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Exploring culturally conceptualized meaning in the Indonesian spatial prepositions “di dalam” and “di atas” and the English “in” and “on”¹

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Abstract

If meaning of words conceptually evolves in relation to how the speakers of a particular language view the world and preposition is no exception; hence, preposition hypothetically also carries culturally motivated meaning. This paper explores how Indonesia speakers' worldview culturally conceptualized in spatial preposition. The spatial prepositions being explored are the Indonesian prepositions “di dalam” and “di atas” and respectively the English preposition “in” and “on” in the framework of Cognitive Linguistics theory. The research was an explorative study which applied comparative method to explore and unveil the image schema and the cultural conceptualization embedded in the spatial preposition. The result of the study descriptively shows that the Indonesian spatial prepositions “di dalam” and “di atas” cannot always be translated into the English “in” and “on” respectively and vice versa. This reveals that (i) the spatial preposition “di dalam” and “di atas” evolves in different cultural conceptualization from the spatial preposition “in” and “on”, (ii) the culturally conceptualized meaning of the spatial prepositions is much richer than what appears to be their superficial meaning, and (iii) that the so-called lexical meaning of preposition is absurd. In conclusion, the study strongly indicates that spatial preposition carries a significant cultural conceptualization of spatial relations more than just merely a grammatical function.

EXTENDED ABSTRACT

Introduction

In general, preposition research in Indonesia has predominantly focused on three key areas. These areas involve inquiries aimed at (i) describing various types of prepositions, (ii) elucidating the syntactic functions of both prepositions and prepositional phrases (PPs), and (iii) revealing the semantic nuances associated with prepositions. The examination of preposition types entails an exploration of diverse forms, encompassing both single and compound prepositions. Investigating the syntactic functions of prepositions is closely tied to understanding how prepositions contribute to constructing PPs and the role of PPs in shaping sentence structure. On the other hand, the exploration of preposition meanings delves into their broader implications within sentences.

Recent researches on Indonesian prepositions still align with these primary research areas mentioned above. Some studies are even repetitive in nature. Meanwhile, other studies can be categorized into four main types. The first category involves examining how prepositions are used within specific types of texts. The second category entails contrasting Indonesian prepositions with those in other languages. The third category focuses on the syntactic analysis of prepositions. Lastly, the fourth category involves prescriptive studies of prepositions.

Given the concise overview presented in previous preposition studies, there is a significant opportunity to examine prepositions through the lens of cognitive semantic theory. A notable distinction between cognitive semantics and other theories lies in the emphasis placed on prepositions within language. Cognitive semantics highlights the importance of prepositions due to their direct association with spatial concepts and the relationships among entities in space. Consequently, this paper diverges from previously discussed frameworks and embarks on an exploration of prepositions focusing on "spatial relations" within the "cognitive semantics" theory. This particular approach to preposition study has not been extensively pursued in Indonesia. Essentially, the paper delves into how speakers' conceptual perceptions, which unequivocally represent their cultural perspectives, are expressed through spatial prepositions – a topic that has been infrequently explored in Indonesia.

Conceptual and Theoretical Framework

Concepts

Prepositions, aside from postpositions, are words traditionally recognized as function words and fall under the category of 'adposition' (Payne, 2011). The term 'preposition', derived from the morphemes 'pre-' and 'position', indicates that it precedes the noun phrase it governs in the Prepositional Phrase (PP) structure. A PP is composed of a preposition, which serves as the governing head of the phrase, along with its accompanying prepositional complement (Weber, 2011). In contrast, 'postposition', derived from the morphemes 'post-' and 'position', indicates that it follows the noun phrase it governs in PP structure. Indonesian and English are examples of languages that employ prepositions, while Japanese employs

postposition. Hence, 'adposition' serves as a neutral term encompassing both types. As this paper compares Indonesian and English, the term 'preposition' will be specifically used. The prepositions to be explored are limited to those that function as indicators of static locative spatial relations.

Literature Review

In general, preposition research in Indonesia has predominantly focused on three key areas. These areas involve inquiries aimed at (i) describing various types of prepositions, (ii) elucidating the syntactic functions of both prepositions and prepositional phrases (PPs), and (iii) revealing the semantic nuances associated with prepositions. These investigative areas are succinctly outlined in the study conducted by Effendi & Aritonang (1991). The examination of preposition types entails an exploration of diverse forms, encompassing both single and compound prepositions. Investigating the syntactic functions of prepositions is closely tied to understanding how prepositions contribute to constructing PPs and the role of PPs in shaping sentence structure. On the other hand, the exploration of preposition meanings delves into their broader implications within sentences.

Recent researches on Indonesian prepositions still align with these primary research areas mentioned above. Some studies are even repetitive in nature (Kurniasih, 2017). Meanwhile, other studies can be categorized into four main types. The first category involves examining how prepositions are used within specific types of texts, as demonstrated by Hanif et al.'s (2020) study. The second category entails contrasting Indonesian prepositions with those in other languages, which is evident in the research by Mas Kusumaningrat (2015) and Rini (2009). The third category focuses on the syntactic analysis of prepositions, as exemplified in the studies conducted by Mulyadi (2012) and Yusof (1996). Lastly, the fourth category involves prescriptive studies of prepositions, as seen in the work by Sugiarti & Ngaisah (2018).

