New Insights into the Language and Cognition Interface

Edited by
Rafał Augustyn
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PREFACE

New Insights into the Language and Cognition Interface is a collection of articles that successfully link theoretical assumptions of Cognitive Linguistics with empirical studies on language. The volume portrays, in a compact form, the latest state of the dynamically changing research in five areas of the cognitive exploration of language: conceptual blending, discourse and narratology, multimodality, linguistic creativity, and construction grammar. This is shown mainly from the perspective of two languages – Polish and English.

The book consists of five sections, each pertaining to the application of tools proposed by cognitive linguistics in empirical studies of various aspects of language and cognition.

The first section, *Blending and Usage*, presents two articles that offer a conceptual blending analysis of various linguistic expressions. The first contribution in this section, authored by Suzanne Kemmer, accounts for fictive motion radiation paths, adopting Fauconnier and Turner's (2002) four-space model of conceptual integration. Kemmer's "Fictive motion of light: Usage and blending" provides a basic universal blend which successfully combines Talmy's analysis of radiation paths (2000) with their manifestation in everyday language. Following this, in the article "Word games in advertising: A cognitive analysis of nonce-words", Aleksandra Pasławska discusses the ephemeral and context-dependent structure of selected nonce words found in Polish and English advertising slogans, adopting both Fauconnier and Turner's original model of conceptual integration (2002) as well as its extended variant as proposed by Brandt and Brandt (2005).

Section Two, entitled *Cognitive Analysis in Discourse and Narratology*, offers an account of studies in diverse fields of broadly-understood discourse. The section opens with the contribution by Anna Drogosz, who analyses various texts on evolution. Her contribution "Force-dynamic patterns in the theory of evolution" offers a cognitive semantic approach to scientific discourse, simultaneously applying force dynamic patterns as described by Talmy (2000). The article "Conceptual metaphors associated with climate change in UK political discourse" by Oleksandr Kapranov provides an in-depth study of conceptual metaphors pertaining to climate change used by the Conservative government and the

opposition Labour Party. His corpus–based analysis aims at identifying and comparing conceptual metaphors used in the discourse of both the Conservative Party and the Labour Party in years 2014-2016. Next, in her article "A Cognitive poetic analysis of paratexts. A study of E. Bowen's 'Postscript by the author' to *The Demon Lover and Other Stories*", Anna Kędra-Kardela elaborates on the cognitive model of text reading, stressing the particular importance of paratexts, their reception, and the role they play in the overall meaning construction of literary texts. The section ends with the contribution by Magdalena Zyga. Her article "The role of the conceptual metaphors/blends analysis in description of individual styles on the basis of selected lyrics by the Welsh Band *Manic Street Preachers*" is an attempt to approach stylistics, or, more precisely, individual styles, with the tools of cognitive linguistics, in particular Lakoff and Johnson's Conceptual Metaphor Theory (1980) and Fauconnier and Turner's Conceptual Blending Theory (2002).

The third section, titled *Multimodality in Language Processing*, offers three contributions, each presenting a multimodal approach to meaning construction and communication. The section opens with Elżbieta Górska's article "A multimodal portrait of WISDOM and STUPIDITY. A case study of image-schematic metaphors in cartoons", where she presents a multimodal analysis of image schematic metaphors that pertain to the concepts of WISDOM and STUPIDITY found in selected cartoons by the Polish artist Janusz Kapusta. In her article "Twitterati in the Twitterverse: A cognitive linguistics account of hashtags on Twitter" Ewelina Prażmo proposes a unitary analysis of "paralinguistic devices", such as semantically-charged punctuation which reinforces the verbal aspect of Internet communication and makes the speaker-hearer interaction more subjective and context-based. Last but not least, Krzysztof Kosecki's article "On the scope of conceptual metonymy in the compound signs of Polish Sign Language" offers an in-depth theoretical, as well as practical account of metonymy-based signs used in the languages of the deaf. The article also addresses the metaphor-metonymy interaction as found in Polish Sign Language.

Section Four, *Creativity in Language and Translation Teaching*, comprises two contributions. The first article, by Alicja Dziedzic-Rawska, is a study of endo- and exo-centric compounds found in contemporary English, stressing their creativity as well as the fuzzy nature of the two notions. "'Exocentric' or 'creative' formations? A plea for an update in terminology" gives the reader an excellent insight into the conceptualization of novel compounds in English as approached by native speakers. By contrast, in the second contribution "Assessing creativity in

the classroom: Teaching literary translation in a cognitive framework" Agnieszka Gicala offers two different approaches to teaching literary translation which aim to induce translational creativity among students. In her article she also discusses the complex problem of translation quality assessment, finding a (partial) solution in Bartmiński's notion of linguistic worldview (2009).

The last section, *Corpus Linguistics Approaches to Constructions*, presents two perspectives of exploring language through the study of various constructions using corpus material. While the article by Anna Ścibior-Gajewska and Joanna Podhorodecka, "The passive of Genitive and Instrumental verbs in Polish: Preferences and constraints", presents the analysis of the Polish passive applying Construction Grammar, in particular collostructional analysis and multiple correspondence analysis, Jarosław Wiliński's contribution "Distinctive-metaphostruction analysis: Investigating significant metaphorical constructions of two target domains" presents an extended variant of the distinctive-collexeme analysis, which derives from the notion of conceptual metaphor, as well as the concept of metaphostruction.

The volume draws inspiration from selected papers that were delivered at the annual international conference of the Polish Linguistics Association (PCLA) held on 24-26 September 2015 at Maria Curie-Skłodowska University in Lublin, Poland. The PCLA conference was an excellent opportunity to share and communicate recent trends and achievements developed within cognitive linguistics.

In the present collection of articles, we would like to share the linguistic enthusiasm that accompanied the conference participants, and invite the reader to delve into recent issues proposed by outstanding cognitive linguistics scholars, from Poland and abroad.

Agnieszka Mierzwińska-Hajnos
Rafał Augustyn

PART ONE

BLENDING AND USAGE

CHAPTER ONE

THE FICTIVE MOTION OF LIGHT: USAGE AND BLENDING

SUZANNE KEMMER

Introduction

This paper studies the expression of radiation path fictive motion in English, e.g. *light poured into the room,* in terms of the Conceptual Integration Theory of Fauconnier and Turner (2002), also known as blending theory. Fauconnier and Turner analyzed some of Talmy's fictive motion types as conceptual blends, but not radiation paths. By combining blending theory with Talmy's original analysis of radiation paths, and applying both to the empirical generalizations found in Kemmer (2014), new generalizations emerge about the nature of radiation paths that go beyond both Talmy's and Fauconnier's original analyses of fictive motion. Specifically, I argue that the fictive motion of light involves a range of related blends in a complex network of conventional blends, in which more complex blends are based on a simple but powerfully compelling blend that appears to be deeper than language.

Light and Motion: The Naïve Model of Light

The conceptual underpinnings of the fictive motion of radiation paths are found in Talmy's analysis of the basic human conceptualization of light. I view this conceptualization as a basic cognitive model, which I call the naïve physics of light. In this model, there is a light source from which visible radiation (light) originates and emanates. In its simplest configuration, the light travels through space along a linear path and reaches physical objects, which are illuminated by the light.

This naïve model bears some resemblance to the physics of light. In the scientific understanding of electromagnetic radiation, radiation moves physically from an energy source across space, and may reach objects in

its path. However, even in the visible spectrum of light, this motion through space is not detectable by human vision. Since light itself moves too quickly for the human eye to see its motion, an illuminated scene, unless there is rapid change in the illumination, is perceived as static illumination. Thus, light, in human perceptual representations, is not actually perceived as a moving object; but it is conceptualized as such, as evidenced by the use of fictive motion expressions as *the light came in the window*.

As Talmy observes, this mode of construing light is such an exceedingly natural and compelling conceptual structure that it can be difficult to understand that it is a construal that differs from our actual perception. As explained below, we can understand this structured conceptual model as the product of a conceptual blending process.

Conceptual Integration in the Fictive Motion of Radiation Paths: The Basic Blend

The naïve model of light is based on relations in another conceptual domain, namely motion through space. The deployment of motion as a structuring conception for an intangible domain like light is just one of myriad similar mappings from the concrete motion domain to more abstract cognitive domains that have been found in human languages around the world, as originally described in Lakoff and Johnson (1980).

The specific conceptual schema drawn on to form the blended conceptualization in radiation paths is the SOURCE-PATH-GOAL image schema described in Johnson (1987) and Lakoff (1987). The SOURCE-PATH-GOAL image schema is a schematic conception deriving from the motion of objects through space, and probably ultimately from the motion of the self-directed human body. It is a somewhat generalized schema in that it is non-specific for aspects of motion that are known to be otherwise significant in language, in particular whether the motion is construed as autonomous (the moving entity is understood as moving under its own power), or is instead induced by an input of force from another entity. The evocation of this image schema and the spatial domain it comes from generates conceptual correspondences that guide speakers of English (and perhaps all languages) to the construal of fictive motion of light, and makes the corresponding elements almost impossible to dissociate, once the mappings are made in a given language.

The conception of motion of an entity through space forms one of two basic conceptual inputs to the blend proposed here. The other input is a static conceptualization of a scene of light, the “veridical” construal that

corresponds to the perception of light by sighted humans as static. Both input spaces, called the motion space and the light space, are drawn from our experience in the physical world. Their structure is constrained by the structure of the physical world, but is filtered through our senses and thus has a phenomenological aspect which is quite distinct from physical reality. The light space specifically highlights visual perception, while the motion space is more multi-modal, relating to our kinesthetic sense of space and force, integrated with input from vision in the usual case of sighted individuals. Figure 1-1 represents this Basic Blend.

In the motion input space (Input Space 2 in Figure 1-1), structured information comes from our general knowledge of how motion works, with the moving entity (called the Mover) progressing through contiguous points forming a linear path towards a spatial goal. From Input Space 1, containing the scene of perceived light, there is also some pre-existing structure that can be used for cross-space mappings: there is the radiant or radiating entity, which is a bright object, and the illuminated entity, which is typically less bright; there is intervening space; and there is the visual perception of the radiation (visible light) within that space. The perceived light can be diffused or focused, depending on features of the light source and local features: at one extreme, it can form a visible beam highlighted sharply against darkness (which makes it look somewhat like a physical object with bounded edges, although it remains intangible), whilst at the other end of the spectrum, as in a brightly lit room or sunny outdoor space, it may suffuse the area with no visible beam structure, in which case the radiation seems more like a substance that occupies space in an unbounded way.

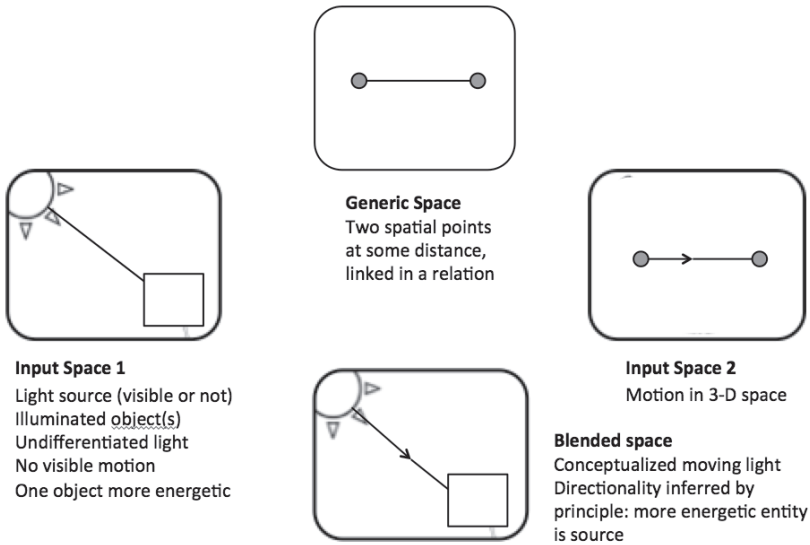

Figure 1-1. Basic Blend (non-language-specific)

In addition, the light domain provides a particular causal structure. First, the radiant entity is understood as the causal source of the light radiation; our experience shows that both light and heat are causally dependent on this object. I suspect this causality is learned early in a child's life in relation to the sun. There is no sunshine at night, and clouds, trees, and other objects can form obstacles that affect the brightness and warmth of the sun's light. In rooms, we can see that by controlling radiating objects like lamps or candles, we can affect the presence of the radiation, whereas controlling the radiated light by blocking or shading it, or controlling the illuminated objects by moving them in and out of the path of light, does not affect the radiant object itself. Thus, the radiant entity is seen as causing the radiation, which provides illumination enabling visual perception.

Significantly, the causal structure of the motion space is different: the point of origin of the motion of a Mover plays no role in the causing its motion. In the motion space, the Mover is seen as propelled by some force—either force exerted by the moving trajector itself, as in the case of agentive, animate movers, or a force that is understood as added by some external entity in the case of inanimate Movers like bullets or falling

objects. It is not this causal structure of the motion domain, but rather the causal structure of the light space that will be projected to the blend.

The input light space lacks some of the structure needed for the blend. There is no intrinsic 'progression' from a spatial source to a spatial endpoint of a light trajectory as there is in the motion space. There is no inherent spatial directionality at all perceptible in light, since as mentioned above we cannot visually track its motion through space as we do in the case of a perceptibly moving tangible object.[1] The visual scene, to our eyes, is static.

Given our knowledge of both the sun and artificial light, we do know that some bright object is the causal source of the light that we see, whether we can observe it or whether it is hidden. So we can say that there is a more abstract, not directly observable causal directionality present in the light space, despite the lack of spatial directionality.

The two ends of the configuration in the light input space, being spatially separated, are good candidates to match the endpoints of the spatial trajectory in the motion space. Which entity, radiant object or illuminated object, is mapped to the spatial source when the two spaces are cognitively aligned is plausibly determined by what Talmy (2000) terms the active-determinative principle, a general principle he has identified in which the more energetic and active participant in a fictive motion relation is the one taken to be the spatial source. I understand this principle as referring to causality, since an active, determinative role in a relation is a causal role. This determinative exertion of energy has an effect on the other participant.[2] By this principle, the radiant object, which is understood as an energetic, causal source, is linked into a conceptual correspondence with the spatial starting point of the trajectory in the motion space. Progression from a spatial source to a goal is thus taken from the motion space, where it is a defining feature of the SOURCE-PATH-GOAL construal. It is this dynamic construal that will be projected to the blend from the motion space.

Talmy also notes that in the case of light, particularly in the case of the sun, the radiant entity may be imputed some property of agentivity or

[1] For further discussion of this point, see Talmy (2000) and Kemmer (2014).

[2] The active-determinative principle, as Talmy suggests, itself emerges from our conception of agency. It results from general mappings from a cognitive model of agentive motion onto the perceived motion of certain inanimate entities we construe as moving autonomously. Agentive motion is a specific, highly salient instance of the more general motion space used as the immediate input to the Moving Light blend. We can think of agentive motion as a third input space that feeds the motion input space in the blend.

quasi-agentivity. We can understand this idea in a blending analysis by saying that such agentivity is projected onto the radiant entity by another, even more basic and general, blend of agentive and non-agentive motion inputs. In the case of light, however, such a mapping yields only an understood *potential* for relatively autonomous action. The radiant entity is not a mover in any space in the basic 'light in motion' blend. What is understood as moving across space in case of a fictive motion construal of light is the radiation, i.e. radiated light, not the object emanating the light.

Both immediate input spaces, the perceptual representation and the motion space, since they draw on three-dimensional physical space, already share the same spatial structure and logic. This means that points in space between source and target can map onto each other in the order of relative closeness to the respective sources and endpoints. The result maintains the coherent spatial logic of relative distance.

When all the correspondence links are made across the two input spaces, the blend is generated in a mental space called the blended space. In the blend, the light moves through space. It is generated at and emerges from the radiant entity, now understood as the spatial source of the light; thus in this space, but not in the light space, we can call the radiant object a light source. The radiated light passes through space and arrives at the endpoint object. The resulting contact causes the object's surface to be illuminated by the radiation and thus visually perceptible.

The new blended conception described above is a mental construal imposed on the visual scene. Yet it is hard for humans to see it as anything but reality. The structure seems given by our eyes, as though it were directly perceived.

A fourth space that emerges in the process of linking up corresponding elements is what Fauconnier and Turner call a Generic Space. This contains whatever structure the two input spaces have in common. In this case it is the highly schematic SOURCE-PATH-GOAL image schema, which, although clearly experientially related to (and most likely derived from) motions in physical space, is more abstract and not specifically about motion or space; it is domain-general. The generic space, in the blending model, is typically the locus of such general image schemas, which are themselves abstracted from recurrent experiences and can form the inputs to many different blends.

The blending network composed of the input spaces, the generic space, and all of the conceptual linkages among them, is co-activated in mental processing during the cognitive processing of the blend, yielding an integrated conceptualization evoking various aspects of the input spaces simultaneously.

The Basic Blend is understood as a general human conceptualization, not specific to any particular language, and thus accounting for the widespread presence of fictive motion of the radiation path type in human languages. This blend is a conceptual structure with no specified formal characteristics, whether lexical or grammatical, since such linguistic elements are conventional and language specific. It is a general, image-schematic structure that is fleshed out in language use. In languages with conventionalized expressions for fictive motion of radiation paths, the basic conceptual blend will be linked to these conventional units, which may be schematic or specific as the case may be in particular languages.

There are additional peculiarities in this blending network. Light is a funny kind of moving entity; in the blend it both moves, yet simultaneously occupies all the points on the linear path between source and target. If the light source is sufficiently bright, the light also occupies the entire space between the two endpoints, which is not confined to the linear path connecting them. Concrete moving objects do not have these properties. The fictive movement of light, I suggest, construes light as a continuous, unidirectional motion that produces a stable and homogeneous configuration. In this respect it parallels one well-known type of physical motion, namely the typical motion of water in a river, which follows a trajectory through space but which also, when we step back and look at the whole scenario, forms a stable and relatively homogeneous configuration in which there is always water in any given stretch of river observed. Like water, light does not have a tangible shape of its own. When it is seen diffused in space, it does not even have a derivative linear shape, unlike, say a river in a river bed, or a stream forced under pressure out of a hose. Although light, as an intangible entity, is physically different from water, with consequent perceptual differences, the similarities are nevertheless strong and thus light is easily construed as a shapeless, liquid-like substance that moves. This construal receives conventional expression with certain verbs which take part in the 'light as a moving fluid' blend (see section entitled "The fictive motion of light as a liquid").

As the blend is processed, or 'run' in Fauconnier and Turner's terminology, the mappings between corresponding elements are clicked into place and the blend merges the elements into a single set of entities, an integrated conception that can be called up in any description of light. The resulting blend is very basic and minimal in the information it provides. There is a light source from which light moves, and an endpoint of the motion. Nothing is conveyed about how the light moves, or what specific properties it might have as a moving object or substance. These minimal, schematic aspects are spelled out in language-specific

expressions of various degrees of specificity. In English, for example, an example like *light came in through the window* is an instantiation of the general blend described above. The noun *light*, the verb *come*, the path expression, and, in this case redundantly, the intransitive motion construction, all serve to elaborate on the particular light scene described, as they fit together into a coherent compositional structure conveying the meaning of the expression.

The conception that light moves through space is powerfully intuitive yet fictive. It is widespread and perhaps universal. Languages can, however, implement the expression of this conceptualization in different ways and to varying degrees. In Kemmer (2014) it was shown that English has a number of striking patterns of linguistic expression that are based on this conceptualization. Patterns with varying degrees of similarity have also been described in Mandarin in Tso (2012), Kemmer and Tso (2012), and Ma (2016).

In English, the fictive motion of light appears in specific conventionalized ways, determined by the particular grammatical structures available and the ways that specific verbs, by virtue of their core meanings (which have themselves been abstracted from linguistic experience as cognitive prototypes), have come to be conventionally associated with these structures. I propose that much of this range of expression comes from the fact that the Basic Blend described above forms the input to other blends in a network of related blending structures. The range of types, in the sense of distinct verbs, appearing in this conceptualization is extensive, yet the overall pattern is strongly constrained: the verbal predicates that occur fall into a limited set of semantic classes whose members occur again and again. These classes are associated with domains of knowledge that serve as regular inputs to a fairly limited set of conceptual blends.

I now turn to verb classes that recur in fictive motion expressions in English, and describe how knowledge of events from these domains is conceptually blended, along with information from particular grammatical constructions in English, to form integrated conceptualizations at different levels of complexity, related in a network of conceptual blends.

Verb Classes in English Fictive Motion

Kemmer (2014) investigated radiation paths in English by searching the Corpus of Contemporary American English (Davies 2008), a very large balanced and tagged corpus of English, for instances of the string *light [[V]]* in which *light* is a noun. I then collected the subset of the results

representing instances of the search string containing motion-related verbs, broadly construed, and verbs found in motion-related constructions (including verbs of light radiation, which often appear in fictive motion expressions). With this method I sought to identify the maximum number of fictive motion uses possible with a small number of searches that would not attract a large number of 'false hits.' These instances were then categorized by their conceptual semantics in their most prototypical spatial-domain uses. There were 234 distinct verbs relating to motion and motion constructions that collocated with *light,* representing thousands of instances of use.[3] The analysis below is thus based on usage data, unlike many accounts of fictive motion. Table 1-1, from Kemmer (2014), shows the most frequent verbs from this search (approximately the top 80) categorized by semantic types.[4]

Table 1-1. Semantic classification of the verbs most frequently collocating with *light*

General types	Specific types	Verbs
Light actions	Radiation of Light	shine, flash, reflect, flicker, blink, glow, flare, glint, light, radiate, pulse, wink, beam, (blaze)
Motion	Generic Motion	come, go, move, travel, pass
	Manner of Motion	fall, play, bounce, shoot, run, dance, explode, creep, burst, sweep, swing, spin, throw, glance, reflect, (travel), (escape)
	Motion of liquid/fluid	filter, pour, spill, fill, stream, flood, seep, wash, bathe, leak, cascade, flow, bleed
	Path of motion	emit, leave, enter, reach, (emanate), scatter, (throw), spread, follow, rise, surround, send, (escape), set, put, return, cross, emerge, pull, bend, place, (reflect), (open), (close)
Contact	Verbs of contact	hit, catch, strike, touch, (place)
	Verbs of forceful contact and disruption	penetrate, break, cut, pierce, stab

[3] In this paper all examples cited are from these data from COCA.
[4] A few verbs fit more than one category due to their semantic complexity. Verbs in parentheses are marginal members of a given category. For further discussion of the semantic categorization see Kemmer (2014).

Table 1-1 reveals that there are some strong semantic patterns in the verbs found in connection with the noun *light*. There are, what I term, light actions, which describe either the simple radiation of light, like *shine*, or the action of radiation combined with some manner of radiation, such as *flash* and *blink*. Verbs of motion are also frequent, both generic motion as well as particular types of motion including paths of motion and manner of motion including motion of liquids or fluids. Verbs of contact of different levels of force are also found, which I have divided in the table into verbs with strong force and resulting disruption of the integrity of an object, and other verbs of contact without those specific properties.

For reasons of space I describe in detail only one type of motion-related verb class in terms of blending in this paper, namely verbs describing light as moving as a liquid (see below). In my view, all of the general and specific semantic types of verbs that occur in fictive motion of radiation can be described in terms of blending, but I will reserve the other types for a later analysis.

Some Blended Conceptualizations

In English there are many examples of the fictive motion of light with generic motion verbs like *come* and *go*, e.g. *I started reading the books sitting on the ladder where the light came in.* I consider these expressions to be the result of blending the Basic Blend, which is not language-specific, with lexically-instantiated conceptualizations of motion in English. I will call this blend the Generic Motion Blend. Analogs are found in many languages. This blend can form the input to more complex blends. For example, we can combine the Generic Motion Blend with the conceptualization of light-radiating actions of luminant objects, such as shining, as in *Her light still shines brightly.* The latter is not a motion conceptualization, but once the action of radiating light combines with motion, we get as a result the common fictive motion conceptualization of light shining on, or to, or toward an object, as in *we suddenly noticed an irritating white light shining directly at us through the trees.* This fictive conceptualization, which I call the Light Shines Down blend, is motivated by the naïve model of light in which light is understood as moving. But it is still a conventional construal linked to specific English expressions including the verb *shine* and specific constructions, notably the intransitive motion construction and also in some cases the caused motion construction (*shine a light on*). Such verbs in many languages do not conventionally occur in fictive motion. For example, the Spanish *brillar* 'shine' does not readily do so; and in Japanese, the most common verbs of

light emission (*hikaru* 'shine' and *kagayaku* 'shine brightly') do not occur with path construals (Yo Matsumoto, p.c.). Constraints on the types of events in fictive motion across languages, I maintain, show that such construals are matters of convention. That is, although they are conceptually motivated, they are language-specific conventional patterns.

Shine is a verb of generic radiation, which does not describe any particular mode of emitting radiation. But once we consider more conceptually rich kinds of emission of radiation, we can get more complex conceptualizations involving manner of radiation: for example, *flash*, *glare* and *reflect*, which have complex temporal and other properties, turn up in the data in fictive motion construals in English (e.g. *light flashed against the wall*). These complex construals, I would argue, are the product of conceptual blending of the Light Shines Down fictive motion blend with various manner of radiation construals.

The Fictive Motion of Light as a Liquid

Manner of radiation is one type of input to the blending process in English. But manner of motion is another common input. In English, light can *fall* or *bounce* or *shoot*, all of which are ways of describing how light fictively moves. A conceptual integration of the Basic Blend with the prototypical frames evoked by manner of motion events is straightforward. Light is a Mover in the Basic Blend, so the Mover from a motion input is readily mapped to it. The two motion trajectories, the generic one and the manner-specified one, will fuse, preserving orderings given by spatial contiguity of the points traversed and the time it takes the mover to reach them. The corresponding elements are thus blended into a single integrated conceptual space, understood as a single event of motion, and they are also linked to corresponding arguments and other elements in a clause.

Within the above-described range of conceptualizations, there is a notable pattern that appears in the data: the manner of motion verbs that specifically and prototypically make reference to a liquid or fluid mover. Light can *flow* or *pour* or *cascade*, as evidenced by many examples of each. These cases take as input particular domains that relate to common experiences with liquids. Liquids are experienced as moving in various ways. Some of these are similar to the kinds of manner properties for manner of light radiation, in particular intensity, which relates to energy and force. In Table 1-1 we see verbs such as *pour, spill, fill, stream, flood, seep, bleed, and drain*, which seem to form a cohesive pattern, a subset of manner of motion.

As pointed out above, light is in many respects like a liquid: It is a continuous mass that is internally homogeneous; it is intrinsically shapeless; and it can be given shape by external objects. In the case of liquids, shape can be provided by physical containers that hold and support them against gravity, such as watering cans or river beds. In the case of light, shape can be given by container-like spaces such as rooms that can be suffused with light, or by objects that block the light to varying degrees. Furthermore, in the Basic Blend light is construed as a river-like object, both moving and globally stable. Thus, it is no surprise to find that this Basic Blend can form an input to other blends which draw on frames of knowledge about liquids. These become a rich and productive source of conceptualizations of light.

Consider the example *a stream of light poured down.* We know a great deal about streams of water through our physical experience, both natural streams and human-created ones. We know about the physical aspects of pouring of liquid, especially water, from one container to another; the way it looks as it falls through space, the way it feels when it splashes on us, and the resulting wetness where it lands. We know that liquid can follow a physical path through space when being poured, observable through vision and/or touch, and that its path typically has a starting point and an endpoint, usually at least one of them visible.

The experience of water in motion forms a natural basis for the conceptualization of light as a substance flowing through space from a light source to an illuminated object or scene. We have specific understandings about the particular ways objects move (down toward earth, because of gravity or their own weight). We have more specific understandings about how liquids move. If the source of the liquid is higher than its endpoint, we understand there is going to be downward motion through space, again because of gravity. If the source is lower, or not visible because we are in an enclosed space or light is in an enclosed space, we activate our understanding of how liquids move into or out of a container. For a small amount, perhaps not where it should be, we use *leak*; for a small amount coming through a porous object, *seep,* or for a lot of liquid coming and filling a large space, *flood*. We select one of these frames and activate it when describing a scene of light that has corresponding properties. Also activated is the generic space we have abstracted from our experience of space, the SOURCE-PATH-GOAL scenario from the domain of motion.

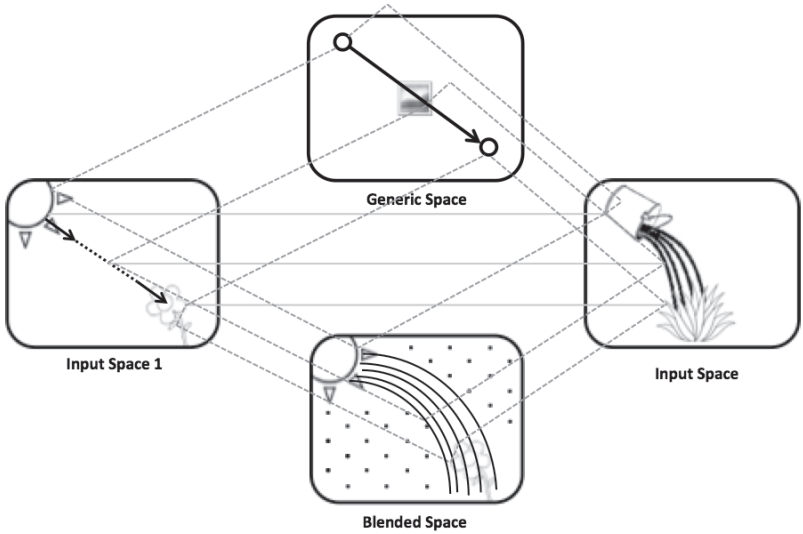

Figure 1-2. Light as a moving liquid

Figure 1-2 illustrates a blend that combines the Basic Blend of Figure 1 with our understanding of the motion of water when it is poured from a container.

For this blend, whatever source input space we select (in the Figure, a pouring scenario) gets projected onto the existing moving light blend (Input Space 1) which had already given us a conceptualization of moving light associated with the visual scene of light. The kind of mover (liquid) and the precise manner it moves (depending on input space selected) is projected from the moving liquid source input space, onto this preexisting blend. The structure is already there and it is easy to link up the elements – water is the thing moving. The source is where the water is coming from. The goal is where the water ends up. The path in between is the space traversed.

Thus, we take the semantic characteristics of the manner of motion of liquid from the specific experientially-derived source conceptualization. We blend it with our pre-existing, conventional blend of light as moving object coming out of a light source. The result is a second blend in which light moves in a particular way. Notice that some information from the source domain is not projected; wetness, for example, is not projected from the input space. Light can seep into a room under a door, but we do not therefore expect the floor to be wet. On the other hand, if the input

domain selected involves lots of water moving in, such as in a scene of light flooding a room, the blend can generate inferences about liquid-like scenes, e.g. the blended space can have objects that become covered by the liquid-like light and therefore can evoke the notions of being soaked or drenched.

Summary of Relations among Blends

Figure 1-3 is a summary of the relations between the conceptual schemas briefly sketched in this paper. Input schemas are arranged above the blends they are inputs to, and their role as inputs is shown by a connecting line. The four blended schemas mentioned or described in the analysis are numbered 1-4. The unnumbered schemas are those that serve as inputs, but not blends.

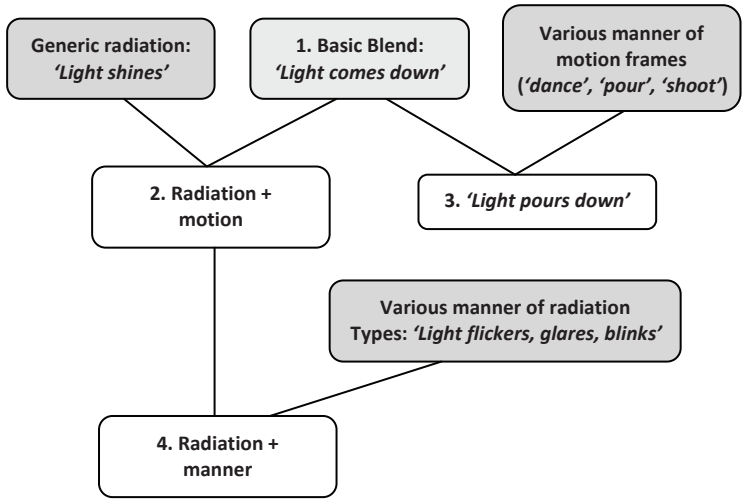

Figure 1-3. A family of blends in English fictive motion of radiation

The diagram shows the Basic Blend (Blend 1) serving as input to two distinct complex blends, one which simply involves a generic radiation of light, yielding Blend 2, 'light shines down', and the other which takes conceptual content from any of a variety of experiential frames characterized by motion that occurs in particular ways, by virtue of particular kinds of Movers and their conventional types of motion in these frames. This yields Blend 3, in the diagram based on the specific

experiential frame of pouring liquid. This analysis accounts for the various kinds of fictive light actions attested in the data relating to metaphors of light pouring, bleeding, sweeping, etc. The generic radiation type, blended with motion (Blend 2), can further combine with input frames involving types of light action, yielding the types of fictive events that incorporate manner of radiation as well as motion, such as *flash* and *glare* (Blend 4). The diagram as a whole thus shows a family of blends that forms a useful and productive range of conventional construals that can be used in the expression of the fictive motion of light in English. The more frequent verbs in a given construction are entrenched usages instantiating the more general blended schemas of 1-4. These schemas are productive in that other verbs which are more or less similar in semantics can be recruited into the pattern in an *ad hoc*, contextually-determined way that does not depend on prior learned use of these verbs in fictive motion. This gives us a core of conventional uses, with flexible extension patterns at the periphery of the system, thus providing stability yet flexibility and the potential for incremental change.

Conclusion

The types of fiction motion construals in English are treated here as a family of blends, a linked network of cognitive structures underlying some major patterns observed for fictive motion of radiation in English. Conceptual Integration theory provides a useful, and I would claim, illuminating framework for describing the language-specific ways in which light is construed in English and how these relate to the more general human conceptualization of light described by Talmy.

This framework can be used to compare and contrast languages with regard to their conventionalized fictive motion construals. Cross-linguistic differences in regard to potential fictive motion construals are a matter of what conventional blends various languages have developed based on their basic clausal or other constructions, in particular motion constructions. Conventional blended schemas allow these constructions to take input from conceptual domains that do not directly relate to them in terms of basic conceptual content. The account brings together Talmy's and Fauconnier and Turner's analyses of motion and related constructions at a more general level than is found in these accounts separately.

It now remains to relate Talmy's approach more specifically with the blending account of fictive motion by Fauconnier and Turner in terms of theoretical mechanisms. Both accounts posit that the two conceptualizations in fictive motion construals–static and dynamic–are

simultaneously activated during processing of fictive motion language. The conceptual integration account, however, adds a few more specific notions to Talmy's account. First, it specifies that the two similar conceptions are linked into a single coherent conceptualization that emerges in cognitive processing and, crucially, combines aspects of both source conceptualizations into a distinct conceptualization, often with emergent properties. It also posits that the blending process creates higher-order conceptualizations out of simpler ones, and these conceptual assemblies can occur in any number of layers of complexity. Conceptual integration theory, as illustrated here, allows for precise and explicit analysis of entire assemblies of such blended conceptualizations.

Examining these properties of the blending analysis, it becomes clear that they are not in any fundamental way incompatible with Talmy's analysis, but instead emerge from a somewhat different theoretical focus. Talmy's primary interests lie in elucidating the conceptual system underlying human language; identifying the major subtypes within the system represented by cross-linguistic variation; and observing how the human conceptual system of linguistic semantics relates to other human conceptual systems. Conceptual Integration Theory, on the other hand, is interested in describing the creative machinery of thought that is unique to humans. It analyzes how previously learned conceptual structures in any domain, whether or not related to language, can be combined with structures in other domains to generate new conceptual structure.

The account of fictive motion in radiation paths presented here shows that when put together, the two theories yield a rich understanding of both language-specific and language-general aspects of fictive motion. Moreover, applying this framework with careful cross-linguistic comparison, there is potential for uncovering cross-linguistic patterns involving subtypes of fictive motion systems, for example, a type grouping English and Chinese as having manner blends in fictive motion and Japanese and Spanish lacking these. The relation of motion constructions to fictive motion can also be explored systematically, within and across languages. I hope with this study to have opened some new pathways in the study of fictive motion.

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CHAPTER TWO

WORD GAMES IN ADVERTISING: A COGNITIVE ANALYSIS OF NONCE-WORDS

ALEKSANDRA PASŁAWSKA

Introduction

Throughout the years, word formations have served as a fruitful area of study for different researchers. It should come as no surprise that, as Kemmer (2003) states, "there is something fascinating about a word in which different ideas are brought together into a new, integrated concept by simply fusing the corresponding words into a single lexical item" (Kemmer 2003, 69). The growing interest in the study of word formations in general and nonce-words in particular has contributed to a number of theoretical approaches put forward by different linguists (see Bauer 1983; Crystal 2000; Štekauer 2002; Kemmer 2003; Hohenhaus 1998, 2005; Guz 2012). Having investigated some of the notable theories on the nature of nonce formations proposed in the academic literature, we argue that the view suggested by Peter Hohenhaus (2005) appears to be the most appropriate for investigating such lexical items given the fact that, in the psycholinguistic sense, nonce words are new, *ad hoc* formations, characterized by their context-dependency (Hohenhaus 2005).

So far, a considerable number of studies on new word formations have focused primarily on phonological, morphological, semantic or syntactic features involved in the creation of lexical items. Scant attention has been paid to cognitive processes taking place in the minds of language users upon the establishment of nonce-words. We argue that word formations go beyond the commonly established views and that what appears to be at the core of determining the meaning of nonce formations is the contextual information along with language users' encyclopaedic knowledge of the world. Having assumed that word formation is a cognitive phenomenon, this paper undertakes an analysis of nonce-words from the point of view of Cognitive Linguistics, with the crucial use of Fauconnier and Turner's

Conceptual Blending Theory (2002) and particularly with its modified version proposed in Brandt and Brandt (2005).

The examples of nonce-words analyzed in the remainder of this chapter were retrieved from selected Polish and English advertising slogans to fulfil the assumptions of nonce formation phenomenon in the sense of Hohenhaus (2005).

Nonce Formations as Linguistically Creative Phenomena

In the academic literature, nonce formations appear to be of great interest and use to researchers of different fields, however a sound cognitive linguistic examination of nonce formations appears to be desirable. Before we offer a profound cognitive analysis of nonce-words in advertising slogans, a brief summary of Hohenhaus's perspective is in order.

In his definition of nonce words, Hohenhaus (2005) outlines that "the one feature that applies to all nonce-formations, i.e. the necessary (but not necessarily sufficient) condition for 'nonceness' as such, is that the formation is 'new' – more precisely: 'new' in a psycholinguistic sense, i.e. formed actively (by whatever means) by a speaker – as opposed to retrieved, ready-made from their storage of already existing listemes in the lexicon" (Hohenhaus 2005, 364).[1] Hohenhaus (1998) supports the validity of his view with "four co-defining features, the presence of which ranks nonce formations from basic, meeting one fundamental criterion (i.e. newness), through gradually more typical ones displaying more than one feature, to, ultimately, prototypical ones exhibiting all the features" (Guz 2012, 231), namely:

1) newness, i.e., the lexical item is not retrieved ready-made from the mental lexicon but is newly formed;
2) context-dependence, i.e., full interpretation and feasibility of nonce formations depends utterly on the context;
3) deviation, i.e., "many nonce formations must also be considered to be deviant, i.e., not conforming to the language's word-formation rules or well-formedness conditions" (Hohenhaus 1998, 240);
4) non-lexicalizability, i.e., due to the fact that nonce formations cannot be fully interpretable without a context, they cannot be

[1] In everyday discourse, nonce formations are coined for different reasons (Guz 2012). The most frequent cause is the need to fill some lexical gaps. Guz (2012) outlines that "the very fact of the coinage illustrates the usefulness and potential of nonce formations, which the speaker/writer can fall back on at any time as need arises" (Guz 2012, 228).

listed as an entry in the mental lexicon; thus, context-dependence results in non-lexicalizability.[2]

With the abovementioned characteristics in mind, let us take a closer look at the examples of nonce-words in advertising slogans (nonce formations are in italics, whereas source words are marked with the capital letters):

a) *"Praktikomania* Uwaga! Takie ceny, że stracisz głowę!"[3]– Polish advertising slogan by Praktiker international hypermarket chain, introduced as a part of a sales campaign	[PRAKTIKer x MANIA]
b) *Uncola*– slogan from the advertising campaign by Seven-Up company.[4] The company introduced such term in the 1960s to mark the difference between cola nuts, i.e. the basic ingredients of the then market-leading beverages – cola and pepsi and "uncola nuts", i.e. lemon and lime, the basic ingredients of the 7UP drink[5]	[UN- x COLA]

[2] Hohenhaus (1998) lists several examples of nonce formations that are non-lexicalizable due to their low usability, such as deictic compounds, phrasal compounds, expletive infixation, or identical constituent compounds (cf. Guz 2012). According to Guz (2012), such formations are "denied listedness because it does not seem worthwhile to list an item of such low usability, an item that cannot be stored as a generic label for future use" (Guz 2012, 232).

[3] We propose the following English equivalent "Attention, please! Our prices will make you go crazy!"

[4] Source: http://themanagmentguru.blogspot.com/2009/11/un-cola-advertise ment-campaign-by-7up.html

[5] Source: http://themanagmentguru.blogspot.com/2009/11/un-cola-advertise ment-campaign-by-7up.html

c) "Weź oddech. Poczuj *mentolnięcie*."[6]– Polish advertising slogan of the Airwaves chewing gum. In English, the source words stand for *menthol* and *kick*	[MENTOLowe x kopNIĘCIE]

First and foremost, all the presented instances were coined as a result of certain word formation processes. In (a) *praktikomania*, two semantically distant words are blended, with the second source word entirely present in the resulting blend; (b) *uncola*, is a result of prefixation, where a bound morpheme "un-" is attached to a noun "cola"[7]; and (c) *mentolnięcie* is a nonce-word where source words do not overlap and are partially present in the emergent formation. Moreover, each example illustrates the creative process of word formation and the phenomenon of nonce formation in the sense of Hohenhaus, which can also be seen in the following statements:

1) *praktikomania, uncola* and *mentolnięcie* were consciously newly-formed rather than retrieved from the existing mental lexicon;
2) they are context-dependent since their meanings are not easily interpretable without additional clues (even in (a) and (b) where second source words are entirely present);
3) the blends are also deviant and non-lexicalizable provided that, "due to their deficient interpretability, they cannot be given an entry in the mental lexicon and become a legitimate part of the vocabulary" (Guz 2012, 231).

Taking into account the insights of Hohenhaus's approach, we argue that proper meanings of nonce-words under discussion cannot be accounted for without referring to the contextual information and the

[6] We propose the following English equivalent "Take a breath. Feel the menthol kick". However, the slogan may be also explained with the company's English version of a tagline "The kick that helps you breathe free!" Source: http://www.wrigley.com/aunz/brands/airwaves.aspx

[7] According to Horn (2005): "The prefix *un-* attaches to English adjectives, verbs, and nouns, in each case yielding a lexical item of the same category as the original base. The standard characterization of the semantics associated with this prefix (or family of prefixes) is in terms of either *negation* or *antonymy*, but it is not clear what sense of negation is involved or whether there *is* a single sense (however generally defined), even within a single category" (Horn 2005, 331-332).

speaker and hearer's general knowledge. This claim can be supported by the following words of Turner (1991)

> This is the common situation of all language: expressions do not mean; they are prompts for us to construct meanings by working with processes we already know. In no sense is the meaning of an xyz metaphor or of any utterance "right there in the words." When we understand an utterance, we in no sense are understanding "just what the words say"; the words themselves say nothing independent of the richly detailed knowledge and powerful cognitive processes we bring to bear. (Turner 1991, 206)

For that reason, we argue that a cognitive linguistic paradigm proves successful in the analysis of nonce formations in advertising.

Cognitive Perspective on Nonce Formations in Advertising

Humans have a unique capacity to invent new meanings and related concepts from the already existing mechanisms of thinking (cf. Joy et al. 2009). For the advertisements to be successful, copywriters strive to create more and more unusual slogans to capture consumers' attention and to make products recognizable. Creative use of nonce formations is nowadays one of the most effective tools exploited in advertising. Nonce formations increase the attractiveness of advertisements by conveying special, usually extraordinary meanings. However, the intended messages are not always straightforward and their appropriate understanding requires activation of linguistic and extralinguistic context as well as encyclopaedic knowledge on the part of language users. To this end, Schmid (2008) observes that:

> When confronted with a previously unknown complex lexeme, hearers have no choice but to rely on analytic interpretations, since a search for an entry of the whole word in their mental lexicon yields no result. Essentially, analytics understanding is based on three types of information: the meanings of the constituents, hearers' knowledge of the instantiated word-formation pattern and its known 'meanings', as well as any relevant information retrievable from the context. (Schmid 2008, 10)

To account for the processes which facilitate the construction and comprehension of nonce-words in advertising, this part examines the insights of Conceptual Blending Theory as proposed by Fauconnier and Turner (2002) and its modified version suggested by Brandt and Brandt (2005; cf. Libura 2010) against the empirical data presented in the previous section.

Conceptual Blending Theory Analysis of Nonce-words in Advertising

Conceptual blending is a process[8] which occurs at the moment of perception and illustrates the way language users arrive at understanding of different concepts (Fauconnier and Turner 2002; cf. Joy et al. 2009). With the use of the conceptual blending paradigm, as proposed by Fauconnier and Turner (2002),[9] it is possible to account for even the most intriguing meanings of nonce formations hidden in advertising slogans. Consider the *praktikomania* lexical blend in the following example:

1) **PRAKTIKOMANIA** Uwaga! Takie ceny, że stracisz głowę! – Polish advertising slogan of Praktiker international hypermarket chain, introduced as a part of a sales campaign (an advertising poster is presented in Figure 2-1).

Figure 2-1. Advertisement for Praktiker

[8] Fauconnier and Turner (2002) describe conceptual blending as "an invisible, unconscious activity involved in every aspect of human life." (Fauconnier and Turner 2002, 18)

[9] Fauconnier and Turner (2002) point that cognitive paradigm of the meaning construction relies on the basic mental operations, which the authors describe as follows: "these basic mental operations are highly imaginative and produce our conscious awareness of identity, sameness, and difference. Framing, analogy, metaphor, grammar, and commonsense reasoning all play a role in this unconscious production of apparently simple recognitions, and the cut across divisions of, age, social level, and degree of expertise. Conceptual integration, which we also call conceptual blending, is another basic mental operation, highly imaginative but crucial to even the simplest kinds of thought" (Fauconnier and Turner 2002, 18).

