
The Cultural Conceptualization of ‘Yii’yam “Blood” in Fulfulde

Ahmadu Shehu

Abstract

This paper studies the cultural conceptualization of the body part term ‘yii’yam ‘blood’ in Fulfulde from a cognitive linguistic approach. The embodiment hypothesis rightly assumes that bodily experiences significantly influence linguistics conceptualization and, therefore, form a great part of linguistics expressions. Even though Fulfulde has been extensively described, most of the works were structural in nature, leaving the cognitive aspects largely unexplored. Based on various metaphors and metonymies, the term ‘yii’yam ‘blood’ has been found to be extended into various linguistic domains, such as kinship/relations, character trait, behaviour, among others.

1) Introduction

Fulfulde is categorized as a West-Atlantic, Niger-Congo language, spoken by dozens of millions of Fulɓe, one of the most dispersed and diverse ethnic groups in Africa. The Fulɓe, who also call themselves Pular/Pulaar, and known as Fulani (Hausa/English), Pul (German), Peul (French), Fellata Arabic, are found in 22 African countries, but are more densely populated in the Western part of the continent.

As one of the major trans-border languages, Fulfulde and the Fulɓe have attracted the interests of linguists and anthropologists

over the centuries, culminating to a vast literature on the language and the culture of the people. Given the linguistic models in vogue over the decades, most of the studies on the language happened to be structural, with emphasis on describing the grammatical system of the language, while relegating the cognitive aspects to the background.

Although a number of studies have been conducted on Fulfulde from cognitive linguistics approach (cf. Shehu, 2018, 2020, 2021, among others), studies on these aspects of Fulfulde linguistics are far from being sufficient. Thus, this paper complements the previous studies on this aspect of the language by applying the Cultural Linguistics model to study the semantic extension of the body part term ‘yii’yam ‘blood’ into various conceptual domains. The data in this paper was collected from various Fulfulde texts, where over thirty expressions involving the term ‘yii’yam ‘blood’ were elicited. These expressions were then categorized into literal and figurative senses, from which the examples provided in this paper were selected. The figurative expressions were then grouped based on their domain of usage, and analysed based on the metaphors and metonymies used in the expressions and the meaning derived from the various usages.

Fulfulde is extremely diverse, with the dialect continuum traversing from the easternmost to the westernmost parts of the African continent. This naturally means great diversity and variations among speech communities, amounting to a yet unknown number of dialects. It is interesting to note, however, that despite this centuries of geographical, social and ecological separation of the speakers of the language, Fulfulde remains greatly intelligible among the dialects.

For academic purposes, scholars (cf. Arnott 1970) identify six dialect areas across the continent, *vis*: Fuuta Tooro, Fuuta Jaloo,

Masina, Adamawa, Sokoto and Central Northern Nigeria, the last three being Nigerian dialects of the language. The data in this paper, however, is based on the Central Northern Nigerian dialect which seems to form a convergence between the eastern and western dialects, as it is mostly more intelligible for both ends of the dialect continuum.

2) The embodiment hypothesis

The *embodiment hypothesis* has become a prominent model of cognitive linguistics analysis. I, therefore, reproduce a brief explanation of the hypothesis from previous works, here. It is well-known that cognitive linguistics investigates the connection between human cognition and language, both at the mental and linguistic levels. Research in the field over the decades have yielded sufficient evidence on the role of human body in linguistic conceptualization and encoding. This subtheme of the field is often referred to as embodiment hypothesis.

This idea, which was first proposed by Lakoff and Johnson (1980) and further developed by subsequent research within and beyond cognitive linguistics (see for instance, Csordas 1994; Gibbs 2006; Kövecses 2005; Kraska-Szlenk 2014; Rohrer, 2007; Sharifian et al. 2008; McPherron & Ramanathan 2011; Yu 2008, among others) is widely investigated across various languages of the world, with substantial positive results of its validity in terms of linguistic conceptualization and expression.

The theoretical foundation of linguistic embodiment is known as experientialism, which assumes that the human bodily experience within its environment is the foundation of human linguistic conceptualization. Understandably, human experience has to be encoded via cognitive mechanisms that allow for the

processing of these experiences within the human mental faculty, and further aiding these refined experiences to understand various concepts connected to the experiences, and to finally develop linguistic constructions to express these concepts.

There are, therefore, two levels of conceptualization: mental concepts and the linguistic expressions that instantiate and communicate these experiences. It is at this level that cognitive linguists talk of metaphor and metonymy; i.e. mental, cognitive processes that allow for human cognitive conceptualization and linguistic expression.

