

Conceptual Restrictions in Indonesian Grammar

A Cognitive Semantics Study

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ABSTRACT

The theoretical formulation on grammar as interlinked with cognitive mechanism has been accounted for by Talmy in the last two decades. This paper takes such theorization as its premise for twofold purposes, they are (1) to integrate as well as implement the Conceptual Structuring System to formulate the nature in the Indonesian context, thereby (2) illustrating the inherent semantic meaning in Indonesian grammar. A linguistic corpus was assembled by collecting 17 articles from antaranews.co.id. Every article was placed as the headlines on 01 April 2020. As to integrating Talmy's Conceptual Structuring System, it is proposed that grammar consists of linguistic forms that systematically operates to conceptualize event or state of affairs. Furthermore, underpinning restrictions on conceptual meanings is one of the properties of grammar. The propositions made by this paper has the potential in generating testable hypothesis, as well as a characterizing baseline for linguistic typology.

Keywords: Indonesian grammar, Conceptual Structuring System, cognitive semantics

1. INTRODUCTION

It has been two decades since Leonard Talmy grammar is theorized as a representational form for structuring concepts in the human mind [1]. A survey of Cognitive Linguistics introductory literature would inform how the theorization is convincing and influential in explaining the nature of language and its relation with human cognition [2]; [3]; [4]. Having said that, it seems the Conceptual Structuring System remains foreign to the existing literature of Cognitive Linguistics in the Indonesian context, especially on the subject of grammar.

Accounting Talmy's Conceptual Structuring System in detail will certainly be a task that demands much space on this occasion. This paper will only regard points of relevance to the objective of the current study. Conceptual Structuring System (CSS) assumes language comprises of two subsystems, lexical subsystem (open class) and grammar subsystem (closed class). While the former can provide rich meaning and serves as the content for linguistic expression, the latter provides abstract or schematic meanings inherent in grammatical elements (e.g., prepositions, adverbial, word class, etc.). The meaning of a given linguistic expression is

conceptually structured by the closed class subsystem. It is the correspondence between the two subsystems that operate systematically in structuring cognitive representation construed from linguistic expressions.

The interest here points to Talmy's theorization on grammatical elements that are considered as a closed subsystem. Although the grammatical elements are inherently meaningful, they are semantically restricted in specifying non-Euclidean topological relations. This implies, grammatical elements will not be construed as three dimensional but two dimensional in representing object relations. Further, the semantic restriction impoverishes the grammatical elements in specifying concepts such as magnitude, forms, manner, quantity, and substance.

Talmy's theorization is based on introspective reflection as a language user, who knows a language at his disposal. At present, there have been numerous attempts that challenged the validity of his theory [5]; [6]; [7]; [8]; [9]. So far the findings are in favour of Talmy's theorization that the linguistic forms and mental capacity are interlinking, given particular language would possess variation in conceptualizing schematic concepts.

Cognitive Linguistics studies released in Indonesian literature are typically carrying out hermeneutic analyses on certain texts [10]; [11]). Aside from methodological evaluation that is justified by those studies, their significance can only go so far as the offered hermeneutic interpretations. The offering does not seem to even tap into the way linguistic information is processed in constructing meaning out of the discursive text, let alone revealing the nature of language and human cognition concerning grammar.

However, other studies seem to possess far more valuable insights about the linguistic meaning experience. Zakiyah, et al [12] applied prototype theory to draw the semantic meaning of *korupsi* (i.e., corruption). Their study suggested prototypical meaning of corruption is *unlawful rewards*, while other suggestive meanings such as *abuse of authority*, *knowing that it is corruption*, and *corrupt intent* is considered less prototypical meanings. Notably, their finding highlights the semantic understanding that is at odds with definitional dictionary meaning, which favours the encyclopaedic view of language as advocated in Cognitive Semantics.

