

MORPHOSEMANTIC FEATURES OF *MEMENUHI* ‘MEET’ IN THE LIGHT VERB CONSTRUCTIONS OF INDONESIAN

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Abstract

This study examines the morphosemantic features of Indonesian light verb constructions (LVCs) that utilize the light verb *memenuhi*. LVCs are a common linguistic feature in Indonesian, consisting of a light verb and a noun that gives the construction a specific meaning. Using a corpus-based approach, this study analyzed LVCs with *memenuhi* from the Indonesian-Leipzig Corpora Collection (ILCC). This analysis focused on the semantic and syntactic properties of these constructions. The findings indicate that *memenuhi* is crucial in assigning specific meanings to LVCs. This study identified four semantic patterns: (1) /*memenuhi*/ + noun denoting ‘requirements’ or ‘expectations’, (2) /*memenuhi*/ + noun denoting ‘goals’ or ‘objectives’, (3) /*memenuhi*/ + noun denoting ‘obligations’ or ‘duties’, and (4) /*memenuhi*/ + noun denoting ‘situations’ or ‘encounters’. The first semantic pattern can occur in constructions such as /*memenuhi kriteria*/ ‘meet a criterion’. The second semantic pattern can occur in constructions such as /*memenuhi target*/ ‘meet a target’. The third semantic pattern can also occur in constructions such as /*memenuhi janji*/ ‘fulfill a promise’. Lastly, the fourth semantic pattern can occur in constructions such as /*memenuhi panggilan*/ ‘answer the call’. Syntactically, LVCs with *memenuhi* exhibit a range of structures, including transitive, intransitive, and ditransitive constructions. Among these three structures, there are at least three thematic relationships that can be found, namely agent, patient, and beneficiary. This study contributes to a deeper understanding of the role of light verbs in shaping the meaning of LVCs in Indonesian.

Key words: morphosemantic; light verb constructions; Indonesian; *memenuhi*

Abstrak

Kajian ini menganalisis ciri-ciri morfosemantik konstruksi kata kerja ringan (LVC) bahasa Indonesia yang memanfaatkan kata kerja ringan *memenuhi* ‘meet’. LVC merupakan salah satu ciri linguistik umum dalam Bahasa Indonesia (BI), yang terdiri atas kata kerja ringan dan kata benda yang memberikan makna tertentu pada konstruksi tersebut. Dengan menggunakan pendekatan berbasis korpus, kajian ini menganalisis LVC berkata kerja *memenuhi* dari Indonesian–Leipzig Corpora Collection (ILCC). Kajian ini berfokus pada sifat semantik dan sintaksis konstruksi tersebut. Hasil kajian menunjukkan kata kerja *memenuhi* sangat penting dalam memberikan makna spesifik pada LVC BI. Secara spesifik, kajian ini mengidentifikasi empat pola semantik: (1) /*memenuhi*/ + kata benda yang menunjukkan ‘persyaratan’ atau ‘harapan’, (2) /*memenuhi*/ + kata benda yang menunjukkan ‘tujuan’ atau ‘sasaran’, (3) /*memenuhi*/ + kata benda yang menunjukkan ‘kewajiban’ atau ‘tugas’, dan (4) /*memenuhi*/ + kata benda yang menunjukkan ‘situasi’ atau ‘pertemuan’. Pola semantik pertama dapat muncul dalam konstruksi seperti /*memenuhi kriteria*/. Pola semantik kedua dapat muncul dalam konstruksi seperti /*memenuhi target*/. Pola semantik ketiga juga muncul dalam konstruksi seperti /*memenuhi janji*/. Terakhir, pola semantik keempat dapat muncul dalam konstruksi seperti /*memenuhi panggilan*/. Secara sintaksis, LVC dengan *memenuhi* juga menunjukkan serangkaian

struktur transitivitas, termasuk konstruksi transitif, intransitif, dan ditransitif. Pada ketiga struktur tersebut, setidaknya terdapat tiga hubungan tematik yang dapat ditemukan, yaitu agen, pasien, dan benefaktif. Kajian ini berkontribusi pada pengembangan studi deskripsi bahasa tentang peran kata kerja ringan dalam membentuk makna LVC dalam bahasa Indonesia.

Kata Kunci: *morfosemantis; konstruksi kata kerja ringan; Bahasa Indonesia; memenuhi*

INTRODUCTION

Light Verb Constructions (LVCs) are pervasive in Bahasa Indonesia (the Standard Indonesian). These constructions involve a combination of semantically bleached verb, often referred to as a light verb, and a non-verbal element, typically a noun, that carry the core meaning of the phrase (Butt, 2010; Fleischhauer, 2021; Pompei & Piunno, 2023). This light verb sheds much of its original meaning, acting more as a grammatical scaffold. Common light verbs across languages include “do,” “get,” and “make” (Giparaitė, 2024; Ronan, 2014; Sundquist, 2020). The second element, the heart of the LVC’s meaning, is a non-verbal constituent, typically a noun phrase. This non-verbal element injects the LVC with its core semantic content. For instance, the English LVC “take a nap” features “take” as the light verb, stripped of its literal meaning of carrying something. Instead, “take” serves a grammatical function, potentially indicating initiation. The real meaning is conveyed by the noun phrase “nap,” which specifies the action being undertaken. This interplay between a bleached verb and a content-rich noun phrase allows LVCs to express a wide range of complex actions and states in a concise and versatile manner (Mastrofini, 2023; Mehl, 2019; Pompei, 2023). While extensively studied (cf., Avdeeva, 2017; Brugman, 2001; Dai, 2016; Eshaghi & Karimi-Doostan, 2023; Kettnerová, 2023; Snider, 2021; Vilas, 2017; Wang & Wu, 2020), LVCs with different light verbs present unique morphosemantic characteristics. This study delves into the case of the Indonesian light verb *memenuhi* ‘meet’.

- (1) /memenuhi ambisi/ ‘meet expectations’ (Σ -occurrence: 2,706)
- (2) /memenuhi kewajiban/ ‘fulfill an obligation’ (Σ -occurrence: 27,748)
- (3) /memenuhi tantangan/ ‘meet the challenge’ (Σ -occurrence: 2,120)

Memenuhi can function as a full verb signifying the act of physically encountering someone or something. However, in LVCs, *memenuhi* sheds its literal meaning and contributes grammatical structure rather than semantic content. While its base meaning of “meet” (or the variant: “fulfill”) holds strong in isolation, *memenuhi* sheds its literal significance when employed in LVCs. Here, it transcends its core semantic contribution and assumes a primarily grammatical role (cf., Nugraha, 2023a). Instead of dictating the action itself, *memenuhi* functions as a structural frame, shaping the overall meaning of the LVC. This allows the complement, often the noun phrase, to take center stage semantically. By way of illustration, consider the LVC *memenuhi syarat* ‘meet a requirement’ (Σ -occurrence: 309,183). Here, *memenuhi* establishes the grammatical framework for the action, potentially conveying completion or attainment (cf., Nugraha, 2023b). The crux of the meaning, however, lies with the noun phrase *syarat* ‘requirement’, which pinpoints the specific action being accomplished. For extended instance, construction sample (1) – (4) are the Indonesian LVCs with *memenuhi*. This dissociation between *memenuhi*’s literal meaning and its grammatical function within LVCs is a noteworthy aspect of Indonesian phrase morphology. Accordingly, this present study investigates the morphosemantic

features of *memenuhi* within LVCs, exploring how it interacts with the non-verbal element to create new meanings and grammatical functions.

