The Correlation Hypothesis revisited

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Abstract

The paper discusses motivation for metaphorical correspondences on the basis of the correlation of concepts, with special focus on conceptual blends. More specifically, it is centered around metaphorical meaning and possibilities that are offered by conceptual blends as tools for interpretation. A key part concerns the idea of the correlation hypothesis (Libura 2000) and its contribution to meaning creation. Providing an account of context-dependent (children's animated films) meaning-construction, the research question assumes that the hypothesis of correlation serves as a useful tool for motivating, organizing and analyzing conceptual blends.

Keywords

metaphors, conceptual blends, the correlation hypothesis, animated films

Jeszcze raz o hipotezie korelacji

Abstrakt

Artykuł traktuje o podstawach i motywacji, które decydują o określonych metaforycznych relacjach, a które tworzone są na podstawie korelacji pomiędzy wybranymi konceptami. Szczególna uwaga po-
święcona jest amalgamatom pojęciowym, które wykorzystane są jako narzędzie w interpretacji znaczenia metaforycznego. Kluczowa część artykułu dotyczy hipotezy korelacji zaproponowanej przez Liburę (2000) oraz wpływu tej hipotezy na tworzenie i interpretację znaczenia, a w szczególności metafor. Biorąc pod uwagę tworzenie znaczenia zależnego od kontekstu, jak dzieje się to w przypadku filmów animowanych, teza artykułu zakłada, że zgodnie z hipotezą korelacji określone współzależności znaczeniowe tworzone są już na poziomie przed-wyobrażeniowym, a powstałe w tym procesie korelacje służą jako narzędzie do motywacji, organizacji i analizy amalgamatów pojęciowych.

**Słowa kluczowe**

metafory, amalgamaty pojęciowe, hipoteza korelacji, filmy animowane

**1. Introduction**

In the modern world of omnipresent technology and mass media, language users are, to a certain extent, forced to process information and meaning in the shortest time possible. The consequence of such expectations and attitudes is that the very form of information must fulfill particular conditions. What follows is that language users function in a specific moderated context whose most characteristic feature is multimodality, enhanced by a number of language phenomena, metaphors being one of them. Yet, the goal of this article does not concern the communication issues but it focuses on the motivation for metaphorical correspondences on the basis of the correlation of concepts, with special focus on conceptual blends (Fauconnier and Turner 2003).

The discussion starts with the introduction of conceptual metaphors and it proceeds to the presentation of conceptual blends. A key part is centered around the idea of the correlation hypothesis (Libura 2000) and its contribution to meaning creation. Providing an account of context-dependent
(children’s animated films) meaning-construction, the research question assumes that the hypothesis of correlation serves as a useful tool for motivating, organizing and analyzing conceptual blends.

2. **Theoretical background**

2.1. **Metaphors**

Given that the discussion of metaphorical conceptualization and metaphorical meaning has generated heated debate since the time of Aristotle, for the sake of the present discussion the scope of the theoretical background, as far as metaphors are concerned, has been limited to a few positions that are most relevant to the research question of the paper.

2.1.1. **Lakoff and Johnson**

Lakoff and Johnson’s work, *Metaphors We Live By* (first published in 1980 with its later edition in 2003 and whose ideas were later supplemented and modified by Lakoff 1987, 1990, 1993, Lakoff and Turner 1989, Johnson 1987) is a monumental work presenting a cognitive semantics approach that has altered the idea of metaphorical meaning. Specifically, these two linguists have managed to prove that metaphors are not language deviations reserved only for literary use but are rather metaphorical expressions that have their motivation in conceptual organization and the structuring of everyday thoughts and ideas. They argue that metaphors are of a conceptual character and, in their conceptual structures, are in principle based on “understanding one concept in terms of another” (Lakoff and Johnson 2003: 5), since this understanding is present in everyday language production and comprehension. However, this understanding is not always the same, i.e., it depends on the kind of experience and mental construals that are activated (e.g. ORIENTATIONAL metaphors that are based on human experience with spatial orientation,
ONTOLOGICAL metaphors that allow for understanding abstract ideas as non-abstract ones, or STRUCTURAL metaphors where “one concept is metaphorically structured in terms of another” (Lakoff and Johnson 2003:14) by means of the metaphorical mapping between a source and a target domain). Lakoff and Turner (1989) supplement the above division of metaphors by adding another group of them, namely IMAGE metaphors, whose status in the human cognitive system has not been defined (i.e. they are new and because of this fact they are not conventional). According to the authors, these metaphors occur more often in poetry or prose than in everyday language.

