# CORPUS RESEARCH INTO ECONOMIC METAPHOR

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*Abstract: The present article opens up a corpus perspective on metaphor research, focusing on a particular ESP branch, namely English for Business and Economics. The purpose of the theoretical and methodological considerations herein addressed by researching economic metaphors via corpus analyses is to shed light on the interaction between this method and this particular domain in point of research gains and losses.*

*Key words: conceptual metaphor, business English, corpus.*

A possible definition of 'corpus' progresses from an earlier general, more inclusive meaning of the term ('a collection of written texts', Oxford English Dictionary) to a more generous one ('a collection of written or spoken material in machine-readable form', Oxford English Dictionary) and even to a less comprehensive, highly specific one ('the collection of a single writer's work or of writing about a particular subject, or a large amount of written and sometimes spoken material collected to show the state of a language', Cambridge Advanced Learner's Dictionary). The latter is the one increasingly favoured by corpus linguistics, i.e. by language studies that investigate language via computerized corpora. There has also been a notable parallel progress in the size of computers, their capacity and repertoire of operations which has further been reflected in dramatic increases in the storage and manipulation possibilities of linguistic corpora.

Such an outstanding technical and operational development has led linguists from putting together early corpora such as the Brown corpus of American English and the Lancaster-Oslo/ Bergen (LOB) corpus of British English, each considered bulky at the time (in the range of a million words) (Leech, 1991), to assembling specialized corpora consisting of entries pertaining to a specified register or genre, in the range of millions of words. The gain for linguistic research is therefore tremendous and doubtless. This gain stems from two directions: corpus size and corpus content selection.

The present paper raises the issue of the profitability of the interaction between corpus studies and a specific genre, that of business English, when the area to be researched is that of metaphorical expressions. It seeks to unmask some aspects of the methodological facility subtly doubled by methodological pitfalls, to introduce some results of research and to put forth suggestions and proposals for further studies in this field.

The definition of metaphor as taken up here originates in cognitive semantics, more precisely in the strand initiated by Lakoff and Johnson in their seminal book *Metaphors We Live By* (1980). From the cognitive perspective, metaphor is seen as the partial mapping of a source domain onto a target domain, with a set of correspondences between the donor and recipient domains. As a result of this transfer, we talk and reason about the target in terms of the conceptual (and inferential) structure of the source. The cognitive semantics framework that serves as a premise in our understanding of metaphor for the purposes of the present study is known as Conceptual Metaphor Theory.

Corpus observation of authentic metaphorical expressions incorporated in Business English in use nowadays presents a series of tractable advantages and disadvantages.

Firstly, the discourse of business English itself has a composite structure, that can be amenable to order by the resources of computerized corpora; if one is interested in dissociating scientific business discourse from media business discourse or ordinary language centred on business topics, the task falls within the stage of corpus selection. One of the corpora selecting media texts, *Business Source Complete*, is available for analysis of typical features such as metaphor sensitivity. As the world's largest full text business database, *Business Source Complete* provides full text for more than 8,500 scholarly business journals and other sources, including full text for more than 1,100 peer-reviewed business publications. Coverage includes virtually all subject areas related to business. This database provides full text for more than 350 of the top scholarly journals dating as far back as 1922. This database is updated on a daily basis via EBSCO*host.*

Secondly, unlike the limited human capacity when it comes to searching a certain pattern, the potential a computer demonstrates is tested again repetitive searching which yields swift and accurate results. A cursory glance at a business newspaper would allow a linguist to spot a few metaphors, sometimes seizing the iterative usage of their underlying cognitive frame, whereas the computerized search using keywords extracted from the target or source semantic field is likely to reveal accurate, complete and therefore reliable results. This further gives the cognitive semantics researcher an edge by diminishing the amount of subjectivity and intuition built in the task.

Thirdly, corpus research in the semantics of economic metaphors launches the possibility to surpass mere qualitative research and proceed to quantitative research. Both types were adopted in Semino's 2002 article, in which she analyzed corpora of English and Italian newspapers with an eye to the representations of the euro at the time the currency was introduced in several European countries back in 1999. The fact that Britain did not enter the Eurozone at the time was linked to the British representations of the process as they surfaced in metaphorical expressions, though a series of metaphors was found to be shared by both English and Italian newspapers. Apart from detecting the partial overlap of metaphorical patterns, Semino was also able to rely on precise frequency counts and combine them with detailed text analysis in order to present the particular evaluative stances towards the common topic – the euro.

Semino's article is also notable for its cross-linguistic investigation, which is again a spin-off of corpus studies. Earlier on, Boers and Demecheleer (1997) analyzed metaphors from the discourse of economics across English French and Flemish texts, using detailed frequency counts of the metaphors from various source domains. They too found common source domains but discovered various frequency levels across the three languages. Their overall conclusion was that the speakers' culture is significantly reflected in the selection and use of metaphors.

