JJMLL

Metaphorical Representation of Human Body Parts in Javanese

Hendrokumoro *, I Dewa Putu Wijana, Nadia Khumairo Ma'shumah

Faculty of Cultural Sciences, Universitas Gadjah Mada, Indonesia

Abstract

Metaphors as a means of conceptualizing reality are not arbitrarily but physically and culturally embedded. This study focuses on the metaphorical representation of human body parts, as well as grounds and socio-cultural factors influencing the connection of the source and target domains in Javanese metaphors' formation. Seventy-two utterances were manually collected using purposive sampling and analyzed using a descriptive-qualitative approach. The findings of this study showed that Javanese human body parts metaphors were constructed through the similarities and associations of the upper, middle, lower, and entire body parts as the source domain. This study also revealed that despite all humans having the same biological or physical parts, every language exploits and functions such body parts in varied ways across cultures. Consequently, human body parts can be associated with various entities and intentions. Considering the connectivity between metaphors and culture, this study is critical for raising a better understanding and awareness of the speech communities' cultural thinking patterns.

Keywords: Metaphors, Human body parts, Source domain, Target domain.

1. Introduction

Metaphors are prevalent and substantial in any language and culture. A metaphor consists of a set of correspondences between a "source" and a "target" domain concerning anything abstract, including emotions, ideas, feelings, and concepts (Kövecses 2018). Because of that, native speakers of all languages employ a wide range of metaphors when communicating about the world (Lakoff and Johnson 2003).

Theoretically, metaphors theory corresponds to Saussure's (1959) paradigmatic or semiotic relations by considering the linkage between content and expression. His view that there is no binding relationship between the signifier or *signifiant* (sound pattern) and signified or *signifié* (concept) underpins the nature of the associations between those sign components in the creation of metaphors. In other words, linguistic forms and their corresponding things are entirely arbitrary (i.e., not based on any inherent resemblance). There is no necessary dependence of the element of a verbal signal on the nature of the referent.

Many practitioners and scholars are skeptical about the implications of holding Saussure's (1959) belief (Jakobson 1971; Lakoff and Johnson 2003; Meir 2010; Stewart 2016). However, a scant number of them seem unaware that Saussure's viewpoint on the arbitrary nature of the linguistic sign is severely

limited. The relationship is only suitable for the most basic essence of a symbol, in which the signifier and the entity being signified have no correlation, and their existence is only possible through a tacit agreement among language users (Sebeok 2001; Chandler 2007). For instance, there is no relationship between the Javanese term *asu* 'dog' and its meaning 'four-legged animal' since completely distinct symbols portray this word. The same case happened in other languages, such as *kuluk* in Balinese, *biang* in Bataknese, *anjing* in Indonesian, *dog* in English, *собака* in Russian, *hund* in Germany, *chien* in French, *kalbun* in Arabic, *inu* in Japanese, etc. Indeed, speakers of any speech community do not simply rely on the basic concept of symbols in communicating with others. That type of symbol is often constructed in very complicated ways in society. As a result, the core meanings of the symbol are expanded to include additional forms of secondary senses for performing a variety of communicating roles.

Obviously, no language creates new symbols to refer to new concepts speakers encounter but expands their senses through various forms of analogy. The secondary senses are frequently tied in very subtle ways to their primary meanings through culturally associated cognition. For example, there is no relation between the phonetic structure of [asu], and the 'four-legged animal'. It is genuinely misleading to regard Javanese native speakers construct *Dhewéké asu, tenan*! 'he is really like a "dog"!' [as cursing in Javanese], or *Asu gedhé menang kerahé* 'the big dog always wins the fight' arbitrarily to refer to 'a person with indecent behavior' or to describe 'a powerful or influential person since each construction has its own connotative and denotative meanings. In any circumstance, there must be various underlying reasons for using such idiomatic or metaphorical terms and some cultural cognitive grounds shared by linguistic forms and things the speakers intend to communicate. Otherwise, speech community members may struggle to understand the meaning of such metaphorical terms. New metaphors can generate new understandings and, therefore, new realities. Lakoff and Johnson (2003) posit that "metaphors, which structure human conceptual systems to a significant extent, are not arbitrary". They must be grounded in human physical culture experience.

Metaphor discussion's development has attracted scholars from various studies, including Psychology, Literature, and Linguistics. Metaphors are widespread and variously defined in many disciplines. Taylor and Dewsbury (2018), Haack (2019), Grinter (2020), and Humar (2021) discovered that the language of past and present science is mainly metaphorical. Metaphors emerge as the essence of scientific research and inquiry and essential tools for science-based communication and understanding. If scientific theories are shown to be metaphorically structured, then creativity must be an ongoing component of the conception and development of scientific understanding (Grinter 2020). From the psychological dimension, Alessandroni (2017), Szokolszky (2019), as well as Zittoun and Gillespie (2020) exposed that metaphor is commonly used in developmental psychology. According to them, non-verbal and verbal metaphorical instantiations are semiotic mediations that humans can use as resources to make visible patterns, meta-modal invariants, and processes in communication and to guide their theoretical imagination. Meanwhile, Hetmański (2021) focuses on metaphors' cognitive functions in both colloquial and scientific discourse. He concluded that metaphor is cognitively vital concerning the people

who use it. Metaphor is the heuristic tool to store and process human knowledge and produce emotional attitudes among users.

From the literature and humanities-based dimension, Dorst (2015) as well as Chita and Stavrou (2020), stressed that metaphor and literature are inextricably linked. Metaphors became the most important stylistic feature in literary works as they constitute social, cultural, and psychological realities. From the linguistic dimension, metaphor has emerged as an essential topic of study in linguistics for the last 30 years, particularly in cognitive linguistics. Focusing on stratal and semantic models of grammatical metaphors, Devrim (2015) reveals that metaphor is one of the most important characteristics of academic, bureaucratic, and scientific discourses. In the same case, Jakobs and Hüning's (2022) research on language-making in linguistics found that metaphors create high accessibility within and outside academia. Metaphorization facilitates the development of new hypotheses and theories by allowing science to creatively shape conceptions of the world. Meanwhile, Zhang's (2021) research under the cognitive-linguistics approach uncovers that metaphors cannot only be perceived as a linguistic phenomenon. Metaphors are a large-scale structure that influences human thoughts about all aspects of their experience, based on Al-Abdullah's (2019) and Zhang's (2021) outlooks.

Motivated by those previous studies, the present study focuses on representing human body metaphors (known as the embodiment or corporeal) in Javanese under the lexical semantics domain of study. There are three main reasons underlying this decision. *First*, human body parts hold multiple philosophies in Javanese society's belief. *Second*, body parts are presumed to be more concrete than the other domains as they derive from components closely related to the human self. *Third,* humans possess a physical presence and logical thinking simultaneously. Because of that, the body and the mind are supposed to be connected. For in-depth analysis, this study addresses the following research questions: (1) what are the human body parts used as the source domain in Javanese metaphors?; (2) what grounds underlying metaphors' source and target domains?; and (3) what socio-cultural factors that make up such metaphors?

2. Theoretical Framework

2.1 A Glimpse of Metaphors in Academic Discourse

Metaphors as figures of speech (*techné rhétoriké*) are unavoidably associated with culture due to the strong connection between language and culture (He 2016). As a result, metaphors are culturally dependent and vary from culture to culture. Wang (2013) proposed that the theoretical study of metaphor can be divided into three periods: (1) the period of rhetorical study of metaphors from Aristotle to Richards (or from 300 BC to the 1930s) by treating metaphors as a rhetorical phenomenon; (2) the period of semantic study of metaphors (from the beginning of the 20th century to the 1970s) by analyzing metaphors semantically from various angles such as linguistics, logic, and philosophy; and (3) the period of the interdisciplinary study of metaphors (from the 1970s to the present) by focusing on multilevel and multi-dimensional research from vantage points of cognitive psychology, philosophy, pragmatics, semiotics, and hermeneutics.

Metaphor theories have constantly been developing in academic circles and popular consciousness. According to the traditional concept, Kövecses (2002) pointed out that metaphors can be briefly characterized by five of their most accepted features. *First*, as a linguistic phenomenon, metaphors are the property of a word. *Second,* metaphors are used in many different types of literature for artistic or rhetorical purposes. *Third*, metaphors are grounded based on the resemblance of two entities being compared and identified. *Fourth*, metaphors are the intentional use of language that requires a particular skill to master. *Fifth,* metaphors are figures of speech that were only used for special effects. Metaphors are well-studied and frequently used in lexical semantics due to their association with meaning. In contrast, their presence in literature studies becomes part of the stylistic and rhetorical approaches to generate diverse aesthetic effects.

