A Review Article of Mark Landau's "Conceptual Metaphor in Social Psychology: The Poetics of Everyday Life"

書評論文:マーク・ランドー著 「社会心理学における概念メタファー:日常生活の詩学」

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Abstract

This paper reviews Mark Landau's book, *Conceptual Metaphor in Social Psychology: The Poetics of Everyday life*. This book provides an interdisciplinary look at metaphor by applying theories from Cognitive Linguistics to research in Social Psychology. The main argument of this book is that metaphor is a key cognitive tool for humans, which allows them to make sense of the world around them and thus offers Social Psychologists a way to better understand human behavior. In this article, I first discuss metaphor research in the field of Cognitive Linguistics, specifically the issue of analyzing conceptual metaphor through language. This book crucially addresses this issue, as it compiles a number of recent experiments that use nonlinguistic evidence to show ways metaphor influences thought and action. Then I review each individual chapter and consider practical applications of this book for teachers in the liberal arts, especially language teachers.

Keywords: Conceptual metaphor, Social Psychology, Cognitive Linguistics

Background

Cognitive Linguistics (CL) has matured into an important field of research with international journals dedicated to the topic and a number of handbooks published over the past decade (Geeraerts & Cuyckens 2007; Littlemore & Taylor, 2014; Dancygier, 2017). One of the more important and influential theories to come out of CL is Conceptual Metaphor Theory (CMT), which quite simply states that metaphor is only derivatively a matter of language and is conceptual in nature, or otherwise we think in metaphor (Lakoff & Johnson, 1980). The success of CMT also resulted in a considerable amount of controversy and criticism (see Haser, 2011; McGlone, 2007; Murphy, 1996), mainly focusing on the circularity of its argument. For instance, Murphy (1996) argued that "[...] the empirical base for the theory must be expanded beyond linguistic phenomena ... there is a circularity here [...]" (p. 200) and "[c]learly, the conceptual metaphor view must go beyond circular reasoning of this sort and seek evidence that is independent of the linguistic evidence" (McGlone, 2007, p.95). In fact, more recently CMT has broadened its scope from linguistic studies to research with images (Forceville, 1996; Forceville & Urios-Aparisi, 2009), music (Zbikowski, 2008), gestures (Cienki & Müller, 2008), and other forms of non-linguistic communication. Along this line of cross-fertilization, CMT has had an influence in the field of Social Psychology, as evidenced by this book. This is Landau's second book about metaphor. In his first one (see Landau, Robinson & Meier, 2014), he was one

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of the editors for a compilation that brought together chapters from various authors in the field of Social Psychology that explored topics ranging from metaphor and memory to metaphor's role in intergroup relations. This recent monograph appears to have developed out of this earlier one, as Landau aims to synthesize CMT with work done over the past few decades in the field of Social Psychology in order to provide evidence independent of linguistic evidence for the conceptual nature of metaphors.

Outline of the Chapters

The Setting

The book is divided into nine chapters and each one begins with a very short synopsis. Chapter 1 introduces the topic of metaphor by providing some examples of the primary metaphor, TIME IS MOTION. In order to talk about the abstract concept of time, language routinely grounds it in the embodied concept of space, or more precisely our physical movement through a landscape, which results in expressions like "look forward to seeing you next week" and "we are getting closer to the end of term". This introduction effectively gets the reader to start thinking about metaphor and how frequently it is used to talk about a wide array of everyday concepts. Landau then provides an outline of the book based on four claims; the ubiquity of metaphor use, metaphor is a cognitive tool (something more than a literary embellishment), metaphor use interacts with a social and cultural context, and the importance of metaphor in the social world. He then provides a brief chapter overview of the book and outlines the intended audiences ranging from students to researchers and those who are simply "curious about the workings of the human mind" (p.13).

In Chapter 2, Landau provides some historical context and how philosophers of the Enlightenment regarded metaphors with disdain, as Locke (1841) suggested that they "are for nothing else but to insinuate wrong ideas, move the passions, and thereby mislead the judgment; and so indeed are perfect cheats" (Book III, chapter X, sec. 34). Then he shifts to historical figures (Jaynes, Cassirer, Arendt, and Nietzsche) who viewed metaphor as a central part of the human mind, which likely laid the foundation for the development of CMT.