Zulkarnen and Muwaffaq [13] applied Fillmore's Frame Semantics thus explaining how *halal* is understood as an Indonesian word adapted from Arabic and Islamic teaching. They introspected the knowledge *halal* presupposes, as its usage in phrases seems to be frequently counterintuitive (e.g., *industri halal*, *laboratorium halal*, etc.) while its meaning uncaptured by dictionary definition. They argue its usage in certain phrases activates MODIFYING_ATTRIBUTE frame whereas as an adjective ATTRIBUTE. This might become an issue when there is no further explanation as to what kind of attribute the word presupposes. Aside from that, their argument implies definitional dictionary meaning is less reliable in comparison to encyclopaedic meaning such as embedded as framed by a particular linguistic unit. As to the present study, the objective is to integrate as well as to implement the initial part of Talmy's Conceptual Structuring System in describing Indonesian grammar.

2. METHOD

There were 17 headline articles per 04 April 2021 from Indonesian national news (antaranews.co.id) assembled as a corpus. The corpus was necessitated only to have a record of language use in a natural setting. Considered as the object of analysis was sentence formulations in Indonesian. Therefore, linguistic expressions followed by period are considered as a sentence, even though some of them exemplify quoted reported speech. Talmy's Conceptual Structuring System (Talmy [1]) was integrated by implementing the theorization as limited to restrictions of conceptual meaning in the expressions.

The introspection to linguistic units was in accord with topological conceptual notions (e.g., *point*, *linear extension*, *locatedness*, etc.) and nontopological conceptual notions (e.g., *matter*, *space*, *time*, *motion*, etc.). The introspected linguistic units were members of Indonesian grammatical elements, namely the pronouns (i.e., *ini* dan *itu*), the prepositions (i.e., *di* dan *ke*), and the particles (i.e., *dari*, *bagi*, *untuk*, *oleh*, dan *pada/kepada*). The privilege as a native speaker was justified in introspecting the units of analysis, which allowed drawing examples that are not in the news articles corpus. Being aware that the implementation of the Conceptual Structuring System was only at the superficial level, this study did not see the need for codification that in referring to semantic concepts already proposed by the theory.

3. ANALYSIS

Talmy theorizes grammatical element is inherently meaningful as also restricted in specifying to non-Euclidean topology, magnitude, form, quantity, manner, and substance. Aligning with his theorization, we propose that all grammatical units in this study (i.e., *ini*, *itu*, *di*, *ke*, *dari*, *bagi*, *untuk*, *oleh*, *pada* and *kepada*) are all introspectively having the same restriction, as they do not necessarily specify such qualitative detail while informing schematic concepts. Sentence (1) exemplifies the occurrence of grammatical forms *ini*.

- (1) **Asuransi ini** diberikan melalui perusahaan anak AXA Mandiri Financial Services.

In (1) the grammatical form *ini* informs a 'point' as 'designated' by certain object *asuransi* as one particular 'side/partition' as being 'located'. The form conceptualizes the object as being 'communicated' and within an 'extent' of the area that can be regarded as the 'same' or 'different' to other objects. Language user has the knowledge about the object as being particularly 'indicated' by the grammatical form. Arguably, the grammatical form also specifies the speaker's perspective as proximal concerning the object. Additionally, the indicated object anchors the speaker's attention. Similar concepts are expressed by *itu* except it implies speaker perspective as distal to the object in communication and as indicated (2)

- (2) **Hal itu** juga menyangkut soal jumlah penduduk atau kondisi demografi dan pertimbangan pemenuhan ekonomi masyarakat.

In (3) the preposition *di* refers to 'locatedness' as being in 'point', 'partition', 'side', and 'area'. It also implies the speaker's knowledge about the place in communication as being indicated. Arguably, it does not necessarily specify the speaker's perspective either in proximity or vice versa. On the contrary, preposition *ke* (3) specifies a 'point' being 'indicated' and of 'communication'. It establishes a trajectory in 'linear

extent' between initial point and endpoint, thus specifies 'location' of both points as 'within' an 'area', 'side/partition'. Furthermore, it conceptualizes an object as 'different from the other. The preposition *ke* also refers to the speaker's knowledge about the object in communication as being indicated, although it places foci of attention as following the trajectory to the endpoint as a 'linear extent'.

- (3) "Kami memprediksi pendapatan negara bisa turun 10 persen," katanya dalam konferensi pers **di Jakarta**, Rabu.
- (4) "BI,OJK, dan kami (Kemenkeu) memperkirakan pertumbuhan ekonomi turun **ke 2,3 persen** bahkan dalam skenario terburuk bisa berkontraksi 0,4 persen," katanya dalam konferensi pers di Jakarta, Rabu.

