

# The heart became hot

## A conceptualization of anger in Dagbani and Dangme

Jonathan Tanihu and Samuel Alhassan Issah

Accra College of Education | University of Education

This paper provides a comparative study of the conceptualization of ANGER in Dagbani and Dangme, classified as Mabia and Kwa languages respectively. We employ the Conceptual Metaphor Theory as an analytical tool for explaining the empirical facts on the conceptualization of anger in these languages. We show that the mental concepts of the Dangme and the Dagbani people reflect in their conceptualizations of ANGER. We demonstrate that although the two languages deploy varied body organs (especially the heart and stomach), to express anger, Dagbani tends to focus more on the use of the heart, the lungs and the chest to express anger, whereas Dangme uses the heart, stomach and the body or self. The two languages share a common conceptual metaphor of anger as 'heat' with other schematic nodes, such as 'fire', 'fluid' and 'container'. We finally establish that although most of the expressions of anger in these two languages fit into cross-linguistic patterns, there are also salient cultural specifics that demonstrate how their physiological and experiential realities tend to play an important role in their conception of anger. Data for this study were collected from native speakers of these languages through spontaneous conversations as well as from literary works produced in the two languages under investigation.

**Keywords:** Anger, metaphor, metonymy, conceptualization, comparative

### 1. Introduction

The focus of this present study is to examine and compare the metaphorical expressions of anger in two Ghanaian languages, Dagbani and Dangme. Whereas the former is a Mabia (Gur) language predominantly spoken in the Northern part of Ghana by about two million speakers (Abubakari, 2018), the latter is a Kwa language spoken mostly in parts of the Eastern Region and in the South-eastern

parts of Greater Accra Region by about five hundred and two thousand, eight hundred and sixteen (502,816) people in Ghana, (Ghana Statistical Service 2012, on the 2010 Population and Housing Census). This paper aims at exploring the conceptualization of anger in Dagbani and Dangme. This study is guided by the following research questions; how is emotion of anger expressed in Dagbani and Dangme? How are the terms for anger conceptualized in Dagbani and Dangme?

Studies on emotion have received an appreciable amount of research over the past decades from both culture-specific and cross-cultural perspectives with different theoretical underpinnings. The studies that are analyzed within the lenses of cognitive linguistics and cross-cultural studies have provided fertile grounds for continuous debate on cross-linguistic explications (see among others the works of Agyekum, 2015; Ansah, 2011; Dzokoto & Okazaki, 2006; Kövecses, 1990, 1991, 2000a, 2002; Lakoff, 1987; Lakoff & Johnson, 1999; Lakoff & Kövecses, 1987; Maalej, 2004; Yu, 1995, 2002). Emotions constitute a crucial aspect of human experience and there are studies that focus on this within the theoretical tenets of cognitive linguistics. The expression of emotions has been argued to be embedded in our cognition as language users, and is consequently reflected in our language and actions. As language users, our reasoning and emotions are conceptualized and structured metaphorically (Dzokoto and Okazaki, 2006; Lakoff and Johnson, 1987). Thus, metaphors could be understood as an appropriate tool for the vivid depictions of emotions.

Wierzbicka (1999: 36) opines that, in all languages, people can describe cognitively based feelings via observable bodily symptoms and figurative bodily images. Ogarkova and Soriano (2014: 148) posit that, emotions can be linguistically represented via literal somatic sensations or by body-part phrases referring to both literal and imaginary processes taking place inside or with the body (e.g., his hair stood on his head, his heart sank, it just makes my blood boil). They add that all languages can describe emotions using both literal and metaphoric body-part expressions. Ogarkova and Soriano (2014: 148) suggest that, while the tendency itself appears to be universal, languages vary dramatically in how the link between the body and emotion is realized in them, adding that many non-Western languages do not appear to differentiate between emotion and bodily sensation to the same extent that Western languages do. The Fante generic term *atsinka*, for instance, encompasses both emotional experiences, like happiness or sadness, and physiological states, such as hunger or thirst (Dzokoto & Okazaki, 2006). They further add that languages differ with regard to the salience of bodily references to emotions in their affective repertoires. While in many Western languages abstract emotion nouns (e.g., anger) exist as alternatives to figurative body-part expressions (e.g., hot-headed), in many indigenous languages, no such lexical possibility is attested. To this, McPherson and Prokhorov (2011: 39–40)

comment on the near-total absence of emotion-specific vocabulary in nine Dogon languages of Mali where emotions are almost exclusively encoded in idiomatic expressions containing the word *liver*.

Many researchers in different fields of study such as psychology, philosophy, ethnology, sociology and linguistics have studied emotions and the way emotions are expressed in many languages (see Akkök, 2017; Dzokoto and Okazaki, 2006; Foolen, 1997). The linguistic study of emotions focuses on how the emotion concepts are expressed and conceptualized. Most of these scholars wrestle with the question of whether emotions are universal or culture-specific in nature (see among others Kövecses, 2000a, 2005, 2008, 2010, 2015; Wierzbicka, 1992a, 1992b, 2002; Yu, 1995, 2008). Wierzbicka (1992a: 178–179) indicates that “while the concept of ‘feeling’ is universal and can be safely used in the investigation of human experience and human nature, the concept of ‘emotion’ is culture-bound and cannot be similarly relied on”. To her, emotion concepts do not have universal characteristics, but have rather culture-specific features. Kövecses (2010), on the other hand, asserts that emotion concepts do have some universal characteristics since the human body motivates them; however, it is also necessary to note that a particular social-cultural environment also produces emotions. Kövecses (2014) again expounds that we can account for both the universality and the culture-specificity of emotion metaphors based on the means of modification in how we think about the bodily basis of some emotion metaphors. He proposes “a new view which builds on the notion of ‘differential experiential focus’, which assumes that the bodily responses in emotion involve several components and that context plays a role in which of these is primarily relied on in a given culture” (Kövecses, 2014: 26). Agyekum (2015: 89) also indicates, “the concepts expressed in metaphors correspond to our natural experiences and basic domains of human life, including bodily perception and movement, basic objects, the environment, culture, and social interactions.” In the view of Dzokoto and Okazaki (2006), the body is an integral part of the symbolism used in the expression of sensory experiences by speakers.

In a previous study focusing on anger, Lakoff and Kövecses (1987) emphasize the role of embodiment and bodily experiences in the conceptualization of anger. According to them, the conceptual embodiment is the idea that the properties of certain categories are a consequence of the nature of human biological capacities and of the experience of functioning in the physical and social environment. They show that, conceptual metaphors and metonymies play a very significant role in the conceptualization of anger in English. They identify several conceptual metaphors, such as *ANGER IS A HOT FLUID IN A CONTAINER*, *ANGER IS FIRE*, *ANGER IS A DANGEROUS ANIMAL*, and suggest that the concept is largely constituted by them. These conceptual metaphors have been used by many studies conducted

in recent years to investigate the concept of anger in both Indo-European and African languages. Some of these studies are Anger in Chinese (King, 1989, Yu, 1995); Anger in Japanese (Matsuki, 1995); Anger in Zulu (Taylor & Mbense, 1998); Anger in Polish (Mikolajczuk, 1998); Tunisian Arabic (Maalej, 2004); Wolof (Munro, 1991); Spanish (Soriano, 2003); Hungarian (Kövecses, 1990, 2000a); Anger in Akan (Agyekum, 2015; Ansah, 2011); Turkish (Akkök, 2017); and Vietnamese (Tran, 2018).