In short, metaphor consists of two concepts, a topic and vehicle (in CMT, these are referred to as target and source domains), and the interaction between these two concepts whereby we interpret one thing (the target) in terms of another (the source). Landau briefly reviews the cognitive processes of cross-domain mapping that occurs when comprehending a metaphor. One issue, I feel with this explanation, is viewing metaphor as a unitary construct and assuming that a single cognitive process is involved in comprehending all types of metaphor (see Birdsell, 2018; Bowdle & Gentner, 2005). For instance, consider the following metaphor:

 The 2016 presidential election season is a goldmine for The Nightly Show with Larry Wilmore. (CBS This Morning, 2016)¹

Here goldmine is the source, but does any relational knowledge from this source actually get mapped onto the "2016 presidential election season" or has goldmine through use and exposure become an exemplar of the superordinate category "things which have value" and then "2016 presidential election season" becomes a member of this category. That is to say, the metaphorical meaning is understood through a categorical class-inclusion assertion (Glucksberg, 2003). In contrast, consider the following metaphor:

(2) The therapy was an archeological dig. (Source: Cardillo et al., 2012)

In this example, which is more novel, to understand and appreciate the metaphor requires a very different cognitive process, as one needs to map certain features from the source domain (archeological dig) onto the target domain

¹ All the examples in this paper are from the Corpus of Contemporary American English developed at BYU (https://corpus.byu.edu/ coca/) unless otherwise stated.

(therapy) such as archeologist \rightarrow therapist; digging \rightarrow talking; artifacts \rightarrow memories and so on. Landau does touch on this in the notes section (2) of this chapter, as he refers to metaphoricity and the importance for one to bear in mind the fact that metaphors are gradable or lie along a continuum from creative or dynamic to conventional ones. This is important to note since most metaphors are highly entrenched in the language and are unconscious while other metaphors, typically more novel and creative ones, are deliberate (see Steen, 2015) and require more cognitive effort to process, but also are appraised as being more aesthetically pleasing (Christmann, Wimmer, Groeben, 2011).

Also in this chapter, Landau provides an example of "trashcan basketball" from Coulson's (2000, pp. 115-118) research. The problem here is that this example is based on conceptual blending theory (Fauconnier & Turner, 2002; Birdsell, 2014 for a review), which is slightly different than CMT. For instance in CMT, the target is conceptualized in terms of some source while in conceptual blending theory, the target and source are viewed as input spaces and selected elements in each are then projected into a blended space whereby emergent meaning arises. It should be noted here that these two approaches to metaphor are not competing theories, but complimentary (see Grady, Oakley, & Coulson, 1999), nonetheless are different theoretical approaches to metaphorical understanding and may cause the reader some confusion since blending theory is not mentioned in this chapter.

After outlining CMT, Landau then presents his main argument of this book, which is how a "metaphorenriched" social psychology can provide a deeper understanding of social behavior. In order to support this view he aims to further analyze the following:

- Metaphor provides a window into the cognitive process of the human mind and how people make sense of the world around them;
- Metaphors are commonly used as a rhetorical tool for persuasive purposes;
- Metaphors arise through shared embodied experiences, but numerous differences between cultures also result in great variations between languages;
- Metaphor is a tool to better understand cognitive flexibility (creativity) and rigidity (entrenchment)

In Chapter 3, Landau provides experimental evidence of metaphor's influence on a number of socio-cognitive processes ranging from perception and attitudes to memory and creativity. For instance, in regards to attitudes, spatial verticality of up and down has an influence on social evaluation (viewing something as good or bad) and power (higher positioning viewed as being more powerful) and this is often unconscious and automatic. In regards to metaphor's influence on creativity, Landau includes a study (Slepian & Ambady, 2012) that looked at how enacting fluid movements (as opposed to stiff or rigid movements) in the form of line tracings improved participants abilities in various creative related tasks like a divergent thinking task and a remote associates test. In citing another study (Leung et al., 2012), Landau provides further evidence for the important role of physical enactment and creativity, which suggests the grounding of creativity in embodied experiences like fluidity and breaking barriers. It should be noted here that these physical enactments that represent the abstract concept of creativity also appear in language in the form of metaphorical expressions like "to have a breakthrough" or "the free flowing of ideas".