- (4) /memenuhi kebutuhan/ ‘meet a need’ (Σ -occurrence: 764,920)
- (5) /memenuhi keinginan/ ‘meet the desire’ (Σ -occurrence: 24,571)
- (6) /memenuhi tugas/ ‘fulfill a duty’ (Σ -occurrence: 2,757)
- (7) /memenuhi hak/ ‘fulfill the right’ (Σ -occurrence: 5,387)

By delving deeper than just the surface meaning of *memenuhi*, this study sheds light on the various semantic roles *memenuhi* can embody, ranging from fulfilling requirements and expectations to achieving goals and fulfilling duties as exemplified in (4) – (7). This analysis unveils the interplay between form and meaning within LVCs. By examining transitivity patterns, thematic roles like agent, patient, and beneficiary, and the distribution of argument across various semantic domains, the study offers a depiction of how *memenuhi* functions within these constructions. Thus, by analyzing a corpus of Indonesian LVCs featuring *memenuhi*, this study aims to identify key morphosemantic features. It will examine how *memenuhi* influences the aspect of LVC semantic environment. It employs a morphosemantic analysis framework, examining both the morphological makeup of *memenuhi* and its semantic impact within LVCs. This framework allows this study to explore how *memenuhi* interacts with the following aspects:

- 1) semantic patterns of the verb; this analysis investigates whether *memenuhi* retains its core meaning of ‘to meet’ within LVCs, or if it takes on the specific role;
- 2) syntactic relations; this analysis explores the transitivity of Indonesian LVCs of *memenuhi*;
- 3) argument structure; this analysis explores the semantic role assigned to arguments (such as agent and patient) within LVCs containing *memenuhi*.

THEORY

The field of morphosemantics bridges the gap between morphology, the study of word structure (Arad, 2005; Plag, 2020), and semantics, the study of meaning (Levin & Hovav, 2017; Lieber, 2001). By analyzing how morphological features interact with semantic content, morphosemantic analysis offers a deeper understanding of how language conveys meaning beyond the literal level (Booij, 2010; Rainer et al., 2014). This study delves into the domain of LVCs in Indonesian, specifically focusing on the verb *memenuhi* ‘meet’ and its morphosemantic features within these constructions.

One of the core theoretical frameworks employed in this study is the concept of selectional restrictions (Blevins, 2016; Mel’cuk, 2006). Light verbs often impose selectional restrictions on the type of noun phrase they can co-occur with. These restrictions ensure semantic compatibility between the light verb and the full verb or noun phrase. For instance, the English light verb *make* typically selects noun denoting actions or creations, i.e., *make a cake* and *make a decision*. Admittedly, the present study draws upon the concept of event semantics. This branch of semantics focuses on the structure of events, including participants (entities involved), states (conditions resulting from the event), and processes (the unfolding of the event itself). By analyzing the events encoded in LVCs *memenuhi*, one can understand the different types of fulfillments these constructions express, ranging from achieving goals and fulfilling requirements to reaching deadlines and completing tasks.

Within the morphosemantics framework, this study also considers the concept of schematicity (Tuggy, 2010; Zlatev, 2010). Schemas are mental representations of stereotypical situations or events. By analyzing how *memenuhi* interacts with different schemas in LVCs, one can explore how the verb contributes to the overall meaning of the construction. For instance, *memenuhi* might evoke schemas related to goal achievement when paired with nouns like target or objective, while it might activate schemas related to completing tasks or fulfilling needs when paired with nouns like duty or requirement.

Moreover, the concept of argument structure is also the core theoretical foundation in this study (Cançado & Gonçalves, 2016; Marantz, 2013; Roßdeutscher, 2014). This theory examines the thematic roles played by the noun phrases and clauses within a sentence. Common thematic roles include agent (the entity performing the action), patient (the entity undergoing the action), instrument (the tool used in the action), and beneficiary (the entity that benefits from the action). By analyzing the thematic roles associated with *memenuhi* in LVCs, one can gain notable insights into the semantic nuances it conveys.

Another key theoretical concept is transitivity (Alexiadou et al., 2015; Ausensi, 2021; Folli & Harley, 2013). Transitivity refers to the number and type of arguments a verb requires. Verbs can be intransitive (requiring only a subject), transitive (requiring a subject and a direct object), ditransitive (requiring a subject, a direct object, and an indirect object), or even more complex with additional arguments. Analyzing the transitivity patterns of LVCs with *memenuhi* allows one to explore how syntactic structure influences the expression of meaning.

Finally, this study acknowledges the importance of corpus linguistics (Biber et al., 2012; Egbert et al., 2020; McEnery & Hardie, 2011; O'keeffe & McCarthy, 2022). By analyzing a large corpus of Indonesian text, one can observe how *memenuhi* functions in real-world usage and identify the various semantic roles and event types it encodes within LVCs. This data-based approach allows the present study to move beyond theoretical discussions and ground this analysis in the actual usage patterns of the language.

Employing a morphosemantic approach in this study offers several advantages. Firstly, it allows this study to move beyond the limitations of a purely semantic analysis. By examining the morphological structure of *memenuhi* and the syntactic structures of LVCs, one gains a deeper understanding of how form contributes to meaning in these constructions. Secondly, a morphosemantic approach allows everyone to identify potential semantic regularities within LVCs. By analyzing the distribution of arguments and the types of nouns or verb phrases accompanying *memenuhi* across different semantic domains, one can identify patterns and potential constraints on how meaning is constructed.

METHOD

This section outlines the methods employed to investigate the morphosemantic feature of LVCs featuring *memenuhi* 'meet' in Indonesian. The present study adopted a corpus-based approach (Gries & Paquot, 2020; Sheng, 2023), focusing on both data collection and analysis procedures. First, data collection procedure. The Indonesian – Leipzig Corpora Collection (ILCC) (2013) served as the primary data source. This corpus encompasses a vast collection of digitally archived Indonesian text data, providing a representative sample of the language across various registers. LVCs containing the light verb *memenuhi* were identified and extracted from the corpus using corpus query tools, i.e., data tabulator, occurrence lister, and similarity screener. The extraction

process focused on constructions where *memenuhi* was followed by a noun phrase, ensuring the identification of genuine LVCs.

Second, data analysis. The extracted LVCs underwent a two-step analysis process. As the initial stage, an analysis categorized the LVCs based on the core meaning they conveyed. This involved identifying recurring semantic themes, such as ‘fulfilling requirements’, ‘achieving goals’, or ‘meeting expectations’. The distinct semantic patterns were identified through this process. Examples were provided for each pattern to illustrate their real-world usage along with their frequency of occurrence within the corpus (denoted by S-occurrence). Subsequently, an extended analysis examined the argument structure of the LVCs. This analysis distinguished between transitive, intransitive, and ditransitive constructions. Additionally, the analysis explored the thematic roles encoded within the LVCs. These identifications of roles represent the participant involved in the action or state expressed by the LVC.