Kövecses (2020: 43) is also of the view that, emotion concepts are composed of four distinct conceptual ingredients: conceptual metaphors, conceptual metonymies, related concepts, and cognitive models, and further proposes that it is cognitive models, or conceptual frames, that are assumed to be the mental representation of particular emotions, such as happiness, anger, love and fear. According to Kövecses (2020: 43), the most typical generic-level conceptual metaphors that characterize emotions include (i) emotion is a fluid in a container (filled with emotion); (ii) emotion is heat/fire (burn with emotion); (iii) emotion is a natural force (be overwhelmed by an emotion) (iv) emotion is a physical force (be struck by an emotion); (v) emotion is a social superior (be governed/ruled by an emotion); (vi) emotion is an opponent (be overcome by an emotion); (vii) emotion is a captive animal (let go of an emotion); (viii) emotion is a force dislocating the self (be beside oneself with an emotion) and finally (ix) emotion is a burden (be weighed down by an emotion). Although studies in this area have received recognition in varied multidisciplinary domains of research, little is known about metaphors of emotions in either Dagbani or Dangme, especially, the emotion of anger. This work is thus significant since it fills a research gap in an area that remains largely unexplored in the study of these two Ghanaian languages.

A central claim of this paper is that although the two languages employ various body organs, particularly the heart, lungs, chest, stomach, and the body to express anger, Dagbani focuses more on the use of the heart, the lungs, and the chest, while Dangme uses the heart, stomach, and the body or self. This paper proceeds as follows: In Section 2, we present the theoretical framework within which the analysis is cast. The methodology that is employed to get the data used in this study is also presented in this section. Section 3 outlines the anger metaphor constructions in Dagbani and Dangme. Section 4 discusses the conceptualization of anger in Dagbani and Dangme, heightening the differences and similarities in these two languages, whereas Section 5 summarises and concludes the paper.

## 2. Theoretical framework and methodology

This study adopts the Conceptual Metaphor Theory (CMT) framework of metaphor analysis. Conceptual Metaphor Theory was originally formulated by Lakoff and Johnson (1980), developed in Lakoff (1987) and Lakoff (1993), and later in Lakoff and Johnson (1999). The CMT treats metaphor as a matter of thought and cognition, not “just a matter of language” (Lakoff, 1993: 208). The Conceptual Metaphor Theory holds that conceptual metaphors are manifested in metaphorical expressions of a given language. It sees metaphor as “the process by which we understand and structure one domain of experience in terms of another domain of a different kind” (Lakoff, 1987: 15). A conceptual metaphor is defined as a set of systematic correspondences between a source domain and a target domain. The source domain is the conceptual domain from which metaphorical expressions are drawn. The source domain is associated with concrete, tangible and physical experiences. The target domain, on the other hand, is associated with abstract experiences such as emotions, thoughts, life, ideas, arguments, etc., and therefore, it is more abstract than the source domain. The target domain is structured and understood in terms of the source domain (Esenova, 2011; Lakoff, 1993; Lakoff and Johnson, 1980; see also Semino, 2008; Sweetser, 1990; Yu, 2004).

CMT suggests that conceptual metaphors are mostly based on bodily experiences. The way we perceive the world is dependent on the way we experience it. That is, we speak by what we perceive or experience (Akkok, 2017). The basic claim of this theory is that abstract experiences such as emotions are conceptualized and expressed in the form of metaphors. For example, the emotion of anger in English is conceptualized in terms of heat and internal pressure (Lakoff and Jonson, 1980; Lakoff and Kövecses, 1987).<sup>1</sup> We consider the CMT an appropriate theoretical tool in accounting for anger metaphors in Dagbani and Dangme because in this theory, concepts are expressed in metaphors with corresponding cultural traits and sociocultural interactions, natural experiences, and basic domains of human life, including bodily perception and movement, basic objects, and the environment. Semino (2008: 5) is of the view that “conceptual metaphors are defined as systematic sets of correspondence, or ‘mappings,’ across conceptual domains, whereby a ‘target’ domain is partly structured in terms of a different ‘source’ domain.” In this paper, we would consider the mappings of anger metaphorical expressions as source domains onto anger conceptualization as target domains.

---

1. This is true in many different languages around the world, as has been established in the literature; however, this study provides the cultural salience in the conceptualization of this concept, and what stands to be similar to these two languages.

There are studies on anger metaphors in the Ghanaian context that have employed the CMT as a Theoretical Framework for their analyses. For instance, Bisilki and Yakpo (2021) propose that in Likpakpaln, the *linuul* 'heart' is the center of the anger emotions. They add that this body part forms other schematic nodes, which express the same anger emotion other than centring it on other parts of the body. Bisilki & Yakpo (2021) found enough evidence to claim that their study supports the 'cultural embodied prototype.' In Akan, Agyekum (2015) avers that the easily accessible body parts *bo* 'chest' and *akoma* 'heart' are the loci where emotions such as anger, provocation, and patience emanate from. In the same vein, Ansah (2011:135) also maintains that in Akan, "conceptualizations of anger are based on both general metonymic and metaphorical principles that are grounded in the physiological and sociocultural experiences." These universal construals of anger as coming from the heart are due to embodied cognition. It is the role and the natural system of the human body, and our interactions with the physical and cultural world (Yu, 2014) that forms the whole plethora of these emotional concepts. However, there are also cultural specificities that are derived from the conceptualization of anger: cultures construe the human body and bodily experiences in different ways through the assignment of varied significance and values to different body parts and organs and how they function. For instance, Agyekum (2015) confirms that there are two peculiar language-specific metaphors of anger identified in Akan, ANGER IS WEED and ANGER IS GUN POWDER. In part, this study is focused on establishing the cultural specificity of anger conceptualization in Dagbani and in Dangme in relation to what has been found in Akan by Agyekum (2015).

In this study, we employed the qualitative method of research design. We examined data on the concept of anger from native speakers of these languages elicited through spontaneous conversations. The data from the natural conversations were gathered through recordings at some community social gatherings and communicative events such as family conflict resolution meetings, marriage ceremonies, funerals, and festivals. Some of the data were also elicited through focus group discussions. For each of these languages, 25 native speakers (10 females and 15 males), whose ages range from 25 to 65 years old were put in groups of 5, and they were tasked to discuss various ways anger is expressed in Dagbani and Dangme. The informants include farmers, traders, teachers, and students from the University of Education, Winneba. For Dagbani, the farmers and traders were drawn from Kukuo-Yapalsi and Kulinyevela, both located within the Tamale Metropolis, whereas for Dangme, they were selected from Toflokpo-Salom in the Ada-West District, and Somanya in the Yilo Krobo Municipal. The selection of these towns was based on proximity to the authors, who are themselves native speakers. These discussions lasted for 35 minutes. The focus group discussions were recorded with

a digital audio recorder and later transcribed and translated for the analysis. Notes were also taken during the discussion processes. The data were collected between the months of June 2019 and January 2021. Most of the expressions that were gathered were metaphorically related to parts of the body, specifically, the heart, the chest, the body, and the stomach. These have been the focus of the discussions and analysis in this paper. We also obtained some of the metaphorical linguistic expressions of anger from books and project manuscripts of students. Some of these are Ablorh-Odjidja et al. (1990), Adabah (2007), Charway (2017) and the Dangme Bible (Bible Society of Ghana, 2008). The secondary sources of Dagbani data were from works such as Napari (2022), Alhassan (2023), Sulemana (1970) and Adam (2010). After this, we grouped and regrouped the conversations into various categories as specified in Lakoff and Kövecses (1987) and Kövecses (2000b). We adopted their cultural model to analyze our data.

### 3. Anger metaphor constructions in Dagbani and Dangme

In this section, we provide an account of the anger metaphor constructions in Dagbani and Dangme. We note that the body parts that are instrumental in the conceptualization of anger metaphors are *suhi* ‘heart’, *puuni* ‘stomach’ and *sapuyu* ‘lung’ in Dagbani and *tsui* ‘heart’ and the *muklii* or *mi mi* ‘stomach’ for Dangme. We observe that the two languages have different preferences for the body parts that they select and conceptualize metaphorically for the expression of anger. This is illustrated in the data in Tables (1) and (2).

