Linguistic Research 35(1), 117-143 DOI: 10.17250/khisli.35.1.201803.005

Multimodality and cognitive mechanisms: A cognitive-semantics analysis of political cartoons <stay out of my hair>*

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Kwon, Iksoo and Jung Hwi Roh. 2018. Multimodality and cognitive mechanism: A cognitive-semantics analysis of political cartoons <stay out of my hair>. Linguistic Research 35(1), 117-143. This paper aims to explore multimodality within a framework of cognitive semantics by conducting a case study of political cartoons <stay out of my hair> with special focus on the optimal manifestations of conceptual metaphors (Lakoff and Johnson 1999) and blends (Fauconnier 1997) in them. It looks into the cartoons which have been published from January to August in 2017 to illustrate escalating tensions over the issue of developing nuclear weapons in North Korea between North Korea and the United States after Donald Trump was elected president of the United States. Total 26 relevant cartoons were collected from multiple public webpages, which use the original hairstyles of the political figures to satirize their political actions or to show conflicts and their unpleasant emotions. This study provides a qualitative analysis of five selected cartoons that represent the sub-types to clarify how hair constitutes the overall construal of the cartoon within a framework of cognitive semantics. It supports the claim that cognitive mechanisms such as conceptual metaphor and blending are not confined to verbal artefacts, but they are pervasive in multimodal manifestations since multimodal data as well as linguistic data are outcomes of human cognition (Dancygier and Vandelanotte 2017). (Hankuk University of Foreign Studies)

Keywords multimodality, political cartoons, conceptual metaphor, conceptual blending, cognitive semantics

1. Introduction

Language uses necessarily entail presence of a viewpoint: Linguistic expressions are construed based on the users' conceptualization, which in turn, is fueled by

^{*} This study was supported by Hankuk University of Foreign Studies Research Fund. The authors would like to thank anonymous reviewers for their invaluable comments and suggestions. All remaining errors are, of course, the authors' own.

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human experiences and categorizations of subjectivity (Cognitive Unconscious, Lakoff and Johnson 1999: 9). Even an identical external stimulus can be construed differently depending on whose perspective it is framed from. This cognitive tendency motivates the observation that language uses are viewpointed in the sense of Dancygier and Vandelanotte (2017: 568), i.e., meanings are cognitively embodied.

In this vein, this paper aims to explore one type of language uses, multimodality within a framework of cognitive semantics by conducting a case study of political cartoons <stay out of my hair> with special focus on the optimal manifestations of conceptual metaphors (Lakoff and Johnson 1999) and blends (Fauconnier and Turner 2002: 39) in them. What this study means by cartoons <stay out of my hair> are a few selected ones among those which have been published from November of 2015 to September of 2017 to illustrate escalating tensions over the issue of developing nuclear weapons in North Korea (NK, henceforth) between NK and the United States (US, henceforth) after Donald Trump was elected president of the US. This study specifically looks into the cartoons that employ one of the salient parts of the two political leaders—hair, because it is one of the major valid cues to evoke the conceptual images of the participants in question. This study focuses on the fact that a significant number of cartoons depict political figures confronting each other over nuclear program in North Korea by using their hair and the body parts which are conceptually weaponized.

This study also discusses pervasive manifestation of human cognition in multimodality as well as "pure" linguistic phenomena based on the conducted case study. The observations support the claim that cognitive mechanisms such as conceptual metaphor and conceptual integration are not confined to linguistic phenomena, but rather, all the human artefacts including cartoons are subject to them (Forcevilles 2008; Dancygier and Vandelanotte 2017; Borkent 2017; Oakley and Pascual 2017).

This study proceeds as follows. In Section 2, background information of the political situation in question and that of theoretical tools, i.e., conceptual metaphor theory and conceptual blending theory, are provided. Section 3 then clarifies the procedures taken to define the scope of the analysis. Section 4 provides a full cognitive semantic analysis of the selected political cartoons with special focus on cognitive mechanisms used and their meaning constructions. Lastly, Section 5 concludes the overall discussion.

2. Backgrounds

Section 2 addresses briefly situational information in general regarding the political situation in question, i.e., North Korea's nuke development and international political situation around the Korean peninsula. In addition, this section includes brief introduction of theoretical apparatus that are employed in the analysis in Section 4, which are conceptual metaphor (Lakoff and Johnson 1999; Lakoff 2008) and blending theory (Fauconnier 1997; Fauconnier and Turner 2002).

2.1 North Korea's nuke development and international attention

This subsection briefly provides background knowledge of the ongoing international conflict between North Korea (NK) and the United States (US), each of which is represented as Kim Jong Un and Donald Trump.