Given the concise overview presented in previous preposition studies, there is a significant opportunity to examine prepositions through the lens of cognitive semantic theory. A notable distinction between cognitive semantics and other theories lies in the emphasis placed on prepositions within language. Cognitive semantics highlights the importance of prepositions due to their direct association with spatial concepts and the relationships among entities in space. Consequently, this paper diverges from previously discussed frameworks and embarks on an exploration of prepositions focusing on "spatial relations" within the "cognitive semantics" theory. This particular approach to preposition study has not been extensively pursued in Indonesia (Kusmanto, 2017). Essentially, the paper delves into how speakers' conceptual perceptions, which unequivocally represent their cultural perspectives, are expressed through spatial prepositions – a topic that has been infrequently explored in Indonesia.

Cognitive Semantics theory considers space an essential element of human existence (Brenda, 2014; Svorou, 1994). In Kant's philosophy, space is seen as a "universal cognitive primitive" (Hickmann & Robert, 2006, p.1). Kant also pointed out that "space... serves as a significant backdrop for all processes of thought and significance" (Zlatev, 2007, p. 320). Levinson & Wilkins (2006) strongly emphasized that spatial cognition is a fundamental necessity for any mobile species with a fixed territory or home base. It undeniably plays a pivotal role in human thinking and reasoning. This underscores why the study of spatial language holds great importance.

Method

This study employs a qualitative descriptive research design, selectively gathering data from online sources to examine the varied usage of the Indonesian prepositions "di dalam" and "di atas," as well as the English prepositions "in" and "on." The application of these prepositions in Indonesian is then comparatively analyzed with their English counterparts, and vice versa. The main objectives of this comparative analysis are twofold. Firstly, it aims to discern diverse usage patterns of these prepositions in both Indonesian and English. Secondly, it seeks to reveal distinctions in how speakers of Indonesian and English conceptualize spatial relationships based on these usage differences. Ultimately, the comparative analysis investigates variations in the use of prepositions, shedding light on cultural disparities among speakers in their understanding of spatial stative relations.

Results and Discussion (Optional)

Equal perceptions

In certain situations, the Indonesia prepositions "di dalam" and "di atas" can be directly translated to their English equivalents, "in" and "on". Likewise, the English prepositions "in" and "on" can be straightforwardly rendered as "di dalam" and "di atas" in Indonesia. The use of these prepositions appears to be equivalent, representing the same conceptual configuration of spatial relations.

Culturally formed perceptions

The analysis compellingly suggests that human perceptual cognition lacks objectivity in perceiving a Ground within a spatial relation with a Figure. This implies that perception is subjective and collectively contributes to shaping cultural perspectives. This shared perception forms a conceptual framework that influences speakers in understanding spatial relations. If human perceptual cognition were objective, speakers across languages would depict similar spatial layouts. However, reality, as reflected in sentences (4), indicates that English and Indonesian speakers perceive the spatial arrangement related to the sky differently. English speakers regard the sky as a "CONTAINER," while Indonesian speakers perceive it as a "LAYER." In Indonesian culture, a widely recognized saying is "di atas langit ada langit," translating to "above the sky, there exist skies." Essentially, this phrase conveys the idea that there is always someone superior or something beyond our current understanding or achievements.

Indonesian all-encompassing preposition ‘di’

The Indonesian preposition 'di,' as seen in (6.d) and (6.e), holds a broad meaning, acting as an encompassing term to signify an unspecified spatial relationship that lacks an equivalent in English. It functions as a versatile preposition, conveying any arrangement between the Figure and Ground. The precise interpretation of the spatial connection between Figure and Ground indicated by the Indonesian preposition ‘di’ depends on its pragmatic meaning. In essence, we acknowledge the presence of the Figure, but the exact spatial alignment with the Ground remains unspecified. Nevertheless, the contextual background offers insights into their spatial relationship.

Conclusion and Recommendations

Even though the discussion within this paper is still exploratory, the analysis of the data demonstrates that prepositions hold abundant and captivating meanings when representing spatial arrangements. To put it differently, despite being considered closed-class words, their meanings are far from being closed or restricted. The data analysis also indicates that image schemas aren't universally objective cognitive defaults. Various language speakers can conceptualize a spatial arrangement differently within distinct spatial setups. If a language speaker's worldview is influenced by their cultural background, it implies that prepositional meanings also encompass cultural concepts. This presumption is well-founded based on the outcomes of data analysis, though further research is needed to delve into the cultural depth embedded in prepositional usage.

