

UNDERSTANDING NEGATION IN ZIMBABWEAN SIGN LANGUAGE: A FOCUS ON GRAMMATICAL AND NON-MANUAL MARKERS

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Abstract

This study explores negation in Zimbabwean Sign Language (ZSL), addressing the limited documentation of African sign languages. Using qualitative analysis of dialogues, discourse, and folklore, I examine how manual and non-manual features combine to express negation. Findings show ZSL employs manual signs (e.g., NO, NOT) paired with obligatory non-manual markers like headshakes, lowered eyebrows, and squinted eyes. Syntactic flexibility allows negation pre- or post-verbally, influenced by SOV word order, though headshakes remain obligatory across clauses. Unique ZSL features include bound negative morphemes (e.g., HAVE NOT) and formal-informal sign variants shaped by context and pragmatics. Comparative analysis reveals overlaps with ASL, SASL, and BSL but highlights ZSL's distinctiveness, such as grammatical non-manual negation and facial reinforcement of inherently negative signs (e.g., WRONG). The study challenges generalisations from dominant sign language typologies, advocating for deeper investigation of understudied languages to refine cross-linguistic theories. By detailing ZSL's negation system, the research contributes to linguistic typology, enhances understanding of ZSL grammar, and underscores the need for language-specific studies to prevent overgeneralisation. It also emphasises implications for deaf education and policy in Zimbabwe, urging pedagogical approaches aligned with ZSL's structural nuances. This work underscores the necessity of recognising regional sign languages' unique features in both academic research and educational frameworks, promoting linguistic diversity and culturally responsive practices.

Keywords: Zimbabwean Sign Language (ZSL), negation, manual markers, non-manual features, syntactic typology, sign language linguistics.

Introduction

Zimbabwe is a multilingual country. Amber (2017), for example, records thirty-five languages. These are English, Shona, Ndebele, Chewa, Chibarwe, Kalanga, Khoisan, Kunda, Lozi, Manyika, Nambya, Ndau, Nsenga, Shangani, Sotho, Tshwao, Tonga, Tswa, Tswana, Venda, Xhosa, Afrikaans, Chinese, Dutch, French, German, Greek, Gujarati, Hindi, Italian, Polish, Portuguese, Chilapalapa, sign language and American Sign Language. Among these languages are main, minor, immigrant, pidgin and sign languages. The list includes Sign language and American Sign Language. This is the case when the *Constitution of Zimbabwe (Amendment No. 20) Act, 2013* granted official recognition to only sixteen languages. Chapter 1, 6 (1) 17 of the charter reads:

The following languages, namely Chewa, English, Chibarwe, Kalanga, Khoisan, Nambya, Ndau, Ndebele, Shangani, Shona, sign language, Sotho, Tonga, Tswana, Venda and Xhosa are the officially recognised languages of Zimbabwe.

As evident in the extract, not all the languages that Amber (2017) identifies are recognised in the *Constitution* as official languages. American Sign Language, for example, is not listed as well. The study could also not find any other study that lists its existence and the users of ASL in Zimbabwe. The current study focuses on the Sign language officially recognised as listed in the *Constitution*. In Zimbabwe, there are approximately 300 000 Deaf and Hard of Hearing people spread over the country who use SL to communicate (Gwarisa, 2018). It is also vital to highlight that ZSL has no generic links with any of the existing spoken languages in the country (Musengi, 2013).

The current study analyses and describes the expression of negation in Zimbabwean Sign Language (ZSL). Several definitions of Sign language have been proffered by scholars. According to Tomasello (2006), Sign

Language (SL) refers to a communication system which relies on a person's use of gestures, namely, hand shapes, body orientation, hand movement, and facial expressions to express ideas and thoughts. Kiingi (2014: 24) provides comparative definition of SL and spoken languages stating that, "in spoken languages, articulation of language occurs through the mouth and its accompanying articulators and the reception of language occurs primarily via the ears (auditory and aural modality), whereas SL employs the hands, face and upper body for the purposes of articulation and the eyes as the primary receptor (i.e. the manual or visual modality)." Sandler (2005) defines SL in terms of organisation of the language and regards it as a system of communication comprising of phonology, morphology, syntax, semantics, and pragmatics, among others. In other words, Sandler's (2007) argument shows that SL is a language in its own right. This study considers the three definitions given above and regards SL as a communication system articulated and received through the manual and visual modality. SL is linguistically organised into phonology, morphology, syntax, semantics and pragmatics. The study provides a detailed analysis of the expression of negation in ZSL.

