

THE MEANING TRANSFERENCE FROM SPATIAL TO NON-SPATIAL MEANINGS OF *BELOW*

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Abstract: This paper analyses the transference from spatial to non-spatial meanings of *below* as a preposition, an adverb, and a particle within the 2017 Corpus of Contemporary American English, genre: fiction. In light of the Multimodal Image Theory and Extended Conceptual Metaphor Theory, the data analysis shows that the prototypical meaning of *below* has two variants in its Visual space, and two non-spatial meanings namely *Less* and *Inferior*. The mechanism of meaning transference is mappings in which salient aspects of absence of contact, force, and occlusion between the Trajector (TR) and Landmark (LM) are retained in construing the non-spatial scenes associated with the word.

Keywords: below, meaning transference, Multimodal Image Theory, Extended Conceptual Metaphor Theory

1. Introduction

Our previous studies (Long, 2019, 2021; Long & Vu, 2020) have shown the appropriateness of a combination between Multimodal Image Theory (Deane, 2005) and Extended Conceptual Metaphor (Kövecses, 2017, 2020)¹ in accounting for the transference from spatial to non-spatial meanings of *over*, *above*, and *under*. The following remarks are withdrawn from the previous studies:

(i) The spatial meanings of prepositions like *over*, *above*, *under* generate among three spatial modalities: Visual space, Maneuver space, and Kinetic space. Each preposition has a prototypical meaning encoded by a pair of image complexes and in each space, it has different variants. The Visual space treats the static meaning while the Kinetic space treats the dynamic meaning. The Maneuver space serves as an allocentric frame of referent in which the clearance between the TR and LM when rotated

is taken into consideration.

(ii) The non-spatial meanings of the four words are attached to a range of conceptual metaphors which are activated in a four-layered direction from mental spaces to frames/ domains and image-schemas.

(iii) The semantic continuity of prepositions like *below* has not been shown clearly, and the links among different image-schemas denoted by prepositions are loosely presented.

This study initiates from the above remarks to provide an account for the meaning transference of *below* within the chosen corpus in which *below* is a preposition, an adverb, and a particle while the use of *below* as a prefix or an adjective as far as that part of speech of *below* is concerned.

One important assumption of the study is non-spatial meanings of *below* are spatially grounded (Lakoff, 1987; Tyler & Evans, 2003),

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¹ Hereafter, MIT and ECMT.

and the study applies the two above-mentioned conceptual frameworks to account for the meaning transference of *below* and then discusses the nature of human construal processes associated with its meaning transference. The above objective is realized by the following two research questions:

1. What spatial and non-spatial meanings of *below* are generated in its contexts of use?

2. How does *below* transfer from spatial to non-spatial meanings in its contexts of use?

2. Basic Tenets in Construing a Scene

Croft and Cruse (2004) identify that the human construal processes would normally undergo the following procedure with *one-to-one* step:

Table 1

The Human Construal Processes

<p>1. Attention/ salience Selection Scope of attention Scalar adjustment Dynamic attention</p>	<p>3. Perspective/ situatedness Viewpoint Deixis Subjectivity</p>
<p>2. Judgement/ comparison Categorization Metaphor Figure-ground alignment</p>	<p>4. Constitution/ Gestalt Structural schematization Force dynamics Relationality (entity/ interconnection)</p>

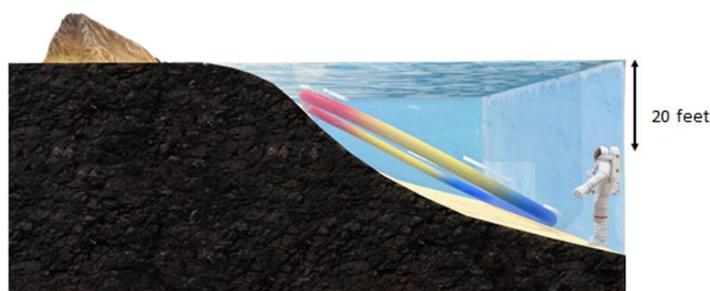
The above procedure is in agreement with the notion of *conceptual structuring system* which is based upon a limited number of large-scale *schematic systems* introduced by Talmy (2000). There are four key schematic systems within the conceptual structuring systems: the Configurational system, the Perspectival system, the Attentional system, and the Force-dynamic system.

Table 1 shows that humans would

normally use their visual capacity or auditory capacity to select/ detect the salient aspects/ features of the scene(s) and then compare those aspects/ features in reference to their situatedness to create a whole picture (the gestalt representation). This process is also similar to *schematization* described by Talmy (2000), in which certain aspects are selected while others are neglected. The following graphic representation provides a lot of clues for people to utter different sentences.