Context, Culture and the Self

In Chapter 4, Landau discusses the motivational factors that influence one's decision in interpreting a certain context. First is "certainty motivation", which is when someone seeks the quickest and easiest interpretation with minimal effort and is often based on the initial information received. Second is "consistency motivation", which is when someone seeks information that conforms to or reinforces already established knowledge structures and moral convictions. Thirdly is "accuracy motivation", which is when someone seeks out an accurate and truthful representation of a stimulus. Using these epistemic motives as a guide, Landau shows how metaphor interacts with each one. For instance, for certainty motivation, one of the key features of metaphor is to help one to achieve a

clearer understanding of a target concept with the least amount of effort. When one experiences or is primed to experience greater uncertainty in some contexts, one often relies more heavily on available conceptual metaphors to provide structure to this experience. In contrast, as for consistency motivation, these types of metaphor have the potential to reinforce and perpetuate certain worldviews by providing a visual frame that highlights or downplays certain aspects of the topic. For example, when war is framed as a game of chess, one more likely conceptualizes the strategic aspects of it while downplaying the cost of human suffering caused by a war. The final motivating factor, accuracy motivation, often relies on more complex analogous structures between the topic and source that provide the individual some scaffolding in order to understand unfamiliar and more complex concepts by referring to something more well known and concrete (e.g., blood vessel is a pipe, brain is a computer). Thus using metaphor for accuracy motivation enhances learning. This seems similar to certainty motivation, but requires more methodological discernment in order to reach a well-reasoned conclusion. In the end of this chapter, Landau explores other motives that drive metaphor use. A crucial one is "creativity motivation". This occurs from the imaginative and playful combination of concepts together in new and unusual ways in order to be humorous, provide new insight, or simply for aesthetic pleasure.

Chapter 5 provides background to how some conceptual metaphors are universally shared across languages and cultures while others vary. Consider the following metaphor:

(3) The change has gone smoothly or hit just a few bumps in most schools. (OregonLive.com, 2017) This simple sentence reflects the primary metaphor, CHANGE IS MOTION, and subsequently difficulties are impediments to this motion. In this case, a "bump" slows down this movement forward, as compared to "smooth" movement. Landau discusses how these basic metaphors emerge from our physical interactions with the world around us. These repeated interactions develop into what he calls "bodily experiential schemas", which provide a template for abstract concepts by metaphorically grounding them in these embodied experiences. For instance, the abstract psychological concept of affection is often metaphorically represented by the physical state of bodily warmth (e.g., "a warm reception" – despite this possibly occurring in Alaska during a cold winter month). Despite the similarities across languages in their uses of conceptual metaphors based on the before mentioned embodiment hypothesis, there are also many differences.

Landau argues that the degree of metaphor use may vary between cultures based on a number of variables such as uncertainty within the cultural environment. For instance, the development of new technologies like the rise of electronic communication resulted in the widespread use of metaphoric vocabulary akin to what Max Black (1955) referred to as "plugging the gaps" in the vocabulary of language. Moreover, Landau points out that cultures vary in their use of indirect or polite speech, which is especially prevalent in collectivistic cultures in order to save or protect one's *face* (metaphor is one common rhetorical figure for indirect speech). Finally, he mentions that cultures differ in how they value creativity and this has an influence on the extent of metaphor use in that speech community.

Landau then discusses how the differences between languages may also be the result of linguistic and cultural preferences to use different source concepts to talk about the same topic. This is likely based on what Boers (2003) has suggested that some source domains are more salient in particular cultures and thus "may not be (equally) available for metaphorical mapping in all cultures" (p. 233). In addition, it should be noted that languages may share conceptual metaphors based on the embodiment hypothesis (e.g., ANGER IS HEAT), but the choice in how to represent them linguistically may vary and can be rather arbitrary and unpredictable. For instance, in English anger is viewed as a hot liquid, "he is boiling with rage" or "he needs to simmer down", whereas in Chinese anger is closer to a hot gas, "he has gas in his heart" (Ta xin-zhong you qi), which means, "he is angry" (Yu, 1995). Finally languages may vary in their use of metaphors depending on bottom-up variations, which Landau provides

such examples as climate, agriculture, topography, and salient activities within the culture (consider the use of sports metaphors in English, especially to talk about politics). Landau throughout this chapter aims to emphasize the importance of looking at the relationships between social cognition, to which metaphor is a crucial cognitive tool, and the socio-ecological factors of the group that results in variability among different languages and cultures.