There have been many disputes over developing nuclear weapons in NK as it is a serious security threat to the international order and peace especially under the non-proliferation treaty of nuclear weapons in the Korean Peninsula. Political tensions between Kim and Trump over nuclear program in NK came into conflict after Trump began to politically engage in the issue after he was elected president of the US. Kim's statement on New Year's Day in 2017 that NK will ramp up its nuclear program and ICBM (Intercontinental Ballistic Missile) is on the final stage to test it reignited their political conflicts. The announcement was intimidating as ICBM capable of reaching the US mainland was designed to attack the US continent and its shores. NK's continued provocation fueled the conflicts and the US reciprocated with harsh sanctions on NK. NK conducted its sixth nuclear test on September 3 and launched 22 missiles in 2017.2 For instance, launching ballistic missiles over Japan, developing hydrogen bombs and examining a strike on Guam which is a military base in US were the major threats that raised global concerns about possible military confrontation. In response to this action, the US proposed

¹ CNN, http://edition.cnn.com/2017/01/02/politics/north-korea-icbm-threat-trump/index.html (Accessed on November 3, 2017)

² CNN, http://edition.cnn.com/2017/05/29/asia/north-korea-missile-tests/index.html (Accessed on October 28, 2017)

³ CNN, http://edition.cnn.com/2017/10/30/asia/north-korea-bombers-cosmetics/index.html (Accessed on November 3, 2017)

harsh sanctions to isolate NK diplomatically as well as economically by blocking the source of NK funds to build its nuclear programs and by cutting off its diplomatic relations. The US-drafted sanctions on North Korea were unanimously adopted by the United Nations Security Council. Furthermore, the US and South Korea conducted the annual military drills and an unprecedented scale of military assets and forces were deployed.

Trump's insistence on nuclear disarmament and Kim's persistence in nuclear weapons development became increasingly bellicose arguments. They exchanged harsh remarks and criticism without direct military conflicts or negotiations, denigrating each other's political performance through official statement. The rhetoric has been fierce that it amounted to rather personal insult. A large number of political cartoons illustrating the escalating strains and conflicts of these two political figures came out, regardless of from the major news media or other political cartoons websites.

2.2 Theoretical backgrounds

Since political cartoons make another form of human manifestation based on his or her conceptualization of subjectivity, the construal of the artefacts necessarily involves cognitive mechanisms such as conceptual metaphor and conceptual blending. The focus of the current analysis is, in this vein, centered around the mechanisms that are employed to construct meanings. Now, let us take a brief look at the two major cognitive mechanisms: conceptual metaphor and conceptual blending.

Conceptual metaphors refer to a way of conceptualization such that one understands one concept in terms of another (Lakoff and Johnson 2003[1980], 1999). There is a caveat that conceptual metaphor differs from the one as a rhetorical device in that conceptual metaphors are not pertained only to linguistic expressions, but rather are influential to overall human cognitive artefacts such as multimodal phenomena (co-speech gestures, combination of pictorial image and verbal expressions, etc.).⁴ The construal via conceptual metaphors relies on human's

⁴ According to Dancygier and Vandelanotte (2017: 567), studies on multimodality within cognitive linguistics include the study, alongside the linguistic channel, of co-speech gesture, eye gaze, facial expressions, posture and possibly other kinetic/visual channels, combinations of image and text. This study shares the fundamental assumption regarding the definition of multimodal data.

primary tendency that human beings understand a relatively more abstract concept by means of a relatively more concrete concept, likely to be related to human experiences shared in common.

This tendency has been proven via numerous psychological/experimental studies (Gentner, Imai, and Boroditsky 2002; Zhong and Liljenquist 2006; Casasanto 2008; Casasanto and Boroditsky 2008; Lai and Boroditsky 2013 etc.). For example, Zhong and Liljenquist (2006) conducted an experiment, hypothesizing that the metaphor morality is cleanliness would influence on human's way of thinking. In the experiment, subjects are asked to conjure up a(n) (im)moral experience of their own first, and are to fill in the blanks such as 'W _ H' or 'S _ P.' Most of the subjects completed them as 'wash' and/or 'soap' rather than 'wish' and/or 'ship.' The result indicates that semantic domains of morality and of cleanliness are unconsciously and conceptually bound to each other and that the binding affects people's mental processing even though the two semantic domains are not equivalent to each other. Moreover, it is also well-known that conceptual metaphors pervade not only in language uses, but also in so-called non-verbal or multimodal modes such as cartoons, commercial advertisements, paintings, slogans, digital storytelling, hand signals (cartoons: Bergen and Binsted 2004; El Rafaie 2015; Kwon 2015; advertisements and film: Forceville 2015, 2008; art: Kennedy 2008; slogans: Kwon 2013; digital storytelling: Alonso and Porto 2015; hand signals: Kwon et al. 2016; Harrison 2015; Meissner and Philpott 1975; co-speech gestures: Lee et al. 2016; Parrill 2012; Sweetser 2007; McNeill 2005, among numerous others)