Figure 1

The Graphic Representation of “You are Also Approximately Twenty-One Meters Below Surface Level.”



In the scene, focusing on the position of the man and the relative distance from his head to the surface, it is noted that the man is appropriately twenty feet below the surface

level, represented by the following utterance:

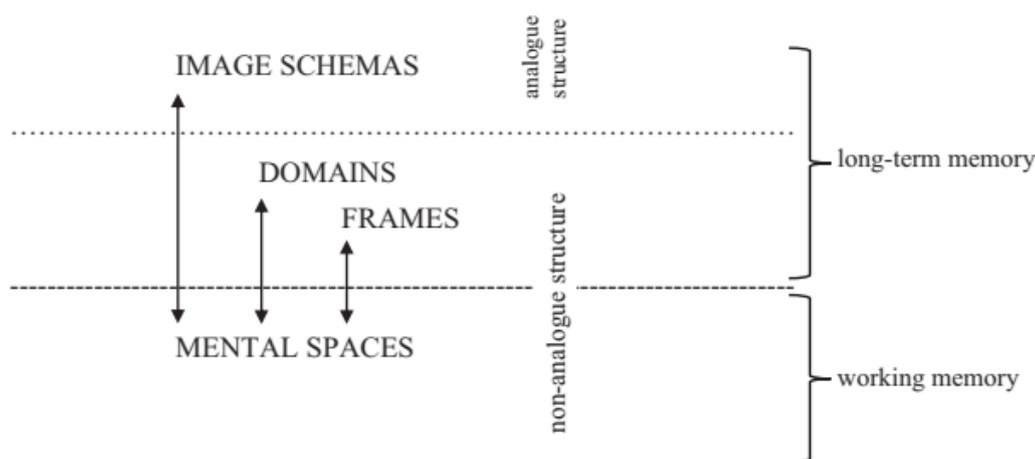
(1) *The man is approximately twenty feet below surface level.*

The TR in the sentence is “The man”,

but it should be noted that the exact part is the head of the man while his feet are deeper in the ocean. In this case, the construal of below is purely spatial, and it is easy to understand that if other parts of the scene were to be taken into view, other utterances would be created.

A scene is part of a bigger concept called *domain* or *frame*. In Kövecses’s sense, a scene is at the individual level, where speaker and hearer (metaphorically) conceptualize objects and

Figure 2
Activation From Mental Spaces to Frames, Domains, and Image Schemas (Kövecses, 2020)



Based on the information about human construal process presented in table 1, it can be seen that a scene can be either spatial or non-spatial. Tamly (2000) breaks up a spatial scene, part of the SPACE domain, and ascribes certain concepts like Trajector (TR), Landmark (LM), etc. to the involved elements. A non-spatial scene also entails the concepts of TR and LM; however, the TR and LM are virtual. The LM serves as a reference for the TR, and they have all features presented in table 1 besides the spatial information. Particularly, a spatial scene involves *concrete* entities which bear certain *spatial* relations with each other. These entities are termed TR or LM, basing on their functions in the scene. The spatial relations denote *image-schemas*. Additionally, the notion of image-schema is also found in a non-spatial scene, part of other domains rather than SPACE domain, which requires construers to deduce from contexts. As discussed earlier, the four words also entail metaphorical understandings; therefore, such a case would shape at least two ways of construal: (i) *spatial & metaphorical*;

events online in a fully contextualized fashion (Kövecses, 2017). A scene can contain different *mental spaces* because mental spaces can be introduced thanks to the emergence of *space builder expressions*. Domains activate *image-schemas* and image-schemas themselves activate *metaphors* when the four items are metaphorically used. All in all, those levels of construal can be represented by the following figure.

(ii) *non-spatial & metaphorical*. All in all, there are three ways of construal: (i) *spatial & metaphorical*; (ii) *non-spatial & metaphorical*; (iii) *spatial & non-metaphorical*. Furthermore, spatial meanings of the four items are found in SPACE domain while non-spatial meanings are found in non-space domains. In the following examples, below is used metaphorically:

(2) *If the eavesdropping level is below a certain threshold, the communication is absolutely secure.*

(3) *“I know what a dipshit like Fleischermann can afford. You ‘re selling yourself below market. Schnabel told me.*

The TR-LM configurations in sentences (2) and (3) are virtual; however, the TR and LM could still be construed. In the sentence (2), the LM is “a certain threshold level” while the TR is the value ascribed for the eavesdropping level. The LM and TR in the sentence (3) are conceptualized as “the standard/ usual price”, “the sold price”. In the above sentences, the TR is construed lower in terms of values than the LM.