In Chapter 6, Landau shifts his focus from culture to the individual self and the role metaphor plays in the development of a self-concept at the individual level. Using work developed by Lakoff and Johnson (1999, Ch. 12), Landau focuses on two self metaphors, the self as an object and the self as a bounded space. From our experiences interacting with objects in the natural world, we will project this knowledge onto the self and view this self as having properties like an object, something that is stable and is able to retain essential characteristics. This self as an object metaphor also borrows from our understanding of the functioning and normalcies of objects. For instance, the self like an object has the ability to change and grow works best when it is whole, as compared to being fragmented like when one experiences a "mental breakdown". Similarly, the self as a bounded space metaphor borrows various knowledge structures of our understanding of containment. For instance, mental states are viewed as objects that can be inside or outside this contained self. Moreover ideas that are more available are in the front part of this contained mind, ideas can be deeply buried in this bounded space, and repressed memories can be dug up. Moving beyond these basic metaphorical underpinnings of how we conceptualize this abstract self, Landau looks specifically at four different aspects of the self where metaphor plays an important role; self-regulation, self-continuity, self-esteem, and self-growth.

One aspect of *self-regulation* is having self-control whereby metaphorically (1) the self is viewed as an object that can be controlled such as "you're pushing yourself too hard"; or (2) the self controls an object "things have gotten out of hand" or "I am trying to get that graphic image out of my head". Another key aspect of self-regulation is time travel, which is our capacity to project ourselves into future states and relies heavily on the LIFE IS A JOURNEY metaphor. This ability to mentally time travel has the potential to influence behavior and action, as we are motivated to achieve future goals and become this future self. Along this same line of thought, self-continuity again involves the journey metaphor, which emphasizes the self, as this coherent whole who moves temporally through time and space. For instance, in one study (see p.115) that Landau conducted, he asked participants to imagine their future academic careers "four years down the road". He grouped participants into an active and passive rendition of a journey metaphor (based on viewing the self as an avatar moving along a path or the self on a train moving along the path). Those who had seen the active journey metaphor felt more confident in attaining future academic goals than the group who viewed the passive rendition. These results, he interpreted, were due to the fact that seeing an active journey metaphor had reinforced the individuals' procedural knowledge of selfpropelled movement, attention to the path, the need to exert energy, and the necessity to overcome impediments along the way. That is to say, this enhanced sense of agency affected their future confidence, as they perceived their self as continuing in time and space and importantly that they were in control of this "journey". Self-esteem concerns viewing the self in a positive light and as having value within a social context and it is generally agreed upon that most people want to maintain a positive self-view. This section of the chapter appears to be lacking cohesion, as he touches on various topics related to self-esteem like how we attribute success to our own doings and failure to external forces (see Hastorf, Schneider, & Polefka, 1970, p.73), but he does not clearly relate this to metaphor beyond a cursory example of anger as a pressurized container (which we can thereby downplay accountability). As he points out at the end of this section, this area of inquiry is still in its "infancy" and much more future research needs to be done before making any substantial claims. Finally, the last section of this chapter, Landau looked at *self-growth*, especially in regards to self-actualization and how people conceptualize an intrinsic self concept by metaphorically viewing the self as a physical object that has the potential to expand in size. To

show this, he discusses one of his studies where participants were exposed to a pictorial expanding (vs. contracting) object prime, which led this group of participants to report higher levels of self-actualization. It would have been beneficial here, if he had expanded on this study and provided more details of it in order to make this argument a little more convincing.

Relationships

In Chapter 7, the topic shifts from the self to interpersonal relationships and how metaphors are frequently used within these situations, so they are a cognitive and linguistic tool, but also a social tool for negotiating interactions between people. Landau discusses various studies that have linked verticality and temperature to the attractive qualities of confidence (upward positioning) and friendliness (warmth) or the opposite, unfriendliness. In this case, an individual uses some linguistic term related to coldness, as can be seen in the below twitter comment, which also includes an emoji of a snowflake in September, in order to recount an unfriendly exchange between two individuals:

In fact, attraction between people is rather difficult to describe without using some form of metaphor ranging from feeling a "deep" connection to the person to the feeling of "being drawn" to that person. Successful interaction between people can also include such binary haptic terms as "smooth" and "rough" relations. Landau goes on to discuss one of the more basic metaphors to talk about human interrelationships, INTIMACY IS CLOSENESS, which he suggests developed out of our needs as infants to seek security in close relationships and such attachment figures change into close friends and lovers into adulthood. Exploring interpersonal relationships, he briefly touches upon a number of topics such as journey (e.g., "we are at the crossroads"), bond/union (e.g., "tie the knot"), economic exchange (e.g., "benefits and costs of a relationship"), and conflict (e.g., "the bond has fallen apart" or "we have hit a rough patch"). He concludes the chapter by considering nonhuman relationships such as with deities or physical objects, yet this seems to be more of a space filler than to actually provide much substance to the argument of the chapter. I found it hard to consider how this might provide support to the thesis of this chapter, specifically, the role of metaphor as a central mechanism for establishing, talking about, and maintaining interpersonal relationships.

Moving from interpersonal relationships, Chapter 8 examines intergroup relationships. At the start of the chapter, Landau introduces two overarching metaphors for group membership: the container metaphor and the entity fusion metaphor. The container metaphor, as widely discussed throughout the book, involves projecting attributes of containers onto a group of people. These attributes include location, which indicates inclusion and exclusion of individuals in this group ("kicked out" or to be on the "margins"), and boundary thickness, which indicates the permeability of the boundary and the ease of individuals to move in and out of this container (group). The entity fusion metaphor is grounded in our understanding of cohesion and how many individual entities can become fused together in order to create a larger whole, which in this case is a social identity of oneness. This fusion can take the form of "glue" that "binds" a group of people together. What exactly is this glue? Often it takes the form of a social attribute such as shared morals, pop-culture, or religious denomination. Consider the following examples:

- (5) To find the moral glue that will bind us together in the twenty-first century. (Futurist, 1994)
- (6) In decades past, major pop-culture moments the ones that everybody experienced at the same time acted as an intangible glue that bound us together. (Christian Science Monitor, 2006)
- (7) Moreover, subscribing to the same religious denomination served as part of the glue that bound groups of kin together more tightly (Georgia Historical Quarterly, 2011)

In fact, as Landau provides evidence from a number of studies (Gómez et al., 2011 and Swann et al., 2012), this sense of cohesiveness and identifying with a specific group predicts one's willingness to sacrifice oneself for the greater good (i.e., martyrdom and fighting).

Landau then aims to present a set of binary exemplars (up/down; light/dark; warm/cold) of metaphors that elicit emotional reactions to intergroup relations. The last pairing, clean/dirty, is worth looking at in more depth since it is prominent in society in regards to being associated with the abstract concept of morality. This metaphor stems from the emotion of disgust, an avoidant reaction emotion to some physical impurity or something viewed as being unclean (e.g., feces, rotting food, dirty toilet, etc.). This basic emotion has the potential to affect one's moral judgment of marginalized groups of people in society (e.g., gays, lesbians, immigrants) who are perceived by other groups as violating a set of norms or morals and therefore are viewed as being unclean and need to be avoided. Humans have evolved the emotion of disgust as a way to avoid contact with pathogens and CMT suggests that the individual develops schemas at a young age for dirt, cleanliness and disease, which subsequently gets mapped onto more complex and higher order concepts like morality and norms. As a result, those who violate such norms are often viewed with this deep emotion of disgust and one can develop strong prejudices against such groups. In this chapter, Landau proceeds to address other ways that groups view out-group members in prejudicial ways and focuses mainly on dehumanizing metaphors, which often consist of animals. For instance, he uses a political article that quotes a former presidential candidate, Ben Carson, who describes refugees as "a rabid dog running around your neighborhood" (p. 162). Using dehumanizing metaphors that compare a group of people with some animal facilitates stereotypes and negative treatment of them. The chapter concludes by reflecting on metaphors that permeate society and more importantly by proposing the question, "Can we use societal metaphors for good?" (p. 168). Landau provides a few examples here such as to advocate pro-social metaphors or metaphors that embody diversity and connections between groups of people. This conclusion is a way to end a chapter that mainly examined how metaphors create and promote stereotypes and negative images of out-group members with a more positive and optimistic view of metaphor and how metaphor also has the potential to connect and nurture greater harmony between groups of people. This chapter illustrates the great possibility of cross-fertilization between the fields of cognitive linguistics, especially conceptual metaphor theory, and social psychology and provides evidence from many studies that have begun to more thoroughly and empirically examine the role of metaphor in social intergroup relations.