Praktikomania is not merely a lexical blend of two words [PRAKTIKer] and [MANIA] but a conceptual blend of two distinct concepts. Adopting Fauconnier and Turner's four-space integration network, consider the following example presented in Figure 2-2.

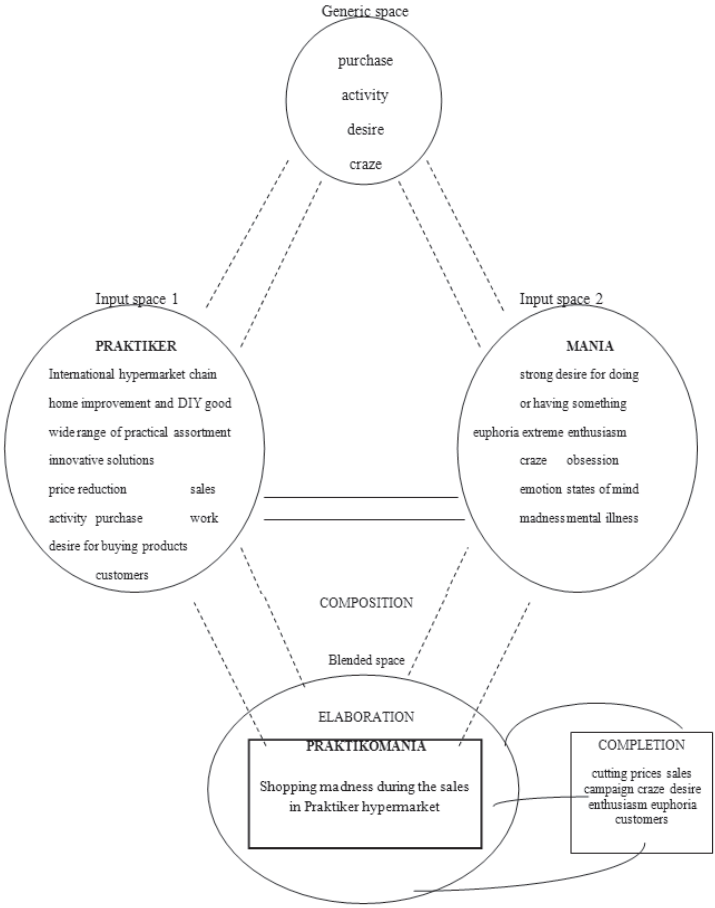

Figure 2-2. Conceptual blending process for PRAKTIKOMANIA (after Fauconnier and Turner 2002)

The conceptual process is based upon two semantic domains: PRAKTIKER and MANIA. In put space 1 encompasses elements related to the Praktiker hypermarket chain as well as the general activity of

buying and selling goods: practical assortment, wide range of goods, innovative solutions, purchase, customers, activity, sale, desire for buying goods as well as work.

Input space 2 is entirely comprised of elements associated with the notion of mania. It includes strong desire, obsession and craze as well as different states of mind, such as extreme enthusiasm and euphoria. Within this mental space, there are also notions of rather negative connotations, such as madness and mental illness.

At the top of the network, there is a generic space which elicits conceptual similarities generated from both inputs as a result of a cross-space mapping: purchase, activity, desire, craze. These notions form a basis for further selective projection and thus contribute to the creation of the emergent structure.

The blended space is considered the most important space of the whole conceptual integration network. It involves the emergent structure with its unique meaning, as well as additional information, structuring the blend.[10] In our example, the emergent structure *Praktikomania* receives its meaning as a result of three significant processes: composition, i.e. matching counterparts from both inputs which are selectively projected and contribute to the emergence of final meaning; completion which involves evoking background knowledge (here denoted by cutting prices, sales campaign, craze, desire, enthusiasm euphoria and customers); as well as elaboration, i.e. the final process (otherwise called "running the blend") resulting in the creation of a new meaning (Fauconnier and Turner 2002), which "allows us to activate our thoughts and obtain a particular usage according to the required context" (Mierzwińska-Hajnos 2015, 72). In the example under discussion here, the emergent meaning points to the shopping madness during sales periods in Praktiker hypermarkets.

Conceptual Blending Theory as proposed by Fauconnier and Turner appears to be a useful tool to analyze some examples of nonce formations in advertising. However, since there are many critical opinions concerning Fauconnier and Turner's theory, the following case will be examined on the basis of the extended model of integration network suggested by Brandt and Brandt (cf. Brandt and Brandt 2005). We attempt to reveal to what extent their cognitive-semiotic approach meets the requirements of a

[10] The emergent structure goes beyond what occurs in either input. Kemmer (2003) highlights that "it is important to note that the result of the conceptual blending of these two domains is not the sum of the source domains. Instead, it is very specific, with aspects selectively taken from the source domains and merged into a functional whole in the blended concept" (Kemmer 2003, 85).

context-dependent scrutiny of nonce-words in advertising and how successful it might prove in comparison to the classical model.

Brandt and Brandt's Revisited CBT Model in the Analysis of Nonce Formations

Although CBT in the sense of Fauconnier and Turner (2002) has received a popular, international acclaim, many scholars have critically viewed the assumptions of conceptual blending (see Oakley and Coulson 2000, 2008; Brandt and Brandt 2005; Brandt 2005; Brandt 2009, 2010; Libura 2010). Oakley and Coulson (2000) outline certain inconsistencies in Fauconnier and Turner's model, claiming that "perhaps because of its descriptive power, blending theory runs the risk of being too powerful, accounting for everything, and, hence, explaining nothing" (Oakley and Coulson 2000, 186). Similar allegations include the claim that Fauconnier and Turner's CBT is too general, too wide-ranging and therefore proves inadequate and superficial (Oakley and Coulson 2000). Critical allegations and revisions of the classical model of conceptual blending have resulted in more elaborated versions, one of which, proposed by Brandt and Brandt (2005), is presented here.

Line Brandt and Per Aage Brandt's (2005) cognitive-semiotic approach to conceptual blending proposes new mental spaces to the integration network. The authors suggest a semiotic base space, a presentation space, reference space, relevance space, and blended space (including virtual space and meaning space), which the authors describe as "a diagram of six interrelated semiotically pre-categorized mental spaces forming a figurative and dynamic semantic network that is designed to derive the critical meaning of the utterance" (Brandt and Brandt 2005, 220). Owing to the fact that Brandt and Brandt's model is more elaborated and context-driven, we argue that it forms a more effective base to account for the meaning of nonce formations in advertising than the classical model proposed by Fauconnier and Turner (2002). We examine this approach against the *mentolnięcie* nonce-word, which is not only a lexical blend of two lexical items [MENTOLowe] and [kopNIĘCIE] (Eng. MENTHOL and KICK) but also a conceptual fusion of two distinct concepts. The advertising poster is presented in Figure 2-3.

Figure 2-3. Advertising poster by Airwaves chewing gum[11]

The first stage in the process of a meaning construction is the semiotic base space.[12] According to Brandt and Brandt (2005), this is the space which greatly contributes to the final meaning due to the assumption that "phenomenologically (…) when people communicate, they represent the situation of communication, and this shared representation is a prerequisite for meaning construction" (Brandt and Brandt 2005, 224). The semiotic base space consists of three layers: semiosis, which includes the communication scene along with a speaker and an addressee; situation,

[11] Source: http://www.wrigley.com/aunz/brands/airwaves.aspx

[12] Brandt and Brandt (2005) describe the semiotic base space as "a mental space in which the cognizer represents the present situation of cognizing. It is either a scene of communication, involving the persons participating in shared meaning construction through the semantic network considered, or a scene of reflection involving the reflecting subject and the situation in which the reflection takes place, as represented by the subject" (Brandt and Brandt 2005, 225). The authors also underline that the semiotic base space includes "conditions that are universally given in the human phonological life-world" (Brandt and Brandt 2005, 226).

which serves as a background for the communication scene;[13] and finally the pheno-world, "comprising such conditions that are universally given in the human phenomenological life world" (Brandt and Brandt 2005, 226). In our example, a communication scene between a speaker (a person in charge of the advertising campaign by the Airwaves company, whose role is to recommend the product and highlight its most salient features) and a hearer (a potential customer) takes place via an advertising poster of a menthol chewing gum.

Since the semiotic space is a base for further construction of the network, it gives rise to the reference space[14] and the presentation space.[15] Brandt and Brandt (2005) describe the spaces as "functionally distinct, one being a *source* and the other being a *target*" (Brandt and Brandt 2005, 228). In our example, the reference space refers to the MENTOL (Eng. MENTHOL) – a substance that tastes and smells of mint, as well as it refers to the menthol flavor of chewing gum. The presentation space pertains to KOPNIĘCIE (Eng. KICK), which denotes a movement with the foot or leg in order to hit somebody or something, a strong feeling of excitement and pleasure, or a strong effect that a particular substance causes. With the fusion of elements from both spaces, the blend stage is set up. Having established the blended structure MENTOLNIĘCIE in a virtual space,[16] the conceptual task is to arrive at its proper meaning. Brandt and Brandt (2005) define a meaning in the following way: "Meaning is a function of the speaker's intention as expressed by the phrase, sentence or textual segment. Meaning is context-dependent, both in relation to the context of surrounding textual environment and to para-linguistic factors" (Brandt and Brandt 2005, 230).

Before an elaborated interpretation of the blend finally appears in the meaning space, it is structured by the relevance space, i.e., "knowledge of the issue the speaker has in mind when evoking the presentation as a sign for the reference" (Brandt and Brandt 2005, 234). Brandt and Brandt describe the process of the final meaning construction at this stage as follows:

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[13] "Consists in the relevant aspects of the immediate environment and whatever aspects of the past and future are of consequence to the interpretation of the present" (Brandt and Brandt 2005, 226).

[14] The reference space pertains to actuality and is set up from the general knowledge and contextual information (Brandt and Brandt 2005).

[15] The presentation space contains a "force-dynamic structure, most of which does not become salient until later in the process" (Brandt and Brandt 2005, 227).

[16] The authors highlight that the virtual space is set up due as a result of a mapping between the elements from both input spaces (Brandt and Brandt 2005).

> It is interesting, from a cognitive perspective, and with regard to emergence of meaning in meaning construction, how the blend in Virtual space comes to serve as *argumentation* for the speaker's point of view. We need to account for the cognitive mechanism that allows the metaphoric meaning to emerge in the blend. Our suggestion is to include in one's analyses of virtual blends the schematic background knowledge that makes it at all relevant for the conceptualizers to blend the two inputs, to describe the schematic content of the knowledge applied to the blend, yielding the emergent meaning. (Brandt and Brandt 2005, 234)

In our example, the relevance space refers to the marketing campaign and the act of highlighting the most salient feature of an advertised product. The background knowledge, along with the elements projected from the reference space and the presentation space give rise to the following interpretation of the MENTOLNIĘCIE blend: An intense, minty flavour hit which helps consumers breathe free with every chew, causing a feeling which can be compared to a strong feeling of excitement or pleasure. The abovementioned conceptual process of the meaning construction is illustrated in Figure 2-4.

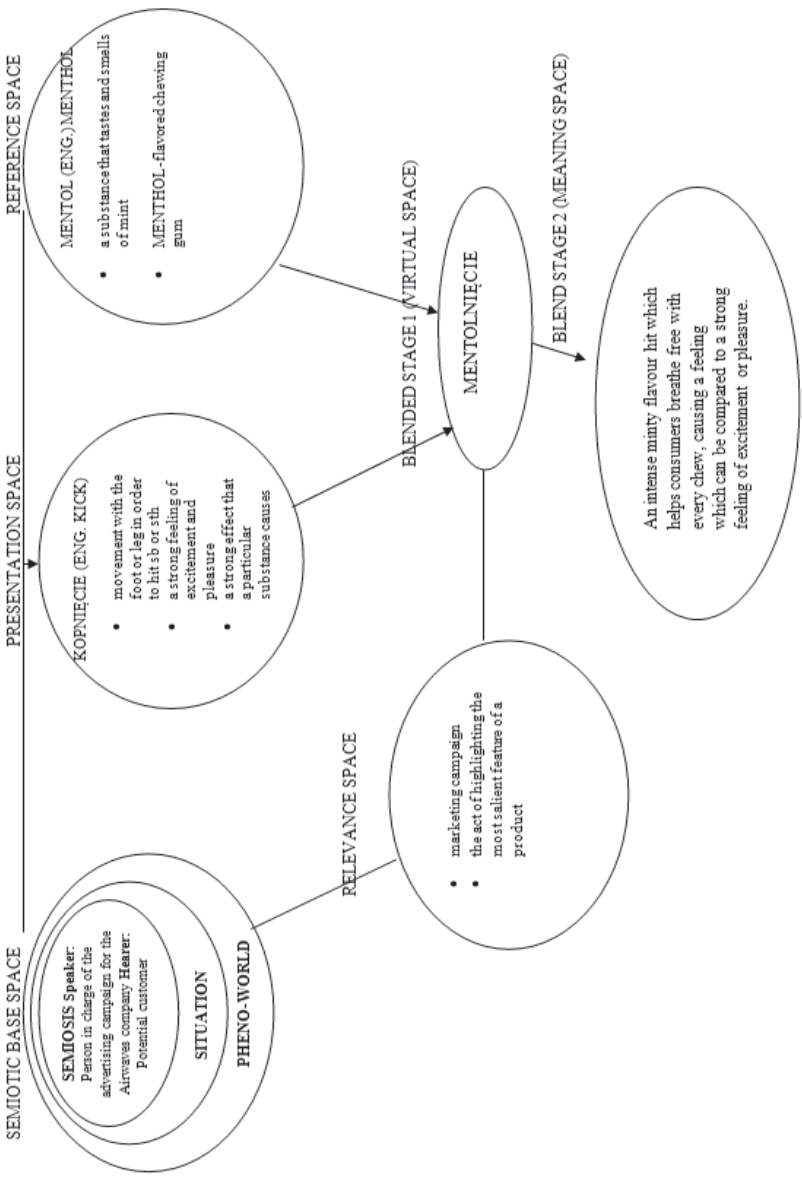

Figure 2-4. The conceptual network for the “mentolnięcie” nonce-word (cf. Brandt and Brandt 2005)

Conclusions

The meaning encoded in nonce formations is not always straightforward but relies upon the context and general knowledge on the part of the language user. Having assumed that nonce formations are cognitive phenomena, the analysis presented draws on Conceptual Blending Theory in the sense of Fauconnier and Turner (2002), as well as its modified version as suggested by Brandt and Brandt (2005).

On the basis of this research, it has been noticed that, although Fauconnier and Turner's (2002) Conceptual Blending Theory serves as a useful tool to analyse some examples of word formations in advertising, the extended model of integration network, forwarded by Brandt and Brandt (cf. Brandt and Brandt 2005) appears to be more accurate when analyzing nonce words, given the fact that the final interpretation of a blend should be determined by the context and communicative situation. Therefore, we claim that Brandt and Brandt's (2005) cognitive-semiotic approach to conceptual blending proves more successful in the analysis of nonce formations in advertising, since it takes into account the communication scene, including speaker-hearer interaction, general knowledge and contextual information.

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PART TWO

COGNITIVE ANALYSIS IN DISCOURSE AND NARRATOLOGY

CHAPTER THREE

FORCE-DYNAMIC PATTERNS IN THE THEORY OF EVOLUTION

ANNA DROGOSZ

Introduction

The objective of this paper is to investigate the role of Talmy's force-dynamic patterns in the theory of evolution. An analysis of texts on evolution (focusing on Darwin's *On the Origin of Species,* but also including contemporary texts on evolution) reveals that the key tenets of the theory, i.e. the struggle for existence and the notion of natural selection, are understood and described in terms of force dynamics. What is more, it appears that the logic of evolutionary theory partially derives from the logic of force-dynamic patterns.

This study represents a Cognitive Semantics approach to scientific discourse which attempts to uncover cognitive patterns underlying construction and linguistic expression of scientific theories. Studies that have analysed conceptual metaphors in the theory of evolution include, for example: Al-Zachrani (2008), Drogosz (2008; 2009; 2010; 2011; 2012a; 2012b; and 2012c). We believe that Cognitive Semantics can contribute to a better understanding of evolutionary theory and improve communication related to its propagation and reception.

The papers is structured as follows: First, we provide a brief account of force dynamics as presented by Talmy. Second, we discuss force-dynamic patterns in the theory of evolution, evidenced in such texts as Darwin's *On the Origin of Species*, Dawkins' *The Blind Watchmaker,* and Gould's *The Structure of Evolutionary Theory,* as well as other texts by evolutionists. Finally, we present our observations and conclusions.

Force Dynamics

This section provides a brief overview of the Force-dynamic System proposed by Talmy (2000, 409-470). According to Talmy, force dynamics is a semantic category that relates to how entities interact with respect to force. Force dynamics is built into language structure across a range of language levels: it has direct grammatical representation, it is incorporated in lexical representation, and it also operates at the level of discourse. What is more, the conceptual system for force interaction is related to other cognitive domains, such as reasoning.

In Talmy's (2000, 413-415) framework, basic force-dynamic patterns involve two force-exerting entities. One entity, the Agonist, is singled out for focal attention. The Agonist is either able to manifest its intrinsic force tendency (toward action/inaction, motion/stasis) or is overcome, blocked, or compelled by a second force entity – the Antagonist. The exerted forces have relative strengths: the entity that is able to manifest its tendency at the expense of its opponent is the stronger participant. According to their relative strengths, the opposing force entities yield a resultant, an overt occurrence (either of action or of inaction), which is assessed solely for the Agonist.

Talmy identifies four basic steady-state force-dynamic patterns (2000, 415-417). The first is the Causative pattern, which involves a weaker Agonist with an intrinsic tendency toward rest/inaction that is being opposed from the outside by a stronger Antagonist. As a result, the Agonist is caused to move/act. The sentence in (1) illustrates this pattern (Talmy 2000, 416):

(1) The ball kept rolling because of the wind blowing on it.

The second pattern is the Despite pattern in which a stronger Agonist remains at rest/inactive in spite of the Agonist's force against it. This is illustrated by the sentence in (2) (Talmy 2000, 416):

(2) The shed kept standing despite the gale wind blowing against it.

The third pattern also belongs to the Despite category, however in this case the now stronger Agonist has an intrinsic tendency toward motion/action and realizes it in spite of the Antagonist's hindrance. Talmy (2000: 416) illustrates this in (3):

(3) The ball kept rolling despite the stiff grass.

The forth pattern, which can be called Causative Hindrance, involves an Agonist that has an intrinsic tendency toward motion and yet the stronger Antagonist blocks it. The result is the Agonist's rest or inaction, as in (4) (Talmy 2000, 416):

(4) The log kept lying on the incline because of the ridge there.

Apart from the steady-state patterns discussed above, Talmy also identifies shifting patterns and secondary steady-state patterns, which are not relevant for this study.

Force-dynamic Patterns in the Theory of Evolution

Many of the linguistic examples provided by Talmy seem specially constructed to illustrate a given pattern. However, in this study we use real-life discourse to investigate the role of force dynamics in framing the evolutionary theory. We begin the analysis of data with Darwin's book *On the Origin of Species* because it can be seen as the origin of force-dynamic framework in evolutionary theory. After this, we turn to contemporary texts to show the continued use of the patterns.

Let us begin with a short recapitulation of the main tenets of Darwin's theory to put the subsequent linguistic analysis in proper perspective. Darwin's main claim is that species of organisms are not immutable but instead they change in time. The change is a result of accumulation of small modifications within a species over long periods of time and the transfer of these modifications to subsequent generations. Such a process leads first to varieties and, later to new species. These new species are not only different but also improved in comparison to parent species. This improvement is a result of the constant struggle for existence. Because more offspring are born than can possibly survive, and because the resources of the environment are limited, organisms constantly struggle for survival. Those organisms that happen to possess valuable modifications are more likely to survive and leave offspring than those that do not. In other words, they are naturally selected. Consequently, evolutionary change can be explained by the operation of natural laws, with natural selection being the most important principle.

The logic and coherence of Darwin's argument relies heavily on antagonistic construals imposed on the world of nature and living organisms. The most obvious antagonistic construal is inherent in the concept of the struggle for existence among all organisms. The other antagonistic construal pertains to Darwin's concept of natural selection

and the way its functioning is presented. In what follows, we present four antagonistic scenarios, realising these construals crucial for Darwin's theory, illustrate them with fragments of *The Origin,* and then analyse them in force-dynamic terms. The first three scenarios contribute to the concept of the struggle for existence, but they are analysed separately, as they differ in the participating entities and force dynamic patterns they evoke. The fourth pattern pertains to the concept of natural selection. Initially, the analysis is conducted following Talmy's original force-dynamic patterns and then is extended by recourse to some proposals from the modern variant of Talmy's theory, i.e. elementary force dynamics (Stocker 2014).[1]

The first antagonistic scenario structuring the relationships in nature involves a struggle among unrelated organisms in a given area at a given moment of time. Consider these excerpts from *The Origin* given below:

(5) [...] in the state of nature, where the trees would have to struggle with other trees and with a host of enemies, such differences would effectually settle which variety [...] should succeed (Darwin 1859, 85).

(6) One species has been victorious over another in the great battle of life (Darwin 1859, 76).

(7) […] the northern forms were enabled to beat the less powerful southern forms (Darwin 1859, 379).

In this scenario, the roles of Agonist and Antagonist are realized by organisms that occupy an area. Agonist organisms have an intrinsic tendency to exist (to remain at rest, in analytic terms). Other organisms that co-habit the area and claim access to the same resources are cast as the Antagonist. In (5), for example, trees have to struggle with other trees. Two possible patterns can result from this struggle:

The Despite pattern

a) Stronger Agonist organisms survive.
They realize their intrinsic tendency to exist (to remain at rest) in spite of the Antagonist's efforts to make them cease to exist (to move).

[1] I would like to express my gratitude to an anonymous reviewer who directed my attention to Stocker's paper.

The Causative pattern
b) Weaker Agonist organisms are overcome.
They cease to exist (are caused to move) by stronger Antagonist organisms.

Interestingly, in this scenario of constant and omnipresent struggle for existence, which entity becomes the Agonist or the Antagonist is open to alternative construals by the cognizing agent, who can ascribe the role of the Agonist to any organism or species of organisms that is in the focus of her attention. Thus, hypothetically, if in a given area two species of trees, such as oaks and birches, compete for light, water and nutrients from soil, either of them can be cast as the Agonist. In the emerging narrative, either oaks or birches will be presented as victorious.

The second scenario in Darwin's concept of struggle for existence also positions organisms in the roles of Agonist and Antagonist, but this time the antagonism is between closely allied forms and extends over time. In other words, earlier forms of organisms struggle against later, and improved forms of their descendants. Darwin describes it in the following ways:

(8) The inhabitants of each successive period in the world's history have beaten their predecessors in the race for life, and are, in so far, higher in the scale of nature […] (Darwin 1859, 345).

(9) […] sub-groups […] will constantly tend to supplant and destroy the earlier and less improved subgroups (Darwin 1859, 126).

(10) Hence, rare species [...] will consequently be beaten in the race for life by the modified descendants of the commoner species (Darwin 1859, 110).

(11) The forms which are beaten and which yield their places to the new and victorious forms, will generally be allied in groups, from inheriting some inferiority in common […] (Darwin 1859, 327).

In force-dynamic terminology, Agonist organisms (parent species), which have the intrinsic tendency to exist (to remain at rest) have to compete for the resources with new, modified forms, which are presented as the Antagonist. According to Darwin's line of reasoning – and transparent in the examples above – there is only one possible outcome of this competition: the weaker Agonist is overpowered and made extinct (caused

to move) by the stronger Antagonist, which corresponds to the Causative pattern.

In the third scenario of the struggle for existence, Agonist organisms manifesting the intrinsic tendency to exist confront the negative effects of the Antagonist, which in this case is the physical environment, such as climate or insufficient water supplies:

(12) […] plants in our gardens which can perfectly well endure our climate, […] (Darwin 1859, 69).

(13) But a plant on the edge of a desert is said to struggle for life against the drought […] (Darwin 1859, 62).

(14) When we reach the Arctic regions, or snow-cupped summits, or absolute deserts, the struggle for life is almost exclusively with the element (Darwin 1859, 69).

As in the case of the first scenario, two possible results can develop: one realising the Despite pattern, in which a stronger Agonist survives (remains at rest), and the other, the Causative pattern, in which a weaker Agonist is overcome by the Antagonist and a particular type of organism becomes extinct in a given area (is caused to move).

As we can see even from this narrow selection of examples, the schematic force-dynamic patterns stimulated elaboration of the metaphor RELATIONSHIPS AMONG ORGANISMS ARE STRUGGLE as war or competition in the text of *The Origin*. Vocabulary from domains of war and competition is recruited to describe relationships among organisms: the appearance of new plants in an area is presented as an invasion or conquest, and the succession of forms of species in time as a competition or even race. Such a conceptualization and description of relationships in nature have been maintained and developed by modern evolutionism, as evidenced by the examples found on the Internet:

(15) Habitats have limited amounts of the resources needed by living organisms. Organisms must compete with others in order to get enough of these resources to survive. If they are unsuccessful and cannot move to another habitat, they will die.[2]

[2] Accessed September 20, 2015.

(16) In evolutionary biology, an evolutionary arms race is an evolutionary struggle between competing sets of co-evolving genes, traits, or species, that develop adaptations and counter-adaptations against each other, resembling an arms race, which could be, and often are, described as examples of positive feedback.[3]

The fourth antagonistic scenario that we would like to discuss pertains to Darwin's concept of Natural Selection. Although Darwin defines this concept as a mechanism of "preservation of favourable variations and the rejection of injurious variations" (1859, 81), its description as an agent consistently appears throughout *The Origin* (cf. Drogosz 2011, 2012b). In force-dynamic terms, natural selection acts as the Antagonist causing evolutionary change in forms of organisms that are cast as an entity with the intrinsic tendency to remain unchanged, that is to inaction. Below we present a few examples of how Darwin depicts action of natural selection:

(17) […] natural selection will be enabled to act on and modify organic beings at any age, by accumulation of profitable variations at that age, and by their inheritance at a corresponding age (Darwin 1859, 86).

(18) […] that natural selection will have modified several species […] (Darwin 1859, 156).

(19) If then it varied, natural selection would probably favour different varieties in the different islands (Darwin 1859, 401).

(20) As natural selection acts by life and death — by the preservation of individuals with any favourable variation, and by the destruction of those with any unfavourable deviation of structure […] (Darwin 1859, 194).

(21) […] natural selection destroying any which depart from the proper type […] (Darwin 1859, 104).

[3] https://en.wikipedia.org/wiki/Evolutionary_arms_race. Accessed September 20, 2015.

(22) […] the very process of natural selection constantly tends […] to exterminate the parent forms and the intermediate links (Darwin 1859, 179).

(23) […] to natural selection […] having overmastered the tendency to reversion and to further variability […] (Darwin 1859, 158).

(24) […] and natural selection will in such cases not as yet had time to overcome the tendency to further variability and to reversion to a less modified state (Darwin 1859, 169).

The logic of Darwin's argument predicts only one development of this scenario: the weaker Agonist is forced to change by the stronger Antagonist, so again the causative pattern is realised.

The force-dynamic pattern underlying Darwin's idea of descent with modification, and the role of natural selection in this process has had far-reaching consequences for the theory. Firstly, it led to an elaborated personification of natural selection, as described in Drogosz (2011; 2012b). Secondly, it stimulated a depiction of natural selection as a force, which is common in modern evolutionism as exemplified by excerpts from *The Blind Watchmaker* by Richard Dawkins:

(25) The reason this seems paradoxical is that we place so much emphasis on natural selection as the driving force of evolution (Dawkins [1987] 1996, 125).

(26) We have seen two ways in which natural selection can be a constructive force (Dawkins [1987] 1996, 193).

What was initially for Darwin a way of explaining laws of nature, in the course of time triggered contention among evolutionists. Inherent in the pattern of force exertion is resistance to that force. Because natural selection is described as an agentive force of evolution, forms of organisms then naturally become construed as resisting the pressure to change. Such reasoning, deriving from the logic of force dynamics, is evidenced by the examples below:

(27) To a punctuationist, there is something very special about stasis. Stasis, to him, is not just evolution that is so slow as to have a rate of zero: stasis is not just passive lack of evolution because there is no driving force in favour of change. Rather, stasis represents a

positive resistance to evolutionary change. It is almost as though species are thought to take active steps not to evolve, in spite of driving forces in favour of evolution (Dawkins [1987] 1996, 246).

(28) Other biologists, including some of those that call themselves punctuationists, might say that the lineage leading to modern *Latimeria* actively resisted change, in spite of what natural selection pressures there might have been (Dawkins [1987] 1996, 246).

(29) Only under these stringent conditions can natural selection – a force that makes nothing directly, and must rely upon variation for all raw material – be legitimately regarded as creative (Gould 2002, 146).

(30) Selection holds primacy of place as the ruling force of evolution (Gould 2002, 537).

(31) […] a study of populations today, and of fossils, provides strong evidence that the same evolutionary forces in operation today have guided evolution in the past. One species evolves into two (or more) (Gould 2002, 583).

The force-dynamic patterns realised in Darwin's framework are summarised in Table 3-1.

The above analysis of force-dynamic patterns in evolutionism was grounded in Talmy's original rest/action dichotomy. The consequence was that the Agonist's tendency "to exist" and "to remain unchanged" was out of necessity interpreted as "remain at rest", and "to cease to exist" and "to change" as "to move". This interpretation seems forced even if we allow a very abstract understanding of rest and motion. However, an alternative to this analysis can be found in a modern variant of the force-dynamic theory, that is, the elementary force dynamics proposed by Stocker (2014). In his search for mental elements that make up a cause and effect, Stocker proposes a number of revisions to Talmy's force-dynamic patterns. With his revisions, Stocker aims to overcome the limitations in Talmy's original account, and to present an account that "can be applied to all causal conceptualization – to all mentally construed physical causation and to all mentally construed causation that goes beyond the physical domain." (Stocker 2014, 122). For the purposes of this paper, we focus only on those aspects of Stocker's theory that are relevant for our study.

Table 3-1. Force-dynamic patterns in Darwin's theory

Relationships in nature described by Darwin	Force-dynamic pattern	Resultant
1. Synchronic struggle among organisms	Despite Pattern	Stronger Agonist organisms survive despite pressures from Antagonist organisms
	Causative Pattern	Weaker Agonist organisms cease to exist due to pressures from Antagonist organisms
2. Diachronic struggle among organisms	Causative Pattern	Weaker Agonist earlier organisms are overpowered by stronger improved later organisms
3. Struggle between organisms and their physical environment	Despite Pattern	Stronger Agonist organisms survive despite environmental pressures
	Causative Pattern	Weaker Agonist organisms become extinct due to environmental pressures
4. Forms of organisms are modified by Natural Selection	Causative Pattern	Weaker Agonist (forms of) organisms are caused to change by Natural Selection

The first revision that Stocker proposes concerns Talmy's action/rest dichotomy, which "cannot essentially capture the relationship of cause and effect (or the conceptual structure underlying *because*)" (Stocker 2014, 124). Stocker proposes to

> replace Talmy's notion of an agonist which always has a tendency either toward action or rest with the more abstract notion that Ago can in principle have any given intrinsic tendency (…) [and] to replace Talmy's notion of an antagonist which always has an opposite tendency that is either action or rest with the more abstract notion that Ant in principle always has an intrinsic tendency that is simply different to the intrinsic tendency of Ago. (Stocker 2014, 124-5)

Stocker expresses it as a formula:

(32) ***C**: Ago-Tx(–), Ant-Txdiff(+) → **E**: Ago-xdiff*

which means that "the cause (C) can now be identified as involving the following scenario: Ago has any tendency (Tx) and Ant then imposes its

stronger different tendency (Txdiff) onto the weaker (–) Ago. This intervention of Ant has the effect (E) that Ago takes on the imposed different value of Ant (Ago-xdiff)" (Stocker 2014, 125).

The second of Stocker's revisions concerns Talmy's notion of "tendency", which he proposes to remove from the description of the before-impingement situation of onset causation. Thus, "instead of standing for a 'tendency', x can now stand for any value (any action or state) ascribed to Ago and xdiff can now stand for any value (any action/state) ascribed to Ant, as long the values of Ago and Ant are not the same" (Stocker 2014, 126). The symbol T is thus removed from the formula (Stocker 2014, 126):

(33) ***C:*** *Ago-x(−), Ant-xdiff(+)* → ***E:*** *Ago-xdiff*

If we apply the same/different (x/x*diff*) dichotomy to the first of the analysed antagonistic scenarios of evolution (i.e. synchronic struggle among organisms) we can rephrase our description using Stocker's terminology and can thus propose that the cause (C) involves cognizing trees of one species (species A) as being in the locational state of "to exist" (AgospeciesA-xexist) which is intervened by the state of other tree species (speciesB) different than that of speciesB. The value to be ascribed to Ant is that the speciesA should cease to exist (AntspeciesB–xdiff-speciesA cease to exist). As we already know from the previous analysis, the scenario can have two developments: as a Causative Pattern, which corresponds to Stocker's successful causation, expressed in (34) and a Despite Pattern, or failed causation in Stocker's terminology, as in (35):

(34) ***C:*** *AgospeciesA-xexist (−), AntspeciesB -xdiff-speciesA cease to exist (+)* → ***E:*** *AgospeciesA-xdiff-cease to exist*

(35) ***C:*** *AgospeciesA-xexist (+), AntspeciesB -xdiff-speciesA cease to exist (−)* → ***E:*** *AgospeciesA-xexist*

The analysis of scenarios describing a diachronic struggle among organisms and the struggle between organisms and their physical environment could be rephrased in an analogical way. The last scenario describing how forms of organisms are modified by Natural Selection, however, is slightly different, as the state value is that of change/not change. For the sake of brevity, we present only the formulaic description:

(36) ***C:*** *Agospecies-xnot change (-), Antnatural selection -xdiff-species change (+)* → ***E:*** *Agospecies-xdiff-change*

The obvious advantage of using Stocker's approach is the possibility to abstract away from a Talmyan rest/action dichotomy and describe Ago as taking on a state of "exist" or "not change", without making forced matches with the notions of motion. On the other hand, Stocker's approach seems to blur the dynamic, antagonistic relationship that Talmy's framework highlighted and which was vital for a description of evolutionist construals of nature.

Observations and Conclusions

Above, we have presented how the main tenets of the theory of evolution (i.e. the struggle for existence and natural selection) are framed in terms of force-dynamic patterns. The collected data and their analysis raise questions concerning the choice of force-dynamic patterns and construals observed in Darwin's theory.

Firstly, as we can see in Table 3-1 above, the Causative pattern is the most frequent force-dynamic pattern to appear in Darwin's theory. The reason for that can be found in the logic of the theory. Darwin's main objective was to provide a non-supernatural explanation for the diversity of forms of species and mechanisms of their change, which means preoccupation with a cause of modifications and adaptations. Consequently, large parts of Darwin's exposition are devoted to descriptions of struggle for life and Natural Selection as stipulated causes of change.

Secondly, out of the four force-dynamic patterns described by Talmy, only two are realised in Darwin's book, i.e. those patterns involving an Agonist with an intrinsic tendency to rest/inaction. Although in contemporary evolutionism we may find different patterns, Darwin consistently describes forms of species as passive entities undergoing modification. Why should the passive construal of an Agonist prevail? The answer can be found in the essence of Darwin's theory, as well as in its historical background. An Agonist's tendency to rest/inaction corresponds to both organisms' tendency to exist and the tendency of the forms of species to stay unchanged. The idea that organisms tend to survive is commonsensical and does not require any explanation. The assumption that forms of organisms are stable, on the other hand, should be seen in the broader context. It has to be remembered that Darwin presented his theory as an alternative to the view of immutable species: the default view of his time was that forms of species had not changed since they were created (in force-dynamic terms, they have the intrinsic force tendency to inaction). To contradict these views he proposed mechanisms such as Natural

Selection that induce changes and lead to the appearance of new species. Nevertheless, the construal of species "unwilling" to change remained the starting point of his argument. Furthermore, in Darwin's time the verb "to evolve" was not used in the sense we use it now and it was, in fact, Darwin himself who gave it this meaning. It appears in *The Origin* only once, at the very end of the book, and in this passive construal:

(37) […] whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved (Darwin 1859, 490).

Thus, throughout his book, Darwin talks about descent with modification not evolution, and in *The Origin* species undergo change or modification, but never change or modify themselves or evolve. Only with the extension of the word "to evolve", have active constructions become possible. As attested by modern texts:

(38) […] lungfishes evolved very rapidly during their early history, but have stagnated ever since (Gould 2002, 817).

(39) These authors showed that the upper Miocene planktonic foram *Globorotalia (Globoconella) conomiozea terminalis* evolved gradually into G. *(G.) sphericomiozea* during a 0.2 million-year interval in central parts of its geographic range (Gould 2002, 842).

(40) […] grasses did not evolve until mid-Tertiary times […]. (Gould 2002: 905).

Thirdly, there is an important question of an obvious preference for an antagonistic construal of the relationships among organisms, both synchronically and diachronically, over a non-antagonistic construal. It has to be stressed that while literal struggle among organisms for food or mates, or between predators and prey is a matter of observation, the antagonism between earlier and later forms of species is a matter of conceptualisation, as is the framing of natural selection as a force changing forms of organisms. Thus, it can be hypothesised that a construal highlighting harmonious cooperation and communication could be also an option, but it was not one explored by Darwin. Again, we need a broader context to address this issue. The moment Darwin started to think about

the natural world in terms of struggle and forces is well documented. As Darwin openly wrote in his notebook, the inspiration came when in 1838 he read *An Essay on the Principle of Population* by Thomas Malthus. "As soon as Darwin had read Malthus, he started to think in terms of forces and pressures that were pushing organisms into available and not-so-available gaps in the economy of nature, and this whole notion of force was central to the way the philosophers interpreted Newtonian physics" (Ruse 1999, 176). Thus, the struggle for existence has become a necessary element of Darwin's logic: there must be struggle because more are born than can possibly survive, and only those that are better adapted than other competitors can leave progeny. However, one can speculate whether a reverse logic could be applied: because so many have to die, then so many must be born to ensure continuity of a species. What is more, many have to die to feed others. In this construal–which is only a theoretical exploration of possibilities without any grounding in biological evidence–sacrifice and cooperation will be highlighted, rather struggle and competition.

Returning briefly to Darwin's work, we believe that apart from being a crucial element of Darwin's theory, the notion of struggle–and indeed the whole antagonistic construal of nature–had important rhetorical advantages for Darwin, as it allows for a richer and more dynamic description of participants of a relationship, evokes stronger emotional responses in readers, and simply makes the text more interesting to read. We believe that it is the rhetorical power of the antagonistic construal that is responsible for the rich elaboration of the struggle metaphor in evolutionary texts, both in Darwin's *Origin* and in contemporary evolutionary discourse. This notwithstanding, it should be emphasised that the presence of force-dynamic construals does not make a theory invalid. However, an awareness of their existence is important for the quality of communication related to the theory and possible directions of its development.

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CHAPTER FOUR

CONCEPTUAL METAPHORS ASSOCIATED WITH CLIMATE CHANGE IN UK POLITICAL DISCOURSE

OLEKSANDR KAPRANOV

Introduction

The issue of climate change is amply represented in corporate, political, and scientific discourse (Bäckstrand and Lövbrand 2016; Fløttum and Dahl 2011; Kapranov 2018). This chapter provides a qualitative study of conceptual metaphors associated with climate change in British political discourse between 2014-2016. The corpus of this qualitative research involves articles and speeches by the then Conservative Party leader PM David Cameron (11.05.2010 – 13.07.2016) and the Labour Party's leaders during that period, Ed Miliband (25.09.2010 – 8.05.2015) and Jeremy Corbyn (12.09.2015 - current). Data analysis involves identification of conceptual metaphors in the corpus of the above-mentioned articles and speeches viewed through the lenses of the methodological apparatus of cognitive linguistics. Whilst there is a burgeoning line of research involving conceptual metaphors associated with climate change in British political discourse (Cohen 2011; Jaspal et al. 2016; Koteyko 2012; Nerlich et al. 2011; Nerlich 2012; Nerlich and Jaspal 2013), the novel aspect of this qualitative study consists in identifying and juxtaposing conceptual metaphors pertaining to the issue of climate change in political discourse by Cameron on the one hand and in the Labour Party's last two leaders on the other hand. It is assumed that conceptual metaphors involving the issue of climate change will cast light onto the framing of climate change discourse by these political actors. Specifically, the juxtaposition of conceptual metaphors is deemed to reveal the difference in framing of climate change in political discourse by the ruling Conservative party and the UK's main opposition party, the Labour Party.

British political discourse involving the issue of climate change merits special attention due to the following considerations: First, the UK addressed the issue of climate change in its political discourse earlier than other developed countries, starting from the late 1980s (Jaspal and Nerlich 2014). Second, the UK was the first amongst industrialised nations to establish departments and working groups on climate change at the core ministries, such as the Foreign and Commonwealth Office and the Ministry of Defence (Boas and Rothe 2016). Third, by passing the world's first Climate Change Act to decrease greenhouse gas emissions, successive UK governments have attempted to create an image of Britain being the global leader in terms of climate change mitigation (Lockwood 2013, 1339). Following the Climate Change Act adopted in 2008, the UK has pledged to reduce domestic greenhouse gasses emissions by 80% from the 1990 baseline (Renzi et al. 2017).

Previous studies indicate that the majority of the British electorate have accepted the existence of the issue of climate change and have expressed concern about it (Lockwood 2013, 1342). Following the electorate's sentiments, climate change in British political discourse is embedded in a range of public concerns, including environmental and ecological security (Jovanovic et al. 2016), public health (Negev and Kovats 2016), food and water supply (UK Government 2010), as well as natural hazards and, specifically, flooding (UK Government 2013). However, it should be mentioned that discursive representations of climate change in the UK critically depend on the priorities of the current government, as well as on the framing of climate change discourse by different government departments (Jovanovic et al. 2016, 23).

In order to examine how the issue of climate change is viewed by the former PM (Cameron) and by the leaders of the main opposition party, this chapter is structured as follows: First, previous research involving conceptual metaphors in climate change discourse in the UK will be outlined; second, a qualitative study of conceptual metaphors associated with climate change in British political discourse within the time frame 2014-2016 will be presented; and finally the implications of the findings will be discussed.

Previous Research Involving Conceptual Metaphors in Climate Change Discourse in the UK

From the vantage point of cognitive linguistics, conceptual metaphors are regarded as an important device in ideological and persuasive communication (Hart 2011, 273), thus making them widely applicable to

political discourse in general and to climate change discourse in particular. The robustness of conceptual metaphors in a variety of discourse genres rests with the universal ability of "mapping certain attributes from a source domain to a target domain" (Giovanelli 2016, 39). Metaphoric mappings are believed to be a matter of thought and not of language (Cameron 2012, 34). The mappings between two distinct and unrelated domains of experience are deemed to provide structure and meaning to abstract concepts (Ferrari 2007). In other words, conceptual metaphors are employed in discourse to facilitate problematic situations in familiar and easily comprehensible terms (Chilton and Ilyin 1993, 9). Consequently, conceptual metaphors are involved in social conditioning, influencing the nature of social discourse about political, environmental and moral issues (Renzi et al. 2017, 624). Extending this argument further, there is a contention that politicians "control discourse and cognition through metaphors that highlight some features of reality and hide others" (Koller and Davidson 2008, 311). Koteyko and her colleagues (2008, 244) emphasise that conceptual metaphors frame political narratives and as such are constitutive of certain world and societal views. Generalising, it can be posited that conceptual metaphors

> reflect and shape the way we think and feel about politics and about conflicts; they prime audiences and frame issues; they organize communities and motivate cooperation; they stimulate division and conflict; they mobilize support as well as opposition. (Beer and De Landsheer 2004, 9)

There is a substantial body of linguistic work involving the role of conceptual metaphors in climate change discourse in the UK (Cohen 2011; Jaspal et al. 2016; Nerlich 2012; Nerlich et al. 2011; Shaw and Nerlich 2015). Previous studies emphasise the value of conceptual metaphors as a mechanism of conceptualisation of climate change science and climate change mitigation (Atanasova and Koteyko 2017; Kapranov 2017). Similarly to climate change discourse, studies in political discourse, in particular in environmental policy discourse, have revealed a prominent role of conceptual metaphors in representing political actors, actions, and behaviour of politicians (Carriere 2016; Coffey 2016; Kapranov 2015). It is inferred from previous research that political discourse in the UK frames the issue of climate change via several conceptual metaphors associated with the free market (Nerlich 2012), low carbon economy (Nerlich et al. 2011), war-like measures to mitigate the negative effects of climate change (Atanasova and Koteyko 2017; Cohen 2011; Nerlich and Jaspal

2013), speed racing (Nerlich and Jaspal 2013), and religion (Atanasova and Koteyko 2017; Jaspal et al. 2016).

Nerlich (2012) posits that political actors in the UK seem to frame their discourse about anthropogenic climate change in terms of the MARKET metaphor. It involves a metaphorical framing that is related to the so-called 'green' economy, or ecologically friendly economy aimed at sustainable development via liberal market-based solutions (Nerlich 2012, 33). In this regard, climate change mitigation is deemed to constitute a problem for the free market which appears to be solved by economic policies of greenhouse emissions, such as selling the greenhouse gasses quotas, by market solutions to stipulate low-carbon technologies and low-carbon-economy in general (Nerlich 2012). It can be generalised that climate change seen through the lenses of the MARKET metaphor is associated with the monetary value of its mitigation.

However, in addition to the market and monetary value of climate change mitigation, the issue of climate change in the UK appears to be commonly framed by means of the LOW CARBON DIET metaphor. Nerlich and her colleagues (2011) indicate that this metaphor involves a mapping from the concrete and physical domain 'weight loss' onto a more abstract domain 'climate change' by evoking "the frame of losing weight and counting calories, and then transfers its connotations, values and expectations onto the issue of reducing carbon dioxide emissions" (Nerlich 2012, 35). Hence, the LOW CARBON DIET metaphor implies political and socio-economic actions to reduce the greenhouse gasses from burning the so-called 'dirty' fossil fuels, such as coal.