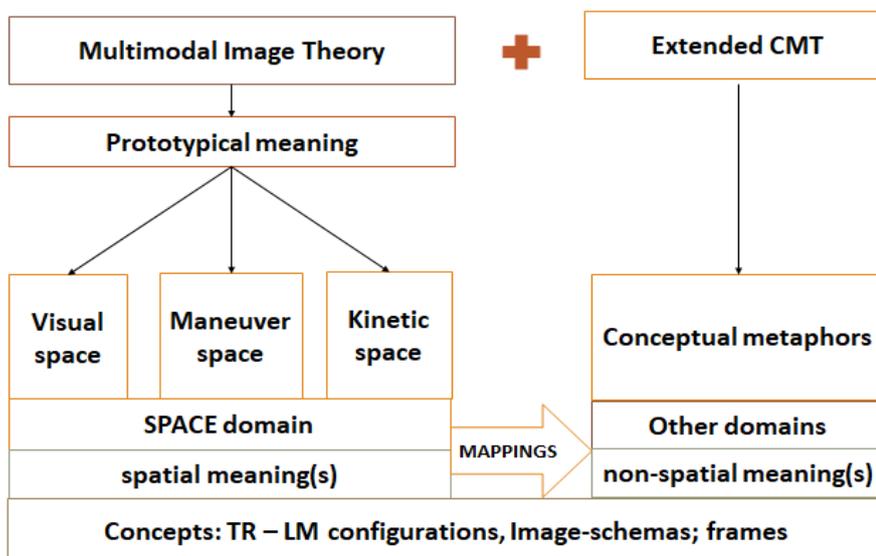
3. Research Methodology

3.1. Conceptual Framework

In fact, the model adopted in this study to treat the semantic continuity of *below* is novel in the aspect that it does not solely list image-schemas associated with the word, it shows how those image-schemas are related, or derived from the image-complexes denoting the prototypical meaning. It is superfluous to analyze all aspects of the proposed frameworks to account for the meaning transference of *below*; however, it is crucial to explain the reason why a combination of MIT and ECMT were exploited. First and foremost, MIT treats a

spatial marker like *below* as a radical category in which extended meanings are variants of the prototypical meaning in the Visual and Kinetic spaces. The Maneuver space serves as an allocentric frame to calculate the clearance between the TR and LM. Spatial meanings of the word are decoded by visual and functional information of the word with its image-schemas. Non-spatial meanings of *below* are also associated with a range of conceptual metaphors which were activated by a four-layered level from mental spaces, frames/ domains to image-schemas. It is proposed that the mechanism of meaning transference is mappings. All in all, the frameworks can be presented by the following figure.

Figure 3
A Hybrid Conceptual Framework to Account for Meaning Transference of Below



3.2. Data and Processing

This study extracted the data from 2017 Contemporary American English Corpus (COCA), genre: fiction. The corpus contains approximately four million words and the data for the analysis were taken from works of fiction published in American English in the year 2017. There are three main reasons why COCA was chosen. Firstly, COCA is currently the largest corpora in linguistics with more than 560 million words of text in five genres: spoken, fiction, popular magazines, newspapers and academic texts. Only in the year of 2017, more than 20 million words had been added. Hence, in reference to the thesis of usage-based model, COCA is appropriate. More importantly, the

corpus shows its unique features with chart listings and collocates searching of up to ten words right or left the node word; re-sortable concordances and comparisons between genres and time periods (Davies, 2010). This makes it easier for linguists to categorize the collocates and structures associated with each word. Last but not least, COCA has never been exploited to treat the word so far.

In order to extract the needed data, the software AntConc (64-bit, version 3.5.7) was exploited by the researcher who is fluent in English and has in-depth understanding of the frameworks to find the appropriate concordance of *below* in the corpus with 170 instances of use. The data were processed in the following procedure:

Stage 1: identifying a metaphorical and non-metaphorical usage

This stage concerns the classification of instances in which *below* is metaphorically used. The identification process is termed “Metaphorical Identification Procedure²” introduced by Pragglejaz Group (2007).

Additionally, the researcher also labelled the instances when the scene is spatial or non-spatial. Finally, all instances are classified into three groups: (i) *spatial and non-metaphorical*, (ii) *spatial and metaphorical*; (iii) *non-spatial and metaphorical*. The researcher applied MIP as follows (adapted from Pragglejaz Group, 2007, p. 3).

Table 2

Metaphorical Identification Procedure (adapted from Pragglejaz Group, 2007)

Step 1	Read the entire text–discourse to establish a general understanding of the meaning. Separating the TR and LM in the sentence.
Step 2	Determine the lexical units in the text–discourse
Step 3	<p>(a) For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation, or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit. The focus is the use of <i>below</i>.</p> <p>(b) For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context. For the purpose of the data analysis, basic meanings tend to be:</p> <p>More concrete; what they evoke is easier to imagine, see, hear, feel, smell, and taste. Related to bodily action. More precise (as opposed to vague) Historically older.</p> <p>Basic meanings are not necessarily the most frequent meanings of the lexical unit. Basic meanings are typically the prototypical meanings.</p> <p>(c) If the lexical unit has a more basic current–contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it.</p>
Step 4	If yes, mark the lexical unit as metaphorical. If no, mark the lexical unit as non-metaphorical.