On the one hand, metaphor – as understood in cognitive linguistics – is a process in which one cognitive domain is understood in terms of another domain. In this process, the source domain A is mapped onto the target domain B in order that B is understood and expressed in terms of A. Metonymy, on the other hand, involves accessing a part of a conceptual domain via another part of the same domain.

Although bodily experience and cognitive mechanisms aid linguistic conceptualizations, they do not account for the variations that exist among speech communities. Thus, whereas all humans have basically the same body structure, languages do not have the same forms and kinds of conceptualizations, because environment, and therefore, experiences, differ significantly.

The difference in experiences within the environment lead to cultural variations among speech communities, which in turn, accounts for the variation in conceptualizing and expressing various linguistic notions. This would mean that languages will not have the same pattern and systems of linguistic embodiment despite the sameness in physical human body.

The variations in linguistic embodiment across languages is accounted for by cultural conceptualization models (cf. Sharifian,

et. al. 2008), which by default encode varied experiences in accordance with the unique culture of the speakers of a given language. That is why, for instance, a given body part term, say the heart which is found in all human bodies, would be conceptually exploited to understand and express varied abstract concepts, based on the prevailing, distinct culture of the speakers of a given language.

Thus, while the body provides a universal template for the understanding and expression of abstract concepts, cultural conceptualizations account for the unique experiences of speech communities, which are instantiated in linguistic expressions. Thus, it is from the perspective of the *embodiment hypothesis* that this paper studies the conceptualization of the term 'yii'yam' 'blood' in Fulfulde.

3) Previous studies on the term “blood”

There is a huge body of literature on body part terms based on various linguistic approaches and perspectives, and on various languages of the world. Some of these studies are generic, in that, they focus on conceptual domains, so that various body part terms are involved in their data and analysis. The term for 'blood' appears regularly in these kinds of works. For instance, seminal works on cognitive linguistics such as Kövecses (1990), Lakoff & Kövecses (1987), Turner (1977), among others, have all reported the prevalence of 'blood' metaphors in various languages.

In particular, Charteris-Black (2001) shows that the term for 'blood' is used in the conceptualization of various emotional concepts in Malay. Both positive and negative emotions are expressed in relation to "blood". Expressions such as *darah manis* 'to deal easily with danger' (lit. 'blood sweet'), *darah merah* 'brave'

(lit. 'blood red'), darah perwira 'very brave' (lit. 'blood hero'), darah hati 'annoyed' (lit. 'blood liver'), darah panas 'short tempered' (lit. 'blood hot'), darah kering 'cruel' (lit. 'blood dry'), darah tersembur 'startled' (lit. 'blood ejected from the mouth'), and darah muda 'impetuous' (lit. 'blood young') are found to be widely entrenched in the language.

Kraska-Szlenk (2004) provides extensive examples of the figurative usage of the term for 'blood' in the domain of kinship/relation across languages. The Polish term *krewny* 'kin, relative' and *pokrewieństwo* 'kinship' derive from *krw* 'blood', *więzy krwi* 'ties of blood (i.e., kinship), as in the expressions *w ich żyłach płynie ta sama krew* 'they are related' (lit. 'the same blood flows in their veins'), *moja krew* (lit. my blood) to speak about one's child, etc. are all figurative usages of the body part term 'blood' in this domain.

Kraska-Szlenk (2004) provides further cross-references on the occurrence of similar conceptualizations in other languages, such as in Swahili *uhusiano wa kidamu* 'blood (i.e. kinship) relation', *huyu ni damu yangu* '(s)he is my blood (i.e., child or other close relative)', *Damu nzito kuliko maji* (proverb) 'blood is thicker than water'. Amharic's *däm*, German's *Blut*, and Turkish's *kan* are all terms for 'blood' reported to have been figuratively extended into the domain of kinship/relations.

Similar studies report the use of the terms for blood in various conceptual domains. Maalej (2008) reports the instantiation of TEMPERAMENT IS BLOOD metaphor in Tunisian Arabic, found in expressions, such as *damm-u sxun* (lit. his blood is hot) 'he is hot-blooded' and *damm-u baarid* (lit. his blood is cold) to mean an individual is easily irritable, and not irritable, respectively.

However, other cognitive studies are specifically on the body part term for 'blood' in a given language or domain of

conceptualization. A good example of this category is a comprehensive corpus-based study of the usage of the term ‘blood’ in the Bank of English conducted by Charteris-Black (2001) which concluded that three fundamental conceptual domains of usage are widely found in English.