Keywords: Cognitive semantics, spatial relation, Indonesian prepositions, cultural meaning

INTRODUCTION

Prepositions, aside from postpositions, are words traditionally recognized as function words and fall under the category of 'adposition' (Payne, 2011). The term 'preposition', derived from the morphemes 'pre-' and 'position', indicates that it precedes the noun phrase it governs in the Prepositional Phrase (PP) structure. A PP is composed of a preposition, which serves as the governing head of the phrase, along with its accompanying prepositional complement (Weber, 2011). In contrast, 'postposition', derived from the morphemes 'post-' and 'position', indicates that it follows the noun phrase it governs in PP structure. Indonesian and English are examples of languages that employ prepositions, while Japanese employs postposition. Hence, 'adposition' serves as a neutral term encompassing both types. As this paper compares Indonesian and English, the term 'preposition' will be specifically used. The prepositions to be explored are limited to those that function as indicators of static locative spatial relations.

Since prepositions can function as the central element (Head) in a phrase structure, in this context a prepositional phrase (PP), they may be semantically categorized alongside the content words such as nouns, verbs, adjectives, and adverbs in the lexical classification (van Gelderen, 2010). This suggests that prepositions possess significant lexical meanings. Despite

having lexical meanings, prepositions are still frequently classified to belong to a closed set of words with a finite quantity and limitedly constant meaning (Chaer, 2008). It's not surprising, then, that prepositions receive limited attention in linguistic investigations, particularly when linked to the perspective that PPs do not play a pivotal role in the syntactic construction of Indonesian (Mulyadi, 2012).

The assertion that PPs do not play a central role in the syntax of Indonesian sentences requires further clarification. PPs become pivotal elements in sentence structure when they fulfill essential syntactic functions, such as those of the Subject, Predicate, or Object. For instance, sentence (1.a) illustrates that the PP '*di atas meja*' (literally translated into 'on the table') serves as the Predicate. In this context, '*di atas meja*' ('on the table') undeniably emerges as an indispensable component in sentence structure, complementing the phrase '*buku saya*' (literally translated into 'my book') as the Subject.

(1). a. Buku saya di atas meja itu.
book my on table that

'My book is on the table'

b. Buku saya ~~di atas~~ meja itu.
Book my ~~on~~ table that

'My book is the table'

Sentence (1.b) illustrates that the preposition '*di atas*' (on) cannot be omitted, as it completely changes the meaning of the sentence. This example suggests that not only does the PP hold an essential syntactic function as the Predicate in the sentence, but it also serves as the essential constituent in the PP structure '*di atas meja*' (on the table). Example (1) demonstrates that the PP is not always a constituent lacking important syntactic function in the syntactic structure of the Indonesian language.

In general, preposition research in Indonesia has predominantly focused on three key areas. These areas involve inquiries aimed at (i) describing various types of prepositions, (ii) elucidating the syntactic functions of both prepositions and prepositional phrases (PPs), and (iii) revealing the semantic nuances associated with prepositions. These investigative areas are succinctly outlined in the study conducted by Effendi & Aritonang (1991). The examination of preposition types entails an exploration of diverse forms, encompassing both single and compound prepositions. Investigating the syntactic functions of prepositions is closely tied to understanding how prepositions contribute to constructing PPs and the role of PPs in shaping

sentence structure. On the other hand, the exploration of preposition meanings delves into their broader implications within sentences.

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Given the concise overview presented in previous preposition studies, there is a significant opportunity to examine prepositions through the lens of cognitive semantic theory within the theoretical framework of Cognitive Linguistics. A notable distinction between cognitive semantics and other theories lies in the emphasis placed on prepositions within language. Cognitive semantics highlights the importance of prepositions due to their direct association with spatial concepts and the relationships among entities in space (Talmy, 2018; Mori, 2019). Consequently, this paper diverges from previously discussed frameworks and embarks on an exploration of prepositions focusing on "spatial relations" within the "cognitive semantics" theory. This particular approach to preposition study has not been extensively pursued in Indonesia (Kusmanto, 2017). Essentially, the paper delves into how speakers' conceptual perceptions, which unequivocally represent their cultural perspectives, are expressed through spatial prepositions – a topic that has been infrequently explored in Indonesia.

Cognitive Semantics theory considers space an essential element of human existence (Brenda, 2014; Svorou, 1994). In Kant's philosophy, space is seen as a “universal cognitive primitive” (Hickmann & Robert, 2006, p.1). Kant also pointed out that “space... serves as a significant backdrop for all processes of thought and significance” (Zlatev, 2007, p. 320). Levinson & Wilkins (2006) strongly emphasized that spatial cognition is a fundamental necessity for any mobile species with a fixed territory or home base. It undeniably plays a pivotal role in human thinking and reasoning. This underscores why the study of spatial language holds great importance.