Metaphors are pervasive in the human mind and everyday language by bringing systematic mappings into account. By assuming that language is anthropocentric, the enthusiasm for studying metaphors is continuously growing over time. Later, the publication of some textbooks provided new insights into metaphor theory (Lakoff and Johnson 2003), particularly about structures (consisting of the source domain, target domain, and ground), categories (consisting of ontological, conduit, and orientational), and conceptualization (consisting of love and journey, emotion and container, as well as time and valuable thing). Research by Yu (2003) then discovered that metaphorical mappings from source domains to target domains emerge primarily from the interplay of the body and culture. Nonetheless, limited researchers investigate the representation of human body parts as a source domain (especially in Indonesia), even though the publication of handbooks, textbooks, guidebooks, book chapters, and academic books covers a wide range of that concern. Several academics are primarily concerned with metaphor and thought (Gibbs 2013; Lakoff 2014; Micsinaiová 2015; Thibodeau, Matlock, and Flusberg 2019), such as metaphor and mind (Wehrs 2017; Holyoak 2019; Gabriel 2022; Markopoulos and Vanharanta 2022); metaphor and cognition (Slepian and Ambady 2014; Semino, Demjén, and Demmen 2016; Jensen and Greve 2019; Kozlova 2020); metaphor and emotion (Kovalenko and Martynyuk 2018; Rahardian and Nirmala 2018; Sharma 2018; Rai et al. 2019); metaphor and personal being (Barnard 2018); metaphor and gesture (Argyriou, Mohr, and Kita 2017; Cooperrider and Goldin-Meadow 2017; Angelopoulou 2021).

2.2 The Representation of the Human Body as Metaphors' Source Domain

Scholars agree that the human body is designed for appropriate metaphor crafting to demonstrate and show the major systems of thought and other bodily representations (Aschale 2013). The body takes center stage among the many facets of conceptual metaphors. Under critical metaphor analysis, Poppi and Urios-Aparisi (2018) revealed that metaphors frame how the body is conceptualized according to dominant ideological practices, such as (a) commodification; (b) the integration of artificial and organic; (c) dissatisfaction; (d) beautification and idealization dynamics; and (e) human body politicization. By separating the human body into head, trunk, arms, and legs to create predicative metaphors, Huo and Chen (2021) clearly indicate that English body-action verbs are metaphorically applied to other abstract

conceptual domains based on human experience with their own body and a pervasive cognitive approach to human body metaphor in the human mind. Meanwhile, by focusing on 'hand' metaphors, Zhang (2021) emphasized that the metaphorization of body parts is one of the basic means of forming and expressing concepts. In the modern cognitive linguistic view, metaphor is based on the human being's experience of knowing the world. Thereby, body part terms are the first and closest objects directly experienced by human beings. These constraints appear to be similar to the intricacy of metaphor research in Indonesia. Lufini (2021), Sanjoko (2022), as well as Farghal and Alenezi (2022), pointed out that the body's experiences can universally motivate many figurative expressions. Human body parts are utilized as a source of metaphor in various analogies, including orientation, form, function, and motion analogies.

This study contends that although universal or primary metaphors exist in every language as part of the cognitive unconscious, there are also complex metaphors produced through conceptual blending built out of primary metaphors and types of traditional knowledge used by society. Humans tend to employ something very close to the social and cultural environment in constructing metaphors. Thus, although metaphorical source domains featuring human body parts are common in all languages, their function and meaning in communication vary across cultures due to differences in social practices, social events, and political environments.

3. Methodology

This study analyzed a cluster of metaphors centered on human body parts in Javanese. A total of 72 examples of data in the forms of utterances and *unen-unen* (Javanese proverbs, consisting of *paribasan, bebasan,* and *saloka* through *tetandhingan* (comparison), *pepindhan* (parable), and *pepiridan* (disguise)) for this study were manually collected using purposive sampling from Javanese dictionaries (Purwadarminta, 1930; Utomo, 2009; Mangunsuwito, 2014), Javanese lesson books (Daryanto, 1999; Nuraini, 2012; Soesanto & Trisnawati, 2019), Dictionary of Javanese Proverbs and Idiomatic Expressions (Soewarno, 1999), as well as Javanese songs, riddles, oracles, and other traditional formulas. For the initial investigation, human body parts are categorized into four main parts: (1) the upper body; (2) the middle body; (3) the lower body, and (4) the entire body parts.
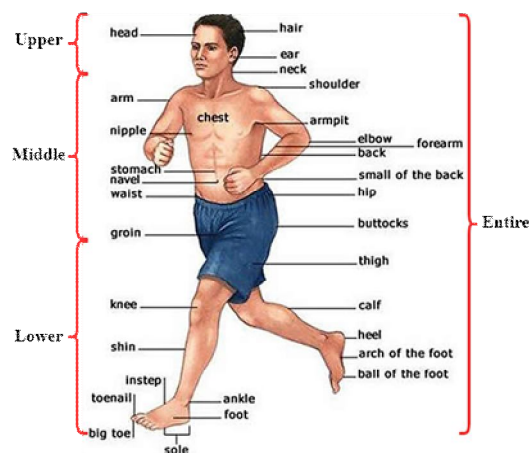
Figure 1: Components of the human body (taken from https://elimufeynman.s3.amazonaws.com with some adjustments)

The data were then holistically analyzed under a descriptive-qualitative approach by stepping on the lexical-semantics approach. As Javanese native speakers who have lived in Java for over forty years (for authors 1 and 2) and over twenty-eight years (for author 3), this study also elicited by providing the meaning (both lexical and referential), outlining the ground behind the relation between the source and target domains (based on forms, locations, functions, and associations), and investigating socio-cultural factors that make up such metaphors. These acts were set based on cross-domain mapping and metaphorical entailment (relying on similarity and associative ground). Last, to avoid subjectivity and bias, the grammaticality, readability, and acceptability of each utterance and *unen-unen* and its interpretation were checked and validated by two other Javanese native speakers as triangulators.

4. Findings and Discussion

Metaphor domains are generated as a result of human knowledge of the surrounding world, represented through the manifestation of the source and target domains. The source domain is concrete and based on sensory experience, whereas the target domain is abstract (Zhumasheva et al. 2022). Different metaphors result from different modes of thinking and cultures. Thus, metaphors can be categorized as 'realia' or 'culture-bound phenomena' as they reflect additional cultural information (Baldó 2022; Sukirman et al. 2022).

Metaphors are firmly attached to Javanese culture and identity. Javanese people tend to avoid conflict as well as maintain harmony and peace in their lives. Because of that, native Javanese speakers prefer to use many kinds of metaphors in many aspects of their lives. Metaphors are manifested in proverbs' constructions to convey advice, rebuke, and satire.

4.1 The Representation of Human Body Parts as Source Domains in Javanese Metaphors

The findings of this study indicate that not all human body parts (either internal (organs) or external) are used by the Javanese to create metaphorical expressions. This is because the Javanese tend to form

and conceptualize metaphors based on the schema of their physical components. These components are generally divided into four segments: the upper, the middle, the lower, and the entire body.

Table 1: Metaphorical representation of human body parts in Javanese

No.	Human Body Part	Occurrence(s)	External or Internal Component
1.	Middle Body	32 (44.44%)	*ati* 'liver', *jantung* 'heart', *nyali* 'guts', *kandhutan* 'womb', *tangan* 'hand', *jempol* 'thumb', *tuding* 'index finger', *bokong* 'glutes/ass/buttocks', *silit* 'asshole', *turuk* 'vagina', *konthol* 'testicles', *usus* 'intestines', *geger* 'back', *sikut* 'elbow', *lengen* 'arms', *bau* 'arms', *wudel* 'navel', *susu* 'breast', and *wadhuk* 'stomach'.
2.	Upper Body	29 (40.28%)	*ndhas* 'head', *sirah* 'head', *mustaka* 'head', *bathuk* 'forehead', *utek* 'brain' *mata* 'eyes', *mripat* 'eyes', *soca* 'eyes', *lambe* 'lip', *cangkem* 'mouth', *untu* 'tooth', *telak* 'throat', *gurung* 'throat', *irung* 'nose', *kuping* 'ears', *ilat* 'tongue', *rai* 'face', *dhapur* 'face', *kuncung* 'tuft', *gelung* 'coil', *rambut* 'hair', and *godheg* 'sideburns'.
3.	Entire Body	6 (8.33%)	*balung* 'bone', *otot* 'muscle', and *kulit* 'skin'.
4.	Lower Body	5 (6.95%)	*pupu* 'thigh', *sikil* 'foot', and *dhengkul* 'knee'.
TOTAL		**72 (100.00%)**	