Negation Patterns in Sign Languages

The syntactic feature negation has been described in several studies including Stokoe (1960), Yang and Fischer (2002) and Aarons (1994). Aarons (1994) notes that the non-manual correlate of the syntactic feature neg may consist of a side-to-side headshake, frown, brow squint, wrinkling of the nose and a raised upper lip. Yang and Fischer (2002) record four major ways of expressing negation. Firstly, syntactic negation uses negative signs such as *not* or *none*; secondly, some lexical signs appear with an inherently negative meaning, such as *wrong* or *ugly*. For example, when the negative head shake accompanies signs like these, it reinforces the negation already in the sign rather than negating something already negative. Thirdly, signs change their movement to show negation, either by a modification e.g., ASL *good/bad*, *want/don't want* (Woodward, 1974), or by reversing the movement, as in ASL *with/without* (Greene & Dicker 1989). Fourthly, non-manual signals, including both headshakes and frowns, are documented in many SLs (Baker-Shenk and Cokely, 1980 for ASL; Sutton-Spence and Woll, 1999 for BSL).

Some SLs (e.g., BSL: Sutton-Spence and Woll, 1999; Swedish Sign Language: Bergman, 1995; Sign Language of the Netherlands: Coerts, 1992) may have two distinct types of negative facial expression. International Sign Language (IntSL), a contact variety recently developed among deaf researchers, has headshake and manual negation gestures such as shrugging (Webb and Supalla, 1994). In addition, IntSL also has negative quantifiers (such as "no," "nothing" or "none" in English), negative markers (e.g., NOT), and negative modals (e.g., CANNOT) (Yang and Fischer, 2002).

In terms of placement, Fischer (2006) states that the basic clause negator NOT generally precedes the VP in ASL. The scholar, however, also mentions the possibility of clause-final placement of NOT when the rest of the sentence is topicalised, as shown in 1.1 (Fischer, 2006).

1.1) $\frac{top}{FATHER\ SICK}\ \frac{neg}{NOT}$ ASL

'Father isn't sick.' (Though one might think he was)

Pfau and Quer (2003) present some aspects of the syntax of sentential negation for both LSC and DGS which offer insights into this study. In these languages, the underlying word order is SOV, and head shake negation is obligatory. However, a crucial difference between ASL on the one hand and LSC and DGS on the other concerns the status of the [+neg] feature. In ASL, the [+neg] feature is syntactic, while in LSC and DGS it is morphological, and is considered a featural affix. The [+neg] feature is considered a featural affix in LSC and DGS because it can have different morphosyntactic properties depending on what is grammatical in the SL (Pfau and Quer, 2003).

Yang and Fischer (2002) report that while some aspects of negation in Chinese Sign Language (CSL) (e.g., non-manual signals, negative signs, and structures of negative sentences) are similar to those found in other SLs, CSL displays some unique features. One is a negative handshape, phonetically equivalent to the finger-spelled letter **I** in ASL. It also seems that a horizontal handwave and a side-to-side headshake have equivalent negative force, but the two cannot be used simultaneously. Yang and Fischer's findings contradict consensus concerning SL based on ASL, BSL, and IntSL.

These findings on structures of negative words and sentences which show that CSL has a unique grammatical system justify continued studies on SL in individual languages to avoid inaccurate generalisations about SL negation. These contradictions point to the need for even more studies in individual languages that would shed more light on this aspect. This study, therefore, becomes essential to contribute evidence to these debates.

As with other SLs, South African Sign Language (SASL) expresses negation using both manual and non-manual features (De-Barros and Sieborger, 2016). Using a Principle and Parameters approach and Government and Binding Theory, De-Barros and Sieborger (2016) analyses the syntactic scope of negation in SASL and observes that side-to-side headshake, as a non-manual feature, appears to be the chief clausal negator in SASL, with a clause-final manual negative particle, 'NOT', playing a secondary role. Klima (1964) cited in De-Barros and Sieborger (2016) are some of the earliest theorists to provide a detailed analysis of SL negation using generative grammar. They posit that negation can take place in one of the two ways: either through sentential/clausal negation or constituent/local negation. Syntactic scope differentiates these two forms of negation. Sentential negation occurs where 'the verb of the clause and consequently the whole clause is negated' (Antzakas and Woll, 2006:35), as in the sentence, 'Peter did not go to school today'. Meanwhile, constituent negation is 'where a part of the clause other than the verb is negated' (Antzakas and Woll, 2006: 35), as in the sentence 'He went to the beach, not to school.' Although significant advances have been made in studying negation in different SLs, there remains need to investigate it in ZSL.