Stage 2: all the spatial usages of *below* were analyzed in the light of *MIT* and metaphorical usages of the four words were analyzed in respect to *ECMT*. Each of usages was put into one of the following groups: spatial configurations (static or dynamic) and non-spatial configurations. The visual and functional information of *below* in such a group is categorized, basing on which the meanings were nominally termed.

Stage 3: the image-schemas of *below* from *MIT* and *ECMT* were compared to show

the metaphors emerged from each of the three spatial spaces of *below*, basing on which the mappings from *DOMAIN* space to other domains were to be found.

4. Findings and Discussion

In the following analysis, the spatial meanings of *below* were presented first, basing on which its non-spatial meanings and meaning transference are discussed.

² Hereafter MIP.

4.1. Below as a Spatial Marker

Below can be traced back to the root *biloogh* (in a lower position), from Anglo-Saxon **be-** "by, about" + *logh, lou, lowe* "low", Old Norse *be* + *lagr* (cf. Tyler & Evans, 2003, p. 127, and Etymology Dictionary online). *Below* designates the TR-LM functional configuration that excludes the contact between the TR and LM, presented as follows.

4.1.1. The Visual Space Images of Below

The stationary scenes denoted by *below* could be seen in the following example:

(4) *The courtyard outside and below Adare's window was a chaos of activity.*

Apparently, there is no contact between the TR, *the courtyard*, and the LM, *Adare's window*, in the above spatial configuration, and our encyclopedic knowledge of building helps us confirm such usage because by convention, a window is built several feet higher than the floor level. Additionally, the perspectival aspect of the frame denoted in the sentence is perhaps from "an insider" due to the emergence of the word "outside". Other examples are:

(5) *Women dance naked in the strip club below his studio, the Mob has vested interests, deals...*

(6) *I stepped inside. Spines pressed into the skin below my eyes, rip-tongued branches curled against...*

Table 3
The Prototypical Meaning of "Below"

<p>The prototypical meaning of <i>below</i> is defined by a pair of images:</p> <ul style="list-style-type: none"> a. From the side at high resolution: the TR is separated from the LM by a vertical gap. b. From the side at low resolution: the TR is separated from the LM by a vertical gap. <p>The gap between TR and LM is significant from the side at low resolution.</p>
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In view of the vertical gap between the TR and LM in sentence (1), this vertical gap facilitates the construal that the LM is geographically higher than the TR. The instances are related to the location of buildings, rivers, etc.

(7) *a steamer with supplies, at some convenient point below Powder River...*

"Powder River" does not refer to the

whole river in general; it only refers to a particular part of the river where the steamer is supposed to be located. Background knowledge tells us that *Powder River* (LM) is higher than *some convenient point* (TR) in reference to the sea level, i.e., to the *north* of the Earth. This usage of *below* is supposed to create the "Topographical Distance" meaning supposed by Tyler and Evans (2003).

Figure 4
The Image-Schema Associated With Below in its Visual Space

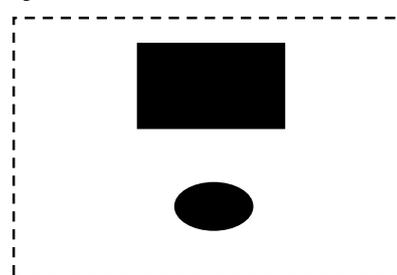
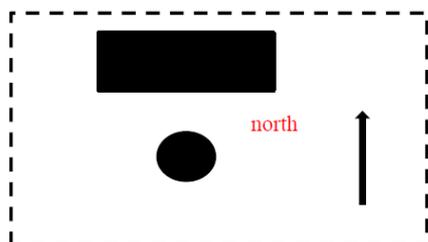


Figure 4 is underspecified. This means that the scene does not require the TR to be located within the scope of the LM, the salient aspect is that the LM is *geographically higher* than and *distinct* from the TR.

All in all, the prototypical meaning of *below* is supposed to be coded by the following pair of images.