Whilst the issue of climate change is widely framed in the UK political and media discourse via the LOW CARBON DIET and MARKET metaphors, previous research indicates that the framing also involves the WAR metaphor (Cohen 2011; Nerlich and Jaspal 2013). This conceptual metaphor is instantiated by a mapping from the concrete domain 'war' onto a conceptually more abstract domain 'climate change'. Cohen (2011, 199) argues that political discursive space in the UK is characterised by metaphoric imagery that frames climate change as "tantamount to a protracted state of armed hostility." Cohen (2011) suggests that metaphoric militarisation of the issue of climate change has been amongst the most prominent framing means in British political discourse. Arguably, this framing enables the policy makers "to propose greenhouse gas reduction strategies that are reminiscent of wartime austerity programs" (Cohen 2011, 199). Atanasova and Koteyko (2017) note the relative frequency of the WAR metaphor in online editorials, in particular in media discourse involving climate change in *The Guardian*.

To an extent, the WAR metaphor in the sense of Cohen (2011) is reminiscent of Nerlich et al.'s (2011) LOW CARBON DIET metaphor. These two types of metaphors involve rationing, a certain reduction, however, in the case of the former the reduction eventuates due to the war-like situation, whilst in the case of the latter it is a voluntary reduction similar to a self-imposed diet. It should be mentioned that the WAR metaphor in the work by Nerlich and Jaspal (2013) is instantiated as a BATTLE metaphor. Specifically, Nerlich and Jaspal (2013) have found that carbon capture and storage is framed by the UK media via the BATTLE metaphor, suggesting that the British government and the corporate actors are in the processes of a protracted battle to implement the relevant carbon capture and storage measures.

Jaspal and the colleagues (2016) indicate that metaphoric mappings from the domains of religion onto climate change give rise to such conceptual metaphors as CLIMATE CHANGE AS FAITH and CLIMATE CHANGE AS PROPHECY. These conceptual metaphors involve such religious concepts as 'belief', 'prophecy', etc., which are mapped onto the issue of climate change and the accompanied notions of climate science and climate scientists. Specifically, those climate scientist who make predictions about the long-term consequences of global climate change are metaphorically regarded as prophets (Jaspal et al. 2016), whilst those who share the concern over climate change are metaphorically associated with the believers in climate change. Jaspal et al. (2016) indicate that the use of religious metaphors in climate change discourse seems to delegitimise climate science in the eyes of the public at large.

A Qualitative Study of Conceptual Metaphors Associated with Climate Change in British Political Discourse within the Time Frame 2014-2016

As indicated in the introduction, whilst the current literature on climate change discourse in the UK is well represented, there are no recent studies involving the identification and comparison of conceptual metaphors associated with climate change in political discourse by the leaders of the Conservative Party and the main opposition party, the Labour Party, prior and following the 2015 Paris Climate Change Summit. Hence, the novelty of the present study rests with the qualitative analysis of the UK political bi-partisan discourse on the issue of climate change within the time frame of the 2015 Paris Climate Change (i.e., one year prior to the summit and the time after the summit). This analysis is carried out within the

theoretical framework of cognitive linguistics with the research focus on conceptual metaphors associated with climate change.

Hypothesis and Specific Research Questions

In this study, the hypothesis is based upon the contention that "effective mitigation of climate change requires participation from across the political spectrum" (Hoffarth and Hodson 2016, 48), with political and corporate actors working together to achieve the goal of carbon emission reductions (Kapranov 2016). This contention is further specified by Kapranov (2018), who found that climate change mitigation in political and corporate discourse is characterised by the use of very similar discursive means. In particular, it was established that climate change discourse by the Royal Dutch Shell and that of The Financial Times (The FT) was framed by qualitatively similar conceptual metaphors, such as the CHALLENGE, the POLITICS, the BATTLE, the JOURNEY, the MONEY, the TRANSPARENCY, and the LOW CARBON (Kapranov 2018, 404). Following these findings, it has been assumed in the hypothesis that conceptual metaphors associated with climate change in political discourse by Cameron and by the Labour Party's last two leaders will exhibit qualitative similarity. An additional aspect to be elucidated in the present research involves the consideration whether or not conceptual metaphors associated with climate change would be similar or different between the two secretaries of the Labour Party, Jeremy Corbyn (current) and his predecessor, Ed Miliband. Hence, specific research questions have been formulated as follows:

i) Would conceptual metaphors associated with climate change be qualitatively similar or different in Cameron's discourse and in the Labour secretaries' discourse within the time frame 2014 - 2016?
ii) Would conceptual metaphors be qualitatively similar or different in the political discourse of the current Labour Party leader Jeremy Corbyn and his predecessor Ed Miliband?

Materials

The study is comprised of the corpus of speeches and articles by Cameron available online at www.gov.uk and by speeches and articles by Corbyn and Miliband, accessible at www.labour.org.uk . All the speeches and articles adhere to the broad type of political discourse. To ensure homogeneity of the corpus and to facilitate comparability, only articles

and speeches from these two websites have been examined. In total, 16 articles and speeches by Cameron (N words = 15,216), 3 by Corbyn (N words = 1,469) and 14 by Miliband (N words = 11,830) have been collected at the respective websites and further analysed in this qualitative study. The websites were searched electronically for the key phrase 'climate change'. The electronic search was followed by a manual reading and analysis of the articles and speeches by the author.

Methods

Qualitative methodology of conceptual metaphor identification has been employed in the study. The methodology follows qualitative analysis by Nerlich and Jaspal (2013). In accordance with Nerlich and Jaspal (2013), expressions used directly in relation to climate change from both www.gov.uk and www.labour.org.uk were extracted by means of identification of overt rather than covert meaning and were linked to conceptual metaphors. Each conceptual metaphor was examined for the presence of identifiable source and target domains respectively (see Nerlich and Jaspal 2013).

Results and Discussion

Qualitative analysis of the corpus data yielded the results presented in Table 4-1. The table summarises the types of conceptual metaphors identified in political discourse on climate change by Cameron, Corbyn and Miliband. The table is organised in chronological order, one year prior to the 2015 Paris Climate Change Summit and the time after the summit.

It has been assumed in the hypothesis that climate change discourse by Cameron and the Labour Party leaders would be characterised by qualitatively similar conceptual metaphors. Indeed, data analysis indicates that the leaders of both the Conservative and the Labour Parties frame their discourse involving the issue of climate change via qualitatively identical conceptual metaphors. Specifically, several identical conceptual metaphors were found in the corpus: CLIMATE CHANGE AS A JOURNEY, CLIMATE CHANGE AS A THREAT, CLIMATE CHANGE AS A BATTLE and CLIMATE CHANGE AS MONEY. The results of the data analysis reveal that the conceptual metaphor CLIMATE CHANGE AS A CHALLENGE was specific to Cameron's discourse, whilst the conceptual metaphor CLIMATE CHANGE AS FASHION was identified exclusively in Miliband's discourse on climate change.

Table 4-1. Conceptual metaphors associated with climate change in political discourse by Cameron and the Labour Party leadership (Miliband and Corbyn) in 2014-2016

Year	Cameron	Miliband and Corbyn
2014	CLIMATE CHANGE AS A JOURNEY CLIMATE CHANGE AS A CHALLENGE CLIMATE CHANGE AS A THREAT CLIMATE CHANGE AS MONEY	CLIMATE CHANGE AS A BATTLE (MILIBAND) CLIMATE CHANGE AS MONEY (MILIBAND)
2015	CLIMATE CHANGE AS A JOURNEY CLIMATE CHANGE AS A THREAT CLIMATE CHANGE AS MONEY CLIMATE CHANGE AS A BATTLE	CLIMATE CHANGE AS FASHION (MILIBAND) CLIMATE CHANGE AS MONEY (CORBYN, MILIBAND) CLIMATE CHANGE AS A JOURNEY (MILIBAND) CLIMATE CHANGE AS A THREAT (CORBYN, MILIBAND)
2016	CLIMATE CHANGE AS A CHALLENGE	CLIMATE CHANGE AS A THREAT (MILIBAND)

Whilst previous research indicates that climate change is a polarised issue involving the magnitude of its ecological, human-health and sociopolitical effects (Boykoff 2008, 2013; Carvalho 2007; Farrell 2016; Hulme 2008), the present data suggest that both Cameron and the Labour Party leaders frame the issue of climate change via several identical conceptual metaphors. These findings are reminiscent of the research by Shrek and Vedlitz (2016, 520) who indicate that in the US, both Democrats and Republicans converge on policy opinions involving climate change that are not aligned with their party identification. In this regard, Chilton (2004) posits that metaphor as a symbol of power in political discourse is achieved by either struggle or cooperation of political actors. Presumably, Conservative and Labour bi-partisan discourse on the issue of climate change exhibits the presence of cooperation of political actors in terms of regarding climate change as a THREAT, a BATTLE, a JOURNEY and MONEY.

Arguably, the THREAT and the BATTLE metaphors are indicative of the securitisation and militarisation of the issue of climate change in the sense that bi-partisan leaders, i.e. Cameron and Labour leaders regard climate

change as a threat to security domestically in the UK, and as well as internationally:

(1) Climate change is one of **the most serious threats facing our world**. And it is not just **a threat to the environment**. It is also **a threat to our national security**, to global security, to poverty eradication and to economic prosperity. (Cameron, 23.09.2014)

(2) The Paris climate change agreement is historic in its ambition to take action against **the worldwide threat of global warmi**ng. (Corbyn, 12.12.2015)

(3) …and the Climate Change conference in December where, at last, there is a chance to achieve a binding agreement on **the greatest threat to our planet**. (Miliband, 14.01.2015)

The threat of climate change must be fought, according to Miliband and, similarly, Cameron frames climate change discourse via the BATTLE metaphor, as evident from Excerpts 4-5:

(4) Next year the world will meet in Paris for the 21st Global Summit on Climate Change. If I am Prime Minister I will make sure that the UK is once again leading the global **fight to tackle climate change**. (Miliband, 21.11.2014)

(5) …climate change; this is a vital year **to secure an ambitious deal that can combat climate change**. (Cameron, 29.05.2015)

The identification of the THREAT and the BATTLE metaphors in the corpus is, perhaps, not surprising, since climate change poses numerous risks and, specifically, in the UK it is associated with the recent flooding. Obviously, domestic and international security and risk-management are critical components of the socio-political context within which both Cameron and the Labour Party leadership operate. Consequently, they are compelled to address this risk by means of political, economic and social actions (Leiserowitz 2006).

One of the means of addressing the issue of climate change via economic action involves the finance and financial sector to provide investments into ecologically friendly projects, into low carbon economy as well as investment into new technology to mitigate negative consequences of climate change. Data analysis shows that both Cameron

and the leaders of the Labour Party frame their climate change discourse by means of the MONEY metaphor:

(6) And as G20 countries, we also need to do **more to provide the financing** that is needed to help poorer countries around the world switch to greener forms of energy. (Cameron, 17.11.2015)

(7) David Cameron must now take his cue from Paris, reverse his Government's cuts to clean energy and **put real investment in the green jobs of the future**. (Corbyn, 12.12.2015)

(9) …**investment in new environmental industries** which both improve our energy security and reduce our dependence on polluting fuels. (Miliband, 19.02.2015)

As seen from the data, financing the so-called 'green' economy, investing into renewables and alternative energy facilitate job creation and poverty eradication. However, the above-mentioned measures of climate change mitigation take time. Whilst reducing greenhouse gasses emission and reducing the carbon footprint are the ultimate goal to be achieved, the reduction is protracted in time, as a metaphorical JOURNEY with its inception, path and the final destination. Interestingly, both Cameron and Secretary Miliband converge on framing climate change via the JOURNEY metaphor. The JOURNEY metaphor is characterised by such attributes as movement along a path, start and end points, and elements of decision making about which direction to take (Giovanelli 2016). In the present data, the JOURNEY metaphor is exemplified by the following excerpts:

(10) Britain is already **leading the way** to cut emissions and help less developed countries cut theirs – and this global deal now means that the whole world has signed to play its part in halting climate change. It's a moment to remember and **a huge step forward** in helping to secure the future of our planet. (Cameron, 15.12.2015)

(11) So in Paris this year, a Labour government would be pushing for global targets for **reducing carbon emissions** that rise every five years with regular reviews towards the **long-term goal** of what the science now tells us is necessary – zero net global emissions in the latter half of the this century. (Miliband, 14.01.2015)

The data from the JOURNEY metaphor are in line with previous findings (Lovell et al. 2009) which indicate that in the UK climate change and energy have converged on the policy agenda. The convergence of framing of climate change by Cameron and the former Labour Party leader Miliband is related to the use of symbolic discursive power to the enactment of political ends (Kampf 2016: 48). It should be noted, however, that in addition to convergence, there are divergent discursive voices in the UK political discourse involving climate change. As evident from Table 1, there are observable differences in the framing of climate change discourse, especially as far as Cameron and Miliband are concerned. Specifically, Cameron regards climate change through the prism of the CHALLENGE metaphor:

(12) In the coming year, we should seize on the progress made at the Malta Summit and work together to strengthen the Commonwealth's contribution to global efforts to **tackle challenges** including extremism, corruption and **climate change**. (Cameron, 13.03.2016)

(13) … climate change is **an international challenge**. It's going to take action by every country internationally. (Cameron, 14.11.2014)

The framing of climate change which diverges from both Cameron and Corbyn is found in Ed Miliband's speech on 26 April 2015, where climate changed is referred to in terms of the FASHION metaphor:

(14) I care about **climate change** not just because it was once **fashionable,** but because it matters to the future of our world. (Miliband, 26.04.2015)

Interestingly, the framing of climate change as the FASHION metaphor, as a fad and as a once fashionable topic in political discourse is absent from the corpus of Corbyn's articles and speeches. It is observed from the data that the current Labour Party leader converges with his predecessor in the instances of the MONEY and THREAT metaphors, whilst such metaphors as the BATTLE and JOURNEY were not identified in Corbyn's discourse involving climate change. These findings suggest a certain degree of polyphony in discursive space within the Labour Party. However, the data reveal that both the Conservative and the Labour Parties' leadership appear to converge on the framing of climate change, which is evident

from the metaphors CLIMATE CHANGE AS A JOURNEY, CLIMATE CHANGE AS A THREAT and CLIMATE CHANGE AS MONEY.

Conclusions and Implications

The qualitative study presented in this chapter has examined conceptual metaphors associated with climate change in political discourse by the former UK's Conservative Party leader PM Cameron (2010 - 2016) and the Labour Party's leaders Miliband (2010 – 2015) and Corbyn (12.09.2015 - current). The novel aspect of this research involves a juxtaposition of conceptual metaphors associated with climate change which are identified in Cameron's discourse and in discourse by the Labour Party's leaders. The identification and the subsequent juxtaposition of conceptual metaphors in the corpus have revealed several identical conceptual metaphors used by both Cameron and the Labour Party leadership in 2014-2016. These conceptual metaphors are CLIMATE CHANGE AS A JOURNEY, CLIMATE CHANGE AS A THREAT, CLIMATE CHANGE AS A BATTLE, and CLIMATE CHANGE AS MONEY. Analysis of the data indicates that the metaphor CLIMATE CHANGE AS A CHALLENGE is specific to Cameron's discourse, whilst the metaphor CLIMATE CHANGE AS FASHION was identified exclusively in Miliband's discourse on climate change.

Arguably, the implications of the study involve a range of considerations. First, the issue of climate change is both local and global. Current bi-partisan discourse in the UK is evocative of the important role of the global aspect of climate change. Both the Conservative and the Labour Parties emphasise the global character of the issue. Second, by acknowledging the global and domestic levels of the threat posed by climate change, the Conservative and the Labour Parties leadership construe a very similar discursive space in relation to climate change. This space is framed by the previously mentioned conceptual metaphors. Fourth, the degree of overlap in the framing of climate change might indicate similarities in the bi-partisan's view of this issue. This implies that the issue of climate change is above the partisan divide in the UK. It appears that there is a bi-partisan discursive space of regarding climate change as a threat, which needs financial means to enable the process of its mitigation that, in turn, is planned and extended in time.

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CHAPTER FIVE

A COGNITIVE POETIC ANALYSIS OF PARATEXTS: A STUDY OF E. BOWEN'S 'POSTSCRIPT BY THE AUTHOR' TO *THE DEMON LOVER AND OTHER STORIES*

ANNA KĘDRA-KARDELA

Introduction

Says Tristram Shandy, the eponymous hero in Sterne's famous 1759 novel (1980, 127):

> Writing, when properly managed, (as you may be sure I think mine is) is but a different name for conversation: As no one, who knows what he is about in good company, would venture to talk all; – so no author, who understands the just boundaries of decorum and good breeding, would presume to think all: The truest respect which you can pay to the reader's understanding, is to halve this matter amicably, and leave him something to imagine, in his turn, as well as yourself.
> For my own part, I am eternally paying him compliments of this kind, and do all that lies in my power to keep his imagination as busy as my own. (Sterne 1980, 127)

This pronouncement seems to define the active role of the reader in perusing and interpreting a literary text. Writing, Sterne appears to be saying here, would be meaningless without the reader as the addressee of writing. Indeed, what we wish to claim in this paper is precisely this: both the participants in the literary conversation – the author and the reader – contribute to the text's meaning construction. The latter, we think, should be couched in terms of the meaning negotiation strategy between these two participants of the literary discourse.

Over two hundred years after the publication of *Tristram Shandy*, in 1987, Gerard Genette in his book *Paratexts: Thresholds of Interpretation* treats prefaces, chapter titles, notes, postscripts etc. as paratexts. Sympathising with Sterne's views on writing, Richard Macksey writes in the "Foreword" to *Paratexts* that Genette's book appears to invite the reader "to *read* with vigilance as well as knowledge […], to become through this reading a collaborator in the on-going literary construction" (Macksey 1997, XXI; original emphasis). Indeed, "paratextual devices," in addition to the literary text proper, can be seen as a literary means employed by the author to "softly manipulate" the reader by involving her/him in the complex, multi-layered process of literary meaning construction.

This paper attempts to address two distinct, yet interrelated issues:

(i) where exactly in a cognitive model of text reading should one include the information provided by a paratext?; and

(ii) how should one account–based on Bowen's "Postscript by the Author" to *The Demon Lover and Other Stories*–for the meaning construction mechanism involving literary texts commented upon by the postscripts?

Genette's Theory of Paratexts

Genette defines paratexts[1] as "verbal or other productions […] [that] surround […] and extend [a text], […] in order to *present* it, in the usual sense of the word but also in the strongest sense: to *make present*, to ensure the text's presence in the world, its 'reception' and consumption in the form […] of a book" (1997, 1; original emphasis). And he continues: "more than a boundary or a sealed border, the paratext is, rather, a *threshold* […]. It is an 'undefined zone' between the inside and the outside, […] an edge, or, as Philippe Lejeune put it, 'a fringe of the printed text which in reality controls one's whole reading of the text'" (1997, 1-2; original emphasis). As a result, the text is better understood and "a more pertinent reading of it" is achieved (1997, 2). Although reading of prefaces or postscripts is optional (1997, 4), once read, they provide the reader with various kinds of information that may influence the reading process and, as Lawrence Sterne holds, bring the reader into a conversation (or

[1] Genette's terminology is much richer and includes such terms as *peritexts* to refer to the elements included in one volume with the text proper e.g. titles, prefaces, chapter titles or notes and *epitexts* to refer to "external elements"– interviews, private conversations, including letters, diaries etc. Thus, the term *paratext* covers both the peritext and epitext (1997, 5).

dialogue) with the author. As a result, an intersubjective author–reader interaction may be built. The role of paratexts then is to develop what Claassen calls "a common ground" between the author and the reader (2012, 57), a "communicative context in which the reader and author are engaged" (Claassen 2012, 56).

According to Claassen, the "cognitive processing of narrative fiction" involves not only analysis of the text but also draws on "readers' assumptions about an author […], about his or her identity, communicative intentions, and attitude" and the role they "play during the reading process" (2012, 50). Claassen is right: we claim that the author's preface or postscript can indeed be treated as a source of the reader's assumptions about the author, assumptions that may prove instrumental in the interpretation of a (literary) text. Certainly, this is true of Bowen's Postscript.

Genette claims that the status of a paratextual message is defined by "spatial, temporal, substantial, pragmatic, and functional" criteria (1997, 4), which means that it is effectively determined by:

(i) the paratext's *position* in relation to the text/work proper–it may precede or follow it;
(ii) the *time* of its inclusion in the work;
(iii) "its *mode of existence*" – it may adopt, for instance, the form of a written text or an oral interview;
(iv) the relationship between the "sender and addressee" of the message; and
(v) the *functions* the paratext is supposed to perform.

One type of paratext is the preface, the term used by Genette to refer to "every type of introductory (preludial or postludial) text, authorial or allographic, consisting of a discourse produced on the subject of the text that follows or precedes it" (1997, 161). The "postface," which is treated by Genette as a "variety of preface," performs a function similar to the preface, since the difference between the two is marginal (1997, 161).

Genette's typology is based on the identity of the sender of the preface. The preface is labelled as *authorial* (or *autographic*) when its author is at the same time the author of the prefaced text. If the "alleged author of the preface" is a character in the literary text, we deal with *actorial prefaces*. The preface purportedly authored by someone else, in turn, is called *allographic* (1997, 178- 179). Taking into consideration the criterion of the writer's "regime with respect to […] 'truth'," the preface is "authentic," "fictive," or "apocryphal." The preface is *authentic*, if its

authorship is verified by some paratextual mark; if, on the other hand, the preface is termed *apocryphal*, it is erroneously ascribed to a real author. A *fictive* preface is the one written by "an imaginary person" (1997, 179).[2]

One obvious function of the preface is "*to get the book read*" – and to involve the reader "*to get the book read properly*" (Genette 1997, 197; original emphasis). Thus, a "proper" reading is (at least partly) determined by the author with whom the reader gets engaged in a dialogue. The preface may contain a number of statements which concern the subject, its importance, originality, moral value (Genette 1997, 200). In the case of volumes of poems or short stories, the preface may also emphasize the "formal" and "thematic" unity of the work (Genette 1997, 201). Thus, for the "proper reading" to be possible, the reader has to be put "in possession of information the author considers necessary" (Genette 1997, 209).[3] The information included in the author's preface may concern:

(i) the genesis of the work;
(ii) the author's goal (Genette 1997, 221), which can be regarded as "the most reliable interpretive key" (222);
(iii) autobiographical details;
(iv) the target reader, directly or indirectly specified (Genette 1997, 212);
(v) the title; it can help explain the title's significance; prevent potential criticism of it and ensure that it is not misread or misinterpreted (Genette 1997, 214);
(vi) the "work's fictiveness" (Genette 1997, 215);
(vii) contextual details concerning the creation of the work (Genette 1997, 218).

In the light of the above, it transpires that the preface is, to use Genette's wording, "one of the instruments of authorial control" (Genette 1997, 222).

Although the postscript is treated by Genette as similar to the preface, the difference between the two is that reading the postscript immediately after reading the text proper may result in the re-interpretation of the latter. There is no denying though that a preface or a postscript establishes a kind of "common ground" within which an analysis of a literary text is developed, based on the reader's knowledge about the author, their

[2] The author–reader relationship is more complex in the case of actorial and allographic prefaces: the relationship is multilayered because above the fictional author of the preface is the real author.
[3] In this paper I will not deal with prefaces written by critics, editors, etc.

intentions combined with the frames of knowledge (Claassen 2012, 53). "These frames," Claassen posits, "include culturally agreed upon moral and ethical standards, linguistic conventions, social norms *et cetera*, and they depend on the reader's knowledge and experience." In addition to that, one should depend on "literary frames of reference, such as general literary conventions, conventions and models of literary genres, intertextual frames of reference [...], as well as biographical information or information about the socio-historical context in which the text was written" (2012, 53). No doubt, the preface or postscript can be a source of this kind of information.

In this paper I will deal with the "Postscript by the Author" added to the first U.S. edition of Elizabeth Bowen's collection of shorts stories entitled *The Demon Lover and Other Stories*. Bowen's postscript will be discussed here within the framework of cognitive poetics as developed by Stockwell (2002), Semino and Culpeper (2002) and others, and will combine Ronald Langacker's theory of the Current Discourse Space (2008).

Bowen's "Postscript"

Based on Genette's typology of senders, Bowen's postscript can be classified as "authentic" and "authorial." The information included provides numerous interpretative hints which can be used to develop author–reader interaction. Containing all sorts of information concerning the author (her war experiences, reflections, the circumstances of the creation of both the individual stories and the entire collection as well as interpretative hints), the postscript enhances the relation between the author and the reader.

The following *Postscript Information* (henceforth PI) is provided by Bowen (1966, 196-203):

1. Publication history: the stories in *The Demon Lover* were first published individually, written on commission for magazines, only later (1945) were they published as a volume.
2. Circumstances in which the stories were written: in wartime London, between 1941-1944, Bowen wrote a story when she was asked to do it.
3. The stories "were sparks from experience – an experience not necessarily [her] own" (196).

4. These are "wartime" and not "*war*" stories, these are "studies of […] war-climate." "We all lived in a state of lucid abnormality" (197).
5. Read as a collection, the stories acquire a new – "cumulative and collective meaning" (198). *The Demon Lover* is "an organic whole: not merely a collection, but [...] a book." The order of the stories in the collection determines its meaning (198).
6. Bowen creates a common ground with the reader by addressing her/him directly ("You may say that…" [201], "Remember that these impulsive moments of fantasy are by-products of the non-impulsive major routine of war." [201]) and by apologising ("I am sorry that my stories do not contain more 'straight' pictures of the wartime scene" [201].). Elsewhere she says she is sorry her stories do not contain heroism: "Yes, only a few were heroic purely: and see how I have not drawn the heroic ones!" [201]). Anticipating readers' reactions to her stories, Bowen explains her creative choices manipulating thereby readers' reactions.
7. Bowen identifies with the community of writers who during the war "followed the paths they saw or felt people treading" (200). For the sake of her readers she "search[ed] for indestructible landmarks in a destructible world" (200). She uses generic language structures: "when a bomb on *your* house was as inexpedient but not more abnormal than a cold in *your* head" (201; emphasis added). The use of personal pronouns contributes to creating the author–reader interaction: "*W*e begin with a hostess […]; *we* end with a pair of lovers" (198; emphasis added).
8. Bowen provides interpretative hints and explanation of individual stories. She comments on the collection as a whole and on particular stories. By referring to the "war-climate" (197) she builds a context for interpretation. Also, she provides some keywords which may be treated as interpretative hints, e.g.: "abnormality" (197), "dislocated" (198), "hallucinations" (198, 200).
9. In the case of stories containing inexplicable events (hauntings, ghosts, hallucinations, time shifts, dreams), the understanding of them is made more explicit thanks to the author's comments (e.g.: "The search for indestructible landmarks in a destructible world led many down strange paths. The attachment to these when they had been found produced small worlds-within-worlds of hallucination – in most cases, saving hallucination" [200]).

10. Bowen acts not only as a writer, but also a reader of her own stories ("When I read them straight through as a collection, I was most struck by what they have in common" [197-198]. "I felt the germination; and feel it, here and there, in these stories now that I read them through"[202].). "Through the stories [...] I find the rising tide of hallucination" (198). In this way she "enters" the community of readers.
11. The novelist gives hints concerning individual stories, which facilitates the reader's understanding of them. This concerns "The Happy Autumn Fields," "The Inherited Clock," "Ivy Gripped the Steps," and the stories featuring ghosts (both "definitive" and "questionable" [200]) such as "The Demon Lover," "The Cheery Soul."
12. She anticipates the future reception of her stories: "These, as wartime stories, are at least contemporary – twenty, forty, sixty years hence they may be found interesting as documents, even if they are found negligible as art" (202).

We will attempt now to incorporate this paratext-related information into Ronald Langacker's model of the Current Discourse Space, combining it with his idea of the "apprehension of other minds" ("mind-reading").

The Author, the Reader and the Current Discourse Space

If, as it transpires from PI-6 through PI-8, the author-reader interaction in "The Happy Autumn Fields" is likely to be partly determined by the Postscript, then the question arises as to how to incorporate this observation into a workable cognitive theory of text-reading. A good candidate for such a theory seems to be Langacker's idea of the Current Discourse Space (2008) coupled with his concept of the "apprehension of other minds" (Langacker 2007, 183).

The Current Discourse Space – CDS, includes "everything presumed to be shared by the speaker and hearer as the basis for communication at a given moment" (Langacker 2008, 466). It consists of "a series of interactive events, in each of which the speaker exerts some influence on an actual or imagined interlocutor" (Langacker 2008, 460). The CDS contains a considerable amount of background knowledge, and when it develops, it is modified as each new utterance is processed. In Langacker's parlance, "[the] linguistic context […] has both stable and transient aspects. Chief among the former is knowledge of the language being used, as well as its sociocultural status. Providing a transient linguistic context is

the discourse in which an expression occurs" (2008, 465). The CDS can be presented diagrammatically (Langacker 2008, 466) as in Figure 5-1.

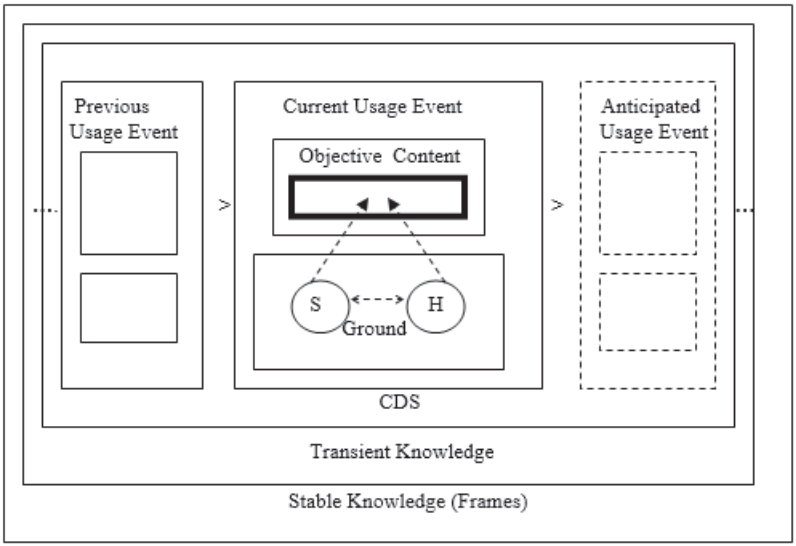

Figure 5-1. The Current Discourse Space (Langacker 2008)

The CDS includes a chain of usage events, i.e. "instances of language use in the complexity and specificity" (Langacker 2008, 457).[4] Generally, the CDS involves three elements: the *Current Usage Event* (CUE), the *Previous Usage Event* (PUE), and the *Anticipated Usage Event* (AUE). As defined by Langacker (2008, 457- 458), "a usage event includes the expression's full contextual understanding – not only what is said explicitly but also what is inferred, as well as everything evoked as the basis for its apprehension."

We would like to claim that a literary text can be treated as a usage event, or rather as a series of usage events. Although a usage event is never identical for the speaker and the addressee, a great deal of overlap between the speaker and the addressee usually ensures effective communication. In the speaker–hearer communication, the CUE is what

[4] A usage event, Langacker (2008, 457) explains, "has no particular size; depending on our analytical purpose, we can segment discourse into words, clauses, sentences, intonation groups, conversational turns, and so on."

the conceptualizer (i.e. the speaker/hearer) may most directly refer to. The focal element of the CUE is the so-called "objective content," i.e. a linguistically encoded entity, a situation which the conceptualizer recognizes or identifies and which may be said to provide "instructions" for the conceptualizer to develop a particular conceptualization. In Fig. 5-1 the rectangle in bold within the *Objective Content* box represents the section of the text the "speaker" and the "hearer" (i.e. reader) focus on at a particular moment. An expression's linguistic meaning is to a great extent established by "the interaction of the speaker and hearer, each engaged in assessing what the other knows, intends and is currently attending to" (Langacker 2008, 465). The *Ground* includes "the speech event, the interlocutors [the speaker and the addressee], and their immediate circumstances" (Langacker 2007, 173). The *Stable Knowledge* box contains information shared by the speaker and hearer which is indispensable for successful communication. The *Transient Context*[5] box, in turn, contains contextual knowledge i.e. the different circumstances in which communication takes place (cf. Zima 2013, 143).

The arrow connecting *S* and *H* in Fig. 5-1 represents the intersubjective character of the speaker–hearer interaction. Both of them focus on a particular segment ("profiled entity") of the objective content represented as a rectangle drawn in bold lines. The speaker-hearer interaction can be accounted for in terms of the "apprehension of other minds" as illustrated diagrammatically in Figure 5-2.

[5] Commenting on the conception of "transient context," Langacker (2008, 465) says: "Providing a transient linguistic context is the discourse in which an expression occurs. There is no particular limit as to how far back in a discourse the currently relevant context extends." The degree of the "extension of the currently relevant context" aside, we treat paratexts here as part of the transient context in which a literary discourse develops.

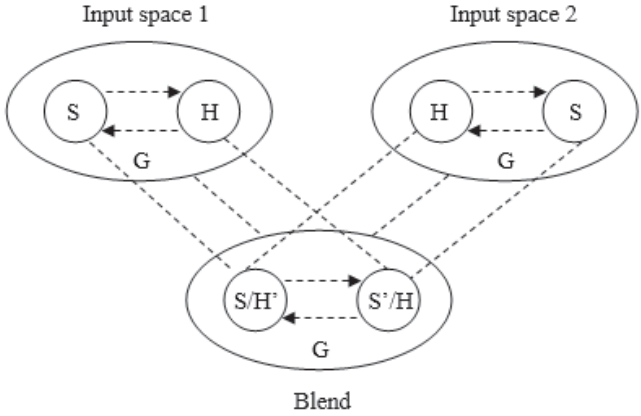

Figure 5-2. The "apprehension of other minds" (Langacker 2007, 182; adapted)

Figure 5-2 presents two speech events, shown in the form of mental spaces. In one speech event (Input space 1), the speaker (S) addresses the hearer (H); in the other speech event (Input space 2), the hearer (H) addresses the speaker (S). The blend, in Langacker's wording (2007, 182), represents the "canonical speech event scenario" with the roles of the discourse participants overlapping: the "current speaker" (S) is also the potential addressee (H'), while the current addressee (H) is also the "potential speaker" (S'). In the case of mind integration, a role switch of speaker and hearer takes place (cf. Kardela and Kędra-Kardela 2014, 448-449).

Let us suppose now that a literary text – analogously to language structures – provides a set of instructions issued for the reader of *how* to construe a literary work. Interpretation in this theory is a result of the "negotiation" between the text/author and the reader. The negotiation can be viewed as a process whereby the process of "apprehension of other minds" in the sense of Langacker takes place (cf. Fig. 2).[6] Recall that in

[6] It is worthy of mention that, according to Langacker:

> compared to formalist approaches, cognitive linguistics has definite advantages for analyzing literature. Most obviously, it accords a central role to meaning, offering a well-developed conceptual semantics that bears directly on phenomena crucial for analyzing literary texts. The speaker (or writer) is seen as actively engaging in an elaborate process of meaning construction. An inherent aspect of this process is construal, our multifaceted capacity for

Langacker's theory it is context that provides "additional aspects" of linguistic meaning. We would like to claim that in the case of a literary work, those "additional aspects of meaning" are provided by a paratext. In particular, when engaged in the verbal interaction, the addressee, drawing on the paratextual information, sets up with the author the common interpretational basis, and it is precisely in the Current Discourse Space that such an interpretational basis can be localized.

In the case of a literary text accompanied by a postscript, the instructions offered by the text proper (e.g. a short story) are supplemented by the author's information provided in the postscript. Such a literary text, along with the postscript, can be viewed as a series of usage events, whose interpretation is determined by the context. Seen in this light, the role of the postscript is to modify the interpretation of the text(s) it is related to. Responding to a literary text involves therefore re-reading and re-interpreting it.

Bowen's "The Happy Autumn Fields": Analysis

Let us take a look now at "The Happy Autumn Fields".[7] A reference will be made in brackets to the different points made by Bowen and, as already remarked, referred to in this paper as *Postscript Information* (PI).

"The Happy Autumn Fields" is one of the stories directly commented upon by Bowen in the Postscript: "In 'The Happy Autumn Fields', one finds a woman projected from flying-bombed London, with its day-and-night eeriness, into the key emotional crisis of a Victorian girlhood" (1966, 200; cf. PI-2, PI-4, PI-8). This authorial remark is helpful in

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> conceiving and portraying the same situation in alternate ways. Even for prosaic language, the meanings constructed are richly imaginative, with metaphor, metonymy, fictivity, and mental space configurations being both pervasive and fundamental. A key point (often missed) is that conception, instead of being insular, is a primary means of interacting with the world, including other minds. Based on our ability to simulate the experience of other conceptualizers, each with their own perspective, speaking (or writing) is an intersubjective process aimed at negotiating a shared contextual awareness. (Langacker 2014, XIII-XIV)

[7] The title of this story is an allusion to a poem by A. Tennyson "Tears, Idle Tears." The relationship between the poem and the story, and the impact of the former on the interpretation of the latter is beyond the scope of this paper. However, one might consider Tennyson's poem to be (part of) a context for reading Bowen's story.

understanding of the story and its interpretation. Basically, the story consists of four scenes: two take place in the Victorian setting and two in war-time London. While in the case of the war scenes one can discern that the reference is made to a town destroyed by bombardment (in the Postscript Bowen says: "in these stories, the backgrounds, and sometimes the circumstances, are only present by inference" [Bowen 1966, 201]; cf. PI- 6), and although no name of the town is mentioned, it is taken for granted that it must be London; in the case of the Victorian scenes it is more difficult to establish when (and where) the events described could have taken place as there is no direct reference to the time of events. The only hints are, it seems, remarks about the long dresses the girls featuring in these scenes wear, which might indicate the Victorian dressing style. Thus, Bowen's prompts from the Postscript help the reader understand the story by indicating its temporal aspect in an explicit way.

The two parts of the story feature different characters, and, as it is explained at the end, there was no natural family relation among them. Mary, the protagonist of the war part is "dislocated" in her sleep into the dream[8] (induced by the letters and photographs she had found in the damaged London house), where she "takes over" the identity of one of the "Victorian" heroines, named Sarah. The quiet autumn fields and the country house described in the Victorian part of the story stand in a sharp contrast to the bombed London house where the ceiling falls upon the sleeping protagonist. As the passage from the Postscript quoted above clarifies, the scenes are temporally separated by several decades. Bowen's statement about the "emotional crisis" is also of key importance because it helps the reader to connect the scenes in a meaningful way (cf. PI-8, PI-9). Phyllis Lassner comments along these lines on the relationship between the scenes:

> Neither scene is weighted as the key to the significance of the other. Instead, the movement back and forth gives the sense that the yearnings, violence, and losses of one era begin and end in the other and that each one can be understood only in the other's light. Thus, the emphasis on order and stability in Victorian life is made understandable only as it is threatened by the violence that erupts during the Blitz. For example, the accident that takes the life of a young man in the earlier time seems as much a result of the future tumultuous world war as of the horse shying in

[8] In the Postscript, Bowen comments on the unique nature of dreams: "It is a fact that in Britain, and especially in London, in wartime many people had strange deep intense dreams. 'Whatever else I forget about the war,' a friend said to me, 'I hope I may never forget my own dreams, or some of the other dreams I have been told. We have never dreamed like this before" (Bowen 1966, 198).

> empty and peaceful Victorian fields. Conversely, the jolts of falling debris during the Blitz seem to originate in the hidden seething violence of Victorian order. (1991, 105-106)

The female protagonists in both the Victorian and the Blitz part of the story – Sarah and Mary respectively – experience emotional crisis. They also share the feeling of "dislocation," the word "dislocation"[9] describing the crisis. Speaking on behalf of Sarah, the narrator in the story asks: "How could she put into words the feeling of *dislocation*, the formless dread that had been with her since she found herself in the drawing-room?" (Bowen 1983, 681; emphasis added). The word "dislocation" also refers to buildings: in the Postscript Bowen writes of a house "dislocated by shock" (1966, 198; cf. PI-8), and this seems to describe Mary's bombed house accurately. Thus, based on the paratext, one can argue that the word *dislocation* epitomizes the story in several ways. On the formal level, the narrator, in her inability to follow the temporal and personal shifts between the four scenes is *dislocated* and thus unreliable.[10] This manifests itself in the failure to identify the characters when the scene shift takes place. In the sentences belonging to the narrator: "*She* yawned into *Mary's hand*" (Bowen 1983, 677) and "*She* instinctively tried and failed, *to unbutton the bosom of Mary's dress*" (678; emphasis added), the pronoun "she" refers to Mary. If this is the case, the sentences should be considered faulty, unless we realize that the narrator errs when telling the story of two women by temporarily confusing their identities.

Now, in order to account for the way the literary text and the paratext (Postscript) interact in Bowen's "The Happy Autumn Fields," we have to modify accordingly Langacker's CDS model (see Figure 5-3).

Figure 5-3 shows the place of the paratext in the CDS (the rectangular box in bold in the CUE partly overlapping the objective content and its focal section). The Objective Content box represents Bowen's story. The element of the story focused on by the reader – the box in bold within the Objective Content box – is subject to the author-reader negotiation process, which leads to the interpretation of the story. Because paratexts

[9] The importance of the theme of dislocation was commented upon by Allan E. Austin in his book *Elizabeth Bowen*: "Few short story themes have proven more fruitful for Miss Bowen than that of dislocation. […] Miss Bowen had employed the theme of dislocation earlier; but with the coming of World War II, it fully engaged her imagination. The stories written in wartime London and published as *The Demon Lover* have dislocation as their main concern" (1971, 113). In this context Austin refers to the Postscript, which confirms the importance of Bowen's paratext to the analysis of her stories.

[10] See the discussion in Kędra-Kardela (1997).

provide additional contextual knowledge, they influence the author-reader meaning negotiation process as "thresholds of communication." (Hence the rectangular box of the paratext overlapping the Transient Context box).The interpretation thus makes crucial use of the information provided by both the story and by the paratext (cf. PI-8, PI-9, PI-11). Because the Ground contains "the speech event, the interlocutors [the speaker and the addressee], and their immediate circumstances" (Langacker 2007, 173), the literary text proper (the Objective Content box), becomes part of the Ground. Broken arrows represent the author's and reader's reference to the relevant passage in both the story and the paratext. The Transient Context box includes the reader's context in which the story is read, and the knowledge obtained by them from the paratext for them to be able to interpret the given segment of the short story (hence the big rectangle in bold partly covers the Ground, the Objective Content box and the Transient Context box). For example, Bowen's remarks in the Postscript about the "war-climate" which she tried to render in her stories may be treated as an element of Transient Context. In the case of each individual story in *The Demon Lover* collection, a different section of the Postscript may be used as a source of the reader's transient knowledge. Stable Knowledge, shared by the speaker and hearer (in this case, the author and reader), contains common extratextual knowledge, including historical facts about World War II, about the bombardment of London, the conditions of life, etc. In other words, Stable Knowledge contains information that the reader may possess, regardless of whether they have read the Postscript or not.

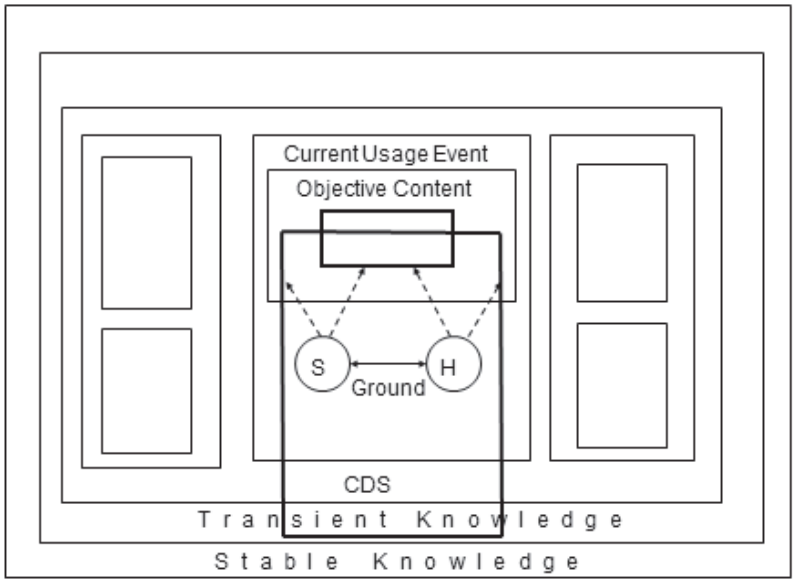

Figure 5-3. The Current Discourse Space and the paratext

Conclusion

In conclusion, we claim that the author–reader interaction takes place on two, interrelated levels: on the level of the literary text and on the level of the paratext. As a result, the paratext becomes part of the Ground and of the story-related Transient Context. The presence of the paratext ensures a more profound understanding of the literary text thereby allowing for a "more complete" interpretation of it. The interpretation of Bowen's "The Happy Autumn Fields" benefits considerably when the story is read in reference to the Postscript by the Author. The latter, by connecting the author's and the reader's Transient Context and Stable Knowledge, provides a richer context for its interpretation.

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CHAPTER SIX

THE ROLE OF THE CONCEPTUAL METAPHORS/BLENDS ANALYSIS IN DESCRIPTION OF INDIVIDUAL STYLES ON THE BASIS OF SELECTED LYRICS BY THE WELSH BAND *MANIC STREET PREACHERS*

MAGDALENA ZYGA

Introduction

The notions of *style* and *stylistics*, especially when used by a layperson, are often virtually involuntarily associated with literary studies and/or literary criticism. A similar situation is true about such phenomena as metaphors and (quality) lyrics, both of which are commonly conceived of as connected with poetry. One of the aims of the paper at hand is to draw attention to the fact that historically stylistics was originally conceived as a branch of linguistics and that nowadays there are linguistic and literary stylistics (Crystal 1992, 69). Furthermore, literary theories such as the latter have been perceived by some scholars (e.g. Freemann 2000, 265) as, contrary to expectations, incapable of an appropriate identification and description of an individual style of an author. This is why what we intend to do here is to apply the approach formulated by Freeman (2000), which is based on the linguistic theories of conceptual metaphors as postulated by Lakoff and Johnson (1980) and Kövecses (2005), as well as the blending theory proposed by Fauconnier and Turner (2002) for the purpose of describing the individual styles. Such description can later potentially be a basis for authorship verification (or potentially identification) of a literary text or/and be used for the purposes of translation. It is to be noted that the blends presented in the lyrics are not to be meticulously analysed in every detail, component after component, but only to the extent deemed necessary for the assumed purposes, i.e. to

present differences between the authors and/or to highlight the aspects of the texts which would be relevant to keep in translation. We shall, furthermore, also analyze our research material with the use of the modified DIMEAN model, which belongs to the framework of discourse analysis, and subsequently compare the results obtained from the application of the two methods.