Because space exists, a variety of relationships between different entities can occur in various configurations within our world. The presence of humans is itself a part of these relationships between entities and seems to be an outcome of this kind of interaction. Horiuchi (2017) suggests that human cognition allows individuals to become aware of (i) their own existence, (ii) the concept of space, and (iii) their existence within a specific space. This awareness of existence goes beyond just physical being and also includes individual postures and arrangements. These distinct postures and arrangements signify the idea that humans possess a specific stance on earth, have different body parts with varying functions, and can move from one place to another using a particular mode of movement, and experience physical changes over time, among other things. As a result, spatial cognition can be considered as "a collection of fundamental and central cognitive abilities that facilitate various conceptual processes, both non-verbal and verbal" (Glanzberg & Skilters, 2015, p.1).

The semantic notion of a linguistic element, like a preposition in this context, encompasses a conceptual framework. The most fundamental conceptual structure within conceptualization is constructed through "schematization", a cognitive process that systematically selects specific facets from "a referent scene to present the whole, disregarding the remaining aspects" (Talmy, 1983). This process of schema formation is facilitated by "categorization". Croft & Cruse (2004, p.54) assert that categorization represents "the most fundamental assessment of comparison." Categorization is employed to condense an array of stimuli, which might possess infinite nuances, into comparable and delimited categories (Goldberg, 2011; Ramscar & Port, 2015). Furthermore, Goldberg (2011) and Ramscar & Port (2015) posit that humans possess the capacity to create concepts, and categorization is not always bound by adherence to worldly realities; instead, it can involve the fabrication of ideas rather than exclusive encounters with pre-existing structures. Examples include mental portrayals of a unicorn, ninja turtles, or mermaids. Both schematization and categorization entail interpretation, resulting in disparities in how they're applied to the same phenomenon among language users.

Hence, categorization reduces the resemblances and discrepancies inherent in various spatial relation configurations into distinct experiences, ultimately generating a series of classifications, in this context a series of prepositions. This process suggests that the preposition "*di atas*" (on, above) encompasses a comprehensive conceptual category. The conceptual category conveyed by the linguistic unit "*di atas*" fundamentally stems from simplifying an array of dissimilar spatial relation configurations. However, the variations within this array of spatial relation configurations are overlooked and generally compressed

into the identical category denoted by the linguistic unit recognized as the preposition "di atas".

Simultaneously, the process of categorization involves a cognitive phenomenon called schematization (Croft & Cruse, 2004). Schematization gives rise to a schema, a mental depiction encompassing a collection of knowledge structures associated with various objects or events, along with ingrained assumptions about their features, relationships, and implications when dealing with incomplete information (DiMaggio, 1997). According to Cienki (2013) and Johnson (2008), the incorporation of these attributes and their subsequent implications is feasible due to the fact that schema embodies "a recurring, dynamic pattern of our perceptual interactions and motor programs that gives coherence and structure to our experience." Consequently, schema serves as a cognitive framework that assists individuals in (i) organizing their comprehension of people, locations, objects, situations, and events, and (ii) interpreting novel data. Moreover, schema generates mental imagery that corresponds with their relationships. This is why the term "image schema" is employed in cognitive semantics theory.

An exemplar is the VERTICALITY schema. This mental illustration stems from the conceptualization of numerous perceptual encounters, ranging from observing trees to recognizing one's ability to stand upright, partaking in activities like ascending stairs or utility poles, measuring height, and more. The VERTICALITY schema encapsulates an abstract knowledge formation that emerges from the synthesis of diverse everyday experiences (Johnson, 1987, 2008; Cienki, 2013; Górska, 2014).

The mental illustration in the form of an image schema is equally applicable to different situations. This implies that while the VERTICALITY schema possesses a universal nature, the spatial relationships among entities encapsulated within the VERTICALITY schema can be interpreted divergently across distinct languages. With respect to the matters investigated within this paper, inquiries may arise, such as whether the conceptual structure of the Indonesian preposition aligns with the conceptual framework of the English preposition "on". Thus, this paper will also address this issue to exemplify the adaptable nature of conceptual frameworks.

Based on the provided background, it is evident that the prepositions '*di dalam*' and '*di atas*' in Indonesian, as well as 'on' and 'in' in English, stem from distinct conceptualizations of spatial relations within the shared image schemas of VERTICALITY and CONTAINMENT. The varied scopes of usage indicate divergent conceptual structures. Two inquiries arise and

will be explored regarding the utilization of these prepositions in this paper. Firstly, how is the image schema of VERTICALITY conceptualized into distinct structures within the Indonesian preposition 'di atas' and the English preposition 'on.' Secondly, how is the image schema of CONTAINMENT conceptualized into different structures within the Indonesian preposition 'di dalam' and the English preposition 'in.' Additionally, these conceptual structure disparities will be explored in connection with their cultural significance.

METHOD

This exploratory study adopts a qualitative descriptive research design to delve into the conceptual structure of the Indonesian prepositions "di dalam" and "di atas," along with their English counterparts "in" and "on." The qualitative approach proves suitable for this investigation as it allows for an in-depth exploration of language nuances and cultural influences (Denzin & Lincoln, 2018). The data for this study is selectively sourced from a variety of online platforms, including literature, articles, and linguistic databases. These sources offer a diverse set of examples, providing insights into contemporary usage patterns in both languages. The deliberate choice of online sources ensures a comprehensive representation of linguistic contexts and usage scenarios.

