Tanulmány

Horváth János

On the Usage Profile of the Words 'Inflation' and 'Deflation'

Abstract

The following study was inspired by Herwig's article from the 1990's that gave a thorough analysis of the word 'inflation' by establishing its usage profile based on corpus evidence. The novelty of my approach comes from the fact that while Herwig gathered his data from his own corpus my corpus data were compiled with the help of a web-based concordance provider. Therefore my study also attempts to justify the significance of the Internet as a huge linguistic data source highlighting its advantages over traditional corpora. Following Herwig's footsteps, I created a so-called usage profile of the word 'deflation', which is later compared with the profile of the word 'inflation'. My usage profile includes colligation features, typical collocations and metaphorical uses. This latter one contributes to the investigation of mental schemes native speakers have in mind concerning these two terms.

In the following paper, I will make an attempt to draw up a corpus-based analysis of two semantically related words, based on Herwig's study from the 1990's and my own web corpus research carried out with the help of the *WebCorp* website, which is a web-based linguistic search engine developed by Birmingham City University.

Corpus linguistics studies words by gathering evidence of use and meaning from large collections of text and, with the development of technology for storing, processing and retrieving large amounts of data over the past decades, this emerging branch of linguistics has had an effect on almost every field in linguistics. It has first and foremost revolutionised lexicology and lexicography, thereby creating new materials for language learners such as dictionaries, course books, grammar books, etc. As Corpus linguistics has evolved into an up-to-date tool or approach to studying language, corpus based evidence has become indispensable for most linguistic research.

Nowadays scholars, teachers and students have much greater trouble-free access to corpus data since software developers made the world wide web's immense linguistic data linguistically more digestible and researchable. Therefore,

> Language scientists and technologists are increasingly turning to it as a source of language data, because it is so big, because it is the only available source for the type of language they are interested in, or simply because it is free and instantly available (Kilgarriff 2003).

That is to say, concordance data can be extracted from texts on the Internet by a mouse click. Not to mention that contrastive studies of 'traditional', manually collected, carefully designed

and, so to speak, prestigious corpora and the World Wide Web as data sources clearly showed that the Internet provides a considerably higher number of occurrences compared to other well-known text collections. It is especially the case when it comes to less frequent words or word combinations and there is more evidential data found on the web in connection with those words as well which constitute the so-called core of English, leading to more stable conclusions concerning language with the help of the huge mass of texts obtainable via the Internet.

Semantics as the field of linguistics that studies meaning benefited a lot from the development of corpus linguistics and the evolution and improvement of the availability and exploitability of corpus data. "Corpus semantics studies how words are used in text and discourse and uses observations of use as evidence of meaning" (Stubbs 2001: 5).

Observations of meaning and use are made based on the co-occurrence of words that are provided by the so-called concordance lists. Concordance lists are obtainable nowadays on the Internet as well, on certain websites where you only have to type in the word or lemma you would like to investigate and depending on your Internet connection and the frequency of your key word you can get your concordance list in a matter of minutes. Inferences about meaning and usage patterns can be based on the lexical relations between words, because repeated co-occurrences specify certain tendencies that lead to the typical and not so typical collocations of words.

> We can talk of a node-word co-occurring with collocates in a span of words to left and right. A 'node' is the word-form or lemma being investigated. A 'collocate' is a word-form or a lemma which co-occurs with a node in a corpus (Stubbs 2001: 29).

The inspection of collocations can reveal main tendencies respecting semantic preferences, colligations, and discourse prosody. Semantic preference shows us how words can be semantically related by having an inclination to appearing regularly within the proximity of each other. Words can be grouped into semantic fields according to their semantic preferences and these fields can be easily tagged. "Colligation is the relation between a pair of grammatical categories or, in a slightly wider sense, a pairing of lexis and grammar (Stubbs 2001: 65). This means that colligation takes a closer look at collocations from a grammatical perspective, namely, how certain generalisations can be made about the relation between different classes of words.

> A discourse prosody is a feature which extends over more than one unit in a linear string. For example, the lemma CAUSE occurs overwhelmingly often with words for unpleasant events, whereas PROVIDE occurs with words denoting things which are desirable or necessary (Stubbs 2001: 65).

These features all make up the semantic schemas or usage profiles of words. Semantic schemas are mental models that native speakers possess about the words of their native tongue and for linguists they are useful for making systematic comparisons and pointing at striking regularities and differences.

The above-mentioned linguistic paradigm has already been utilised by corpus linguists and some parts of the vocabulary of the English language have been explored systematically with its help. My main focus is the business vocabulary of English, but some scholars have already made some investigations in this field as well. For example, Mike Nelson, a corpus linguist from Manchester has made extensive research on the lexis of business English and has come up with the following discoveries,

> […] Business English was semantically divorced from lexis concerned with personal issues, society, family, house and home and personal activities […]. The lexis found could be encapsulated to a large extent within a limited number of semantic categories. These categories included business people, companies, institutions, money, business events, places of business, time, modes of communication and lexis concerned with technology (Nelson 2007).