From Tables 1 and 2, it is clear that various body parts are instrumental in the conceptualization of anger metaphors in Dagbani and Dangme. Dagbani tends to conceive anger expressions from *suhi* ‘heart’, *puuni* ‘stomach’, *ningbuna* ‘body’ and *sapuyu* ‘lung’, and Dangme makes use of the *tsui* ‘heart’ the *muklii* or *mi mi* ‘stomach’ and the *he* ‘body’. The term *àbòfú*, the Example (1) from Table 2, is believed to have its origin from the Akan word for ‘anger’ *abofuo*. According to Agyekum (2015), the term *a-bo-fuo* literally means ‘chest sprout’, but metaphorically refers to ‘anger’. He maintains that in Akan, the *bo* ‘chest’ is the outer shield that safeguards the heart which is the seat of emotions and affections. However, what is prevalent to the eyes is the chest hence, some of the emotion concepts including anger are metaphorically expressed using the chest. There are therefore expressions such as *abofuo*, ‘anger’ and *abohuro*, ‘provocation’. The determination of an expression from *bo*, ‘chest’ as being metaphoric is based on the Akan indigenous concept of anger. This is shown below in Example (1).

**Table 1.** Anger metaphorical extensions of *suhi* ‘heart’, *puuni* ‘stomach’, *ningbuna* ‘body’ and *sapuyu* ‘lung’ in Dagbani

	Dagbani	Literal translation	English meaning
1.	<i>suhi yiyisi</i>	heart rises [or rose up]	to become furious
2.	<i>suhibii</i>	heart has become hot	to be angry
3.	<i>suhi taai buyim</i>	heart has caught fire	to become very furious
4.	<i>suhi yina</i>	heart has come out	to appear fearful
5.	<i>suhi dui</i>	heart has been cooked	to be furious
7.	<i>sapuyu wuyi</i>	lung rises [or rose up]	to be angry
8.	<i>nii mii</i>	body became uncomfortable	to be forced into anger
9.	<i>ningbuna zabira</i>	body is fighting	to be painfully angry
10.	<i>ningbuna dui</i>	body boiling	to be angry
11.	<i>suhi dabi nangbanpiba</i>	heart sticks to lips	to be easily angry
12.	<i>puuni taai buyim</i>	stomach has caught fire	to be very furious

**Table 2.** Anger metaphorical extensions of *tsui* ‘heart’ and the *muklii* or *mi mi* ‘stomach’ in Dangme

S/N	Dangme	Literal translation	English meaning
1.	<i>àbòfú</i>	(chest) rise	prototypical word for anger in Dangme
2.	<i>muklii/mi mi fu</i>	raised stomach	wrath, rage, fury (Jeremiah. 7:20; 15:17)
3.	<i>muklii/mi mi wo la</i>	stomach is hot (with fire)	anger, irritation, annoyance, rage, fury
4.	<i>abofu munyu/sane</i>	heart sprout or tearing issue	irritating matters/issues, annoying
5.	<i>tsui yaya</i>	bad heart	easily angered, irritated, pissed off
6.	<i>o be tsui</i>	you don’t have heart	easily angered, irritated, pissed off
7.	<i>tsui fia</i>	heart boil	easily angered
8.	<i>tsui dɔ la</i>	heart is hot (with fire)	hot temper
9.	<i>tsui ba si</i>	heart is down	cooled temper
10.	<i>tsui ho hiɔwe ya</i>	heart has (gone (up) to the sky	risen temper
11.	<i>tsui te</i>	heart is risen	pissed off or quick tempered
12.	<i>tsui hua</i>	heart shakes	quick tempered/ easily angered
13.	<i>tsui wo la</i>	heart is set on fire	easily angered, irritated, pissed off
14.	<i>o tsui nge o de mi</i>	your heart is in your palm	easily angered, irritated, pissed off
15.	<i>yo tsui nge o de</i>	you have woman heart	easily angered, irritated, pissed off
16.	<i>sane ɔ dɔ mi</i>	issue made me hot	the issue made me angry



(1) [Prefix body part verb-suffix] → nominal

[a-      bo      fu-o] → *abofuo*

[Prefix chest      to.grow] → ‘anger’

(Agyekum, 2015, 94)

He adds that, metaphors *bo*, ‘chest’ and *akoma*, ‘heart’ in Akan support the notion that, many of the source domains of conceptual metaphor reflect patterns of bodily experience. In Akan, since *akoma*, ‘the heart’ resides in the chest, expressions connected with emotions are also derived from the nominal *bo*, ‘chest’. Accordingly, one of the unique cultural metaphors for anger in Akan is “anger is a weed” (Agyekum, 2015: 95). In most societies, the heart is considered the seat, location, or container where most feelings or emotions are based.

In *abofuo*, ‘anger,’ the chest is considered to be a weed that has the ability to grow and increase in size and height. This means that emotions are boiling up, and there is a loss of temper. Just like a weed, the substance in the chest (heart) sprouts or rises when the heart is heated. A weed can be trimmed when it grows too much; this is the metaphor used for when one is calmed down. It implies that anger can subside, and this is when the weed withers in the dry weather, and it is seen no more. However, as a weed, it can spring up again when the season changes; that is why people can get angry at different times and can then be controlled and calmed down. The metaphorical extensions in Akan that are derived from the body parts *bo*, ‘chest’ to express the emotions of anger, provocation, and patience are shown below in Table 3 (Agyekum, 2015: 93).

**Table 3.** Metaphorical extensions of *bo*

	Akan	Literal translation	English meaning
1.	<i>abohyew</i>	chest hot	wrath, rage, fury
2.	<i>Abohuru</i>	chest boil	provocation
3.	<i>Abofuo</i>	chest sprout	anger, fury, rage
4.	<i>Abote</i>	chest tearing	irritating
5.	<i>Abotee</i>	straight chest	courage

It is interesting to note that, the usage of *abofu* ‘chest sprout or rise’ as an expressive metaphor for anger is not as pervasive in Dangme as in Akan. The only example is indicated in Example (1) of Table 2. How such a term is used in Dangme is illustrated in the expressions below:

- (2) *Namo na abofu.* DAN  
 NamO.POSS get.PFV chest.rise.PFV  
*Lit.* “Namo’s chest risen.”  
 “Namo is angry or temper is high.”
- (3) *E abofu hí.*  
 3SG.POSS chest.rise good.NEG  
*Lit.* “His anger is not good.”  
 “He has a bad temper.”

It is evident from the data that the expressions of emotions of anger in both languages are derived from the conceptualization of the heart as an important seat of the emotions. How these manifest in the linguistic expressions of anger is illustrated in (4) and (5).

- (4) a. *Fusheini suhi yiyisi-ya.* DGB  
 Fusheini.POSS heart getup-PFV  
*Lit.* “Fusheini’s heart got up.”  
 “Fusheini became very furious.”
- b. *E tsui te.* DAN  
 3SG.POSS heart rise up  
*Lit.* “His/her heart got up.”  
 “His/her temper is high.”
- (5) a. *Adam suhi daa bii mi.* DGB  
 Adam.POSS heart PST be.hot FOC  
*Lit.* “Adam’s heart became hot.”  
 “Adam became very angry.”
- b. *Teye tsui dɔ la.* DAN  
 Teye.POSS heart be.hot fire  
*Lit.* “Teye’s heart is hot.”  
 “Teye is angry.”

We observe in Examples (4) and (5) that the two languages have the same preferences for the metaphorical conceptualization of the body parts in the expression of anger. Both languages conceptualize the heart getting up (4a), rising up (4b), and becoming hot (5a), (5b) to mean the expression of anger. It should be noted that the preferences for referencing these body parts is based on the physiological experiences in the varied sociocultural settings of the Dagbamba and the Dangme people (see Lakoff and Kövecses, 1987).