The collected data undergoes a comparative analysis, where the usage of Indonesian prepositions is systematically examined alongside their English equivalents. This bidirectional analysis aims to uncover patterns of divergence and convergence in the application of these prepositions (Bryman, 2016). By systematically comparing examples from both languages, the study aims to identify instances where the use of prepositions differs or aligns. The primary objectives of this comparative analysis are two-fold. Firstly, it seeks to discern diverse usage patterns of the prepositions "*di dalam*" and "*di atas*" in Indonesian, as well as "in" and "on" in English. This involves identifying specific contexts and scenarios where these prepositions are employed, elucidating the semantic nuances associated with each (Flick, 2018). Secondly, the study aims to reveal distinctions in how speakers of Indonesian and English conceptualize spatial relationships based on these usage differences.

The comparative analysis goes beyond a mere linguistic examination and extends into the realms of culture and cognition. Drawing on cognitive linguistic theories, such as image schemas, the study explores how speakers of Indonesian and English mentally represent spatial relationships through the use of these prepositions (Johnson, 2008). By investigating the cognitive underpinnings of prepositional usage, the research aims to uncover cultural disparities in the conceptualization of spatial stative relations.

The examination is exclusively focused on the Indonesian prepositions “*di dalam*” and “*di atas*” and their English equivalents “in” and “on” in the context of an exploratory investigation. Consequently, the analysis will not address the inclusion of related prepositions in the discourse, including English prepositions such as “above”, “under”, and “over”. This study, once more, is exploratory in its essence, with the objective of illustrating that prepositions, conventionally perceived as a closed word class with restricted lexical significance, fundamentally contribute to human cognition by shaping spatial relationships among entities in the world.

RESULTS AND DISCUSSION

The Indonesian preposition “*di dalam*” and the English preposition “in” exhibit a shared conceptualization grounded in the image schema of “CONTAINMENT.” Likewise, the Indonesian preposition “*di atas*” and the English preposition “on” are positioned within the image schema of “VERTICALITY.” This suggests a common origin for these prepositions, stemming from a shared perception of spatial relations. To further investigate these linguistic parallels, it is imperative to scrutinize the contextual applications of each preposition and assess the extent of their equivalence. Direct translatability can be employed as the first method to scrutinize both their similarities and distinctions.

The Indonesian preposition “*di dalam*” and the English preposition “in”

The conceptual alignment of “*di dalam*” and “in” under the image schema of “CONTAINMENT” suggests a fundamental similarity in expressing containment or enclosure. The preposition “*di dalam*” in Indonesian is used to denote being enclosed or surrounded by something, just as “in” is employed in English as exemplified in data (2).

(2). a. Mereka menyimpan pakaian *di dalam* rumah. (liputan6.com)

‘They store clothes in the house’

b. There are a few books in the bag. (tatoeba.org)

‘Ada beberapa buku *di dalam* tas itu’.

The data reveals that the use of Indonesian prepositions “*di dalam*”, along with their English counterparts “in” in sentences (2), can be seamlessly interchanged in translation. In sentence (2.a), the Indonesian preposition “*di dalam*” expresses an identical spatial relationship as the English preposition “in” does in sentence (2.b). The direct and reciprocal translatability observed in these expressions suggests that the utilization of prepositions in sentences (2)

denotes a consistent spatial relationship between entities. This shared representation also reflects a conceptual similarity in understanding the spatial relations conveyed by these prepositions.

The phrase "*di dalam rumah*" (literally and directly translated into "in the house") in Indonesian and "in the house" in English both convey the idea of being within the confines of a house. This shared semantic territory reflects the universality of the human cognitive process in understanding containment. This conceptual parallelism is reinforced by the translatability of these prepositions between languages. The direct translation capabilities between "*di dalam*" and "in" underscore their semantic equivalence and the interchangeability of their usage. Such translational ease is a strong indicator of the shared conceptual framework underlying these prepositions.

The preceding analysis has demonstrated that both the Indonesian preposition "*di dalam*" and its English equivalent "in" are grounded in the CONTAINMENT image schema. When employed to depict a spatial relationship within this schema, "*di dalam*" and "in" can be directly translated interchangeably. The conceptual framework of "*di dalam*" in Indonesian and "in" in English relies on the perception of the Ground. If the Ground is perceived as a container, the Figure will be spatially configured within that Ground using the preposition "*di dalam*" in Indonesian and "in" in English.

Subsequent examples reveal a distinct finding compared to the earlier analysis, where the English preposition "in" in sentence (3.a) does not have a direct equivalence with its Indonesian counterpart '*di dalam*' (3.b).