The above data depicted various body components and organs as the source domain in Javanese metaphors. The human body is universally perceived as synthesizing the physical body, mind, and/or soul. The closeness of body parts creates the shortest distance for individuals to associate each body part with its referential meaning, despite requiring the best thinking capacity elements (Aschale 2013). As shown in Table 1, the representation of human body parts metaphors in Javanese was dominated by the middle body as it contained various limbs and organs. Therefore, they frequently appear in Javanese proverbs along with the other parts of the middle body. The upper body part took second position in the data since four of the five major sensory organs (including vision (eyes), audition (ears), olfaction (nose), and gustation (tongue) and the information processing center's organ (brain) are in the upper body. For the Javanese, human senses (*pancadriya*) are part of sacred physical elements and a mapping tool for information accessed from the small world: body, soul, and spirit connected to the outside world (*jagad gedhé*). Meanwhile, the brain is vital to manage all aspects of human function, interprets information from the outside world, encodes short-term, long-term, and skill memory, and embodies the essence of the mind and soul (Mayfield Brain & Spine Cincinnati, 2018). The whole or entire body took the third position, represented by muscle, skin, and bone in the data. The lower body part took the last position since it only covered the extremities' components (as a determinant of human movement and mobilization). Most of the parts can be used either metaphorically (based on the similarity between two things) or metonymically (based on the contiguity between two things).

4.1.1 The Middle Body Parts Metaphors

The middle body (known as the torso or trunk) is the most complex part. It includes all body parts above the waist (from the shoulders to the glutes). Consider the following examples.

No.	Source Domain	Target Domain
1.	*"Dhéwéké ana **ati** marang Ani."* 'He gives his **liver** to Ani.' *there is a misconception about using heart and liver to represent 'love' in Javanese.	He fell in love with Ani.
2.	*"Dadi **ati** salawasé."* 'You always stick in my **liver.**'	You always have a place in my heart.
3.	*"Ibu nyayur **jantung** pisang."* 'My mom cooks the banana **heart** for a meal.'	My mom cooks banana blossoms for a meal.
4.	*"**Jantung** atiné wis lunga."* 'His **heart** and **liver** have already gone.'	His sweetheart has already gone.
5.	*"Awaké gedhé, ning **nyaliné** cilik."* 'His **guts** are not as big as his **body**.'	He is a coward.
6.	*"**Kandhutané** ala tenan."* 'His **womb** is evil.'	He has a bad temper.

The Javanese tend to exploit their physical experience with the middle body parts and organs to express certain concepts. While other languages use 'heart', the liver stands metonymically for the abstract concept of love. It is associated with the concept of love in Javanese metaphors in example (1), functioning as a container or the seat of innermost feeling in example (2), as well as depicting someone in example (4). For the Javanese, although the heart is thought to be the center of the soul, the liver is primarily the center of both emotional and mental activity. The liver is the seat of emotion, knowledge, and intentionality. It relates to sincerity, honesty, and purity, which makes it impossible to be stimulated and manipulated. Because of that, the liver was used to manifest human characters, attitudes, emotions, thoughts, and moral values.

Unlike the *ati* 'liver', *jantung* 'heart' represented 'part of something/someone' in examples (3) and (4). The banana blossom is the forerunner of the banana fruit. It was known as *jantung pisang* in Javanese because it physically resembled the human heart organ shape. In another case, *jantung* in *jantung ati* was used as a term of endearment to indicate that a person is at the center of someone's life.

The gastrointestinal system is very sensitive to emotions and reactions associated with cortisol and adrenaline (stress hormones). Because of that, when humans face fear, they have several reactions involving their guts (such as vomit or cramps). This was why the Javanese used guts (gastrointestinal trait) to manifest bravery or courage (as in example (5). Many researchers in the field of prenatal psychology believe that the womb (uterus) is the first environment that forms humans' psychological condition and personality. In short, genetics significantly affects how an embryo responds to stimuli, reacts to unexpected events, and deals with emotions. Meanwhile, the womb was used to manifest human nature, as in example (6).

No.	Source Domain	Target Domain
7.	*"**Tangan**ané kursi kuwi wis ilang."* 'The **hand** of that chair was missing.'	One of the arms of that chair was missing.
8.	*"Aja nabok nyilih **tangan**!"* 'Do not hit someone by using someone else's **hand**.'	Do not be a coward!

Hands play an essential role in human body language and sign language. A hand is prehensile. By using their own hands, humans can grab and hold many things. Because of that, the Javanese primarily use hands metaphorically. Based on its similarity, human arms metaphorically symbolize the arm of the chair by using the term *tanganan* (as in example (7). It also implies everything done by hand by the term *nyilih tangan* (as in example (8). Similar to the concept of *up vs. down, near vs. far, back vs. front*, *light vs. dark, on vs. off, center vs, periphery,* etc., is used as an indicator to produce orientational metaphors (Arimi 2015), the image schema of using own hand underlies power, courage, and responsibility. On the other hand, using someone else's hand to do something indicates incompatibility, fear, and cowardice in Javanese.

No.	Source Domain	Target Domain
9.	"*Dhéwéké pancén **jempol**an.*" 'He is a **thumb**.'	He is terrific!
10.	"*Aku naté dithuthuk nganggo **tuding***" 'He ever hit me by using a **point**er.'	He ever hit me by using a stick.
11.	"*Aku di**tuding** nyolong kertas.*" 'I was **point**ed for stealing papers.'	He accused me of stealing papers.

Many languages tend to share the same conceptual framework, referring to the use of the thumb as a system of symbols from the outside world. A thumbs-up is an ordinary hand gesture humans use to signal approval and satisfaction. Conversely, a thumbs-down signals disagreement and disappointment. For this reason, the Javanese used the term *jempolan* to express the compliment in the example (9). Different from the thumb associations, *tuding* (from the index or forefinger) was used in the example (10) for manifesting a pointer stick, based on its function to identify an item, person, place, or object and also to modulate someone's attention (Ariga and Watanabe 2009). Being almost but not exactly the same, *dituding* in example (11) means a hostile act of making explicit and unfair accusations of blame. Similar to Western culture, in Javanese culture and manner, pointing at other people is considered inappropriate, disrespectful, and rude, as it is associated with blame allocation.

No.	Source Domain	Target Domain
12.	"*Omahku adu **bokong** karo nggoné Agus.*" 'My house is **ass** to **ass** with Agus.'	My house is opposite Agus.
13.	"*Biaya manténanku di**bokong**i Pak Sigit.*" 'Mr. Sigit **glutted** my wedding.'	Mr. Sigit financially backed up my wedding.

Metaphors also reveal a basic tendency of the human mind to think and correlate two related or unrelated referents (Danesi 2004). As shown in the data, *bokong* 'glutes/buttocks/ butt/ass' (two rounded portions of the human's exterior anatomy) was used both metaphorically and metonymically in the Javanese word's order. Located on the back of the hip, *bokong* metaphorically refers to a part, place, or position in the back of something, such as a house, car, etc. (as in example (12), or metonymically refers to a thing or action related to it, such as *dibokongi* 'backed up' in example (13).

No.	Source Domain	Target Domain
14.	"*Bubut ana wuluné. Dom ana silit*é." 'Birds' vent has feathers, and needles have an **asshole**.'	Birds' vent has feathers, and needles have an eye.
15.	"***Silit***, *aku ra bakalan percaya omongan*é!" '**Asshole**, I will never believe what he says!'	All of what he said were bullshit!
16.	"***Turuk bintul*** *lan jepitan* **konthol** *kuwi jeneng panganan.*" 'Slightly bumped **vagina** and clamped **testicle** are names of foods.'	*Turuk bintul* and *jepitan konthol* are names of foods.

Although words related to genitals or sexual organs are generally stigmatized as taboo and sensitive, the Javanese associate them with various entities around their environment. *Silit* (anus/asshole), for example, was used to represent something that resembled a hole, such as a hole through the head of a needle (in the example (14). It was also used in communication as cursing to denote that the addresser does not trust anything the addressee said (as in example (15). Strangely, middle body parts were used as foods name, such as the use of *turuk* 'vagina' in *turuk bintul* (in the example (15) based on its similarity with female genital, as well as *konthol* 'testicle' in *jepitan konthol* (in the example (16) based on its similarity with male genital.