Figure 5

The Representation of “at Some Convenient Point Below Powder River”



The above figure can also be applied for the spatial scene denoted in the following instance without arrow to show direction:

(8) *You are also approximately twenty-one meters below surface level.*

From the above analysis, it is supposed that *Topographical Distance* meaning (Tyler & Evans, 2003) is in fact the prototypical meaning of *below* in its Visual space. The emergence of *below* in such sentences like (8) is also the result of experiential correlation of human construal

Table 4

The Visual Space of “Below”

Visual space images	The images represented in this space are locative and stationary, besides the prototypical meaning of <i>below</i> , there are two other pairs of images. Pair 1: a. From the side at high resolution: there is a gap between the LM and TR. b. From the side at low resolution: the gap between the LM and TR is still clear. c. From the top of the scene: the LM occludes the TR Pair 2: a. From the side at high resolution: the TR is unique to the LM b. From the side at low resolution: the TR is lower than the LM in reference to the sea level.
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Up to now, the prototypical meaning of *below* and its Visual space have been discussed. Describing a spatial scene in which the LM is geographically higher than the TR and there exists no contact between the two entities, *below* is a better preposition than *under* is.

4.1.2. The Maneuver and Kinetic Space Images of “Below”

Rotating the prototypical spatial scene involving *below* results in the image-schema denoted by *below* as in figure 5. With a line drawn from the nearest point of the TR parallel to the LM, another line can be seen from a certain point of the LM that is perpendicular to

(Tyler & Evans, 2003); however, as the image-schema remains unchanged while other significant elements such as forces does not contribute to the construal of the scene, the meaning of *below* in this case does not guarantee a distinct meaning.

Back to the construal of sentence (5), Tyler and Evans would advocate a distinct meaning from the prototypical meaning termed “*Next-one-down*”. However, in this study it is supposed that the image-complex coded by this usage is only a variant of the prototypical meaning. What should be taken into consideration is that in this case, the TR is occluded by the LM and the LM and TR are in a line from high above. Noted that the TR and LM are clearly separated regardless of high or low resolution.

In short, it is better to conclude that two above usages of *below*, i.e., “*Next-one-down*” and “*Topographical Distance*”, are variants of *below* in its Visual space.

the earlier line. This again means that the gap after rotation remains significant.

Figure 6

Rotating the Prototypical Image-Schema Denoted by “Below”



Tyler and Evans (2003) find that the TR and LM associated with *below* are never in contact. One may ask whether the LM of *below* could be the prototypical ground. If so, the TR must be on the surface of the Earth, or in other words, the TR is occluded by the LM. In the *Distinctiveness Principle* in the Visual space of prepositions, two prepositions cannot be applied with the same spatial scene. Our previous analysis shows that *under* is acceptable in such a case; therefore, *below* must be excluded. Additionally, if the LM occludes but does not interact with the TR, the LM, if it is big enough, cannot be conceptualized as covering the TR. The two above reasons perhaps make it clear why the meanings of *below* are fewer than those of *under*.

In the following sentences, *below* is used with motion verbs:

(9) "Thank you." He watched her turn

and go below, carefully placing stocking feet onto slippery road.

(10) The sheet draped from the overhead rod fell to below her chin, blocking off her view...

(11) Then nylon rustled and something heavy landed in the footwell below my head: the backpack that Ma had kept...

Sentence (9) shows a movement of a woman from a building to a road. Therefore, the space in the spatial scene is separated; or to be exact, the TR (her) moves from a close space to an open one. The hidden LM1 and LM2 are unique. Similarly, there are two unique LMs in sentence (10), one of which is *the chin* while the other is *overhead rod*. Sentence (11) is similar to sentence (9) when denoting a force dynamic which makes the TR move from LM1 to LM2. The direction of the TR is downwards to the ground, summarized in the following figure.

Figure 7

The Direction of TR of Below in its Kinetic Space

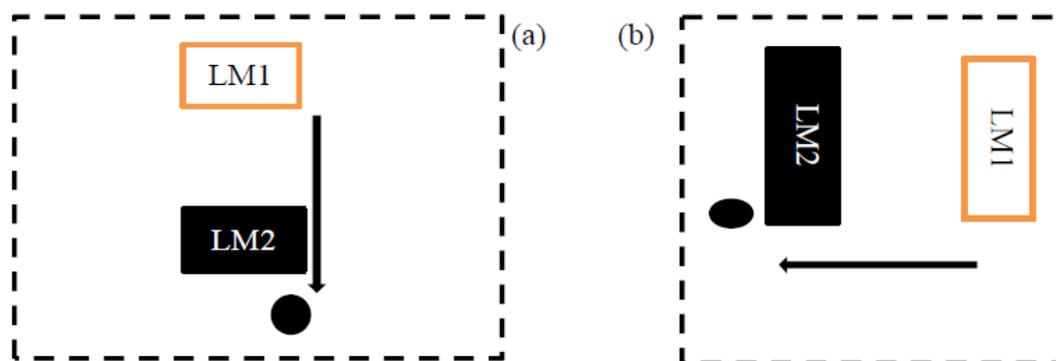


Figure 7(a) ideally fits the spatial configuration in sentence (10) and (11) while its rotated version fits the configuration denoted in

Table 5

The Maneuver and Kinetic Space of "Below"

Maneuver space images	a. Initial position: there is significant clearance between the TR and the LM, with the LM oriented parallel to the ground. b. Image after rotation: the clearance remains significant.
Kinetic space images	Kinetic Image Sequence: a. The LM forms part of the base on the locomotor surface; the TR is in open or close space, has force-dynamic impetus parallel to the base. b. Resultant state: the TR is on the far side of the LM from its initial position.