Discourses

In the final chapter, Chapter 9, Landau analyzes the use of metaphor for rhetorical purposes in two varying discourses, politics and health care. Reemphasizing Ortony's (1975) theses of the pedagogical value of metaphor namely, the compactness thesis, the inexpressibility thesis, and the vividness thesis, Landau shows the rhetorical function and persuasive power of metaphor. For instance, in a case when the Texas motor vehicles department rejected specialty license plates that bore the Confederate flag, Governor Rick Perry vividly used a metaphor that drew up the image of the past and the racism associated with this flag as a festering wound, when he stated "We don't need to be scraping old wounds" (p. 175). This metaphor is compact in that it says a lot with very few words, it associates a very complex history with something very concrete and easily understood (a festering wound), and is visceral and vivid in so far as it evokes a strong emotion to this topic. Despite the persuasive power of metaphor, these three functions of metaphor can also cause inappropriate transfer of meaning from the source onto the topic, create undue certainty, and exaggerate the strength of the topic. In one study by Landau and colleagues (p. 178), one group of participants first read an article that described airborne bacteria as ubiquitous and harmful to health, so they were part of a contamination threat condition, and then read an article that metaphorically framed the United

States in terms of a physical body. Afterwards, they filled out a questionnaire about immigration and participants in this condition feared immigration more than participants who were part of a no-contamination threat group. Metaphorically framing an idea can have an impact on political ideologies. For instance, are unemployment benefits and healthcare a "safety net" or "hand-outs"? Landau provides a number of interesting examples and studies that look at the power of metaphors in framing political discourse, often for ideological and persuasive purposes.

To end this chapter and the book, Landau focuses on health discourse and the role of metaphor. He argues that metaphor facilitates communication between medical professionals and the general public by using more concrete and easier to visualize concepts to discuss health issues. In doing so, research suggests that it elicits worry and consequently energizes people towards more preventative behaviors. Again, Landau also considers the negative aspects of metaphors (since he views metaphor as a "double-edge sword" p.171) within the public sphere and how they may transmit biases or distract people from bigger issues. For instance, he discusses research done by Sontag and the widespread use of metaphors to portray AIDS that vividly depict it as pollution or decay. Consequently, patients affected with it are viewed as possessing tainted moral values. Landau questions what to do about metaphors and suggests that it is crucial for people to become more aware of them and how they frame discourse. Instead of abandoning them or block their usage, he encourages people to generate more of them in order to expand and illuminate different truths and perspectives.

Applications for the Language Teacher

This book provides a broad description of how important metaphor is for talking about the self and relationships with others and thus a central part to communication. The ability to use and interpret metaphor in language is often referred to as metaphoric competence and developing this skill in a foreign language presents many challenges for learners, but nonetheless crucial, and thus needs to be included in any teaching curriculum. One theme touched on in this book that has been recently applied to the language classroom has to do with the embodied nature of metaphor – in the sense that the source of the metaphor often involves activating sensory-motor experiences of the human body. Consequently, Holme (2009) has proposed the use of physical enactment in the classroom in order to act out the language (of metaphors), which he has described as an Enactment and Movement based pedagogy. Consider again the studies Landau mentioned in chapter 3, outlined above, and how enacting fluid movements with the body (as opposed to rigid movements) resulted in higher scores on a divergent thinking task. Likewise, future studies need to look at whether similar results could be found with language – does enacting the metaphor enhance metaphoric competence in language learners?

Despite the fact that many metaphors are based on these shared experiential correlations (i.e., UP IS MORE or WARMTH IS CLOSENESS), that is to say, they are grounded and filtered through species specific interactions with the world, variation between languages and cultures also exist. Consequently, a second theme highlighted in this book (specifically in chapter 5) that could be applied to language learning is the role of culture on metaphor. One starting point for better understanding these differences is to compare figurative phrases between languages in order for teachers to anticipate difficulties. In fact, Charteris-Black (2002) has shown that this is advantageous for learners, especially when these phrases differ between the two languages. Also, Landau indicated (pp.96–100) that socio-ecological factors like climate, agriculture, and the economy influence figurative expressions in different languages. For instance, he mentions a study by Kövecses (2005), who found that Hungarian translations of English in the discourse of economics did not rely on the metaphor, "time is money", as much as the original text. Highlighting these differences has the potential to raise the learners' awareness of the structure of metaphor in that target language and build their overall fluency, especially with figurative language.