Conceptual Blending Theory (Fauconnier 1997; Fauconnier and Turner 2002; Oakley and Pascual 2017) is another critical component of theoretical apparatus employed in the current analyses. As the name implies, more than one conceptual units participate in the process and the unit is a mental space. Mental spaces are conceptual packages of knowledge that accommodate relevant and optimal information to given contexts in interlocutors' mind, as discourse in focus unfolds. The knowledge accommodated by mental spaces is free from physical constraints with regard to, for example, indexical accessibility (i.e., temporal/spatial constraints etc.) and also is freely paired up with another package of knowledge profiled in cognizers' mind. The 'pairing' process is called *mapping* and the mapping process generates emergent meanings. One of the well-known examples is *In France*, *Watergate would not have hurt Nixon* (Fauconnier and Turner 2002: 225). To

construe the sentence, interlocutors necessarily have an access to the two focal input mental spaces accommodating the political system of France and that of US. Specifically, without acknowledging the role of given information regarding the Watergate political scandal and the former President Nixon in US, interlocutors cannot grasp the meaning of the sentence fully. Speaking of it in terms of CBT, the two input spaces of the US political system and of the French one are blended so that an emergent event structure is generated, which resides neither in the US input space nor the French space. The sentence requires cognizers to anchor to a hypothetical scenario as a premise wherein a US president takes the office in France and then to elaborate and draw a conclusion from the premise (for more details, see Fauconnier and Turner (2002: 226)).

The two cognitive mechanisms that have been briefly overviewed are the main theoretical apparatuses for the analysis that this paper conducts in Section 4. Conceptual metaphor and conceptual blending are unmarked cognitive mechanisms that run unconsciously and automatically in human mind and thus, to model how they work for meaning constructions is worth investigating. This study, in this vein, conducts a case study of analyzing political cartoons with special focus on conceptual metaphors and blendings that are employed to construct emergent meaning and to convey intended messages in an efficient way. It is of great significance especially because this line of research on political cartoons has not received sufficient attention in the field yet (except for Bergen and Binsted 2004 and Kwon 2015). This study attempts to fill the gap by conducting an in-depth qualitative analysis on political cartoons.

3. Data collection

What this study means by political cartoons <stay out of my hair> are conditioned as follows: first, they have been published from January to September of 2017 (dates of posting on the web)⁵ after Mr. Trump was elected as President (total 158 cartoons); second, their purpose is to illustrate escalating tensions over the issue

Intriguingly, Mr. Trump appeared in political cartoons produced even before the election since November in 2015: his original hair style had been used in his caricature mockingly in comparison with another owner of original hairstyle, Mr. Kim, Jong-un, the North Korean ruler.

of developing nuclear weapons in North Korea between NK and the United States after Donald Trump was elected president of the US; third, cartoonists include visualization of either one of the focal figures-Mr. Trump and Mr. Kim and elaborate their salient part, hair, in the cartoons (total 29 out of 158 cartoons);6 fourth, all the materials in focus are produced in English. The collection was obtained via Google search with keywords typed in such as 'Trump,' 'Kim,' and 'Cartoon.' Those that were not dated were excluded from the selection. The time frame of the data coverage coincides with the period during which President Trump takes office. This study aims to shed light on the motivation behind the target group of data, whose focal part—the shape of hair—is one valid cue to evoke the conceptual images of the political figures Mr. Trump and Mr. Kim.

Total 29 relevant cartoons were collected from multiple public webpages. This study found that the 29 tokens addressing hair of the political figures can be categorized into two major categories upon what kind of cognitive mechanism plays a salient role to construct meanings in them: those relying on conceptual metaphor and those relying on conceptual blending. To achieve effectiveness in descriptions and analyses, the ensuing section brings in some of the 29 tokens which represent each of the categories and provides in-depth qualitative analyses of them.

4. Data analysis and discussion

This study provides a qualitative analysis of seven selected cartoons to clarify how the salient part constitutes the overall construal of the cartoon within a framework of cognitive semantics. The seven tokens are chosen from the pool of 29 cartoons for the following reason: the six selected cartoons out of seven represent six types of the dataset, which are generalized and sorted out upon what kind of conceptual structure constitutes them with saliency; the rest is analyzed to illustrate that conceptual metonymy is commonly shared by all the data (see the analysis of

This study filtered out those cartoons which include the element hair not as a salient property of the characters in them: for instance, in spite of including hair as body part of the figures, those including simple depictions of either of the figures or those conceptualizing the two figures as two babies are excluded because they are designed to rely on other more salient property of the figures. The other ways of conceptualizing them are also of great interest, which calls for further cognitive semantic analyses in future.