No.	Source Domain	Target Domain
17.	"*Kowé kudu dawa* **usus**é." 'You must have long **intestines**.'	You must be patient!
18.	"*Pokoké karo wong kuwi kudu* m**balung usus**." 'You must have an **intestine bone** to deal with him.'	You must be stubborn in front of him.
19.	"***Usus***mu *cendhak tenan*." 'Your intestine is very short."	You are over-temperamental!

Humans live in a jungle of body parts metaphors. In Javanese, intestines were closed with human emotion and character. According to Javanese belief, the short length of the intestine determines the level of patience. The long intestine (as part of the digestive time system) was associated with patience (as in example (17), the short intestine was associated with temperament (as in example (19), while the intestine bone was associated with stubbornness (as in example (18).

No.	Source Domain	Target Domain
20.	"*Omahé ning* **gegeré** *gunung.*" 'His house is on the **back** of the mountain.'	He lives on a mountain slope area.
21.	"*Dhéwéké* **nyikut** *bagianku.*" 'He **nudged** my duty.'	He took off my duty.
22.	"*Karo kanca, aja* **sikut-sikut**an." 'With a friend, do not **nudge** each other.'	Do not fight with your friend!
23.	"*Dhéwéké nganggo klambi* **lengen**an." 'He wore a shirt with **arms.**"	He wore a t-shirt.
24.	"*Klambiné ora* **lengen** *dawa."* 'The shirt does not have a long **arm.'**	That is not a long-sleeved t-shirt.
25.	"*Tak kandhani, kowé aja merang* **lengen**." 'As I told you, never wound your **arm**!'	Never overshow your power!

Some middle body parts have been used to conceptualize the inanimate world. *Geger* 'back', as the rear part of the human body from the neck to the end of the spin (https://www. merriam-webster.com/dictionary/back), was metaphorically used to mean the back of something, such as the back of the mountain (in the example (20). Sikut 'elbow' as the joint of the human arm is used metonymically in association with its function to push, jostle, or shove aside something or someone (as in examples (21) and (22). Meanwhile, *lengen* 'arm' was designed in a metaphoric sense to refer to sleeves (as in examples (52) and (53) and metonymic sense to signify power, authority, or dignity (as in example (25).

No.	Source Domain	Target Domain
26.	*"Sawahé jembaré pirang **bau?**"* 'How many **arms** is your rice field?'	How wide is your rice field?
27.	*"Dhéwéké sing **mbau dhendha** ning kéné."* 'He is the person armed with **bludgeon** here.'	He holds power over here.
28.	*"Aku ora duwé **bau** sing isa nandangi gawéanku."* 'I did not have an **arm** for handling my tasks."'	I have no employee to handle my tasks.

Like the other languages, Javanese also conceptualizes size and dimensions (physical units) through metaphors, such as *bata, iring, bau, kedhok, paron, ru,* and *prowolon*. Usually, these sizes and dimensions are traditionally used by Javanese farmers to establish their field boundaries. *Bau* 'arm' was associated with a narrow extension of an area (1 *bau* is equivalent to 0.70-0.74 ha) as in example (26). It was also referred to as authority in example (27), and assistant, servant, employee, or co-worker in example (28).

No.	Source Domain	Target Domain
29.	*"Bapak nandur gedhang **susu** lan jambu **wudel**."* ''My father grows **milk** banana and **navel** guava trees.'	My father grows lady-finger banana and rose apple trees.
30.	*"Dhéwéké pancén ora nduwé **wudel**."* 'He does not have a **navel**.'	He was shameless.
31.	*"Aku arep **nusu**ni bayiku."* 'I will give my **breast** to my baby."'	I will feed my baby.
32.	*"Gadjah Mungkur, **wadhuké** amba tenan."* 'Gadjah Mungkur's **stomach** is vast.'	The reservoir of Gadjah Mungkur is vast.

Wudel 'navel' and *susu* 'breast' were used metaphorically to refer to something similar to the shape of the organs, such as *jambu udel* 'a variety of guava shaped like a navel. Traditional Javanese views that expose females' bare navel and midriff are considered impolite or indecent. For this reason, *wudel* in '*ora nduwe wudel'* was metonymically used for depicting the essence of 'shameless' (as in example (30). *Susu* 'breast/milk' was metaphorically used in *gedhang susu* for a variety of bananas that tasted like milk (as in example (29) and literally for milk as in example (31). Meanwhile, in the example (32), *wadhuk* 'stomach' as a big shelter or storage only could be used metaphorically to refer to a vast object, such as a reservoir or dam.

4.1.2 The Upper Body Parts Metaphors

The upper body part can be seen from the hair to the neck. The upper part consists of structures that control and protect our ability to see, hear, speak, and think. The head and neck anatomy work together to deliver blood and stimuli from the heart to the rest of the body. The signals must travel through the neck and reach the brain to elicit a response. Consider the examples of metaphors below.

No.	Source Domain	Target Domain
33.	*"Aja kegedhén **ndhas**!"* 'Do not have a too big **head**!'	Do not be arrogant!
34.	*"**Ndhasé** sepur wis kétok."* 'The **head** of the train is already visible.'	The lock of the train is already visible.
35.	*"Aja dicacah **sirah**, ora bakal cukup."* 'Do not count **head to head**. It will never be enough.'	Do not count them one by one. It will never be enough.
36.	*"Kuwi **mustaka** masjid sing arep dipasang dino iki."* 'That is the **head** of the mosque that will be installed today.'	That is the upper part of the mosque that will be installed today.'
37.	*"Karangan ingkang **asesirah** "lebaran" sampun kula serat wonten ing kalawarti Jayabaya."* 'The article with the **head**line "Lebaran" (the celebration that occurs at the end of the Muslim fasting month) has been written by me in Jayabaya magazine.'	I have written an article entitled "Lebaran" in Jayabaya magazine.'

Javanese is well-known as a local language in Indonesia with highly sophisticated speech levels. To communicate with interlocutors of varying socioeconomic status, degree of closeness, and age, the Javanese use distinctive vocabularies for referring to entities, actions, states, and so on. In daily conversation, Javanese native speakers use the "ngoko" to connect with intimate addressees, such as the coeval or a person with equal socioeconomic status. They use "madya" while communicating with someone of the same age and socioeconomic standing but have not yet established an intimate relationship. Further, they frequently use "krama" to show respect for someone with a higher socioeconomic standing or strangers.

Examples of the data above displayed the use of the head as the source domain (using different words at different speech levels: *ndhas, sirah,* and *mustaka*) in Javanese. Nonetheless, metaphor is fundamentally conceptual, not linguistic (Lakoff and Johnson 2003). In the case of the data, *ndhas* and *sirah* are *ngoko* forms of "head", whereas *mustaka* are the "krama" ones. These findings prove the insufficiency of Saussure's (1959) concept by expanding the integration between metaphor, body, and language; and support Lakoff and Johnson's (2003) argument that even if two or more things refer to the same reference, they cannot be used arbitrarily. As shown in examples (33) and (34), the Javanese use *ndhas* to express their displeasure or anger since *ndhas* is a harsh and offensive word. *Cacah sirah* 'number of heads', which associates with 'the act of counting person by person,' is used metonymically in the example (35) through a part-whole relationship, as humans can be counted by head-to-head. In contrast, religious buildings, such as a mosque, use the term *mustaka* (as the polite one) to refer to the top

half of the structure in the example (36), as the head is the pinnacle of the human body structure. Meanwhile, in stable diglossia situations, Javanese uses Indonesian words such as *kepala sekolah* 'school principal' and *kepala kantor* 'the head of the office' instead of **ndhas sekolah*, **mustaka kantor*, or **sirah sekolah* which are unsuitable to be used in Javanese and Indonesian collocations. That is why the word *asesirah* was metonymically used to resemble the "title or headline" of the article.

No.	Source Domain	Target Domain
38.	*Sadumuk **bathuk** sanyari bumi ditohi pati.* ’If you touch my **forehead** and take even a tiny piece of my land, I will defend it until I die.’	I will fight for my prestige and dignity until the day I die.
39.	*“Utekmu nang ndi!”* ‘Where do you put your **brain**!’	Where do you put your mind?
40.	*“**Bathuké** dienggo!”* ‘Use your **forehead**!.’	Use your brain!
41.	*“Ali-aliku ilang **mata**né/**mripa**té.”* ‘I lost the **eye** of my ring.’	I lost my ring stone.
42.	*“Kuwi banyu **soca** arané.”* ‘That is called the **eye** of water.’	That is known as spring water.
43.	*“Aku isih ke**mata-mata** sepréné.”* ' I cannot erase her out of my **eyes**.’	I cannot remove her from my mind.
44.	*“**Mata**né! Delok dalané!”* 'Your **eyes!** Watch your step!’	Keep your fucking eyes on the road!