Agyekum (2015) is of the view that in Akan, particular body part terms relate to different emotions for different reasons: either because the body part is the perceived locus of the feeling, because of a lexicalized polysemy of a body part term,

or because of a metonymic association between a body part, its behavior, and its feeling. In Akan, most emotive expressions, such as love, patience, happiness, sorrow, fear, sympathy, generosity, hatred, and anger, normally reference the *akoma* ‘heart’ (Agyekum, 2015: 88).

Yu (2008: 136, 140) likewise notes that in both the physical and metaphorical senses, the heart is at the center of the body. It controls and coordinates the functions of other parts of the body, as well as the spiritual light. That is, in the Chinese language, the word *xin*, which primarily refers to the heart organ, also refers to it as the seat of thought and feeling. The heart is commonly understood as a container for thoughts and feelings, and the word ‘heart’ can refer to thoughts and feelings within this container via conceptual metonymy CONTAINER FOR CONTAINED. It clearly indicates that the heart plays an integral role in the conceptualization and expression of emotions across languages. Ikegami (2008) similarly points out that in Japanese, the heart is responsible for more emotionally oriented activities.

In addition to the heart as a body part for the conceptualization of anger, there are other body parts which are used to express the notion of anger in the two languages under consideration. The illustrations in Examples (6) and (7) indicate such a phenomenon for Dagbani and Dangme.

- (6) a. *Di che ka paya maa puuni taai buyim.* DGB  
 IMP.NEG CAUS CONJ woman DEF stomach catch fire  
*Lit.* “Don’t cause the woman’s stomach to catch fire.”  
 “Don’t irritate, provoke or make the woman angry.”
- b. *Koo wo ye muklii mi la.* DAN  
 IMP.NEG put 1SG.POSS stomach POSTP fire  
*Lit.* “Don’t put fire in my stomach.”  
 “Don’t irritate, provoke or make me angry.”
- (7) a. *Adam suyulo naa-ya.* DGB  
 Adam.POSS patience finish-PFV  
*Lit.* “Adam’s patience has finished.”  
 “Adam has gotten angry.”
- b. *Naki sane ne ɔ do mi.* DAN  
 Naki.POSS issue FOC DEF be.hot 1SG.OBJ  
*Lit.* “Naki’s issue has made me hot.”  
 “Naki’s issue made me angry.”

From Examples (6) and (7), it is clear that in addition to the heart being the major organ in the expression of emotions in Dagbani and Dangme, the chest, the stomach, and the self also play significant roles when it comes to anger expressions. In a study of Chinese body-part terms in the expression of emotions, Yu (2002)

asserts that, some (internal) organs are connected to some particular emotions; especially, the spleen is connected with anger, the liver with anger and sadness, intestines with anxiety and sadness, the stomach with anxiety, the lungs with sadness, and the gallbladder with fear, whereas the heart is related to vast number of emotions including anger. The same could be said for Dagbani and Dangme where the chest, the lung, the stomach, and the body/self as well as the heart are linked to the emotion of anger.

#### 4. Conceptualization of anger in Dagbani and Dangme

This section outlines both the universal and culture-specific aspects of conceptualizations of anger metaphors in Dagbani and Dangme. It considers the cultural models of anger conceptualizations as proposed by Lakoff and Kövecses (1987) and further modified by Kövecses (2000b) and Yu (1995). Lakoff and Kövecses (1987) emphasise the role of embodiment and bodily experiences in the conceptualization of anger. According to them, conceptual embodiment is the idea that the properties of certain categories are a consequence of the nature of human biological capacities and of the experience of functioning in the physical and social environment.

Kövecses et al. (2015:357) explore four languages and cultures, American English, Spanish, Turkish, and Hungarian, and postulate that two aspects of the concept of anger dominate: intensity and control. Intensity is expressed primarily by the container metaphor, while control is chiefly conceptualized as both container and opponent. The possessed object metaphor is highly frequent in all four languages because it is the way of capturing the existence of anger; that is, the fact that the state of anger actually exists in a given situation. People must have remarkably similar cultural models of anger: Anger as an emotional state exists in intense forms, and because of its high intensity, it needs to be controlled in some way.

Kövecses (2000a:161) posits that, human beings are containers and anger and its counterparts are some kind of substance (a fluid or gas) inside the container. He further suggests that in terms of metaphors, the body is the container for the emotions and anger is a substance (fluid/gas) in the container. He refers jointly to these two sub-metaphors as the container metaphor. This is backed by the data below in four languages (English, Chinese, Japanese, and Hungarian).

- (8) a. English  
He was filled with anger.  
Try to get your anger out of your system.

- b. Chinese  
*Man qiang fen nu.*  
 Full cavity anger.  
 “To have one’s body cavities full of anger.”
- c. Japanese  
*Ikari ga karadajyu ni jyumanshita.*  
 Anger in my body to be filled was.  
 “My body was filled with anger.”
- d. *Ikari o uchi ni himeta.*  
 Anger inside to lock in.  
 “I contained my anger.”
- e. Hungarian  
*Tele van dühvel.*  
 Full is düh-with  
 “He is full of anger.”
- f. *Nem tudta maga ’ban tartan dühét.*  
 Not could himself-in to keep anger-his.  
 “He could not keep his anger inside.” (Kövecses, 2000a: 161)

Kövecses (2000a) adds that a major attraction of the container metaphor for the purposes of conceptualising anger (violent passion) is that it captures a great number of aspects and properties of anger. It allows us to conceptualize intensity (filled with), control (contain), loss of control (could not keep inside), dangerousness (brim with), and expression (express/show). It indeed appears that no other conceptual metaphor associated with anger can provide us with an understanding of all these facets of anger.

Ogarkova and Soriano (2014: 156–157) posit that, in the metaphor system employed for the representation of ANGER concepts in English, Russian, and Spanish, the somatic aspects of the emotion are captured by several metaphors, such as THE BODY IS A CONTAINER, ANGER IS A PRESSURISED FLUID IN THE BODY-CONTAINER, ANGER IS A HOT FLUID IN THE BODY-CONTAINER, and ANGER IS AN ILLNESS. Two types of concordances were observed for the metaphor, as illustrated below:

- (9) a. There was fury in his eyes.  
 b. Sometimes Peter’s voice fills with anger.  
 c. Caroline felt a stir of anger within her breast.
- (10) a. Anger welled within her breast.  
 b. Indignation and righteousness burned in my soul, unquenchably so.  
 (Ogarkova and Soriano, 2014: 156–157)

Lakoff and Kövecses (1987) propose that conceptual metaphors and metonymies play a very significant role in the conceptualization of anger in English. They argue that the cultural model of the physiological effects of anger especially the ‘heat’ aspect forms the basis of the most general metaphor for anger. They identify two versions of the central metaphor of anger in English: ANGER IS HEAT AS APPLIED TO SOLIDS, so that anger relates to physiological effect and is represented as fire, heat, and redness, and ANGER IS HEAT AS APPLIED TO LIQUIDS, so that anger is represented as the heating of fluid in a container, which is characterised by internal pressure and agitation.

We apply this aspect of their model to account for what pertains in Dagbani and Dangme, as our observations indicate that the primary metaphorical expression of ANGER IS HEAT is largely applicable to the Dagbani and Dangme languages.<sup>2</sup> Similar aspects of these domains of anger conceptualization are demonstrated with conventionalised metaphorical expressions as follows:

#### 4.1 Anger is heat as applied to solids: Anger is fire

In the expressions of ANGER IS HEAT in Dagbani and Dangme, same metaphorical concepts of ANGER IS FIRE are derived as based on the conventionalised and cultural patterns of these languages. This is exemplified in (11) through (14).