Third, data presentation. The findings from all stages of analysis were presented in a clear and concise manner quantitatively and qualitatively (Baroni & Evert, 2009; Biber & Jones, 2009). This included the identification of the core semantic pattern with example constructions and their frequencies. Furthermore, the analysis of argument structure and thematic roles was presented through tables and charts to illustrate the interplay between morphological form, syntactic relation, and semantic meaning within LVCs *memenuhi*.

RESULTS AND DISCUSSION

Semantic patterns of the LVCs *memenuhi*

The present study revealed that *memenuhi* contributes significantly to the semantic meaning of LVCs through the identification of at least four distinct patterns (*see* Figure 1). The first pattern involves *memenuhi* combining with nouns denoting ‘requirement’ or ‘expectations’, exemplified by constructions like *memenuhi kriteria* (*see* Table 1). The second pattern features *memenuhi* partnering with nouns that convey ‘goals’ or ‘objectives’, as seen in *memenuhi sasaran* (*see* Table 2). A third pattern sees *memenuhi* co-occurring with nouns that express ‘obligations’ or ‘duties’, evident in constructions like *memenuhi amanat* (*see* Table 3). The fourth pattern highlights *memenuhi* preceding nouns that denote ‘situations’ or ‘encounters’, exemplified by *memenuhi dahaga* (*see* Table 4). These distinct semantic patterns showcase the versatility of *memenuhi* in shaping the meaning of LVCs within Indonesian language.

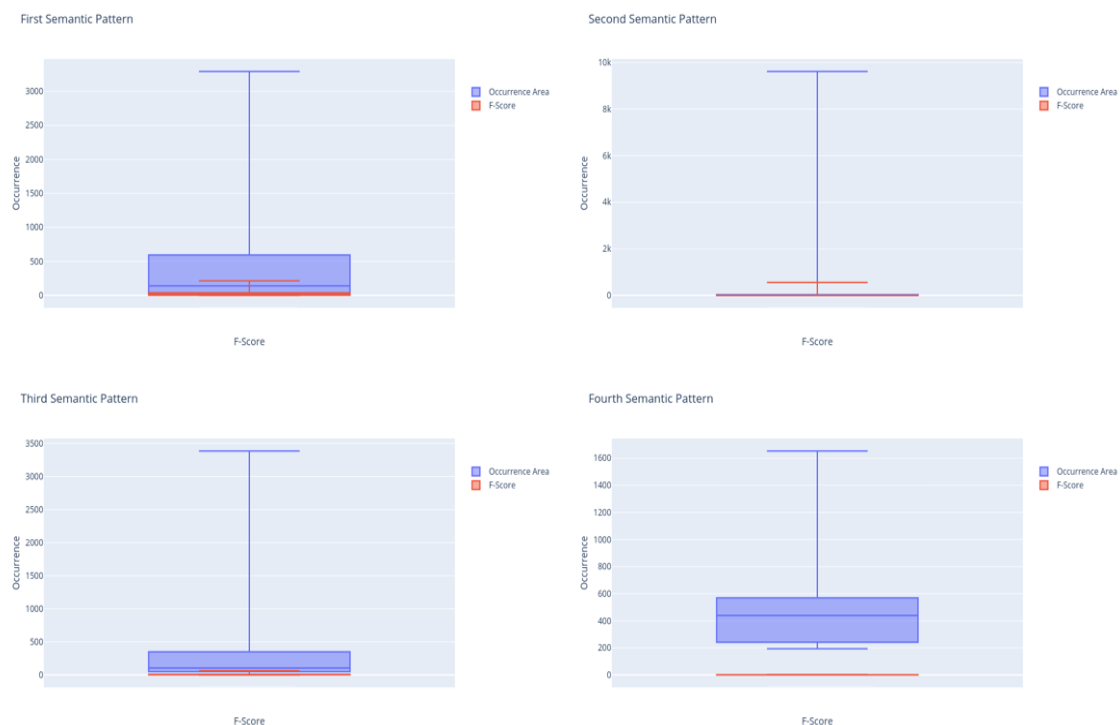


Figure 1. Analysis of the Four Types of Semantic Pattern by F-score Comparison

First, Table 1 offers a detailed breakdown of the first semantic pattern identified in this corpus analysis of LVCs with *memenuhi*. This pattern accounts for approximately 48.13% of the total occurrences observed. This pattern centers on *memenuhi* combining with nouns that denote ‘requirements’ or ‘expectations’. The table dissects this pattern further, revealing specific noun phrases that frequently co-occur with *memenuhi* and their corresponding corpus statistics. Among the ‘requirements’, *memenuhi syarat* (meet the requirement), as exemplified in (8), stands out as the most frequent construction, with a significant occurrence of 309,183 and an F-score of 0.214, indicating its prominence in the corpus. Other frequent constructions include *memenuhi persyaratan* (meet the requirements) and *memenuhi standar* (meet the standard), both exceeding 100,000 occurrences. These findings suggest that *memenuhi* is commonly used to express the notion of fulfilling ‘established criteria’ or ‘condition’.

Table 1. First Semantic Pattern of Indonesian LVCs *memenuhi*

Code	Identified Semantic Core	Sample	Σ-Occurrence	(%)	F-Score
T1-ILCC-01	requirements	<i>memenuhi syarat</i>	309,183	32.92	0.214
T1-ILCC-02	requirements	<i>memenuhi persyaratan</i>	199,085	21.19	0.138
T1-ILCC-03	requirements	<i>memenuhi standar</i>	106,714	11.36	0.074
T1-ILCC-04	requirements	<i>memenuhi kriteria</i>	89,100	9.49	0.062
T1-ILCC-05	requirements	<i>memenuhi ketentuan</i>	32,348	3.44	0.022
T1-ILCC-06	requirements	<i>memenuhi kualifikasi</i>	23,159	2.47	0.016
T1-ILCC-07	requirements	<i>memenuhi syarat-syarat</i>	18,105	1.93	0.013
T1-ILCC-08	requirements	<i>memenuhi spesifikasi</i>	3,213	0.34	0.002
T1-ILCC-09	requirements	<i>memenuhi kaidah</i>	2,928	0.31	0.002
T1-ILCC-10	requirements	<i>memenuhi prosedur</i>	2,010	0.21	0.001
T1-ILCC-11	expectations	<i>memenuhi permintaan</i>	79,301	8.44	0.055

Code	Identified Semantic Core	Sample	Σ -Occurrence	(%)	F-Score
T1-ILCC-12	expectations	<i>memenuhi harapan</i>	25,107	2.67	0.017
T1-ILCC-13	expectations	<i>memenuhi keinginan</i>	24,571	2.62	0.017
T1-ILCC-14	expectations	<i>memenuhi janji</i>	8,238	0.88	0.006
T1-ILCC-15	expectations	<i>memenuhi rasa</i>	3,213	0.34	0.002
T1-ILCC-16	expectations	<i>memenuhi ambisi</i>	2,706	0.29	0.002
T1-ILCC-17	expectations	<i>memenuhi kepentingan</i>	3,120	0.33	0.002
T1-ILCC-18	expectations	<i>memenuhi kepuasan</i>	2,977	0.32	0.002
T1-ILCC-19	expectations	<i>memenuhi komitmen</i>	2,730	0.29	0.002
T1-ILCC-20	expectations	<i>memenuhi aspirasi</i>	1,504	0.16	0.001

In addition, the expectation sub-category reveals interesting insights as well. While less frequent overall compared to requirements, *memenuhi permintaan* (meet the request), as exemplified in (9), is the most common instance with over 79,000 occurrences and an F-score of 0.055. This suggests that *memenuhi* plays a role in conveying the ‘satisfaction of desires’ or ‘expressed needs. Notably, constructions like *memenuhi harapan* (meet expectations) and *memenuhi keinginan* (meet desires) also appear frequently, further solidifying the connection between *memenuhi* and the fulfilment of ‘anticipated outcomes.