Forehead metaphors in Javanese-speaking culture are mostly bound to intelligence and broad insight. For representational purposes, the term *bathuk* was used for manifesting 'prestige and dignity' in example (38) and 'thought' in example (40). In the same association, *uthek* 'brain' refers to the 'mind' in the example (39). In this case, the forehead was associated with the brain (the nearest organ) as the nervous system's center. Nonetheless, it can be concluded that even though *utek* 'brain' and *bathuk* 'forehead' can manifest thoughts or minds, they cannot be used interchangeably, as in examples (39) and (40).

Mata, mripat, and *soca* for 'eyes’ also cannot be used interchangeably. The word *mata* was used in the example (41) for representing the 'ring’s stone’, *soca* ‘eye’ in *banyu soca* ‘spring water’ was employed to refer to the water flowing coming out through the bamboo strip as in the example (42), *kemata-mata* was prototypically linked to spatial orientation. It was projected into the cognitive and stood for the abstract entity. *Mata* has been used in Javanese discourse as a container for the essence of "remembering or shadowing by someone" in the example (43) and was adversely used as a form of emotion or anger in the example (44).

No.	Source Domain	Target Domain
45.	"*Dhewéké lungguhan ning* **lambé***né sumur.*" 'He was sitting on the **lip** of the well.'	He was sitting on the edge of the well.
46.	"*Anaké dadi kembang* **lambé**." 'His daughter became the flower of **lips.**'	His daughter became the subject of hearsay.
47.	"*Aja kokéhan* **cangkem**!" 'Do not have too many **mouths**!'	Do not talk too much!
48.	"**Untu***né gorok ora landhep.*" 'The **tooth** of the saw is dull.'	The serration of the saw is dull.
49.	"*Dina iki aku nggantung* **untu.**" 'Today, I hang my **teeth.**'	Today, I did not eat anything.
50.	*Abot* **telak** *karo anak.* 'His **throat** is heavier than his child.'	Someone is more concerned with himself than his child.
51.	*Sak dawa-dawane lurung, luwih dawa* **gurung**. 'No matter how long the passage is, the **throat** is still longer.'	People's conversations can go on indefinitely.
52.	"*Dhewéké selfi lungguh ning* **irungé** *mobil.*" 'She captured her photograph by sitting on the **nose** of the car.'	She captured her photograph by sitting on the bonnet.

Figuratively speaking, lips and mouth are analogously compared to the tips and talks in Javanese-speaking culture. As in the preceding data, *lambé* 'lips' meant 'the edge of the well,' as in example (45), whereas *kembang lambé* came to mean 'the subject of hearsay or gossip,' as in example (46). *Cangkem* 'mouth', an impolite form of *tutuk and lambé,* was used for bearing metonymical senses of 'talking' in example (47). In another case, *untu* 'tooth' is metaphorically used to mean 'something similar to the tooth', such as *untune gorok* 'serrated saw' in example (48), and metonymically to mean 'does not eat anything', such as *nggantung untu* 'hanging teeth' in example (49). In example (50), *telak* 'throat' was paired with the importance of 'food' (as the necessities of life) in the Javanese proverb *abot telak karo anak* 'his throat is heavier than his child' to imply that in some instances "someone more concerned with himself than his child". *Gurung* 'throat' in the Javanese proverb *sadawa-dawane lurung luwih dawa gurung* 'no matter how long the passage is, the throat is still longer' refers to the ability or fondness of humans to spread certain news elsewhere, as in example (51). Meanwhile, *irung* 'nose' was inclusively used metaphorically to refer to anything that resembles it, such as the use of *irung mobil* (as in example (52) for mentioning 'car's bonnet or frontside' because of its protruded appearance.

No.	Source Domain	Target Domain
53.	*"Dhasar **kuping** manci ya, angél diceluk."* 'Your ears are like a pan **ear**, so difficult to call!'	Your ears are like a panhandler, so difficult to call you up!
54.	*"Ati-ati lho, dhewéké **kupingé** tipis!"* 'Be careful! He has thin **ears**!'	Be careful! He was easily offended!
55.	*"Oh, **kupingé** pancén kandel!"* 'Oh, his **ears** are very thick!'	Oh, he is very stubborn!
56.	*"Wis mati **ilaté**."* 'His **tongue** is dead.'	His tongue is numb.
57.	*Mogél **ilaté**.* 'His **tongue** always moves.'	He is always eager to eat delicious food.
58.	*"**Raiku** takseléhké ning ngendi?"* 'Where must I put my **face** on?'	I felt humiliated!
59.	*Buta nggoné ing **dhapur** kiwa.* 'The giant's place is on the left side of the **face**.'	The left side is the place for the giant.
60.	*"Wiwit di**kuncung** nganti di**gelung**."* 'From being **tufted up** to be **coiled up**.'	From being a kid until being mature.
61.	*"Nganti sésuk di**kuncung**, aku ora arep ngeruhi dhéwéké!"* 'Until I am **tufted**, I will never call him out!'	Until I die, I will never talk to him!

The examples of the data above prove the initial argument by Guliyev (2021) that the connections between objects of different orders and processes influence the formation of metaphors. Even though they generate dynamic formations, the metaphorical projections are not arbitrary but heavily constrained by form and function. The meaning of a metaphor depends on its relation to other words within the system. Based on the function, *kuping* 'ears' was associated with the auditory system, while *ilat* 'tongue' was associated with the gustatory system. *Kuping* 'ear' in constructing *kuping manci* 'pot handler' (example (53) is metaphorical. However, the inability to perform its actual function (for hearing) was metonymical, such as the use of *kuping* for *kuping tipis* for easily offended, as in example (54), and *kuping kandel* for stubbornness, as in example (55). In contrast, *ilat* 'tongue' was only used metonymically for the sense of taste in examples (56) and (57).

Human faces convey critical information for understanding the mental states and intentions of others (Lanfranco, Rabagliati, and Carmel 2023). As in Javanese, *rai* 'face' was metonymic to refer to the speaker's self-esteem in example (58) but was metaphorically used in the example (59) by using the term *dhapur* 'face' to mention the position of the puppet in puppet performance. The protagonists and goddesses were placed on the right side of the screen (*kelir*), while the antagonists and giants were placed on the left side of the screen. These bring the orientational concept that the right is good and the left is bad. *Kuncung* 'tuft' and *gelung* 'coil' (in example (60) were metaphorically used to refer to the human's lifetime journey (from adolescence until maturity). Meanwhile, *kuncung* (*pocongan/poncotan*), in example (61), was metonymically used for representing 'mortality' (a resemblance to Javanese *Abangan*'s corpse treatment and burial ceremony by wrapping the corpse using white fabric as a symbol of purity).

4.1.3 The Entire Body Parts Metaphors

The entire body is designed to perform activities to obtain information from human natural and cultural environments. It comprises the skeleton, bone, muscular system, skin, and flesh. Consider the following examples.

No.	Source Domain	Target Domain
62.	"*Wah, **balung**ané omah jati kabéh.*" 'Wow, the house's **skeleton**s were totally made of teak wood.'	Wow, the house's frames were totally made of teak wood.
63.	"*Dhéwéké lagi nglumpukaké **balung** apisah.*" 'He was collecting separated **bones**.'	He was trying to reunite his big family
64.	"***Otot-otot**é digawé saka wesi.*" 'The **muscles** were made of iron.'	The wall frames were made of iron.
65.	"*Dhéwéké **ngotot** banget karo panemuné.*" 'He **muscled** his opinion.'	He vigorously defended his opinion.
66.	"*Omahé digawé saka **kulit**an.*" 'Her house was made of bamboo **skin**.'	The wall of her house was made of plaited bamboo.
67.	"*Wong-wong kuwi isih **kulit daging**ku.*" 'They are still my **skin** and **flesh**.'	They are still my relatives.