- (11) a. *o suhi daa taai la buyim kɔŋ kpihi-bu.* DGB  
 3SG.POSS heart PST catch FOC fire unable quench-NOMZ  
*Lit.* “His/her heart caught fire beyond quench.”  
 “He/she became uncontrollably angry.” (Adam, 2010, 10)
- b. *Yo ɔ tsui wo la.* DAN  
 woman.POSS DEF heart put fire  
*Lit.* “The woman’s heart is set on fire.”  
 “The woman has lost her temper or she is provoked.”  
 (Ablorh-Odjidja et al., 1990, 80)
- (12) a. *Issah suhi daa bii mi.* DGB  
 Issah.POSS heart PST be.hot FOC  
*Lit.* “Issah’s heart became hot (more than two days ago).”  
 “Issah became very angry (more than two days ago).”

---

2. We take cognizance of the comment of one of the anonymous reviewers that the concept of anger could have alternatively been accounted for within the framework of conceptual metonymy. However, our choice of the CMT is not motivated by a claim of superiority of this theory over the conceptual metonymy.

- b. *Mate tsui do la saminya.* DAN  
 Mate.POSS heart be.hot fire very  
*Lit.* “Mate’s heart is very hot with fire.”  
 “Mate is very angry.”
- (13) a. *O puuni daa taa la buyim.* DGB  
 3SG.POSS stomach PST catch FOC fire  
*Lit.* “His/her stomach has caught fire.”  
 “S/he has become angry.” (Adam, 2010, 21)
- b. *Ye muklii/mi mi wo la.* DAN  
 1SG.POSS stomach POSTP put fire  
*Lit.* “My stomach has been set on fire.”  
 “I am angry.”
- (14) a. *A boo-ri la kpam niy-di buyim ni.* DGB  
 2SG pour-IMPV FOC oil put-IMPV fire inside  
*Lit.* “You are pouring oil onto fire.”  
 “You are infuriating someone.”
- b. *O wo ngme nu ke nge la mi wo-e* DAN  
 2SG take palm kernel oil to be fire inside put-IMPV  
*Lit.* “You are putting palm kernel oil onto fire.”  
 “You are infuriating them.”

From the expressions of ANGER IS HEAT in Dagbani and Dangme, it could be noted that the two languages share the same conceptual metaphor ANGER IS FIRE. The linguistic expressions used for these conceptualization are largely similar but with slight differences. Anger is conceptualized in Dagbani and Dangme as an agent of increasing temperature: *di* ‘to burn’ or *bi* ‘to be hot’ is used to focus on destructiveness to the person who gets angry and those they meet. This is obvious when some body parts such as the heart in (11), (12), and stomach (13) are conceptualized to be on fire in the expression of the emotion of anger. Examples (11) and (12) portray an instance where the heart becomes very hot to the extent of blazing with fire. Generally, fire is a helpful agent when it comes to its domestic and commercial purposes, but at the same time, it can be a very destructive force that can sweep away a whole edifice within the twinkle of an eye. This destructive nature of fire has been mapped onto that of a more abstract entity, which is anger. Here, the destructive activities of an angry or outraged person who is out of control is conceptualized as the harmful nature of fire when mishandled; when his or heart (temper) is cooled, he or she becomes aware of the destruction and pain he or she has caused. According to Yu (1995: 63), “intuitively or medically, excessive anger hurts certain aspects of one’s body.” In Tunisian Arabic, emotions are actually viewed as having direct causes of their own conceptualization. That

is, the conceptualization of an emotion is physiologically embodied because the effect talked about is a physical state produced in the body by the emotion in question (Maalej, 2004: 52). In view of this, Maalej (2004: 52) suggests that, because anger is known to cause, for instance, heat to mount in the body, this physiological effect of anger is likely to be the basis for its conceptualization as heat in many languages. However, this explains only the portion of the emotion whose conceptualization comes because of a physical cause-effect relation. Maalej (2004) adds that, there may exist emotions for which there is no known particular part of the body receiving any physiological change to it because of the emotion. To extrapolate from this, when the conceptualization of an emotion does not come because of a physical cause-effect relation, the conceptualization and the emotion are not physically close, which gives room for other kinds of embodiment.

Typically, the heart is perceived as the seat, the locus or point, the container where most feelings and emotive expressions are based (see Agyekum, 2015: 93; Maalej, 2004: 60). From Examples (11) and (12), the heart is conceptualized in both languages as an inflammable entity that easily catches fire. It is conceived in Example (14) as fire itself, and any other attempt to make the angry person angrier is said to be ‘pouring oil or kerosene into the fire’ (heart, anger).

## 4.2 Anger is heat as applied to liquids: A heat of fluid in a container

The second version of *ANGER IS HEAT* proposed by Lakoff and Kövecses (1987) is that *ANGER IS A HEAT OF A FLUID IN A CONTAINER*. This explains metaphorical expressions of anger as a substance in a container, which is usually a fluid under some sort of pressure. Kövecses (2020: 44) claims that the metaphor *ANGER IS HEAT* is based on the *BODY HEAT FOR ANGER* metonymy, and adds that, several conceptual metaphors of emotions are based on the metonymic connections between the elements as: “body heat and anger, lack of body heat and fear, physical closeness and love, upward motion and happiness, chest out and pride, blushing and shame” (Kövecses, 2020: 44).

In this instance, the identified body parts especially, *suhi* / *tsui* ‘heart’ in Dagbani and Dangme respectively is metonymically conceived as the container, which rises or swells because of the intensity and pressure of heat that is applied to it. The controlling aspect of anger, which is perceived as fluid is linked to a fluid in a container experiencing some level of heat.<sup>3</sup> This metaphorical expression is based on our everyday experience and knowledge of the activities around us. For instance, within the Dagbani and Dangme cultures, people are aware that when

---

3. Anger as a hot fluid in a container also pertains to languages such English, (Lakoff and Kövecses, 1987) and in Chinese, (Yu, 1995), among others.



heat is applied to a fluid in a covered container, it rises up, especially when it is boiling. Sometimes, when the heat is intense, it shakes the container and pushes the lid or cover. This causes the fluid to spill, drip or pour out of the container. Sometimes whatever is in the container forces to push or burst out of the container. These physical observations are what the Dagbamba and Dangme people extend to the expression of the nature of the emotion of anger. The examples in (15) through (18) illustrate THE FLUID-IN-A-CONTAINER metaphor for ANGER.

- (15) a. *Be suhi-ri daa dii yiyisi mi.*  
 3PL.POSS heart-PL PST unexpectedly rise.PFV FOC  
*Lit. "Their hearts have risen."*  
*"They were unexpectedly very angry."* (Napari, 2022, 21)
- b. *Maku na abofu.* DAN  
 Maku.POSS get.PFV chest.rise.PFV  
*Lit. "Maku's chest risen."*  
*"Maku is angry or temper is high."*
- (16) a. *Jona sapuyu n wuyi* DGB  
 Jona.POSS lung FOC lift.PFV  
*Lit. "Jona's lung is lifted."*  
*"Jona is very angry."*
- b. *Yiheyo ɔ muklii/mi mi fu.* DAN  
 Lady.POSS DEF stomach POSTP rise.PFV  
*Lit. "The lady's stomach has risen or swollen."*  
*"The lady is angry."* (Charway, 2017, 15)
- (17) a. *Tanihu suhi bii-ya* DGB  
 Tanihu.POSS heart be.hot-PFV  
*Lit. "Tanihu's heart has become hot (boiled)."*  
*"Tanihu is very furious."*
- b. *E tsui fia nge sane ɔ he.* DAN  
 3SG.POSS heart boil be.at matter DEF POSTP  
*Lit. "His heart boiled about the matter."*  
*"He got angry or pissed off about the issue."* (Adabah, 2007, 4)
- (18) a. *Abu ningbuna duy-ri mi.* DGB  
 Abu.POSS body boil/cook-IMPV FOC  
*Lit. "Abu's body is boiling or cooking."*  
*"Abu is very angry."*
- b. *Nyumu ɔ tsui hua.* DAN  
 Man.POSS DEF heart shake.PFV  
*Lit. "The man's heart shook."*  
*"The man is provoked."*

It could be concluded from the Examples (15) through (18) that the Dagbamba and the Dangme people conceptualize the heart, lungs, chest and the stomach as containers, which contain a fluid. The fluid in here is blood whose level raises in the heart (15a), (15b), the lungs and stomach (16a), (16b), and occupies the chest (17a). The blood boils and shakes the container (s) (17b), (18a), (18b), when the fluid in the heart or stomach experiences great intensity of heat under pressure (INTERNAL PRESSURE) and rises or swells. This can lead to such an individual bursting or exploding (with anger) as seen in the Examples (19) to (20).