- (8) “Setelah calon donor dianggap *memenuhi syarat*, dilakukanlah panen jaringan.” (ILCC, 2013)
- (9) “Akil bersedia diperiksa asal MKH *memenuhi permintaan* Akil.” (ILCC, 2013)
- (10) “Namun, hingga batas waktu tersebut, Recapital gagal *memenuhi komitmennya*.” (ILCC, 2013)

It is worth noting the presence of less frequent constructions with both ‘requirement’ and ‘expectation’ sub-categories. These include *memenuhi kualifikasi* (meet qualifications), *memenuhi janji* (fulfill a promise), and *memenuhi komitmen* (meet a commitment) as exemplified in (10). While their individual occurrences are lower, they demonstrate the empirical application of *memenuhi* in expressing adherence to specific ‘standards’, ‘obligations’, or ‘pledges’.

Second, Table 2 presents a second distinct semantic pattern in LVCs involving *memenuhi*: its usage with nouns that convey ‘goals’ or ‘objectives’. This pattern accounts for approximately 40.75% of the total occurrences observed. Interestingly, the analysis reveals two sub-categories within this pattern: ‘goals’ and ‘objectives’. On the one hand, the ‘goals’ sub-category encompasses nouns that express ‘aspirations’, ‘targets’, or ‘intended outcomes’. The most frequent example, *memenuhi tujuan* (meet a goal) as exemplified in (11), directly highlights the notion of achieving a predetermined objective. Similarly, *memenuhi ekspektasi* (meet expectations) emphasizes fulfilling anticipated outcomes. Less frequent constructions like *memenuhi seruan* (meet a call) and *memenuhi ajakan* (meet an invitation) hint at responding to requests or invitations, which could ultimately lead to achieving a specific goal.

Table 2. Second Semantic Pattern of Indonesian LVCs *memenuhi*

Code	Identified Semantic Core	Sample	Occurrence	(%)	F-Score
T2-ILCC-01	goals	<i>memenuhi tujuan</i>	3,557	0.45	0.003
T2-ILCC-02	goals	<i>memenuhi ekspektasi</i>	3,472	0.44	0.003
T2-ILCC-03	goals	<i>memenuhi seruan</i>	1,534	0.19	0.001
T2-ILCC-04	goals	<i>memenuhi kelengkapan</i>	1,045	0.13	0.001
T2-ILCC-05	goals	<i>memenuhi ajakan</i>	1,027	0.13	0.001
T2-ILCC-06	goals	<i>memenuhi kehendak</i>	1,016	0.13	0.001
T2-ILCC-07	goals	<i>memenuhi ketersediaan</i>	758	0.10	0.001
T2-ILCC-08	goals	<i>memenuhi konsumsi</i>	1,101	0.14	0.001
T2-ILCC-09	goals	<i>memenuhi sasaran</i>	492	0.06	0.000
T2-ILCC-10	goals	<i>memenuhi keingintahuan</i>	416	0.05	0.000
T2-ILCC-11	objectives	<i>memenuhi kekurangan</i>	2,707	0.34	0.002
T2-ILCC-12	objectives	<i>memenuhi kebutuhan</i>	764,920	96.20	0.557
T2-ILCC-13	objectives	<i>memenuhi hak</i>	5,387	0.68	0.004
T2-ILCC-14	objectives	<i>memenuhi asas</i>	1,359	0.17	0.001
T2-ILCC-15	objectives	<i>memenuhi biaya</i>	474	0.06	0.000
T2-ILCC-16	objectives	<i>memenuhi keterwakilan</i>	473	0.06	0.000
T2-ILCC-17	objectives	<i>memenuhi aspek</i>	1,143	0.14	0.001
T2-ILCC-18	objectives	<i>memenuhi kecukupan</i>	1,695	0.21	0.001
T2-ILCC-19	objectives	<i>memenuhi tantangan</i>	2,120	0.27	0.002
T2-ILCC-20	objectives	<i>memenuhi kualitas</i>	446	0.06	0.000

On the other hand, the ‘objectives’ sub-category encompasses nouns that express ‘needs’, ‘requirements’, or ‘essential elements’. The most prominent example, *memenuhi kebutuhan* (meet needs), underscores the act of fulfilling essential requirements. Similarly, *memenuhi kekurangan* (meet a shortage) and *memenuhi hak* (meet a right), as exemplified in (12), emphasize addressing deficiencies or upholding entitlements. Less frequent constructions like *memenuhi asas* (meet a principle) and *memenuhi biaya* (meet costs), as exemplified in (13), point towards fulfilling underlying principles or financial obligations.

- (11) “Organisasi Pembelajar tidak hanya memfokuskan pada belajar tetapi juga *memenuhi tujuan*.” (ILCC, 2013)
- (12) “Sejauhmana upaya dan kerja keras kita dalam *memenuhi hak* anak-anak kita.” (ILCC, 2013)
- (13) “Tapi, dia pesimistis bisa *memenuhi biaya* untuk membebaskan Darsem.” (ILCC, 2013)

Furthermore, the F-score in Table 2 provides a quantitative measure of the semantic significance of each construction. F-score, a combination of precision and recall, indicates the balance between identifying relevant constructions and avoiding irrelevant ones. Higher F-scores suggest stronger semantic associations. In the ‘goals’ sub-category, *memenuhi tujuan* and *memenuhi ekspektasi* exhibit the highest F-scores, reflecting their string semantic relevance. Within the ‘objectives’ sub-category, *memenuhi kebutuhan* stands out with a notable F-score, highlighting its centrality in expressing the fulfillment of essential needs.

Third, the third semantic pattern identified in this study of LVCs involving *memenuhi* centers on its co-occurrence with nouns expressing ‘obligations’ or ‘duties’ as listed in Table 3. This pattern constitutes a significant portion of the data, accounting for over 0.11% of the total occurrences. A closer look reveals two sub-categories within this pattern as follows. On the one

hand, the ‘obligations’ sub-category, encompassing over 85% of this pattern, highlights various types of commitments and expected actions. The most frequent construction, *memenuhi panggilan* (answer the call), with a substantial occurrence (69,672), exemplifies responding to a summons or fulfilling a role. Similarly, *memenuhi tuntutan* (meet a demand) and *memenuhi undangan* (honor an invitation) emphasize fulfilling expectations or requests. The analysis also reveals constructions that convey fulfilling legal or formal obligations, such as *memenuhi kewajiban* (fulfill a duty) and *memenuhi perintah* (obey an order). Less frequent constructions like *memenuhi pesanan* (fill an order) and *memenuhi amanat* (fulfill a mandate) hint at fulfilling specific instructions or entrusted tasks. Interestingly, *memenuhi prinsip* (uphold a principle) suggests a moral or ethical obligation.