He also tested semantic preferences or semantic prosody concerning the lexis of business English and his findings confirmed that specialist language has unique characteristics regarding collocations.

> Semantic prosody can show at least two significant things: the ways in which business people think, and the way words become more collocationally fixed in specialist linguistic environments (Nelson 2007).

He also came up with examples taken from his own business corpus:

> *Sale*, for example, has a unique prosody connected to *availability*, whereas the word package, whilst having a unique prosody connected to computers, also shares a prosody related to finance with other words such as *merger, market* and *finance* (Nelson 2007).

I also came across Herwig's article on the usage profile of the word 'inflation' and it gave me the idea that I should create a usage profile of its antonym, 'deflation'. Herwig's undertaking was twofold. At first, he wanted to prove that 'inflation' has a higher frequency in a business language environment than in a general English environment and he did this by establishing two corpora with the assistance of his students. His Corpus A, or Business Corpus comprised chiefly of printed articles from business columns of *The Guardian,* and *The Observer.* His Corpus B contained mainly general English from *Life Magazine* and *The Observer.* The frequency of the word 'inflation' in the two corpora clearly showed that this word is much more frequently used in Business English than in general English. "Inflation was distributed over the two corpora in the following quantities: Corpus A 2,563, Corpus B 7"(Herwig 1996: 20). Secondly, he constructed a usage profile of 'inflation' based on the concordance data he obtained from his corpora.

My research concerning the word 'deflation' started with the creation of the concordance list and I made use of the web-based concordance search engine, called *WebCorp* and it has produced 2,427 concordance lines that included the word 'deflation'. This is a very useful and simple tool to produce web based concordances and it also offers advanced search options with which you can set your own search criteria. You can specify the internet sites, select from some of the newspaper domains on offer, you can opt for a specific subject area, and among other settings you can also opt for the time range concerning the dates of publication you wish to gather your data from. Although I tried the British and American newspaper options separately for my own search, 99 percent of my concordance list was produced when no restrictions were applied. It is important to note, however, that in spite of the fact that my corpus was much bigger than Herwig's, there is no considerable difference in the number of concordance lines it has created. This finding leads to the conclusion that 'deflation' is used much more scarcely than 'inflation' and also supports the argument that the World Wide Web is the ultimate source for linguistic data, especially in the case of rare words.

I also consulted six different monolingual dictionaries including business, general, and a special type that explains geographical terminology. In the six different dictionaries altogether four senses of the word 'deflation' can be differentiated, that is business, technical, geographical, and figurative. The business sense is explained as the following, "a reduction in the amount of money in a country's economy so that the prices fall or remain the same"

(OBEDLE, 2005: 148). There was no information in any of the above-mentioned dictionaries about structural regularities, typical collocations, and metaphorical use of 'deflation' concerning the business usage or any other sense.

During the categorisation of the variety of occurrences of 'deflation', the following questions were formulated. What are the mental images we apply to 'deflation'? What are the different grammatical structures this word is frequently used in? Do such senses exist that are not listed in the six dictionaries consulted? What are the most typical or frequent metaphorical or idiomatic uses?

As far as structural regularities are concerned, the most frequent occurrences of 'deflation' were the 'noun+preposition+noun' structure with 335 instances, similar to 'inflation' in magnitude. Of the 335 instances, 317 are identical to the 'noun+of+*inflation*' type structure. The most frequent one is the *period(s) of deflation* collocation, occurring 36 times in the concordance list, whereas in the case of 'inflation', the collocation *rate(s) of inflation* is the most prevailing one with 95 occurrences.

There was a more significant difference in the comparison of the colligation features of the two words. Namely, the word 'inflation' had a strikingly more frequent occurrence in the 'noun+noun' structure with 236 occurrences than the word 'deflation', which had only 63 occurrences that way. The most frequent collocation in this respect was *inflation rate* occurring 87 times in Herwig's corpus whereas *rate* as a collocate only came up once with 'deflation' as a node in mine.

Although there is no statistical data available concerning the frequency of 'inflation' used in a 'patient' role (i.e. verb initial node structure) in Herwig's study, there is a significant number of occurrences of 'deflation' in this structure with altogether 323 instances, out of which the collocation *fight against deflation* is the most frequent one. Another notable structural regularity is the agentive role of 'deflation' with 224 occurrences, the collocation with the highest number of frequency being *deflation occur(s)* with 30 occurrences.