Figure 1 below). This study specifically argues that cognitive mechanisms such as conceptual metaphors and blending are productively employed to convey intended messages via multiple modes – both verbal and imagery means.

One caveat here: it is noted that the analyses embedded in this study assume neither that the two cognitive mechanisms are to be strictly distinguished from each other nor that one of the two is more efficient than the other, as one of the anonymous reviewers implied. The main focus of this study is rather to categorize the political cartoons upon what kind of cognitive mechanism is saliently employed (i.e., best-fits) to convey the intended message, acknowledging the fact that the two cognitive mechanisms could functionally be overlapping in many cases (for more details of the issue of the functional overlap, see Lakoff (2008: 30ff.; "Metaphors vs. Blends")).

Before conducting data analyses of the two cognitive mechanisms in full details, it is noted that construal of all the cartoons in question involves metonymic conceptualizations employed to make a reference to the political figures by foregrounding their salient part—hair. Let us explore briefly Figure 1.



Figure 1. Metonymic representations of Mr. Kim and Mr. Trump in cartoon.⁷

In the figure, the two figures are caricatured with the keywords that are used in describing them: *umpredictable, vain, vindictive, insecure, overcompensating, authoritarian,* and *a funny hair cut.* Viewers immediately understand that the two beings in the cartoon are Mr. Kim and Mr. Trump because the cartoonists make their appearance including their original hairstyles distinctive, which have high cue validity regarding the two figures in the real world—hair. In terms of cognitive mechanism, the illustration is motivated by conceptual metonymy because the reference of the whole (Mr. Kim and Mr. Trump) has been made successfully due to the employment of the salient part (their heads and original shapes of hair) in the image. Throughout the set of dataset, the very pattern of metonymic conceptualization is pervasive. Based on this, let us take a look into a few selected salient metaphorical systems in the dataset.

4.1 Conceptual metaphors

This sub-section addresses three major metaphorical systems employed in the dataset in focus: ARGUMENT IS WAR, CAUSES ARE FORCES, and PURPOSEFUL ACTIONS ARE SELF-PROPELLED MOVEMENTS.

4.1.1 ARGUMENT IS WAR

The event structure in the cartoons of dataset is motivated by the metaphor ARGUMENT IS WAR. Semantic frame of ARGUMENT differs from that of WAR. The concept of argument is defined in relation to the context of verbal discourse, which hardly entails physical struggles, whereas the concept of war necessarily involves physical contact, engagement, and conflicts, which result in damages and casualties. These two different domains interact with each other and based on the interactions, people understand the concept of argument in terms of war-like actions. For

An anonymous reviewer raised a possibility that the relatively smaller font phrase with a fumy hair cut in Figure 1 could have an ironical semantic effect on the overall construal: the minimized part of sign (i.e., small font) could somehow direct viewers' attention to the most salient part of the body part, so it could read, "the two protagonists have many characteristics in common even including the hilarious shape of their body part." The semantics of irony made out of cartoons is another intriguing issue which is worth looking into systematically in further depth, although it is beyond the scope of the current study.

example, when one argues against others by pointing out their logical weakness embedded in what the counterpart has said, we can say that one attacks the counterpart's vulnerable point; the counterpart can defend it by providing more stipulations and so on. The reification of this kind of metaphoric reasoning can be found in cartoons, as illustrated in Figure 2.



Figure 2. Weaponized hairs of the two political figures

In Figure 2, the two political leaders of the US and NK, respectively, are staring each other with narrowed eyes without hiding hostility. It is intriguing to see that their face illustrations are intentionally cropped in the cartoon to get more attentions to hair, which helps viewers identify who they represent due to the element's high cue validity, i.e. their original hairstyles. The cartoonist describes that their hairs are stretched and engaging as if there were exchanges of missile attacks between the two and as if their hairs were smokes (one blonde and the other black) behind launched missiles. In other words, their hairs are conceptually related to uses of tactical weapons such as missile-launching against each other. It indicates that the two political figures' opinions are in conflict in the real world (since there is no single contact depicted in the cartoon), and thus that the conflict might result in grave consequences in future. Speaking of the domain of the international politics around the Korean peninsula, in fact, there was no military conflict or physical engagements or missile attacks. The two political figures only exchanged harsh words against each other by warning the counterpart of the seriousness of the nuke development. The conceptual metaphor argument is war employed in the cartoon can be mapped as follows:

Source: war	Target: argument
groups of people	political leaders
attack	criticism
defense	response
tactics	rhetorics
target	counterpart
weapon	words

Figure 3. Mappings of argument is war in Figure 2

In consideration of the cartoon that addresses the political situation in the physical world, the target domain of argument signifies the actual exchange of criticisms over NK's nuclear program between the US and NK. In this domain, two political leaders are exchanging criticism as one agent says negative remarks to the other (counterpart) then the counterpart lashes back with aggressive comments. The target domain is understood in terms of the war (source) domain, which consists of groups of people, attack and defense actions, tactics, target, arms, etc. The cartoon in question thus indicates that the two political figures are exchanging irritating words on the matter of developing nuclear issue by criticizing the counterpart's political performance and defending their political stance.