Table 3. Third Semantic Pattern of Indonesian LVCs *memenuhi*

Code	Identified Semantic Core	Sample	Occurrence	(%)	F-Score
T3-ILCC-01	obligations	<i>memenuhi tugas</i>	2,757	1.34	0.003
T3-ILCC-02	obligations	<i>memenuhi panggilan</i>	69,672	33.84	0.065
T3-ILCC-03	obligations	<i>memenuhi tuntutan</i>	37,330	18.13	0.035
T3-ILCC-04	obligations	<i>memenuhi undangan</i>	33,116	16.09	0.031
T3-ILCC-05	obligations	<i>memenuhi kewajiban</i>	27,748	13.48	0.026
T3-ILCC-06	obligations	<i>memenuhi pesanan</i>	5,696	2.77	0.005
T3-ILCC-07	obligations	<i>memenuhi amanat</i>	2,365	1.15	0.002
T3-ILCC-08	obligations	<i>memenuhi prinsip</i>	1,893	0.92	0.002
T3-ILCC-09	obligations	<i>memenuhi perintah</i>	1,494	0.73	0.001
T3-ILCC-10	obligations	<i>memenuhi perjanjian</i>	277	0.13	0.000
T3-ILCC-11	duties	<i>memenuhi fungsi</i>	689	0.33	0.001
T3-ILCC-12	duties	<i>memenuhi unsur</i>	8,753	4.25	0.008
T3-ILCC-13	duties	<i>memenuhi keperluan</i>	5,451	2.65	0.005
T3-ILCC-14	duties	<i>memenuhi aturan</i>	3,544	1.72	0.003
T3-ILCC-15	duties	<i>memenuhi pasokan</i>	2,022	0.98	0.002
T3-ILCC-16	duties	<i>memenuhi peraturan</i>	1,298	0.63	0.001
T3-ILCC-17	duties	<i>memenuhi ambang</i>	1,277	0.62	0.001
T3-ILCC-18	duties	<i>memenuhi peran</i>	105	0.05	0.000
T3-ILCC-19	duties	<i>memenuhi misi</i>	174	0.08	0.000
T3-ILCC-20	duties	<i>memenuhi nazar</i>	217	0.11	0.000

On the other hand, the ‘duties’ sub-category, making up about 15% of this pattern, sheds light on fulfilling inherent roles or functionalities. Here, *memenuhi fungsi* (fulfill a function) stands out, highlighting the notion of fulfilling a designated purpose. Furthermore, constructions *memenuhi unsur* (fulfill an element) and *memenuhi aturan* (comply with rules) emphasizes fulfilling necessary elements or following established guidelines. Less frequent examples include *memenuhi keperluan* (meet a need), *memenuhi pasokan* (maintain supply), and *memenuhi peraturan* (follow regulations), all pointing towards fulfilling practical necessities or upholding established procedures.

- (14) “Sistem Sentralisasi merupakan salah satu solusi untuk *memenuhi tuntutan* tersebut.” (ILCC, 2013)
- (15) “Tuhan, ijinkan aku *memenuhi amanat* kakek.” (ILCC, 2013)
- (16) “Ping berhasil *memenuhi fungsi* DNS.” (ILCC, 2013)

The F-score column of Table 3 provides valuable insights into semantic weight of each construction. Among ‘obligation’, *memenuhi panggilan* exhibits the highest F-score (0.065), highlighting its strong association with the concept of responding to a call or fulfilling a role. Within ‘duties’, *memenuhi unsur* has notable F-score (0.008), suggesting its importance in expressing the completion of necessary elements.

Table 4. Fourth Semantic Pattern of Indonesian LVCs *memenuhi*

Code	Identified Semantic Core	Sample	Occurrence	(%)	F-Score
T4-ILCC-01	situations	<i>memenuhi pasar</i>	957	8.63	0.001
T4-ILCC-02	situations	<i>memenuhi nafsu</i>	815	7.35	0.001
T4-ILCC-03	situations	<i>memenuhi gizi</i>	670	6.04	0.001
T4-ILCC-04	situations	<i>memenuhi nafkah</i>	338	3.05	0.000
T4-ILCC-05	situations	<i>memenuhi dahaga</i>	502	4.53	0.001
T4-ILCC-06	situations	<i>memenuhi benak</i>	245	2.21	0.000
T4-ILCC-07	situations	<i>memenuhi kerinduan</i>	239	2.15	0.000
T4-ILCC-08	situations	<i>memenuhi kekosongan</i>	215	1.94	0.000
T4-ILCC-09	situations	<i>memenuhi nutrisi</i>	280	2.52	0.000
T4-ILCC-10	situations	<i>memenuhi syahwat</i>	291	2.62	0.000
T4-ILCC-11	encounters	<i>memenuhi kontrak</i>	501	4.52	0.001
T4-ILCC-12	encounters	<i>memenuhi tagihan</i>	474	4.27	0.000
T4-ILCC-13	encounters	<i>memenuhi jadwal</i>	594	5.35	0.001
T4-ILCC-14	encounters	<i>memenuhi tenggat</i>	1,834	16.53	0.002
T4-ILCC-15	encounters	<i>memenuhi quorum</i>	1,109	10.00	0.001
T4-ILCC-16	encounters	<i>memenuhi kuota</i>	563	5.08	0.001
T4-ILCC-17	encounters	<i>memenuhi kapasitas</i>	546	4.92	0.001
T4-ILCC-18	encounters	<i>memenuhi lonjakan</i>	256	2.31	0.000
T4-ILCC-19	encounters	<i>memenuhi jumlah</i>	448	4.04	0.000
T4-ILCC-20	encounters	<i>memenuhi rasio</i>	216	1.95	0.000

Fourth, the final semantic pattern identified in this study involving *memenuhi* focuses on its usage with nouns denoting ‘situations’ or ‘encounters’. This pattern accounts for approximately 0.57% of the total occurrences observed. A closer look reveals two sub-categories within this pattern as listed in Table 4. On the one hand, the ‘situation’ sub-category, encompassing over 50% of this pattern, highlights various states or conditions that require fulfilment. The most frequent constructions, *memenuhi pasar* (saturate the market), with occurrence of 957, exemplifies reaching a point of market saturation. Similarly, constructions like *memenuhi nafsu* (satisfy a desire) and *memenuhi gizi* (meet nutritional needs) emphasize fulfilling internal states or requirements. The analysis also reveals constructions that convey fulfilling physical needs or reaching thresholds, such as *memenuhi dahaga* (quench thirst) and *memenuhi nafkah* (provide for a livelihood). Less frequent examples like *memenuhi benak* (fill the mind) and *memenuhi kerinduan* (satisfy a longing) delve into the realm of fulfilling emotional or mental states. Interestingly, *memenuhi kekosongan* (fill a vacancy) suggests fulfilling a physical or metaphorical void.