Our research material consists of selected lyrics of the Welsh band *Manic Street Preachers*, which used to have two lyricists who, prior to a mysterious disappearance of one of them, would sign their works – most of which were written separately – together. Similarly to Freeman, despite the fact that lyrics by virtue of resembling poetry fall into the realm of literature, it is not considered inappropriate here to analyze literary texts by means of linguistic tools, especially if the tools can prove to be more successful than the ones offered by literary scholars. After all, all texts consist of language.

Terminological Issues and the Object of Research

To write about the usefulness of conceptual metaphors analysis for identification of individual styles it is necessary to elaborate on the term 'style' first. If a layperson asked what style is, it would probably be defined as (1) a way one makes use of his or her own native language, (2) some specific characteristics of a text, or maybe as (3) something that draws the reader's attention in a piece of writing/speech. These opinions, although non-professional, touch upon the difficulties connected with the notion in question. They imply that definitions of style tend to be producer-, text- or recipient-oriented (Althaus, Henne and Wiegand 1980, 305), and that style is an omnipresent phenomenon, which is confirmed by the observations of such linguists as Wolf and Polzenhagen (2003, 249), "Texts never have no style" or Sandig and Selting (1998, 138), "(...) style can only be spoken of in the plural." Moreover, the layman explanations reveal that style is, in fact, a complex phenomenon which is so difficult to explain that it is virtually impossible for the linguists to reach a consensus (Fleischer, Helbig and Lerchner 2001, 423). This is why many linguists propose an explanation of his/her own – hence the plethora of definitions, which can be grouped as construing style as choice, connotation, ornamentation, norm or deviation from it – while others postulate to abandon the endeavour to define the term altogether, claiming that it is unsubstantial and superfluous (Althaus, Henne and Wiegand 1980, 304-306).

In the view of van Dijk (1998, 11) for instance, style is "a context-bound variation of the expression level of discourse." The definitions offered by Crystal (1992, 66): "the set of language features that make people distinctive – the basis of their personal linguistic identity" or by Fairclough (2003, 159): "Styles are the discoursal aspect of ways of being, identities. (...) Styles are linked to identification (...) the process of identifying, how people identify themselves and are identified by others," highlight the identity/individual aspect encompassed by the phenomenon of style. Fromkin and Rodman (1998, 425) who define styles as "situational dialects" or Sandig and Selting (1998, 138), "a variety of alternatives for referring to the same object, the same process, the same fact" chosen not only "in unilateral dependence on extralinguistic factors" (1998, 153) also draw the attention to the importance of non-linguistic context when discussing the notion of style.

As far as style features are concerned, the ones of main interest in this paper are holistic style structures. What is meant by this is the emergent 'Gestalt', a particular whole made up from different kinds of more local features (Sandig and Selting 1998, 140), or in yet other words, the 'global stylistic pattern' of a text as a whole (e.g. of satire), which emerge from re-occurrence and co-occurrence of linguistic elements (Wolf and Polzenhagen 2003, 251). What is noteworthy in this respect is the role of conceptual metaphors in creating these global stylistic patterns as the patterns may arise from "diverging or conflicting entailments of the conceptual metaphors drawn upon" (Wolf and Polzenhagen 2003, 268) e.g. between the metaphor TRADE NEGOTIATIONS ARE BATTLES emphasizing the serious nature of a given event and TRADE NEGOTIATIONS ARE CONTESTS highlighting its game-like nature (Wolf and Polzenhagen 2003, 268). Other features of interest here are (after: Sandig and Selting 1998, 138-139):

(1) Lexical style features, i.e. vocabulary items with their connotations
(2) Syntactic style features
(3) Phonological style features, e.g. the use of rhyme and sound repetitions
(4) Figures of style, such as parallelism or alliteration as well as "the kind of relation between the denotation and the image used" (Sandig and Selting 1998, 139) in case of (conceptual) metaphors
(5) Pragmatic style features, i.e. the types of speech acts used and different ways of performing them.

Methods of Analysis

The article of M. Freeman (2000) about the role of cognitive linguistics in interpreting literary texts begins with the following statement: "(…) the defining characteristics of literature is its ability to generate multiple meanings and interpretations" (Freeman 2000, 253). Literary criticism, she further claims, lacks proper tools to account for this multiplicity of several–often equally legitimate–readings of one text. The existence of more than one interpretation often poses a problem not only for literary scholars but also for translators and analysts who, for example, need to check the authenticity of a given text by identifying individual poetic style of an author. According to Freeman, however, for each text there is a meaning at the highest level of schematicity abstracting away from details. This superordinate abstract meaning makes several subordinate concrete meanings possible (Freeman 2000, 265). At this level of high-order structure, "the emergent structure of meaning" (Freeman 2006, 111; 120) of a poem as a blend and the personal identity of an author is revealed in all its distinctness. The reconstruction of this emergent structure, done mainly by focussing on the conceptual metaphors and conceptual blends which build and organize the conceptual universe of a given poem and of the poem's author, is what constitutes the core of Freeman's approach.

In her article "Poetry and the scope of metaphor: Toward a cognitive theory of literature" Freeman names three processes of reasoning which are employed to interpret a (literary) text (2000, 254-255):

(1) attribute mapping, i.e. we perceive similarities between items;
(2) relational mapping, i.e. we notice relations between items;
(3) system mapping, i.e. we recognize that the relations between the items create patterns at an abstract level.

What many literary critics, however, do wrong even when they try to "apply the same analogical processes of reasoning that enable metaphor construction as the writers do who compose them" (Freeman 2000, 254) to perform the mapping is that they only usually focus on the two first types of mapping and do it at a relatively low level of abstraction. Thus, in Emily Dickinson's Cocoon poem, for example, some literary critics map the butterfly onto a woman, who feels limited by the patriarchal rule (=the tightening of the cocoon; relational mapping), while other might claim that the butterfly should be mapped onto poetry trying to get out of the cocoon of the limiting prose (Freeman 2000, 256). The prototypical reading of the poem, however, which sanctions the above-quoted concrete interpretations

(and possibly even more) should be sought at a higher level of abstraction. Consequently, the attribute mapping is the one of the butterfly onto the speaker of the poem (whoever or whatever it is), the cocoon onto the dress and the development onto the will to break free. As for the relational mapping, an analogy can be drawn between the tightening of the cocoon and the feeling of being limited. The fact that the colours tease means that the speaker is attracted to the idea of changing oneself, and the "dim capacity for wings" suggests that the speaker feels capable of changing for the better. At the level of system mapping, which is the most crucial one according to Freeman, the images of the first stanza (concrete) find their counterparts in the abstract terminology of the last stanza. Moreover, the second stanza, which could be mapped onto the fourth if it existed, seems 'trapped' in the cocoon created by the first and the third one. As a result, the poem in its deliberate state of being unfinished becomes itself an icon (Freeman 2000, 256-258). The arguments and examples presented by Freeman seem to confirm the fact that the cognitive analysis of literary texts can be used successfully to capture an individual poetic style of an author by reconstructing the poet's conceptual universe through identifying the (types of) conceptual metaphors and blends habitually used by the poet (Freeman 2000, 270). The cognitive analysis as postulated by Freeman pinpoints, for example, the habit of Dickinson to reverse the conceptual domains in the widespread metaphors–as, for instance, in the Loaded Gun poem–or to reverse the usual figure-ground configurations, like in her poems about time, where she rejects the common metaphor TIME IS A HEALER and where time is the ground and not an active figure.

Within the framework of discourse analysis Spitzmüller and Warnke (2009, 125-147) propose a multi-layered model of analysis DIMEAN (**Di**skurslinguistische **M**ehr-**E**benen **An**alyse), which comprises three main levels: the intratextual level (including such aspects as keywords, stigma words, speech acts, syntactic constructions etc.), the level of actors and the transtextual level (including topoi, schemata, intertextuality etc.) with the sub-levels within each of these. With their model the authors seek to limit and order the methodological pluralism in discourse analysis. Distinguishing all the sub-levels described in the model, however, does not mean that all of them need to be examined in detail in every analysis. Identifying and listing them in the model should enable the analyst to make informed choices as to which level(s) he needs to focus on and which aspects of the discourse studied can be omitted depending on the purpose of his/her analysis (Spitzmüller and Warnke 2009, 124-125). It is worth noting here that conceptual metaphors are in fact taken into consideration in the DIMEAN model with their components mentioned at

several sub-levels of the intratextual as well as the transtextual level, and that the procedure of their identification resembles the one proposed by Steen (2002). Yet, the model does not include the phonological level. This can significantly impoverish the analysis of texts such as lyrics, which are meant to be sung and where sound patterns are of importance. With the inclusion of the phonological level, however, the model, by virtue of clear organization and provision of a comprehensive (yet open-ended) list of aspects which can be analysed, seems to be potentially useful for analysing individual styles for various purposes (authorship verification, translation).

Case 1: "I live to fall asleep"

The set of sleep lyrics is composed only by two items, one written by Jones and one of dubious authorship. The title "I live to fall asleep" given by Jones seemingly evokes the widespread conceptual metaphor DEATH IS SLEEP. The metaphor is readily activated in the mind of the recipient by the use of the sentence structure/schema: agent–action + to + goal, which favours the interpretation of the goal of falling asleep as denoting dying, especially because the verb "live" activates the METAPHOR LIFE IS A JOURNEY. This SLEEP-AS-DEATH-metaphor, however, is de facto rejected from the very beginning, as sleep is presented as a recurrent event, framed as the time to "regenerate and sin". Nonetheless, at the end of the stanza we come to realize that the notion of death is not erased altogether but, on the contrary, covertly present throughout the text, as the verse "I've lived enough to kill" can be read as hinting about death. The first stanza, moreover, reveals such novel metaphors as DREAMING IS INFILTRATING and BEAUTY, by virtue of being something which can be infiltrated, IS AN ORGANIZATION: "I never want to dream/It infiltrates beauty". In the chorus the speaker projects the SPATIAL RELATION OF DISTANCE onto RELATION OF FRIENDSHIP ("another distant friend") and either personifies love (LOVE IS A PERSON) or expresses the metaphor LOVE IS VIOLENT FORCE in that he talks about "another boy struck dumb with love":

When did you become another distant friend
Everyone who loved you stayed waited till the end
When did you become another distant friend
Everyone who loved you stayed waited till the end
Oh, when did you decide that sleep could save your life
How could you become another boy struck dumb
How could you become another boy struck dumb with love.

Sleep, in turn, is presented as something that can "save your life", which favours the metaphorical reading SLEEP IS A CURE. This belief, however, does not seem to be the one of the speaker but of some other person ("when did you decide", "your life" vs. "I live to fall asleep" [my underlining, M.Z.]), maybe of the second lyricist of the band. The second stanza again develops the presentation of sleep as mere sleep, which "helps me through the day". It also contains another personification, this time that of pain (PAIN IS A PERSON) and the ontological metaphor SCREAMS ARE OBJECTS, to which the speaker can "hold on":

I live to fall asleep
it helps me through the day
[...]
I live to fall asleep
serene alone happy
Holding on to screams
waiting for the time

The last stanza, however, returns to the notion of death with the words "So lazy, lazy, lazy/chuck down all the pills/needing to remember how and why to live". Hence, the emergent structure of the text seems to consist in the juxtaposition of sleep as just sleep and of sleep as death. More precisely, the text seems to be a blend with the input spaces: (1) sleep, (2) cure, (3) death. Furthermore, it is noteworthy that the chorus is written in the past tense, which additionally reinforces the death input, and 'pushes' the blend into the past while the actual sleep remains in the present time. The mixture of the components of several domains, i.e. introduction of the components at various stages of the text progression rather than one by one, as the mode of creation of the global blend seems to be typical for Jones.

When the text "I live to fall asleep" by Jones is approached with the application of the DIMEAN model in mind, the word-oriented analysis reveals that it contains such words and phrases as "fall asleep", "loved", "end" and "save your life", which can be considered of key importance. Furthermore, it is to be noted that the prevailing form–which pertains to the speaker in the text–is "asleep" and not "sleep", and that the latter is used only in the question directed to the lyrical hero: "When did you decide/that sleep can save your life?" Also at the intratextual level it can be observed that the sentences are well-formed. Similarly to "Black dog on my shoulder" (another piece of lyrics by Jones), the text contains questions: "When did you become another distant friend?", "When did you decide that sleep could save your life?". It is noteworthy that the

sentences pertinent to the speaker of the text are in the simple present tense while those concerning the "you" are all in the simple past. The sentences seem to form a coherent description of a situation. What is presented to the speaker are actions and emotions rather than visual sensations. As for phonological features, we can identify only a few rhymes: sin-in, friend-end and pills-live. The speech acts in the piece are of representative and expressive type. At the transtextual level we notice the context of Richard Edwards's insomnia (addressed in the text "Sleepflower"), his mysterious vanishing and suggestions made by the police of him having committed suicide (Price 1999, *passim*).

Case 2: "Sleepflower"

Although the text "Sleepflower" uses the imagery connected both to plants and to sleep it will be analyzed here due to the dominance of the sleep theme. To investigate whether this piece of lyrics could be written by the author of "I live to fall asleep", the conceptual universe of the text– composed of conceptual metaphors and blends–is to be reconstructed. This, however, shall not be done in detail but only to the extent allowing identifications of differences (and similarities) between the two texts. The identification of characteristic features can also be useful for the purposes of translation.

The text "Sleepflower" is rather opaque and contains blends which are difficult to unpack, violating to some extent one of the optimality principles (no. 3) pertinent to mental binding – according to which the input spaces, the generic space, the blended space and the connections between them should be recreated easily on the basis of an analysis of the blend only (Turner and Fauconnier 2000, 138) – and hence being prone to both under- and over-interpretations. This feature can be considered characteristic of most of the output by Edwards, e.g. "Small black flowers that grow in the sky" not analysed in this paper. In the very first verse we are confronted with the metaphor MORNING IS STALE FOOD ("morning always seems too stale to justify"). Consequently, what is expected to appear further in the text are metaphors sanctioned by the more general TIMES OF THE DAY ARE FOOD, i.e. projections of different types of food (e.g. fresh, bland etc.) onto times of the day. Nothing like this happens. Instead, this is what happens in the second line: "lament blossoms, hours, minutes of our lives" is a creative blend which seems to refer to the rather conventional metaphor LIFE IS A CYCLE OF PLANTS. Hours and minutes of our lives are namely described not simply as blossoms but as "lament blossoms". Hence, we postulate a multiple blend with three input spaces:

(1) plants, (2) time, (3) lament. The blend seems to inherit the organizing structure from the frames (1) and (2) as the third space has no organizing frame of its own. The third line, "broken thoughts run through your empty mind", reveals another two blends. The THOUGHTS are at the same BRAKABLE OBJECTS and PEOPLE, hence running through the TERRAIN of the MIND, which as a CONTAINER can also be empty. The first blend is thus assembled from the elements of the input spaces: (1) thoughts, (2) objects, (3) people, while the second one draws on (1) terrain – which is reinforced in the chorus by the reference to "a pale landscape" –, (2) mind, and (3) container space. The chorus introduces more metaphorical objects, namely "pieces of sleep" (SLEEP IS A BREAKABLE OBJECT), as well as some puzzling metaphorical projections for identification of which the five-step procedure offered by Steen (2002, *passim*) proves to be useful, especially steps 3 (metaphorical comparison) and 4 (metaphorical analogy):

I feel like I'm missing pieces of sleep
A memory fades to a, a pale landscape
You were an extinction, a desert heat
A blind illness of my anxiety.

When we approach the verse "you were extinction, a desert heat" we do sense the presence of some metaphor but experience difficulty in formulating it since the connection between the source and the target domain manifested linguistically by the element "you", which has a link to the domain PERSON, seems rather unclear, i.e. it seems that postulating a simple personification metaphor (X IS A PERSON) could be an oversimplification. To notice how "you" and EXTINCTION or/and DESERT HEAT are similar, to better determine the grounds for the mapping, let us adjust Steen's notation for metaphorical comparison (step 3) for our purposes: $(\exists F)(\exists G)$ {SIM[F (PERSON), G (EXTINCTION $\wedge$ DESERT HEAT)]} i.e. let us postulate that there is some aspect F and some G for which there is a similarity between PERSON doing/being F and the aspect G of EXTINCTION and DESERT HEAT. Given our experiential knowledge, it seems that the phenomena of extinction and desert heat contain an element of destructive power, of causing death or an end of something (e.g. of a plant). This reasoning leads us to propose the following reformulation of the notation, in other words, to identify the metaphorical analogy by filling in the empty slots: {SIM [KILLING/ELIMNATING (PERSON), CAUSING DESTRUCTION (EXTINCTION $\wedge$ DESERT HEAT)]}. The next verse, "a blind illness of my anxiety" seems to further block our attempts to identify the conceptual metaphors present in the chorus since, again, it seems to be revealing of something more than a simple metonymy BLIND ILLNES FOR

ANXIETY, especially in the context of the previous verse about extinction and desert heat. Therefore, we postulate the existence of a multiple blend rather than a simple conceptual metaphor with a source and a target domain , and consider it justified to treat the two verses as a whole. The domain DESERT HEAT thus seems to be linked to ILLNESS by virtue of causality, since desert heat can cause hallucinations, which can be construed as a form of an illness affecting sight. The fact of blindness seems to be linked to the domain PERSON. As a consequence, positing personification of ANXIETY seems plausible. So is, however, postulating that anxiety is to be interpreted as only a body part, an organ that can be afflicted with an illness. Such interpretation would account for the phrase "of my". The shortcoming of these suggestions becomes visible if we, after a close examination of the lines, interpret "a blind illness" as pertinent to "you" (PERSON) – similarly to EXTINCTION and DESERT HEAT. In this case the metaphorical comparison can be formally noted down: (∃F)(∃G) {SIM[F (PERSON), G (ILLNESS)]}, and with the empty slots filled as {SIM[HALLUCINATING (PERSON), EFFECTING IN HALLUCINATIONS (ILLNESS)]}. Hence, it seems most reasonable to read "of my anxiety" as "out of my anxiety, i.e. the anxiety causes illness affecting sight. Taking the whole analysis of the two verses into consideration, we postulate the existence of a blend with the following input spaces: (1) person, (2) extinction, (3) desert heat, (4) illness affecting sight, (5) hallucinations.

The second stanza, being the last, offers the metaphors MIND IS HELL and INNOCENCE IS A PERSON in its first line and another blend in the next two:

Endless hours in bed, no peace, in this mind
No one knows the hell where innocence dies
Fragments crawling like cobwebs on stone
Blows away the safety only a sleeping pill knows.

The crawling fragments ("Fragments crawling like cobwebs on stone") can refer back to the thoughts-objects-people from the first stanza or to some pieces of sleep, or to both. The emergent blend draws from the input spaces of (1) thoughts (2) people, (3) objects, (4) sleep, (5) cobwebs. These fragments, moreover, kill the personified safety, who is known to a personified sleeping pill (SAFETY IS A PERSON, SLEEPING PILL IS A PERSON). As a result, it seems that sleep (fragments crawling) kills ("blows away") sleep–it might be possible that there are two kinds of sleep: a good and a bad one. In other words: (bad) sleep causes insomnia, which is a disruption of a cause and effect sequence, a counterfactual, impossible fusion of cause and effect. This emergent contradiction, which is similar to

the disruption of orientational metaphors present in "Small black flowers that grow in the sky" (another piece of lyrics by Edwards), leads us, despite the complexity absent in the plants lyrics confirmed or assumed to be written by Richard Edwards, to a conclusion that "Sleepflower" is of his authorship. Furthermore, the local blends in all their complexity are created 'at once', that is to say, the elements of separate blends are not mixed in the course of the song. To formulate it yet differently, a new blend is created only after the previous one has been completed. The conceptual universe of this author and his lyrics differs significantly from the one created by Nicholas Jones.

The keywords and key phrases in the text "Sleepflower" are somewhat difficult to identify in the course of a DIMEAN-oriented analysis for the reasons to be explained in our examination of the pragmatic features of the text. We assume that words/phrases of key importance are "lament", "broken thoughts", "pieces of sleep", "illness", "anxiety".

The title "Sleepflower" itself is an occasional neologism. The words "pill" and "sleep" are shared by this text and "I live to fall asleep". The individual sentences in the piece seem well-formed but combined together they lack the pragmatic feature of cohesion and they can be said to trigger only relatively coherent visualizations. As for phonological features and stylistic figures, the text contains as few as two instances of rhyme: sleep-heat and stone-knows, as well as complex metaphoric blends. The speech acts present in the piece seem to be of expressive and representative type. The difference with respect to the use of different speech acts, although absent here, can, however, be potentially of importance, which could be observed with respect to other texts (not analysed in this paper) created by Edwards and Jones. At the transtextual level the words "sleep" and "pill" seem to link the pieces "Sleepflower" and "I live to fall asleep" together, in that the latter seems to refer to the issues referred to in the former. In other words, what we notice here is the phenomenon of intertextuality. The text also addresses Edwards's insomnia. Although both texts, "I live to fall asleep" and "Sleepflower" share the topic and refer to similar phenomena, both author seem to apply different linguistic/discursive means to create their textual worlds.

Table 6.1. Results of the conducted analysis[1]

Features	*I live to ….*	*Sleepflower*
Well-identifiable metaphors/blends easy to unpack	x	
Mixed introduction of the elements of the blend	x	
LIFE IS A JOURNEY	x	
Evocation -denial	x	
Stepwise creation of the global metaphor/blend, blends created locally		x
Disruption/modification of the conventional		x
Reconcilable clash		x
Interrogative sentences	x	
Emotions rather than images	x	
Images rather than emotions		x
Social and/or personal problems addressed		x
references to transtextual reality	x	x
Low frequency of rhymes	x	x
Occasional neologisms		x
Cohesion[2]	⇨	⇩
Coherence	⇧	⇨
Expressive and representative speech acts	x	x

Conclusions

The results obtained by means of the two models of analysis are summarized in the chart below (Table 6-1). What the examination of the selected texts seems to show is that the analysis of cognitive metaphors/blends alone can be conceived of a system which is not fully informationally encapsulated. Thus, while it produces relevant and generally reliable data, the interpretation of these can vary depending on

[1] The list of features presented in the chart is by no means exhaustive for a characterization of individual styles of Jones and Edwards in general–only the aspects visible in the two texts analysed in this paper are included here. The horizontal line separates the results obtained with the application of the method by Freeman (above the line) from those achieved by means of the modified DIMEAN model (below the line).

[2] The arrows indicate low, medium and high level of cohesion/coherence respectively.

the analyst, his/her expectations and the amount of background knowledge about the analyzed text. The result can, unfortunately, be also under- or over-interpretation. The DIMEAN model without an analysis of conceptual metaphors/blends, in turn, is also an imperfect tool for an analysis of individual styles–e.g. for the purposes of authorship verification. This model generally allowed us to identify more features of style shared by the two lyricists, which can be seen as both an asset (e.g. for a translator) and drawback (e.g. in the process of authorship verification). Hence, we are inclined to conclude that neither of the methods–i.e. 1) the cognitive analysis of conceptual metaphors/blends, 2) the linguistic multi-level discourse analysis (DIMEAN) – alone is perfect. In the light of the analysis presented here as well as an examination of a larger set of 17 texts by Jones and Edwards, it seems that for the purposes of verifying authenticity or of translation only the combination of the two methods applied by the analyst, by virtue of being comprehensive and showing a high level of informational encapsulation, should be an optimal one for the analysis of individual styles allows to achieve best results.

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PART THREE

MULTIMODALITY IN LANGUAGE PROCESSING

CHAPTER SEVEN

A MULTIMODAL PORTRAIT OF WISDOM AND STUPIDITY: A CASE STUDY OF IMAGE-SCHEMATIC METAPHORS IN CARTOONS

ELŻBIETA GÓRSKA

Introduction

Spatialization of abstract ideas is one of the dominant research questions in studies of conceptual metaphor in cognitive linguistics. This issue has been commonly addressed on the basis of linguistic data alone (see, e.g., Lakoff 1993; Lakoff and Johnson 1980, 1999; Kövecses 2000). In this article, however, I will join the trend of research on co-speech gesture (see, e.g., Cienki 1998b, 2005, 2013; Müller 2008a, 2008b; Calbris 2008; Mittelberg 2010), film (e.g. Forceville 2006, 2013), and music (e.g. Zbikowski 2009, Górska 2010, 2014) and take a multimodal perspective on this issue. Specifically, I will focus on the spatialization of various aspects of the concepts of WISDOM and STUPIDITY in cartoons by means of image schematic metaphors, i.e. metaphors that evoke an image schema or an image schema complex as their source domain and whose function is to highlight some aspect or aspects of these two abstract concepts.

Image schemas (Johnson 1987; Lakoff 1987), let us recall, are prelinguistic patterns of sensory-motor experience which emerge from our physical interactions with the environment, of which bodily movement through space, perceptual interactions, and manipulation of objects play a crucial role. Being derived from such embodied experiences which are themselves inherently meaningful (in that they have predictable consequences), image schemas have their internal logic which forms the grounds for making predictions about objects and events in the physical world. It is also important to note that image schemas may have not only

dynamic, but also static realizations. What is crucial for our concern here, however, is the fact that, due to their grounding in multisensory experiences, image schemas are "cross-modal", i.e. are able to transfer information between different sensory systems. I will aim to show in this chapter that the cross-modal activation of image schemas underlies a coherent interpretation of a selection of cartoons by the Polish artist Janusz Kapusta. To be more precise, my purpose is to discuss a number of creative multimodal image schematic metaphors which, taken together build a verbo-visual portrait of WISDOM and STUPIDITY constructed by Janusz Kapusta in his cartoons.

The underlying idea which forms the backbone of my discussion goes back to Lakoff's Invariance Hypothesis that metaphorical mappings preserve the image-schema structure of the source domain, from which it follows that "a great many, if not all, abstract inferences are actually metaphorical versions of spatial inferences that are inherent in the topological structure of image schemas" (Lakoff 1990, 54). It is thus expected that inferencing about the abstract concepts of "wisdom" and "stupidity" will be a multimodal metaphorical version of spatial inferencing inherent in the image schematic structuring of a particular source domain. It needs to be noted also that, following Forceville and Urios-Aparisi, I assume that a defining characteristic of a multimodal metaphor is that its "target and source are rendered exclusively or predominantly in two different modes/modalities" (2009, 4).[1]

The selected cartoons were originally published in the Polish weekly "Plus-Minus", but my data sample (except for one example) comes from a recently published book by Janusz Kapusta (2014) which marked the 10th anniversary of his weekly collaborations with this magazine. It comprises over 200 cartoons, out of about 500 published during this ten year period. As the book-cover shows (Figure 7-1), the cartoons have a characteristic structure.[2]

They always have a protagonist whose shape, as the book cover indicates, is reminiscent of a Buddha or a chess pawn who formulates a caption that is, as a rule, represented above the protagonist's head and linked to it by a short line segment (cf. on the cover it points to the title *Plus-Minus*). As an enlightened sage (a Buddha) or an everyman (a pawn), the protagonist dwells upon issues ranging from various aspects of the world and universe at large, through religion, politics, human life and

[1] The terms mode and modality, as is common in the literature on the subject, are used here interchangeably (see Forceville and Urios-Aparisi 2009, 4).

[2] The book cover and all the cartoons are reprinted here with the permission of Janusz Kapusta, to whom I'm very grateful for it.

human condition to diverse human traits, such as wisdom and stupidity which will be our main concern here. Functionally, the captions may be regarded as "speech balloons" or "thought bubbles", with the little line segment playing the role of a semiotic tool for interfacing the verbal and the pictorial.[3] Since in multimodal genres of this kind the verbal and the visual elements constitute different facets of a single communicative act, the recipient is invited to interpret them in terms of each other with the aim of constructing a unified conceptual whole. In building this conception he or she is thus confronted with a problem solving task – a multimodal riddle whose solution itself might be a pleasurable reward.

Figure 7-1. *Plus-Minus* book cover

For the sake of this study, only the image schematic structure of the cartoons will be focussed on, and therefore, when considering the drawings, I will not go into matters of design or composition, which of course would be relevant in a more comprehensive analysis. Such an analysis should also give an account of the dynamics of meaning construction and the creation of emergent concepts in particular. It needs to be noted also that I assume a multispace model of the Blending Theory (Fauconnier and Turner 1998, 2002) and in these terms the discussed

[3] In the literature, the structure of the interface is described in terms of the carrier-tail-root configuration, and the verbally expressed information (typically the carrier) and pictorially expressed information (the root) as well as the tail, which connects root and the carrier, may appear "in a variety of visual forms" (Bateman: 2014, 109; see also Forceville et al. 2010).

image schemas would capture the structure and organization of the verbal and/or the visual inputs, and define numerous correspondences between them.

WISDOM and STUPIDITY in Cartoons

As is typical of abstract ideas, the concepts of WISDOM and STUPIDITY have only minimal non-metaphorical structures and highly schematic meanings. They both characterize human attributes pertaining to abilities and behaviour which are typically perceived as opposites: a "wise" person has a lot of experience and knowledge and therefore is able to make good decisions and judgments, and a "stupid" person, by contrast, is unintelligent and therefore unable to make good decisions and judgments. My aim will be to show that the multimodal characterization of these two concepts in Janusz Kapusta's cartoons goes far beyond this highly general content, providing directly meaningful structuring to them and enriching their common understanding in a creative way. The means to this end, as I will argue, are to a large extent, derived from our basic embodied patterns of thought – image schemas.

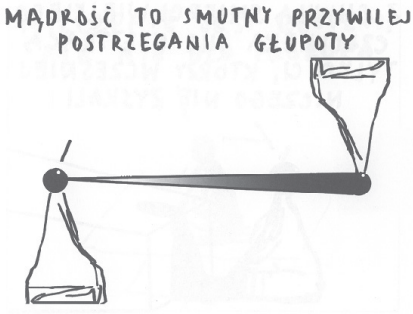

Figure 7-2. "Wisdom is a sad privilege of seeing stupidity" (Kapusta 2014, 156; transl. E.G.)

The first example (Figure 7-2) visualizes the contrast between WISDOM and STUPIDITY by means of our schematic knowledge about the about UP/DOWN orientation – called the UP/DOWN or, the VERTICALITY image schema which, according to Johnson (1987) and Lakoff (1987), is first and foremost derived from our preconceptual bodily experience of gravity (cf. Lakoff 1987, 276). "Because we exist within a gravitational field at the

earth's surface, and due to our ability to stand erect, we give great significance to standing up, rising, and falling down" (Johnson 2005, 20).

In the cartoon, the protagonist who produces the utterance is depicted in the canonical human orientation of being up while the object of his conception is depicted at the end of his line of sight in a position opposite to the canonical alignment, i.e. as upside down. Note that the relevant human qualities are evoked here via a more specific version of the metonymy PERSON FOR A SALIENT ATTRIBUTE (OF THAT PERSON), namely THE PERSON'S VERTICAL ORIENTATION FOR A SALIENT ATTRIBUTE OF THAT PERSON. Based on this metonymy, the multimodal metaphors which underlie a possible interpretation of this cartoon could be rendered as WISDOM IS UP and STUPIDITY IS UPSIDE DOWN.[4] Since the canonical human orientation is a more specific manifestation of the UP/DOWN schema, like the latter it is experientially directly meaningful, and therefore it forms grounds for drawing inferences not only about the physical human posture, but also about the metaphorical extensions taking the UP/DOWN schema (and its more specific realizations such as the human posture in Figure 7-2) as the source domain. Consequently, in terms of the basic logic of this schema, we can infer that WISDOM is associated with a highly positive evaluation, while STUPIDITY is perceived as highly negative.[5]

Let me add briefly that this creative characterization of WISDOM and STUPIDITY is coherent with the conventional metaphorical structuring of a number of concepts (see 1, below) which are "orientationally" contrasted as opposites in our culture:

(1) HEALTHY IS UP – SICK IS DOWN
VIRTUE IS UP – LACK OF VIRTUE IS DOWN
CONTROL IS UP – LACK OF CONTROL IS DOWN

[4] As an instantiation of a deviant behaviour, this multimodal portrait of stupidity may be linked to the cultural model of stupidity which is motivated by the DEVIANT BEAHVIOUR FOR STUPIDITY metonymy; the linguistic evidence for this metonymy is discussed by Feyaerts (1999, 324ff) on the basis of German idiomatic expressions.

[5] Relying on a common association of the UP orientation with positive experiences and of the DOWN orientation – with negative, Krzeszowski (1987, 113) claimed that the UP/DOWN schema is axiologically charged with the PLUS-MINUS poles. A critical assessment of this view was given by Hampe (2005, 107), who observed that "axiological dimensions have to remain default values because evaluation is never absolute" and argued that such default values are determined with respect to much broader and richer, contextualized cognitive models, of which image schema groupings form a part.

RATIONAL IS UP – NON-RATIONAL IS DOWN.[6]

Seen in the light of this system of orientational metaphors, the creative characterization of WISDOM and STUPIDITY in Figure 7-2 could be further enriched with conceptual content: WISDOM can now be correlated with HEALTH, VIRTUE, CONTROL, and RATIONALITY, while STUPIDITY with SICKNESS, LACK OF VIRTUE and CONTROL, and NON-RATIONALITY. Note, finally, that in this cartoon the target concepts are cued in the verbal mode while the image schematic source domain of UP/DOWN – in the pictorial mode only. In effect, since the two modalities complement each other in evoking the metaphorical understanding of these two concepts, the level of activation of metaphoricity in this cartoon would qualify, in Müller's (2008a) terms, as low.[7]

As in the first example, in Figure 7-3 the two modalities cue complementary aspects of meaning and the level metaphor activation is low. Here, again, the target concept – STUPIDITY – is evoked in the verbal mode while the image schematic source domain is cued in the pictorial modality, and in this case it is also activated via a metonymy.

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[6] See, e.g., Kövecses (2002, 35-36). Of the numerous verbal manifestations of these metaphors in Polish consider a few conventional expressions: *Ostatnio świetnie biega - jest w szczytowej formie* "He's been running really fast lately – he's in top form" *(*HEALTHY IS UP) – *Zapadł bardzo na zdrowiu* "He fell in health" (SICK IS DOWN), *Nie można upaść tak nisko* "One should'nt fall down so low" (LACK OF VIRTUE IS DOWN), *Ma cały dział pod sobą* "S/he has the whole section under him/her" (CONTROL IS UP), *Dyskusja zeszła do poziomu podłogi* "The discussion hit the ground (lit. fell down to the floor level)" (NON-RATIONAL IS DOWN).

[7] According to Müller, metaphoricity, i.e. the process of "seeing" one thing in terms of another, "may materialize in different modalities" (2008a, 32). Crucially, "metaphoricity is not only dynamic (that is, a matter of activation) but also gradable (that is, a matter of degrees of activation)" (2008a, 8). It is assumed also that the level of metaphoric activation is empirically observable: it can be correlated with the amount of the so-called "activation indicators", such as repetition, elaboration, specification or multimodal construction (see Müller 2008a, 178-209); and, "the more metaphoricity indicators surround a given metaphor as it is used online during discourse, the higher its level of activation" (Müller 2008a, 198). Relying on the idea of iconicity and the context of interaction, this hypothesis predicts that the more cues direct the attention of the interlocutors to the metaphoric quality of an expression, the higher the degree of cognitive activation of metaphoricity in the producer and also potentially in the addressee (see Cienki and Müller 2008, 495).

Figure 7-3. "Stupidity is a natural affliction which makes seeing that others are not stupid impossible" (Kapusta 2014, 165; transl. E.G.)

Note, first, that in the verbal modality the expression *zauważenie* "seeing, noting" refers to an ability of perceiving something abstract – an ability to realize that "others are not stupid". Clearly, this extended meaning is motivated by the conventional metaphor UNDERSTANDING IS SEEING (Sweetser 1990). Observe now that the figure on the right, which serves to visualize STUPIDITY, is depicted as headless, hence is unable to see anything, either literally or metaphorically. At the same time, what replaces the head, namely the image of a hand, on account of being unexpected is visually highly salient, and hence is crucial to building a coherent interpretation of this multimodal communicative act. I would like to suggest that the hand functions here as a metonymic vehicle providing access to the concept of GRASPING which, in turn, serves as the image schematic source domain for another metaphor of thought, namely UNDERSTANDING IS GRASPING (see Grady 1997; Lakoff and Johnson 1999, 54; 124-125). This metaphor has its sensorimotor motivation in object manipulation and in the primary experience of obtaining information about objects by grasping and manipulating.[8] The metaphor has numerous cross-linguistic manifestations. For our purpose, suffice it to note that in Polish the verb *chwytać* "grasp, catch" has both the basic physical sense as well as the metaphorical sense "comprehend, understand", as in: *Nie chwytam co ona ma na myśli* "I don't grasp what she has on her mind".[9] In the

[8] For the GRASP schema see Chilton (2009).

[9] Note that historically the same metaphor motivated the meaning of the Polish verb *pojąć* "understand, comprehend" (as in: *Nie pojmuję co ona ma na myśli* "I don't understand what she has on her mind"), which has been derived from the now obsolete physical sense of this verb "catch, take, grasp"; for a similar development of the English *comprehend* see Lakoff and Johnson (1999, 124-125).

context of the drawing, however, the conventional metaphor UNDERSTANDING IS GRASPING – with respect to the figure visualized as stupid – is denied, or questioned: being equipped by nature, which is indicated via the expression *naturalna przypadłość* "natural affliction", with the hand instead of a head, the figure is capable only of physically grasping, and consequently, unable to understand or realize, as the verbal mode states, that "others are not stupid". Under this interpretation, the creative multimodal metaphor can be phrased as STUPIDITY IS PHYSICAL GRASPING.

The cartoon in Figure 7-4 can also be seen as a creative reworking of the opposition between WISDOM and STUPIDITY. In this case, the verbal mode specifies that they are not straightforward opposites, and the pictorial mode cues the relevant source domain as a more specific realization of the PATH schema – a series of radiation paths,[10] which spread out from the protagonists head but, conspicuously, not from the figure the protagonist is facing.

Figure 7-4. "Wisdom is not a negation of stupidity, but stupidity is a negation of wisdom" (Kapusta 2014, 160; transl. E.G.)

A quick look at Figure 7-5 where the concept of WISDOM is also considered may provide a clue to a coherent interpretation of the radiation paths in terms of motion (via the metonymy PATH FOR MOTION):

[10] For more on "radiation paths" and (fictive) motion see Talmy (1996, 221).

Figure 7-5. "Light like wisdom spreads out to the spheres of darkness" (Kapusta 2014, 181; transl. E.G.)

Note, first, that in this cartoon the caption expresses a simile which, in contrast to the previously considered cartoons, does not evoke WISDOM as the metaphorical target, but as the source domain for the conceptualization of another abstract concept that is difficult to grasp – LIGHT. In the pictorial mode, therefore, the radiation paths visualize the metonymic vehicle for accessing the metonymic target – motion of WISDOM (via the PATH FOR MOTION metonymy) that spreads out to the spheres of darkness. It is beyond doubt that the choice of the head as the origin of wisdom's radiation is well-motivated in our culture – it is rooted in another conventional metonymy – HEAD FOR INTELLIGENCE (Lakoff and Johnson 1980, 36). Note, incidentally, that the verbal simile expressed in the cartoon also opens up another interpretation, in which the target concept – LIGHT – is visualized as spreading out in the same manner as WISDOM.[11]

Seen in the context of this cartoon, the multimodal structuring of the opposition between WISDOM and STUPIDITY in Figure 7-4 can now be interpreted with respect to the unique ability of wisdom to radiate out (in analogy to physical light) from its centre of origin – the head – to the spheres of darkness. The creative metaphor underlying this interpretation can be rendered as: WISDOM IS RADIATION (OF LIGHT TO THE SPHERES OF

[11] In a commentary to the book's section from which the cartoon in Figure 7-5 comes, Kapusta observes: "... in descriptions given by people who have lived through a clinical death the image of light frequently recurs. [In these descriptions] it [the Light] is not physical. It's like a Light of reason. So may be this very Light has created the covering darkness, in which the physical light that we are experiencing is born in its image and likeness" (2014, 177; transl. E.G.).

DARKNESS).[12] This conception of WISDOM does not rest upon any reference to STUPIDITY, hence, as the caption states, WISDOM is not a negation of STUPIDITY. By contrast, stupidity is visualized in this cartoon as unable to radiate out, and so, by entailment STUPIDITY IS LACK OF RADIATION (OF LIGHT TO THE SPHERES OF DARKNESS). On this account, then, STUPIDITY would qualify as a "negation" of WISDOM (but not conversely) .

With regard to the interaction of the two modalities in the cartoon in Figure 7-4, the verbal and the pictorial complement each other: the target concepts are evoked verbally, while the image schematic source domain of MOTION is cued metonymically via the radiation paths (i.e. more specific realizations of the PATH image schema) depicted in the drawing. In effect, since there is no overlap in the conceptual content of this multimodal metaphor, the degree of metaphoricity is, as in the previous examples, low.

Figure 7-6. "Wisdom can walk along the paths of stupidity, not losing anything" (Kapusta 2014, 158; transl. E.G.)

Similarly to Figure 7-4, in Figure 7-6 WISDOM is again portrayed as unaffected by its counterpart – STUPIDITY. In this case, however, there is a higher degree of multimodal activation of metaphoricity. On the one hand, the image schematic source domain of PATH is cued in the two modes.

[12] This creative metaphor may be regarded as a more specific instance (elaboration) of the conventional metaphor REASON IS LIGHT which, as Lakoff and Johnson (1999, 545) argue, underlies the conception of mind characteristic of rationalism. This conventional metaphor is itself a submapping of the UNDERSTANDING IS SEEING metaphor (note also its other submappings which are relevant here: IDEAS ARE OBJECTS, KNOWERS ARE SEERS, INTELLIGENCE IS VISUAL ACUITY) (ibid.).

Verbally, it is evoked via the noun *drogami* "paths, Instr." and pictorially it is represented as a series of curved lines on which the protagonist is standing. On the other hand, the MOTION schema is explicitly cued only in the caption (cf. the verb *chodzić* "walk"), however we can easily establish here a cohesive tie with the pictorial mode by a metonymic activation of MOTION from the paths depicted in the drawing. At the same time, there is also another multimodal link: verbally personified WISDOM is pictorially represented as the protagonist.[13]

Observe now that the curved lines in the drawing form a multimodal unit with the expression *drogami głupoty* "(along) the paths of stupidity". Note further, that the shape of these lines is in sharp contrast with two long straight parallel lines enclosing the protagonist's head. I would argue that the contrasting shape of these lines is by no means accidental here. The key to a coherent interpretation of this aspect of the cartoon lies in the STRAIGHT image schema,[14] which provides metaphorical structuring to a whole range of abstract domains in Western culture, including DISCOURSE, MORALITY, EXPECTED SOCIAL BEHAVIOUR and – immediately relevant to our concern – the domain of THOUGHT (see Cienki 1998a). Crucially, as Cienki (following Sweetser 1987 and Emanatian 1996) observes:

> A dominant model of serious thought in American society (but not exclusive to it) emphasizes its logical nature, and value is placed on the sequential development of each idea based on immediately preceding ones. Consistent with this model, logical thought is understood metaphorically as motion along a straight path, and illogical or insane thoughts or judgments, as well as those for whom such thought is characteristic, are *bent, warped, contorted*, etc. (1998a, 121)

In short, image schematic structuring of THOUGHT in terms of STRAIGHT/NON-STRAIGHT applies to both, its logical vs. illogical aspects and to sanity vs. insanity of an individual. Verbal manifestations of these oppositions are cross-linguistically common (see Cienki 1998a). By way of illustration a few examples would suffice:

(2) ORDERLY (LOGICAL) THOUGHT IS STRAIGHT (and, by entailment, UNORDERLY/ILLOGICAL THOUGHT IS NOT STRAIGHT)
a. *to think straight* [in a logical manner] (Cienki 1998a, 122)
b. *prjamoj smysl delat' X* (Russian)

[13] Note also that personification may be regarded as a specific realization of the OBJECT schema.

[14] Johnson refers to it as the STRAIGHT-CURVED schema (2007, 21).

straight sense do-INF X
"it makes a lot of sense to do X" (Cienki 1998a, 132)
c. *myśleć pokrętnie* (Polish) "think in an illogical manner"

The diachronic data in (3a-c) show also that the spatial understanding of insanity based on this schema is deeply rooted in our culture:

(3) AN INSANE MIND/INSANE THOUGHT IS NOT STRAIGHT
a. *delirium*< Latin *dēlīrāre* "to deviate from a straight line < *dē-* "away from" + *līrā* "a furrow" (Cienki 1998a, 122)
b. *durak; duret'* (Russian) <PIE **dhe wér-* "swirl, whirl"
"a fool (M); to go crazy" (Cienki 1998a, 132)
c. *bredit'* (Russian) <Common Slavic **-bred-* "roam, wander"
"to be delirious, rave" (Cienki 1998a, 132)
d. Cf. the Polish equivalents of (a-c): *delirium*, *dureń,* and *bredzić*

Importantly, the same metaphor also motivates recent extensions:

(4) a. *You're bent/twisted/warped*! (colloquial – joking that someone is crazy; this is a metonym: a person stands for their behavior/thoughts) (Cienki 1998a, 122)
b. *Pokręciło go!* (Polish) "literally, he got twisted (coll. he went mad/crazy)"
c. *Ale pokręcony*! (Polish) "lit. He is so twisted! (coll. He is so crazy/stupid!)"

Understood in this context, the multimodal structuring of WISDOM and STUPIDITY in Figure 7-6 can be interpreted by two creative metaphors: WISDOM IS MOTION ALONG A STRAIGHT PATH and STUPIDITY IS MOTION ALONG A NON-STRAIGHT PATH.