Methodology

Angouri's (2010) framework for linguistic research emphasises methodological pluralism, advocating for approaches that align with the research question while accounting for modality-specific constraints - a crucial consideration for SL studies. This study employs a qualitative research methodology to explore the expression of negation in Zimbabwean Sign Language (ZSL). Data collection involves recording naturalistic conversations among a diverse group of ZSL users, including fluent signers and those with varying proficiency levels, to ensure a representative sample. Participants were recruited from different regions of Zimbabwe, and informed consent obtained to maintain ethical standards. Podesva and Sharma (2014) underscore the need for ethical transparency, especially when working with marginalised communities e.g. (Deaf signers). The recordings included spontaneous dialogues and structured interviews, as well as folklore narratives that capture culturally significant expressions of negation. The transcriptions were made in a visual format that accurately reflects both manual signs and non-manual features, such as facial expressions and body movements, following established conventions in sign language linguistics.

Data analysis mines thematic coding of the transcribed material to identify various strategies used in expressing negation. This included examining manual signs, non-manual markers, and the syntactic placement of negation within sentences. The findings are then compared with existing literature on negation in other sign languages, such as American Sign Language and South African Sign Language, to highlight both similarities and unique features of ZSL. Additionally, a pragmatic analysis was conducted to understand how context influences the use of negation, considering social dynamics and cultural implications. To validate the findings, member checking was employed, allowing participants to review interpretations of their signed discourse, while peer debriefing sessions with fellow researchers helped refine the analysis. This comprehensive methodology provides a nuanced understanding of negation in ZSL, contributing to the broader field of sign language linguistics and informing educational practices for the deaf community in Zimbabwe.

Context for studying SL morphosyntactic constructions

One area which literature considers crucial in linguistic studies that concern SL is the context of study. Meir (2004) espouses that syntax can be best understood within a pragmatic context. The scholar notes that the interaction between syntax and pragmatics in determining the facial expression and head posture in questions and negative sentences, for example, is of paramount significance. Meir (2004) argues that depending on pragmatic contexts, some non-manual features are suppressed. This argument is supported by Johnston and Schembri (2007) who find that the raised brows of polar interrogatives may not show up if the signer has additional intentions. The negative head shake is suppressed in negative imperatives, while a sentence or phrase may be negated in Auslan by shaking the head from side to side while the sentence is being signed. Other non-manual signals may accompany this headshake, such as frowning, squinting or pouting.

Scholars such as Valli et al., (2011) and Altamira (2012) note how corpus data cannot be used exclusively when the aim is to describe and analyse a natural language, since not everything that is in the language is precisely contained within the corpus. Valli et al., (2011) and Altamira (2012) argue that the structure of SLs may differ depending on the setting; that is where, and when a conversation takes place. Furthermore, they also report that in informal settings, for example, many two-handed signs may be signed with one hand. Valli et al., (2011) avers that one of the tasks of the discourse analyst is to identify the boundaries of units of discourse as it occurs, when two or more people communicate. Another task is to determine which “grammatical” rules apply on the joining of these units into a coherent discourse, much like syntacticians study the rules by which grammatical sentences are formed. These sentiments inform and justify the current study which utilises discourse contexts.

Sign Language discourse as a context for study of the linguistic structure of Sign Language

According to Johnston and Shembri (2007), discourse in SL studies refers to any coherent series of signed sentences such as a conversation, story or lecture. Yet another scholar, Bucholtz (1999) cited in Holmes and Meyerhoff (2003: 44), proffers that, “discourse is language in context, that is, language as it is put to use in social interactions.” These definition(s) clarify how discourse has been defined in terms of form, meaning and function. Winston and Roy (2015) note yet another definition where discourse refers to a broader range of social practices that include non-linguistic and non-specific instances of language use. Winston and Roy (2015) argue that the creator or presenter and the audience of discourse have an impact on the meaning of the message. This view implies that all discourse has an audience; even monologues presented on video with no apparent audience, are presented with the audience and its potential responses in mind. Every choice of sign or word, every choice of facial expression, intonation, shift of body stance, or eye gaze communicates something (Winston and Roy, 2015). So, every aspect of communication is part of discourse analysis. Further, Winston and Roy (2015) state that every choice is related to the discourse and meaning that has emerged previously, whether a minute ago, or a conversation last week, or last year. These choices create texture and cohesion throughout the text/discourse and help the listeners in understanding the underlying coherence of the message as it is created.