LM1 is typically the initial position of the TR while LM2 helps to localize where the TR is.

In short, *below* as a spatial marker designates unique TR and LM without any contact, and the LM is geographically higher than the TR.

4.2. Non-Spatial Meanings and the Meaning Transference Processes From Spatial to Non-Spatial Associated With “Below”

(1) MORE IS UP; LESS IS DOWN.

This metaphor emerges from the Visual space of *below* in which the vertical extension stands for growth in general (*part for whole*). This *metonymy* can be seen in the domains of NUMBER, TEMPERATURE, etc. Here are two examples:

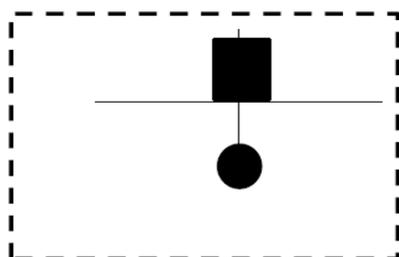
(12) *He was cruising at just below seventy miles per hour.*

(13) *Once you get past twenty degrees below zero, it's just about the same.*

In sentence (12), the TR is hidden (*the speed of the vehicle that man was using*) and the LM is *seventy miles per hour*. However, sentence (13) explicitly denotes the TR, *minus twenty degrees (-20)*, and the LM, *zero degree*. Presenting the TR and LM in two above sentences, we have the following figure.

Figure 8

The First Image-Schema Transformation Associated With “Below”



In the domains of NUMBER or FINANCES, it is easy to ascribe numeric values to the TR and LM, making it clear that the LM is often conceptualized as a standard for the TR to be compared with. Sometimes, the LM is rather abstract:

(14) *...to Winsome this year, and temperatures were well below normal.*

(15) *we'll be able to bring the population below the sustainable level in this particular union...*

(16) *Another one of these below standard reviews and they're going to...*

Though numbers in general or temperature in particular are easy to describe, *normal temperatures*, the LM in sentence (14), in a place at a period of time in a year, have relative and conventionalized values. The experiences from the sensory systems provide input for such a comparison. The LM in sentence (15) refers to a number priorly mentioned in the text due to the emergence of the article “the”.

It can be seen that all the LMs function as the measuring standards, and the lines are purposefully displayed from the TR and LM in order to show that the LM and TR can be presented on a scale.

In light of the constraints set in the conceptual framework, when abstract concepts are construed as concrete entities, there emerge *ontological metaphors*. Look at two following sentences:

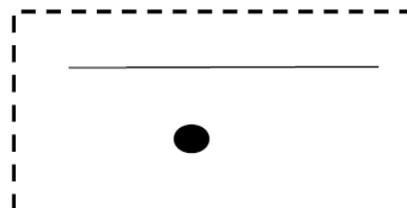
(17) *Outside the sun dropped below the ridgeline and the shadows slithered in to...*

(18) *Yeah. I'm below the Mendoza line.*

Sentence (17) denotes a spatial scene in which the TR, *the sun*, is ideally conceived to set below the LM, *the ridge line*. The LM is seen as a line, which is also denoted in sentence (18): *the Mendoza line*. Historically, *Mendoza line* refers to a poor performance of a baseball gamer called Mendoza, and when a player exposes his deficiency as a hitter below 0.215. The second image-schema transformation of *below* can be presented as follows.

Figure 9

The Second Image-Schema Transformation of “Below”



As can be seen, the LM is treated as a line, different from the former version when it is

conceived of as an indeterminate object. Another abstract example is:

(19) *He hummed the tune below his breath- and then louder and fuller...*

Typically, sound can be measured in decibel, shown in a vertical scale; however,

Table 6

The Mapping of Below Associated With “MORE IS UP, LESS IS DOWN”

SPACE domain	Other domains (NUMBER, FINANCE, SOUND)
The TR is lower than and distinct from the LM.	The LM is conceptualized as a par for the TR to be compared with. The TR is lower than the LM in terms of values.