These domains, referred to as “conceptual keys” by Charteris-Black (2001) are potentially universal, in that, they have been found to be relevant in many languages of the world. These are domains of ancestry, life and temperament, which are based on three metonymies, namely; BLOOD FOR ANCESTRY; BLOOD FOR LIFE AND BLOOD FOR TEMPERAMENT.

Subsequent studies on the term in various languages and cultures seem to agree with the idea that the term for blood is primarily – but not only – extended into these domains. For instance, Owiredu and Adu (2020) studied the metaphoric and metonymic structures of the term ‘blood’ in the Bible, exploring the various figurative senses in which the term was used in the scriptures. Taking expressions from the Bible, the study highlights the various context in which the term infers meanings and was used to express distinct linguistic concepts.

Kóczy (2020) studied the term Vér ‘blood’ in Hungarian, from a cognitive perspective. The term Vér ‘blood’ as would be seen from her paper is entrenched in Hungarian, given that it is used for the conceptualization and expression of various concepts in the language. According to her findings, the domains in which the term Vér ‘blood’ is extended in Hungarian include the domains of colour, death/war, kinship, human nature, life force/essence, emotions and intensity.

In a similar approach, Zibin (2021) analysed blood metaphors and metonymies in Jordanian Arabic, and further provided a comparison of Arabic conceptualizations with those of

English. Based on Kövecses’s (2010) notion of main meaning focus, Zibin analysed a 40,000 words specialized corpus of Jordanian Arabic, the results of which were used for comparative analyses with other languages studied in the literature.

The results of the study indicate that the body part term for ‘blood’ is used as the source domain for the conceptualization of various domains, mainly character traits, essence and emotion. These conceptualizations were found to be widely reported across other languages, such as English.

Another comparative study of the body part terms for blood is Bosman and Elsabe (2021) who studied the cognitive conceptualization of the terms for blood in Afrikaans and Northern Sotho. Deploying dual methodological approaches, the authors report that the body part terms for blood in the two languages were found to be extended mostly into the domains of life, emotions and inheritance. The conceptual metaphors underlying these extensions include LIFE IS BLOOD, EMOTIONS ARE BLOOD and INHERITANCE IS BLOOD.

Interestingly, Simó (2011) provides a similar cross-linguistic study of the metaphoric and metonymic conceptualizations of the terms for blood, but this time in two major European languages: English and Hungarian. Adopting a corpus-based approach, Simó shows that American English and Hungarian exhibit similarities and differences in the extension of the terms for blood. Based on the results, she suggests “the usage of mixed corpora, and imply a vital need to investigate the context of metaphorical expressions in order to bring to light the conceptualizations inherent in them”.

4) The semantic extensions of ‘yii’yam ‘blood’ in Fulfulde

4.1 ‘Yiiyam ‘blood’ in the domain of kinship/relations

In physical life, blood is the most fundamental part of human procreation. It is also known to sustain the human physical body. Given the role of blood in human procreation, the term for blood is used to conceptualize and express kinship and lineage in various languages. In Fulfulde, the term ‘yii’yam ‘blood’ is extended to the domain of kinship and family relations as exemplified in the expressions (1a – d).

- 1 (a) d um ‘yii’yam mab b e
it blood 3PL.POSS
‘he/she is their family’
- (b) d um ‘yii’yam ngoot-am
it blood same-
‘they are relatives’
- (c) ‘yii’yam jinngan
blood support
‘relatives support each other’
- (d) God d o wanya-taa ‘yii’yam mum
someone hate-FUT.NEG. blood 3sg.poss
‘one cannot hate his kinsmen’

In the above expressions, the term ‘yii’yam ‘blood’ is used to refer to family relations, kinship and even ethnic/tribal lineage. When one is said to be “of their blood” as in (1a), for instance, they are said to belong to a particular family, and when two or more people are “of the same blood”, they belong to the same extended family (1b). But, one’s blood goes beyond the immediate family, as kinsmen and women of the same ethnic background are expected to stand up for one another, as in (1c), and to never hate each other, as in (1d).

4.2 ‘Yiiyam ‘blood’ in the domain of character traits

Like other internal and external body part terms, the term ‘yii’yam ‘blood’ plays a role in the Fulfulde understanding and expression of character traits. It has been reported in previous studies (Kraska-Szlenk 2014), that understanding and fully encoding the various sub-domains of human character traits requires the exploitation of various body parts, according to the various aspects and nature of the traits to be expressed.