Other studies have brought variation to the conceptualisation of the term discourse, distinguishing between discourse-focused analyses and discourse-based analyses (Dachkovsky and Sandler, 2009). Discourse-focused analyses consider the broader text, context and intentions of interactants, exploring how the parts build the meaning of the whole. Dachkovsky and Sandler’s (2009) analysis of prosodic features in Israeli Sign Language and Herrmann’s (2010) analysis of eye blinks and their role in the prosodic structuring of sign utterances in German Sign Language are examples of studies that consider a broader discourse focus. Discourse-based analyses, on the other hand, focus on discrete elements taken from discourse (sign units, space, head nods, leans, etc.). These are exemplified by studies that investigate eye gaze and verb agreement as discrete features within discourse (Thomson, Emmorey, and Kluender, 2006), eye blinks (Wilbur, 1994), and utterance boundaries (Brentari and Crossley, 2002; Fenlon et al., 2017). These features all contribute to meaning, and such discourse-based analyses are essential for understanding discrete elements of language and interaction; they provide windows into the structures and functions of discourse as a whole.

Negation patterns in ZSL

The study observed that in ZSL, there are a multiplicity of negative devices when expressing negation. Like in ASL, Auslan and SASL, ZSL has a variety of manual negation signs which are accompanied by non-manual components in different ways. Details are presented, analysed and discussed below.

Manual negation in ZSL

Data drawn from Sign language dialogues shows that manual negation in ZSL uses a variety of special signs as shown below.

(1.2a) **Question in ZSL** BREAKFAT $\frac{NMM}{EAT}$

‘Did you eat breakfast?’

(b) **Response in ZSL** NO

(c) **Question in ZSL** PREGNANT YOU

‘Are you pregnant?’

(d) PREGNANT YOU

‘Are you pregnant?’

(e) **Response in ZSL** NEVER

(f) PREGNANT ME NOT

‘I am not pregnant’

The negative response NO and NEVER in ZSL is not typically used in a sentence but it is generally used to answer a YES/NO question. NO is a manual interjection borrowed from ASL and its phonology derives from the ASL letters of the alphabet N and O. Tai (2008) reports that while borrowed words in spoken languages are subject to phonological regulations of the receiving language, the whole sign can be borrowed from one sign language to another sign language without much alteration. For example, the sign NO is the same across ASL, SASL, UgSL and ZSL. This tallies with Zeshan’s (2004) observations that most SLs make use of uninflected negative particles. The negative particle NO appears to be the most common and was found in all the 38 SLs analysed in Zeshan’s (2004) typological study. SL users are often easily influenced by the grammar of spoken languages (Zeshan, 2004). Similarly, the strategy that the deaf people use for negation is borrowed from negative markers in English. The use of the manual negator NO in Zimbabwe by the deaf is more widespread among the partially deaf and educated deaf people who are proficient in written English. NO is a strong form of negation in ZSL. The sign NO is used on its own as a negative interjection which may be used as a means of emphasis or as an answer to a closed question. Further, to make a simple negative response in ZSL, one can use either a manual negator NO (1.3a) and a non-manual headshake negator in (1.3b) during informal conversations as exemplified below.

(1.3a) **Question in ZSL** EAT WANT

‘Do you want to eat?’

Response in ZSL

(b) ZSL NO ‘NO!’

(c) ZSL $\frac{hs}{NO}$

Thus, ZSL negation signs are accompanied by non-manual components in different ways, as non-manuals may be obligatory/optional and vary in form depending on the negative sign used.

The sign NOT is one of the manual negation signs in ZSL and it is used in a wide variety of negative contexts, including refusal and denial as shown in example (b). When the negative sign is articulated, the open palms of both hands face down, with alternating movements from left to right combined with lowered eyebrows and squinted eyes as non-manual markers. In ZSL, for a negative sentence to be grammatical, the headshake can either occur over just the manual negation sign or over the whole clause as exemplified in (d) and (e) below.

(d) ZSL CHIPO CAR BUY $\frac{hs}{NOT}$

‘Chipso is not buying a car’

(e) ZSL CHIPO $\frac{hs}{NOT BUY CAR}$

‘Chipso is not buying a car’

A manual sign alone is not enough to negate the sentence in ZSL but negating a sentence with headshake alone is grammatical as shown in example (e). This confirms Liddell’s (2003) comments that when the manual sign is absent, the non-manual features spread over the verb phrase (VP) as shown below.