Apart from a number of disagreements about their definitions of metaphors, Lakoff and Johnson’s approach has invited comments and discussion from numerous viewpoints and at multiple levels of analysis, and ultimately allows for the recognition of a systematic organization of the conceptual system of language based on sets of conceptual metaphors.

2.1.2. Kalisz

One of such viewpoints is presented by Kalisz (2001) who attempts to solve the problem of classification of conceptual metaphors. He suggests the following parameters for a particular class of metaphors:

(a) novelty,
(b) entrenchedment of metaphor in a person’s cognitive system,
(c) productivity,
(d) intensity,

where productivity and entrenchedment are the opposite of novelty and intensity (i.e. if a metaphor is novel, it is intensive in a conceptual system; if a metaphor is entrenched/conventionalized, it is productive). Furthermore, he introduces a spectrum of metaphors (Kalisz 2001: 113), where each kind
of metaphor is a variant resulting from the degree of fulfillment of the above criteria:

<table>
<thead>
<tr>
<th>ontological</th>
<th>structural</th>
<th>image</th>
<th>novel</th>
<th>metaphorical</th>
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<tr>
<td>process</td>
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The last position in the spectrum is occupied by “a metaphorical process” which Kalisz (2001) defines in terms of the meaning and status of a given expression whose metaphorical specification is still in progress and whose status as a metaphor has not yet been constituted.

The above-mentioned criteria, as well as the organization of groups of metaphors in the form of a continuum, are obviously dependent on individual cognitive models that preclude a clear-cut distinction between kinds of metaphors.

### 2.1.3. Charteris-Black

At the beginning of his *Corpus Approaches to Critical Metaphor Analysis* (2004), Charteris-Black claims that metaphor is not only limited to language and concepts but is closely related to "a transaction between contexts" (Ricoeur 1978, quoted after Charteris-Black 2004: 2). These transactions are complemented with his corpus analyses, which allow for metaphors to obtain a pragmatic dimension. Thus, metaphor being a cognitive, linguistic as well as pragmatic phenomenon constitutes a category, which frequently explains or guides the lexical choices of language users. What is most significant is that these “linguistic choices realize particular rhetorical intentions within a particular context” (Charteris-Black 2004: 8), which strengthens the position of metaphors as useful and easily applicable pragmatic tools (e.g. for persuasion or manipulation). To support his view, Charteris-Black (2004: 12) states that
Analysis of metaphor is often, then, an exploration of the inner subjectivity of speakers—what it is that is unique to their perception of the world—and forms the basis for their response to particular situations and to particular ideas.

What follows from the above quotation is that what counts in metaphor can be divided into its conceptual background (this inner subjectivity), on the one hand, and its motivation/use (the response) that allows for interpretation by users of language, on the other hand. While it could therefore lead the present discussion to the dilemma of “what is said” versus “what is meant/intended” (discussed, among others, by Sadock 1979, Searle 1979, Levinson 1983), this problem need not be addressed here, since the thrust of the present discussion is to examine key issues more generally connected with pragmatic aspects of metaphors. Yet, Charteris-Black (2004: 13) complements this approach by noting that pragmatics investigates “the contexts in which metaphors occur and the evidence that these contexts provide of speakers’ intentions in using metaphors”.

The above discussion illustrates that the phenomenon of metaphors goes far beyond the relationship between a source domain and a target domain. A significant factor that influences the form and interpretation of metaphorical meaning is strictly linked to contextual conditions and communicative intentions that particular metaphors are expected to fulfill.

2.2. Conceptual blends

Since its introduction, the theory of conceptual blending (Fauconnier and Turner 2003) has attracted considerable attention from scientists in different fields, beginning, obviously, with cognitive studies (with priority given to linguistics), but also including such disciplines as literary studies or even theatrical studies (Limon 2010).
One of the most basic concepts connected with this theory relates to the idea of mental spaces, since they are a major tool by means of which certain cognitive operations are performed. As Radden and Dirven (2007: 202) define them, mental spaces are representations of a situation in the speaker’s and hearer’s minds. Thus, such representations are reflections of one’s knowledge, experience and cultural background as well as a part of the cognitive apparatus which plays an active role in linguistic competence and linguistic performance.