Thus, the term ‘yii’yam ‘blood’ has been found to express both positive and negative notions that are related to human character traits. Positive traits are those characters perceived to be acceptable, even appreciable in the culture of a society, which are often encoded and expressed *via* various embodied conceptualizations.

- 2 (a) ‘Yii’yam mbel-d am
blood sweet-CL22
‘loveable personality’
- (b) ‘yii’yam maako mbel-d am
blood 3SG.POSS sweet-CL22
‘he/she is a loveable person’
- (c) O woodi ‘yii’yam mbel-d am
CL1 have blood sweet-CL22
‘he/she is likeable/loveable’
- (d) Suka wel-a ‘yii’yam-jo
bachelor sweet-FUT blood-CL1
‘he is a charming, charismatic young man’

In the above expressions (2a – d), for instance, the term ‘yii’yam ‘blood’ denotes positive traits, as the expression in (2a) refers to ‘being loveable’. Apart from the BLOOD FOR LOVE metonymy, this conceptualization is foregrounded by GOOD IS SWEET metaphor

instantiated in many other languages of the world, the reverse of which is instantiated by expressions in the next section. It is, therefore, cogent that someone whose blood is “sweet” is loveable, and that the one with a “sweet” blood is attractive, as instantiated in (2b – d).

Like positive traits, some forms of negative traits are conceptualized and expressed *via* the term ‘yii’yam ‘blood’. Negative traits are perceived to be unappreciated, sometimes even unacceptable, and therefore, discouraged in the society. These forms of traits can also be perceived as unwarranted, a taboo, or even offensive and would sometimes lead to prejudicial tendencies.

- 3 (a) ‘Yii’yam mettu-d am
blood bitter-CL22
‘dislikeability’
- (b) O mett-a ‘yii’yam-jo
CL1 bitter-FUT blood-CL1
‘he/she is dislikeable’
- (c) Buduure mett-a ‘yii’yam bana Caro...
spinster bitter-FUT blood like Caro
‘an unlikeable lady like Caro’
- (d) Suka mett-a ‘yii’yam bana
Hammadu...
bachelor bitter-FUT blood like Hammadu
‘an unlikeable bachelor like Hammmadu...’

The BAD IS BITTER metaphor instantiated in (3a) foreground the negative perception that leads to the understanding that “unlikeability” is the result of having a “bitter” blood, as in (3b), which is perceived as offensive and a taboo, with some prejudicial tendencies against someone who’s said to have a “bitter” blood, as in (3c – d).

4.3 ‘Yii’yam ‘blood’ in the domain of behaviour

Human behaviour is one of the abstract domains for which body part terms are exploited to conceptualize and express. In loose terms, the behavioural domain is close to character, but there are conceptual variations that distinguish these two domains. While traits are usually acquired aspects of one’s life, which the individual may not have control over or the ability to change, behaviour is a function of habit and attitude that could be changed or controlled by the individual.

- 4 (a) ‘Yii’yam ngul-ɗ am
blood warm-CL22
‘active blood’
- (b) ‘Yii’yam maako ngul-ɗ am
blood 3SG.POSS warm-CL22
‘he/she is active’
- (c) Wul-uki ‘yii’yam maako hokk-i mo
warm-FUT.MID. blood 3SG.POSS give-PAST
3SG.POSS
‘his/her success is due his/her hard work’
- (d) Wai! ‘Yii’yam maako ngul-ɗ am masin
Wai! blood 3SG.POSS warm-CL22 a lot
‘what! He/she is an active, hardworking person’

Like traits, some behaviours are positively perceived and encouraged in the society. Some of these kinds of behaviours are conceptualized *via* the term ‘yii’yam ‘blood’. For instance, the expression in (4a) instantiate the ACTIVE IS WARM metaphor which leads to the understanding of a warm blood as being active, and thus having a hot blood is to be hard working, active, fast, etc. as in (4b),

which in turn leads to achievement and success, as in (4c), a very welcome attitude in the society, as in (4d).

When the Fulbe bodily experience taught them that something warm, especially a liquid is perceived as positive, as is seen in various ontological metaphors, it did not fail to teach them that a cold liquid – blood in this instance – should be perceived as negative, as these are opposing concepts.