(1.4a) ZSL $\frac{hs}{CHIPO\ BUY\ CAR}$

‘Chipo is not buying a car’

Negation in ZSL can be placed before the verb and after the verb as shown in example (1.5a) where the headshake is placed over the negator NOT before the verb and the headshake can also be placed after the verb.

(1.5a) ZSL CHIPO $\frac{hs}{NOT}$ BUY CAR

‘Chipo is not buying a car’

(b) ZSL $\frac{hs}{CHIPO\ CAR\ BUY}$

‘Chipo is not buying a car’

What distinguishes the placement of pre-verbal/post-verbal negation in ZSL is relevant to the word order which can be SVO, OSV and SOV. This confirms what Sandler and Lillo-Martin (2006) discovered about preverbal and postverbal placement. They suggest that the postverbal position of a negative item often coincides with the final position of the sentence. The underlying word order for ZSL is SOV and headshake negation is obligatory.

ZSL discourses drawn from ZSL folklores also established that ZSL conveys negation through negative signs such as NOBODY and NOTHING as shown below.

(1.6a) ZSL DEAF PEOPLE CARE $\frac{puffed\ cheeks}{ZERO\ ZERO}$

‘Nobody cares for the deaf’

(b) ZSL MAN KNOW $\frac{puffed\ cheeks}{ZERO\ ZERO}$

‘The man knows nothing’

The negative particles NOTHING and NOBODY have the same linguistic description. It is either signed as none or zero with a flat O hand, palm facing out, in front of the chest, flat O hands move in a circular motion with puffed cheeks as non-manual markers occurring over the entire manual negation signs.

Further to this, data gathered from ZSL discourses also showed that the sign NEVER is a strong form of negation that requires the presence of headshake as shown below.

(1.7a) ZSL SEX HIM YOU

‘Did you sleep with him?’

(b) ZSL SEX HIM YOU

‘Did you sleep with him?’

(c) Response $\frac{hs}{NEVER}$

When the negative sign NEVER is articulated, the horizontal open palms face each other moving up and down with sideways headshaking as non-manual features. Moreover, the sign for SEX in example (1.7a) is used in formal settings and the sign in example (b) is a colloquial sign for sex and is used in informal communication and commonly by the young generation within the deaf community. Thus, in many pairs of signs in ZSL that have the same meaning, one is used in formal settings and the other signs in informal settings. This confirms Valli et al.’s (2011) observation that the physical and social context in which a sentence is produced plays a central role in helping to understand what the meaning is. In fact, it is important to know who is producing the sentence, what their relationship is to the person seeing or hearing the sentence and where the sentence is produced. Yule (1996) argues that pragmatics should also consider aspects of contexts such as who people are talking to, when, where and under what circumstances that determines the way they say and what they want to say.

Discourse segments extracted from ZSL videos downloaded from organisations for the Deaf websites show that the negation sign I DON'T CARE expresses a mixture of NOT BOTHERED and I DON'T CARE as shown in example (1.7a) and comprises shrugged shoulders, sometimes performed with the hands turned, palms-up, as well as a facial expression and body posture which convey negation.

(1.8a) ZSL ME NOT $\frac{sh}{BOTHERED}$

'I don't care'

NOT BOTHERED negation sign is sometimes performed only on the face (using a frown). It exclusively has a non-manual variant. The citation form of NOT-BOTHERED looks very similar to the shrugged shoulders gesture commonly used amongst hearing people to mean 'I DON'T KNOW' or 'I DON'T CARE.'

ZSL also uses bound morphemes to convey negation for example HAVE NOT, LIKE NOT as exemplified below.

(1.9a) ZSL ME EAT $\frac{hs}{ZERO}$

'I have not eaten'

(b) ZSL WAR LIKE $\frac{hs}{ZERO}$

'I don't like war'

Bound negative morphemes often occur with verbs of experience or sensation (Sutton-Spence and Woll, 1999). The bound morpheme NOT is attached to the verb *eat* and *like* as shown above and they cannot stand on their own. A characteristic of derivational morphology is also not compounding (HAVE NOT). Meir (2005) argues that these signs are suffixations as explained above because the suffix (NOT) attaches to a wide range of base forms for example, LIKE and HAVE, whereas compounding is more restricted. The base determines the number of hands in the suffix, whereas this is less common in compounds. The suffix determines the category of the final form, whereas in compounds for example, in Israeli Sign Language the first element is the head. The addition of the suffix NOT to HAVE and LIKE changes the meaning of verb HAVE which is to possess something, to a sign which means not in possession of something and the verb LIKE which means to enjoy doing something to dislike doing something. Thus, as Napoli (2019) observes, affixation is uncommon in SLs and many SLs are derivational in nature, including ZSL.