In Charteris-Black and Mussolff's analysis (2003) the representations of the euro in the British *Financial Times* were paralleled to the counterparts in the German sister publication. Their data was collected at a later date than Semino's, and the results were closely linked to the corpus content: their choice of a financial newspaper whose target readership is the informed reader, the expert in the field, clashes with Semino's general journalism addressed to the average reader. The insights from the two text types show a different attitude towards the euro – more negative views are traced in Semino's

corpus of British journalism. These variations in results show the relevance of constituting corpus input in studying the metaphorical phenomena in the economic texts.

With the corpus I chose, *Business Source Complete*, the researcher benefits from selecting texts according to keywords or subject terms. The results may be limited to full text or not, according to published date, publication type (all, academic journal, periodical, trade publication, newspaper, book, primary source document, industry profile, country report), cover story, language. Any preferences may be saved for later searches and results may be archived in a search history file. More recently, results may be sorted, grouped or filtered by date. Related words may be applied in a search session.

Once the corpus assemblage is in place, the cognitive linguist faces a series of choices as far as the methodology is concerned.

A first option is to be assisted by concordancing software. Methodologically speaking, the linguists tasks may be the following: with the help of dictionaries and thesauri, to establish a series of keywords that are attached to a particular conceptual metaphor, evoking either the target or the source domain; to trawl concordance lines so as to check the text occurrences of the items on the keywords list; to process the retrieved concordances and decide upon their metaphoricity; finally, to classify, extend, discuss and map the concordancing results.

An alternative is to rely on a small corpus and manually search it (Cameron & Deignan 2003). I went along these lines in a cross-linguistic study (Nicolae, 2006) focused on the metaphorical representations of money in the Romanian business press.

A third way about it is to search a sample of a large corpus by hand and then extend the search into the larger corpus (Charteris-Black, 2004). I also experimented such a procedure with BSC (Nicolae, 2007) when the keywords in the search list belonged to the field of sports and games.

The corpus analysis of metaphor is relatively recent, and the methodology is constantly developing, but such studies have their due share in drawing our attention to the understanding of metaphorical systems in texts in several ways.
The combined quantitative and qualitative analysis shows the value of corpus work in bringing naturally-occurring data to the examination of the cognitive semantics network of a particular discourse type, and reconstructing patterns of language and thought.

Nevertheless, despite the ongoing technological advancement, the direction of investigation in metaphor studies does not seem reversible: it can be done only from linguistic form through to meaning, and the advent of corpus enquiries cannot change that. Computer programs can organize language data according to various factors, but the identification of metaphorical mappings and pragmatic dimensions resides with a human processor. The corpus researcher has to be interposed between the corpus itself and its interpretation as an alert sift. Corpus studies will thus remain a province of bottom-up linguistic investigation.

The dimensions of the selected corpus will affect its reliability in point of authenticity and representativeness. A large corpus evinces higher reliability, but transforms manual searches into a painstaking job for the researcher, who is anyway exposed to the danger of not being able to sift through the entire corpus. While it is possible for a chosen limited corpus to under-represent a discourse or text type, it alternatively displays higher maneuverability. Knowles (1996) argues that corpora provide naturally-occurring evidence, a strong point that should not be overshadowed by the fact that they are however limited. With BSC the advantage is that authentic language data is daily updated, compensating for the natural limitations of any corpus.

Tognini-Bonelli authors a classification of corpus work into two categories: corpus-based versus corpus-driven (2001). Broadly, the former is initiated starting from a host of assumptions and existing patterns and checks them against a corpus, whereas the latter proceeds from a clean slate where it records any paradigms that emerge from the study. The metaphor research we are interested in shares features from both types of investigation, and thus tends to be rather positively evaluated from this perspective. Since Conceptual Metaphor Theory provides the theoretical foundation, the notional stepping stones in corpus research, it resembles corpus-based work; but as any findings are open to conclusions, to reclassifications, to new paths of investigation and to new mappings on the conceptual network of a language, the research is dynamic and corpus-driven.

Here are two opposite cases. Charteris-Black's investigation (2000) of a corpus of *The Economist* reveals how the selection of particular metaphors signals a certain perspective upon the topic, consequently consolidating one of the main tenets of Conceptual Metaphor Theory. Still, in her analysis of a corpus of texts dealing with the economy of the European Union (Semino, 2002), Semino's findings shake the predictions thrown up by the same theory – isolated, 'one-shot' metaphors rather than systematic metaphors are detected to be the norm and prove to be conceptually poignant rather than insignificant.

Corpus inquiries in metaphor studies have only started to be tackled, and there is a lot of territory left to be scientifically covered. One application that deserves to be extended and pursued in greater detail is the comparative one. Researchers are able to diversify the range of languages whose economic corpora they look into, or brake down larger corpora into sub-corpora which can be compared, allowing for genre or text type comparisons. Similarly, the universality and the cultural-specificity of economic metaphors can be reflected in corpus studies. There is enough room left for deeper insights into the functions of metaphors in the economic discourse, the grammar or hidden ideology of metaphorical expressions, or metaphor processing. A complement to metaphor studies based on intuition and elicitation, corpus research would certainly add another dimension to the examination of the implications of Conceptual Metaphor Theory.

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