In the same vein, the conceptualized scene in the cartoon can be elaborated by WORDS ARE WEAPONS metaphor as it is one of the entailments of ARGUMENT IS WAR metaphor. As it is specified in Figure 2, all the remarks including the announcement from Mr. Kim (that NK will ramp up provocation by continuing nuclear development for self-defense) and a harshly condemning response from Mr. Trump are conceptualized by means of missiles (weapons) that are launched against each other. It is noteworthy, however, that they are not physically engaging each other but rather staring or glancing even in the cartoon. It indicates that they did not make a radical move and that they act as if they seek a chance to gain a dominant position at the negotiating table regarding developing nuclear missiles.

4.1.2 CAUSES ARE FORCES

The metaphor CAUSES ARE FORCES also makes one of the frequently employed metaphor systems in the cartoons. It is a natural consequence considering that the nation of *great strength*, the US is gravely influential to other countries, and specifically that the US would not *step back* on the critical matter such as nuclear threat posed by NK. In addition, the causal relation always holds in the domain of international politics: for example, if one nation's spokesperson makes a threatening statement against another nation's interest, the latter would react by doing a relevant course of action. This kind of causal force-interaction motivates the CAUSES ARE FORCES metaphor. The following figure includes an intriguing conceptualization of the situation in terms of using hair-dryers.



Figure 4. Metaphoric representation of the two political figures in cartoon

In Figure 4, the two caricatured political figures are blowing their hair-dryers to each other, which results in negative emotions to both of them such as rage and unpleasantness. Their hairs are being affected by the wind blow and probably their shapes will not be tidy after the exchange of the blows. It is noted, however, that neither physical contact nor engagement is taking place: they try to mess with each

other by using a non-harmful tool—a hair dryer, which is not likely to be efficient in the domain of a physical struggle. This inventive choice is not unmotivated: the two political figures are famous for their original hair styles, the kind of force that can be applied to the salient frame element—hair—is wind blow, and to the cartoonist's belief, the hair dryer makes an optimal tool to create a gag by breaking an expectation that a physical struggle involves a 'harmful' weapon that entails a contact and at the same time to relate the whole scene to the element hair. The mapping structure evoked by the cartoon can be listed as follows:

Source (forces in a motion domain)	Target (politics)
protagonists	political figures (nations via metonymy)
contact	engagement
directionality	objective
movement	execution of an action
resulting state	resulting state
wind blow (force)	criticism

Figure 5. Mappings of CAUSES ARE FORCES in Figure 4

Since the cartoon is based on the observation of the real-world situation, the target domain can be specified as the domain of causal relation in international politics. In the domain, two nations, metonymically speaking, two leaders are engaged in an argument by saying negative things to each other. As ordinary conversations unfold, one reacts to what his counterpart has said or acted. As a result, both the interlocutors undergo a resulting state and this process repeats cyclically until they reach a conclusion in common.

The source domain of FORCES consists of protagonists, directionality, movement, contact, resulting state, and wind blow (force). The two protagonists, as far as the cartoons are concerned in this paper, face against each other just as the US and NK have different or even conflicting objectives on the matter of developing nukes. One blows his hairdryer against the other showing hostility. This is the result of conceptual elaboration: the type of force employed in the cartoon is specified as wind blow and it is triggered by a specific tool, hairdryer. This elaboration is optimal for the construal of the event involving the two political figures, who are

both famous for their original hairstyles. Intriguingly, the inferential patterns evoked by the no-contact constraint in the source are maintained in the target domain as well: just as the military forces of the US and NK have not been engaged physically, there has been no "contact" in the source. Rather, they try to avoid direct contact and engagement in any possible way. This is why the non-lethal hair dryer is employed in the cartoon, which instantiates one of the forces that does not accompany critical consequences.

4.1.3 PURPOSEFUL ACTIONS ARE SELF-PROPELLED MOVEMENTS

Another major metaphorical system involved in the group of cartoons is PURPOSEFUL ACTIONS ARE SELF-PROPELLED MOVEMENTS (PASM, henceforth). The metaphor system is one of the salient conceptualization patterns in language uses (e.g., *We're striding toward the splendid future, The company has pushed ahead with legal action* etc.) The thing is that its presence does not seem to be obvious from the surface expression or the images: how is the concept of MOVEMENT related to any of the cartoons because all kinds of event structure reified in the data are static? This doubt dissolves when we understand inferences given in the conceptual structure. Let us take a look at Figures 6 and 7 below.