- 5 (a) ‘Yii’yam peew-d am
blood cold-CL22
‘laziness/weakness’
- (b) ‘Yii’yam maako peew-d am
blood 3SG.POSS cold-CL22
‘he/she is lazy’
- (c) Nga feew-a ‘yii’yam-wa...
CL12 cold-FUT. blood-CL12
‘he/she [argumentative] is lazy/slow’
- (d) God d -el feew-a ‘yii’yam-yel
person-CL3 cold-FUT. blood-CL3
‘he/she [diminutive] is a lazy/slow person’

Thus, attitudes and behaviours that are opposed to those discussed in examples (4) are conceptualized through the WEAK IS COLD metaphor, so that a “cold” blood is weak, as in (5a), and that the one with such kind of “blood” is lazy, as in (5b), and is, therefore, talked of in pejorative, disrespectful manner, as in (5c – d).

4.5 ‘Yiiyam ‘blood’ as bad luck/accident

Bad luck and misfortunes are mostly perceived as affecting the blood. This may have stemmed from the human experience with disease and physical harm. When an accident occurs, the most prominent physical experience out of a wound or any such harm is

blood. This experience has led to the conceptualization and direct expression of accidents and physical harm as “blood disease”.

- 6 (a) ‘Yii’yam nyaw-ii
 blood disease-PAST
 ‘destined to be harmed’
- (b) ‘Yii’yam maako nyaw-i waf-i o
 yah-i ton
 blood 3SG.POSS disease-PAST did-PAST CL1
 go-PAST there
 ‘he/she went there because he/she was destined to be
 harmed’
- (c) ‘Yii’yam to nyaw-ii doole wurt-o
 blood if disease-PAST compulsory come
 out-FUT.MID
 ‘a destined accident/harm must happen’
- (d) ‘Yii’yam nyaw-d am
 blood disease-cl22
 ‘bled blood’

When someone’s blood is said to be “diseased”, that person is afflicted by physical harm or an accident, as would be seen in (6a). Thus, being where an accident or harmful incidence occurred is the result of having a “diseased blood”, as in (6b), which must be let out of the body willingly or unwillingly, as in (6c). Therefore, a blood lost in an accident or harmful incident is a “diseased blood”, as in (6d).

5) Conclusion

This paper analyses the semantic extension of the body part term ‘yii’yam ‘blood’ from a Cultural Linguistics perspective. It has been shown in previous research that the human embodied experiences

shape our cognitive conceptualization, which in turn, provide the basis for the understanding and expression of linguistic concepts.

On these basis, it has been found that the term '*yii'yam*' 'blood' serves as the source domain for the conceptualization and expression of various domains. These include the domains of kinship/relations, character traits, attitude/behaviour, and respect/obey. These conceptualizations are foregrounded by various metaphors and metonymies that allow for the mapping of bodily experiences unto conceptual domains in order to aide human understanding and expression of concepts related to the domains.

References

- Bosman, N. and Taljard, E. (2021). A Cross-Linguistic Study of BLOOD Metaphors in Afrikaans and Northern Sotho. *Language Matters* 52(1):3-29
DOI:10.1080/10228195.2020.1854331
- Charteris-Black, J. (2001). Blood sweat and tears: A corpus-based cognitive analysis of ‘blood’ in English phraseology. *Studi Italiani di Linguistica Teorica e Applicata*, 30(2), 273–287.
- Csordas, T. J. (ed.). (1994). *Embodiment and Experience: The Existential Ground of Culture and Self*. Cambridge: Cambridge University Press.
- Gibbs, R. W. Jr. (2006). *Embodiment and Cognitive Science*. Cambridge: Cambridge University Press.
- Kóczy, J. B. (2020) “Light-Blooded, Blood-Fumed and Blood-Rich: Cultural Conceptualizations of Vér ‘Blood’ in Hungarian”. In *Łódź Studies in Language* (Vol. 66). *Language, Heart and Mind: Studies at the intersection of emotion and cognition*. (pp.139–160.). Peter Lang.
- Kövecses, Z. (1990). *Emotion Concepts*. New York: Springer.
- Kövecses, Z. (2002). *Metaphor: A Practical Introduction*. Oxford: Oxford University Press.
- Kövecses, Z. (2005). *Metaphor in Culture: Universality and Variation*. Cambridge: Cambridge University Press.
- Kraska-Szlenk, I. (2014). *Semantics of Body Part Terms: General Trends and a Case Study of Swahili*. LINCOS Studies in Semantics 6. München: LINCOS Europa.
- Lakoff, G., & Mark, J. (1980). *Metaphors We Live by*. Chicago and London: The University of Chicago Press.
- Lakoff, G. & Kövecses, Z. (1987). “The cognitive model of anger inherent in American English”. In D. Holland & N. Quinn