Generally, conceptual blending theory involves the creation of a separate structure/construal (blend) from a number of mental spaces which, in a dynamic way, allow for the reading of meaning. Fauconnier and Turner (2003) highlight that the blended space is the result of the exploitation of counterpart connections between inputs; however, not all counterparts have to be fused in the blend. The two linguists propose a schematic representation of the blending process (see Figure 1).

The emergent structure, which is the space where a new meaning is construed, partially inherits structures from input spaces while the blended space constitutes the site for central cognitive work.

In the process of blending one can distinguish composition, completion and elaboration (Fauconnier and Turner 2003: 47-48) as fundamental operations that organize the construal meaning. As Fauconnier and Turner (2003) point out, composition links elements from the input spaces in order to form relationships absent in the separate inputs. This means that “counterpart elements can be composed by being included separately” (Fauconnier and Turner 2003: 48) in the blended space or “are being projected onto the same element in the blend” (Fauconnier and Turner 2003: 48); this kind of projection is called “fusion” (Fauconnier and Turner 2003: 48). Completion, as another operation, recruits background knowledge and meaning patterns to a great extent in order to obtain a complete conceptual form. The result is that parts of a familiar frame are used in the blend where “a minimal
composition is often automatically interpreted as being a richer pattern” (Fauconnier and Turner 2003: 48). The third procedure, elaboration, allows us to treat conceptual blends as simulations that can be analyzed and understood in an imaginative way, yet still follow the principles established for the blend.

![Figure 1](image)

**Figure 1**
The blending process (Fauconnier and Turner 2003: 46)
Moreover, the operations mentioned above give rise to a structure “that is not copied from the inputs” (Fauconnier and Turner 2003: 49) and this emergent structure (like any structure in the blend) can be modified at any moment. However, these conceptual operations constantly recruit mappings and frames that are entrenched in the conceptual system of language users.

The theory of blending can be treated as an alternative/complementary method to the theory of a conceptual metaphor as far as the analysis of indirect meaning is concerned. That is, in a conceptual metaphor (Kövecses 2005, Turner 1987, Lakoff and Johnson 2003 and others) the mapping involves two conceptual domains, one of which requires the complementation of its conceptual structure (a target domain) while the other provides this lacking conceptual structure (a source domain). In fact, Lakoff and Johnson (2003) claim that metaphors are omnipresent in everyday life and their role in human conceptualization as well as understanding seems unquestionable. Yet, in the further part of this article I shall demonstrate that this mapping involves a rather limited number of conceptual structures, and for more complex and intricate meanings conceptual blends seem to offer a more effective analytical tool. Additionally, I shall show how the correlation hypothesis works in conceptual blending and how it is realized in children’s animated films.

2.3. The Correlation Hypothesis

The lexical choices that form a metaphor are not stipulated by communicative intentions only, but since these choices follow conceptual processing, it is worth taking a closer look at the conceptual processes involved in creating metaphors. One of the major issues focused on here is that of the Correlation Hypothesis that assumes:

[…] the majority of metaphors which provide the structure for everyday expressions have as their source various kinds of pre-
metaphorical relationships across conceptual domains; these correlations motivate the creation of a metaphor since the inherent structure of the target domain limits the choice and form of the source domain.

(Libura 2000: 257, translation mine)

As the above quotation presents, the metaphorical mapping is conditioned by the target domain which dictates the choice of the source domain. This selection is limited by the structure of the target domain which seeks concepts and lexical correlates in the corresponding source domain to fill the semantic gap and to meet certain communicative intentions.

Thus, according to Libura (2000), metaphors have their motivation in the pre-metaphorical relations across various conceptual domains (it can be called motivation for metaphorical correspondence). Consequently, metaphor is part of the process of meaning formation that begins even before fully developed concepts are formed in the human conceptual system. Yet, it is worth highlighting that the pre-metaphorical relations may be of a conceptual or pre-conceptual character.

In her work, Libura (2000: 60) claims that language is saturated with structures related to pre-language experience connected with body and physical activities. A similar view is expressed by Johnson (1992: 347) who claims that “the way things can be meaningfully understood depends, to a large extent, on the kinds of bodies we have and the ways we interact with our physical and social environment”. As Gibbs and Colston (1995: 363) point out, we possess an ability to appreciate resemblances between relatively abstract properties of visual and auditory experiences, which has its results in the emergence of various image structures.