On the other hand, the ‘encounters’ sub-category, making up about 45% of this pattern, highlights various types of external interactions or stipulations. Here, *memenuhi kontrak* (fulfill a contract) stands out, highlighting the notion of fulfilling an agreement. Furthermore, constructions like *memenuhi biaya* (cover the cost) and *memenuhi jadwal* (meet a schedule) emphasize fulfilling financial obligations or adhering to set timeframes. The analysis also reveals

constructions that convey fulfilling limitations or quotas, such as *memenuhi tenggat* (meet a deadline), *memenuhi quorum* (reach a quorum), and *memenuhi kuota* (fill a quota). Less frequent examples include *memenuhi kapasitas* (reach capacity), *memenuhi lonjakan* (meet a surge), *memenuhi jumlah* (meet a quantity), and *memenuhi rasio* (meet a ratio), all pointing towards fulfilling established limits or reaching specific numerical requirements.

- (17) “Kembalinya Yesus akan *memenuhi kerinduan* kita yang terdalam dan pengharapan yang paling besar.” (ILCC, 2013)
- (18) “Berorientasi pada target pasar dan mampu *memenuhi tenggat* waktu yang ketat.” (ILCC, 2013)
- (19) “Pertanyaan demi pertanyaan *memenuhi benakku*.” (ILCC, 2013)

The F-score column of Table 4 provides insights into the semantic weight of each construction. Within ‘situation’, *memenuhi tenggat* has the highest F-score (0.002), highlighting its importance in expressing the fulfillment of deadlines. In ‘encounters’, *memenuhi kontrak* exhibits a notable F-score (0.001), suggesting its centrality in fulfilling contractual obligations.

Syntactic relations amongst the LVCs *memenuhi*

Beyond the semantic versatility of *memenuhi* in LVCs, the analysis also sheds light on the syntactic structures it enables. The constructions I identified exhibit a range of transitivity patterns. One prominent structure is the transitive constructions, where *memenuhi* is followed by a single obligatory argument, typically a noun phrase denoting ‘requirement’, ‘goal’, ‘situation’, or ‘encounter being fulfilled’ (see Figure 2). Examples include *memenuhi kriteria* (meet a criterion) and *memenuhi janji* (fulfill a promise). I also extended the analysis to observe whether intransitive constructions exist in the potential coverage area of LVCs *memenuhi*. After examining permutation and substitution, these LVCs often express a more general state of completion or attainment, exemplified by constructions like *kebutuhan terpenuhi* (needs are met). For this type, I would prefer to name it the conditioned-intransitive or c-intransitive. Lastly, the third tendency of the syntactic relation is the conditioned-ditransitive or c-ditransitive. This pattern is a potential area of LVCs *memenuhi* regarding the syntactic relations. For instance, LVC *memenuhi nafkah bagi keluarga* is the item of third classification.

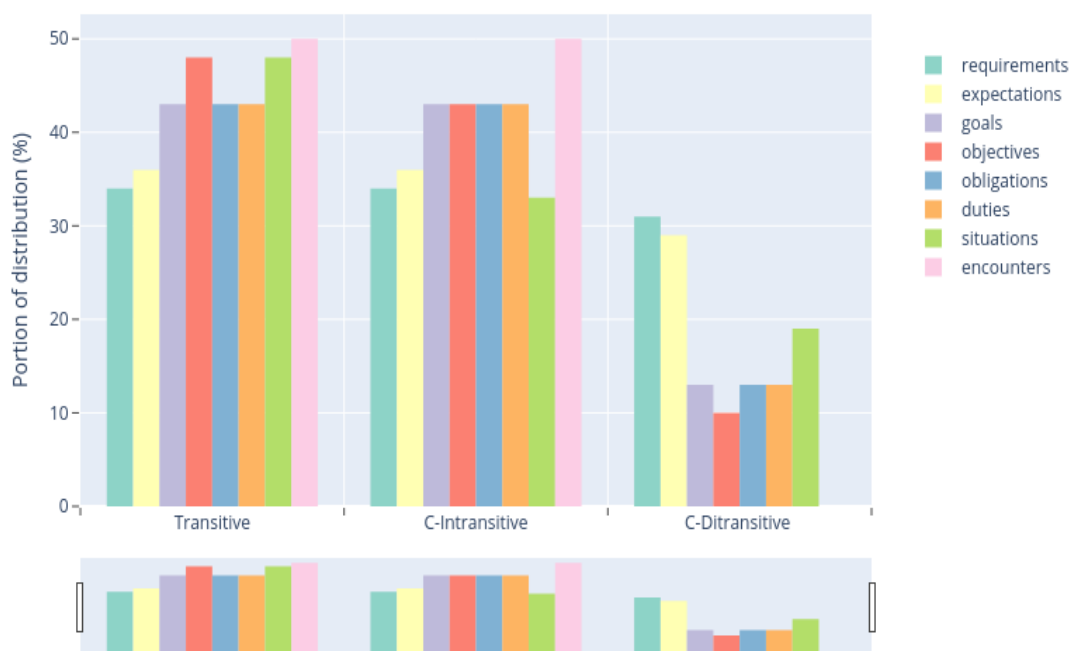


Figure 2. The Identified Relation Types of Transitivity by Percentage Comparison

Continuing this exploration of *memenuhi* within LVCs, Table 5 delves into the interplay between its semantic roles and syntactic structures. The table categorizes occurrences based on transitivity patterns (transitive, intransitive, and ditransitive) and the eight semantic categories identified in this analysis (‘requirements’, ‘expectations’, ‘goals’, ‘objectives’, ‘obligations’, ‘duties’, ‘situations’, and ‘encounters’). Notably, the table reveals an indication of the interplay between transitivity and semantic meaning.

Table 5. Frequency of the Syntactic Relations of Indonesian LVCs *memenuhi*

TS	Identified Rate (> 0) n = 80 type of LVCs															
	1 ST				2 ND				3 RD				4 TH			
	R		E-1		G		O-1		O-2		D		S		E-2	
	F	(%)	F	(%)	F	(%)	F	(%)	F	(%)	F	(%)	F	(%)	F	(%)
T	10	0.34	10	0.36	10	0.43	10	0.48	10	0.43	10	0.43	10	0.48	10	0.50
C-I	10	0.34	10	0.36	10	0.43	9	0.43	10	0.43	10	0.43	7	0.33	10	0.50
C-D	9	0.31	8	0.29	3	0.13	2	0.10	3	0.13	3	0.13	4	0.19	0	0.00
Σ	29	1.00	28	1.00	23	1.00	21	1.00	23	1.00	23	1.00	21	1.00	20	1.00

Note

- | | | | |
|-----|------------------------------|-----------------|---------------------------|
| F | : Frequency | O-2 | : obligations |
| TS | : type of syntactic relation | D | : duties |
| T | : transitive | S | : situations |
| C-I | : c-intransitive | E-2 | : encounters |
| C-D | : c-ditransitive | 1 ST | : first semantic pattern |
| R | : requirements | 2 ND | : second semantic pattern |
| E-1 | : expectations | 3 RD | : third semantic pattern |
| G | : goals | 4 TH | : fourth semantic pattern |
| O-1 | : objectives | (%) | : percentage |

First, transitive LVCs *memenuhi*. For transitive constructions, where *memenuhi* takes a double obligatory argument (usually a noun phrase denoting what is being fulfilled as the receiver and other categories as the actor), I see a relatively balanced distribution across most semantic categories. This suggests that *memenuhi* can function effectively in transitive constructions to express the fulfillment of requirements (0.34), expectations (0.36), goals (0.43), objectives (0.48), obligations (0.43), duties (0.43), situations (0.48), and encounters (0.5). Interestingly, ‘encounters’ exhibit a slight preference for transitive constructions, possibly due to the emphasis on fulfilling specific conditions within a particular interaction (e.g., *memenuhi kontrak* (fulfill a contract)).