The establishment of the usage profiles is not only useful for quantitative analysis but it provides ample evidence for more in-depth qualitative investigation as well. Although Herwig attempts to classify the word combinations of 'inflation' according to phrasal categories, such as free-word groups, phraseological units, idioms, etc., he admits that it is a rather difficult task. "One reason why the distinction between these groups can be rather tricky is that the process of metaphorisation is sometimes difficult to notice at all" (Herwig 1996: 22). This is the reason why I didn't endeavour to put the collocations of 'deflation' into the above-mentioned categories; I preferred to establish the various classes thematically according to the different metaphorical word combinations in which 'deflation' occurred.

> According to one elementary formulation, metaphor holds two thoughts of different things together in simultaneous performance upon the stage of a word or a simple expression, whose meaning is the result of the interaction (Ricoeur 1997: 80).

To explore the metaphorical uses of 'deflation', I attempted a conceptual grouping, following in Herwig's footsteps, of his study of 'inflation' and these groupings were made according to the different domains of senses that interacted with our nodes. At first, I will elaborate on those metaphors that both words have brought about. In a number of collocations both 'inflation' and 'deflation' carried the sense of hostile nature and evoked the concept of 'war', something that should be struggled against or pressed down. The most typical pattern for the warlike nature of 'deflation' was the collocation *fight against deflation* with 19 occurrences and other verbal collocates expressing war were as follows, *combat, defeat, counteract, elimi-*

nate and *battle against*. In these examples 'deflation' has the syntactic role of a patient but the hostile force of 'deflation' came up in other structures as well. 'Deflation' was used as an agent with collocates like, *take hold, destroy, strike, force and wreak* in the sense 'domains of war' and 'enemy'. Other examples for this can be taken from other structural regularities, too, such as the (noun+preposition+noun) structure, e.g. *forces of, hedge against, bulwark against* or attributes like *damaging, destructive* and *pernicious.* This metaphorical concept is illustrated by the verbal collocates *battle, fight, beat, combat, conquest, fight against* and *conquer* in the case of 'inflation'.

The hostile connotation of these two words brings another metaphorical concept into play where danger is an inherent quality and the "transposition from the concrete to the abstract" (Ricoeur 1997: 120) takes place. This leads us to those metaphorical units that contain the element of fire or explosives and our words in question collocate mostly with the synonyms of extinguishing or starting these potential hazards. Collocations of this kind with 'deflation' are *defuse, trigger, choke off, (re)kindle,* and *outburst.* 'Inflation' collocates with almost the same words except for one, *reignite, rekindle, choke off* and *fuel.*

"What is potentially hostile has to be kept under control" (Herwig 1996: 23) is valid for both 'inflation' and 'deflation', and there are structural similarities as well, since both words appear in patient roles of predicates or in prepositional structures in these metaphorical expressions. The following collocations exemplify this metaphorical process in the case of 'deflation': *stave off, tackle, mitigate, avert, ward off, control, curb, hedge against,* or *bulwark against.* Collocations of 'inflation' conveying the same concept are *keep under control, curb, hedge against, keep the lid on.*

Another tendency of metaphorisation that can be observed in the case of both lemmas is what is called 'personification'. In broader terms, 'the transposition of the animate to the inanimate' (Ricoeur 1997: 120) can be perceived. The lemma 'deflation' is the agent in those collocations that typify this process and the collocates here are as follows, *discourage, encourage, feed on, offer* and *favour.* On the one hand, the syntactic role of 'inflation' is more diverse in these metaphorical expressions than that of 'deflation' and, on the other hand, there are also animal metaphors and the trait of movement integrated into these collocations. Examples are as follows, *reawakening inflation, runaway inflation, inflation (jumps, runs, hacks away, eats),* and *galloping inflation.*

As I have already elaborated on the similitude between 'inflation' and 'deflation' in terms of their collocations with regard to their syntactic and metaphoric usage, let me now point at the major differences between them. There are two exceedingly productive collocations of 'inflation' which are not applied at all with 'deflation'. These highly repeated collocations of 'inflation' are *high* and *low.* Herwig's somewhat indecisive categorisation of this phenomenon again shows us how difficult it is to come up with a precise label for collocations or phraseological units.

> These metaphors may be dead in that we are no longer aware of the underlying process of metaphorisation. They are on the other hand very active, living metaphors in that they conceptualise our understanding of a social phenomenon as if it were a local dimension (Herwig 1996: 22).

To give a more exhaustive explanation concerning the underlying mechanisms of these metaphorical processes, let me refer to some other hypotheses as well. According to Kövecses' argument "[…] we have a complex abstract concept as a target domain and a simpler, nonabstract concept as a source domain" (Kövecses 2003: 109). Ricoeur mentions Black's model theory as a plausible interpretation of metaphors which seem to be also relevant here.

> Their purpose is to show how something looks, how it works, what laws govern it […]. For everything with a spatial or temporal dimension, these conventions rest on partial identity of properties and invariance of proportions (Ricoeur 1997: 240).