Conclusion

In sum, Landau throughout this book provides extensive amount of research and evidence that supports his claim for the value, insight, and the need to integrate conceptual metaphor research in Cognitive Linguistics with Social Psychology. There is great potential for further cross-fertilization between these two fields. It is important to note that one issue in the social sciences is the bias of journals to publish positive results and not negative ones (Francis, 2012). In this context, Landau throughout this book paints a very conclusive picture of the effects of metaphor on individuals and groups in decision tasks, abstract reasoning, memory, and behavior. However one drawback of the book is that he does not touch on recently published research that have claimed difficulties in duplicating some of the findings mentioned (see Earp, Everett, Madva, & Hamlin, 2014; Fayard, Bassi, Bernstein, & Roberts, 2009; LeBel & Wilbur, 2014). One example is the Earp and colleagues (2014) study, which aimed to duplicate a highly publicized paper (Zhong & Liljenquist, 2006) that provided some of the early evidence that moral cleanliness is grounded in physical cleanliness. Hence one of the shortcomings of this book is the lack of controversial research that questions the validity of some of the studies used in this book and possible explanations for such discrepancies.

In conclusion, Landau's book is a fundamental contribution to the field of metaphor theory. More importantly it has begun integrating the fields of Social Psychology and Cognitive Linguistics. The monograph provides wideranging non-linguistic evidence for the conceptual nature of metaphor, thus addressing seriously some of the circularity issues with CMT and has opened many pathways for future research to investigate in more depth the conceptual, social, and ecological workings of metaphor.

References

- Birdsell, B. (2014). Fauconnier's theory of mental spaces and conceptual blending. In J. Taylor & J. Littlemore (Eds.), *The Bloomsbury companion to cognitive linguistics* (pp.72–90). London: Bloomsbury Academic.
- Birdsell, B. (2018). *Creative metaphor production in a first and second language and the role of creativity*. Unpublished PhD thesis, University of Birmingham, UK.
- Black, M. (1955). Metaphor. Proceedings of the Aristolean Society, 55, 273–294.
- Boers, F. (2003). Applied linguistics perspectives on cross-cultural variation in conceptual metaphor. *Metaphor* and Symbol, 18(4), 231–238.
- Bowdle, B. F., & Gentner, D. (2005). The career of metaphor. Psychological Review, 112(1), 193-216.
- Cardillo, E. R., Watson, C. E., Schmidt, G. L., Kranjec, A., & Chatterjee, A. (2012). From novel to familiar: tuning the brain for metaphors. *Neuroimage*, 59(4), 3212–3221.
- Charteris-Black, J. (2002). Second language figurative proficiency: A comparative study of Malay and English. *Applied linguistics*, 23(1), 104–133.
- Christmann, U., Wimmer, L., & Groeben, N. (2011). The aesthetic paradox in processing conventional and nonconventional metaphors: A reaction time study. *Scientific study of Literature*, 1(2), 199–240.
- Cienki, A., & Müller, C. (Eds.). (2008). Metaphor and gesture (Vol. 3). Amsterdam: John Benjamins Publishing.
- Coulson, S. (2000). *Semantic leaps: Frame-shifting and conceptual blending in meaning construction*. Cambridge: Cambridge University Press.
- Dancygier, B. (Ed.). (2017). The Cambridge handbook of cognitive linguistics. Cambridge University Press.
- Earp, B. D., Everett, J. A., Madva, E. N., & Hamlin, J. K. (2014). Out, damned spot: Can the "Macbeth Effect" be replicated?. *Basic and Applied Social Psychology*, *36*(1), 91–98.
- Fauconnier, G. & Turner, M. (2002). *The way we think: Conceptual blending and the mind's hidden complexities*. New York: Basic Books.
- Fayard, J. V., Bassi, A. K., Bernstein, D. M., & Roberts, B. W. (2009). Is cleanliness next to godliness? Dispelling

old wives' tales: Failure to replicate Zhong and Liljenquist (2006). *Journal of Articles in Support of the Null Hypothesis*, *6*, 21–28.