The terms *balung* 'bone/skeleton' (as a support structure of the human's body) and *otot* 'muscle' (to generate force) were created through similarities between the house frame and the human's bone (in example (62) as well as between the iron wall frame and human muscles (in example (64). Some entire body metaphors are also possibly created through associations. The part-whole orientation linked the term *balung* to the entire family members (in example (63) and *otot* to the opinion defense (in example (65). Meanwhile, *kulit* 'skin' metaphorically referred to something that functioned like skin, such as *kulitan* for 'plaited bamboo' (in example (66) and metonymically referred to 'relatives' through the use of the term *kulit daging'* skin and flesh' in example (67).

4.1.4 The Lower Body Parts Metaphors

The lower body was widely known as the lower extremity. It refers to the part of the body from the hip to the toes. Consider the following examples.

No.	Source Domain	Target Domain
68.	"*Suwé ora nduwé anak, dhéwéké banjur **mupu**.*" 'After a long period without a child, he decided to have a **thigh**.'	After a long period without a child, he decided to adopt one.
69.	"*Endi iki **sikilé** kursi?*" 'Where is the leg of the chair?'	Where is the leg of the chair?
70.	"*Sakploké didol, aku ora nduwé **sikil**.*" 'I no longer have a foot since it has been sold.'	I no longer have a vehicle since it has been sold.
71.	"*Atiné landhép **dhengkul**.*" 'His heart is as sharp as the **knee**.'	He is cold-hearted.
72.	"*Senengané ngiket-iketi **dhengkul**.*" 'He likes to tie his **knee**.'	He likes to prioritize his family and relatives above all else.

Pupu 'thigh' were metonymically used to represent the act of adopting a child (as in example (68). Therefore, according to Javanese customary law, the adopted child was known as *anak pupon*. The word

pupon designates that the child was taken from his/her mother's lap when he/she was a baby. The dullness of a knee metonymically represented cold-hearted (as in the example (71). Meanwhile, *sikil* 'leg' was metaphorically used to point out a part of a chair (as in example (63) and associatively as a transportation device (as in example (64).

4.2 The Overview of the Ground and Socio-Cultural Factors Influencing the Connection of the Source and Target Domains

The underlying ground of the source and target domains can be divided into two major types: similarity ground (metaphors) and associative ground (metonyms). Metaphors were hardly a manifestation of analogical reasoning (Vico in Danesi 2004). The existence of resemblances between the metaphorical source domain and the target domain underpins the similarity ground. Their similarities could related to **shape** (such as found in the similarity between *jantung* and banana blossom (3), *tanganané kursi* and the arm of the chair (7), *silit* and needle's hole (14), *lengenan* and sleeves (23 and 24), *gedhang susu* and lady-finger bananas or *jambu wudel* and rose apples (29), *wadhuk* and the reservoir (32), *ndhas sepur* and the lock of the train (34), *mata ali-ali* and ring's stone (41), *untuné gorok* for the serration of the saw (48), irung *mobil* and the bonnet (52), *kuping manci* and the panhandler (53), *balungané omah* and the house frame (62), *otot* and the wall frame (64), *kulitan* and the plaited bamboo (66), as well as *sikil kursi* and the leg of the chair (69), **position, state,** or **spatial orientation** (such as *jantung* in *jantung ati* (4), *bokong* in *adu bokong* (12), *geger* in *gegeré gunung* (20), *sirah* in *asesirah* (37), *mata* in *kemata-mata* (43), *lambé* in *lambéné sumur* (45), and *dhapur* in *dhapur kiwa* (59), as well as **size, amount,** or **dimension** (such as *bau* for the area dimension (26), *cacah* **sirah** for one-to-one's counting (35), and *gurung* for indefinitely (51).

Metonyms (as a metaphor component) were created through specific associations shared by the source and target domains. Those associations could be built based on symbolic associations. It could be related to **function** (such as *tuding* for a pointer or stick (10), *nyikut* for taking off someone's duty (21), *sikut-sikutan* for fighting (22), *nusoni* for breasfeeding (31), *mustaka masjid* for the upper part of the mosque (36), *uthék* and *bathuk* for mind (39 and 40), *silit* and *matané* for cursing (15 and 44), *kembang lambé* for the subject of hearsay (46), *nggantung untu* for did not eat anything (49), *kuping tipis* for easily offended (54), *mati ilaté* for numb (56), *mogel ilaté* for always eager to eat delicious food (57), and *sikil* for a vehicle (70)), **human character, emotion, and action** (such as *ati* for love (1 and 2), *cilik nyaliné* for coward (5), *ala kandhutané* for bad temper (6), *nyilih tangan* for coward (8), *jempolan* for terrific (9), *dituding* for an action of accusing someone (11), *dibokongi* for backing up (13), *dawa ususé* for patient (17), *mbalung usus* for stubborn (18), *cendhak ususé* for over-tempramental (19), *merang lengen* for showing power (25), *mbau dendha* for holding power or having authority (27), *ora nduwé wudel* for shameless (30), *kegedhén ndhas* for arrogant (33), *kakéhan cangkem* for talkative (47), *abot telak* for selfish (50), *kuping kandel* for stubborn (55), *ilang rai* for shame (58), and *landhép dhengkul* for cold-hearted (71), **part-whole relation** (such as *bau* for co-worker or assistant (28), *bathuk* for prestige (38), *soca* in *banyu soca* for spring water (42), *dikuncung* for kid (60) or die (61) and *digelung* for mature enough (60), *balung* for big family (63), *ngotot* for defensive (65), *kulit daging* for relatives (67), *pupon*

for an adopting child (68), and *dhengkul* for family and relatives (72), as well as **oppositive relation** (such as *turuk* 'vagina' in *turuk bintul* and *kothol 'testicle'* in *jephitan konthol* (16).

Metaphors and metonyms require cultures, just as cultures require metaphors and metonyms. Every speech community has different ways of perceiving something, which is reflected in the use of language. The organization of external reality varies to some extent according to the language and concept used to talk about it (Yule 2010). This concept is known as linguistic relativity. As a result, many metaphors would be misaligned from one language to another, particularly those involving human body parts. Javanese used *ati* 'liver' rather than *jantung* 'heart' for conceptualizing love. Maybe only the Balinese used *betukkan* 'giblet' for substitute heart (such as in the sarcastic idiomatic phrase *Sing ngelah betukkan* for cruel). Traditionally, *bathuk,* 'forehead' is considered sacred and prohibited from being touched by anyone as part of the Javanese way of life. For this reason, *bathuk* in *sadumuk bathuk* was associated with prestige.

Despite there being idealized cultural or cognitive models (ICMs) to make the connection between the source and target domains relatively understandable across cultures, some source domains are more likely to be culture-specific. There were conceptual distinctions that were lexicalized in Javanese but not in another. For instance, while English used the eye, Javanese used *silit* 'asshole' to resemble the needles hole, although it seems taboo or offensive. The metaphorical expression of *nganti dikuncung* 'until being tufted' seems complicated by non-natives who do not know about Javanese corpse treatment and burial tradition. In Javanese, the corpse would be wrapped using 3 or 5 layers of white fabric to symbolize purity and virtue and tied to keep the corpse from falling apart, instead of dressing the corpse in a suit or traditional cloth. In the same case, a variant of *gedhang susu* for *Musa acuminata* and *jambu wudel* for *Syzygium malaccense* may be strange for non-Javanese, since they were commonly known as 'lady finger bananas' and 'rose apples'.

5. Concluding Remarks and Recommendations

By investigating the representation of human body parts as source domains, as well as grounds and socio-cultural factors influencing the connection of the source and target domains in Javanese, this study reveals that the body measures all things in human cognition. The use of human body parts as the source domain implies that the Javanese perceive the universe as one colossal body made up of bodily parts. Despite the fact that not all human body parts were used to construct metaphorical expressions in Javanese, they could be divided into four groups based on which section of the body and organs belong to: upper (from the hair to the neck), middle (from the shoulders to the glutes), lower (from the hip to the toes), and entire body parts (comprises the skeleton, bone, muscular system, skin, and flesh). A thorough examination of this study also reveals that human body parts can be used metaphorically (based on similarities in shape, position, state, spatial orientation, size, amount, or dimension) or metonymically (based on associations related to function, human character, emotion, action, part-whole relation, or oppositive relation) between the source and target domains.

This study also shows that metaphors as conceptual or mental operations reflected in human language have been documented across societies as a fundamental source for understanding abstractions of human reality. In this case, metaphors are not arbitrarily but physically and culturally embedded. The conceptualization of various human body parts reveals different cultural models developed and shared by societies. In other words, even though all languages share many human body concepts or embodiment, not all language communities share the same cultural experiences. As a result, human body parts can be used to represent and be associated with various entities and intentions across cultures.