- (Eds.), *Cultural Models in Language and Thought* (pp. 195–221). New York, Cambridge University Press.
- Maalej, Z. (2004). Figurative language in anger expressions in Tunisian Arabic: An extended view of embodiment. *Metaphor and Symbol*, 19(1), 51–75.
- Maalej, Z. (2008). “The heart and cultural embodiment in Tunisian Arabic”. In F. Sharifian, R. Dirven, N. Yu & S. Niemeier (Eds.), *Culture, Body, and Language: Conceptualizations of Internal Body Organs across Cultures and Languages* (pp. 395–428). Berlin, New York: Mouton de Gruyter.
- McPherron, P. and Ramanathan, V. (2011). *Language, Body, and Health*. Berlin: Mouton de Gruyter
- Newman, P. (1991). “A Century and a Half of Hausa Language Studies”. In Rufa’i, A. (ed.), *Nigerian Languages: Yesterday, Today and Tomorrow*. Kano: Centre for the Study of Nigerian Languages, Bayero University Kano, 1–18.
- Owiredo, C. and Adu, F. (2020). Metaphorical and Metonymic Conceptualization of Blood. *International Journal of Humanities and Social Studies*.
- Pawlak, N. (2014). “Notions of SELF in Hausa”. In Brenzinger, M. & Kraska-Szlenk, I. (eds.). *The Body in Language: Comparative Studies of Linguistic Embodiment* (pp. 140–160). Leiden: Brill.
- Rohrer, T. (2007). “Embodiment and Experientialism”. In Geeraerts and Cuyckens (eds.), *The Oxford Handbook of Cognitive Linguistics*. Oxford: Oxford University Press, 25–47.
- Sharifian, F., Dirven, R., Yu, N., & Niemeier, S. (eds.). (2008). *Culture, Body, and Language: Conceptualizations of Internal Body Organs across Cultures and Languages*.

- Berlin/New York: Mouton de Gruyter.
<https://doi.org/10.1515/9783110199109>
- Shehu, A. (2018). “Body Part Terms as Sources of Spatial Markers in Fulfulde and Hausa”. In: J. Jurewicz (ed.), *Orientaliści Kognitywnie*. Warsaw: Elipsa, 137–146.
- Shehu, A. (2019). “The Conceptualization of ‘mouth’ in Hausa and Fulfulde”. In Nina Pawlak (ed.), *Linguistics Evidence of Cultural Distance: Hausa in Cross-Cultural Communication*. Warsaw: Elipsa.
- Shehu, A. (2021). What do EYES mean to a Pullo? Body, cognition and cultural conceptualization. In: Melike Baş and Iwona Kraska-Szlenk (Eds.), *Embodiment in Cross-Linguistic Studies: The ‘Eye’*. Brill Studies in Language, Cognition and Culture. Brill
- Simó, J. (2008). It’s not all about the brain: A cross-linguistic exploration of body part metaphors in chess. *The Ninth Conference on Conceptual Structure, Discourse, and Language (CSDL 9)*, October 2008, Cleveland, Ohio.
- Simó, J. (2011). Metaphors of *blood* in American English and Hungarian: A cross-linguistic corpus investigation. *Journal of Pragmatics*, 43, 2897–2910.
- Simons, G. F., & Charles, D. F. (eds.). (2017). *Ethnologue: Languages of the World*, Twentieth edition. Dallas, Texas: SIL International.
- Turner, V. (1977). *The ritual process: Structure and antistructure*. Ithaca, NY: Cornell University Press.
- Will, I. (2019). “The conceptualization of HEAD among the Hausa based on verbal and nonverbal representations”. In: Kraska-Szlenk, I. (ed.), *Embodiment in Cross-Linguistic Studies*. Leiden/Boston: Brill, 157–182

- Yu, N. (2008). “The Chinese Heart as the Central Faculty of Cognition”. In: Sharifian, F. et al. (eds.), *Culture, Body, and Language: Conceptualizations of Internal Body Organs across Cultures and Languages*. Berlin/New York: Mouton de Gruyter, 131–168.
- Zibin, A. (2021). Blood metaphors and metonymies in Jordanian Arabic and English. *Review of Cognitive Linguistics Vol. 19:1 (2021) pp. 26–50*.

Ahmadu Shehu
Kaduna State University, Kaduna,
Nigeria.