In Figure 6, two protagonists representing Mr. Trump and Mr. Kim, respectively, are facing each other exchanging daggering looks with each other. They are not only facing, but taking aggressive postures just as in a wrestling match. Their hair is a high validity cue to recognize that the protagonists represent the two political leaders of the US and NK. The shape of their hairs is transformed into that of missiles whose tapered ends face each other. In Figure 7, two protagonists ride on nuclear war-headed missiles. Heads of both protagonists and missiles face against each other, which entails that their destinations conflict and thus that they make an obstacle against each other.



Figure 6. Metaphoric representation of PASM (1)



Figure 7. Metaphoric representation of PASM (2)

The construction stay out of my hair is an elaborated use of the more intuitively familiar expression stay out of my way. The original expression evokes the following event structure, which is entailed by the metaphor PURPOSEFUL ACTIONS ARE SELF-PROPELLED MOVEMENTS:

an agentive protagonist moves toward a destination; there is a path and the

path may be easy or difficult to take a journey on; one of the factors that determine the difficulty is an obstacle; if the protagonist faces an obstacle on the road, he or she may go around it or remove it, which would take more efforts and time, or change direction or quit the journey, which would yield a different resulting state.

The way of removing an obstacle is instantiated in the event structure by the imperative of urging the addressee to move.

The conceptual structure of the metaphor purposeful actions are self-propelled movements can be accounted for as follows:

Source:movement	Target: purposeful action
mover	(personified) nation
movement	pursuit
destination	objective
path	"course" of action
directionality	attributes of desired result
collide	engagement due to incompatible objectives
personal space	sovereignty
obstacle	restriction

Figure 8. Mappings of PASM in Figures 6 and 7

Since the cartoons are concerned with the real-world situation of the US-NK conflict on the issue of NK's nuke development, the target domain of purposeful action is actually about actions by personified beings of nations. The target domain is understood in terms of the source-path-goal domain, which consists of an agent, its action, goal, path, directionality, interaction with another agent (collide), obstacle, personal space, etc. Their corresponding elements in the target are a personified being of the US and NK, their "goals" to be pursued, objectives, "courses" of action, attributes of desired results from the actions, engagement with another nation due to the conflict of their interests, restriction, and sovereignty. Only with this mapping structure (at least), we can grasp what the given figures intend to convey fully.

The scene depicted in the figure relies on the construal of the real-world international situation regarding NK's attempts to develop nuclear weapons. That is, the

NK government posed a potential threat against the US by developing nukes stealthily and by testing them. In reaction to this incident, the US government warned the NK ruler to abort the program by executing full-scaled joint military exercises in coordination with South Korea and Japan in the border line areas. It is noteworthy, however, that they are not in contact physically in the cartoons, but posing aggressive gestures or raising their voices toward each other. This pattern of conceptualization is motivated by the fact that the two nations do not engage with each other's military forces: they do not exchange any valid fires that are meant to strike their enemies, but they are demonstrating, "we are fully capable of doing this and that." If they had engaged with each other physically, which would have resulted in a number of casualties in action, the situation would have been depicted differently, e.g., two protagonists exchanged punches and kicks which entail direct contacts.

Now, one can see that the motivation of the use of hair instead of way underlies here because either of the word choices would make the same sense in the semantic domains of spatial movement: to get rid of something in my way means to clear it from my personal space; as you approach the obstacle, it gets closer to you; if it is as close to my body as my hair is, the obstacle is really close to you; you need to remove the obstacle in your 'hair' space8 to proceed. In addition, this elaborated construal of the event self-propelled movement is reified in cartoons as an intriguing dual structure. In the dual structure, two protagonists are not in motion, who otherwise would be moving forward toward a destination, but rather are in each other's way or hair.

4.2 Conceptual blending

speaking, what cartoons include is a result of cartoonist's Generally conceptualization. It would thus not be strange if cartoons depict some unreal event. However, the contents of the cartoon are not a random consequence of the cartoonist's thought. It tends to contain elements that are selectively chosen to deliver intended messages effectively and this tendency is inevitably related to cognizers' cognitive mechanisms. In this section, one of the mechanisms, conceptual blending, is discussed.

The first blending example is a simple mixture of visual elements as shown in Figure 10.

The concept of 'hair' space is therefore metonymically motivated. Specifically, the metonymy AN ENTITY FOR ITS LOCATION is involved in the use of the expression.