Forceville, C. (1996). Pictorial metaphor in advertising. London: Routledge.

- Forceville, C., & Urios-Aparisi, E. (Eds.). (2009). Multimodal metaphor (Vol. 11). Berlin: Walter de Gruyter.
- Francis, G. (2012). Publication bias and the failure of replication in experimental psychology. *Psychonomic Bulletin* & *Review*, *19*(6), 975–991.
- Geeraerts, D., & Cuyckens, H. (Eds.). (2007). The Oxford handbook of cognitive linguistics. OUP USA.
- Gómez, A., Brooks, M. L., Buhrmester, M. D., Vázquez, A., Jetten, J., & Swann Jr, W. B. (2011). On the nature of identity fusion: Insights into the construct and a new measure. *Journal of Personality and Social Psychology*, 100(5), 918–933.
- Grady, J., Oakley, T., & Coulson, S. (1999). Blending and metaphor. In R.W. Jr. Gibbs & G. Steen (Eds.), *Metaphor in cognitive linguistics* (pp.101–124). John Benjamins Press, Amsterdam.
- Haser, V. (2011). *Metaphor, metonymy, and experientialist philosophy: Challenging cognitive semantics* (Vol.49). Walter de Gruyter.
- Hastorf, A., Schneider, D., & Polefka, J. (1970). Person perception. Reading, Mass.: Addison-Wesley.
- Holme, R. (2009). Cognitive linguistics and language teaching. New York: Palgrave Macmillan.
- Kövecses, Z. (2005). Metaphor in culture: Universality and variation. Cambridge: Cambridge University Press.
- Lakoff, G., & Johnson, M. (1980). Metaphors we live by. Chicago: University of Chicago Press.
- Lakoff, G., & Johnson, M. (1999). Philosophy in the flesh. New york: Basic books.
- Landau, M. J. (2016). Conceptual metaphor in social psychology: The poetics of everyday life. New York: Routledge.
- Landau, M. J., Robinson, M. D., & Meier, B. P. (2014). The power of metaphor: Examining its influence on social life. Washington, DC: American Psychological Association.
- LeBel, E. P., & Wilbur, C. J. (2014). Big secrets do not necessarily cause hills to appear steeper. *Psychonomic Bulletin & Review*, 21(3), 696–700.
- Leung, A. K. Y., Kim, S., Polman, E., Ong, L. S., Qiu, L., Goncalo, J. A., & Sanchez-Burks, J. (2012). Embodied metaphors and creative "acts". *Psychological Science*, 23 (5), 502–509.
- Littlemore, J., & Taylor, J. R. (Eds.). (2014). *The Bloomsbury companion to cognitive linguistics*. London: Bloomsbury Publishing.
- Locke, J. (1841). An essay concerning human understanding. Retrieved from http://www.gutenberg.org/cache/epub/10616/pg10616-images.html.
- McGlone, M. S. (2007). What is the explanatory value of a conceptual metaphor?. *Language & Communication*, 27(2), 109–126.
- Murphy, G. L. (1996). On metaphoric representation. Cognition, 60(2), 173–204.
- Ortony, A. (1975). Why Metaphors Are Necessary and Not Just Nice. Educational Theory, 25(1), 45-53.
- Slepian, M. L., & Ambady, N. (2012). Fluid movement and creativity. *Journal of Experimental Psychology: General*, 141(4), 625–629.
- Steen, G. (2015). Developing, testing and interpreting deliberate metaphor theory. *Journal of Pragmatics*, 90, 67–72.
- Swann Jr., W. B., Jetten, J., Gómez, Á., Whitehouse, H., & Bastian, B. (2012). When group membership gets personal: a theory of identity fusion. *Psychological Review*, *119*(3), 441–456.
- Yu, N. (1995). Metaphorical expressions of anger and happiness in English and Chinese. *Metaphor and symbol*, 10(2), 59–92

- Zbikowski, L. (2008). Metaphor and music. In R.W. Jr. Gibbs (Ed.), *The Cambridge handbook of metaphor and thought* (pp.502–524). Cambridge: Cambridge University Press.
- Zhong, C. B., & Liljenquist, K. (2006). Washing away your sins: Threatened morality and physical cleansing. *Science*, 313(5792), 1451–1452.