- (19) a. *O ni yeli lala, di saha Naa Luro suhi yiyisi-ya* DGB  
 3SG.SUBJ PRT say that 3SG.INAN time Naa Luro heart rise-PFV.  
*Lit.* “When s/he said that, Naa Luro’s heart rose up.”  
 “When s/he said that, Naa Luro exploded with anger.” (Sulemana, 1970, 15)
- b. *E fle geje.* DAN  
 3SG.POSS flare up  
*Lit.* “She/he flared up.”  
 “He exploded or burst with anger.”
- (20) a. *O suhi n faai* DGB  
 3SG.POSS heart FOC escape  
*Lit.* “His/her heart has escaped.”  
 “He/she has exploded with anger.”
- b. *E je gia mi.* DAN  
 3SG out of gear POSTP  
*Lit.* “He/she is out of gear.”  
 “He/she has exploded with anger.”

This pressurized and heated anger is only cured when the boiling blood is cooled down. This also implies that when there is no heat the liquid in the container becomes cool and calm, which demonstrates that coolness and calmness are associated with the absence of anger as indicated in Example (21).

- (21) a. *O suhi maai do la tinja.* DGB  
 3SG.POSS heart cool lie FOC ground  
*Lit.* “His/her heart cooled down.”  
 “He/she is calmed/anger is down.”
- b. *E tsui he jo* DAN  
 3SG.POSS heart POSTP cool/down  
*Lit.* “His/her heart cooled down.”  
 “He/she is calmed/anger is down.”

Maalej (2004: 52) asserts that in Tunisian Arabic, anger is conceptualized according to the conceptual metonymy, ANGER IS THE HEAT OF A FLUID IN A CONTAINER. This can be seen in the Example (22).

- (22) a. *Talla3-l-i id-damm l-raaS-i.*  
 He lift-PERF to me the blood to head my.  
 He lifted blood up to my head.  
 “I was flushed with anger.”
- b. *Rawwib-l-I damm-i*  
 He half-boil-PERF to me (like an egg) blood my.  
 He made my blood half-boil like a half cooked egg.  
 “He made my blood simmer.”
- c. *Fawwar-l-I damm-i.*  
 He steam-PERF to me blood my.  
 He made my blood steam.  
 “I was fuming.”

(Maalej, 2004: 57–58)

Note that for Akan, Ansah (2013: 79) claims that the fluid in the container is ‘not specified’, in contrast to English (‘you make my blood boil’), and Tunisian Arabic above. To Ansah, there is no fluid in the container since no specific fluid has been mentioned in the Akan conceptualization and expression for anger. Nonetheless, the use of a verb like *huru* ‘to boil’ (*ne bo rehuru so* ‘his chest is boiling’, i.e. he is angry) suggests that water or some other liquid is present (Ansah, 2013: 79).

In some cases the metaphor is of a solid in the container, as seen in Tunisian Arabic. Maalej (2004: 57–58) demonstrates that beside the ANGER-AS-A-FLUID-IN-A-CONTAINER, Tunisian Arabic also offers ANGER IS THE HEAT OF A SOLID IN A CONTAINER where the solid substance is the brain. The brain’s solid state seems to preclude some anger expressions from occurring. For instance, the brain boiling is not a possible metaphor as boiling is predicated of liquid substances. The heat-of-a-solid-substance only allows the brain to half-cook. This can be seen below in Example (23).

- (23) a. *Rawwib-l-I muxxi.*  
 He half-boil-PERF (like an egg) to me brain my.  
 He half-boiled my brain to me like a half cooked egg.  
 “He caused my brain to cook like a half-boiled egg.”
- b. *Haraq-l-i muxx-i.*  
 He burn-PERF to me brain my.  
 He burnt my brain to me.  
 “He caused my brain to burn.”

As observed in (20a and 20b) above for Dagbani and Dangme, a similar report is made of Chumburung where as indicated by Hansford (2005), the people of Chumburung also conceptualize the heart as container, which contains a boiling liquid, anger. Examples of such expressions are illustrated in (24) and (25).

(24) *Mɔ dun a fwii.* = “My heart has boiled.” = i.e. “I was angry”

(25) *Fɔ a fwii mɔ duñ.* = “you have boiled his heart”, i.e. “You have made him angry.” (Hansford, 2005: 164)

The notion of calmness in Chumburung is expressed using the human body (Hansford, 2005). This is illustrated (26) adapted from the work of Hansford.

(26) a. *mo eye a yuri mo.*  
my body PST cool me  
“I am calm / at peace.”

b. *fo a kra fo eye.*  
you PST catch your self  
“You controlled yourself.”

(Hansford, 2005: 148)

As in other languages, this metaphorical conceptualization of the emotion of anger is in line with the physiological and cultural concept of the Dagbamba and the Dangme people. In contrast to Dagbani, Schaefer (2015) reports that Safaliba, (a Mabia language) has a lexicalised word for the abstract noun ‘anger’ which is not a metaphor. However, the expression to calm someone down from anger does require a metaphor as illustrated in (27).

(27) *Hmm, ɛ kabɛ naaŋ ŋ barɛ nɛɛ, ka a naanɛ boŋ zaɔ koronɛ ba dɛɛɔɔ.*  
‘Well, you have calmed me down (broken my leg), otherwise, nothing would have saved him.’ (Sherris et al., 2021: 153)

Interestingly, Schaefer (2015:102) notes that, the lexeme for ‘anger’ in Safaliba *suuru*, resembles the lexeme for ‘heart’ in Dagbani (*/suhi/*); however, the word for ‘heart’ in Safaliba does not in any way resemble */suuru/* or */suhi/*. On the other hand, Safaliba has a number of ‘chest’ metaphors, i.e. *nyɛbirii* (‘whole/single-chest’ or ‘boldness’), *dibi nyɛa* (‘press chest’ or ‘console’), *nyemaare* (‘chest-coolness’ or ‘happiness’).

There are similarities and differences in the conceptualization of anger in Dagbani and Dangme. In the first place, a major similarity is that both languages largely use body parts to derive metaphorical expressions for the expression of the emotion of anger. Some of these body parts are the heart, the lungs, the chest, and the stomach. There is evidence of cultural embodiment that runs across both languages in the conceptualization of anger. Both languages clearly show that the human body plays a pivotal role in the construal and expression of the emo-

tion of anger. As the data suggest, conceptually Dagbani and Dangme share common, specific body part(s) where anger may be felt or contained: the heart, and the body. In addition, both languages share central conceptual metonymies and metaphors from which other sub-metonymic and metaphorical anger conceptualizations emanate. These include, BODY HEAT STANDS FOR ANGER, with the specific conceptual metaphors in Dagbani as *suhi bi* 'heart hot' *suhi taai buyim* 'heart caught fire', and in Dangme as *mi mi wo la* 'stomach is hot (with fire)', *tsui wo la* 'heart is set on fire', which are projected to the construal of the emotion of anger; and THE BODY IS A CONTAINER FOR EMOTIONS also gives rise to specific conceptual source domain metaphors in Dagbani *ningbuna dui* 'body boiling/being cooked', and Dangme *tsui fia* 'heart boiling', as specified in Tables 1 and 2. We observed that these central metonymies and metaphors for anger conceptions were premised on the physiological effect of anger. It is the symbolism assigned to the human body that helps the Dagbamba and the Dangme people to unravel the understanding that exists within themselves and their sociocultural environment.