Figure 9. The film poster of (Star Wars III)



Figure 10. Blending from the film poster

It is obvious that the structuring image of Figure 10 comes from the famous film poster in the US, <Star Wars: Revenge of the Sith> as in Figure 9. The meaning structure involves conceptual blending, seeing that the given image is unrealistic even as a film poster: there is no film called Hair Wars: Revenge of the Tweet and above all, the phrase hair wars is not easy to construe only based on common sense from the real world. In Figure 10, which is represented as a parody of a film poster, viewers can easily identify that the two political figures with unique hairstyle are depicted as main characters of the film. Considering Mr. Kim is holding a nuclear missile on his back while Mr. Trump is typing on his phone to use one of the

famous social media—*Tweeter*, the phrase *revenge of the tweet* sarcastically stands for the action from Mr. Trump.

The event structure of the cartoon can be specified with the current political backgrounds that the two political leaders are in confrontation over NK's nuke development. Their political stance is sharply opposed to each other in that they are holding their ground without negotiation. Since they are in conflict, they exchange harsh remarks to condemn each other's political actions. It is noteworthy that the phrase using "hair" in the cartoon is obviously motivated by the distinctive feature of these political figures. It is also intriguing to see that Mr. Trump is using his social media account as a means of revenge, which has no physical threat to harm the counterpart and thus which yields the meaning of sarcasm.

The meaning structure involves conceptual blending, which consists integration of different mental spaces. The construal of the cartoon in question composes at least two input spaces: real-world politics space and a film poster space. The first input (argument in politics) includes Mr. Trump, Mr. Kim, official statements, criticism, the focal issue of NK's nuke development, military action, etc. The second input (film poster) in a nutshell represents characters—Anakin and Obi-Wan, director's name, release date, punchline, etc. Based on the information, conceptual blending of these two inputs can be structured as follows:

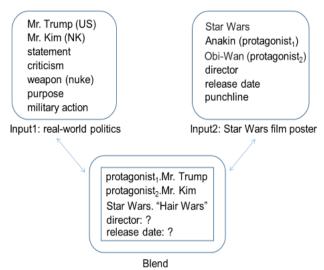


Figure 11. Conceptual blending in Figure 109

In the blended space, selected elements from the inputs are integrated to construct the emergent structure indicated by a square. The event structure of the blend can be specified as follows: the phrase *Hair Wars: Revenge of the Tweet*; two political figures are featured on the poster as main characters. In this space, the emergent meanings are produced, and the meaning constructions elaborated in the emergent structure are unique that they do not exist in any of the inputs: Mr. Trump and Mr. Kim did not have face-to-face meeting; Mr. Kim cannot hold a missile on his back, etc.

The scene of this cartoon is one of the instances of simplex blend, where specific values from the roles in a given frame are merged (Oakley and Pascual 2017: 429). The structure of a sci-fi film is maintained: the roles are filled in by those from the frame of real-world politics, specifically the conflicts between the two political figures in question. For example, the first protagonist role is filled in with the value of Mr. Trump from Input1; the second protagonist role with the value of Mr. Kim; the title is replaced with "hair wars," part of which is inherited from the first input space (the fact that the two political figures are well-known for their original hairstyles); neither the director nor its release date is specified in the cartoon. Selected roles and values are fused in the blend, creating an emergent structure.

Given the parodic image and phrase are generally used as a means of imitation to make fun of something or to criticize, multiple inferences can be drawn from the cartoon. The phrase *Revenge of the Tweet* depicted in large lettering in the cartoon signifies Mr. Trump reacted to Mr. Kim's military threat with his social media account, which might not be viewed as a relevant course of action because common sense tells us that sending out a text is not usually an effective countermeasure against a serious military threat. It can be inferred that the particular social medium is chosen because the cartoonist intends to pose a sarcastic stance toward the following fact: different from his predecessors, Mr. Trump has often used the very medium to make announcements without an official endorsement from his own administration. It might also be the case that the cartoonist thought this is not a

⁹ Canonically, multiple links among the selected group of elements are included in the representation. The current analysis, however, does not include them for the sake of representational clarity. Rather, the links are verbally explicated in the body of text below. The same applies to Figure 13.

serious event so that the political figures are depicted as bluffing actors who "act" as if they were in a war-like situation.

The construal of the cartoon illustrated in Figure 12 below also involves conceptual blending in that the scene depicted in the cartoon cannot be real: there are two unrealistic beings whose upper bodies are in shape of human heads, specifically the two political figures in question—Mr. Trump and Mr. Kim and whose lower bodies are in shape of weapons—a grenade and a missile, respectively.



