Cloud in proportion to their frequencies, vivifying their relative significance.

The procedures were: to concordance the search word in BNC, save the hits as a plain text document to upload to Wmatrix by clicking Tag Wizard (in case the researcher has a preferred semantic domain for a certain word, use Domain Tag Wizard), the system will do part of speech (hereafter POS) tagging and semantic tagging automatically for each word before producing the frequency lists in terms of word, POS and semantic domain. The most important feature is keyness analysis by comparing the target frequency lists with a built-in BNC Sampler corpus, or a self-built one.

⁴ Refer to <http://ucrel.lancs.ac.uk/wmatrix3.html>

⁵ *Word* is used interchangeably with *lexical unit* to include fixed multi-expression words.

⁶ Refer to <http://emargin.bcu.ac.uk>

Wmatrix only assigns one most likely semantic tag to each word, but gives other possibilities in the broadlist useful at least for conventional metaphor identification: the source domain term may receive two or more semantic tags, i.e. its original/source domain meaning plus the metaphorical/target domain meaning(s). However, it may receive only one semantic tag which is the target domain meaning in case of a conventional metaphor, or the source domain meaning in case of a fresh metaphor⁷.

According to Culperer⁸, «the closer the relationship between the target corpus and the reference corpus, the more likely the resultant keywords will reflect something specific to the target corpus» This is true not only for keywords, but also for key semantic domains. Hence the comparison was made between the target file and the BNC Sampler Written given that all search words occur dominantly in written texts according to the distribution information from BNC. The effectiveness was proven: When the target file, e.g. for *dog*, was compared with the file either for *hound* or *bitch*, the search word might lose its keyness in the semantic tagging list; but when compared with the BNC Sampler Spoken or Written, the keyness was kept. This may be because the data came from BNC, but the relative frequency of the search word is much higher than that in BNC, so the comparison highlighted rather than weakened the keyness.

Wmatrix has been proven ideal in providing semantic taggings as clues for metaphor identification. However, one problem was found: a highly conventional metaphorical word may receive the same tagging for all its tokens, which is not discriminating enough to tell different shades of its meanings. This is where eMargin came in.

⁷ Koller V. Using a semantic annotation tool for the analysis of metaphor in discourse. *Metaphorik.de*. 2008. No 15. P. 141–160.

⁸ Culperer J. Keyness: words, parts of speech and semantic categories in the character-talk of Shakespeare's Romeo and Juliet // *International Journal of Corpus Linguistics*. 2009. No 14(1). P. 29–59.

3. Case study

According to Lynne⁹, English tends to put metaphoricality on verbs. In addition, metaphorical nouns are much less frequent and thus more marked¹⁰. To make effective use of the limited space, this paper only looked at the verbal and adjectival forms of *dog*, *bitch* and *hound*. Although some scholars¹¹ may not regard such verbal and adjectival metaphors as metaphorical, Deignan (footnote 3) treats them as such, and this paper stands on her side.

Among the three words, *dog* is a covering term, *bitch* mainly refers to a female dog, and *hound* to a dog for hunting. All can shift to verbs without changing their lexical forms, and two to adjectives via affixation: *dogged* and *bitchy* respectively, with *hound* having no adjectival inflection. BNC was used to concordance each form. Then the data were uploaded to Wmatrix respectively for semantic tagging. Then, the concordances for *hound* as a verb and *bitchy* as an adjective were uploaded to eMargin for a qualitative annotation to find their more identifiable metaphorical meanings.

3.1. Interface between BNC and Wmatrix

3.1.1. Dog, Bitch and Hound as Verb

Due to the limit of space, no detailed procedures are possible. The findings in the following table either came from BNC or

Wmatrix: semantic tagging and frequency came from Wmatrix; token and collocation, from BNC; the semantic prosody was inferred by the writer.

Table 1. Dog, Bitch and Hound as Verb

Lemma: dog

⁹ Lynne C. *Metaphor in Educational Discourse*. London, 2003.

¹⁰ Goatly A. *The Language of Metaphors*. London, 1997.

¹¹ Steen G. et al. *A Method for Linguistic Metaphor Identification*. Amsterdam, 2010.

Semantic tag: E6-¹²: worry
Frequency: 206 (excluding irrelevant ones)
Tokens: dog, dogs, dogging, dogged
Main collocations: footsteps, injury, problems, problem...
Semantic prosody: negative (based on its collocations and semantic tag)

Lemma: Bitch

Semantic tagging 1: Q2.2: speech act
Tokens: bitch, bitched, bitching, bitches
Frequency: 85
Semantic tagging 2: A5.1: Evaluation: bad
Tokens: bitch, bitched, bitches (without -ing form)
Frequency: 19
Main Collocations : you (*you bitch*), stop (*stop bitching*), !
Semantic prosody: negative

Lemma: Hound

Semantic tag: E6-: worry
Frequency: 131
Tokens: hound, hounded, hounding
Main collocations: out, fans...
Semantic prosody: not obvious

From the above table, it can be seen that all of the tokens of *dog* and *hound* received the same semantic tag. However, *dog* demonstrates a very obvious negative prosody, while *hound* does not. In addition, *bitch* received a different semantic tagging, and is used quite differently: as a speech act of *complaining*, or providing a very bad evaluation.