The next issue is to list those collocations that have yielded those images that were only represented in my web based concordance data of 'deflation'. One of these is the concept of a ghost, with collocates like *spectre of, ghost of, ogre,* and *monster.* Interestingly enough, there are collocations that liken the abstract concept of 'deflation' to some kind of an abyss, something that is so deep that it has no bottom or to a whirling mass of water one can sink into. Collocates that conjure up this image are *spiral of, morass of, pitfalls in, vortex of, fall into* and *mire in.*

There is one notable aspect that should not be left out from the comparison of these two economic terms. Although the element of danger mostly brings about a negative connotation of these words, it should be noted here that there are a few collocates of 'deflation' which contribute to positive connotations. For instance, *good, benign, beneficial* and *mild,* in fact, two of these have proved to be quite frequent because the collocation *good* occurred 45 times and *benign* appeared 21 times in the concordance data. In his research, Herwig could not come up with one single collocation of 'inflation' that carried a positive connotation.

Since my concordancing process was not limited only to the field of economics, my corpus evidence concerning 'deflation' revealed subject areas other than the field of economics, too, where 'deflation' was used quite frequently. These subject areas are mechanics, medical science and geography. 'Deflation' proved to be the most productive in the realm of medical science with 28 different collocations and in geography with 26 different collocations. The collocations under mechanics and medical science draw upon the same sense domain of 'deflation', namely, the letting out of some substance of a balloon or tyre that has been inflated by that substance. On the other hand, in the geographical sense 'deflation' has a unique meaning specific to this subject area, i.e. "the action of the wind in removing material from a surface and lowering that surface" (ODOG, 1997: 122). During the close scrutiny of the concordance lines I have encountered one single collocation exemplifying a figurative use that the OALD dictionary only lists under the word form 'deflate' referring to people and their behaviour, i.e., "somebody especially proud or confident feel or appear embarrassed or discouraged" (OALD, 1993: 314). The web-based concordance data delivered the figurative implication as follows, *"Newsvine UW Football elation or deflation for the Huskies?"*

Keeping Stubbs' proposition in mind that "corpus evidence has shown several times that there are striking differences in usage concerning the different word forms of a lemma" (Stubbs 2001: 27), I did not restrict my research to only one word form of the lemma 'deflation'. As a consequence, the succeeding word forms turned up in my concordance data, *deflationary, deflations* and *deflationists.* Out of which the most common was *deflationary* with a remarkable 247 occurrences. Having taken a closer look at the collocations of the word form 'deflationary', I noticed that it shows most similar semantic prosodies to the word form 'deflation'. The three most frequent collocations of 'deflationary' were *spiral, forces* and *pressure.*

To conclude my study, I hope to have achieved my goal in emphasising the usefulness and the importance of the establishment of usage profiles with the help of concordance lists for linguistic research. It can give such an overview of the features of words that no present day dictionaries can give, not even corpus based ones. This type of research cannot only be utilised in business English but for any genre or register. It can certainly serve as an educational

method for students at university or advanced level as Herwig put it in the conclusion of his article.

> At an advanced level of language study, it can appeal to some students' preference for the use of modern technical devices, but what is even more, it can lead them to bring together what frequently is only compartmentalised knowledge (Herwig 1996: 26).

The upshot of such analyses is that they can give a better explanation of the different senses and uses of a word that course book writers for language learners can also take advantage of.

References

Herwig, R. (1996): Inflation – a Usage Profile. In: Rácz, I. (ed.): *English Studies and the curriculum: Proceedings of the first Tempus – Jen mini conference.* Debrecen: Institute of English and American Studies, University of Debrecen, 19-33.

Kilgarriff, A. (2003): Web as Corpus [Online]. Available at: *http://www.kilgarriff.co.uk/Publications/2003-KilgGrefenstette-WACIntro.pdf*

Kövecses, Z. (2003): *Metaphor and Emotion.* Cambridge: Cambridge University Press.

OALD – Oxford Advanced Learners' Dictionary. 4th ed. Oxford: OUP, 1993.

OBEDLE – Oxford Business English Dictionary for learners of English. 1st ed. Oxford: OUP, 2005.

ODOG – Oxford Dictionary of Geography. 2nd ed. Oxford: OUP, 1997.

Nelson, M. (2007): Computers and Semantic Prosody [Online]. Available at: *http:// www.kielikanava.com/semantic.html*

Ricoeur, P. (1997): *The Rule of Metaphor.* R. Czerny, Trans. London: Routledge.

Stubbs, M. (2001): *Words and Phrases: Corpus Studies of Lexical Semantics*. United Kingdom: Blackwell.

WebCorp search engine: *http://www.webcorp.org.uk/index.html*