The pronouns (i.e., *ini* dan *itu*) specify either speaker's perspective as in proximity or in distance to object of communication or as indicated. The prepositions express locatedness of things without necessarily specifying the relation between the speaker and the object (i.e., *di*), and a linear extent trajectory between an initial point and an endpoint (i.e., *ke*). Indonesian particles seem to articulate topological relation and status of the participant.

Objects in (5)-(7) are designated as 'point' of 'communication' and as 'indicated' by the grammatical units *bagi*, *untuk*, and *kepada*. All the grammatical units can express the object either as 'different' or 'similar' as well as belonging to one particular 'side/partition'. Arguably, the attentional focus is directed to the objects following the fore mentioned grammatical units. What differentiates all of them is that the status participant in (5) implies an intended perceiver, while in (6) intended purpose and (7) intended receiver. If particle *bagi*, *untuk*, and *kepada* specifies status participant of object, *oleh* expresses the agentive status of a particular object in a sentence (8). As to the topological relation, the grammatical unit shares a similar conceptual meaning.

- (5) BI terbitkan insentif **bagi** bank penyedia **pendanaan dampak COVID-19**
- (6) ...Kementerian BUMN beserta seluruh jajaran BUMN bahu membahu aktif menyiapkan berbagai hal **untuk** kepentingan masyarakat
- (7) Asuransi yang diberikan **kepada** tenaga medis pasien Corona ini adalah Asuransi Mandiri Corporate Life Plan, dengan masa berlaku hingga 31 Maret 2021.
- (8) Sebelumnya Menteri BUMN Erick Thohir memastikan proyek pembangkit listrik 35 ribu MW tetap berjalan dan tidak terpengaruh **oleh** **wabah Virus Corona baru atau COVID-19 yang sedang melanda Indonesia.**

The other particles (i.e., *dari* and *pada*) seem to express topological relations as similar to prepositions. However, *dari* specifies initial point or source as part of trajectory and endpoint (9). Speaker's attentional focus is placed at the initial point that is expressed spatially or temporally. Grammatical unit *pada* typically specifies 'side/partition' as in 'point' and 'locatedness' of space and time. As exemplified in (10), object that follows the grammatical unit can be understood as specifying ground for a particular activity or action. In this case, *pada* seems to conceptualize the 'surface' of the ground. The attentional focus of the speaker is applied to the object that follows the grammatical unit.

- (9) Kemenag juga telah **memperpanjang masa pelunasan tahap awal** **dari semula sampai 19 April** menjadi 30 April 2020.
- (10) Kalau disetujui, pelaksanaannya mesti mengacu **pada Undang-Undang Nomor 6 Tahun 2018 tentang Kekarantinaan Kesehatan**

In summary, what is categorized as particles in Indonesian grammar that bear varying conceptual meanings? They allow language users to conceptualize different statuses of the participant in a sentence (i.e., intended perceiver, the intended target, and intended receiver). Some other particles can anchor attention to the initial point or source (i.e., *dari*), spatiotemporal side or partition and surface (i.e., *pada*). Importantly, the conceptual meaning in the grammatical elements discussed above is rather schematic or abstract instead of open to variation of interpretation of meaning. Such schematic meaning allows one to structure meaning either as speaker or hearer. The latter echoes what Talmy theorizes as the property of a grammatical closed class in the Conceptual Structuring System.

4. FIGURES AND TABLES

Introspection to Indonesian grammatical units justifies the siding on Talmy's theorization about semantic restrictions on the grammatical elements of language. The restrictions are suggested in the way one can sense non-Euclidean topological relation being as being informed and another qualitative aspect of information such as magnitude, form, quantity, manner, and substance. Repeating Talmy's theorization, grammatical elements are inherently mean that they specify topological concepts (e.g., 'point', 'locatedness', 'region', etc..) and nontopological concepts (e.g., 'difference', 'similarity', etc..). Arguably, cognitive representations (e.g., perspective and attentional focus) can also be drawn from grammatical elements, At this point, this study has integrated to implement Talmy's Conceptual Structuring System as a theorization of grammar that assumes interconnectivity between language and human cognition in the Indonesian context. Notably, the implementation of CSS is still at

the superficial level due to the time limitation of the study. Despite the limitation, this study should open for further potential studies of cognitive semantics using Indonesian linguistic data. The proposed arguments in the present study can serve as a ground assumption for generating testable hypotheses in future studies. They can also serve as a substantial baseline for a cross-linguistic typology that is committed to cognitive assumptions about language.