Note further that the embodied grounding of the STRAIGHT schema provides experiential motivation for a typically positive evaluation of concepts metaphorically understood as STRAIGHT, and a negative evaluation of concepts which are conceived of as NON-STRAIGHT. Experientially, as Cienki observes:

> Coordination and bodily control constitute a largely unconscious part of our daily functioning. There is a significant relation between our bodies being straight, up, and in control; resisting the force of gravity, *standing up straight*, involves a specific kind of muscular tension. Contrast this with the relation between being bent, down, and a lack of control; when submitting to a force or influencing factor (e.g., fatigue), the body is bent

> over, slouched. The qualities of straightness, control, and being up, strong, and firm, therefore, commonly group together in our experience given how our bodies function, with a contrasting grouping being bent/curved, lack of control, down, weak, and soft (1998a, 111). Moreover, it is part of our experience of bodily motion that "[i]t takes less time to get somewhere via a straight path rather than a curvy path given a set rate of movement." (ibid., 112)

Given the previously mentioned cultural model of thought and the experiential motivation of the STRAIGHT schema, I would suggest that in Figure 7-6 the pictorial cuing of WISDOM by means of two straight lines within which the protagonist's head is situated is likely to strengthen the positive evaluation of this concept. This would also entail that the representation of the "paths of stupidity" as curved contributes to the negative evaluation of its counterpart. A word of caution is in order, however: The fact that many STRAIGHT metaphors receive a salient positive evaluation in Western culture cannot be taken as universally valid. Rather, it should be seen as a result of a strong correlation between embodiment and particular cultural stereotypes. In Russian, for example, aside positive evaluation of LOGICAL THOUGHT which is STRAIGHT (cf. 2b above), there is also a salient association between STRAIGHT THOUGHT and lack of creative intelligence (cf. Cienki 1998a, 141). This conception reflects a different stereotype, namely of a person whose thinking is too straight and not flexible (cf. Cienki 1998a, 132). This would also account for a negative evaluation of the Polish *prostak* "(pejor.) boor" and *prostacki* "boorish, crude".

The cartoon in Figure 7-7, just like that in Figure 7-6, cues the image schema complex which comprises the OBJECT schema (realized via personification) as well as the PATH and MOTION schemas, however this complex domain serves to highlight a very different aspect of the target concepts: the rarity of WISDOM and commonality of STUPIDITY.

For the purpose of this chapter, the creative metaphors which provide structuring to this conception can be phrased as WISDOM IS A JOURNEY ALONG A FREE PATH and STUPIDITY IS A JOURNEY ON A CROWDED MOTORWAY. Under this analysis, then, the rarity of WISDOM and commonality of STUPIDITY are conceived of as entailments of these metaphors: travelling along a free path entails that the traveller meets few people of his kind (if any), which is in sharp contrast to a situation on a crowded motorway, where there are many people travelling together. Note, finally, the target concepts, as in the previous examples, are only realized verbally. On the other hand, the activation of the image schematic source domain in this example illustrates quite a complex interaction

between the two modes. The PATH schema is explicitly evoked in the caption only, and in the pictorial mode it is activated metonymically via the PERSON FOR PLACE metonymy. In turn, the MOTION schema (as an aspect of a journey) can only be accessed metonymically – via the verbally expressed concept of PATH (cf. PATH FOR MOTION) or of the TRAVELLER (cf. AGENT/TRAVELLER FOR ACTION/MOTION) who, in turn, is cued in the drawing only.

Figure 7-7. "On the paths of wisdom there is a lot of free space, on the motorways of stupidity all the lines are taken" (Kapusta 2014, 63; transl. E.G.)

The last two examples focus on WISDOM only, and they both crucially rely on the FORCE image schema (Talmy 1988) to construct a highly positive portrait of this concept. In Figure 7-8, WISDOM is portrayed as a causal force that can fill in the "bitter cage of life" with "a bit of hope and sense".

In Figure 7-9, in turn, it is portrayed as a magnetic force that is oriented towards beauty and goodness.

The creative metaphor underlying these two conceptions can be phrased as WISDOM IS FORCE. Note that, even though the source domain is activated metonymically in both cartoons, in each case a different metonymy provides the relevant mechanism. For Figure 7-8, it is the EFFECT FOR CAUSE metonymy (realized verbally by the causative verb *napełniać* "fill in" and the abstract substance coded as *nadzieja* "hope" and *sens* "sense"), and for Figure 7-9 – the INSTRUMENT FOR ACTION (with the specific instrument – the magnetic needle cued in the two modes). Observe, finally, that on account of a high overlap in conceptual content evoked in the two modes, Figure 7-8 and Figure 7-9 both illustrate a high degree of metaphoricity.

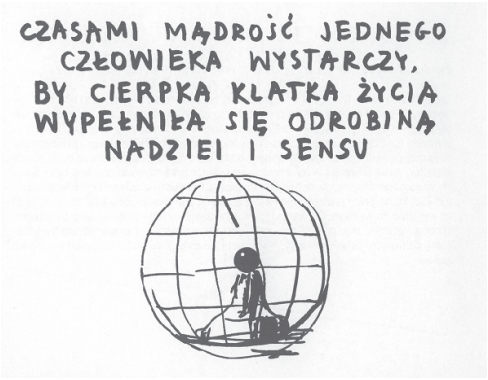

Figure 7-8. "Sometimes wisdom of a single person is enough to fill in the bitter cage of life with a bit of hope and sense" (Kapusta 2014, 139; transl. E.G.)

Figure 7-9. "Wisdom is a magnetic needle oriented towards beauty and goodness" (*Plus-Minus* 4/6 April 2015, transl. E.G.)

Conclusions

By focusing on the verbo-pictorial manifestations of image schemas in Janusz Kapusta's cartoons, I hope to have shown that the discussed schemas are conceptual tools for structuring the idea of WISDOM and STUPIDITY in a creative way. Specifically, in the drawings, by means of the UP/DOWN and the STRAIGHT image schemas these two concepts have been spatially portrayed as opposites – WISDOM was associated with UP and STRAIGHT while STUPIDITY – with the (UPSIDE) DOWN and NON-STRAIGHT. In accordance with the internal logic of these schemas, we can infer that

WISDOM is evaluated as highly positive and desirable, while STUPIDITY has opposite evaluations. I further argued that taken together the metonymic activation of the GRASP schema in the pictorial mode, the verbal cueing of the conventional metaphor UNDERSTANDING IS SEEING, and an implicit reference to another conventional metaphor (UNDERSTANDING IS GRASPING) all serve as grounds for constructing another more complex aspect of this multimodal portrait of STUPIDITY. A person who qualifies as stupid has been portrayed as naturally "equipped" with a hand in place of the head and, therefore, as capable of grasping by means of the physical hand only, and, by implication, as unable to understand and "see" anything. The verbal mode rendered the object of this understanding specific: the person in question is unable to see that other people are not stupid. In this multimodal portrait, WISDOM, in contrast to STUPIDITY, was also conceived of as a rare quality, which is capable of spreading out from its centre – the head. In the analysis, I proposed that this construal crucially relies on the OBJECT, PATH and MOTION schemas complex. Yet another aspect of this portrait was constructed via the FORCE schema. Namely, as a force WISDOM can cause desirable outcomes – it brings about hope and sense to life, as well as detects beauty and goodness. In effect, this rare quality of humans receives here the highest esteem.

In more general terms, the cartoons discussed in this study are a valuable source of insights into the relationship between space, cognition and language.[15] Since in the drawings they portray aspects of image-schematic source domains to highlight facets of the two abstract target concepts, they constitute a "window" onto spatial thinking and on the metaphorical nature of the conceptual system. In particular, their pictorial realizations in a number of cartoons considered in this study provide supportive evidence for the claim that spatialization of abstract ideas in the visual medium may be independent from how such ideas are expressed verbally. This finding corroborates the results of numerous gesture studies (see, e.g., Cienki 1998b; Cienki and Müller 2008; Müller 2008b; Müller and Cienki 2009), strengthening the view that metaphor, as a conceptual mechanism, has its manifestations not only in the verbal mode, but also in other modalities. At the same time, because the cartoons also rely on the verbal medium, they also offer additional insights into multimodal representations of abstracts concepts, and the dynamic activation of metaphoricity.

[15] For more on this relationship see, e.g., Evans and Chilton (eds.) (2010).

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CHAPTER EIGHT

TWITTERATI IN THE TWITTERVERSE: A COGNITIVE LINGUISTICS ACCOUNT OF HASHTAGS ON TWITTER

EWELINA PRAŻMO

Introduction

The language of the Internet is probably the fastest changing variety of language and thus gives an insight into an accelerated micro-scale of language evolution. The language of internet communicators, social networking and blogging platforms abounds in neologisms, novel uses of words and structures as well as changing tendencies in the use of punctuation, symbols and numbers. In view of the accelerating pace of Internet communication as well as in the face of the increasing amount of information exchanged, greater and greater attempts are being made to account, in a systematic way, for the processes underlying this singular nature of the Internet language.

Scope of Research, Methodology, and Data

Based on the internet linguistics research (cf. Crystal 2006, 2008), we propose a unitary analysis of "paralinguistic devices" such as hashtags and punctuation devices found in *Twitterese* which ascribe "tonal colouring" to utterances, serving to express humour, sarcasm, irony, and self-deprecation. Among hashtags offering a meta-commentary on the text, we analyse, e.g. #mylifehascometothis, #mylifeissohard or #middleclassproblems which all serve to express irony and create a safe distance from the information posted. Also, we try to define the possible "meanings" of hashtags and offer a tentative classification of the functions they serve. We claim that hashtags activate certain associations and invite special interpretations of the content they precede. We suggest that they

focus on the speaker's (i.e. a person posting a message) subjective experience, or on the intersubjective impression they are intended to make on the hearer (i.e. a recipient of the post). We analyse the emergent aspects of meaning which arise only on combining an expression with the hash sign. In so doing we adopt the conceptual blending theory (cf. Fauconnier and Turner 2002, Kemmer 2003), coupled with Ronald Langacker's (2008) theory of the current discourse space involving meaning negotiation between the speaker and the hearer (Langacker 2007). It is precisely through the speaker-hearer meaning negotiation, we claim, that lexical items, including paralinguistic devices, acquire their context-based meanings. Thus, we view meanings not as stable entities, but as emergent structures created on-line in the current discourse space. In our analysis we make crucial use of Ronald Langacker's (1990) conception of subjectification, as well as the idea of intersubjectification as proposed in Traugott (2010). The choice of linguistic data is limited to posts found in social communicators and micro-blogging platforms such as Twitter.

Twitter functions as the most promising hunting ground for linguistic innovation, despite, or maybe thanks to the 140-character limit imposed on its posts (which was increased to 280 characters on 7 November 2017). The limit forces Twitter users to be innovative and brief, leading to the widespread use of abbreviations, omitting punctuation and creating ingenious ways to express extra-linguistic cues. On the other hand, this brevity enables frequent updates and shapes the content of the messages posted.

> Because of character limitations imposed on microposts, they are interesting data to observe how meaning can be made in constrained environments. The brevity encouraged by the medium affords frequent and continuous updating, and consequently, jokes abound about the egocentricity of telling the world the minutiae of personal experiences that constitute everyday life. (Zappavigna 2012, 27)

The abovementioned limitations and characteristics lead to the creation of a special type of discourse with its many peculiarities which we are addressing in the remaining part of the paper.

Neologisms

The use of neologisms is widespread in the Twitter community. New expressions are constantly created to keep up with changes and advances of technology. It gives rise to new linguistic items e.g. *to google*, creates polysemy in originally monosemous items e.g. *to tweet*, *to follow,* extends

the grammatical categories or creates derivational neologisms[1] *to unfriend, to unfollow*. Many new creations result from compounding or blending. Consider e.g. *twitterati* (Twitter + litterati; the tweeting elite), *twittersphere* (Twitter + sphere; Twitter and its users), *twitterverse* (Twitter + universe; Twitter and its users), *twibe* (Twitter + tribe; a group of people tweeting about a topic of shared interest), *tweetish* (Twitter + sheepish; feeling sheepish and regretful about something that one has tweeted), *tweetaholic* (Twitter + alcoholic; a Twitter addict), *twalker* (Twitter + stalker; one who stalks others on Twitter i.e. only reads posts and never posts anything back), *twitterhoea* (Twitter + diarrhoea; constantly posting meaningless tweets).

Frequent use of numeronyms is also worth noting. They differ in their degree of conventionalisation, and range from the well known and commonly used, through the institutionalised in the Twitter community to the completely new - which require a certain amount of cognitive effort to be interpreted. Among the (i) more conventionalised numeronyms we may mention e.g. *3D* (three-dimentional), *K9* (canine, a dog esp. used in the police forces or in the army), (ii) less conventionalised but universally recognised (based on a phonetic replacement): *gr8* (great) *l8r* (later), and (iii) still less conventionalised and decipherable only in a context, used frequently on Twitter due to the 140 character limit of posts and the need to safe space: *i18n* (internationalisation), *l10n* (localisation), *E15* (Eyjafjallajökull[2]). In this group, a number does not bear any phonetic similarity to a syllable it replaces, but stands for the number of letters which are replaced. The forth group consists of numeronyms in which numbers replace letters with similar graphical similarity, e.g. *H4CK3D* (hacked).

Apart from neologisms and numeronyms there are many special signs used on Twitter-like services. Consider:

> In contrast to other forms of communication, there is no communal expectation that anyone respond to a tweet, as the metaphor of 'twittering' continuously like a bird implies. There is, however, a social need among users to engage with other voices in public and private feeds. Hence we see creative use of punctuation to reference other users and tag common topics. These expansions in typographic meaning potential are part of a community-driven movement toward Twitter becoming a form of 'public conversation'. It is conversation, however, that is multiparty, temporarily fluid and highly intertextual. (Zappavigna 2011, 790)

[1] For more on derivational neologisms, see Szymanek (2005).

[2] The name of the Icelandic volcano whose 2010 eruption made wordlwide headlines.

Among those "creative uses of punctuation" we can include marked use of "normal" punctuation devices as well as the use of special signs like e.g. @ in front of a user name for addressing them directly.[3] Adding @ to the user name makes the Tweet in which this form of address appears instantly visible for the person in question and may, as a result be said to have a vocative function.

Hashtags

Another special sign used in the twittersphere is the hash sign. The use of hashtags is institutionalised in the Twitter community, although not necessarily conventionalised in the general language. However, the hashtags spread out of the Twittersphere into other modalities, such as song lyrics or even spoken communication.

In the present article we attempt to provide a typology of hashtags. The typology is based on mainly their functions, but also meanings. We suggest the following as nodal points of the classification:

(i) "tagging" pieces of information to make them more easily searchable, categorising content (objective);
(ii) expressing attitudes and beliefs i.e. marking content with "modality" (subjective);
(iii) aiming at eliciting a certain response from the readers, inviting comments (intersubjective).

The need for quicker sorting and finding information in the vastness of the virtual space is the function of the hashtag in its most common usage. Apart from the original function i.e. the hash sign representing the number symbol, point (i) may be considered the most frequent. The very first usage of the hash sign for making data more easily searchable is attributed to Chris Messina and his 2007 Twitter post:

> How do you feel about using # (pound) for groups. As in #barcamp [msg]? (Messina 2007 online)

[3] For example, an isolated question mark to signify the need for clarification, an isolated exclamation mark to express surprise, or a dot to mark decisiveness and authoritativeness. The use of punctuation devices in Twitter and Twitter-like services is marked due to the fact that the need for brevity has rendered the omission of punctuation devices a default option.

It proved to be a useful and convenient tool, and rapidly spread within social networking sites and microblogging platforms. This wide availability and easy use has been also exploited in advertising. Hashtag is a very convenient way to target a certain demographic in a short time and relatively unobtrusive way. A natural step forward in the evolution of the hashtag is that of bringing people of similar political persuasions together. By making a message more easily searchable, we make it more accessible and as a result it is a perfect tool for political propaganda. For instance, it is said to have played an important role in raising awareness about the issues related to the Arab Spring. It served to disseminate information and facilitate organisation of gatherings and protests. Once recognised as a political tool, it started to be appreciated in the marketing world as well. From sharing information about products, to channelling commercials and advertisements into the right target group, the hashtag has acquired new functions. All of them are maintained and used, while new ones are constantly being devised. Often, the hashtag is misused and overused, which only adds to the confusion and makes the description of its multiple meanings even more difficult.

> Hashtags have become cool. Unfortunately, anything trendy or popular opens itself up to heinous misuse. Subsequently, there are those who use hashtags without any semblance of irony or functionality. We've all seen Facebook statuses bearing bland hashtags that seem to serve no apparent purpose: #onholiday or #latte or #books. Even more aggravating: a post that's drowning in a sea of irrelevant or obscure hashtags (a disease especially virulent on Instagram). The perpetrators of this insufferable tendency seem to have some dim perception that hashtags will draw attention to their post, but they don't quite know how to use them and thus overcompensate viciously. Misused, overused, and adopted for cheesy marketing purposes, it's no wonder that hashtags invite mockery. (Gao 2015)

In this paper we want to place particular emphasis on functions (ii) and especially (iii), which is the most elusive, but at the same time the most intriguing one. We will attempt to create a classification of hashtags, giving special attention to the (inter)subjective hashtags. We focus on the relatively newest stages of the evolution of the hashtag which, undoubtedly, are related to the previous uses and cannot be totally separated from them. The hashtags that we intend to analyse in detail are those which add extra semantic value or modal coloration to the expression that they precede, as well as those which are directly aimed at the audience. This "modality" may express irony, sarcasm, self-mockery or, as Zimmer writes, self-deprecation:

> Among Twitter's triumphs is the reinvention of self-mockery. By hijacking a feature known as the hashtag, Twitter users have found new ways to inject tiny packages of self-directed sarcasm into their tweets. (...) Suddenly, a humble indexing tool became a sophisticated new technique for self-deprecation in type. (Zimmer 2016)

We suggest that this emergent meaning which appears on combining the hashtag with its content can be accounted for by means of the conceptual integration theory.

Conceptual Integration Theory

As proposed by Fauconnier and Turner (2002), conceptual integration theory is a theory that explains the process of juxtaposing and integrating individual concepts. The theory has been applied to the analysis of meaning creation in lexical blending by Kemmer (2003). But whether we apply it to morphemes, lexemes, or concepts belonging to different modalities, like language and music, language and image, etc. (cf. Forceville 2007), the main rationale remains the same. The blended concept, rather than being a sum total of its constituent parts, is a novel entity with additional meaning not directly derivable from either of its constituent parts. As a result, the blending process provides an ideal illustration of the dynamic nature of meaning creation. Meanings, rather than stable and fixed to forms, are constantly changing, adjusting to contexts, and malleable in many ingenious ways.
The theory is represented graphically in Figure 8-1 (adapted from Fauconnier and Turner 2002):

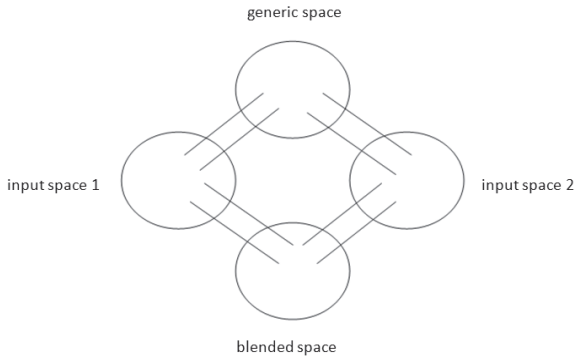

Figure 8-1. Conceptual integration model

There are at least four spaces. A minimum of two input spaces, each of which contributes some information into the blended space, and the generic space which constitutes the shared elements, relevant to each of the input spaces only in a decontextualised scenario. For an expression in context, the common ground is established with reference to the context itself. Brand and Brandt put it in the following way:

> The structure that the inputs have in common, the shared structure ("generic" structure in Fauconnier & Turner's terms), is specified by what is situationally relevant. It is thus not cognitively realistic that this structure exists in the mind as a definite list of entities and relations independent of a goal, a purpose, motivating a conceptualizer to evoke these similarities. As with other categories, the category "shared structure between the inputs" is context-sensitive. Though it may be analytically possible to construct such an exhaustive list for every blend, it is not phenomenologically plausible that such a list is evoked in the mind of the conceptualizer in order to construe the meaning of a blend. (Brandt and Brandt 2005, 232)

Regardless of whether some information is derived from the generic space, or whether it is supplied by the context, there is also the non-derivable component which contributes to the overall meaning of a blend. This emergent, non-derivable value is what we focus on.

More often than not, the extra semantic value, which seems not to originate from either of the input spaces, is a result of conventionalisation of a blend. For instance, a compound such as *wheelchair* is a highly conventionalised item whose meaning is composed of semantic elements provided by both input spaces as well as our conventional or background knowledge. Thus, a *wheelchair* is not just a chair with wheels (or one wheel, as suggested by the singular lexical form of the modifier of the compound), but a special type of chair used by the disabled. This extra knowledge is not explicitly encoded in either *wheel* or *chair* but is well known and conventional, and thus – far from novel. However, the conceptual integration theory is very often used to account for the creation of neologisms which, by definition, are not conventionalised. This being the case, where does the non-derivable information come from? It emerges during the blending process, or more precisely, on the interpretation of a neologistic blend. Interpretation requires an interpreting agent who also makes use of the contextual information to complement the meaning. Only the interaction of those components, namely the blend itself, the context in which it appears and the active interpretation on the part of the conceptualiser may yield a thorough and successful understanding of a novel concept. This aspect of novelty and the fact that blends require a certain amount of mental effort makes them useful in creating catchy

slogans and memorable expressions. Since the interpretation is not straightforward, blends, once understood, may give some degree of satisfaction to the interpreting agent (i.e. the conceptualiser) and, as a result evoke emotions absent in conventional language processing. Clever and ingenious blends are very often based on wordplay or require extralinguistic knowledge for their proper interpretation, which, as mentioned above, engages the conceptualiser in a kind of a game. An unconventional and unexpected juxtaposition of concepts may also bring about a humorous effect and add to the attractiveness of this particular type of word formation. This explains the popularity of blend-based neologisms in newspaper headlines (to draw attention and to be memorable), as well as in the realm of advertising (to appear humorous, smart, unique, etc.). In either case, since the interpretation of an intentionally-meaningful expression requires an interpreting agent as well as the intention of the "blend-producer", the emergent meaning is intersubjective in nature.

> The utterer, the "sense maker", intends to share some content of thought with an addressee in a semiotic exchange. This semantic content, which is inherently intersubjective, borne of the speaker's intention to have the addressee recognize his utterance as an attempt to engage in a semiotic event of shared attention, as well as its pragmatic implications (its status as a communicative act), constitute the meaning of a metaphor [or a blend – EP]. (Brandt and Brandt 2005, 219)

In this way, the conceptual integration model should be supplemented with the elements belonging to the ground, in Langacker's terms, according to whom:

> The term **ground** is used for the speaker and hearer, the speech event in which they participate, and their immediate circumstances (e.g. the time and space of speaking). As the "platform" for apprehending the content evoked, the ground enters into the meaning of every expression, even when construed with maximal subjectivity. (Langacker 2008, 78)

The final model, henceforth, can be depicted in Figure 8-2.

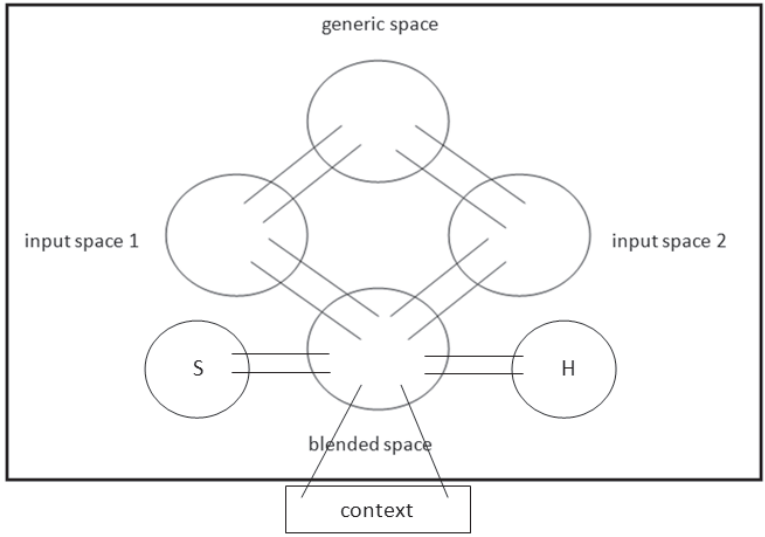

Figure 8-2. Conceptual integration model extended

S stands for the speaker. The speaker's intention is included in the overall meaning contained in the blended space. H is the hearer, and the hearer's interpretation also plays a part in the meaning construction. The two remaining lines link the blended space with the context which must also be taken into account. Context may be understood in many ways. Firstly, it is the reference to the shared cultural values and knowledge of current affairs (i.e. the political context). Secondly, it is the situational context established within the current discourse space (cf. Langacker 2008) encompassing the current usage event and its participants. The participants i.e. the speaker and the hearer are engaged in constant meaning negotiation or meaning-making process. This configuration emphasises the dynamic nature of meaning which, in turn, finds in reflection in ever-changing conceptualisations.

> I have hypothesized that subjectification and intersubjectification involve the reanalysis as coded meanings of pragmatic meanings arising in the context of speaker-hearer negotiation of meaning. Subjectification is the development of meanings that express speaker attitude or viewpoint, while intersubjectification is the development of the speaker's attention to addressee self-image. (Traugott 2010, 60)

In the objectively construed hashtags, the participants of the usage event (the speaker and the hearer) may remain in the background, unprofiled. In this case, it is only the combination of the content and the hash signs which plays a role in meaning construction. In the hashtags which express some form of modality, the speaker is added into the focus, or profiled, whilst in the intersubjective hashtags all the elements, also including the hearer, contribute to the meaning construction.

In this way, we have now arrived at the final model of the theory which we will apply to the interpretation of hashtags in the remainder of the chapter.

Case Studies

Subjective Hashtags

Firstly, we focus on the hashtags with some degree of modal function i.e. the function of expressing a speaker's attitude[4] towards an event. This attitude may be of an affective nature, i.e. express the speaker's desires, or it may be related to the speaker's judgement of an event according to certain rules, norms, expectations. Intuitively, the expression of desires and emotions feels more subjective, but a speaker's expectations and judgements also belong to this group even though the norms and standards of behaviours by which an event is judged may be perceived as objective. Such hashtags may be said to express deontic modality.

(1) why is it white people in US hates black people.. fyi native americans are black! #youshouldknow

Another group is the hashtags which express various degrees of certainty. These are means of adding epistemic modality to a post:

(2) If my 2 horses were both first to fall.. Do I get anything back!? #Surely #GrandNational

(3) Politicians will offer everything just to win. Including free from taxes. #idoubt

[4] According to Zappavigna (2015, 8), attitude may be related to: affect (expressing emotion), judgement (assessing behaviour), and appreciation (estimating value).

Intersubjective Hashtags

The first set of cases under analysis pertains to the description of everyday events and mundane experiences that are shared via Twitter posts. They are tagged with hashtags which serve as hedge-like expressions. They do not, however, lessen the certainty of what is posted (i.e. they are not markers of epistemic modality per se), but rather change the seriousness of tone. But why share information which is not worth sharing in the first place? Zappavigna explains:

> Microblogging, and social media in general, affords new insight into aspects of everyday life that have hitherto not been readily made public. Personal expression of routine experiences has never been subject to real-time mass dissemination in the way that we are currently witnessing. Microblogging services provide a forum where these routine experiences may be almost instantaneously broadcast, whether to share a positive moment or to satisfy the very human need to complain (...) Microposts frequently provide an opportunity for bonding around the quotidian, affording the private realm of daily experience to a public audience. (Zappavigna 2012, 37)

What is more, it takes time and effort to regularly post information concerning every-day activities. So maybe the light-hearted downplaying achieved by means of a deprecating hashtag has a different function altogether? It is not difficult to conceive that hashtag-hedge aims to create a 'safety barrier' and helps avoid potential criticism which could affect the Twitter user. This explanation sounds even more plausible considering the fact that:

> (...) microblogging can be seen as an ongoing performance of identity. Perhaps another significant explanatory factor is the human desire for affiliation: we exist within communities of other voices with which we wish to connect. The stances we adopt and observations and evaluations we share all exist relative to the meaning making of other members of our social network and to all other potential networks of meaning. In other words, we perform our online identities in order to connect with others. (Zappavigna 2012, 38)

Thus, on the one hand there is a desire for self-expression and constant update of the online identity, and on the other - the fear of rejection and criticism. They are mediated by the safety hashtags which soften the impact and provide protection. Let us now turn to specific examples.

The first hashtag under analysis is *#mylifehascometothis*. This hashtag, added to a post serves a hedge-like function, but instead of adding the air

of uncertainty it creates a different type of safety margin. It adds the element of self-mockery and self-deprecation and in this way lessens the impact of the post. Without this self-mocking hashtag a post would come across as pretentious and unnecessary. The hashtag guides the interpretation and makes the recipient take the post not so seriously. In this way, the sender may share the most compromising information without bearing the responsibility for whatever embarrassing event the post refers to. In this way, the hashtag proves that the sender is capable of being critical to themselves. Let us analyse a set of examples from Twitter:

(4) Fell asleep sitting straight up watching the Spongebob movie.. #mylifehascometothis

(5) You know it's sad when you have to set an alarm to wake up from a nap #mylifehascometothis

(6) Drinking coffee through a straw. #mylifehascometothis #nope

(7) I think I'm going to buy a cat this weekend #mylifehascometothis

(8) Being sober is absolutely miserable. #mylifehascometothis

(9) To reduce chocolate consumption, store all chocolate in the freezer. #mylifehascometothis

The hashtags in the abovementioned examples signalise irony. Whereas in some of them a sensitive reader would notice an intentionally ironic overtone, in others e.g. (4) the mood is indecipherable without the meta-commentary provided by the hashtag.

Another set of examples illustrates a hashtag which serves a very similar function. It downplays the sender's attitude towards a particular problem that they describe in order to avoid possible criticism from the readers.

(10) Why am I going back to uni when game of thrones start... #mylifeissohard

(11) Don't you just love when your eye is itchy but can't scratch cause makeup. #mylifeissohard

(12) My hand is sore from bowling, so I can't take notes comfortably #mylifeissohard

(13) I got two new dresses, and they're both too big. #mylifeissohard

(14) My eye has been doing this swelling thing all weekend and it's ruining my selfies. #MyLifeIsSoHard

(15) You know what the worst feeling is? Having 2 pieces of sushi left but being too full to eat them #mylifeisSOhard

This hashtag, however, differs from *#mylifehascometothis,* as its real meaning is the opposite of the literal one. Whereas *#mylifehascometothis* could be just as well be used without the hash sign to signalise irony, sarcasm, self-mockery or any other similar undertone, *#mylifeissohard* requires more mental effort on part of the reader. *#mylifehascometothis* is supposed to imply that somebody's life has really reached a point they are not particularly proud of, but *#mylifeissohard* actually means that the life is not so hard and the problems described are exaggerated and should not be taken seriously. This reading would be possible without the explicit marker of the changed tone i.e. the hashtag, but such an interpretation is not necessarily obvious, and in some cases - impossible.

> The particular brand of irony that a hashtag boasts can't be conveyed in any other way. (...) On the other hand, the ironic hashtag combines jest, flippancy, and self-mockery in just the right quantities. I think of the ironic hashtag as a grammatical mood, like the French subjunctive. (Gao 2015)

Exactly the same applies to *#firstworldproblems* and *#middleclassproblems*. Coupled with those expressions, the hash sign sets a certain mood, activates certain interpretation. It is a written equivalent of a wink or a change in the tone of voice which signals the speaker's attitude and calls for a specific interpretation. Since changes in intonation or facial expressions are absent from written communication, hashtags serve as one possible solution to fill in the vacancies in emotional expressions. Says Zimmer:

> Think of all the ways we have in everyday conversation to take the wind out of our own sails. A chuckle, an ironic tone of voice, a shrug of the shoulders, or even the strategic use of "air quotes" can all convey the message, "Don't take me too seriously." It's harder to get across a self-effacing tone when we communicate online. Typing out a message lacks

> those expressive nonverbal cues that linguists call "paralanguage." You might resort to emoticons to help soften your tone, or playful abbreviations like "JK" for "just kidding," but the arsenal of self-deprecating signals in the electronic world is a paltry one. (Zimmer, online)

Consider:

(16) I finished watching a series on Netflix, and now I'm sad and bored. #firstworldproblems

(17) Just took some amazing selfies!!!!! .....but had to delete them because I realized there was a booger in my nose #firstworldproblems

(18) I haven't been able to tweet much since I've been driving all day #firstworldproblems

(19) My professor canceled our 8 a.m. class, but left a note on the door rather than emailing us. #firstworldproblems

Self-denigration and self mockery may also have a solidarity-building function (Zappavigna 2012, 155); by admitting one's failures and sharing misfortunes we invite positive and emphatic comments. This sympathy-provoking function may be seen in hashtags like *#fail, #myfail, #mybad.* Consider:

(20) In case you too ever encounter a professional racecar driver, the proper nomenclature is "racer," not "racist." #mybad

(21) I've lived here almost 2 years, and I still can't spell Massachusetts without looking it up. #Ifail

(22) Only I would show up 5 mins late to an appointment that's directly at the end of my block ☹ #ifail

(23) Yep. Pulling my hamstring definitely wasn't the best thing to happen a week before running a marathon.. #ifail

A number of posts marked with *#fail, #ifail, #ifailatlife* and the similar seems to be related to the domain of schoolwork or academic duties and the domain of healthy eating and staying fit. In such cases, this public

penance may function as a means of clearing the speaker's conscience or alternatively, may constitute an act of public humiliation which would deter further wrongdoing i.e. procrastination in fulfilling academic tasks and eating sweet and fatty food in the case of people intending to stay fit.

(24) Lacking the motivation to do any form of revision for my exams in less than 2 months #GCSE #ifailatlife

(25) One week im motivated and will do 4000 words the next i cant even managed to reach for my laptop. #ifailatlife

(26) Eating chocolate and cookies and reading about diabetes and metabolic syndrome... #Ifailatlife whoopsies!

(27) So I planned to get up early before work and write some of my essay due tomorrow, so far I've sat in bed and eaten toast. #IFailAtLife

(28) When you had every intention of waking up and going to the gym but you're still blanket burrito in bed! #ifail

Whatever instance we take into consideration, all of the abovementioned examples seem to share one common feature, namely they serve an "affiliative function". As Zappavigna claims:

> Tweets and the hashtags which they contain may thus be thought of as two different orders of experience: a tweet is an instance of language use, while a tag is language about language, performing what this article will show is an affiliative function. (Zappavigna 2011, 792)

The hash sign makes it clear that the message which follows is supposed to carry some extra value. Similarly to a linguistic hedge, the hashtag gives the speaker some safety margin and lessens the impact of the utterance. It prepares the hearer to expect oncoming irony, joke, sarcasm and not to take the following expression literally. Thus, the meaning of the hashtag is not semantic and cannot be easily defined. It should be located on the pragmatic extreme of the semantics-pragmatics scale, as it is inextricably connected to the context, speaker's intention and hearer's interpretation, i.e. the elements also present in Langacker's model of current discourse space. Meaning creation in hashtags can be thus accounted for by conceptual integration theory (Fauconnier and Turner

2002), because it is dynamic and emergent. The final interpretation of the intended meaning can only be accomplished after the integration of the hash sign with the expression it precedes. It can be represented schematically as in Figure 8-3.

Here, the enhanced meaning is understood as the meaning reinforced by the pragmatic values listed above, which differentiates it from the meaning of a text taken at face value. The reading of such a blend (hash sign and text combination) deviates from the default interpretation. This new quality can only develop as the result of blending.

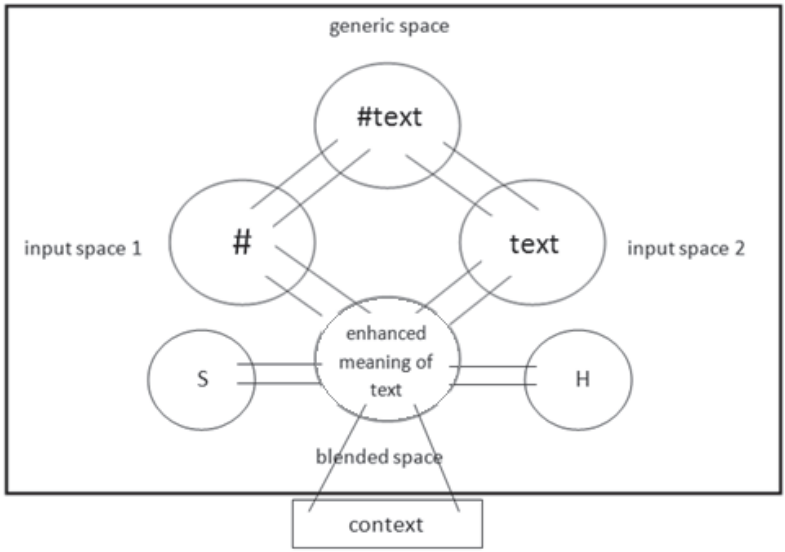

Figure 8-3. Conceptual integration model for analysing hashtags

Conclusion

Considering the multitude of situations for whose description hashtags may be used as well as the rapid pace of information exchange on services like Twitter, a consistent and convincing typology of functions of hashtags is hardly possible. Different uses seem to form a network of overlapping categories with several more pronounced nodes. Among the most salient and important functions is, without a doubt, that of making tagged content more easily searchable. However, this searchability of content has spawned several different types of functions and we claim that the

evolution of hashtag has taken two parallel lines. The main stem of evolution is still that of hashtag as a means of tagging content in a certain way to facilitate access to it. The second branch is that of hashtags as a metacommentary on the content they tag. Thus, firstly, hashtags proliferate as advertising tools as well as means of political or social activism. They also help users keep up with current affairs and facilitate finding information related to the events that one is interested in. Secondly, they add extra value to the content they attach to. The emergence of those extra effects may be accounted for by means of the conceptual integration theory. Nonetheless, it should be borne in mind that this other function has also developed from the "findability" of the tagged content. By making a post more easily accessible and by channelling it to a certain target audience we invite certain types of comments and reactions. This "affiliative function" (Zappavigna 2011) has given rise to further branches of hashtags expressing deontic modality (i.e. the speaker's attitude, including emotional attitude, judgement of behaviour, and appreciation of values), hashtags expressing epistemic modality– which both can be branded as subjective, and finally hashtags which aim at eliciting certain reactions from other members of the Twitter community.

This simplified classification may be represented graphically as in Figure 8-4.

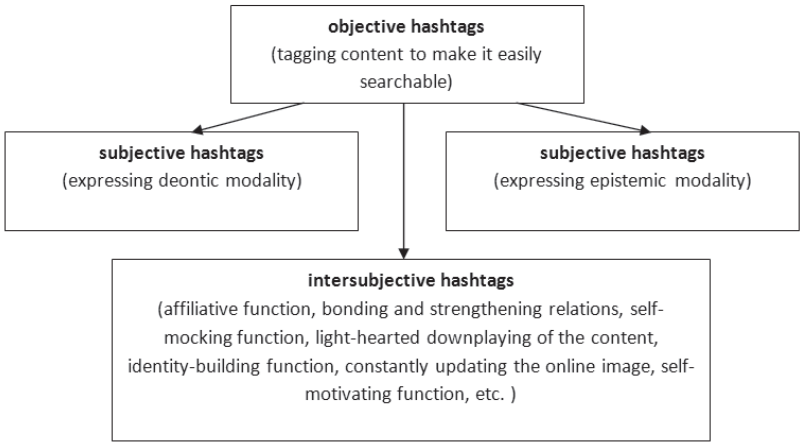

Figure 8-4. Functions of hashtags

The intersubjective function of hashtags has been an inevitable step in the hashtag evolution, considering the nature of communication via microblogging platforms such as Twitter. Additionally, The use of intersubjective hashtags seems to be gaining momentum and certainly offers great potential as a field of further research.

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CHAPTER NINE

ON THE SCOPE OF CONCEPTUAL METONYMY IN THE COMPOUND SIGNS OF POLISH SIGN LANGUAGE

KRZYSZTOF KOSECKI

Introduction

The present article aims at sketching the scope of metonymy in the compound signs of Polish Sign Language (Polski Język Migowy/PJM). The theoretical section introduces the concept of metonymy and the basic properties of signed languages, compares the structure of compounds in phonic and signed communication, and provides some examples of metonymy-based signs in the languages of the deaf. The analytical section discusses the scope of metonymy in the compound signs of PJM. These are divided into several categories, which reflect the increasing complexity of the metonymic basis of their conceptual structure. Finally, the possibility of conceptual metaphor interacting with metonymy in some signs is indicated.

Metonymy

The main function of metonymy is directing attention (Kövecses 2002, 147–48). Two broad types of this conceptual mechanism can be distinguished (Lakoff 1987, 85). Individual cases, for example OBJECT USED FOR USER, can be illustrated by the expression "*The sax* has the flu today" (Lakoff and Johnson 1980, 38), in which a musician playing in a band is identified by reference to their instrument. By contrast, category-related metonymies pick out a member of a category and use it to stand for the whole of it. Thus, the expression "He took *the aspirin* to relieve the cold" may refer to any other medicine giving similar effects. It is an

instance of the metonymy MEMBER OF A CATEGORY FOR THE CATEGORY (Radden and Kövecses 1999, 34).

The analysis below follows Lakoff and Johnson (1980, 36), who regard THE PART FOR THE WHOLE relation – known as 'synecdoche' in traditional rhetoric – as a special kind of metonymy. In an influential paper, Radden and Kövecses (1999, 31) admit that the relationship has been "classified as a type of its own", but also regard it as a form of metonymy in which the entity "most crucially involved" in the conceptual relation is highlighted. Other linguists take a different view of metonymy and synecdoche. Seto (1999, 91–92), for example, regards metonymy as "an E(ntity)-related transfer" and synecdoche as "a C(ategory)-related transfer" based on the relation of semantic inclusion between more and less comprehensive categories. Most other approaches, however, and especially Lakoff (1987, 77–90), Radden and Kövecses (1999, 31, 34–35), and Barcelona (2002, 220–221), see both THE PART FOR THE WHOLE relation and the category-related transfers as types of metonymy.

Signed Languages

Though signed languages operate in the spatial-visual mode, they have all the levels typical of phonic languages, namely: phonology, morphology, syntax, and semantics (Stokoe 1960; Battison 1978; Klima and Bellugi 1979; Sandler 2003; Wilcox 2008). Signs, which are produced by hands, body movements, and facial gestures, fall into two categories: dactylographic or finger-spelled signs represent letters and numbers with ideographic signs used to express ideas. In many cases, both dactylographic and ideographic elements contribute to the construction of meaning.

The spatial-visual character of signed languages is the reason for the broad presence of iconicity in their structure. Though simple referential iconicity based on "a direct relation between linguistic form and reality" (Wilcox 2008, 1117) is common,[1] cognitive iconicity is of paramount importance. As "a relationship between our mental models of image and referent" (Taub 2001, 19), it underlies many signs in which the hands conceptualised as objects moving in space and performing actions in time reflect source domains of metaphors or vehicles of metonymies (Langacker 1987, 77; Wilcox, Wilcox, and Jarque 2003, 141–42; Wilcox 2008, 1119; 1122–24; Sutton-Spence and Woll 2010, 188–95).

[1] It is evident, for example, in the PJM sign *card*, in which the hands trace the shape of the object.

Compounds in Phonic and Signed Languages

In phonic compounds, all morphemes are free, that is, "they can stand alone as meaningful units" (Sutton-Spence and Woll 2010, 103). Many signed compounds also consist of elements which represent two independent meaningful units. For example, the PJM sign *drug addiction* consists of the morphemes *drug* and *addiction* (Kosiba and Grenda 2011, 156–57). Other signed compounds, however, involve the reduction of articulation parameters within either of their elements so as to make the signing more fluent (Sutton-Spence and Woll 2010, 102–103). It is, for example, the case of the PJM sign *wife*, in which the initial element *woman* is reduced in comparison with its independent use (Tomaszewski 2005, 66–67).

The majority of signed compounds are inherent to signed communication, for example the British Sign Language/BSL sign *blood* consists of the morphemes *red* and *flow*; the sign *check* combines the components *see* and *maybe*; the sign *promise* consists of the components *say* and *true*; the sign *believe* is made up of the morphemes *think* and *true* (Sutton-Spence and Woll 2010, 102). Some semantic loans from phonic languages are possible, usually as a result of borrowing motivated by contact between the hearing and the deaf populations. The BSL sign *balance sheet*, which consists of the components *balance* and *sheet* (Sutton-Spence and Woll 2010, 102), represents the category.

Metonymy-based Compounds in PJM: The Analysis

The presence of metonymy in signed communication is widely recognized. Wilcox (2000, 85–92) gives examples of metonymy-based American Sign Language/ASL signs for various referents. Wilcox, Wilcox, and Jarque (2003) discuss the role of metonymy in signs for persons in ASL and Catalan Sign Language (Lengua de Signes Catalana/LSC). Wilcox (2008, 1124) mentions the metonymic basis of signs for animals in ASL and other languages. In BSL, many sports disciplines, animals, and other concepts are also accessed by means of metonymy-based signs (Sutton-Spence and Woll 2010, 188–89; Smith 2010, 48–49; 78–79). However, none of the above-mentioned analyses focuses on the role of metonymy is signed compounds.

I contend that compounds, being a special and complex category of lexical units both in phonic and in signed communication, involve equally complex metonymic relations. Kosecki (2007) was an attempt to analyse various categories of phonic compounds in terms of metonymy. It claimed

that both the heads and the dependent parts of the expressions involved various metonymic relations. The present analysis makes the same claim with regard to signed communication. It argues that two-element and three-element compounds inherent to PJM involve metonymy in their various elements. In some cases, the complexity of metonymic basis increases as a result of the presence of metonymic chaining.

The analysis focuses on the compound signs that meet the following three criteria:

(1) they consist of two elements which are represented as free and meaningful units by Kosiba and Grenda (2011);
(2) they are sequential, that is, their components follow each other rather than being signed simultaneously;
(3) they are unique to PJM, that is, they are not semantic loans from Polish.

The examples have been divided into three categories. The first one covers the cases where metonymy operates only in the first element of the sign; the second includes the compound signs whose second element is based on metonymy; and the third comprises the most complex cases, where metonymy is present in both elements of the sign. The last category has been extended to illustrate the process of chaining of metonymies (Fass 1997, 73). Finally, the possibility of metaphor-metonymy interaction in some compound signs has also been indicated. In each of the sections, the examples are discussed in the alphabetical order.

Metonymy in the First Element of the Compound Sign

The sign *address* (Figure 9-1) consists of the morphemes *live* and *matter*/*affair*. In the first of them, the dominant B-shaped hand is held upright and its edge is oriented outwards; it touches the palm on the right cheek as the head tilts slightly right. The second morpheme is articulated by means of the B-shaped hand held flat and palm upwards, and the dominant A-shaped hand, its edge oriented outwards, hitting it twice (Kosiba and Grenda 2011, 28).