However, Johnson (1992) explains that the conceptual system is significantly dependent on image-schemas and the structure of a given type of image-schemas consists of not only spatial features but also of abstract ones. Further, he (Johnson 1992) highlights that all features co-create the structure of image schemas. Moreover, metaphorical mapping
preserves the structure of image schemas. Yet, as Libura (2000) points out the question arises if all features of all beings can be represented by means of image schemas.

Above all, Libura (2000: 103) concentrates on the issue of lexical correlates of an image schema. She defines image schemata as lexemes which are closely connected with a particular schema relating (in a direct or metaphorical way) to an experience that constitutes it. Additionally, some lexemes can be lexical correlates for more than one schema, especially if for the meaning of these words more than one of image schemas is necessary.

Nevertheless, the linguist also highlights that “some abstract notions are grasped not only by the metaphors but also have their own (probably insufficient) inherent structure” (Libura 2000: 272, translation mine). Furthermore, she points out that even such abstract conceptual categories as time or causation possess an internal organization (although relatively simple) that matches more precise image schemata. As a result, this match facilitates metaphorical mapping across particular conceptual domains but, as Libura underlines, only for those metaphors which are the most often used and are a conventionalized part of the lexicon. This aspect also illustrates that the hypothesis is not universal and that the actual metaphorical mapping is conditioned by the level of abstract thinking, that is to say, metaphorical mapping is only possible when abstract thinking is well developed.

Although the above discussed theoretical assumption connected with correlations at the pre-metaphorical level covers mostly instances that are commonly recognized, used and interpreted by speakers of a given language, it is a useful tool for moderated contexts (the ones that are not genuine language performance but are modelled on such language use, thus they are directed and planned).
3. A case study

3.1. About Cars

*Cars* is a Pixar and Disney co-production that presents a story about a racing car named Lightning McQueen and his adventures in a small American town, Radiator Springs, near Route 66 in Carburetor County. Other characters (which are all cars) that play a crucial role in the development of the story are (to name only a few): Tow Mater (a local hauler), Sally (a local lawyer who moved from LA), Hudson Hornet-Doc Hudson (a local judge and a former racing legend), Sheriff (a member of the local law enforcement), Luigi (a local owner of a tire shop) and Guido. Thus the audience is presented with a spectrum of representative inhabitants of a southwestern American town that used to be a famous place but now is forgotten and deteriorated. All of these elements form a platform for a moderated context which combines a number of sensual and conceptual levels, giving it the character of a multi-modal phenomenon.

3.2. The conceptual structure in *Cars*

Following Redzimska (2013: 71), the conceptual structure of this animated film can be represented by a complex conceptual blend where the most developed space is the generic space (Figure 2).
Redzimska (2013) points out that the Multi-Space Model of the generic space superimposes the conceptual background of the plot on the conceptual blend that results from it (which also underlies the multi-modal dimension of the film). Additionally, this generic space serves as a reference point for the conceptual frames of meaning present in the above-mentioned blend.

A closer examination of the above blend reveals that conceptual blends can serve as a basis for forming multi-modal metaphors, since each conceptual domain/mental space (input as well as generic and a blend) provides a mode which can be later developed and supplemented, not only conceptually/semantically but also as required by the production process of the film (the modes include a visual representation or music, among others). This argument works also in favour
of one of the assumptions for the present paper that conceptual blends give more possibilities for analyzing metaphorical meaning in relation to conceptual metaphors because they reveal levels of conceptualization absent in the source-domain approach to metaphor.

3.3. Conceptual blends and the Correlation Hypothesis

The main objective of the paper is to demonstrate that the Correlation Hypothesis can be applied as an analytical tool for conceptual blends. Pre-metaphorical relationships across conceptual domains and their language correlations (which is in accordance with the Correlation Hypothesis) motivate semantic processes that further constitute conceptual blends. These pre-metaphorical relationships are particularly visible (but not only) in the generic space because their function is similar to that of the generic space. In other words, they provide certain elementary conceptual frames which then form a bigger conceptual structure – a generic space. Moreover, as Libura (2000) stresses, these pre-metaphorical relationships subsequently make use of image schemata as a source of their conceptual structures. Thus, the claim is that all of the above-mentioned aspects can be applied to the conceptual blends.