- (3). a. A jet is flying **in** the sky. (freepik.com)
- b. *³ 'Sebuah jet terbang **di dalam** langit'
 a jet fly **in** sky
- c. 'Sebuah jet terbang **di** langit' or
- d. 'Sebuah jet terbang **di atas** langit'

In sentence (3.a), the English preposition "in" cannot be directly translated to its Indonesian equivalent "*di dalam*" in sentence (3.b). Within this specific context, the English preposition "in" and its Indonesian counterpart "*di dalam*" reveal distinct conceptual perspectives. The usage of the English preposition "in" in (3.a) implies that English speakers conceptualize the sky as a container where other entities are positioned inside, indicating its association with the

³ The use of the asterisk symbol in the data signifies the inappropriateness of the expression.

CONTAINMENT image schema. In other words, the primary use of the preposition “*di dalam*” and “in” is highly dependent on how the Ground is culturally perceived. This strongly suggests that a particular spatial configuration is interpreted uniquely and is expressed through a varied selection of preposition usage.

The analysis compellingly suggests that human perceptual cognition lacks objectivity in perceiving a Ground within a spatial relation with a Figure. This implies that perception is subjective and collectively contributes to shaping cultural perspectives. This shared perception forms a conceptual framework that influences speakers in understanding spatial relations. If human perceptual cognition were objective, English and Indonesian speakers would depict similar spatial layouts in perceiving the sky. However, reality, as reflected in sentences (3), indicates that English and Indonesian speakers perceive the spatial arrangement related to the sky differently. English speakers regard the sky as an image schema of “CONTAINER,” while Indonesian speakers perceive it as an image schema of “LAYERS.”

In Indonesian culture, a widely recognized saying is “*di atas langit ada langit*”, literally translating to “above the sky, there exist skies”. Essentially, this phrase conveys the idea that there is always someone superior or something beyond our current understanding or achievements. In simpler terms, Johnson's (2008) insight about the coherence and structure of our experiences emphasizes that it is not solely determined by randomly recurring dynamic patterns of perceptual interactions. Instead, the coherence and structure arise from our process of categorization and classification.

The above examination suggests that the Indonesian preposition “*di dalam*” and its English counterpart “in” exhibit a comparable conceptual structure linked to the CONTAINMENT schema. The divergence in the application of these prepositions is not rooted in an inherent dissimilarity in their internal conceptual structures but rather arises from variations in how the Ground is perceived. Despite referencing the same object, English and Indonesian speakers may interpret the object in divergent ways. As exemplified in the provided data (3), English speakers view the “sky” as a container, while Indonesian speakers perceive it as a layer.

The utilization of the English preposition “in” in another context, which cannot be directly translated to the Indonesian preposition “*di dalam*”, is exemplified in data (4).

- (4). a. By swimming **in** the sea I cross normal boundaries (www.theguardian.com)
- b. *‘Dengan berenang **di dalam** laut saya melampau batas normal’
by swimming **in** sea I cross boundaries normal

- c. ‘Dengan berenang **di** laut saya melampau batas normal’

In this instance, Indonesian speakers deviate from the usual use of the preposition "*di dalam*", directly associated with the CONTAINMENT image schema (4.b), to express the sentence in (4.a). The employment of "*di dalam*" in sentence (5.b) implies a three-dimensional CONTAINMENT image schema, signifying the actor's presence contained inside the sea. Here, the sea is perceived as a three-dimensional container, with the actor positioned within it rather than on its surface.

To convey this scenario, Indonesian speakers opt for the preposition "*di*" over "*di dalam*" as in (4.c). The broad applicability of "*di*" in Indonesian enables it to convey a wide range of spatial relations. The use of the Indonesian preposition "*di*" relies on shared knowledge among the speakers, contributing to a nuanced and accurate interpretation of the spatial configuration. This analysis suggests that English speakers have a broader and more flexible perception of the CONTAINMENT image schema compared to Indonesian speakers. In the case of Indonesian speakers, the CONTAINMENT image schema pertains to a three-dimensional container, spatially configuring the Figure inside it, excluding placement on its surface.

The Indonesian preposition “*di atas*” and the English preposition “on”

Moving on to the prepositions associated with the image schema of VERTICALITY, “*di atas*” in Indonesian and “on” in English signify a spatial relationship involving vertical positioning. Both prepositions convey the idea of being situated above or on top of something as exemplified in data (5).

- (5). a. Saya meletakkan piring **di atas** meja. (grid.id)

‘I placed the plate **on** the table’

- b. The apple **on** the table is rotten. (hinative.com)

‘Apel **di atas** meja itu busuk.’

The data reveals that the use of Indonesian prepositions “*di atas*”, along with their English counterparts “on” in sentences (5.a) and (5.b), can also be seamlessly interchanged in translation. In sentence (5.a), the Indonesian preposition “*di atas*” expresses an identical spatial relationship as the English preposition “on” does in sentence (5.b). The direct and reciprocal translatability observed in these expressions also suggests that the prepositions in

sentences (5.a) and (5.b) denote a consistent spatial relationship between entities. This shared representation also reflects a conceptual similarity in understanding the spatial relations conveyed by these prepositions.