AUTHORS' CONTRIBUTIONS

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REFERENCES

- [1] Talmy, L. (2000b). *Toward a Cognitive Semantics*, vol. The MIT Press.
- [1] Talmy, L. (2000a). *Toward a Cognitive Semantics: Vol 1 Concept Structuring Systems*. Massachusetts Institute of Technology.
- [2] Evans, V., & Green, melanie. (2008). Cognitive Linguistics. In *A Companion to Cognitive Science*. <https://doi.org/10.1002/9781405164535.ch37>
- [3] Geeraerts, D. (2006). *Cognitive Linguistics: Basic Readings* (D. Geeraerts, R. Dirven, J. R. Taylor, & R. W. Langacker (eds.)). Mouton de Gruyter. <https://doi.org/10.1515/9783110199901>
- [4] William Croft, & Cruse, A. D. (2004). *Cognitive Linguistics*. Cambridge University Press.
- [5] Athanasopoulos, P., & Bylund, E. (2013). Does grammatical aspect affect motion event cognition? A Cross-Linguistic comparison of english and swedish speakers. *Cognitive Science*, 37(2), 286–309. <https://doi.org/10.1111/cogs.12006>
- [6] Huette, S., Winter, B., Matlock, T., Ardell, D. H., & Spivey, M. (2014). Eye movements during listening reveal spontaneous grammatical processing. *Frontiers in Psychology*, 5(MAY), 1–7. <https://doi.org/10.3389/fpsyg.2014.00410>
- [7] Montero-Melis, G., & Bylund, E. (2017). Getting the ball rolling: The cross-linguistic conceptualization of caused motion. *Language and Cognition*, 9(3). <https://doi.org/10.1017/langcog.2016.22>
- [8] Noguchi, H. (2011). Talmy ' s Dichotomous Typology and Japanese Lexicalization Patterns of Motion Events Talmy ' s Typology of Lexicalization Patterns of Motion Events. *TESOL & Applied Linguistics*, 11(1), 29–47.
- [9] Papafragou, A., Hulbert, Justin, & Trueswell, J. (2010). Does language guide event perception? Evidence from eye movements. *Cognition*, 108(1), 1–28. <https://doi.org/10.1016/j.cognition.2008.02.007>. Do es
- [10] Haula, B., & Nur, T. (2019). KONSEPTUALISASI METAFORA DALAM RUBRIK OPINI KOMPAS: KAJIAN SEMANTIK KOGNITIF. *RETORIKA: Jurnal Bahasa, Sastra, Dan Pengajarannya*, 12(1), 25. <https://doi.org/10.26858/RETORIKA.V12I1.7375>
- [11] Wiradharma, G. S., & Wastono, A. T. (2016). METAFORA DALAM LIRIK LAGU DANGDUT: KAJIAN SEMANTIK KOGNITIF. *Arkhaish - Jurnal Ilmu Bahasa Dan Sastra Indonesia*, 7(1), 5–14. <https://doi.org/10.21009/arkhaish.071.02>
- [12] Zakiyah, M., Fiaji, N. A., & Zulvarina, P. (2018). Semantik Prototipe Korupsi: Kajian Linguistik Kognitif. *RETORIKA: Jurnal Bahasa, Sastra, Dan Pengajarannya*, 11(2), 164. <https://doi.org/10.26858/retorika.v11i2.5137>
- [13] Zulkarnen, & Muwaffaq, T. (2018). Dictionary Meaning vs. Encyclopaedic Meaning of Halal: Comparing Meaning in Dictionaries with Frame Semantics for The Sake of Conceptual Understanding. *2ND ISIE (International Symposium of Islamic Epistemology)*, 95–104.