As far as the conceptual blend for Cars (presented in Figure 2) is concerned, there are a number of pre-metaphorical relationships across conceptual domains. The most obvious ones are present in the process of personification (or to be more precise, anthropomorphization) as a common practice for literary works or films. Thus, the fact that car characters (one mental space) behave and speak like human beings (another mental space) is conditioned by the conceptual structure of the first mental space which is chosen and limited by the inherent structure of another mental space (prototypically these characters represent characteristics that are closely connected and deeply entrenched in the conceptual system; thus the characteristic features have the status of the most basic pre-metaphorical concepts). Consequently, the lexical represent-
lations based on metaphors make use of pre-metaphorical relationships across conceptual mental spaces.

In the case of the car characters, these pre-metaphorical relationships can also be exemplified by the concepts their names represent. A prime example is the major character Lightning McQueen, a red sports car famous for his achievements in speed racing. Names occupy a special place in a semantic theory. As Cruse (2000: 315-318) states, they have no meaning (so they have extensions but not intentions) or they represent abbreviated descriptions. For the sake of the present discussion, the latter understanding of names is the relevant one. Clearly, in such art productions as animated films, the assumption is that these names will be easily recognized and associated with a given movie character (from a pragmatic point of view it is similar to a perlocutionary effect (Austin 1962), where what is said has certain psychological consequences; one of them is the intention to impress or connect with the audience).

Moreover, in the conceptual background of the name (understood as abbreviated description) for Lightning McQueen there are a number of pre-metaphorical relationships, which means that before the personification mapping between a human domain and a vehicle domain, the focus is on a number of attributes that characterize the concept of lightning. These attributes form a certain image and understanding of lightning; thus to a certain extent they support Lakoff’s (1990) claim that human reasoning is image-based. The concepts of lightning can be defined, among others, by a number of pre-metaphorical image schemas, which can include:

- elaborations of force (the image schema described by Johnson 1987): which in the case of this film character can be interpreted as the physical force that is produced during a lightning strike or as the mechanical power of the engine of Lightning McQueen;
attraction (the image schema described by Libura 2000: 167): in the case of a lightning strike, characterized by brief intermittent force (until the electrical charge has been discharged); as far as Lightning McQueen is concerned this can be metaphorically understood as a feature of a character (that attracts with great force but for a short period of time, and in an intermittent way);

counterforce (the image schema described by Libura 2000: 173): this image schema assumes that if there is some force used, there is always a counterforce that responds to it; again, in the case of the major character of the film in question it can be metaphorically interpreted as a number of actions (counterforces) that were undertaken (provoked) in response to Lightning McQueen’s deeds;

contact (the image schema described by Lakoff 1987) which when applied to a lightning strike as a physical phenomenon refers to the fact that the electrical charge excited during a strike usually goes down towards the ground so that it hits it; the character of Lightning McQueen makes this phenomenon visible since as a sports car it slows down dramatically when it contacts an obstacle (like a lightning bolt that discharges when it hits the ground).

As the above analysis illustrates, the image schemata used in the pre-metaphorical formulation of the major character are some of the prototypical features (widely recognized) of lightning and they work as motivation for metaphorical correspondences. In the process of personification they acquire metaphorical meaning that defines the features of a human character but, at the same time, such construal of a major character that is based on this kind of pre-metaphorical relationship functions effectively for the audience toward whom a given artistic creation is directed. Thus, as it has been demonstrated above, the correlation hypothesis has its application in the creation of conceptual blends. This hypothesis ultimately explains why particular pre-conceptual image schemata are successfully used in the creation of characters in animated films for children.
4. Conclusions

The paper accounts for the role of the correlation hypothesis in conceptual blends with reference to metaphoric relationships represented by these blends. The research question assumes that pre-metaphorical image schemata motivate metaphorical correspondences and condition the construal of conventional conceptual metaphors. Additionally, the thesis also assumes that such pre-metaphorical correlations can be purposefully used in moderated contexts such as animated films for children. The theoretical background provides insight into the theory of metaphor in connection to selected aspects, pragmatic grounds for metaphors and conceptual blends, as well as the hypothesis in question. The data analyzed in the article come from the animated film for children entitled *Cars 1*.

Thus, it can be concluded that the correlation hypothesis has great explanatory potential for the phenomenon of conceptual blends, which are useful for explaining metaphorical meaning in a moderated context. This potential has been revealed in the facilitation of the conceptual process as well as in the reading of the conceptual/metaphoric structure. Moreover, as illustrated in the case of the film, the application of particular image schemas in metaphorical realizations of concepts undoubtedly enhances this effect.

References


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