Figure 9-1. The PJM sign *address* (Kosiba and Grenda 2011, 29)

The first component is metonymic because it highlights the action of sleeping, which is only one aspect of living in a place. Because the action of living can be conceptualised as a whole event, the underlying metonymy can be formulated as SUB-EVENT FOR WHOLE EVENT (Radden and Kövecses 1999, 32).[2] The second component is not based on metonymy.

The sign *Jelenia Góra* (Eng. Deer Mountain) (Figure 9-2), which represents a city in south-western Poland, consists of the components *deer* and *mountain*. In the first of them, the left 3-hand-shape, its palm in and edge directed right is placed on the left-hand side of the head, whereas the right 3-hand-shape, its palm outwards, is placed a little higher on the right-hand side of the head; both hands then move up and down twice interchangeably, assuming opposite positions. The second component is signed with a B-shaped hand held upright in front of the right arm of the signer, then moving upwards and left, its edge outwards, and ending with the tips of the fingers down (Kosiba and Grenda 2011, 102).

The initial morpheme accesses its referent by representing the animal's horns. It is thus based on the metonymy PART OF A THING FOR THE WHOLE THING (Radden and Kövecses 1999: 31). The second morpheme is not metonymic, but rather it is an instance of what Mandel (1977) calls "virtual depiction" because "the moving articulator leaves a trace in the shape of the object" (Wilcox 2008: 1117).

[2] See Kosecki (2012, 167–68) for an interpretation of this sign in terms of a simple metonymic chain, which, however, may be too far-fetched.

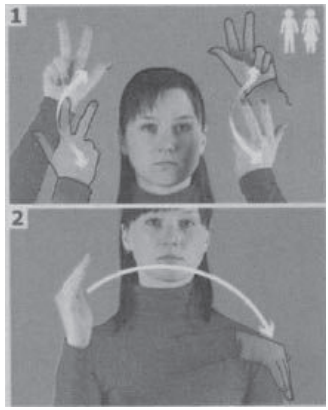

Figure 9-2. The PJM sign *Jelenia Góra* (Kosiba and Grenda 2011, 103)

The sign *letter* (Figure 9-3) consists of the components *post* and *law*. In the first of them, the right I-shaped hand held upright touches the right corner of the lips with the thumb and then moves forwards over an upright arc to a sudden stop. In the second component, the right A-hand-shape, its edge downwards, hits the left B-shaped hand held flat in front of the signer (Kosiba and Grenda 2011, 130).

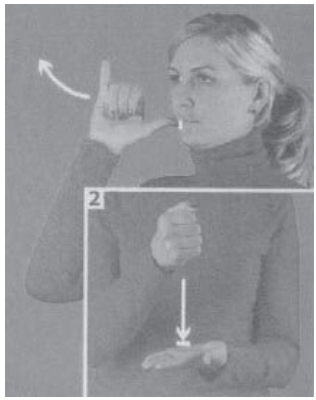

Figure 9-3. The PJM sign *letter* (Kosiba and Grenda 2011, 131)

The first morpheme is based on the metonymy THE EMBLEM FOR THE INSTITUTION, because the dominant hand is iconic of the old postilion's

trumpet. Such an ideogram is still present on post stamps and post boxes in some countries. The second morpheme is not based on metonymy.

Finally, the sign *postcard* (Figure 9-4) consists of the morphemes *post* and *card*. The first one is articulated in the same way as in the previous sign; the second one is produced with left and right L-shaped hands, their edges downwards, making contact with fingertips in front of the signer's chest and moving out (Kosiba and Grenda 2011, 194).
The initial component is based on the metonymy THE EMBLEM FOR THE INSTITUTION. The second one is a virtual depiction of the shape of a card, so it does not involve metonymy.

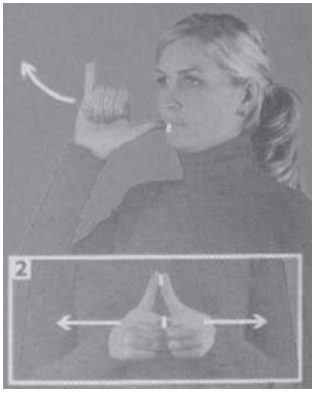

Figure 9-4. The PJM sign *postcard* (Kosiba and Grenda 2011, 195)

Metonymy in the Second Element of the Compound Sign

The sign *infertility* (inability to give birth to children) (Figure 9-5) consists of the morphemes *be unable to* and *baby*/*infant*. The first is produced with the right I-shaped hand held upwards, its edge outwards, touching the nose with the tip of the thumb, then moving over a small upward arc forwards and down to the position with its edge downwards. The second morpheme is signed with the right B-shaped hand held flat and resting on the forearm of the left B-hand-shape; both hands have their palms oriented upwards and edges backwards as they move right and left (Kosiba and Grenda 2011, 38).

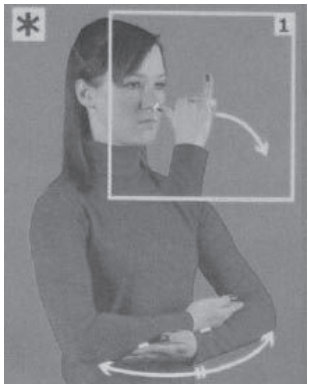

Figure 9-5. The PJM sign *infertility* (Kosiba and Grenda 2011, 39)

The first component is not metonymic, but the second one highlights the action of lulling a baby to sleep, so it is based on the metonymy PROTOTYPICAL ACTION FOR THE PERSON.

Figure 9-6. The PJM sign *obligation to register one's address* (Kosiba and Grenda 2011, 321)

The sign *obligation to register one's address* (Figure 9-6) is made up of the morphemes *to register one's address* and *live*. In the first one, the left B-shaped hand, its palm right and edge downwards, is placed in front of the chest. The tip of the right Z-hand-shape, palm down and edge outwards, touches the space between the middle finger and the raised index finger of the B-hand-shape and then twice moves to the position

edge downwards. The second morpheme is the same as the initial morpheme of the sign *address* discussed at the beginning of the preceding section (Kosiba and Grenda 2011, 320).
The first component is not metonymic, whilst the second one involves the above-mentioned metonymy SUB-EVENT FOR WHOLE EVENT.

Metonymy in Both Elements of the Compound Sign

The sign *apartment* (Figure 9-7) is made up of the morphemes *live* and *room*. The first forms a part of the signs *address* and *obligation to register one's address* discussed in the two preceding sections. In the second one, the left B-shaped hand is placed flat in front of the chest, its palm upwards and edge inwards. Over it is the right C-shaped hand, palm down and edge outwards slightly to the right. It touches the palm of the left hand twice; on the second touch, its edge is oriented to the right (Kosiba and Grenda 2011, 144).

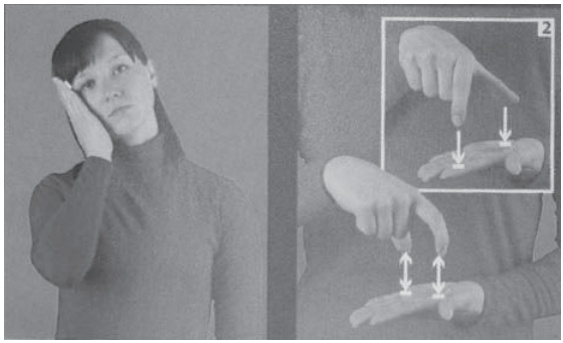

Figure 9-7. The PJM sign *apartment* (Kosiba and Grenda 2011, 145)

The first component of the sign is based on the metonymy SUB-EVENT FOR WHOLE EVENT, which was postulated as a part of the other two signs that involve it. In the second component, the articulators assume the shape of the floor and two of the room walls. It thus involves what Taub (2001, 68–69; following Mandel 1997) calls "substitutive depiction" because the articulators assume the shape of the object. At the same time, they represent the referent by means of its part, so the component is based on the metonymy PART OF A THING FOR THE WHOLE THING.

Figure 9-8. The PJM sign *church building* (Kosiba and Grenda 2011, 119)

The sign *church building* (Figure 9-8) consists of the morphemes *Church* and *house*. The first one is signed with left and right Z-shaped hands held in front of the chest with their edges outwards – the left hand is held flat, the right one is held upwards, and they cross with the index fingers. The second morpheme is articulated by means of left and right B-shaped hands placed aslant in front of the chest, their edges outwards, making contact with the tips of the index, middle, and ring fingers (Kosiba and Grenda 2011, 118).

The initial component is iconic of the sign of the cross, which is usually found on top of a typical church spire. It is thus based on the metonymy CONVENTIONAL SYMBOL FOR THE INSTITUTION. The B-shaped hands held aslant and making contact in front of the chest represent a sloping roof, that is, a part of a typical house. This component is thus based on the metonymy PART OF A THING FOR THE WHOLE THING.

Metonymy in Both Elements of the Compound Sign: The Case of Chaining

The sign *café* (Figure 9-9) is made up of the morphemes *coffee* and *enterprise*. The first one is articulated by means of the left A-shaped hand, its edge down, held in front of the signer; the right L-shaped hand, its edge down, is placed over it and moves left in a small circle twice as it touches the right hand (Kosiba and Grenda 2011, 108). In the second morpheme, the right L-shaped hand placed in front of the left side of the forehead, its palm out, moves right.

Figure 9-9. The PJM sign *café* (Kosiba and Grenda 2011, 109)

The initial component, which imitates the action of turning the old-fashioned coffee-grinder (Wilcox 2000, 88), involves a metonymic chain (Fass 1997, 73). The metonymy MANNER OF OPERATION FOR THE INSTRUMENT precedes the metonymy THE INSTRUMENT FOR SUBSTANCE. The sign represents the process of grinding coffee beans, but it can be used to access all kinds of coffee – ground, drip, and even instant (Wilcox 2000: 88–89). The third metonymy in its structure is thus SPECIFIC FOR GENERIC or MEMBER OF A CATEGORY FOR THE CATEGORY (Radden and Kövecses 1999, 34). The second component traces the shape of the shop sign, which is usually placed above the door. It is thus based on the metonymy PART OF A THING FOR THE WHOLE THING.

The sign *first aid kit* (Figure 9-10) consists of the morphemes *medicine* and *package*. The first one is articulated by means of the left B-shaped hand held flat and palm up in front of the chest. The right A-shaped hand, its edge down and back oriented to the front, is placed over it and moves left in a small circle twice (Kosiba and Grenda 2011, 32).

This element is based on the metonymy MANNER OF PREPARATION FOR THE SUBSTANCE because the dominant hand imitates the process of mixing the ingredients of a medicine by the chemist. As the sign can be used to refer to any kind of medicine, it also involves the metonymy SPECIFIC FOR GENERIC or MEMBER OF A CATEGORY FOR THE CATEGORY. The second element is based on substitutive depiction because only three sides of a package are represented. The underlying metonymy can thus be called PART OF A THING FOR THE WHOLE THING.

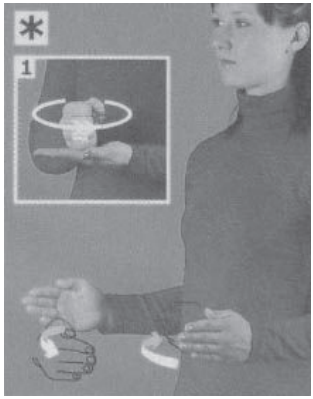

Figure 9-10. The PJM sign *first aid kit* (Kosiba and Grenda 2011, 33)

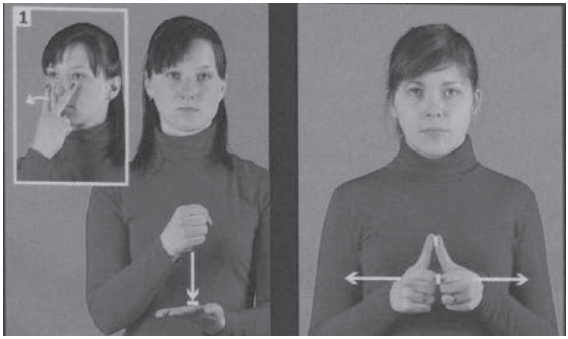

Figure 9-11. The PJM sign *affidavit*/*certificate* (Kosiba and Grenda 2011, 325)

Metonymy in Three-element Compound Signs

The above-discussed compounds are prototypical in that they consist of two morphemes. It is, however, possible to find signed compounds that involve more elements and are also based on metonymy. One example can be the PJM sign *affidavit*/*certificate* (Figure 9-11), which consists of the morphemes *see*, *law*, and *card* (Kosiba and Grenda 2011, 324–25).

In the first component, the hands are placed just below the eyes, and the location is the vehicle of the metonymy BODY PART FOR ACTION. The second component is not metonymic. The third one, as in the case of the sign *postcard*, involves virtual depiction.

Metonymy Interacting with Metaphor in the Compound Signs

Finally, some signs may involve interaction of metonymy with conceptual metaphor. The sign *conference* (Figure 9-12) consists of the morphemes *consultation* and *dialogue*. The first one is articulated by means of left and right O-shaped hands, their palms down, held in front of the chest and moving up and down alternately. In the second one, left and right B-shaped hands held aslant, their palms outwards, touch the lip corners and move alternately forwards (Kosiba and Grenda 2011, 114).

Figure 9-12. The PJM sign *conference* (Kosiba and Grenda 2011, 115)

The alternating up and down movement of the O-shaped hands in the first morpheme may indicate picking out ideas or topics to be discussed. If this interpretation is correct, the sign involves the ontological metaphor IDEAS ARE OBJECTS TO BE MANIPULATED OR PLACED (Wilcox 2000, 112–13). Touching the corners of the lips in the second morpheme points out to one of the speech organs. The location of the articulators is thus the vehicle of the common metonymy BODY PART FOR ACTION.

Conclusions

The broad scope of metonymy can be postulated for the PJM compound signs. The conceptual mechanism either operates in one of the morphemes or underlies both of them. Its distribution is thus similar to phonic compounds–for example, in both Polish and English, the equivalent expressions *parostatek* and *steamboat* contain the metonymy SUBSTANCE FOR MANNER OF OPERATION/MOTIVE POWER in their initial morphemes.

Metonymy types present in the individual signs are varied; ranging from the relatively simple PART OF A THING FOR THE WHOLE THING to more complex category-related cases, they include the two broad types indicated at the beginning of the analysis.

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PART FOUR

CREATIVITY IN LANGUAGE AND TRANSLATION TEACHING

CHAPTER TEN

"EXOCENTRIC" OR "CREATIVE" FORMATIONS? A PLEA FOR AN UPDATE IN TERMINOLOGY

ALICJA DZIEDZIC-RAWSKA

Introduction

It has been more than ten years since Réka Benczes (2004, 11) used the term *creative* with regard to compounding to deal with "a more imaginative word formation process". Surprisingly, the term did not receive any follow-up and linguists still widely acknowledge and use the "old" terms, *endocentric* and *exocentric*, coined by Leonard Bloomfield (1933) (see e.g. Iacobini and Giuliani 2010; Ralli and Andreou 2012; or Jackendoff 2014). It seems that linguists are attached to the terms that have already gained popularity and are generally accepted and it is certainly far from easy to change a tradition that has been in use for more than eighty years. Scholars, be they distinguished or just starting out, may have a preference for the original line of thinking, albeit for different reasons.

Nonetheless, with regard to compounding, linguists very often find it difficult to classify new compounds according to the categories established long ago by scholars that once sought to set categorial boundaries (e.g. Adams 1973; Warren 1978; Rosario and Hearst 2001). For instance, newly formed slang compounds like *john law* "a policeman" or *dama Blanca* "cocaine" do not fit the old categories. To solve this problem, one would have to create new categories every time a novel expression is formed. This, however, seems futile, as, with the constant development of language, the number of categories could be indefinite. At this juncture it should be pointed out that the distinction between exocentric and endocentric compounds is an absolute one in that a compound can be either an "exocentric" or "endocentric" category. Thus exocentric

compounds are characterized by non-headedness or non-transparency, both meaning that the internal composition of a phrase is not responsible for its external distribution. In contrast, the semantic head of endocentric compounds lies within the compound and so the compound's meaning is (or should be) transparent. However, compounds present a cline of transparency, which means that the "old" categories are fuzzy. Amid other current concerns is the fact that there is no place for the interpretation of the speakers, as any expression offers a plethora of available meanings dependable on the context. This would also mean that any expression could fit any category. To avoid these and other problematic issues, with the help of two questionnaires distributed among nine native speakers of English, this study challenges the widespread view that compounds are semantically, apart from their morphosyntactic criteria, either endocentric or exocentric. Because the clear line of what is and what is not exocentric is difficult to grasp, this study argues for labeling the latter as *creative*, as the term presupposes a cline of transparency, instead of classifying them into sharp and strict categories. In addition, as language itself functions thanks to the imagery and creativity of conceptualizers, there is no need for the traditional Bloomfieldian distinction. As a matter of fact, every word, as well as every compound is creative, but not necessarily purely endo- or exocentric.

Creativity

The notion of creativity has been successfully and eagerly applied to different phenomena in various disciplines (e.g. creativity and intelligence, creativity in organizations, or creativity as achievement of something new in psychology). Alperson (2003, 245) states that "we speak freely of creative activity in the sciences, in academic disciplines, in cooking, in sports, and, indeed, in virtually every area of human productive endeavor." In the same passage, the author continues by saying that "what can be made or done can be made or done creatively." Therefore, everything that human beings do and produce is creative, as it adds something to the world we live in. Lamb (1998, 205) maintains that:

> real creativity is when we invent new lexemes for new or old concepts; when we build a new concept, especially one which integrates ideas in our conceptual systems that have not previously been connected; when we devise new metaphors in our attempts to understand some combination of complex experiences; […] when we invent a new way of saying something that does not fit standard syntax.

Such notion of creativity in language, called linguistic creativity, is of most interest for this paper, as it includes metaphorical language, upon which exocentric compounds are formed. Nevertheless, a satisfactory definition of linguistic creativity has not been proposed so far, as it has been variously understood: on the one hand, as the ability to form an infinite number of utterances on the basis of a finite number of lexemes and grammatical constructions (cf. the work of Humboldt or Chomsky 1965) and, on the other, as the ability to attribute new meanings to already existing words when the need arises. It has also been applied to the successful use of metaphors in new contexts. Therefore, crucially, language is in fact truly flexible: it allows its users to use it for their own means whenever and as they please. According to Ricoeur (1981, 340), "language could extend itself to its very limits forever discovering new resonances within itself." Language is not static and has no boundaries, hence new words, expressions and grammatical constructions emerge on a daily basis. Additionally, the linguistic categories formed so far will change and have to change, as they have to and will have to account for novel ways of expressing the surrounding reality.

Bearing in mind that "'new forms' also, in effect, signal 'new meanings'" (Zawada 2006, 235), Zawada (ibid., 235-6) provides a new and thorough definition of creativity, which will be followed in the remainder of this study:

> (Linguistic) Creativity is an essential and pervasive, but multi-dimensional characteristic of all human beings (irrespective of age, education, intelligence, social status or artistic bent). Linguistic creativity is primarily the activity of making new meaning by a speaker (in the broadest sense of the user of language in all forms and in all mediums), and the recreation and re-interpretation of meaning(s) by a receiver. Linguistic creativity is secondarily observable as a feature or product in a language. Linguistic creativity is a graded phenomenon ranging from the more conventional and predictable to the less conventional and unpredictable, and it is manifested in all domains of language (lexis, grammar, text and discourse), the results of which may or may not become conventionalised and therefore entrenched in a particular language.

The author rightly observes that creativity entails many notions ranging from the creation of a novel expression to a re-interpretation of a meaning given by the creator. Importantly, the idea of creativity is gradable and is typical of all language users,[1] standing in contrast to the traditional approach of a gifted or an ideal speaker (cf. Chomsky and generativists).

[1] I.e., given proper circumstances.

Nevertheless, each of us is capable of altering language and making additions to it. For that reason, I would like to add the following to Zawada's definition: *creativity is the ability to think "out of the box" and to move beyond the commonly accepted schemes/patterns in language*. I am also of the opinion that each of us, in favourable conditions, is able to perform in such a way.[2] However, creativity, except that of artists, has been often supressed and underappreciated. Thinking out of the box has often been perceived as an obstacle to the mainstream need of ordering of the world. Homeostasis[3] has been so ingrained in us that it holds us back from achieving more and from developing our potential. Endo- and exo-centric constructions, discussed here, are just two of the examples of organizing our world in a meaningful way. It is certainly easier and more convenient to classify different linguistic elements according to the rules already present and, thus, make sense of them. Nonetheless, there is a huge risk of overcomplicating things, as whenever a novel expression or construction arises we tend to categorize it and often find ourselves in need of creating new categories. Therefore, the present study vies for the need for simplification, which would also help us, as language users and linguists, gain a better understanding of novel additions to language.

Transparency

The notion of transparency in linguistics has been crucial in the discussion of processing of different expressions, e.g. compounds or idioms. When it comes to idioms, the traditional approach is that the meaning of an idiom is non-compositional, i.e. it is does not automatically follow from the individual meanings of its components. Nonetheless, idioms are sometimes viewed as motivated, which pertains to the fact that they are quite easily understood and unravelled by native speakers. As far as compounds are concerned, similar theories have been applied. Dirven and Verspoor (1998) were the first ones to drop the endo-/exo- discrepancy and proposed a cline of transparency on which compounds reside. As

[2] Consider children, e.g. at the age of 4, who mostly have their own way of describing the surrounding world, and it is, probably, at the time of primary school (or even kindergarten) when they are taught the 'proper' language use. I think that this is when their creativity starts to decline. Additionally, parents who often correct their kids may contribute to this loss.

[3] One of the definitions of the term is 'the process of maintaining a stable psychological state in the individual under varying psychological pressures or stable social conditions in a group under varying social, environmental, or political factors' (http://www.merriam-webster.com/dictionary/homeostasis).

stated above, it has also been argued (c.f. Dziedzic-Rawska 2014) that many of the compounds that are currently formed do fit the "old" categories provided in the literature. One of the recent examples is the compound *close-talker*. [4] Both the head and the modifier of the expression are transparent when analysed individually. Only by combining them together does the meaning become less transparent, as it is "a person talking to you and, at the same time, standing very close or too close to you". To my mind, this expression is neither totally transparent nor totally non-transparent, although at approximates the "transparent" end of the spectrum (i.e. endocentricity; see Figure 10-1).[5] Therefore, Dirven and Verspoor's cline of transparency rightly takes into account the fact that there is more to endo- and exocentric constructions than was previously observed in the linguistic literature of the past.

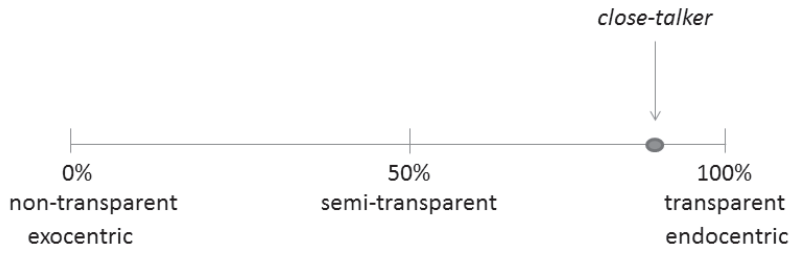

Figure 10-1. The transparency of *close-talker* on a 0-100% scale[6]

Other examples of compounds difficult to categorize are e.g. *atom bomb* "a combination of marijuana or hashish with opium or cannabis or cocaine", *chickenbrain* "a fool" or *bean bandit* "a Mexican". These examples, involving metaphor and metonymy, show that transparency, and thus endocentricity, is a matter of perception. In reversed sequence, these instances could be analysed as follows: the most transparent (least exocentric), the averagely transparent (averagely exocentric) and the least transparent (most exocentric). However, as Benczes (2004) rightly notices, the definitions of transparency that Dirven and Verspoor propose are "very vague" (2004, 4).

[4] The expression was found on a Jerry Seinfeld TV show devoted to social awareness and personal space.

[5] Assuming that completely exocentric constructions are 0% transparent, and that completely endocentric constructions are 100% transparent.

[6] Please note that the transparency of the expression may vary among language users.

The number of compounds varying in their degree of transparency is outstanding. It seems that it is difficult to find two or more identically transparent composite structures and for this reason Dirven and Verspoor's cline of transparency is not enough. Below, ten other compounds will be examined with a view to changes in terminology and I will use the functional notion of transparency, as discussed by Keysar and Bly (1995, 89), i.e. "[a] relatively transparent [expression] is an [expression] for which the connection between the expression and its […] meaning makes sense to native speakers." Having this in mind, the incomplete results of the second questionnaire[7] point to identical observations that the connection between the meaning of many non- or semi-transparent expressions and their form becomes obvious once the definitions are presented. The connection between the expression and its meaning is motivated as it makes sense to native speakers. It seems that native speakers do not ponder over the meaning; they take it for granted. In addition to this, speakers of any language use their intuition and refer to the knowledge of the world upon coming across a novel expression. The knowledge of the word language users possess affects their intuition, thus aiding them in unravelling the mysterious meaning of a lexical item. One should also remember here about the fact that metaphorical and metonymical thinking has long been observed as natural, ordinary everyday processes (see Lakoff and Johnson 1980).

Examples, the Questionnaire and the Results

The examples chosen for the analysis in this paper appeared on the Oxford English Dictionary's *New Words List* in June 2015[8] and I would argue that they show various levels of endo- and exo-centricity. Therefore, making the final decision as to the category they belong to is definitely not an easy task, and indeed may even be impossible. To further prove that compounds should be labeled *creative* I asked nine[9] native speakers of English[10] to assess the transparency of the data provided. Each participant

[7] Only six out of nine native speakers responded to it. Therefore, more data is needed to arrive at more convincing conclusions.

[8] Available at http://public.oed.com/the-oed-today/recent-updates-to-the-oed/june-2015-update/new-words-list-june-2015/ (accessed April 15, 2016).

[9] Questionnaires were sent to more native speakers of English; however, not every person contacted responded. Nonetheless, the number of the participants who responded seems suitable enough to justify the hypothesis forwarded in this study.

[10] The respondents were both British and American native speakers of English, living in different parts of Great Britain and the USA.

received the ten compounds first without their meaning and later, in a separate questionnaire, together with the meaning. The participants' task was to indicate the transparency of the expressions by using a scale of 1-5, where 1 is the least and 5 the most transparent. The results seem to confirm the thesis forwarded in this paper: namely that compounds are creative; they present a cline of transparency and cannot be classified only according to the categories of endo- and exo-centricity, as such a doing only clouds the understanding of them and complicates the picture. The compounds, together with their meaning given by oxforddictionaries.com, are provided below in alphabetical order.

barong tagalog "a lightweight, embroidered shirt for men, worn untucked and traditionally made of piña or a similar vegetable fibre"
hard launch "the general release of a new product or service to the public"
hardware woman "a female dealer in hardware; (in later use especially) a woman who runs a hardware store, or who works in one"
Homo economicus "another term for economic man"
Photobomb "a photograph that has been spoiled by the unexpected appearance of an unintended subject in the camera"s field of view as the picture was taken"
seachanger "a person who makes a dramatic change in their lifestyle, especially by moving from the city to a seaside or country area"
sharon fruit "a persimmon, especially one of an early-fruiting orange variety grown in Israel"
storyboard "a sequence of drawings, typically with some directions and dialogue, representing the shots planned for a film or television production"
uncanny valley "used in reference to the phenomenon whereby a computer-generated figure or humanoid robot bearing a near-identical resemblance to a human being arouses a sense of unease or revulsion in the person viewing it"
zamazama "a person who works illegally in abandoned mine-shafts in order to retrieve metals, minerals, etc."

The results of the individual responses to the first questionnaire, the one without definitions, are presented in the following figures (Figure 10-2 – Figure 10-10). Each figure was marked with an R (for Respondent) and a number in the top right-hand corner.

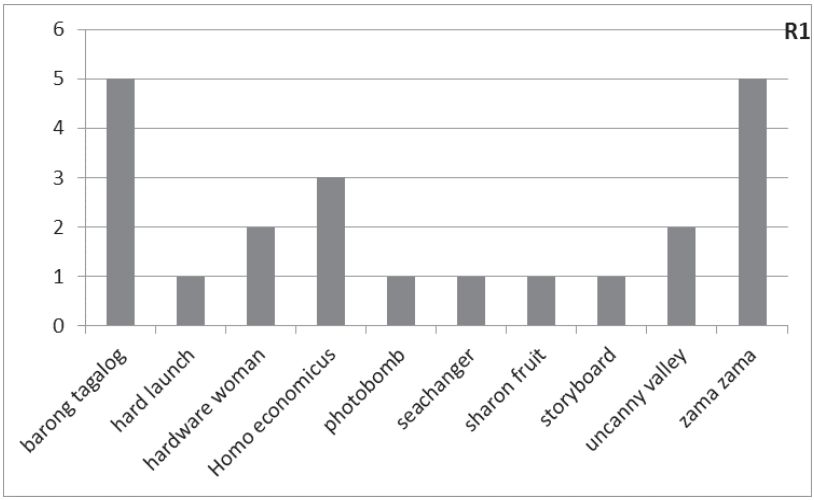

Figure 10-2. Individual responses – Respondent 1

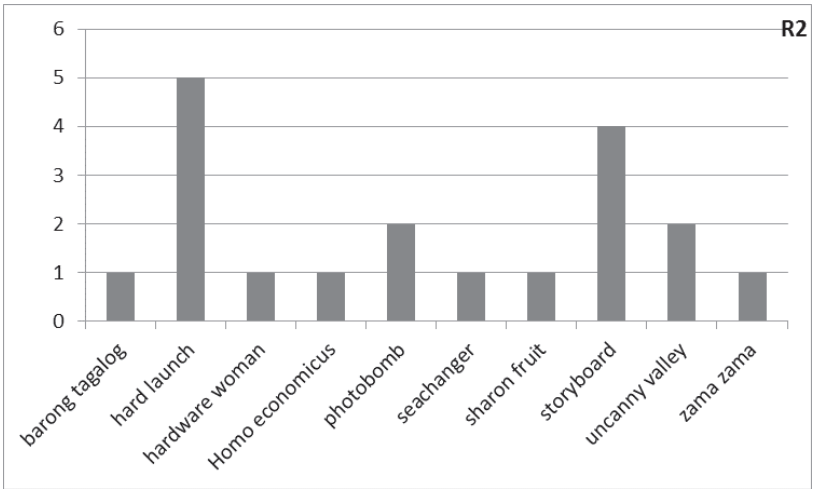

Figure 10-3. Individual responses – Respondent 2

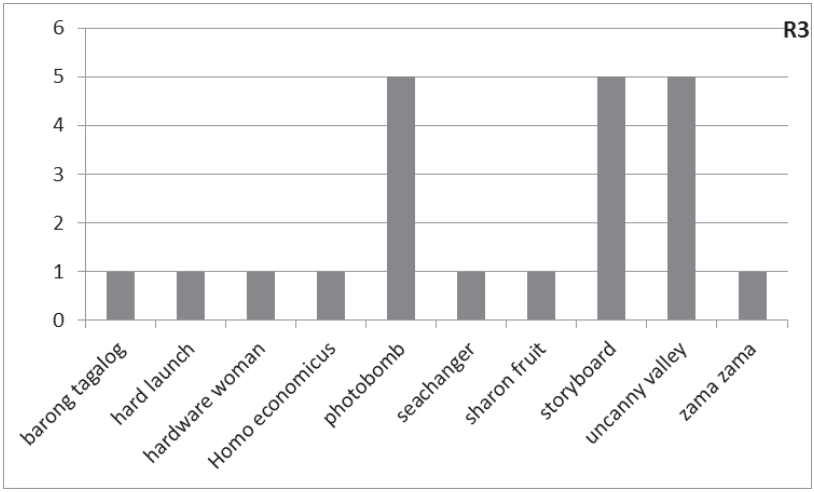

Figure 10-4. Individual responses – Respondent 3

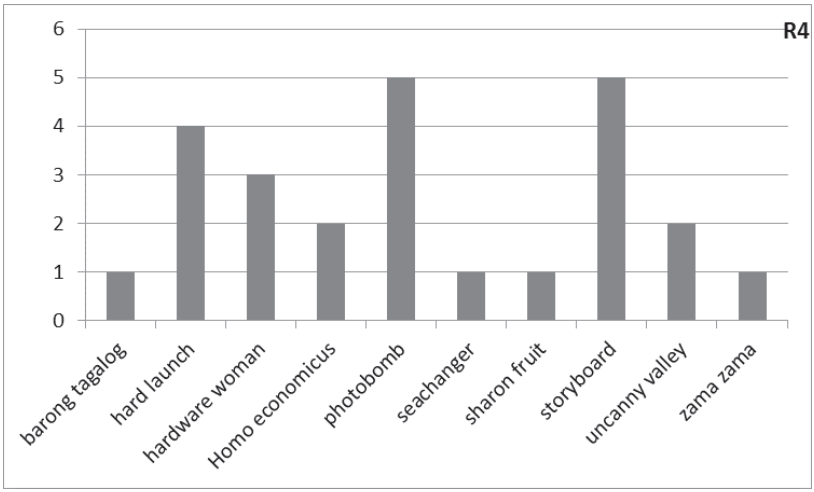

Figure 10-5. Individual responses – Respondent 4

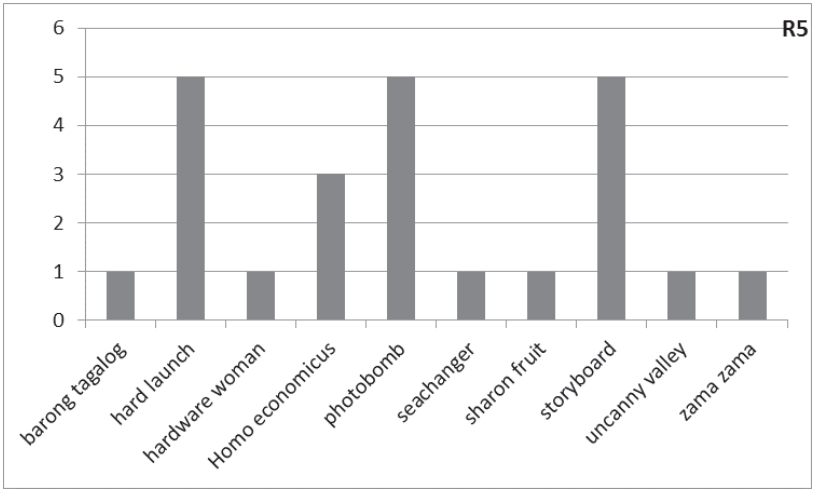

Figure 10-6. Individual responses – Respondent 5

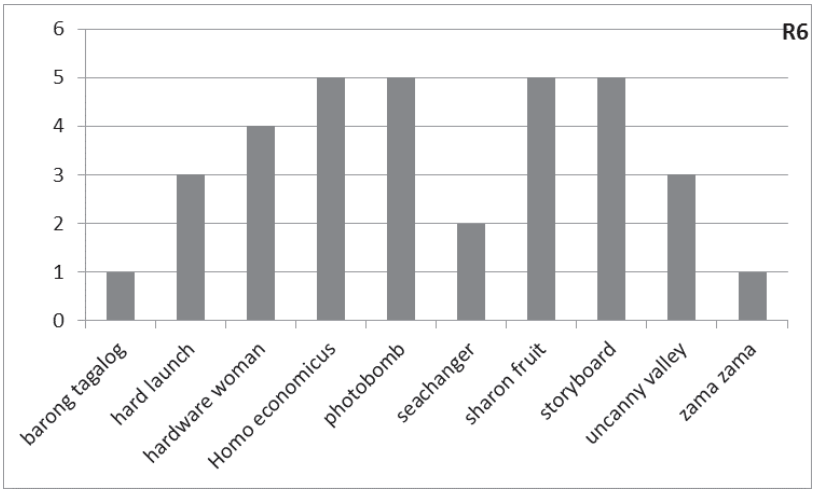

Figure 10-7. Individual responses – Respondent 6

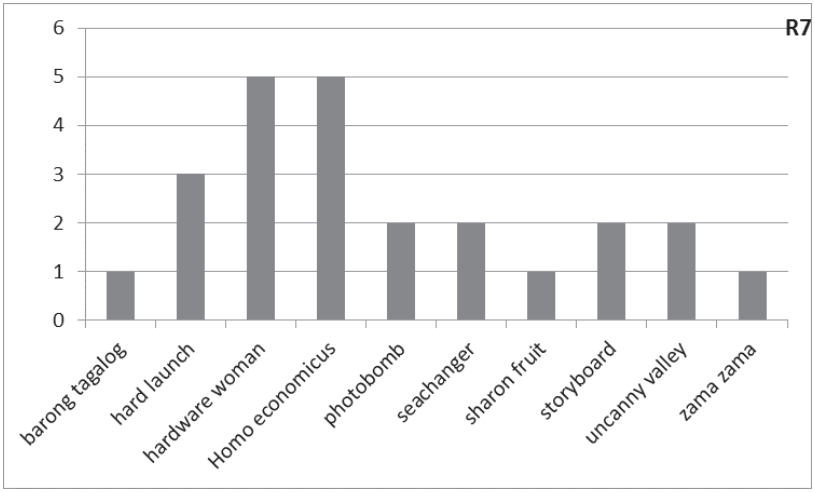

Figure 10-8. Individual responses – Respondent 7

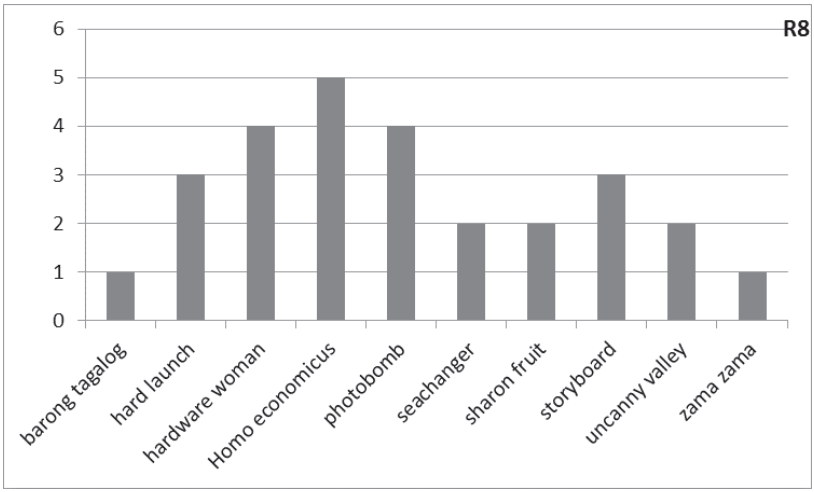

Figure 10-9. Individual responses – Respondent 8

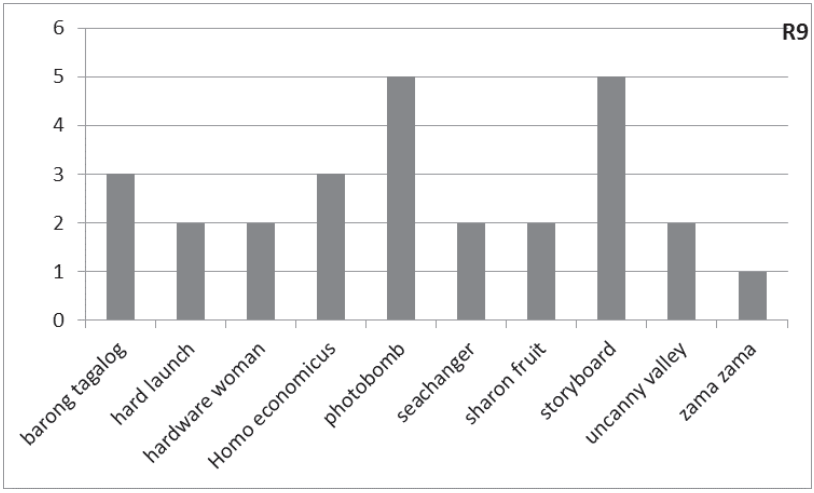

Figure 10-10. Individual responses – Respondent 9

At first sight, it is clear that the understanding of the compounds is remarkably different among the respondents. It seems that they were able to interpret some of the examples without being given their meanings. Firstly, some of the respondents might have come across some of the expressions before; secondly, they might have known their individual elements, thus adding them in an attempt at discovering their meaning; thirdly, they might have used (and most probably did use) their background knowledge; fourthly, they might have interpreted them on the basis of already existing expressions similar in meaning or form; fifthly, they might have used their observations of the world in the process of unraveling the meanings; and sixthly, they might have associated the compounds with something that they knew. The fact that the respondents had various intuitions about a compound like *hardware woman* only highlights the obvious: language users understand, and thus, interpret language differently. A word can be interpreted in different ways depending on the context; therefore, a transparent word for one speaker may be non-transparent for another, i.e. it can be either endo- or exocentric or something in between. Another key issue here is that metaphor and metonymy, which most of the examples are based on, are conceptual processes and a "natural ability of human beings" (Benczes 2010, 217). If metaphorical and metonymical thinking are natural for us, then it comes as no surprise that our interpretation of metaphor- and metonymy-based expressions is almost effortless and, most of the time, accurate. Den

Ouden (1975, 103) claims that "human nature is that distinct capacity and ability to respond with appropriate and meaningful novelty." A speaker may have a particular meaning on their mind and it is the task of the hearer to unveil it. Even without the linguistic context, most of the respondents had at least a "vague" idea of what a particular expression means.

Directly involved in the understanding of any metaphor-based expression is the notion of analogy, as every metaphor is grounded in analogies and makes connections between various ideas, things, people, etc. According to Veale (2006, 478), "[l]ike the most striking and novel of metaphors, a good analogy can reveal deep insights between the most far-removed concepts […]." When performing an analogy, a hearer needs to know two ends of the spectrum and these are not exclusive of each other. They can be either of the following: the expression provided and its meaning; the expression provided and the context; or even the expression provided and the knowledge of the world. Also, the interpretation of any metaphor requires "the dynamic construction of new ad-hoc categories" (ibid., 472). In the saying *a great wine is like a great woman* the hearer may recognize that the best wine is the one that is intoxicating, surprising in taste and gets better with age.[11] In the example, the same is said about a woman. To capture this analogical similarity, the recognition requires the creation of ad-hoc categories[12] TASTY WINE – WOMAN PLEASANT TO A PARTNER, OLD WINE – UNDERSTANDING WOMAN AND GOOD QUALITY WINE – WOMAN GOOD IN CHARACTER. To understand analogies in the examples analysed in this study, the respondents also had to create ad-hoc categories; in the example *photobomb* this could be DROPING A BOMB – DESTROYING/KILLING SOMETHING. Some of the respondents had no difficulty in unveiling the meaning of the provided expression or could simply guess it, which means that metaphorical or metonymical expressions are not opaque for some speakers at all. Benczes (2004, 3) says that "the simple fact that English *does* have such constructions implies either that English speakers like to invent dim and murky terms when creating a new word for public access or that the meaning of exocentric compounds is not opaque as it seems" [original emphasis]. For the very important reasons that endocentric and exocentric constructions are not exclusive, that they present various levels of transparency, that they are mostly understandable for language users, and that there are plenty of metaphorical and metonymical constructions nowadays,

[11] Although, please note that the hearer can recognize this likeness in various ways depending on that person's ideal woman.

[12] It should be noted at this point that the categories provided here may not be exclusive.

especially in slang, changes should therefore be introduced to terminology. Benczes (ibid., 18) argues that exocentric compounds are created by "a more imaginative word formation process". Additionally, Benczes (2006, 184), by giving the examples of *apple tree* and *hammerhead*, argues that "the main difference between [them] is not transparency of meaning, but creativity: the latter represents a type of nominal construction that has been coined by a more imaginative, associative and creative word formation process." Therefore, following Benczes, I also claim that metaphorical and metonymic constructions, like the ones presented above, should be labelled *creative*.

Conclusions

The initial results of the questionnaires are promising. Exocentric compounds, among other seemingly non-transparent expressions, are clear for native speakers. Thus, they should not be taken for granted by linguists as exo- or endo-centric. Linguistic literature shows that there has been much dispute over the analysis of compounding in English. Mostly, linguists have discarded exocentric constructions as the ones that do not pertain to standard word-formation processes, or they have claimed that they constitute too great of a peripheral part of the overall word-formation processes to be included in linguistic investigation. However, this issue certainly begs a more in-depth consideration, as exocentric constructions are here to stay. English speakers, and not only speakers of the English language, prefer using metaphors and metonymies as part of their daily linguistic ritual, possibly as an economy of language. Making use of this part of figurative language may not only stem from the need to compare and add more meaning to fewer words but may be perceived as an exercise of ingenuity and incorporation of nonchalance into everyday language use. What is more, as demonstrated by Benczes (2010, 218), creative compounds are "lexically and semantically compact, and they are also able to evoke richer images than literal language – no wonder that such constructions are an everyday facet of language that speakers routinely employ." The fact that native speakers are able to easily unravel or deduce the meaning of an exocentric construction –and that the form and its meaning is motivated –directs our attention to the fact that exocentric compounds might not be opaque (i.e. exocentric) at all. Both endo- and exo-centric constructions are created through the same word-formation processes, the only difference being that the processes involved in the latter are more creative. With the constant development of language and the dilemma of classifying many novel expressions, it is reasonable

enough to term exocentric compounds *creative*. It is understandable that for some scholars disregarding the endo- and exo- distinction may be seen as a step back. However, sometimes a step back is a step forward.

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CHAPTER ELEVEN

ASSESSING CREATIVITY IN THE CLASSROOM: TEACHING LITERARY TRANSLATION IN A COGNITIVE FRAMEWORK

AGNIESZKA GICALA

Introduction

This chapter discusses the problems of literary translation teaching and assessment, adopting a broadly understood cognitive perspective, encompassing ethnolinguistics with its key concept of linguistic worldview.[1] In particular, the chapter presents the formal description of the literary translation course designed for the third and final year of BA translation studies in the Institute of Modern Languages of the Pedagogical University of Kraków, and proposes teaching and assessment solutions based on the application of the concept of linguistic worldview to the translation of literary texts.