There are, however, cultural variations in how the different parts of the body are deployed in the construal of the source domain. For instance, in the metaphorical projection of the body heat as anger in Dagbani, anger could be felt in the heart and stomach, whereas in Dangme, it is felt in the heart, the stomach, chest and the body/self. In the same vein, when the body is conceptualized as a container for anger, different specific body parts come to play in such conceptualizations for anger. In Dagbani, anger is contained in the heart, the lungs, and the body, whereas it is contained in the stomach, the heart, and the body in Dangme. Aside from that there are differences in how the heart appears in the expression of anger in Dagbani and Dangme (see Example (18a) and (18b)). Literally, in Dagbani, the heart is said to lie on the ground when one is calmed after anger, whereas it is tactilely cooled in the Dangme expression of calmness after anger.

It should be noted that these bodily containments of anger also pertain to the English and Akan languages. In English, anger is conceptualized as being contained in the eye, face, neck, chest, guts, nerves and blood; but in Akan, anger is metaphorically contained in the chest, the heart, the back of the head, the stomach, and the entire body (Ansah, 2013: 79; Lakoff and Kövecses, 1987). Notably, the heart and the body also appeared in Akan to be containers of anger in the conceptualization of anger, as was also seen in Dagbani and Dangme. This is likely to be because these languages form part of the Niger-Congo family of languages, and, as indicated in the literature, these languages are said to emanate from the same ancestry and hence have the tendency to exhibit the same source domain of emotion conceptualizations (see Dzokoto & Okazaki, 2006).

## 5. Findings and conclusion

This paper has explored the conceptualization of anger in Dagbani and Dangme using CMT as an analytical tool. It has been established from the analysis that internal body organs like the lungs and the heart (which is cross-linguistically viewed as the loci of emotions) and external body parts such as the chest and the stomach are involved in the conceptualization of the emotion of anger. There are similarities and differences in the conceptualization of anger in Dagbani and Dangme. In terms of similarities, both languages use human body parts in the construction of metaphorical expressions of anger, and the two languages share common conceptual metonymies and metaphors from which other sub-metonymic and metaphorical anger conceptualizations are drawn. The findings of this study show that although there are subtle differences between Dagbani and Dangme in the expression of feelings in the body, they share common conceptual metaphors in the expressions of anger. The presence of these metaphors in the cultures of Dagbani and Dangme indicates that these cultures share a great deal in their conceptualization of anger. Notwithstanding the similarities pointed out above, these languages also exhibit some differences in the conceptualization of anger. For instance, whereas in Dagbani, anger could be felt in the heart, in Dangme, it is felt in the heart, the stomach, and even the body/self.

In addition, when the body is conceptualized as a container for anger, certain specific body parts are employed in the conceptualizations for anger. In Dagbani, anger is contained in the heart, the lungs, the chest, and the body, but in Dangme, anger is contained in the stomach, the heart, and the body. We conclude that the similarities are attributable to the universality of conceptual metaphors and similar human experiences, while the differences in some of the metaphorical expressions can be attributed to language-specific differences in the cultures of these languages.


## Acknowledgements

This paper was first presented at the 10th World Congress of African Linguistics (WOCAL), Leiden University, June 7–12, 2021 and later at the Institute of African Studies (IAS) Virtual Seminar Series, University of Ghana, Legon, July 20, 2023. We are thankful to the audience for their comments. Finally, we are grateful to Paul Schaefer for checking this manuscript for Language.

## Abbreviations used in this paper include

1SG	First Person Singular	NEG	Negative particle
2SG	Second Person Singular	NOMZ	Nominaliser
3SG	Third Person Singular	PRT	Particle
CAUS	Causative morpheme	PFV	Perfective particle
CONJ	Conjunction	POSS	Possessive pronoun
DEF	Definite pronoun	POSTP	Postposition
FOC	Focus particle	PL	Plural
IMP	Imperative morpheme	PST	Past Tense
IMPFV	Imperfective marker	SG	Singular
INAN	Inanimate	SUBJ	Subject








## References

- Abubakari, K. (2018). Segment deletion as a morpho-phonological process in Dagbani compound word formation. *Journal of West African Languages* 45(1), 155–176.
- Ablorh-Odjidja, J., Tetteh, N., Apronti, E., Accam, T., Pupilampu, E., & Atrokpa I, B. (1990). *Dangme ngmami bo. (The Writing of Dangme)*. Revised Edition. Accra: Bureau of Ghana Languages.
- Adabah, J. (2007). *Ninyegu (Creative writing/Apongma)*. University of Education, Winneba. Department of Ga-Dangme Education. (Unpublished).
- Adam, P. (2010). Dagbaŋ Nam Piligu [The history of Chieftaincy in Dagbaŋ]. University of Education, Winneba. Department of Gur-Gonja Education. (Unpublished).
-  Agyekum, K. (2015). Metaphor of anger in Akan. *International Journal of Language and Culture* 2(1), 87–107.
-  Akkök, A. E. (2017). Turkish metaphors of anger. *Ankara Üniversitesi, Dil ve Tarih-Coğrafya Fakültesi Dergisi* 57(1), 302–326.
- Ansah, G. N. (2013). Culture in embodiment: Evidence from conceptual metaphors/metonymies of anger in Akan and English. *Compendium of cognitive linguistics research* 2, 63–82.
- Alhassan, Y. N. (2022). Ti daa bi bang [We did not know]. University of Education, Winneba. Department of Gur-Gonja Education. (Unpublished).
- Ansah, G. N. (2011). The cultural basis of conceptual metaphors: The case of emotions in Akan and English. In eds. K. Kaufhold, S. McCulloch, and A. Tominc, *Papers from the Lancaster University Postgraduate Conference in Linguistics & Language Teaching 2010*, pp. 2–25. Lancaster University.
- Bible Society of Ghana. (2018). Bible in Dangme. Retrieved from <https://www.bible.com/bible/2265/GEN.1.DANGME> on 30/07/2021.
-  Bisilki, A. K., & Yakpo, K. (2021). ‘The heart has caught me’: Anger metaphors in Likpakpaln (Konkomba). *Sociolinguistic Studies* 15(1), 65–89.
- Charway, M. (2017). Aseewe (Creative writing/Apongma). University of Education, Winneba. Department of Ga-Dangme Education. (Unpublished).