This research contributes to a better understanding of the various metaphorical embodiments among languages and speech communities. Therefore, metaphors and cross-cultural metaphors studies are essential for raising cultural awareness. However, since the amount of data and instruments in this study is limited, the additional study in the future should use a broader range of data (such as a corpus), as well as operate data processing and analysis tools (such as CADQAS NViVo, AntConc, Atlas.ti, etc.) to obtain more versatile, systematic, and ideal results. Moreover, as the scope of metaphors is vast and varied, this study has the potential to be expanded through different approaches, domains, and perspectives.

Funding

The author received no direct funding for this research.

Disclosure Statements

We declare that we have no competing conflict, financial interests, or personal relationships that could have appeared to influence the work reported in this work.

تمثيل الاستعارة لأجزاء جسم الإنسان في اللغة الجاويَة

هيندروكومورو، إديوا فوتو وييانا،تادية خميراء معصومة
كلية العلوم الثقافية، جامعة غاجة مادى، إندونيسيا

الملخص

الاستعارة أداة لتصور الواقع ليست عشوائيَة، بل هي جزء لا يتجزأ مادياً وثقافياً. وبناء على هذا البيان، ركز هذا البحث العلمي على تمثيل الاستعارة لأجزاء جسم الإنسان والأسس الاجتماعيَة والثقافيَة والعوامل المؤثرة على العلاقات المتبادلة بين المجالات المصدر والمجالات الهدف في تكوين الاستعارات الجاويَة، جُمعَ ما مجموعه 72 من الأقوال والأمثال يدوياً باستخدام تقنية أخذ العينات الهادفة وتحليلها باستخدام المنهج الوصفي النوعي، وتظهر النتائج أن الاستعارة لأجزاء جسم الإنسان في اللغة الجاويَة تُبنى من التشابه والجمع بين الجسم العلوي والوسطي والسفلي والجسم كله: كمجال مصدر، ويكشف هذا البحث العلمي أنه على الرغم من أن جميع الناس لديهم الأجزاء البيولوجيَة أو الفيزيائيَة نفسها، فإنَ كل لغة تستقل وتؤدي وظائف هذه الأجزاء من الجسم بطرق مختلفة عبر الثقافات. وبالتالي يمكن أن ترتبط أجزاء من جسم الإنسان بكيانات وأغراض مختلفة. من خلال النظر في الترابط بين الاستعارة والثقافة، فإن هذا البحث العلمي مهم لترقية الفهم وترقية الوعي بأنماط التفكير الثقافي لمجتمع الكلام.

الكلمات المفتاحية: الاستعارة، أجزاء جسم الإنسان، مجال مصدر، مجال هدف.

References

Al-Abdullah, Maram. 2019. Cognitive Linguistic Perspectives of Metaphoric Conceptualization of Pain in Jordanian Arabic. *Jordan Journal of Modern Languages and Literature* 11 (3): 341–60.

Alessandroni, Nicolás. 2017. Development of Metaphorical Thought before Language: The Pragmatic Construction of Metaphors in Action. *Integrative Psychological and Behavioral Science* 51 (4): 618–42. https://doi.org/10.1007/s12124-016-9373-3.

Angelopoulou, Afroditi. 2021. Gesture, Metaphor and the Body in Trojan Women. *American Journal of Philology* 142 (4): 597–627. https://doi.org/10.1353/ajp.2021.0020.

Argyriou, Paraskevi, Christine Mohr, and Sotaro Kita. 2017. Hand Matters: Left-Hand Gestures Enhance Metaphor Explanation. *Journal of Experimental Psychology: Learning, Memory, and Cognition* 43 (6): 874–86. https://doi.org/10.1037/xlm0000337.

Ariga, Atsunori, and Katsumi Watanabe. 2009. What Is Special about the Index Finger?: The Index Finger Advantage in Manipulating Reflexive Attentional Shift. *Japanese Psychological Research* 51 (4): 258–65. https://doi.org/10.1111/j.1468-5884.2009.00408.x.

Arimi, Sailal. 2015. *Linguistik Kognitif: Sebuah Pengantar*. Yogyakarta: Jurusan Sastra Indonesia, Fakutas Ilmu Budaya, Universitas Gadjah Mada.

Aschale, Alelign. 2013. The Human Body Metaphors: A Critical Analysis of the Metaphoric Extensions Vis-a-Vis Amharic and English Languages. Dissertation, Ethiopia: Addis Ababa Science and Technology University (AASTU).

Baldó, Rosa María Pacheco. 2022. Metaphor and Irony on Reviews for Spanish and American Prisons. *International Journal of Society Culture and Language*, no. Online First (February). https://doi.org/10.22034/ijscl.2022.539054.2377.

Barnard, Antoni. 2018. Well-Being, More Than a Dream: Women Constructing Metaphors of Strength. *Frontiers in Psychology* 9 (July): 1186. https://doi.org/10.3389/fpsyg.2018.01186.

Chandler, Daniel. 2007. *Semiotics: The Basics*. Oxon and New York: Routledge.

Chita, Anna, and Christos Stavrou. 2020. The Metaphor in Literature and the Effect on Translation. *Nordic Journal of English Studies* 19 (2): 117. https://doi.org/10.35360/njes.562.

Cooperrider, Kensy, and Susan Goldin-Meadow. 2017. When Gesture Becomes Analogy. *Topics in Cognitive Science* 9 (3): 719–37. https://doi.org/10.1111/tops.12276.

Danesi, Marcel. 2004. *Messages, Signs, and Meanings: A Basic Textbook in Semiotics and Communication Theory*. 3rd ed. Toronto: Canadian Scholars' Press Inc.

Daryanto. 1999. *Kawruh Basa Jawa Pepak*. Surabaya: Apollo Lestarip.

Devrim, Devo Yilmaz. 2015. Grammatical Metaphor: What Do We Mean? What Exactly Are We Researching? Functional Linguistics 2015 (2): 3. https://doi.org/10.1186/s40554-015-0016-7.

Dorst, Aletta Gesina. 2015. More or Different Metaphors in Fiction? A Quantitative Cross-Register Comparison. *Language and Literature: International Journal of Stylistics* 24 (1): 3–22. https://doi.org/10.1177/0963947014560486.

Farghal, Mohammed, and Eman Alenezi. 2022. Arabic Metonymy and Synecdoche in English Translation: The Case of Body Parts. *Jordan Journal of Modern Languages and Literatures* 14 (4): 731–53. https://doi.org/10.47012/jjmll.14.4.2.

Gabriel, Rami. 2022. The Pragmatic Use of Metaphor in Empirical Psychology. *History of the Human Sciences* 35 (3–4): 291–316. https://doi.org/10.1177/09526951211047395.

Gibbs, Raymond W. 2013. Metaphoric Cognition as Social Activity: Dissolving the Divide between Metaphor in Thought and Communication. *Metaphor and the Social World* 3 (1): 54–76. https://doi.org/10.1075/msw.3.1.03gib.

Grinter, Aaron. 2020. Metaphors in Science: Lessons for Developing an Ecological Paradigm. *Telos* 2020 (190): 77–91. https://doi.org/10.3817/0320190077.

Guliyev, Fakhraddin Abdulkerim Oglu. 2021. Metaphor as an Object of the Synergy Paradigm Study. *Linguistics and Culture Review* 5 (S1): 1–10. https://doi.org/10.21744/lingcure.v5nS1.1309.

Haack, Susan. 2019. The Art of Scientific Metaphors. *Revista Portuguesa de Filosofia* 75 (4): 2049–66.

He, Keyu. 2016. Influences of Cultural Elements on Metaphor." *English Language and Literature Studies* 6 (2): 126. https://doi.org/10.5539/ells.v6n2p126.

Hetmański, Marek. 2021. Cognitive-Methodological Functions of Metaphors. *Argument: Biannual Philosophical Journal* 11 (1). https://doi.org/10.24917/20841043.11.1.5.

Holyoak, Keith James. 2019. *The Spider's Thread: Metaphor in Mind, Brain, and Poetry*. Massachusetts: The MIT Press.

Humar, Marcel. 2021. Metaphors as Models: Towards a Typology of Metaphor in Ancient Science. *History and Philosophy of the Life Sciences* 43 (3): 101. https://doi.org/10.1007/s40656-021-004502.

Huo, Mingjie, and Jiaxuan Chen. 2021. On Embodiment of Predicative Metaphor: A Case of English Body-Action Verbs. *Theory and Practice in Language Studies* 11 (9): 1114–20. https://doi.org/10.17507/tpls.1109.19.