3.1.2. Dogged and bitchy as adjective

The same procedures were used to get the following table:

Table 2. Dogged and Bitchy

¹² For the semantic tagset used in Wmatrix, please refer to <http://stig.lancs.ac.uk/wmatrix3/semtags.html>

Lemma: Dogged

Semantic tag: X8+: trying hard

Frequency: 109

Main collocations: Determination, persistence, resistance...

Semantic prosody: Positive

Lemma: Bitchy

Semantic tag: S1.2.1: Formal/unfriendly

Frequency: 59

Main collocations: So...(too strong to be modified by other words of degree)

Semantic prosody: Negative

From the above table, it can be seen that *dogged* has an obvious positive prosody, signifying a very desirable personality, hence sharply contrastive with its verbal form; *bitchy* is dominantly negative, and is normally used in formal registers.

From Table 1 and Table 2, it can be said that although *dog*, *hound* and *bitch* all denote canine entities, their correspondent verbal and adjectival uses do not share much commonness.

3.2. Interface between BNC and eMargin

From the three concepts as verb and adjective, it can be seen that all of them were tagged as the target domain meanings rather than the source domain meanings in Wmatrix, showing their metaphorical uses as verbs and adjectives are highly conventional. However, the high uniformity in tagging also causes a questioning: How is *bitchy* bad in different cases? Or how does *hound* cause worryment? To solve these problems, we resorted to eMargin. In the following, *hound* as a verb and *bitchy* as an adjective were explored.

3.2.1. Hound as verb

The concordances for *hound* as verb were uploaded to eMargin where its different meanings were encoded with different colours, and the findings are as follows:

Table 3. Metaphorical Meanings of Hound as Verb

<u>Colour</u>	<u>Frequency</u>	<u>Meaning</u>	<u>Prosody</u>
Yellow	18	pursue to hurt	negative
Blue	1	stick to obstinately	negative
Green	13	harass severely	negative
Red	15	persecute relentlessly	negative
Cyan	1	force to give	negative
Purple	2	push into a better position	positive

Here the prosody of *hound* can be seen as very clearly negative with just one exception. It can also be found that the agents of *hound* can be humans, organizations (the press, companies), other animate things (animals), and abstract things (ideas, fear). And the patients are almost always severely hurt either physically or emotionally. Since only one positive use was found, it was ignored.

3.2.2. *Bitchy*

The following are the findings in eMargin about *bitchy* based on its concordances from BNC:

Table 4. Metaphorical Meanings of Bitchy.

<u>Colour</u>	<u>Frequency</u>	<u>Meaning</u>	<u>Prosody</u>
Yellow	16	unpleasant	negative
Blue	8	low	negative
Green	20	fierce	negative
Red	3	malicious	negative
Purple	4	bossy	negative

It was found that none of the meanings of *bitchy* is positive; among all the examples, only one is non-metaphorical¹³; it was also

¹³ The colour *cyan* encodes the only example of the meaning *a female dog*, which is not metaphorical, and prosodically neutral.

found that not only women, but also *men* can be *bitchy*; not only people, but also *remarks*, *books*, *comments* and *behaviours* can be *bitchy*.

4. Findings

4.1. Findings about metaphor study

Recent years has witnessed the prosperity of the conceptual metaphor studies, and the development of well-designed corpora and corpus tools has pushed them forward by providing linguistic evidences. However, the richness and charm of linguistic metaphors cannot be ignored: to reduce them to a limited number of conceptual metaphors does not help much with language users. This can be seen from *dog*, *hound* and *bitch*: Although they all belong to the same genus, no conceptual metaphor(s) can summarize their commonness except the ANIMAL metaphor which is too general. It is high time for cognitive metaphor researchers to mind the diversity and specificity of individual linguistic metaphors again.

4.2. Findings about the Tools

About BNC. Embedded with such handy functions as frequency breakdown, collocation, distribution, sort, thin, etc., it is more than just a corpus. If only it had semantic tagging.

About Wmatrix. It is the only corpus software that incorporates semantic tagging with POS tagging, powerful not only for general discourse analysis, but also for metaphor studies. However, it is more useful to summarize things from rich resources than reverse attempts.

About eMargin. It is ideal for collaborative work; however, problems exist: firstly, only six colours are provided, insufficient obviously on some occasions; secondly, it does not have the concordance function; thirdly, no statistics are available for the annotated items under the colour codes.