- doi** Dzokoto, V.A. & Okazaki, S. (2006). Happiness in the eye and the heart: somatic referencing in West African emotion lexica. *Journal of Black Psychology* 32(2), 17–140.
- Esenova, O. (2011). Metaphorical conceptualization of anger, fear and sadness in English (Doctoral dissertation, Eötvös Loránd University).
- doi** Foolen, A. (1997). The expressive function of language: Towards a cognitive semantic approach. In eds. S. Niemeier and R. Dirven, *The language of emotions: conceptualization, expression, and theoretical foundation*, pp.15–32. Amsterdam: John Benjamins.
- Ghana Statistical Service. (2012). *2010 population and housing census, district analytical report*. Accra: Ghana Statistical Service.
- Hansford, G. (2005). My eyes are red: Body metaphor in Chumburung. *Journal of West African Languages* XXXII.1–2 32(1), 135–180.
- doi** Ikegami, Y. (2008). The heart: What it means to the Japanese speakers. In eds. F. Sharifian, R. Dirven, N. Yu, and S. Niemeier, *Culture, body, and language: Conceptualizations of internal body organs across cultures and languages*, pp.169–190. Berlin: de Gruyter.
- King, B. (1989). The conceptual structure of emotional experience in Chinese. Ph.D. thesis. Ohio State University.
- doi** Kövecses, Z. (2020). An extended view of conceptual metaphor theory. *Review of Cognitive Linguistics* 18(1), 112–130.
- doi** Kövecses, Z. (2015). The “container” metaphor of anger in English, Chinese, Japanese and Hungarian”. In ed. Z. Radman, *From a Metaphorical point of view: A Multidisciplinary Approach to the Cognitive Content of Metaphor*, pp.117–146. Berlin: De Gruyter.
- doi** Kövecses, Z. (2014). Conceptualising emotions. A revised cognitive linguistic perspective. *Poznan Studies in Contemporary Linguistics* 50(1), 15–28.
- Kövecses, Z. (2010). *Metaphor, A practical introduction*. (2nd ed.) New York: Oxford University Press.
- doi** Kövecses, Z. (2008). Metaphor and emotion. In ed. R. W. Gibbs, Jr., *The Cambridge handbook of metaphor and thought*, pp.380–396. New York: Cambridge University Press.
- doi** Kövecses, Z. (2005). *Metaphor in culture: Universality and variation*. Cambridge: Cambridge University Press.
- doi** Kövecses, Z. (2002). Folk and expert theories of emotion and the disappearance of psychology. *Theoria et Historia Scientiarum* 6(1), 332–346.
- doi** Kövecses, Z. (2000a). The concept of anger: Universal or culture-specific? *Psychopathology* 33(4), 159–170.
- Kövecses, Z. (2000b). *Metaphor and emotion: Language, culture, and body in human feeling*. Cambridge, UK: Cambridge University Press.
- doi** Kövecses, Z. (1991). “Happiness: A definitional effort”. *Metaphor and Symbolic Activity* 6(1), 29–46.
- doi** Kövecses, Z. (1990). *Emotion concepts*. Berlin and New York: Springer-Verlag.
- doi** Kövecses, Z., Arika, A. E., Blanco-Carrion, O., Nucz, E., Szabó, R. & Szelíd, V. (2015). Anger metaphors across languages. A cognitive linguistic perspective. In eds. R. Heredia and A. Cieslicka, *Bilingual figurative language processing*, pp. 341–367. Cambridge: Cambridge University Press.




- doi Lakoff, G. (1993). How metaphor structures dreams: The theory of conceptual metaphor applied to dream analysis. *Dreaming* 3(2), 77.
- doi Lakoff, G. (1987). *Women, fire and dangerous things: What categories reveal about the mind*. Chicago: University of Chicago Press
- doi Lakoff, G., & Johnson, M. (1987). The metaphorical logic of rape. *Metaphor and Symbol* 2(1), 73–79.
- Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to western thought*. New York: Basic books.
- Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago, IL: The University of Chicago Press.
- doi Lakoff, G., & Kövecses, Z. (1987). The cognitive model of anger inherent in American English. In eds. D. Holland and N. Quinn, *Cultural models in language and thought*, pp.195–221. Cambridge, UK: Cambridge University Press.
- doi Maalej, Z. (2004). Figurative language in anger expressions in Tunisian Arabic: An extended view of embodiment. *Metaphor and Symbol* 19(1), 51–75.
- doi Matsuki, K. (1995). Metaphors of anger in Japanese. In eds. J. Taylor and R. E. MacLaury, *Language and the cognitive construal of the world*, pp.137–151. Berlin: de Gruyter.
- McPherson, L. & Prokhorov, K. (2011). Structural correlates of liver expressions in Dogon emotional vocabulary. In ed. G. C. Batic, *Encoding emotions in African Languages*, pp.38–56. Muenchen: Lincom.
- doi Mikolajczuk, A. (1998). The metonymic and metaphorical conceptualization of anger in Polish. In eds. A. Athanasiadou and E. Tabakowska, *Speaking of emotions: Conceptualization and expression*, pp.153–191. Berlin: De Gruyter.
- Munro, P. (1991). ANGER IS HEAT: Some data for a cross-linguistic survey. Unpublished Manuscript. Department of Linguistics, University of California at Los Angeles.
- Napari, M. S. (2022). Yela nyaanja [Had I known]. University of Education, Winneba. Department of Gur-Gonja Education. (Unpublished).
- Ogarkova, A. & Soriano, C. (2014). Emotion and the body: A corpus-based investigation of metaphorical containers of anger across languages. *International Journal of Cognitive Linguistics* 5(2), 147–179.
- doi Schaefer. (2015). Hot eyes, white stomachs: Emotions and character qualities in Safaliba metaphor. In eds. E. Piirainen and A. Sherris, *Language endangerment: Disappearing metaphors and shifting conceptualizations*, pp.91–110. Amsterdam and Philadelphia: John Benjamins.
- Semino, E. (2008). *Metaphor in discourse*. Cambridge: Cambridge University Press.
- doi Sherris, A., Schaefer, P., & Kosiaku, E. (2021). Resonating embodiment: Everyday metaphorical abstractions in Safaliba. *Sociolinguistic Studies* 15(1), 135–156.
- Soriano, C. (2003). Some Anger Metaphors in Spanish and English. A Contrastive Review. *International Journal of English Studies* 3(2), 107–22.
- Sulemana, T. (1970). Naa Luro mini o Bihi [Naa Luro and his Children]. *Bureau of Ghana Languages*. Accra.
- doi Sweetser, E. (1990). *From etymology to pragmatics: Metaphorical and cultural aspects of semantic structure*. Newcastle, UK: Athenaemum Press Ltd.

-  Taylor, J. R., & Mbense, T. G. (1998). Red-dogs and rotten mealies: How Zulus talk about anger. In eds. A. Athanasiadou & E. Tabakowska, *Speaking of emotions: Conceptualisation and expression*, pp.191–226. Berlin: Mouton de Gruyter.
- Tran, H. T. (2018). *Conceptual structures of Vietnamese emotions*. University of New Mexico. UNM Digital Repository. [https://digitalrepository.unm.edu/ling\\_etds/58](https://digitalrepository.unm.edu/ling_etds/58). Last accessed: 20.05.2021.
- Wierzbicka, A. (2002). The body in description of emotion. *Pragmatics and Cognition* 10(1–2), 1–25.
- Wierzbicka, A. (1999). Emotional universals. Language design. *Journal of Theoretical and Experimental Linguistics* 2, 23–69.
-  Wierzbicka, A. (1992a). *Semantics, Culture, and Cognition: Universal Human Concepts in Culture-Specific Configurations*. Oxford: Oxford University Press.
-  Wierzbicka, A. (1992b). Defining emotion concepts. *Cognitive Science* 16, 539–581.
- Yu, N. (2014). Embodiment, culture, and language. In ed. F. Sharifian, *The Routledge handbook of language and culture*, pp.227–239. London: Routledge.
-  Yu, N. (2008). Metaphor from body and culture. In ed. R. W. Gibbs, Jr., *The Cambridge handbook of metaphor and thought*, pp.247–262. New York: Cambridge University Press.
-  Yu, N. (2004). The eyes for sight and mind. *Journal of Pragmatics* 36, 663–668.
-  Yu, N. (2002). Body and emotion: Body parts in Chinese expression of emotion. *Pragmatics & Cognition* 10(1–2), 341–367.
-  Yu, N. (1995). Metaphorical expressions of anger and happiness in English and Chinese. *Metaphor and Symbolic Activity* 10(2), 59–92.

## Address for correspondence

Samuel Alhassan Issah  
Faculty of Ghanaian Languages Education  
Gur-Gonja Department  
University of Education, Winneba  
Ghana  
samuel\_issah@yahoo.com  
 <https://orcid.org/0000-0003-3479-5406>

## Co-author information

Jonathan Tanihu  
Department of Languages  
Accra College of Education  
jonathanehimo@gmail.com  
 <https://orcid.org/0000-0002-5502-657X>

## Publication history

Date received: 9 June 2022

Date accepted: 9 March 2024

Published online: 2 April 2024