Jakobs, Marlena, and Matthias Hüning. 2022. Scholars and Their Metaphors: On Language Making in Linguistics. *International Journal of the Sociology of Language* 2022 (274): 29–50. https://doi.org/10.1515/ijsl-2021-0017.

Jakobson, Roman. 1971. *Selected Writings: Word and Language*. The Hague: Walter de Gruyter, Mouton.

Jensen, Thomas Wiben, and Linda Greve. 2019. Ecological Cognition and Metaphor. *Metaphor and Symbol* 34 (1): 1–16. https://doi.org/10.1080/10926488.2019.1591720.

Kovalenko, Liudmyla, and Alla Martynyuk. 2018. English Container Metaphors of Emotions in Ukrainian Translations. *Advanced Education* 5 (10): 190–97. https://doi.org/10.20535/2410-8286.142723.

Kövecses, Zoltán. 2002. *Metaphor: A Practical Introduction*. Oxford and New York: Oxford Univerity Press.

Kövecses, Zoltán. 2018. Metaphor in Media Language and Cognition: A Perspective from Conceptual Metaphor Theory. *Lege Artis* 3 (1): 124–41. https://doi.org/10.2478/lart-2018-0004.

Kozlova, Lyubov A. 2020. Metaphor as the Reflection of Culture Determined Cognition. *Russian Journal of Linguistics* 24 (4): 899–925. https://doi.org/10.22363/2687-0088-2020-24-4-899-925.

Lakoff, George. 2014. Mapping the Brain's Metaphor Circuitry: Metaphorical Thought in Everyday Reason. *Frontiers in Human Neuroscience* 8: 958. https://doi.org/10.3389/fnhum.2014.00958.

Lakoff, George, and Mark Johnson. 2003. *Metaphors We Live By*. 2nd ed. Chicago: University of Chicago Press.

Lanfranco, Renzo C., Hugh Rabagliati, and David Carmel. 2023. The Importance of Awareness in Face Processing: A Critical Review of Interocular Suppression Studies. *Behavioural Brain Research* 437 (February): 114116. https://doi.org/10.1016/j.bbr.2022.114116.

Lufini, Andi Wardatul Wahidah. 2021. Metafora Anggota Tubuh Dalam Masyarakat Muna. *Deskripsi Bahasa* 4 (1): 25–33. https://doi.org/10.22146/db.v4i1.4110.

Mangunsuwito. 2014. *Kamus Lengkap Bahasa Jawa*. Bandung: Yrama Widya.

Markopoulos, Evangelos, and Hannu Vanharanta. 2022. *The Company Democracy Model: Creating Innovative Democratic Work Cultures for Effective Organizational Knowledge-Based Management and Leadership*. 1st ed. New York: Productivity Press. https://doi.org/10.4324/9781003158493.

Meir, Irit. 2010. "Iconicity and Metaphor: Constraints on Metaphorical Extension of Iconic Forms." *Language* 86 (4): 865–96.

Micsinaiová, Alžbeta. 2015. Metaphor and Thought: *Studia Philosophica* 44 (2): 137–51. https://doi.org/10.5840/philtoday200044243.

Nuraini. 2012. *Pepak Jawa Lengkap*. Surakarta: Lingkar Media.

Poppi, Fabio Indìo Massimo, and Eduardo Urios-Aparisi. 2018. Metaphor and Ideology in the Representation of the Human Body in Cinema. *Metaphor and Symbol* 33 (4): 295–314. https://doi.org/10.1080/10926488.2018.1549838.

Purwadarminta, W. J. S. 1930. *Bausastra Jawi Indonesia*. Jakarta: Balai Pustaka.

Rahardian, Ema, and Deli Nirmala. 2018. The Force Scheme in Javanese Emotion Metaphors. *PAROLE: Journal of Linguistics and Education* 8 (1): 12. https://doi.org/10.14710/parole.v8i1.12-18.

Rai, Sunny, Shampa Chakraverty, Devendra K. Tayal, Divyanshu Sharma, and Ayush Garg. 2019. Understanding Metaphors Using Emotions. *New Generation Computing* 37 (1): 5–27. https://doi.org/10.1007/s00354-018-0045-3.

Sanjoko, Yohanis. 2022. Tubuh Sebagai Ranah Sumber Metafora. *Metafora: Jurnal Lintas Disiplin Studi Metafora* 1 (1): 35–55. https://doi.org/10.26877/mf.v1i1.10495.

Saussure, Ferdinand De. 1959. *Course in General Linguistics*. New York: Philosophical Library.

Sebeok, Thomas Albert. 2001. *Signs: An Introduction to Semiotics*. 2nd ed. Toronto: University of Toronto Press.

Semino, Elena, Zsófia Demjén, and Jane Demmen. 2016. An Integrated Approach to Metaphor and Framing in Cognition, Discourse, and Practice, with an Application to Metaphors for Cancer. *Applied Linguistics*, September, amw028. https://doi.org/10.1093/applin/amw028.

Sharma, Sunil. 2018. Metaphor and Emotion: A Case of Anger in Hindi Phraseology. *Cognitive Linguistic Studies* 5 (2): 303–40. https://doi.org/10.1075/cogls.00023.sha.

Slepian, Michael L., and Nalini Ambady. 2014. Simulating Sensorimotor Metaphors: Novel Metaphors Influence Sensory Judgments. *Cognition* 130 (3): 309–14. https://doi.org/10.1016/j.cognition.2013.11.006.

Soesanto, and Y. Trisnawati. 2019. *Pepak Basa Jawa.* Yogyakarta: Oxygem Media Ilmu.

Soewarno, Peter. 1999. *Dictionary of Javanese Proverbs and Idiomatic Expressions.* Yogyakarta: Gadjah Mada University Press.

Stewart, John. 2016. "Language and Language : Approaches to Metaphor." *Corela*, no. HS-19 (June). https://doi.org/10.4000/corela.4417.

Sukirman, Sukirman, Firman Firman, Nurul Aswar, Mirnawati Mirnawati, and Rusdiansyah Rusdiansyah. 2022. The Use of Metaphors through Speech Acts in Learning: A Case from Indonesia. *International Journal of Society Culture and Language*, no. Online First (May). https://doi.org/10.22034/ijscl.2022.551893.2613.

Szokolszky, Agnes. 2019. Perceiving Metaphors: An Approach from Developmental Ecological Psychology. *Metaphor and Symbol* 34 (1): 17–32. https://doi.org/10.1080/10926488.2019.1591724.

Taylor, Cynthia, and Bryan M. Dewsbury. 2018. On the Problem and Promise of Metaphor Use in Science and Science Communication. *Journal of Microbiology & Biology Education* 19 (1): 19.1.40. https://doi.org/10.1128/jmbe.v19i1.1538.

Thibodeau, Paul Henry, Teenie Matlock, and Stephen J. Flusberg. 2019. The Role of Metaphor in Communication and Thought. *Language and Linguistics Compass* 13 (5): e12327. https://doi.org/10.1111/lnc3.12327.

Utomo, Sutrisno Sastro. 2009. *Kamus Lengkap Jawa-Indonesia.* Yogyakarta: PT. Kanisius.

Wang, Lulu. 2013. Cultural Functions in the Translation of Metaphor. *Journal of Language Teaching and Research* 4 (3): 530–35. https://doi.org/10.4304/jltr.4.3.530-535.

Wehrs, Donald R. 2017. Metaphors of Mind: An Eighteenth-Century Dictionary. *The Scriblerian and the Kit-Cats* 50 (1): 78–81. https://doi.org/10.5325/scriblerian.50.1.0078.

Yu, Ning. 2003. Metaphor, Body, and Culture: The Chinese Understanding of Gallbladder and Courage. *Metaphor and Symbol* 18 (1): 13–31. https://doi.org/10.1207/S15327868MS1801_2.

Yule, George. 2010. *The Study of Language.* 4th ed. Cambridge: Cambridge University Press.

Zhang, Ming. 2021. A Cognitive Research on Hand Metaphors in English. *OALib* 08 (05): 1–10. https://doi.org/10.4236/oalib.1107436.

Zhumasheva, Kamshat, Meiramgul Sapargaliyeva, Damira Sarkulova, Rimma Kuzhentayeva, and Ansagan Utarova. 2022. Representation of Gender Metaphor in Lexicography as a Reflection of Culture. *International Journal of Society Culture and Language*, no. Online First (June). https://doi.org/10.22034/ijscl.2022.555683.2662.