In the above analysis, the exploration of the Indonesian preposition “*di atas*” and its English equivalent “on” revealed a compelling aspect of linguistic interchangeability. The initial assessment of interchangeability was based on the seamless substitution of “*di atas*” with “on” and vice versa in various contexts as in (5), suggesting a common understanding of spatial relations framed by the image schema of VERTICALITY. However, upon a more profound exploration, it becomes evident that the mere interchangeability of these prepositions may not fully encapsulate the complexity of their mental representations. Additional illustrations (6) and (7) (Kusmanto, 2017; Kusmanto et al., 2021) unveil a layer of complexity beyond mere linguistic equivalence. These instances suggest that the application of prepositions is not solely a linguistic choice but is intricately intertwined with the subjective worldviews of language speakers. The mental schema associated with the Indonesian preposition “*di atas*” might extend beyond the simplistic representation provided by the image schema of VERTICALITY.

- (6). a. The lamp is on the ceiling.
 b. The lamp is on the wall.
 c. The lamp is on the table.
- (7). a. *Lampu itu berada di atas langit-langit.
 Lamp that is on ceiling
 “the lamp in on the ceiling”
- b. *Lampu itu berada di atas dinding.
 Lamp that is on wall
 “The lamp is on the wall.”
- c. Lampu itu berada di atas meja.
 Lamp that is on table
 “The lamp is on the table”
- d. Lampu itu berada di langit-langit.
 Lamp that is (all-encompassing preposition) ceiling
 “The lamp is on the wall”
- e. Lampu itu berada di dinding.
 Lamp that is (all-encompassing preposition) wall
 “The lamp is on the wall”

Data (6) concerning the usage of the English preposition “in” reveals that the spatial arrangement between the entity ‘the lamp’ and other entities (6.a) ‘the ceiling’, (6.b) ‘the table’, and (6.c) ‘the wall’ is not structured based on the VERTICALITY image schema. Data (6.a) and (6.b) indicate that the spatial relationship between entities lacks any discernible connection with the VERTICALITY image schema. Consequently, the conceptual framework of the English preposition “on” does not incorporate orientation (whether vertical or horizontal) as a factor in perceiving the spatial relationship between entities in data (6).

The conceptual arrangement evident in data (6) pertaining to the use of the English preposition “on” is characterized by a ‘direct attachment’ between entities. In this context, if the entity ‘the lamp’ is considered the Figure and ‘the ceiling’, ‘the wall’, and ‘the table’ represent the Ground, the configuration between the Figure and the Ground completely overlooks the orientation aspect of the spatial relationship. Consequently, the spatial relations in (6) can manifest in various arrangements, provided that the Figure attaches to the Ground in a way that the Ground serves as the support for the Figure. In other words, the spatial arrangements of the data (6) stem from the image schema of SUPPROTIVE ATTACHMENT.

On the contrary, data (7) illustrate that Indonesian speakers employ the preposition “*di atas*” to indicate a vertical orientation relationship. Furthermore, the Figure must be oriented vertically relative to the Ground, regardless of whether the Figure is physically and directly attached to the Ground or not. This is why the spatial relationships in (6.a) and (6.b) cannot be directly translated using the Indonesian preposition “*di atas*” as in (7.a) and (7.b). Instead, Indonesian speakers would use the all encompassing preposition “*di*” to express the spatial relationship in (6.a) and (6.b) as in (7.d) and (7.e).

In this context, the distinction in the use of the Indonesian preposition “*di atas*” and the English preposition “on” is evident in their associated image schemas. The Indonesian preposition “*di atas*” employs the VERTICAL RELATION image schema, depicting the Figure positioned vertically above the Ground, whether in direct contact as illustrated in (8.a) or without direct contact as shown in (8.b).

- (8). a. buku itu berada *di atas* meja.
 book that is *on* table
 ‘the book is *on* the table’
- b. Pesawat itu melintas *di atas* bukit itu.
 plane that fly *on* hill that

‘the plane is flying over the hill’

At the same time, the application of the English preposition “on” is grounded in the SUPPORTIVE ATTACHMENT image schema, irrespective of the orientation of the relationship. Consequently, as exemplified in data (6), the English preposition “on” can establish a spatial connection between a Figure and a Ground in diverse orientations.

The above analysis demonstrates that relying solely on the use of the Indonesian preposition “*di atas*” and the English preposition “on”, as seen in data (5), can lead to misleading conclusions regarding the underlying image schema used for the usage of these two prepositions. This finding is crucial because it turns out that the Indonesian preposition “*di atas*” and the English preposition “on” exhibit significantly different patterns of usage. The Indonesian preposition “*di atas*” represents a configuration resulting from the conceptualization of spatial relations between entities based on the vertical orientation relationship between the Figure and the Ground. On the other hand, the English preposition “on” represents a configuration resulting from the conceptualization of spatial relations between entities based on the relationship between an attached Figure and a supporting Ground.