At first sight, the teaching of literary translation as a university translator training course might appear to be a very difficult task. How can translators of literature be trained? Can anyone call him- or herself well-trained in literary translation? The concept of translating literature, with its elusive poetic qualities captured by an individual translator's sensitivity, sounds contradictory to training and skills. That notwithstanding, translation training courses do include elements which will certainly aid the development of sensitivity to the delicate matter of style – an author's individual means of conveying the message of the text. There are also numerous works on the subject, both theoretical and case studies, that can be used to build and extend a translation training course and a trainer's repertoire of teaching solutions. A few of the most relevant here include

[1] Ethnolinguistics is described as the "Polish Cognitive Studies" by Elżbieta Tabakowska (2013, 321-338); some convergences between cognitive linguistics and ethnolinguistics are also discussed by Agnieszka Gicala (2018, 35-39).

the systematic presentation of the means offered the translator of literary texts and the teacher of such translation by cognitive linguistics, as proposed by Elżbieta Tabakowska in her classic book *Cognitive Linguistics and Poetics of Translation* (1993); Stanisław Barańczak's collection of essays on literary translation *Ocalone w tłumaczeniu* and Anna Legeżyńska's *Tłumacz i jego kompetencje autorskie* (1999), which are also a must for the reading list of any translator or translation teacher interested in literary texts. Willis Barnstone adds "An ABC of Translating Poetry" at the end of his book *The Poetics of Translation. History, Theory, Practice* (1993). More recently, Jeremy Munday has devoted a chapter of his book *Evaluation in Translation* (2012) to literary translation, where he discusses important issues of revision, self-revision and evaluation; literary translation is also a subject of Jean Boase-Beier's *A Critical Introduction to Translation Studies* (2011). Other sources include Monika Linke's *A Cognitive Approach to Equivalence in Literary Translation* (2008), Maria Krysztofiak's *Translatologiczna teoria i pragmatyka przekładu artystycznego* (2011) and Agnieszka Gicala's *Przekładanie obrazu świata. Językowy obraz świata w przekładzie artystycznym* (2018) – the latter applying the concept of linguistic worldview to literary translation.

However, a number of practical questions arise concerning the formal arrangement of a literary translation course. One of the problems is what a literary translation course can teach students during 30 contact hours in the classroom. Another is whether formal assessment (e.g. a grading system based on percentage) is possible; and if it is, then how is it possible to ensure correct and objective assessment for tasks done during the course and in the final examination? What criteria should be adopted by the teacher? The problems of formal assessment in written translation training have been recently discussed by Joanna Dybiec-Gajer (2013), who highlights the significance of such factors as: the length and goals of a course as well as the purpose of assessment, but also the question of professional realism and student creativity (Dybiec-Gajer 2013, 116; 261-262). In the formal assessment of literary translation the difficulty is magnified.

The remainder of this chapter presents the formal description of the literary translation course designed for the third and final year of BA translation studies in the Institute of Modern Languages of the Pedagogical University of Krakow. It describes two different sample teaching solutions which were used by the present author during the

2012/2013 academic year.[2] One such solution is a class exercise and the other a written examination task. The analysis below includes comments on their assumptions and criteria as well as the actual results of the students' work and the task assessment.

A Literary Translation Course: Assumptions, Goals and Task Assessment

The formal university requirements for a course description are that it ought to include such elements as: prerequisites, learning goals and learning outcomes, the latter being divided into three areas: knowledge, skills, and social competence. The prerequisites set for prospective participants of the course in question included knowledge of English at C1 level and the completion of two previous translation courses (altogether 60 hours over 2 semesters). Before proceeding to the goals and the learning outcomes, it is worth looking at the details of the C1 level as it defines the students' linguistic ability. The attainment of the C1 level, or Effective Operational Proficiency, means that a student "can understand a wide range of demanding, longer texts, and recognize implicit meaning", "express ideas fluently and spontaneously without much obvious searching for expressions", "use language flexibly and effectively for social, academic and professional purposes", and "produce clear, well-structured, detailed text on complex subjects, showing controlled use of organizational patterns, connectors and cohesive devices" (Common European Framework of Reference for Languages 2013).

The goal of the course in question is the acquisition of the skill of literary (non-specialist) translation. Among the learning outcomes upon its completion is a knowledge of the linguistic features and stylistic requirements of different literary genres, as well as an awareness of cultural issues that are relevant to translation. Consequently, a student should not only attain the ability to identify different genres and understand texts which belong to different genres, but also learn to recognize differences between the source and the target cultures. As the above elements of a student's achievement at the end of the literary translation course are extremely broad, their attainment could be viewed as very difficult, if not impossible. It is the teacher's responsibility to discuss

[2] I would like to thank my students in my literary translation course in the 2012/2013 academic year for taking part in the experiment to apply the concept of linguistic worldview in the process of teaching literary translation, and for my possibility to learn from that experience.

these concepts with the course participants at the very beginning in order to make it as clear as possible what is practically attainable within a thirty-hour course and to delimit its scope.

The thirty teaching hours, broken into fifteen meetings, does not allow for a thorough review of all literary genres with their linguistic features, historical background and other types of context. Neither does it leave room for discussing and trying out in practice the different theories of translation. Instead, the teacher can design the course around a set of several sample texts belonging to different genres and offer the students the space for practical translation, possibly preceded by a guided search for the necessary background knowledge. As the course is not a lecture, the teacher's role is that of a tutor, who asks questions in order to encourage the students to search for information and come up with solutions, and assists individual or group work on a given text, rather than dictate either theoretical data or practical solutions.

Taking into consideration all of the formal requirements, as well as the practical limitations described above, the literary translation course I conducted was – as far as it was possible – based on the idea of tutoring, that is guiding a participant's own, individual or semi-individual work. Each meeting was designed to cover at least one short passage from a literary text in Polish or English, including modern poetry, Christmas carols (as the course took place in the winter semester), passages from children's literature, religious texts, extracts from novels, and an artist's description of creating a work of visual art. The texts were selected so as to cover a range of genres and to display at least one characteristic feature that made each of them unique. Additionally, each text could be treated as a partial and creative exemplification of a particular linguistic worldview, which will be described and illustrated below.

Classes usually started with the reading of a given passage and a discussion aimed at eliciting both the unique qualities of the text and those characteristic of its genre, the possible significance of the author and the context for translation, before setting possible translation strategies and tasks together, which was followed by practical translation. The participants were then usually free to choose to work either individually or in groups, and to translate at least a fragment of the passage in class (the remaining part of the passage was then the homework but the students were also asked to comment on their translation in writing). The final stage of each meeting was a presentation of the translations followed by the discussion of the solutions used, sometimes juxtaposed with the published translations (if available), which also served as informal assessment of the task.

From the teacher's perspective, formal assessment was the greatest challenge. The criteria adopted as suitable and sufficient for assessment during the course described in the present paper were: active and regular participation in all tasks, submitting all tasks done in class, submitting and completing all homework assignments–including written comments expressing the views and explaining the goals of a given task. However, the formal, written examination required scoring a minimum of 60%. The application of a percentage system to literary translation is not easy as it implies objective assessment of tasks whose fulfillment largely depends on the subjective quality, i.e. a student's sensitivity. It is hoped that what made the exam assessment maximally objective was the choice of tasks and texts, which reflected those done in class, namely similar text types along with the same instruction: to comment on the unique features of a given text and the relevant translation strategies and techniques, if possible–accompanied by an attempt to translate a small part of a given text.

Linguistic Worldview and Literary Translation

The concept underlying both the routine set-up during the course and the exam tasks, used as an inspiration and a type of experimental "teaching aid" and offered to course participants as an optional tool, was **linguistic worldview**.[3] The fact that linguistic worldview may be applied when approaching poetic and other creative texts has been expressed by Anna Pajdzińska:

> If language is an interpretation of reality or a way of seeing the world, the categories and values cherished by a linguistic community should also be taken into account in interpretations of literary texts. Even if one assumes that literary texts are radically different from other kinds of text in their very essence, their intentions and execution, even if the author – in his or her desire to enrich and extend the knowledge of people and the world, to express the inexpressible, to access a mystery, etc. – continually strives to go beyond the limits of language in its communicative function, "everything that a work contains ... must go through the medium of language" (Mukařowský 1970, 169). (Pajdzińska 2013, 48)

[3] The history of the linguistic worldview idea and different approaches to its understanding are presented by various authors in the recent volume *The Linguistic Worldview: Ethnolinguistics, Cognition, and Culture* (2013), edited by Adam Głaz, David S. Danaher and Przemysław Łozowski.

Being a term capable of encompassing numerous phenomena–and thus numerous aspects of a literary text and its translation–linguistic worldview may have several advantages for both the teacher and the students. Firstly, it can aid source text analysis prior to translation proper. Secondly, it can guide the translator's strategic decision process (see, e.g. Piotrowska 2007, 87-93), i.e. the choice of translation strategy, which then prompts decisions concerning the practical details. Consequently, it is useful in the translation task summing up and assessment.

Among its advantages is the fact that the very expression "linguistic worldview" makes it largely self-explanatory: it is **linguistic** (concerns language), it is a **view** (it is subjective as it represents a viewing subject, such as a larger or smaller community or an individual person) and it refers to the **world** as experienced and viewed by that subject. The above aspects of linguistic worldview are encompassed in the definition proposed by Jerzy Bartmiński, the founder of the Lublin school of ethnolinguistics:

> Linguistic worldview is a language-entrenched interpretation of reality, which can be expressed in the form of judgements about the world, people, things or events. It is an interpretation, not a reflection; it is a portrait without claims to fidelity, not a photograph of real objects. The interpretation is a result of subjective perception and conceptualisation of reality performed by the speakers of a given language. (Bartmiński 2009, 23)

Bartmiński stresses the fact that linguistic worldview is "subjective" or "intersubjective (social)", "anthropocentric" and that it "creates a community of thoughts, feelings and values" (Bartmiński 2009, 23). Although he himself and other scholars of the Lublin school of ethnolinguistics investigate and apply the concept in ethnolinguistic research, a large part of which concerns the Polish language (see for example Bartmiński 1999, 2007 or 2009), Bartmiński admits that "the linguistic worldview conception can play a major role in comparative research", including comparisons between different languages (Bartmiński 2009, 36). This opens up the possibility to test its applicability for translation studies research and for practical translation, in particular literary translation, which can be done by ascertaining the scope of linguistic worldview and listing its parameters. As specified by Bartmiński (2009, 26-34), these include:

- lexis, including word-formation, etymology, onomasiology, connotations as well as the axiological aspect;

- phraseology, collocations, metaphors;
- grammar;
- texts;
- 'co-linguistic' data,[4] that is "socially entrenched, belief-based knowledge of the world, common to the speaker (sender) and the hearer (receiver)", including "conventionalized patterns of behavior."

Sample Translation Tasks and their Analysis

Translation Task 1

As stated above, the parameters of linguistic worldview may be used in all the stages of the process of literary translation, as illustrated by the two exercises presented below. In the first, the students were given a passage from Władysław Reymont's novel *Chłopi*, vol. I "Jesień." The novel *Chłopi* (*The Peasants*) consists of four volumes depicting the life of Polish peasants, their village and the countryside in the late 19th c. through the four seasons of the year, beginning with "Jesień" ["Autumn"]. The picture of the peasants' material life–with its hardships but also its rich traditions and customs–which are described in a very vivid, colourful way, using the peasants' language, gained its author the Nobel Prize for Literature in 1924. The students received the following passage along with the author's name and the title:

> A ciągnęły się już te tany łańcuchem jednym, bez przerwy ni przestanku… bo co muzyka zaczynała rznąć nowego, naród się podnosił z nagła, prostował jak bór i szedł z miejsca pędem takiej mocy jak huragan; trzask hołubców rozlegał się jak bicie piorunów, krzyk ochotny trząsł całym domem i rzucali się w tan z zapamiętaniem, z szaleństwem, jakoby w burzę i bój, na śmierć i życie. (Władysław Reymont in: Furdal, Musiołek-Choinski, Piotrowski 1990, 269)

During the stage of source text analysis, the students identified the passage as a description of folk dances and also identified the novel (known from their secondary school reading list). This particular novel (and this passage in particular) constitutes excellent material to teach the concept of linguistic worldview because its characteristics are easy to

[4] The term 'co-linguistic data' has now replaced the less fortunate 'ad-linguistic data' actually used in Bartmiński 2009 (cf. e.g. Bartmiński in: Głaz, Danaher, Łozowski 2013, 168 as well as the Editors' note on p. 18 in that volume).

identify there. The students pointed to the following elements of linguistic worldview as its key components in the analyzed passage:

1. Lexis: imitates the Polish peasants' dialect (for example *tany*, *hołubce*); it is very colourful, with numerous synonyms (contributing to the effect of unending dancing) and phraseological units;
2. Syntax: the passage is one, long sentence with many repetitions, which imitates continuous dancing.

During the source text analysis, performed as a discussion, the teacher limited her role to prompting the linguistic worldview components and asking about their possible significance. The first feature noticed by the students was the lexis whereas the role of syntax was discovered only after the teacher read the passage aloud, using breath and intonation to show that the sentence is extremely long. All the participants of the discussion then agreed that both the structure of the passage and its lexical elements served to depict the dances as 'co-linguistic' data that support the linguistic view of Polish peasants at the end of the 19th c. Next, the students were asked to translate the passage and prepare brief comments on their work. Two of their translations are presented below, followed by a short summary of the translators' comments:

Translation 1:

> And so the dances went on, one after another, with no breaks nor stops… as every time the musicians began a new tune, the crowd rose suddenly, straightened like a pine wood and leapt forward with the force of a hurricane, the clack of heels rolled like a thunder, a lively shout shook the whole house and they threw themselves into the dance with ferocity, with madness, as if into a storm and a fight to the death.

Translation 2:

> Dances kept going on one by one, with no pause, one after another… As soon as the music started again, people would stand straight as a forest, burst into a dance suddenly as a hurricane. The sound of feet stamping and jumping felt like a thunder, shouts of joy shaked the house while people went on dancing, wildly, madly as into a storm or battle, for life and death.

The authors of the first translation regarded vocabulary items as the most difficult to translate, giving the example of *hołubce* as a word with no literal counterpart. They strove to preserve the syntax of the original.

The authors of the second translation decided to split the sentence twice as it was considered too long; in their comment they also noticed that the "atmosphere" lay in the vocabulary but they found this too difficult to render in English. Generally, the impression of unending dancing was rendered more successfully (in other words, the linguistic view of the dances was reconstructed more fully) in the first translation (it was also more correct, as the second translation contains an incorrect past form "shaked" but correctness was not the main focus of that translation task).

The final stage of the task was a comparison with the translation by Michael H. Dziewicki, entitled *The Peasants*, published in New York in 1942, which allowed the student translators to identify divergences in this translation from the key components of the linguistic worldview which they themselves had determined. This was mainly the syntax (Dziewicki also splits the sentence), but also the exclamation mark added by the translator at the very end, intensifying the emotional quality of his translation:

> One dance followed another in rapid succession, and with no interval between them. As each new dance was struck up, new dancers directly sprang forward, erect as a forest, swift of advance as a gale of wind; and loudly the stamping feet thundered afar, and shouts of merriment echoed through the house, while the onset went on, wild, mad, stormy, and earnest as a struggle for life and death! (trans. Michael H. Dziewicki in: Furdal, Musiołek-Choinski and Piotrowski 1990, 294)

Translation Task 2

The underlying principles of the examination at the end of the literary translation course described here were similar (irrespective of the tasks, which ranged from translation of a given passage to comparison of translations provided in the examination materials). In an examination task presented below, the students were asked to compare two Polish translations of a short passage from *The Cloud of Unknowing*, a 14th-century anonymous English mystical treatise, written by a spiritual advisor for his pupil, which aimed to teach him what a mystical experience is and how to achieve it (this information was provided by the examiner). The students were to list three key components of linguistic worldview in this religious text and comment on their rendering in the translations. The students were encouraged to use the term 'linguistic worldview' and they were expected to take into account its elements in their analysis, as had been done throughout the course.

The source text:

> If ever you are to come to this cloud and live and work in it, as I suggest, then just as this cloud of unknowing is as it were above you, between you and God, so you must also put a cloud of forgetting beneath you and all creation. (ed. and trans. Clifton Wolters 1978, 66)

Translation 1:

> Jeśli kiedykolwiek uda ci się wejść w ten obłok, przebywać w nim i pracować, jak ci zalecam, to podobnie do obłoku niewiedzy zawieszonego jakby nad tobą, między tobą a Bogiem, umieścić musisz obłok zapomnienia pomiędzy tobą a całym stworzeniem. (trans. Wojciech Unolt 2001, 43)

Translation 2:

> Jeżeli masz dotrzeć kiedykolwiek aż do tej chmury, jeżeli masz w niej pozostać i pracować tak jak ci to opisuję, będziesz musiał pod sobą rozciągnąć chmurę zapomnienia, która będzie między tobą a wszystkimi stworzeniami, tak jak chmura niewiedzy jest ponad tobą, między tobą a twoim Bogiem. (trans. Piotr Rostworowski 1985, 41)

In their comments, the students were expected to show a feature similar to one studied in class, namely the presence of metaphor in a religious text (which cannot express the mystical reality in any other way).[5] In the examination task, the students had to find two such metaphors: the metaphor of a cloud or clouds and the metaphorically understood UP-DOWN orientation related to it (the specific religious worldview visible in the language of the source passage is based on these two conceptual metaphors). The critical comments on the translations were to show the students' awareness of the use of as many as two Polish counterparts of the English lexeme "cloud": *obłok* and *chmura*, as well as awareness of their different connotations.

In the assessment of this task, two-thirds of the points could be scored for the two metaphors (listing or highlighting in the texts all the linguistic realizations of the two conceptual metaphors, including the difference: "cloud": *obłok* or *chmura*, and a brief comment on how they differ). Although metaphor is the most important feature of this text, other features could also be distinguished that contributed to the mystical

[5] Cf. Gicala 2006 on the inexpressibility of mystical experience, the role of metaphor and the translation of this type of religious texts.

worldview contained in it. The third element to be found in the passage could be any other feature considered important by the student, provided that it was clearly indicated in the texts and commented upon (for example, *as I suggest–zalecam–opisuję*, where *zalecam* does enhance the didactic aim of the treatise but *opisuję* does not). In this way, the exam did test the students' skill to identify the linguistic worldview components in those text types that had been analyzed and translated during the course, while it also allowed for a certain creativity in the approach to the source text and its translations.

Conclusions

To sum up, I would like to come back to the questions asked at the beginning. How can one assess creativity in the classroom? What can a literary translation course teach students during 30 contact hours in the classroom and how can a teacher provide a maximally objective assessment in the final examination? The concept of linguistic worldview, introduced as an inspiration and an aid at all stages of the translation process, from source text analysis to setting the translation strategy and the decisions of detail, to translation criticism (and self-assessment), to formal examination assessment, was found useful for the literary translation course described here, as it allows for a holistic approach to a literary text. The concept may help students to set priorities for a given translation task in a way which is not "mechanical", that is not limited to "traditional" text layers to be rendered in translation (word, above-word, grammatical, etc.); asking the question about the fullest possible reconstruction of linguistic worldview in translation encourages creativity in text analysis and translation. The same question may serve as a tool of translation assessment. It also remains in accordance with the recommended learning outcomes presented in the course description above.

Literary translation assessment is an extremely difficult task as it imposes a grading system onto solutions which are to a large degree individual and intuitive. It seems impossible to rate creativity in percentage terms. In the literary translation course described in this chapter, translation discussion and assessment were facilitated by the set of guidelines inspired by the definition and components of linguistic worldview, thus encouraging the students' critical and imaginative thinking. The role of a literary translation teacher resembles that of a tutor: assisting the students' individual development. The teaching of such a course would benefit from inspiration drawn from studying and discussing the possible scope and complexity of linguistic worldview, present as a

frame of reference in a given literary text, and from showing the applicability of this concept in literary translation.

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PART FIVE

CORPUS LINGUISTICS APPROACHES TO CONSTRUCTIONS

CHAPTER TWELVE

THE PASSIVE OF GENITIVE AND INSTRUMENTAL VERBS IN POLISH: PREFERENCES AND CONSTRAINTS

ANNA ŚCIBIOR-GAJEWSKA
AND JOANNA PODHORODECKA

Introduction

The Polish passive is not a phenomenon to be taken for granted. Firstly, unlike the passive construction in English, it is not necessarily considered as a structure vital to the language system. Many Polish descriptive grammar books do not describe the passive extensively, or indeed in some cases, at all. In Grochowiak et al.'s (1984, 94-95) classic publication on Polish syntax, the passive alternative is discussed as one of a range of possible diathetic solutions available in Polish. The relatively free Polish word order condemns the passive construction to being one of several equally eligible options for the distribution of information in a sentence. Moreover, as canonical and predictable as the construction itself may be, Polish's verbs rich valency spectrum (cf. Sawicki 1988) does not contribute to the predictability of the passive actually "happening" to a given verb/of a given verb actually being "drawn" into the passive. Within both the traditional and transformational syntactic frameworks, it seems a reasonable assumption that the case of the verbal complement should be the decisive factor in passivization. This is, however, not the case in Polish. Not all verbs taking the Accusative–which is the most common variant–passivize. Among the verbs taking the Genitive and the Instrumental, some do, others do in certain contexts, and still others do not passivize at all. It seems that only the Dative verbs behave "normally" and never appear in the passive, being true indirect objects and given that the passive is allowed only with direct objects (Fisiak et al. 1978, 199). This

traditional principle is also introduced by Klemensiewicz (1961, 41), who uses the passive as the criterion of object identification: only direct objects can be moved in passivization; if an object cannot be moved, it is an object indirect, e.g. as in *wierzyć* +NP_{dat}, *spodziewać się* +NP_{gen}.

In fact, adopting such a criterion entails that in Polish there are direct objects in the Genitive or Instrumental as well asthe Accusative:

(1) Ktoś źle **rządzi** krajem$_{Instr.}$–Kraj **jest** źle **rządzony**.
[Somebody is governing the country badly. The country is badly governed.]

(2) Policja **poszukuje** sprawcy$_{Gen.}$–Sprawca **jest poszukiwany** przez policję.
[The police are looking for the culprit. The culprit is being looked for by the police.]

This has also been suggested by Alicja Nagórko (1996).

With this in mind, in this study we disregard what is obvious and expected and instead choose to focus on the instances when the verbs that theoretically should not appear in the passive, ingeniously labelled by Frank (1995, 34) as "quirky case-assigning verbs", in fact do. That set includes both passivizable Genitive and Instrumental verbs. Additionally, in order to understand that the case of the object cannot be relied on to unequivocally identify the verbs that would be attracted to the passive construction, one must cast the net wider and consider the semantic factors as well. Thus the research question that motivates this chapter is: what syntactic or semantic factors determine the possibility of using Polish Genitive and Instrumental verbs in the passive construction?

The remainder of the paper is structured as follows. The next part outlines the characteristics of the passive construction and its behaviour in Polish, and the final part comprises the research analysis, which starts with a lexicographical pilot study and is followed by the analysis of corpus data focusing first on the frequencies of Genitive and Instrumental passives of particular verbs and further on a feature analysis of a data sample.

The Passive as We Know It: From a Transformation to a Construction

The Passive Transformation

Starting with the traditional and transformational descriptions, we shall define the Polish canonical passive as a structure which contains the Nominative NP in the subject position, the predicate which is formed by a passive verb form (auxiliary + past/passive participle), and the optional *PRZEZ* [*by*] phrase. It is also assumed to have a corresponding active sentence. These characteristics of the passive are also listed by Siewierska as the most commonly mentioned (1984, 2):

- The subject of the passive clause is a direct object in the corresponding active;
- The subject of the active clause is expressed in the passive in the form of an agentive adjunct or is left unexpressed;
- The verb is marked passive.

Naturally, in the transformational tradition, the passive sentence is seen as derived from the active one by the passive transformation. The passive morphology of the verb optionally assigns the case to the demoted Agent argument in the *by*-phrase, while the internal argument of the verb must be raised to the subject position in order to receive the case, as it no longer receives it from the passive verb. Thus the argument structure of the verb remains unchanged (Haegeman and Guerron 1999, 199-200). In lexical-functional grammars, from the perspective of the argument structure, the Agent argument is suppressed and the Patient argument role is assigned to the external argument, the subject, while the suppressed argument becomes the so-called ”argument adjunct” (Grimshaw 1992, 133).[1]

The passive morphology marked on the main verb requires an auxiliary verb to agree with the grammatical subject of the clause. In Polish, two auxiliary verbs are used, *być*, which corresponds to *to be*, and *zostać*, which roughly corresponds to *to become/to get.* The latter is restricted in use to perfective verbs only. *Być*, on the other hand, is unrestricted and can co-occur with both types of verbs, with a slight shift in the meaning of the whole clause towards the stative interpretation (Siewierska 1984, 129).

[1] Klemensiewicz (1961, 46) calls this argument “dopełnienie sprawcy”, which could be translated as the ”Actor/Agent complement”; the term ”dopełnienie” is traditionally translated as ”object”, yet here it is treated by Klemensiewicz as a functional (semantic) class of sentence elements rather than a syntactic function.

Case-wise, Polish is a highly complex system. The seven cases appear in various syntactic and semantic functions, including the case-marking of objects and complements. Even with the prepositional complements accounted for, there are still four cases to consider in verb complementation: the most common Accusative, the Genitive, the Dative, and the Instrumental (Klemensiewicz 1961, 40-44). Assuming that the passive should be available to transitive verbs only, it is necessary to clarify how transitivity is typically understood in Polish. Transitive verbs are those that are followed by an Accusative object and passivized (with restrictions on the passivization of verbs of possession, measure, etc., also present in English, cf. Nagórko 2007, 289-290). Yet, as mentioned above, following aline of reasoning that makes passivizability the main criterion of transitivity, some verbs taking the Genitive or the Instrumental are also transitive. Consider, for example:

(3) Artysta **udzielił** wywiadu$_{Gen}$
[The artist gave an interview]

(4) Prezydent **rządzi** krajem$_{Instr}$
[The president rules the country]

They passivize and their objects become passive subjects, which proves them to be direct objects direct (Nagórko 2007, 290). Other Genitive and Instrumental verbs take an indirect object and do not passivize. Consider:

(5) **Potrzebuję** spokoju$_{Gen}$
[I need peace]

(6) On **handluje** warzywami$_{Instr}$
[He deals in vegetables]

Theoretically, this should make them non-transitive.[2] Nagórko states that indirect objects are closely associated with non-transitive verbs and the case of the indirect object itself in fact does not matter. Additionally, the non-transitive class includes verbs taking one object in Dative. These do not passivize in Polish under any circumstances. The Dative object, which is assigned the role of Recipient or Experiencer (the latter also covering Possessor), is unequivocally labelled as object indirect, and thus never allowed to become a passive subject. On the other hand, typically

[2] Swan (2002, 393) labels such verbs as "semitransitives."

ditransitive verbs, which take an Accusative and a Dative object, do allow passivization, but only from the direct object in the Accusative (Nagórko 2007, 291). Indirect objects and non-transitive verbs further include true reflexive verbs (V+*się*+NP) and verbs taking prepositional phrases.

In view of the above, it should be concluded that morphological case is not a reliable predictor of passivization in the case of Genitive and Instrumental verbs. Another factor that needs to be mentioned in this context is the semantic class of passivizing Instrumental verbs, namely verbs of control (Nagórko 2007, 290). It is more interesting, however, whether other semantic factors are at play, e.g. the thematic role of the object, lexical aspect of the verb, its dynamicity, telicity, etc., and these issues will be investigated below.

The traditional and transformational view on the passive is somewhat undermined by the occurrence of passive sentences built on verbs that theoretically should not passivize. Both in English and in Polish an observable tendency occurs to passivize verbs otherwise regarded as intransitive, e.g. motion verbs. The process is often camouflaged as adjectival, attributive, or predicative use of the passive participle, as in:

(7) dobrze **wylądowany** skok
[a well-landed jump]

(8) Auto było mało **jeżdżone**.
[The car hasn't been driven much.]

In English this tendency is observed in verbs taking a place adverbial in the form of a prepositional phrase; the prepositional passive is then sanctioned by the analogy to the prepositional passive of prepositional and phrasal verbs (Podhorodecka 2014). The unexpected gaps in the otherwise coherent system of active/passive sentences should also raise doubts as to the complete transformational correspondence between the two structures. Thus, we now turn to Construction Grammar to account for the occurrence of passives in Polish.

The Passive Construction

In this chapter we adopt the view of Goldberg (2006, 2009) – further clarified by Hilpert (2014) – on language as a set of constructions. A construction is defined as a pair of form and meaning, characterized by Goldberg in the following way:

> Any linguistic pattern is recognized as a construction as long as some aspectof its form or function is not strictly predictable from its component parts or from other constructions recognized to exist. In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency. (Goldberg 2006, 5)

Constructions are known to display certain preferences and constraints as to the lexical items they attract. To identify a construction, Hilpert (2014, 14-23) lists four characteristics: deviation from a canonical pattern (formal unpredictability), non-compositional meaning (semantic unpredictability), idiosyncratic constraints on meaning or form, and collocational preferences. The passive is an argument structure construction, subject to the Semantic Coherence principle, which states that a verb will be attracted by a construction only if "the event structure of that verb and the argument structure of the construction match semantically" (Hilpert 2014, 30). It is also a valency-decreasing construction, which means it overrides the Correspondence Principle (profiling arguments) by allowing the normally profiled Agent to be deemphasized and made optional (Goldberg 2006, 40). Finally, the passive construction attracts various verbs with different force: some are commonly used in the passive, while the passivization of others comes as a surprise, and some are clearly banned from the construction altogether (Hilpert 2014, 41-42). Thus the passive construction displays specific collocational preferences and constraints.

Langacker states the main function of the passive construction to be the reversal of the hierarchy of salience: the normally (in a typical transitive clause) unprofiled Patient is brought to attention by becoming the trajector of the sentence – the subject (Langacker 2008, 384). But not each and every transitive verb is eligible for the passive, following the constraints and preferences of the construction. More typical transitive verbs should be more likely to appear in the passive. A prototypical transitive clause can be described by the following characteristics:

- Two participants, coded by nominals, of specific reference, pre-existing, maximally distinct, in opposition;
- The event is dynamic, telic/perfective, punctual, external and observable, involving physical contact, is real rather than hypothetical;
- The agent is the trajector, volitional, in control of the action, human, an energy source;
- The patient is the landmark, non-volitional, affected, inanimate, energy sink (Langacker 1991, 302).

The possibility and the frequency of passivization depends on how closely a particular verb corresponds to the transitive prototype. Prototypically transitive situations are cross-linguistically expressed by prototypical transitive structures, with a full set of their characteristic features, including the ability to passivize. However, not every transitive structure denotes a prototypically transitive event, and various languages tolerate varying degrees of deviation, combining them with different types of restrictions on the construction's behaviour (Naess 2003, 3-5). This study examines how Polish Genitive and Instrumental verbs differ from the transitive prototype and how those differences influences their passivization.

Research Analysis

Verb Spotting: The Pilot Study

A purely lexicographical pilot study was conducted to reconnoitre the field. Mędak's Dictionary *Praktyczny słownik łączliwości składniowej czasowników polskich* was used as the source of the material. The dictionary list was extended with several aspectual counterparts of the verbs; at the same time, certain cases were not included in the research: Dative supplemented by the Dative construction, but not listed in the verb's argument structure (*wyczyść mi buty [clean me the shoes]*); canonical ditransitive construction Dative (thus ditransitive verbs are tagged with the Direct Object case only); Genitive imposed by the Partitive construction, unless it was the only complementation pattern of the verb; Instrumental unambiguously marking the adverbial of manner; Prepositional case marking. This selection yielded a list of 1,050 verbs which were further tagged for case.

Table 12-1 shows the number of particular case-marking verbs. Of those, Genitive and Instrumental verbs were selected for further analysis, as the least predictable ones in terms of passivizability. They were tagged for Subject and Object theta-role, semantic feature (+/- Human, Animate), morphological aspect, lexical aspect, and passivizability. The theta-roles used follow the classic definitions: Agent is understood as a sentient, intentional instigator; Cause is the force behind the action (energy source), but not sentient; Patient is the affected object which undergoes a change, either sentient or not; Theme is the unaffected object which does not undergo change, is unaware of the activity, undergoes movement, is the point of reference, etc.; and Experiencer is the metaphorical recipient or possessor of information, emotion, etc. Aktionsart, as defined by Vendler

(1957), was assigned to particular verbs on the basis of their abstracted lexical meaning.

Table 12-1. Distribution of case-marking among the examined verbs

Main complement case	Number of verbs	Approximate %
ACCUSATIVE	522	50
PP	270	26
INSTRUMENTAL	107	10
GENITIVE	62	6
DATIVE	56	5
Mixed and other	33	3
TOTAL	1050	100

Table 12-2. Case and passivizability

Case	No. of verbs	Passivising verbs	Approximate %
Instrumental	107	8	7.5
Genitive	62	27	43.5
Dative	56	2	3.5

Table 12-2 presents the ratio of passivizing verbs in each case set. Genitive verbs seemed the best group for analysis, with almost half of the set allowing passivization. The theta-role analysis revealed that both the passivizing and non-passivizing Genitive verbs assign mostly Agent and Experiencer roles to their subjects, and Theme role to their objects. As for the lexical aspect, of the 27 passivizing Genitive verbs, 10 were identified as states, 9 as activities, 6 as achievements and only 2 as accomplishments. In the non-passivizing Genitive set (35 verbs), there were 13 achievements, 12 states, 8 activities, and 2 accomplishments. The results seem counterintuitive, as the non-passivizing verbs assign exactly the same roles as the passivizing ones. It appears that an agentive subject and a Theme object do not guarantee passivization. Secondly, there are more activities and states (durative, atelic) than achievements (dynamic, telic, punctual) among the passivizing Genitive verbs, which goes against the expectations built on the prototypical features of a transitive event.

In the group of Instrumental verbs, the percentage of passivization was low (less than 9%). This number represents exactly 9 Instrumental verbs that allow passivization, which form a rather coherent set, with 8 out of 9 being Activities, with Controlled objects and Agentive subjects. In this group, the verbs *dowodzić, kierować, sterować, rządzić, zarządzać,*

powodować[3] are all imperfective activities of controlling. Apparently the aktionsart of the verbs is not a factor in passivization, but perhaps their Instrumental objects have more Patient characteristics than those of other verbs from the case set; this could result from the semantics of the verb. In comparison, *handlować*, which is also an imperfective activity, yet with an obviously unaffected Theme object, does not passivize. This observation seems to confirm the claims of some descriptive grammarians that in the case of Instrumental verbs, passivizability is related to the verb's semantics and that only the verbs of "control" or "governing" passivize (Sawicki 1988; Nagórko 2007; Frank 1995).

Corpus Frequencies and Collostructions

We will focus on the preferences and constraints that the Polish passive reveals. In particular, we will analyse the features of verbs attracted by the construction. As already explained above, the obvious choices will be omitted from the research: neither the Accusative verbs, typically appearing in the passive, nor the Dative verbs, excludedby the passive construction in Polish, will be examined. In the spirit of the constructionist assumptions, we shall investigate the "unpredictable." The linguistic material selected for the research contains verbs complemented by Genitive and Instrumental noun phrases, which, according to the restrictions of the classic Polish descriptive grammar, should not passivize. The primary list of verbs was taken from Stanisław Mędak's *Praktyczny słownik łączliwości składniowej czasowników polskich* and verified against the balanced subcorpus of *Narodowy Korpus Języka Polskiego*. Altogether 96 Genitive and Instrumental verbs were subjected to further analysis. The raw frequencies of the passive uses of the examined verbs were obtained from the corpus and collostructional analysis was conducted in order to determine which of the verbs occur in the passive construction more often than might be expected from their overall corpus frequencies. The next stage focused on selected samples of the verbs, tagged for various morphosyntactic and semantic features, and submitted to multiple correspondence analysis with the aim of delineating the idiosyncratic constraints and preferences of the Genitive and Instrumental passives.

The search of the balanced subcorpus of the *NKJP* yielded 33 passivizing Genitive verbs and 12 Instrumental ones, out of which only 12

[3] The verb *powodować* meaning *to cause* is followed by an Accusative object; this use is regularly passivizable.

verbs exceeded the number of 100 passive tokens. They are listed in Table 12-3.

Table 12-3. Top twelve passivizable Genitive and Instrumental verbs.

	Verb	Passive freq.	Corpus freq.	% passive
1.	dokonać$_{gen}$	1404	45321	3.10
2.	używać$_{gen}$	1389	35617	3.90
3.	wymagać$_{gen}$	1272	66432	1.91
4.	dokonywać$_{gen}$	1029	24560	4.19
5.	udzielić$_{gen}$	780	22547	3.46
6.	zabronić$_{gen}$	667	4543	14.68
7.	udzielać$_{gen}$	589	19934	2.95
8.	przestrzegać$_{gen}$	541	12282	4.40
9.	wysłuchać$_{gen}$	290	9079	3.19
10.	zarządzać$_{instr}$	267	34019	0.78
11.	sterować$_{instr}$	218	6849	3.18
12.	rządzić$_{instr}$	128	20185	0.63

The list contains mostly Genitive verbs. Instrumental passives are less frequent, which might suggest that Instrumental verbs are less prototypically transitive. The list also features pairs of imperfective/ perfective verbs (*dokonać/dokonywać, udzielać/udzielić*), with similar percentages of the passive usage. This could imply that morphological aspect is not as important as the semantic content of the lexemes. In terms of meaning, the verbs in the list follow certain semantic patterns: completed performance of the action (*dokonać, udzielać*), and imposing obligation (*wymagać, zabronić, przestrzegać*) or control (*zarządzać, sterować, rządzić*). The last set–control verbs–is the most uniform semantically, and includes only Instrumentals, which passivize notably less often than Genitives. Paradoxically, the semantic component of control should bring a verb closer to the transitive prototype, and consequently enhance its passivizability. The analysis below will focus on the possible reasons for this situation.

The above-mentioned predominance of Genitive passives is also visible in the overall percentage of passive uses of the examined lexemes, even more so when the average is calculated for the top ten verbs within

each case category. The average passive frequencies are listed in Table 12-4.

Table 12-4. Average frequency of the passive

	All passivizing verbs	Top 10
Genitive verbs	1.55%	4.37%
Instrumental verbs	0.97%	1.1%

Collostructional analysis is a technique which identifies the most characteristic collocates of a particular construction and ranks them according to their collostruction strength–the force of their correlation with the structure in question. Raw frequencies alone are not enough to establish the strength of that association, so collostructional analysis uses relative frequencies to determine whether particular lexemes occur in the construction more often than could be expected from their overall corpus frequency.

The present analysis was conducted with Coll.analysis 3.5 script (Gries 2014).[4] The script relies on the Fisher exact test, but its final results are log-transformed, so that instead of p-values the test yields more intuitively readable results, where a larger number corresponds to a stronger word-construction association. The lexemes whose collostruction strength exceeds 1.3 are statistically significant at the p-level of 0.05, while a value above 3 indicates a highly significant attraction at the p-level of 0.001 (Gries 2014).

Out of the 96 verbs examined, only 4 (see Table 12-5) proved to be attracted by the construction. All of them are Genitive-taking verbs. Such results are to be expected, as the passive is a marked, relatively infrequent structure (the more so in Polish), and Genitive and Instrumental verbs are far from typical in terms of transitivity.

The obtained results prove the importance of collostructional analysis, as the verbs attracted by the passive construction are not the ones with the highest raw frequencies, but those whose percentage of the passive exceeds 3.5% of all uses. The verb with the highest collostruction strength is *zabronić*; however, it may be suspected that in many uses the participle could be interpreted as a lexicalized adjective. The frequency of passivization and collostruction strength of this lexeme are markedly above the other verbs, which indicates different patterns of usage. *Używać*, on the other hand, shows a weak attraction to the passive, below the level of significance. That notwithstanding, it still shares certain features with

[4] We are grateful to the author for providing us with this software.

the two remaining lexemes: all three denote volitional dynamic actions and are imperfective and durative (potentially iterative).This shows that the verbs attracted by the passive construction approximate the transitive prototype in certain aspects (volitionality and dynamicity),but depart from it in others (imperfectivity and non-punctuality).

Table 12-5. Collostructional analysis: verbs attracted by the passive construction

Verbs	Collostruction strength
zabronić$_{gen}$	186.9
przestrzegać$_{gen}$	2.83
dokonywać$_{gen}$	2.23
używać$_{gen}$	0.39

As the data discussed above indicates, Genitive passives dominate over the Instrumental ones, both in terms of the number of passivizing lexemes, the raw frequencies of their individual tokens, and collostruction strength. The next stage of the analysis will investigate the semantic and syntactic features which could possibly account for this situation.

Genitive vs. Instrumental–multiple Correspondence Analysis

Multiple correspondence analysis (MCA) is a statistical technique whose aim is to visualize correlations in the data: the distance between the points in an MCA graph represents the strength of association between the linguistic features they denote (Glynn 2014, 133-134). This part of the analysis focuses on the differences between Genitive and Instrumental passives and compares them to the transitive prototype, attempting to explain the predominance of genitive passives. The sample created for the purposes of the present stage of the research contains 20 tokens each (10 in the active, 10 in the passive) of the top ten most frequently passivizing Genitive and Instrumental verbs (see Tables 12-6 and 12-7), making the overall number of the analysed tokens 400. Such composition of the sample was motivated by the fact that many of the features (e.g. lexical aspect, telicity, etc.) were directly determined by the semantics of individual verbs, while the focus of the research was higher-level generalizations, related to the semantics of the whole construction. A proportionate sample would skew the results in favour of the few most frequent verbal lexemes.

Table 12-6. Top 10 Genitive verbs

	Verb	Overall freq.	Passive freq.	Passive %	Coll. strength
1	Dokonać	45321	1404	3.10	-18.41
2	**Używać**	35617	1389	3.90	**0.39**
3	Wymagać	66432	1272	1.91	-184.07
4	**Dokonywać**	24560	1029	4.19	**2.23**
5	Udzielić	22547	780	3.46	-3.26
6	**Zabronić**	4543	667	14.68	**186.9**
7	Udzielać	19934	589	2.95	-11.87
8	**Przestrzegać**	12282	541	4.40	**2.83**
9	Wysłuchać	9079	290	3.19	-3.51
10	Słuchać	32383	85	0.26	-Infinite

Table 12-7. Top 10 Instrumental verbs

	Verb	Overall freq.	Passive freq.	Passive %	Coll. strength
1	Zarządzać	34019	267	0.78	-280.52
2	Sterować	6849	218	3.18	-2.89
3	Rządzić	20185	128	0.63	-189.72
4	Kierować	43875	98	0.22	-56.85
5	Manipulować	2662	83	3.12	-1.67
6	Administrować	2005	26	1.30	-11.32
7	Powodować	28386	13	0.05	-Infinite
8	Dowodzić	10210	12	0.12	-152.57
9	Wzgardzić	305	4	1.31	-2.11
10	Pokierować	951	3	0.32	-12.32

All 400 tokens were annotated for a number of semantic and morphosyntactic features, and submitted to multiple correspondence analysis through the use of R statistical programming environment, supplemented with the FactoMineR package (Husson et al. 2007). Logistic regression was used to determine the significance of individual factors.

MCA: Genitive vs. Instrumental Passives

The categories that proved statistically significant for the distinction between the Genitive and Instrumental passives are presented in Figure 12-1. They include: auxiliary (*być/zostać*), aspect (perfective/ imperfective), passive type (short/long), aktionsart (state/activity/ achievement/ accomplishment), animacy of the "passive subject/active object" (PSOA) (human/institution/action/inanimate/abstract), and affectedness (controlled/effected/mental). The latter category was redefined to more precisely reflect the differences in the degree and kind of affectedness observed in the data. The prototypical affectedness, with a Patient undergoing a visible change of state as the result of the action, was conspicuously absent from the sample. Instead, less prototypical Patients were identified. The type of affectedness labelled as "controlled" features a Patient which does not itself undergo a change of state, but which is manipulated (*używać, kierować*) or whose behaviour is influenced (*zabronić, wymagać)*. An "effected" Patient is created as a result of the action (*udzielić, dokonać*). "Mental" affectedness characterizes the entity (not necessarily the PSAO) whose mental state has been altered as the result of the action (*wysłuchać, wzgardzić*).

In Figure 12-1, the two data points labelled in capital letters represent respectively Instrumental passives and Genitive passives. The distance between these points and the remaining category labels represents the strength of their association. The Instrumental data point, situated on the left side of the graph, is surrounded by a loose cluster of features comprising long passive, the imperfective aspect, the auxiliary *być,* aktionsart activity, controlled affectedness, and institution subject. This combination of features is exemplified in (9) below. Moreover, two more features correlated with the Instrumental are human subject and aktionsart state; these are illustrated in (10).

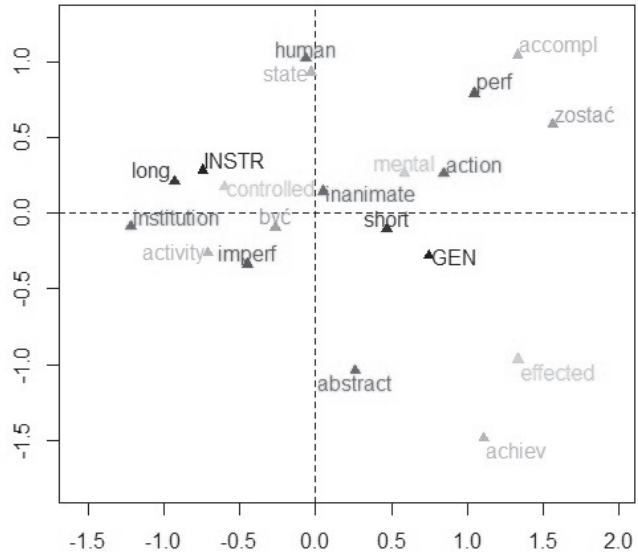

Figure 12-1. Genitive vs. instrumental passives – MCA results.
Factors: auxiliary, passive type, aspect, PSAO animacy, affectedness, aktionsart

(9) (…) firma **była i jest kierowana** przez eksperta w dziedzinie ubezpieczeń.[5]
[(…) the firm has been and still is managed by an expert in the field of insurance.]

(10) Ludzie (…) **mogli być powodowani** bardzo różnymi okolicznościami.
[People (…) might have been driven by very different circumstances.]

The right side of the graph is occupied by the features associated more closely with the Genitive passive. The most clearly visible combination of these is situated in the upper right quadrant of the graph, including aktionsart accomplishment, the perfective aspect, the auxiliary *zostać*, mental affectedness, short passive, and an inanimate or action subject. This configuration of features is best illustrated by (11).

[5] Henceforth all the examples come from NKJP corpus. Emphasis added.

(11) (…) moja modlitwa **została wysłuchana**.
[(…) my prayer has been heard.]