The two words “under” and “below” are also associated with the metaphor “MORE IS UP, LESS IS DOWN”, so what is the difference in such metaphorical usages between them? Supposedly, the answer lies in the way how the LM is construed. The LM of *below* is seen as a “par”, a kind of “standard value” for the TR to be compared and contrasted with. In the domain of TEMPERATURE, for example, the phrase “below zero” is quite frequently used. In fact, the *zero Celsius degree* (0°C) is the point below which water turns into ice from liquid. Another example is “below the Mendoza line”, discussed earlier. On the contrary, although *under* also emerges in the domain of TIME (AGE), NUMBER, the LM is purely conceptualized as a reference point.

In view of the visual and functional information of *below* associated with the metaphor “MORE IS UP, LESS IS DOWN”, the construal of *below* in this case makes a distinct meaning, termed *Less*. This is in agreement with Tyler and Evans (2003). In short, a non-spatial and metaphorical meaning of *below* (*Less* meaning) is ignited when humans construe the metaphor “MORE IS UP; LESS IS DOWN”.

(2) HIGH STATUS IS UP; LOW STATUS IS DOWN.

Again, when one entity is presented priorly or higher than another entity, it is construed higher and of greater importance. This

Table 7

The Mapping of Below Associated With “HIGH STATUS IS UP; LOW STATUS IS DOWN.”

SPACE domain	SOCIAL HIERARCHY
The TR is lower than and distinct from the LM.	The TR is lower than the LM in terms of social positions/ power.

scientists show that sounds travel as a line with changing in pitch, making its graphic illustration ideally look like a sine graph with a horizontal axis.

The mapping of *below* from spatial to non-spatial meanings is summarized in the following table.

is the basic spirit of social status which is also conceived as a ladder. Additionally, this metaphor has its ground basis when a person of lower rank is supposed to express his submission to those of higher rank by bowing, or kneeling down:

(20) *Esau Steadman chose a life mate considerably below his family's means and social standing...*

In the above sentence, *the wife of Esau Steadman* (TR) is in a lower class than he who belongs to *a family of upper class* (LM). To be more precise, the social status of the marital spouses are contrasted. The frame/domain is SOCIAL HIERARCHY, and the meaning in this case is non-spatial and metaphorical. This usage of *below*, according to Tyler and Evans (2003), facilitates the *Inferior* meaning. The nominal phrase “inferior” denotes the difference in the connotational meaning of this metaphor associated with *under* and *below*. As mentioned, the LM of *under* exerts force on the TR due to the potential contact between the two entities while in case of *below*, there is no such direct force. Perhaps, the lack of contact and the uniqueness between the TR and LM of *below* make the word a better candidate than *under* to denote *social gap*. It is also observed that the LM of *under* associated with this metaphor is construed of potential power/ force on the TR. The mapping of *below* associated with this metaphor is summarized in the following table.

(3) TOWARDS THE BEGINNING OF WRITTEN DISCOURSE IS UP; TOWARDS THE END OF WRITTEN DISCOURSE IS DOWN.

This metaphor is also mapped from the Visual space of *below*, shown in the following sentence:

(21) *The lines below the recipient's name, that which is called...*

In this sentence, the LM is *the recipient's name*, which is located closer to the beginning of the domain of WRITTEN DISCOURSE. The use of *below* in the sentence is *spatial* and *metaphorical*. It is spatial because it designates the location of the TR and LM in a

Table 8

The Mapping of Below Associated With "TOWARDS THE BEGINNING OF WRITTEN DISCOURSE IS UP; TOWARDS THE END OF WRITTEN DISCOURSE IS DOWN."

SPACE domain	WRITTEN DISCOURSE
The TR is lower than and distinct from the LM.	The TR appears later than the LM in the discourse.

Three metaphors in which *below* is used both spatially and non-spatially have been presented. In the third metaphor "TOWARDS THE BEGINNING OF WRITTEN DISCOURSE IS UP; TOWARDS THE END OF WRITTEN DISCOURSE IS DOWN", the spatial origin of the usage of *below* can still be traced back. With the first and second metaphor, the virtual LM serves as a standard for the TR to be compared with, thus the degree of abstractness is not complex.

In the following analysis, we present one more conceptual metaphor associated with *below*.

(4) TRUTH IS A HIDDEN OBJECT.

Based on the contextual information from sentence (6) in the discussion of *below* as a spatial marker, it can be seen that *below* can participate in cases where the vision is occluded:

(22) *The sheet draped from the overhead rod fell to below her chin, blocking off her view...*

In the above sentence, the TR is *her chin* while the LM is *the sheet* which dynamically moves downwards to occlude the vision of the woman. Our background tells us that the size of the sheet must be big enough to cover the eyes of the woman at least for several seconds. In this

concrete text. It is metaphorical because it denotes an orientational metaphor. However, it is not uncommon to find spoken utterances using *below* like this usage.