- (20) “Tapi, PGAS tidak akan kena pinalti lantaran tak bisa *memenuhi kontrak*.” (ILCC, 2013)
- (21) “Prioritaskan hal terpenting, jadwal di agenda membantu Anda dalam *memenuhi tenggat* waktu.” (ILCC, 2013)

Second, c-intransitive LVCs *memenuhi*. This type contains technical details regarding the itemization of certain LVCs after undergoing an experiment with {di-} or {ter-} affixes. This modification process is used to assess the potential compatibility of the LVCs *memenuhi*. The c-intransitive, where *memenuhi* appears without direct syntactic-object, also showcases a balanced distribution across most categories (ranging from 0.33 to 0.43). This suggests that *memenuhi* can function effectively in these constructions to express a general state of fulfillment across various semantic domains. However, situations show a slight decrease (0.33) compared to the transitive counterparts, potentially indicating a lesser emphasis on specifying the fulfilled situation within a c-intransitive construction.

- (22) “Bila *kuota* gakin itu tak *terpenuhi* akan diisi siswa reguler.” (ILCC, 2013)
- (23) “Tempat tinggal meski kecil, tp segala *kebutuhan terpenuhi*.” (ILCC, 2013)

Third, c-ditransitive LVCs *memenuhi*. The grammatical marker for this pattern is the use of *bagi* or *untuk* as the complement for the LVC *memenuhi*. When a specific LVC can be expanded in the experiment and demonstrate grammatical meaning and correlation, it can be categorized as a ditransitive construction. For example, *memenuhi nafkah* can be expanded with *bagi keluarga*. The second indicator uses *dengan* as the permutation device to determine the status of ditransitivity. If the construction retains the same functionality after permutation, it is classified as a ditransitive construction. For example, *memenuhi keluarga dengan nafkah*. Thus, this experiment assesses whether the LVC *memenuhi* can express the core meaning with two arguments (giver and receiver). If not, the LVCs are not included in this category.

Another notable observation lies in the c-ditransitive category. Here, I see a significant decrease in occurrences across most semantic categories (ranging from 0.1 to 0.13). This suggests that ditransitive constructions, which involve *memenuhi* with three obligatory arguments, are less common for expressing the fulfillment of requirements, expectations, goals, objectives, obligations, and duties. The exception is encounters (0.19), which shows a slightly higher preference for the ditransitive structure. This might be due to the emphasis on highlighting both the fulfilling entity and the recipient with the encounter (e.g., *pemerintah memenuhi kebutuhan rakyatnya* (the government fulfils the needs of its people)).

- (24) “Siapa yang akan merawat dan *memenuhi kebutuhan* hidup untuk anakku dan cucuku?” (ILCC, 2013)
- (25) “Apa yang perlu Anda lakukan adalah *memenuhi kebutuhan* pelanggan pada saat pelanggan Anda membutuhkannya.” (ILCC, 2013)

This pattern is, in a way, an extended version of the transitive pattern. This means that some LVCs, like *memenuhi* can function in different ways depending on the grammatical context of the sentence. Therefore, some LVCs are incompatible with the two conditions of the ditransitive test. Consequently, it can be argued that converting LVCs *memenuhi* will impact the transitivity system. Overall, these three patterns unveil a relationship between the semantic roles of *memenuhi* and the syntactic structures it enables in LVCs. While transitive and c-intransitive constructions can effectively express fulfillment across various semantic domains, c-ditransitive constructions seem to be less frequent and primarily used for highlighting encounters with a fulfiller and a beneficiary. This analysis, to some extent, provides insights into the interplay between form and meaning within LVCs involving *memenuhi*.

Argument structure within the LVCs *memenuhi*

This analysis of LVCs *memenuhi* reveals an interplay between syntax and thematic roles. Beyond the mere existence of transitive, c-intransitive, and c-ditransitive constructions, these structures encode a thematic relationship. Three core thematic roles emerge consistently: agent, patient, and beneficiary (see Figure 3). These roles interact dynamically with the syntactic structures employed. In transitive constructions, where *memenuhi* takes a double obligatory argument, an agent-patient relationship often predominates. The subject, acting as the agent, fulfills a requirement, goal, situation, encounter, or some other semantic concept, while the argument following *memenuhi* represents the patient the entity or state being fulfilled. For instance, *pemerintah memenuhi target* (the government meets the target) showcases *pemerintah* (agent) fulfilling *target* (patient). This interplay extends to c-intransitive constructions, where *memenuhi* stand-alone after the modification. Though thematic roles might be implicit, they often suggest an agent fulfilling a patient. *Kebutuhan terpenuhi* (need as met) exemplifies this, implying an unspecified agent fulfilling the needs (patient). Finally, c-ditransitive constructions introduce a beneficiary alongside the agent-patient relationship. Here, the first argument acts as the agent fulfilling something, the second argument becomes the beneficiary who receives the fulfilled entity or state.

Furthermore, Table 6 reveals a strong dominance of agent and patient roles across all semantic categories. The values for both agent (0,34 – 0,45) and patient (0,34 – 0,45) are remarkably consistent, hovering around 0,4 for most categories (requirements, expectations, goals, objectives, obligations, duties, and situations). This suggests that LVCs *memenuhi*, regardless of their specific meaning (fulfilling a requirement, expectation, goal, etc.), tend to consistently encode an agent-patient relationship. The agent, typically the subject of the sentence, fulfills something, while patient, often realized as a noun phrase following *memenuhi*, represents the entity or state being fulfilled.

