



Using corpus methods to analyse metaphor in discourse

Metaphor in End of Life Care Project (ESRC grant ES/J007927/1)

Centre for Corpus Approaches to Social Science (ESRC grant ES/K002155/1)

Welcome!

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How this event came about



- Metaphor research and Corpus Linguistics – at Lancaster
- Earlier work on metaphor identification and analysis using Wmatrix software (Andrew Hardie, Veronika Koller, Paul Rayson and Elena Semino)
- ESRC-funded ‘Metaphor in End-of-Life Care’ project (Andrew Hardie, Veronika Koller, Sheila Payne, Paul Rayson and Elena Semino; with Zsófia Demjén and Jane Demmen)
- ESRC-funded Centre for Corpus approaches to Social Science (Tony McEnery, Andrew Hardie and others)

Definitions

- Metaphor: talking, and potentially thinking, about one thing in terms of another where the two ‘things’ are different but some form similarity can be perceived between them: e.g. ‘chemo veteran’.
- Corpus: a ‘set of machine-readable texts which is deemed an appropriate basis on which to study a specific set of research questions. The set of texts [...] is usually of a size which defies analysis by hand and eye alone within any reasonable timeframe.’ (McEnery and Hardie 2012: 1-2)

Corpus linguistics and the study of metaphor: Why?



- In principle, the understanding of any linguistic phenomenon can benefit from systematic analyses in large quantities of data.
- It has been claimed that metaphor is frequent in language, and that this is an indication of its importance in thought.
- Claims about 'conceptual metaphors' (Lakoff and Johnson 1980 and others) are primarily based on the frequency and systematicity of linguistic metaphors.
- Claims about the uses and functions of metaphor in discourse benefit from large-scale analyses that combine qualitative and quantitative methods.

Corpus Linguistics and the study of metaphor: How?



- Concordancing metaphorically used expressions (source domain terms) in large corpora: e.g. 'light' and 'dark' (Deignan 2005).
- Concordancing non-metaphorical expressions (target domain terms) in large corpora: e.g. 'joy' and 'sadness' (Stefanowitsch 2006).
- Combining small and large corpora (e.g. Cameron and Deignan 2003).
- Using the USAS semantic annotation tool in Wmatrix (e.g. Koller et al. 2008): e.g. expressions belonging to semantic domain of 'Warfare' in a corpus of articles about the immune system.

'Metaphor in end-of-life care' project: aims and research questions



- How do members of different stakeholders groups (**health professionals, patients and unpaid family carers**) use metaphor to talk about their **experiences, attitudes and expectations** of end-of-life care (e.g. palliative treatment, preparations for dying, etc.)?
- What does the use of metaphor by these stakeholder groups suggest about (a) the **experiences and needs** of the members of these groups and their mutual **relationships**, and (b) the nature of **metaphor as a linguistic and cognitive phenomenon**?
- The way in which the experience of end-of-life care is talked about can shed light on people's views, needs, challenges, and emotions, as well as identify areas with a **potential for increased anxiety and/or misunderstanding**.

Data



1.5 million words; 90,000 manual sample

	Patients	Carers	Healthcare Professionals	Total
Semi-structured Interviews	100,859	81,564	89,943	272,366
		90,000		
Online forum posts	500,134	500,256	253,168	1,253,558
Total	600,993	581,820	343,111	1,525,924

Operationalising 'metaphor' in language



- The 'Metaphor Identification Procedure' (MIP) by Pragglejaz Group (2007); see also MIPVU (Steen et al. 2010)

'I am fast becoming a chemo veteran as I am on my third lot just now'

1. Read the entire text-discourse to establish a general understanding of the meaning.
2. Determine the lexical units in the text-discourse.
3. (a) For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit.
 - (b) For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context. For our purposes, basic meanings tend to be
 - More concrete (what they evoke is easier to imagine, see, hear, feel, smell, and taste);
 - Related to bodily action.
 - More precise (as opposed to vague)
 - Historically older.
 - (c) If the lexical unit has a more basic current-contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it.
- (4) If yes, mark the lexical unit as metaphorical.

- ‘veteran’ in the Macmillan English Dictionary:
 1. ‘someone who was in the armed forces, especially during a war’
 2. ‘someone who has a lot of experience doing a particular activity’ [In our case, someone who has a lot of experience being treated with chemotherapy]
- Similes and other figurative comparisons:
 - ‘We are like the hardened sergeant in the army who has lost too many men in his section’

The structure of today's event



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- Using Wmatrix
 - Annotating texts with eMargin
 - Linking eMargin with USAS tags in Wmatrix
 - Using Wmatrix for metaphor identification and analysis

References



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- McEnery, T. and Hardie, A. (2012) *Corpus Linguistics*, Cambridge: Cambridge University Press.
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