As discussed earlier, with regard to *below* in its Visual space, the TR and LM are in no contact; therefore, the TR and LM in a written discourse need not to be located on the same page. This is also a remained salient aspect of *below*.

Again, it is the separation between the TR and LM of *below* that facilitates the meaning in the written discourse domain, and it can be obviously deduced that *under* could not be used in this case.

case, the LM and TR are in contact, but the salient aspect is the separation between the chin of the woman (LM) and the sheet (TR), i.e., the bottom of the sheet. Such an occlusion can be seen in the following sentences:

(23) *He'd seen dark currents swirling below her polite expression and...*

(24) *but we both knew what was crackling just below the surface of our conversation...*

(25) *unsteady breathing and meaning the trembling just below the surface of her calm exterior...*

The scene is conceived with a *surface LM configuration* in those sentences. Particularly, the LM in sentence (23) is *her polite expression* while the TR is *dark currents*. Comparing the image-schema in sentence (9) and (23) are to be compared a similar occlusion in which the TR is covered by the LM can be conceptualized. Perhaps, the emergence of the phrase "below the surface of..." in sentences (24) and (25) makes the virtual occlusion meaning of *below* easier to be construed.

Up to now, the analysis in this paper has shown that the non-spatial uses of *below* are more complex than the nominal terms that Tyler

and Evans (2003) advocate. It is again reaffirmed that *an image-based approach* shed light on the meaning transference of the marker, and the spatial meaning of *below* is its prototypical meaning with variants in spaces, two non-spatial meanings of *below* are *Less* and **Table 9**

Inferior.

5. Conclusion

The construal of non-spatial meanings of *below* is summarized in the following table.

A Summary of Meaning Transference From Spatial to Non-Spatial of Below

Spatial modalities	Conceptual metaphors	Meanings
1. Visual space		
1.1. The prototypical image complexes	MORE IS UP, LESS IS DOWN.	Non-spatial meaning
	HIGH STATUS IS UP; LOW STATUS IS DOWN.	Non-spatial meaning
	TOWARDS THE BEGINNING OF WRITTEN DISCOURSE IS UP; TOWARDS THE END OF WRITTEN DISCOURSE IS DOWN.	Spatial and metaphoric meaning
1.2. The first variant when the LM is seen as a line.	TRUTH IS A HIDDEN OBJECT.	Non-spatial and metaphorical meaning

The transference from spatial to non-spatial meanings of *below* can be summarized as follows:

(i) *Below*, as a spatial marker, has one prototypical meaning coded by a pair of image complexes in which the TR is lower than the LM, and there is no contact between them. The first variant in the Visual space is when the LM is seen a surface which occludes the TR. The second variant refers to a topographical distance, which could be presented in a map. The Maneuver and Kinetic Space of *below* designate a clearance in the gap between the TR and LM; and the TR in its movement tends to be further from the LM.

(ii) As a non-spatial marker, *below* is associated with four conceptual metaphors: MORE IS UP, LESS IS DOWN; HIGH STATUS IS UP; LOW STATUS IS DOWN; TOWARDS THE BEGINNING OF WRITTEN DISCOURSE IS UP; TOWARDS THE END OF WRITTEN DISCOURSE IS DOWN; and TRUTH IS A HIDDEN OBJECT.

Of the four metaphors, the construal of the three first metaphors can be processed via the

virtual image-schema without much complexity; however, the construal of the fourth metaphor requires the grounding experience and embodiment. First, the listener must understand denotational meaning of the noun in the prepositional phrase, and then adopt an image-schema based frame to construe the whole prepositional phrase. The degree of abstractness increases from the first to the fourth metaphors.

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CHUYỂN DI TỪ NGHĨA KHÔNG GIAN SANG NGHĨA PHI KHÔNG GIAN CỦA “BELOW”

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Tóm tắt: Bài báo này phân tích hiện tượng chuyển di từ nghĩa không gian sang nghĩa phi không gian của *below* với tư cách là giới từ, trạng từ, và tiểu từ trong khối liệu Anh Mỹ đương đại năm 2017, thể loại: tiểu thuyết. Sử dụng khung kết hợp Hình ảnh đa phương thức và Ấn dụ tri nhận mở rộng, chúng tôi đã chỉ ra điển nghĩa của *below* có hai biến nghĩa ở thức Hình ảnh và hai nghĩa phi không gian là *ít hơn* và *kém hơn*. Cơ chế của chuyển di nghĩa là ánh xạ mà ở đó những đặc điểm nổi trội thiếu tiếp xúc, lực, và che lấp giữa đạo tử (TR) và vật mốc (LM) được lưu giữ khi kiến giải cảnh phi không gian gắn với *below*.

Từ khóa: *below*, chuyển di nghĩa, Hình ảnh đa phương thức, Ấn dụ tri nhận mở rộng