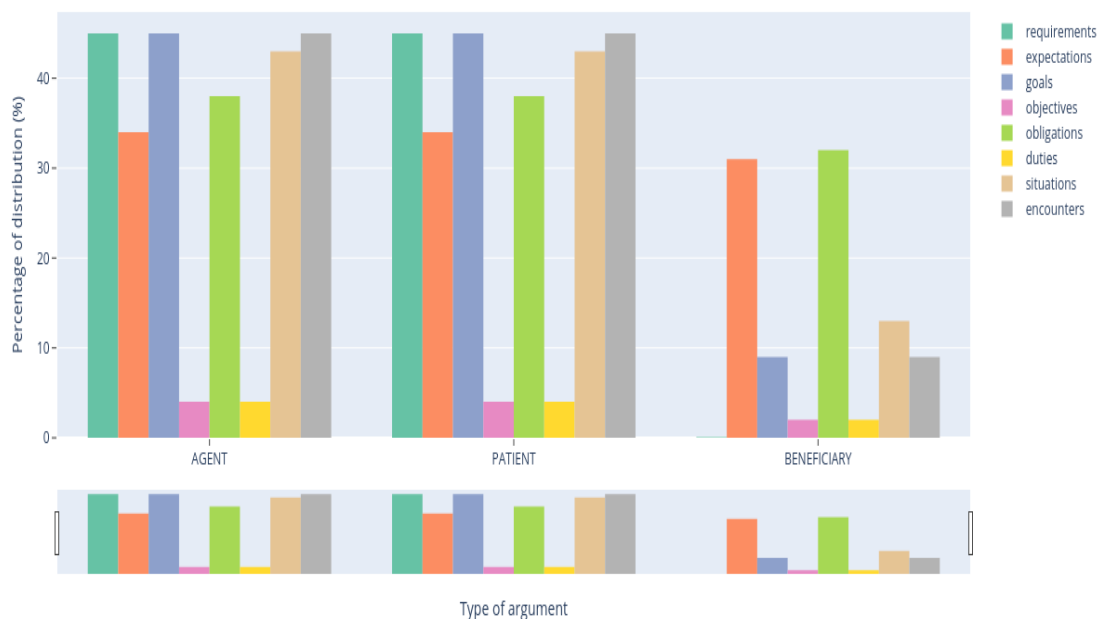


Figure 3. The Identified Argument Structure by Distribution Comparison

The beneficiary role, however, presents a distinct pattern. This role, specific to c-ditransitive constructions where *memenuhi* has three obligatory arguments, exhibits significantly lower values across most categories (ranging from 0,09 to 0,32). This indicates that while *memenuhi* can express fulfillment with a beneficiary (the one who benefits), it is not the most common thematic role. The highest beneficiary values are observed in ‘expectation’ (0,31) and ‘obligations’ (0,32), suggesting that beneficiaries are slightly more prominent when fulfilling expectations or obligations directed towards someone.

Table 6. Frequency of the Argument Types within Indonesian LVCs *memenuhi*

TA	Identified Rate (> 0) n = 80 type of LVCs															
	1ST		2 ND				3RD				4TH					
	R	E-1	G	O-1	O-2	D	S	E-2	F	(%)	F	(%)	F	(%)	F	(%)
A	10	0.45	10	0.34	10	0.45	10	0.40	10	0.38	10	0.40	10	0.43	10	0.45
P	10	0.45	10	0.34	10	0.45	10	0.40	10	0.38	10	0.40	10	0.43	10	0.45
B	2	0.09	9	0.31	2	0.09	5	0.20	6	0.23	5	0.20	3	0.13	2	0.09
Σ	22	1.00	29	1.00	22	1.00	25	1.00	26	1.00	25	1.00	23	1.00	22	1.00

Note

- F : Frequency
- TA : type of argument
- A : agent
- P : patient
- B : beneficiary
- R : requirements
- E-1 : expectations
- G : goals
- O-1 : objectives
- O-2 : obligations
- D : duties
- S : situations
- E-2 : encounters
- 1ST : first semantic pattern
- 2ND : second semantic pattern
- 3RD : third semantic pattern
- 4TH : fourth semantic pattern
- (%) : percentage

First, the role of AGENT within LVCs *memenuhi*. In intransitive constructions, where *memenuhi* takes a double obligatory argument, the agent role is often implicit in the subject. For instance, in *karyawan memenuhi target* (the employee meets the target), *karyawan* (employee) acts as the agent fulfilling the target (patient). It is the agent-patient relationship.

- (26) “Capaian kinerja *memenuhi target*.” (ILCC, 2013)
- (27) “Cuma diakui, anggaran yang digelontor ke sektor ini belum *memenuhi harapan*.” (ILCC, 2013)

Second, the role of PATIENT within LVCs *memenuhi*. C-intransitive constructions, where *memenuhi* stands alone after the modification, can also encode the patient role implicitly within the subject, with a focus on the general state of fulfillment. An example is *kebutuhan terpenuhi* (needs are met), where *kebutuhan* can be seen as a patient being fulfilled, even though the agent causing the fulfillment might not be explicitly mentioned.

- (28) “Karena itu, *keinginan paduka* tidak akan *terpenuhi*.” (ILCC, 2013)
- (29) “Keluarga merasa lega, kesulitannya teratasi, *kebutuhan terpenuhi*.” (ILCC, 2013)

Third, the role of BENEFICIARY within LVCs *memenuhi*. C-ditransitive constructions, featuring *memenuhi* with three obligatory arguments, offer the most explicit representations of thematic roles. Here, the first argument often maps to the agent role, actively fulfilling something. The second argument typically represents the patient, the entity or concept being fulfilled. Thematic roles like beneficiary also come into play in ditransitive constructions as the third arguments. For instance, in *pemerintah memenuhi kebutuhan rakyatnya* (the government fulfills the needs of its people), *pemerintah* acts as the agent, *kebutuhan* is the patient being fulfilled, and *rakyatnya* functions as the beneficiary receiving the fulfillment.

- (30) “Sementara itu, Rachel *memenuhi undangan* Finn untuk datang ke rumahnya dan makan malam bersama.” (ILCC, 2013)
- (31) “Selain *memenuhi pesanan* eceran dari masyarakat, produk tersebut dipasok ke toko modern atau hypermarket.” (ILCC, 2013)

By examining these thematic roles across various syntactic constructions, this study presents a depiction of how *memenuhi* functions within LVCs. The interplay between transitivity, agency, patiency, and beneficiary roles unlocks a nuanced layer of meaning within these versatile constructions. Overall, this analysis reinforces the centrality of agent and patient roles in LVCs *memenuhi*. They capture the core essence of fulfilling something (agent) and the entity or state undergoing fulfillment (patient). While beneficiaries can be present, particularly in specific semantic contexts, they appear less frequently compared to agents and patients.

CONCLUSION

This study has shed light on the morphosemantic features of Indonesian LVCs featuring the light verb *memenuhi* ‘meet’. The analysis revealed that *memenuhi* plays a crucial role in assigning specific meanings to LVCs. The identified semantic patterns demonstrate its versatility in expressing requirements, goals, obligations, and situations. Syntactically, the study identified a range of LVC structures with *memenuhi*, including transitive, intransitive, and ditransitive constructions, each with distinct thematic relationships.

However, limitations exist. The current analysis focused on a specific corpus, and further investigation with diverse data sources could provide a more comprehensive understanding of *memenuhi*'s behavior across different registers and genres. Additionally, exploring diachronic development of these LVCs could offer valuable insights into their evolution and potential semantic shifts.

Future research could delve deeper into the subtle semantic nuances within each identified pattern. Investigating the interaction of *memenuhi* with other light verbs and exploring its role in complex LVC structures with multiple noun phrases would further enrich our understanding of its multifaceted functions in Indonesian grammar. Lastly, this study paves the way for further exploration of how light verbs contribute to meaning construction and syntactic variation in Indonesian LVCs.

NOTE

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