This distinction highlights the importance of delving deeper into the cognitive and linguistic nuances associated with the use of these prepositions. The initial assumption of interchangeability based on a shared image schema of VERTICALITY needs to be revisited, given the divergence in the fundamental conceptualizations of spatial relations embedded in these prepositions. The Indonesian preposition “*di atas*” involves a vertical orientation that emphasizes the positional relationship between the Figure and the Ground, whereas the English preposition “on” emphasizes attachment and support in spatial relationships.

This insight urges a reconsideration of the implications for cross-linguistic and cross-cultural communication. It underscores the need to recognize that linguistic choices, especially those involving prepositions, are not merely interchangeable across languages. Instead, they reflect deep-seated cultural and cognitive perspectives that shape the way spatial relations are conceptualized and expressed.

What is notably intriguing is the utilization of the Indonesian preposition “*di*”, exemplified in instances (4.c), (7.d), and (7.e), which demonstrates a remarkable breadth of meaning. This preposition serves as an all-encompassing term, signifying an unspecified spatial relationship that lacks an equivalent counterpart in English. It operates as a versatile preposition, encompassing various arrangements between the Figure and the Ground. The specific

interpretation of the spatial connection between the Figure and the Ground, indicated by the Indonesian preposition “di”, is contingent upon its pragmatic meaning. Essentially, we acknowledge the presence of the Figure, but the precise spatial alignment with the Ground remains unspecified. However, the contextual background provides valuable insights into their spatial relationship.

Alternative interpretations can be proposed regarding the utilization of the Indonesian preposition “di”, which is versatile enough to represent various configurations of spatial relations. Firstly, Indonesian speakers might not intricately focus on spatial relations unless such details become necessary. When a detailed spatial relation is indeed needed, Indonesian speakers will explore it more extensively within the given context. Secondly, the flexibility of 'di' allows for a broad application in expressing spatial relationships, emphasizing the pragmatic and contextual aspects in communication. This adaptability implies that Indonesian speakers prioritize a functional and contextual understanding over specifying spatial details in everyday language use. Moreover, the use of the Indonesian preposition 'di' also aids learners of Indonesian as a foreign language when they are uncertain about which spatial preposition to use in a particular situation.

CONCLUSION

This comprehensive exploration into the cognitive and cultural dimensions influencing prepositional usage highlights the need for a more nuanced and interdisciplinary approach in future studies. While the focus has primarily been on linguistic aspects, recognizing the interconnectedness of language, cognition, and culture is imperative for a holistic understanding of how prepositions shape our perceptions of spatial relations. This interdisciplinary perspective has the potential to uncover richer layers of meaning and shed light on the intricate dynamics that govern the usage patterns of prepositions in different languages.

Future research endeavors should extend beyond traditional linguistic analyses and delve into the cognitive processes that underlie the choice and interpretation of prepositions. Cognitive linguistic theories, such as image schemas, provide a valuable framework for understanding the mental representations that inform prepositional usage. By exploring how individuals mentally conceptualize spatial relations, researchers can gain insights into the cognitive mechanisms that influence prepositional choices. The interdisciplinary approach advocated here aligns with the growing recognition of the intricate interplay between language and culture in the field of linguistics. By extending this understanding to prepositional usage,

researchers can uncover deeper layers of cultural meaning that may remain obscured within the confines of traditional linguistic analyses.

Despite the exploratory nature of the discussion within this paper, the analysis of the data underscores the richness and complexity inherent in prepositional meanings when representing spatial arrangements. Contrary to the notion that prepositions are closed-class words with restricted meanings, the data suggests that they are dynamic linguistic elements capable of encapsulating nuanced and captivating meanings. This challenges the traditional view of prepositions as mere functional connectors and emphasizes the need to consider them as carriers of cultural and cognitive significance.

The findings also raise intriguing questions about the universality of image schemas as objective cognitive defaults. The data analysis reveals that various language speakers can conceptualize spatial arrangements differently within distinct spatial setups. This challenges the assumption that image schemas are universally shared cognitive structures and emphasizes the role of cultural and individual differences in shaping mental representations. Therefore, an in-depth exploration into the cultural dimensions of prepositional usage is crucial for a comprehensive understanding of how linguistic choices reflect and contribute to cultural worldviews.

While this study has provided valuable insights, it is essential to acknowledge its limitations and recognize the need for further research to delve into the cultural depth embedded in prepositional usage. Future investigations could employ a more extensive and diverse dataset, encompassing various cultural and linguistic contexts to capture a broader spectrum of prepositional meanings. Additionally, incorporating experimental methods, such as cognitive linguistic experiments, could offer a more detailed understanding of how individuals from different cultural backgrounds mentally represent spatial relations.

Finally, the exploration of prepositional usage goes beyond the boundaries of linguistics and calls for an interdisciplinary approach that considers the intricate interplay between language, cognition, and culture. By recognizing the dynamic and multifaceted nature of prepositional meanings, researchers can gain a more profound understanding of how language shapes our perception of spatial relations. The insights garnered from this interdisciplinary exploration contribute not only to linguistic theory but also to the broader field of intercultural communication, providing a foundation for navigating the complexities of language and cultural diversity.

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