Another, small cluster of features, more loosely associated with the Genitive passive comprises abstract subject, effected affectedness, and aktionsart achievement. Such a combination is exemplified in (12):

(12) Odpowiedź **była udzielona** naprędce.
[The answer was given hastily.]

The significance of the features was determined with logistic regression. The factors which reached the threshold of statistical significance are listed in Table 12-8, together with the p-values they obtained in the test.

Table 12-8. Logistic regression: auxiliary, passive type, aspect, animacy, affectedness, aktionsart

Genitivepassives		Instrumentalpassives	
Mental affectedness	1.05e-10	Aktionsart: activity	0.000192
Perfective aspect	8.60e-09		
Short passive	4.26e-07		
Action as PSAO	5.35e-07		
Inanimate PSAO	0.012288		
Auxiliary *zostać*	0.024275		

The results show that the highest statistical significance is associated with the group of features situated in the upper right quadrant of the graph and related to the Genitive passive. Several of them match the transitive prototype quite closely (perfective aspect, short passive, inanimate PSAO). On the other hand, the Instrumental passive is characterized by one statistically significant feature–aktionsart activity, which entails that Instrumental passives are predominantly durative and atelic. Thus, the only feature significant for Instrumental passive stands in contrast to the transitive prototype.

The above observations invite a number of conclusions. Instrumental passives share one feature with the transitivity prototype, i.e. a greater degree of Agent control. On the other hand, they are characterized by a series of features distancing them from the prototype. Firstly, they are usually imperfective and durative, which entails incompleteness of the

action, decreasing the affectedness of the Patient. Secondly, they more frequently occur with the *by*-phrase, which prevents their Agents from being completely demoted, and feature human or institutional rather than inanimate Patients. These characteristics diminish the prototypical maximal distance between the Agent and the Patient. By contrast, Genitive passives are associated with a number of significant features matching the transitive prototype. This indicates that they constitute a more uniform category, which can be characterized by perfectivity (perfective aspect, auxiliary *zostać*) and a clear distinction between the two participants (short passive, non-human PSAO: action or inanimate).

MCA: Active vs. Passive

The final stage of the analysis contrasts the Genitive and Instrumental verbs in terms of the differences between their active and the passive uses. Figure 12-2 illustrates the behaviour of Genitive verbs.

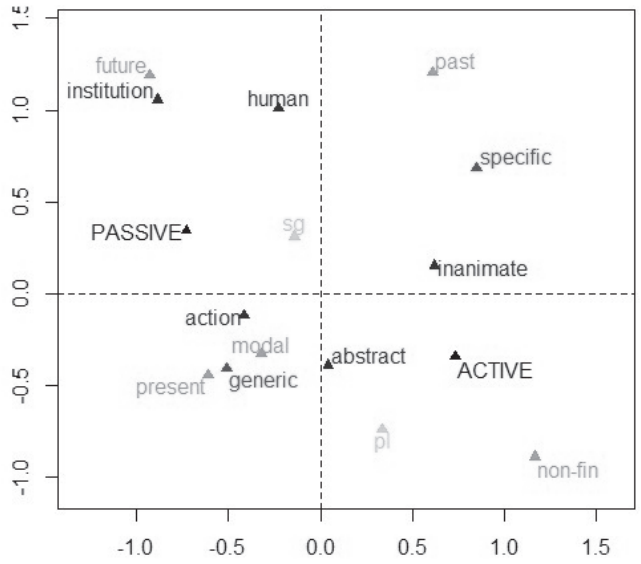

Figure 12-2. Genitive verbs active vs. passive – MCA results.
Factors: specificity, PSAO animacy, tense, number

The MCA graph can be divided into the features associated with the passive, situated on the left, and those associated with the active, situated

on the right. The former include generic type of situations, expressed by future, modal, or present verb forms, and combined with a human, institution, or action PSAO (13 and 14). The active usage of the verbs correlates with specific situations, past or non-finite verb forms (including impersonal), and either inanimate or abstract PSAO (15).

(13) (…) ewentualne odpęd raczenie **nie może być dokonane** w ostatniej chwili.
[(…) potential disinsection cannot be conducted at the last moment.]

(14) W trakcie postępowania **zostaną wysłuchane** obie strony konfliktu.
[During the proceedings both sides of the conflict will be heard.]

(15) (…) towarzysz K . gotów był mu **udzielić** rekomendacji.
[(…) comrade K. was ready to grant him recommendation.]

Table 12-9. Logistic regression: specificity, animacy, tense, number

Genitiveverbs–active		**Genitiveverbs– passive**	
Tense: non-finite	8.36e-10	Tense: present	0.002397
Specific events	7.89e-07	Tense: modal	0.007876
Tense: past	0.039262	Number: singular	0.025259
Inanimate PSAO	0.076209	Action as PSAO	0.068468

The statistically significant features are listed in Table 12-9. The most important conclusion is that the Genitive passive appears to have a generalizing effect. While the active shows a very strong correlation with specific events, such an association is absent from the passive usage. Instead, the passive significantly co-varies with modals and present verbs forms, which frequently have a de-specifying effect. The connection of a singular number with the passive can be explained by the significance of action as passive subject, often expressed by a gerund. Thus, apart from generalization, the Genitive passive is characterized by reification, where the subject is an action or a relation conceptualized as a thing. This feature contrasts with typically inanimate and thus more concrete active objects.

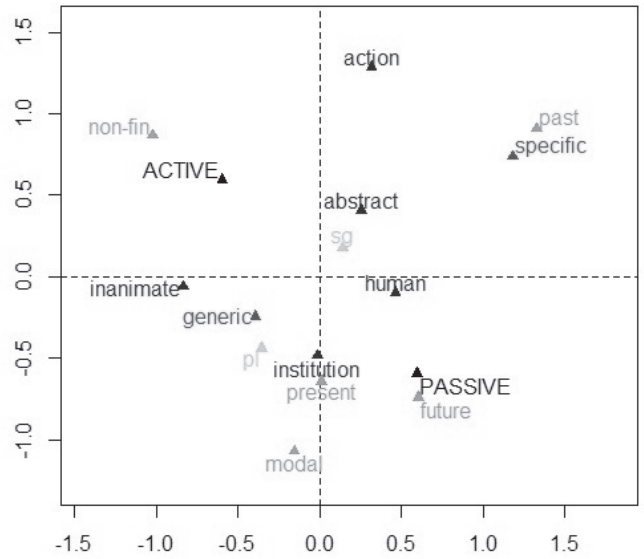

Figure 12-3. Instrumental verbs active vs. passive–MCA results.
Factors: specificity, PSAO animacy, tense, number

Figure 12-3 shows the behaviour of Instrumental verbs in the active and the passive.The correlations between the factors generally resemble the ones observed with Genitive verbs, but there are some important differences, most clearly visible if the statistical significance of individual factors, listed in Table 12-10, is taken into consideration.

Table 12-10. Logistic regression: specificity, animacy, tense

Instrumental verbs – active		**Instrumental verbs – passives**	
Tense: non-finite	3.75e-12	Tense: past	0.00424
Inanimate PSAO	0.04604	Tense: present	0.01941
		Specific events	0.09007

Similarly to Genitive verbs, Instrumental verbs correlate with non-finite forms and inanimate objects in the active (16), but the combination of past tense and specific events characterizes the passive, not the active usage of Instrumental verbs (17). The passive shows no significant correlations with specific subject types or number.

(16) Chcesz **zarządzać** swoim kontem nawet wtedy, gdy jesteś na wakacjach ?
[Do you want to manage your account even when you are on holiday?]

(17) (…) kobieta kłamała , a w dodatku **była manipulowana**.
[The woman was lying and what is more, she was being manipulated.]

As the data above shows, both Genitive and Instrumental verbs correlate with non-finite forms and concrete inanimate objects in the active, while the passive shows more variety both in its tense and the type of subjects, which may indicate a greater tendency of the passives for meaning extension. The main difference lies in the fact that while reference to specific events is highly significant for the active usage of Genitive verbs, with Instrumental verbs it is weakly distinctive for the passive. This confirms the atypical behaviour of Instrumentals in the passive.

Conclusions

The fact that Genitive verbs passivize more frequently than Instrumental verbs proves that case is a significant factor, in that the two types of verbs show different semantics and different patterns of usage. Genitive verbs have more features related to the transitive prototype, such as telicity and a more pronounced opposition between the two participants in terms of their animacy. Instrumental verbs, on the other hand, show a number of features uncharacteristic for the passive construction, most notably the association of specific events with the passive and an atypical distribution of salience between the participants. This may result from the fact that the semantic content of the verbs, denoting governance and management (*administrować, zarządzać, kierować*), makes the controller communicatively more salient, which explains both the large proportion of long passives and reference to specific past situations. So paradoxically, the features which conform to the transitive prototype in combination with the semantics of this particular group of verbs result in a construal atypical for the passive construction.

Another factor that contributes to the low passivizability of Instrumentals is their lexical aspect: most of the verbs are atelic and durative, which inhibits affectedness. The factors which account for the predominance of Genitive passives, namely telicity and specificity, are also related to affectedness. Within the transitive prototype, they

contribute to patient affectedness, as the effect of the action is more clearly observable if the action is complete rather than incomplete and specific rather than generic. Thus, the results of the research seem to indicate that features which influence patient affectedness are more important for the frequency of passivization than those which enhance agent control.

The present study clearly raises a number of questions. The results are inconclusive as to the role of morphological aspect and aktionsart. It seems reasonable to expect these parameters to play a role in passivizability and a more narrowly targeted study should clarify the issue. Another factor that obviously influences the choice of the passive construction is the information structure of the sentence. Polish, being a highly inflectional language with a relatively free word order, is a perfect sitefor a detailed investigation of this aspect of passivization. As for the research methodology, the results of a lexicographic and a corpus study would certainly benefit from a comparison with an acceptability survey among native speakers. As the investigations above have hopefully demonstrated, the Polish passive proves to be a complex multi-aspectual phenomenon, which offers ample ground for further research.

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CHAPTER THIRTEEN

DISTINCTIVE-METAPHOSTRUCTION ANALYSIS: INVESTIGATING SIGNIFICANT METAPHORICAL CONSTRUCTIONS OF TWO TARGET DOMAINS

JAROSŁAW WILIŃSKI

Introduction

In recent years, the field of cognitive linguistics has taken a quantitative turn. We continue to witness an unprecedented proliferation of scientific publications, conference presentations, and books in the field involving some form of quantitative analysis of linguistic data and the application of quantitative corpus-driven methods for the exploration of language and the rejection or confirmation of quantitatively testable hypotheses (cf. Gries and Stefanowitsch 2006; Stefanowitsch and Gries 2006; Glynn and Fischer 2010; Janda 2013; Glynn and Robinson 2014).

Some research studies have combined the insights from cognitive linguistics with the quantitative methods and techniques applied in corpus linguistics (Newman and Rice 2004; Deignan 2005; Lewandowska-Tomaszczyk and Dziwirek 2009; Dziwirek and Lewandowska-Tomaszczyk 2010; Zeschel 2010; Lewandowska-Tomaszczyk 2010; Lewandowska-Tomaszczyk and Wilson 2013). Other studies have employed exploratory techniques, such as Cluster Analysis and Correspondence Analysis, for the identification of patterns and associations in linguistic data (Krawczak and Kokorniak 2012; Fabiszak et al. 2014). Logistic Regression Analysis (e.g. Glynn 2014), a confirmatory multivariate technique, has also proven to be especially useful for the comparison of near-synonyms in corpora.

Collostructional analysis is also one of the most widely used techniques within cognitive linguistics. This technique is in fact a cover term for three related methods of corpus-linguistic research, Collexeme Analysis (Stefanowitsch and Gries 2003), Distinctive Collexeme Analysis

(Gries and Stefanowitsch 2004a) and Covarying Collexeme Analysis (Gries and Stefanowitsch 2004b; Stefanowitsch and Gries 2005). Each of these methods has been used to determine the mutual attraction between lexical items and various grammatical constructions (e.g. Hilpert 2009; Colleman 2010; Perek 2014; Wiliński 2015d).

To date, however, little attention has been paid to the quantification of metaphorical expressions and to the employment of statistical techniques and methods for the empirical substantiation of the previous hypotheses about the nature of particular metaphorical mappings and the significance of some source domain lexemes for the comprehension of a particular target domain. Wiliński's (2015c) corpus-based study of sports terms occurring in the spoken part of the Corpus of Contemporary American English is one of a few notable exceptions. The results of this investigation indicated that sports terms coming from racing and boxing are prevalent in the political context, and that the conceptual metaphors A POLITICAL CAMPAIGN IS A RACE and A POLITICAL DEBATE IS A BOXING BOUT are of fundamental importance for the understanding of ideas, activities, and events in politics.

Adopting the concept of *metaphostruction* (Wiliński 2015c) and the perspective of conceptual metaphor (Kövecses 2002), this chapter introduces an extension of distinctive-collexeme analysis that is specifically geared to investigating the relationship between two target domains and the source domain lexemes that occur in both of them. The corpus-based method, referred to as *distinctive-metaphostruction analysis*, is used to determine distinctive source domain lexemes occurring in two different target domains.

Distinctive-metaphostruction Analysis: Theoretical and Methodological Background

The distinctive-metaphostruction analysis is built on the theoretical framework provided by the notion of metaphostruction (Wiliński 2015c) and the conceptual theory of metaphor (Lakoff and Johnson 1980). The term *metaphostruction* denotes a metaphorical construction, a pairing of form and meaning/function, where both form and meaning can be understood broadly. The former is not restricted to the number, types, distance, and flexibility of the components on the condition that metaphostruction is viewed as one linguistic unit and includes at least one source domain lexeme. The latter is interpreted from a cognitive, discourse-functional and social-cultural perspective. As for the frequency of occurrence, a particular source domain lexeme becomes more

entrenched in a particular domain or context (e.g. either in politics or in business) and achieves the status of metaphostruction faster – a conventionalized metaphorical linguistic unit (see Wilinski 2015c for a more detailed discussion) – on the condition that such a lexeme occurs more frequently than expected in this target domain as compared to other domains.

The conceptual theory of metaphor, as proposed by Lakoff and Johnson (1980), asserts that metaphor is not an exclusively linguistic phenomenon, but it exists on several different levels at the same time: in other words, it is a phenomenon that seems to belong to language, thought, social-cultural practice, brain, and body (Kövecses 2005). Thus, metaphor should be best examined from a semiotic, psychological and socio-cultural perspective in contrast to a purely linguistic or cognitive one (cf. Gonzálvez-García, Peña-Cervel, and Pérez Hernández 2013). From a cognitive linguistic viewpoint, conceptual metaphors are part of the common conceptual knowledge shared by members of a culture. They are systematic in that we can observe a set of fixed correspondences between the structure of the domain to be understood (e.g. a political campaign) and the structure of the domain with respect to which we understand it (e.g. a race). They are rooted, conventionalized and entrenched in language: that is, there are numerous lexical items and idiomatic expressions in languages whose meanings are dependent upon those conceptual metaphors.

The methodological framework is offered by quantitative corpus linguistics. The distinctive-metaphostruction analysis is an extension of both the distinctive-collexeme analysis and the metaphostructional analysis. The former is used to determine which of the lexemes occurring in two synonymous constructions are most distinctive for either of them, while the latter is employed to identify strongly attracted and repelled source domain lexemes occurring in one target domain. The distinctive-metaphostruction analysis, by contrast, investigates the mutual attraction between two target domains and source domain lexical items occurring in both of them. The method is particularly suited for the identification of significant metaphostructions (i.e. very strongly distinctive metaphorical constructions) that exhibit a strong preference for one target domain as opposed to the other. Quantitative though the method is, the results of such an analysis are evaluated qualitatively and subjectively. Particularly, source domain lexemes that are strongly attracted to a particular target domain can be grouped and explained with reference to different metaphorical correspondences on the basis of introspective judgments.

As with the distinctive-collexeme analysis, so too does the distinctive-metaphostruction analysis rest on naturally-occurring language data from a representative and balanced corpus. In both cases, all linguistic expressions under scrutiny are extracted exhaustively from corpora, which frequently entails the manual annotation, counting and grouping of many thousands of hits. The data are strictly quantified and statistically evaluated in terms of association strengths. To this end, we apply a two-dimensional table, in which nominal or categorical variables are submitted to a distributional statistic (usually the Fisher exact test) to calculate association strengths. The linguistic expressions under study are then ranked according to their association strength.

Although the methods bear a close resemblance to each other, they also vary in some respects. First, a distinctive-metaphostruction analysis relies on the concept of metaphostruction and uses different theoretical frameworks. Second, it always begins with the retrieval of all occurrences of lexical items from the source domain (e.g. sport) in corpora. The selection of items under study is based on *a priori* knowledge and existing word-lists. This technique inductively identifies two target domains, i.e. two specific contexts in which those lexical items occur (e.g. politics and business). Finally, the results of such an analysis are assessed and interpreted qualitatively and subjectively: source domain lexemes that are strongly associated with a given target domain are described as instances of particular metaphorical mappings.

Corpora, Data and Tools

The data to be examined were retrieved from the magazine part of the well-balanced corpus of Contemporary American English (COCA), which is probably the largest publicly and freely available corpus of English. Its advantage is that words are evenly distributed across different genres, and its size increases the reliability and validity of observations of relatively rare metaphorical expressions. The written part of COCA used in this study covers the years between 1990 and 2012. This sub-corpus consists of approximately 86 million words drawn from nearly 100 different popular magazines, derived from a variety of domains, e.g. health, news, home and gardening, religion, financial, business and sports.

The observed data were retrieved from the corpus by means of a concordancer, ConcGram 1.0. This software program was used to search for all the instances of source domain lexemes in the magazine sub-corpus. The result of each query was a key-word-in-context concordance. Each concordance line was then manually examined to identify a political and

business context in which sports terms occurred. A specific function of this software also allowed for the advanced search of the corpus, which involved applying context words (common political and business terms) and horizons adjusted for size. This additional search was employed for the retrieval of the most frequent sports terms. The rest of the values and the expected frequencies were computed by means of Microsoft Excel spreadsheets. All frequencies essential for the computation of the association strengths were entered in the 2-by-2 table and submitted to the Fisher exact test. The p-value provided by this test was taken as an index of the degree of statistical association between a source domain lexeme and a particular target domain, i.e. a lexical item's strength of attraction/repulsion to this target domain: the smaller the p-value, the stronger the association. This statistical measure was carried out by means of an on-line Fisher's exact test calculator for two-dimensional tables.

When investigating the relationship between source domain lexemes and two target domains, it is possible to choose among a variety of association measures, such as the *t*-score, the mutual information score, the binominal test, the Chi-squared test, and the Fisher exact test, etc. However, not all of them provide equally satisfactory results. The mutual information score, for example, tends to overestimate low-frequency data and is sensitive to data sparseness (Kilgarriff 2001), whereas the Chi-squared test assumes that the linguistic data under scrutiny are distributed randomly across corpora, but "language is never, ever, ever, random", as argued by Kilgarriff (2005). Stefanowitsch and Gries (2003, 218), by contrast, maintain that the Fisher exact test is a perfect choice for the computation of two-dimensional tables, as it "neither makes any distributional assumptions, nor does it require any particular sample size".

Despite its advantages, it should be mentioned that the application of the Fisher exact test to the calculation of statistical significance was criticized by Schmidt and Küchenhoff (2013) and Küchenhoff and Schmidt (2015). The first point of critique concerns the interpretability of the p-values of this test. According to Schmidt and Küchenhoff (2013, 547), p-values can be affected by high total frequencies of lexemes outside the construction: namely, higher frequencies reduce p-values in the comparison with smaller frequencies with the same internal distribution. The next critical issue pertains to the uncertainty whether the p-value of the Fisher exact test incorporates the size of the effect. Schmid and Küchenhoff (2013, 539-540) maintain that the p-value fails to include the effect size; instead, p-values measure "the likelihood with which the assumption that there is no attraction, i.e. the null hypothesis, can be rejected". One further point of criticism concerns the dependence of the p-

value of the test on the sample size. As noted by Schmid and Küchenhoff, the p-values decrease when the values in the contingency table increase, even though the internal structure of the data remains unaffected. Those primary points of critique were rejected by Gries (2015, 508; 519-520), who advances valid arguments for the employment of the Fisher exact test for the computation of association strength (see also Gries 2012 for relevant arguments). For example, Gries (2015) argues that the Fisher exact test makes no distributional assumptions, is not a linear function of the observed frequencies, can successfully handle low and skewed frequencies better than MI or chi-squared, and can differentiate between identical effect sizes by assigning more weight to the effect sizes based on more data. The p-values provided by this test, in turn, reflect a combination of various things including the size of the sample(s), the variability of the sample(s), and the effect size.

Procedure

The procedure followed in this study begins with a calculation of the observed frequencies. By way of illustration, let us consider the lexical item *win.* The actual frequencies required for a distinctive-metaphostruction analysis of the word *win* in two target domains are rendered in Table 13-1. The frequencies in italics were derived from the corpus while the other frequencies are the results of addition and subtraction.

The observed values were ascertained in the following way. First, all occurrences of the term (*win*) in politics were extracted from the corpus: 2046. Second, all occurrences of the term (*win*) in business were calculated: 979. Third, the total frequency of sports terms in politics was identified: 6371. Finally, the total frequency of sports terms in business was determined: 9086. These four values were derived from the corpus directly while the remaining ones (that is, the frequency of all other sports terms in politics: 4325; the frequency of all other sports terms in business: 8107; the total frequency of sports term (*win*) in politics and business: 3025; the total frequency of all other sports terms: 12432; the total frequency of all sports terms in politics and business: 15457) result from addition and subtraction. These frequencies are shown in Table 13-2.

Table 13-1. Co-occurrence table for a distinctive metaphostruction analysis

	Win	**All other sports terms**	**Total**
Sports term in politics	*Frequency of term (win) in politics* ***a***	Frequency of all other sports terms in politics **b**	*Total frequency of sports terms in politics* ***x***
Sports term in business	*Frequency of term (win) in business* ***c***	Frequency of all other sports terms in business **d**	*Total frequency of sports terms in business* ***y***
Total	Total frequency of sports term (*win*) in politics and business **e**	Total frequency of all other sports terms **f**	Total frequency of all sports terms (politics/ business) **z**

Table 13-2. The distribution of *win* in politics and business

	Win	**All other sports terms**	**Total**
Sports term in politics	*2,046* (1246.832)	4,325	*6,371*
Sports term in business	*979* (1778.168)	8,107	*9,086*
Total	3,025	12,432	15,457

The second step was to estimate the expected frequencies of the lexeme *win* both in politics and business. This calculation was performed in a simple way. For the sports term *win* in each target domain, its column total was multiplied by its row total, and the result was divided by the overall table total. For example, for the figure (2,046), the column total (3,025) was multiplied by the row total (6,371). This gave the rather large figure (19,272,275). This figure then was divided by the table total (15,457), providing the result (1246.832). These calculations were carried out in Microsoft Excel. If the observed frequency of the lexeme *win* in politics was significantly higher or lower than expected, the relation between the word *win* and this target domain was counted as one of attraction or repulsion respectively (the lexeme *win* is then considered be a significantly attracted or repelled metaphostruction of the political domain). Likewise, if the observed frequency of the lexeme *win* in business was significantly higher or lower than expected, then the lexical item *win* occurs either more frequently than expected or less frequently than expected in this domain. In other words, the lexeme *win* is then said

to be a significantly attracted or repelled metaphostruction of the business domain.

In the third step, the association strength (in this case, its distinctiveness or metaphostructional strength) between the lexeme *win* and two target domains was computed on the basis of the four observed values: a) the frequency of the term *win* in politics; b) the frequency of all other sports terms in politics; c) the frequency of the term *win* in business; d) the frequency of all other sports terms in business. These were entered in a two-dimensional table and examined by means of the Fisher exact test. The computation of the Fisher exact test for this distribution provided an exceptionally small p-value: 1.77E-235. This means that the lexeme *win* is highly significant (distinctive) for one of the two target domains, but it remains unclear for which one. In order to determine this, the observed frequencies of the verb *win* were compared with the expected ones. As this comparison reveals, the term *win* occurs more frequently than expected in politics and less frequently than expected in business. In other words, *win* is a highly significant, very strongly distinctive metaphostruction of the political domain if compared to the business domain. Such results become meaningful only when this procedure is adopted for every single sports term in the two domains.

In the final step of the procedure, the terms are sorted, first, according to their direction of association (attracted or repelled), and second, according to their metaphostructional strength (their distinctiveness). The data, in turn, are evaluated qualitatively and subjectively in various ways. Suffice to say that (i) there are indeed sports terms that are significantly attracted to, or repelled by, one of the target domains, and that (ii) they instantiate particular metaphorical mappings.

Business and Politics are Sports

The presence of sports metaphors in the languages of business and politics has been widely discussed (Howe 1988; Hunt and Menon 1995; Skorczynska 2001; Arcimavičienė 2008; Negro Alousque 2011, Wiliński 2015a, 2015b, to mention a few). The metaphorical conceptualization of the actions, entities and events in politics and business has been explained by their abstract nature. In other words, political and business issues, being abstract notions, are understood in terms of physical entities that are easier to grasp, i.e. the actions, concepts, and events derived from sports. The following examples can be taken as an illustration of this phenomenon:

(1) BUSINESS IS SPORT

a. The company's *track record* seems to show that every other release either has not caught on or has been problematic.
b. Here are three technologies that auto-industry insiders we consulted think could *raise the bar* for automotive fuel economy.
c. His personal *favorite* in equities is the company stock.
d. Big banks thought commercial customers were too different to be ranked by such a *scorecard*.

(2) POLITICS IS SPORT

a. He *ran for* governor but blew the women's vote with West Texas crudities.
b. Washington state has an unusual blanket primary in which the top two vote-getters *square off* in the general election.
c. The result, as the President undoubtedly intended, is political *stalemate*.
d. A few days after Labor Day 1999, campaign pollster Mark Penn decided it was time for a *showdown.*

Our understanding of business issues is largely structured by the metaphors BUSINESS IS A SPORTING EVENT and MARKETS ARE PLAYING FIELDS. These structural metaphors allow us to use one highly structured and clearly delineated concept to structure another one (cf. Lakoff and Johnson 1980, 61). By those metaphors, we understand the target concept by means of the structure of the source domain. Competitive companies are viewed as teams. Both companies and teams win or lose a competition. Businessmen are like sportsmen. Business strategies and activities are perceived as analogues to sports tactics and activities. Both business and sport require leaders capable of controlling the organization and projection of people and resources, etc.

A similar parallelism could be established between a political election and a sporting event. Politics and sports are forms of competition involving two or more opponents (parties, politicians, teams or players) striving to clinch a victory or gain an advantage. Tactics and strategies occupy a pivotal role in each activity and can affect or decide the outcome of the competition. Both politics and sport need leaders who are crucial to the success of each competition, etc.

Since many metaphorical linguistic expressions coming from the source domain of sport reflect the conceptual metaphors BUSINESS IS

SPORT and POLITICS IS SPORT, the corpus-based study of sports terms used in the context of business and politics may substantiate pre-set hypotheses and assumptions concerning metaphorical correspondences and support our intuitive knowledge of the two metaphors. Considering the ubiquity of sports metaphors in business and political discourse, we can expect that some sports terms occur more frequently than expected in business as opposed to politics, and that some sporting events play a more important role in understanding politics than business. The distinctive-metaphostructional analysis allows us to test and verify such pre-set assumptions and expectations. This may be done by means of identifying sports terms that are highly distinctive for one of the two target domains (i.e. occur more or less frequently than expected in business as compared to politics).

Findings and Evaluation

The data obtained from the corpus clearly show that there are sports that strongly influence the understanding of politics and business. Out of 277 types of metaphorical expressions found in the context of politics and business, the majority is constituted by the sports terms derived from racing (a track event and a horse race), boxing, baseball, and American football. The metaphors coming from the afore-mentioned sports account for 65% of the total collection of sports terms. Both racing and boxing contribute about 22% of the metaphors (60 and 59 respectively), whereas baseball provides approximately 16% (44 metaphors) of all terms. American football amounts to roughly 6.5% of the metaphors (18 metaphors). The metaphorical expressions coming from soccer account for 4.7 per cent of the total collection (13 occurrences). Those pertaining to sailing, chess and card games occur 33 times, 12 of which refer to sailing (4.3%), 11 to chess (4%) and 10 to card games (3.6%). Golf occupies the next position in the frequency list (10 occurrences), ahead of wrestling (5 occurrences). The magazine sub-corpus also contained several examples of general terms used in various sports. These constitute 6.1% of the total set (17 occurrences). The last set comprises metaphorical expressions coming from the following sporting events: games (5 types), motor and cycling racing (4 types), tennis (2 types), basketball (2 types), athletics (2 types), rowing (1 type) and a greyhound race (1 type). The tokens of all types of the sports terms provided a quantitative basis for the distinctive-metaphostruction analysis.

Table 13-3. The results of a distinctive-metaphostruction analysis

Rank	Sports term	a	c	e	f	x	y	z	b	d	(a)	(c)	$P_{Fisher\ exact}$
1.	win	2046	979	3025	12432	6371	9086	15457	4325	8107	1246.83	1778.17	1.77E-235
2.	run for	584	71	655	14802	6371	9086	15457	5787	9015	269.98	385.02	1.54E-151
3.	stake	106	903	1009	14448	6371	9086	15457	6265	8183	415.89	593.11	1.30E-109
4.	lose	871	2206	3077	12380	6371	9086	15457	5500	6880	1268.26	1808.74	2.09E-61
5.	challenger	208	46	254	15203	6371	9086	15457	6163	9040	104.69	149.31	7.14E-41
6.	front-runner	118	16	134	15323	6371	9086	15457	6253	9070	55.23	78.77	1.79E-29
7.	in the long run	4	143	147	15310	6371	9086	15457	6367	8943	60.59	86.41	7.11E-28
8.	across the board	16	149	165	15292	6371	9086	15457	6355	8937	68.01	96.99	2.93E-19
9.	track record	25	168	193	15264	6371	9086	15457	6346	8918	79.55	113.45	8.88E-18
10.	team	557	1189	1746	13711	6371	9086	15457	5814	7897	719.66	1026.34	2.08E-17
11.	contender	137	56	193	15264	6371	9086	15457	6234	9030	79.55	113.45	6.60E-17
12.	finish	73	263	336	15121	6371	9086	15457	6298	8823	138.49	197.51	2.82E-14
13.	right-winger	30	1	31	15426	6371	9086	15457	6341	9085	12.78	18.22	5.08E-11
14.	stalemate	44	12	56	15401	6371	9086	15457	6327	9074	23.08	32.92	2.40E-08
15.	scorecard	5	54	59	15398	6371	9086	15457	6366	9032	24.32	34.68	3.17E-08
16.	saddled	6	56	62	15395	6371	9086	15457	6365	9030	25.55	36.45	7.14E-08
17.	tackle	26	109	135	15322	6371	9086	15457	6345	8977	55.64	79.36	8.17E-08

18.	infighting	32	6	38	15419	6371	9086	15457	6339	9080	15.66	22.34	1.06E-07
19.	favorite	189	412	601	14856	6371	9086	15457	6182	8674	247.72	353.28	5.66E-07
20.	overtake	10	62	72	15385	6371	9086	15457	6361	9024	29.68	42.32	7.91E-07
21.	showdown	49	20	69	15388	6371	9086	15457	6322	9066	28.44	40.56	8.35E-07
22.	knock sb down	4	43	47	15410	6371	9086	15457	6367	9043	19.37	27.63	8.53E-07
23.	raise the bar	2	36	38	15419	6371	9086	15457	6369	9050	15.66	22.34	1.03E-06
24.	rein in	13	66	79	15378	6371	9086	15457	6358	9020	32.56	46.44	2.95216E-06
25.	pawn	26	6	32	15425	6371	9086	15457	6345	9080	13.19	18.81	5.18135E-06
26.	square off	18	2	20	15437	6371	9086	15457	6353	9084	8.24	11.76	8.23135E-06
27.	jab	13	0	13	15444	6371	9086	15457	6358	9086	5.36	7.64	9.83881E-06
28.	spar	14	1	15	15442	6371	9086	15457	6357	9085	6.18	8.82	3.7414E-05
29.	strike out	0	19	19	15438	6371	9086	15457	6371	9067	7.83	11.17	5.903E-05
30.	dead heat	14	2	16	15441	6371	9086	15457	6357	9084	6.59	9.41	0.00018463

Note!
a = Observed frequency of sports term (e.g. win) in politics; **b** =Frequency of all other terms in politics; **c** = Observed frequency of sports term (e.g. win)in business; **d** =Frequency of all other terms in business; **e** = Total frequency of sports term (*win*) in politics and business; **f**=Total frequency of all other sports terms; **x** = Total frequency of sports terms in politics; **y** = Total frequency of sports terms in business; **z** = Total frequency of all sports terms (politics/ business); **(a)** = Expected frequency of sports term (e.g. win) in politics; **(c)** = Expected frequency of sports term (e.g. win) in business; $\mathbf{P_{Fisher\ exact}}$ = index of distinctive metaphostructional strength.

Since it is impossible to evaluate the findings for all these sports terms in the space here allotted, this section will present the results for the most strongly attracted and repelled metaphostructions of the two target domains. Table 13-3 shows the results of the distinctive-collexeme analysis ($P_{Fisher\ exact}$) for the thirty most strongly attracted lexemes, the expected frequencies for each term: (a) and (c), and the observed frequencies applied to the computation of the direction of association (attracted or repelled) and the strength of association (the distinctiveness of *sports terms*) in two target domains.

The results confirm the predictions that there are indeed metaphostructions distinguishing between politics and business, and that some sports seem to wield dominant influence upon the comprehension of political and business events. Consider now Table 13-3 which shows the thirty most strongly attracted lexemes of the two domains. For the political domain, the most distinctive sports terms were *win, run for, challenger, front-runner, contender, right-winger, stalemate, infighting, showdown, pawn, square off, jab, spar,* and *dead heat.* The p-values taken to be indexes of their distinctivity are very small, as displayed in Table 13-3. A comparison of the observed and expected frequencies of each of these lexemes in the two domains shows us that the terms occur more frequently than expected in politics and less frequently than expected in business. In other words, they are highly significant, very strongly distinctive metaphostructions of the former when compared to the latter. Note also that *win* is the strongest metaphostruction for the political domain, since its p-value resulting from the calculation of the Fisher exact test is exceptionally small (1.77E-235), and the expected frequencies indicate that *win* occurs more frequently than expected in politics and less frequently than expected in business. *Win* and most other distinctive expressions are the linguistic realizations or manifestations of underlying conceptual metaphors and instantiate various metaphorical relationships.

Win and *right-winger* instantiate the POLITICS AS A GAME. *Win* denotes 'to be the most successful in an election or competition', whereas *right-winger* refers to a member of a right wing political party or to a player positioned on the right side of a team on the field. The next group in the ranking is constituted by *run for, front-runner* and *dead heat,* sporting terms instantiating the POLITICAL CAMPAIGN AS A RACE. *Run for*–ranked second in the top thirty lexemes –means 'to compete as a political candidate in an election' or 'to take part in a race for a particular purpose'. A *Front-runner ,*in rank 6, is a person who leads in a race or a political campaign. *Dead heat* describes a situation in a race or a political campaign

in which competitors are so close that it is impossible to predict the winner.

The ranking list also contains a group of terms reflecting the metaphor POLITICAL DEBATE AS A BOXING BOUT. *Challenger,* occupying the highest position among the boxing terms, is a politician who tries to win an official position from the previous winner or a boxer who fights a champion for his championship title. *Contender* in rank 11 is used in a similar context to refer to a politician who competes with other candidates for a position of power or to a sportsman (usually a boxer) who competes for a championship title. *Infighting,* ranked number eighteen, is applied to disagreement among the members of a group or to boxing at close quarters. *Square off, jab* and *spar* are also among the strongly attracted lexemes, occupying ranks 26, 27 and 28, respectively, but being less distinctive in the comparison with the boxing terms discussed above. *Square off* means 'to face an opponent in a political debate' or 'to take a fighting stance in a boxing bout'. *Jab* denotes 'to punch with a short, quick blow' or 'to gain an advantage during a political debate by asking an opponent pointed and awkward questions'. *Spar* is used in a figurative sense to mean 'to argue with a political opponent in a friendly way'. This meaning is derived from a literal sense: 'to box with a boxer as a form of training or practice'.

Among the most significant lexemes, there are also *stalemate* and *pawn* evoking the metaphor POLITICS AS A GAME OF CHESS. The former is applied to a situation in chess in which a player cannot successfully move any of the pieces and neither player can win or to a political dispute in which neither side can gain an advantage or win. The latter refers to a politician who does not have any real power but is used by other politicians to achieve something. This meaning is a figurative extension of a literal sense: 'one of the least valuable pieces in the game of chess'. *Showdown* – ranked twenty first – instantiates the metaphor POLITICS AS A CARD GAME. The term is used to refer to a final confrontation in politics intended to settle a dispute or to a situation in which card players expose their cards on the table at the end of the game.

With regard to the business domain, *stake* was the most distinctive metaphostruction, as the p-value resulting from the computation of the Fisher exact test for this term was small: p= 1.30E-109, and the expected frequencies show that *stake* occurs more frequently than expected in business if compared to politics. This lexeme refers to a sum of money gambled on the result of a risky venture and instantiates the conceptual metaphors: BUSINESS AS A CARD GAME or BUSINESS NEGOTIATION AS A GAMBLING GAME.

Other terms strongly associated with business, such as *in the long run, across the board, track record, finish, saddled, favorite, overtake* and *rein in,* are the realizations of the metaphorical mapping: BUSINESS AS RACING, in particular HORSE RACING. The term *in the long run,* ranked high among the most central lexemes of business, is used in the context of business and economic planning to mean 'over a long period of time'. This usage alludes to a racer who continues on his course to the end. *Across the board* in rank 8 refers to every part or area of something. This figurative sense is derived from a bet that includes all potential ways of winning money on a race. The word *board* is the notice-board on which the races and betting odds are listed. *Track record,* occupying the next position, refers to all the past achievements and failures of a company or to the fastest time for a race on a running track. *Finish,* ranked number 12, is applied to the outcome of business and racing. *Saddled*, derived from the literal sense 'having or putting a saddle on a horse, is used figuratively to denote 'carrying a heavy burden of work, difficulties or responsibilities.' *Favorite,* holding the next rank, is applied to a horse or a politician that is likely to win. *Overtake* in rank 20 means 'to catch up with and move past another competitor that is trying to win a competition. The term *rein in,* coming from 'to stop a horse by pulling the reins', carries the meaning 'to limit or control somebody or something more strictly'.

Another group of strongly attracted lexemes was constituted by the general terms used in different team sports and evoking the metaphorical correspondence: BUSINESS AS A GAME. Its leading metaphostruction, *lose* in rank 4, is accompanied by *team* and *tackle* in ranks 10 and 17. *Lose* denotes 'to fail to win a competition, make more money, or score a point', while *team* is applied to a group of people who play a game against another group or to a group of people who work together in a company. *Tackle*, in turn, means 'to attempt to deal with a problem in business in an organized and determined way' or 'to attempt to take the ball from the opponent'.

In contrast to the previous terms, *scorecard* and *strike out* seem to be a manifestation of the underlying metaphor, BUSINESS AS A BASEBALL GAME. The term *scorecard* refers to a report that gives information about the status, condition, or success of business or to a card on which the score of a game or contest is recorded. *Strike out* is used to denote 'to fail or be unsuccessful in business' or 'to fail to hit the ball three times'.

Knock sb down and *raise the bar*, occupying ranks 22 and 23, are the last terms appearing among the most central lexemes of business. The former means 'to persuade a person to reduce a price of a product' or 'to hit a boxer and make him fall to the floor', while the latter denotes 'to

raise the bar in high jumping' or 'to raise the standards of quality, especially by making a task a little more difficult'.

At this stage of interpretation, it might also be essential to point out the sports terms that are not significantly attracted to both target domains: that is, the expressions that are not strongly distinctive for either domain. The findings of the distinctive-metaphostruction analysis for the 20 most strongly repelled expressions of the two domains are displayed in Table 13-4. Interestingly, in the case of both domains, the terms such as *on the sideline, take the wind out of one's sails*, *helmsman*, *navigate*, *off course*, *hand the baton*, *pass the baton*, *toe the line*, *jump the gun*, and *relay* are not strongly distinctive lexemes, since their p-values resulting from the computation of the Fisher exact test are very high. In addition, a comparison of the observed and the expected frequencies for each of these terms and each of the two domains shows us that these expressions usually occur less frequently than expected in one of these two domains, and that there are relatively minor differences between the observed values and expected ones. Thus, these sports terms appear not to be significant expressions of politics and business.

Table 13-4. The twenty most strongly repelled sports terms

Rank	Sports terms	a	c	e	f	x	y	z	b	d	(a)	(c)	p-value
1.	knockout	3	4	7	15450	6371	9086	15457	6368	9082	2.89	4.11	1
2.	knockdown	1	1	2	15455	6371	9086	15457	6370	9085	0.82	1.18	1
3.	take off the gloves	1	1	2	15455	6371	9086	15457	6370	9085	0.82	1.18	1
4.	race against time	2	2	4	15453	6371	9086	15457	6369	9084	1.65	2.35	1
5.	off and running	2	2	4	15453	6371	9086	15457	6369	9084	1.65	2.35	1
6.	out of the running	2	2	4	15453	6371	9086	15457	6369	9084	1.65	2.35	1
7.	in the running	4	5	9	15448	6371	9086	15457	6367	9081	3.71	5.29	1
8.	tough going	1	2	3	15454	6371	9086	15457	6370	9084	1.24	1.76	1
9.	starting blocks	0	1	1	15456	6371	9086	15457	6371	9085	0.41	0.59	1
10.	starting line	0	1	1	15456	6371	9086	15457	6371	9085	0.41	0.59	1
11.	relay	1	2	3	15454	6371	9086	15457	6370	9084	1.24	1.76	1
12.	jump the gun	1	2	3	15454	6371	9086	15457	6370	9084	1.24	1.76	1
13.	toe the line	2	3	5	15452	6371	9086	15457	6369	9083	2.06	2.94	1
14.	pass the baton	2	2	4	15453	6371	9086	15457	6369	9084	1.65	2.35	1
15.	hand the baton	1	1	2	15455	6371	9086	15457	6370	9085	0.82	1.18	1
16.	off course	2	3	5	15452	6371	9086	15457	6369	9083	2.06	2.94	1
17.	navigate	24	34	58	15399	6371	9086	15457	6347	9052	23.91	34.09	1
18.	helmsman	0	1	1	15456	6371	9086	15457	6371	9085	0.41	0.59	1
19.	take the wind out of one's sails	0	1	1	15456	6371	9086	15457	6371	9085	0.41	0.59	1
20.	on the sideline	9	13	22	15435	6371	9086	15457	6362	9073	9.07	12.93	1

Concluding Remarks

The findings reveal that there are indeed lexemes that indicate a definite preference for one domain when compared to the other, and that these come from a wide range of sports and instantiate various metaphorical correspondences. As for politics, it was found that the two groups with the largest type frequency occupying most of the central positions in the lexeme ranking are constituted by the sports terms instantiating the conceptual metaphors: POLITICAL CAMPAIGN IS A RACE and POLITICAL ELECTION/DEBATE IS A BOXING BOUT. One possible reason for their frequent occurrence is that politics, like racing and boxing, is a highly competitive activity that involves competing for a dominant position. It is a competition between politicians or parties to win seats in a parliament or to find out who or which party is more effective at convincing voters. It should not be surprising, therefore, that these competitive aspects of politics are understood in terms of the most physical forms of competition, i.e. a race and a boxing fight. This way of enhancing understanding is used by journalists and politicians to arouse interest in a political election and to support and inspire politicians in achieving success.

Curiously, in comparison with politics, business appears not to be extensively conceptualized in terms of a boxing bout. Boxing terms, in turn, occur less frequently in business as opposed to politics. The most logical explanation is that business is not combative, but competitive. The focus is more on collaborating with suppliers, creating value for customers and making high profits, rather than on fighting with competitors. In addition, the attention is on the popularization of the company's vision and the opportunities for generating substantial profits, rather than on external threats coming from the activity of other companies. For these reasons, it is not necessary to conceive business issues as a boxing fight. Instead, the activities, ideas and events in business are understood in terms of less fierce and violent competition, i.e. racing.

With regard to business, the results show that the sporting terms instantiating the conceptual metaphor BUSINESS IS RACING form the largest group of the most significant lexemes. One reasonable explanation for their frequent occurrence in the context of business is that business is a competition in which companies and manufacturers attempt to win in the marketplace and be the first to launch new products. In other words, companies compete with each other to maintain market share and to find out which one is the best and fastest at selling, promoting, and releasing new products on the market. Racing metaphors are invaluable tools for highlighting these competitive aspects of business. For example, a

company which is a world leader in selling some products can be perceived as having an excellent track record or as being found in the fast lane or track. Such an effective way of facilitating understanding is utilized by journalists to create inherent coherence in the description of business issues and to combine actions and ideas by evoking the simplicity and straightforwardness of a racing competition.

The method proposed in this chapter should be used in tandem with qualitative approaches to metaphor research or as a useful supplement to the qualitative study of metaphors. One potential application of this technique would be to identify distinctive source domain lexemes occurring in two different target domains. A further important use could be to quantify the frequency of linguistic metaphors and to determine primary metaphors on the basis of such quantitative data. Furthermore, the method might be applied to the confirmation or rejection of previous hypotheses about particular metaphorical mappings: for example, the importance of a specific metaphorical mapping for a given target domain, the productivity of metaphorical correspondences, and cross-cultural and cross-linguistic similarities and differences in the conceptualization of abstract notions. Finally, this technique can be used along with semantic interpretation to draw a distinction between dead and active metaphors, by determining the most strongly attracted and repelled lexemes of a particular target domain. For example, future work might focus on the identification of dead and active metaphors in politics. An example of a dead metaphor would be *to win an election,* an expression that occurs frequently in the context of political elections. In this example, *win* was initially an expression that drew on the metaphorical image of the success in a race applied to the subject matter in question. As a dead metaphor, *win an election* literally means 'to defeat everyone else by finishing first in a competition', and no longer suggests anything new or unusual. In that sense, *win an election* may be interpreted as a literal statement of fact or a dead metaphor, i.e. a metaphor that lost its force and imaginative effectiveness through its frequent use and deep entrenchment in a target domain. The distinctive-metaphostruction analysis allows for the identification of such deeply entrenched lexemes and for the interpretation of their meanings in particular contexts.

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