Figure 12. Weaponized Political Figures

In figure 12, the two imaginary beings confront each other saying "stay out of my hair." Their upper bodies are skewed to the front as if they would otherwise proceed without being blocked by each other's presence. Since they are obstacles in each other's way, the two beings make a nuisance to each other. This event structure is concerned with the current international political issue of NK's nuke development and of the US's reaction to it. Since they have different objectives regarding non-proliferation of nuclear weapons on the Korean peninsula, the two beings representing the US and NK are conceptualized as two protagonists in conflict. Among the courses of action available, to use physical forces such as military actions will result in a devastated consequence, which provides a metonymic link to employ images of weapons in the cartoon. It is noteworthy that the being of Mr.

Trump in cartoon has a trigger, without which a grave consequence—explosion and casualties because of it—would take place. As briefly explored, the single image generates meaning based on rich background information.

The meaning construction heavily relies on conceptual blending. To begin with, the construal necessarily involves at least three input spaces: real-world politics space, a war-framed space, and a spg (source-path-goal) schema space. The first input (argument in politics) is structured by the following elements: Mr. Trump, Mr. Kim, statements which can be instantiated by criticism, the focal issue of NK's nuke development, military action, etc. The second input (war) includes war-participants (usually nations), opponent, strategy, weapon, casualty, damage etc. The last mental space is the spg event structure which is evoked when an event of movement is construed: a mover, destination, path, obstacle etc. are the elements for the setting. Based on the given information on the inputs, the representation of the conceptual structure is shown below:

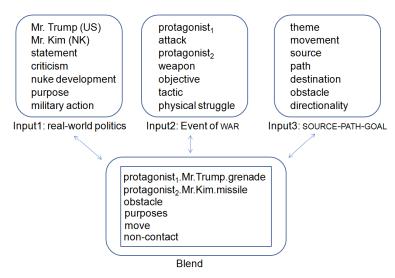


Figure 13. Conceptual blending in Figure 12

In the blend, a new semantic structure emerges with a combination of selected elements from the multiple inputs. The event structure of the blend, which is represented vividly in the cartoon, can be described as follows: two human-headed and weaponized beings are in conflict; they say to each other that the counterpart should move out of the way so that the protagonist can move on toward his destination; there are spectators behind them. In terms of the frame elements used in the figure, the blend space accommodates an emergent structure where two weaponized imaginary beings think that the counterpart is an obstacle blocking each other's way toward their destination. The conceptualization of their weaponized bodies is metonymically motivated by the fact that the two nations that the two figures represent are capable of using lethal weapons (via POSSESSION FOR OWNER). They are not in contact, but are about to be.

This blend embraces meanings from the metaphor ARGUMENT IS WAR and also from the metaphor PURPOSEFUL ACTIONS ARE SELF-PROPELLED MOVEMENTS (see sections 4.1.1 and 4.1.3). The simulated meanings of the emergent structure cannot be found in any of the inputs by itself: there is no such thing as human-headed weapons in the real world of international politics; the two political figures in the real world did not actually have a face-to-face meeting; they have not spoken the utterance "stay out of my hair," which results from elaboration of the blended space; the human-headed weapons do not exist in the war domain; the spg domain does not necessarily involve the construal of the conflict between two nations. All the simulated inferences from the blend can be obtained only from the interactions of the inputs and the blend.

This cartoon makes an instance of single-scope blend, where one of the two inputs provides the primary organizing frame for the blend (Oakley and Pascual 2017: 429): a dual structure of two protagonists with physical forces as a whole is accommodated by the second input in the figure; in the given primary structure, the frame knowledge of international politics, specifically force-dynamics between the two national leaders in question, fills in the roles briefed in input 2 (protagonist, attack, weapon, physical struggle etc.); the third input picks a salient meaning package of movement, which motivates the construal of forward movement in the dual structure of the blend.

5. Conclusion

This paper has conducted a case study of multimodality, by looking into political cartoons <stay out of my hair> with special focus on the optimal manifestations of conceptual metaphors (Lakoff and Johnson 1999) and blends (Fauconnier 1997) in them. This study specifically investigated how conceptual metaphor and blending conspire to convey intended messages of rich meanings successfully and modeled the conceptual structures involved in the construals. In the dataset in focus, i.e., <stay out of my hair> cartoons, it argued that there are three major metaphor systems ARGUMENR IS WAR, CAUSES ARE FORCES, and PURPOSEFUL ACTIONS ARE SELF-PROPELLED MOVEMENTS, and that conceptual blending motivates other types of the cartoons. It modeled their conceptual structures and discussed how the internal structures motivated their interpretations. The implication of this study indicates pervasiveness of human cognition in multimodality as well as "pure" linguistic phenomena. This study backs up the claim that cognitive mechanisms such as conceptual metaphor and conceptual integration are not confined to linguistic phenomena, but rather, all the human artefacts including cartoons rely on them.

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Received: 2017. 12. 01. Revised: 2018. 02. 14. Accepted: 2018. 02. 14.