Non-manual negation (NMN) in ZSL

Negative non-manual features are articulated using head movements, facial expressions and movements of the body and for ZSL, they play a critical role in negation. The most common strategy for negating sentences in ZSL is through the use of head movements as shown below.

(2.1a) ZSL I $\frac{hs}{TEACHER}$

'I am not a teacher'

The signer shakes his head sideways to show negation; the headshake as shown in example (2.1a) is appended at the end of the sentence to negate the whole sentence and the negative headshake can negate a sentence in the absence of a negative component in ZSL. Hence, headshake negation in ZSL is obligatory. According to Zeshan (2004), there are three main forms of head movement which are a headshake, headturn and headtilt. The headshake appears to be the most common form and it is a repeated side to side movement of the head rotating round the neck as axis as exemplified above. Zeshan (2004) comments that the difference between the headturn, headtilt and headshake is unclear, so the headturn is just a reduced form of the headshake.

Data from ZSL discourse segments also shows that head movements can either occur over the manual negation sign, over both a negation sign and the verb, over the entire clause that includes manual negative sign and over the entire clause exclusive of a manual negative sign as exemplified below.

(b) ZSL CHIPO $\frac{neg}{NOT}$ BUY CAR

‘Chipo is not buying a car’

(c) ZSL CHIPO $\frac{neg}{HOUSE\ BUY}$

‘Chipo is not buying a house’

The nature of the head-movements in ZSL is such that they occur simultaneously with other signs. Negation in ZSL can be placed before the verb as shown in example (b) where the headshake is placed over the negator NOT and the headshake can also be placed over the verb as exemplified in example (c). What distinguishes the placement of preverbal/postverbal negation in ZSL is related to the word order which can be SVO or SOV. This confirms what Sandler and Lillo-Martin (2006) discovered about preverbal and post verbal placement of negative signs. They suggest that the post-verbal position of a negative item often coincides with the final position of the sentence.

It emerged also from the data that some lexical signs in ZSL have an inherently negative meaning as shown below.

(2.2a) ZSL GIRL $\frac{hs}{UGLY}$

‘The girl is ugly’

(b) ZSL INTERPRETER $\frac{hs}{WRONG}$

‘The interpretation is wrong’

(c) ZSL BAD BEHAVIOUR

‘Bad behaviour’

When the negative headshake accompanies signs like WRONG/UGLY/BAD, it reinforces the negation that is already embedded in the sign rather than negating something already negative.

ZSL expresses negation in a variety of ways and negative signs in ZSL are rich and productive. ZSL shares some similar features with other SLs in the expression of negation. ZSL expresses negation using both manual and non-manual markers and it can take place either through sentential or constituent negation. The data also shows the interaction between syntax and pragmatics in determining the facial expression and head postures in negative sentences. The basic negator in ZSL is NOT and during its articulation the open palms of both hands face down with alternating movements from left to right combined with lowered eyebrows and squinted eyes as non-manual markers.

Conclusion

This study provided a comprehensive analysis of negation in Zimbabwean Sign Language (ZSL), highlighting its unique features and the interplay between manual and non-manual elements. The findings demonstrate that ZSL employs a multifaceted system of negation that integrates various manual signs, such as NO, NOT, and NEVER, with obligatory non-manual markers, including headshakes and facial expressions. This dual approach not only enriches the expressive capacity of ZSL but also underscores the syntactic flexibility inherent in its structure, allowing for both pre-verbal and post-verbal placement of negation influenced by its underlying SOV word order. Such syntactic characteristics align with observations made in other sign languages, suggesting a broader typological significance in the study of negation across different sign languages.

Moreover, the research identifies distinctive characteristics of ZSL, such as the use of bound negative morphemes and context-dependent sign variants, which reflect the pragmatic dimensions of communication within the deaf community. The findings indicate that while many signs are iconic and share similarities across regions, there are notable variations in the expression of negation that are influenced by regional dialects and individual signing

styles. This highlights the importance of considering sociolinguistic factors when analysing sign languages, as they can significantly impact the way negation is expressed and understood.

By comparing ZSL's negation strategies with those of other sign languages, such as American Sign Language (ASL) and South African Sign Language (SASL), this study emphasizes the importance of recognising the unique grammatical systems of understudied sign languages. The comparative analysis not only sheds light on the specific features of ZSL but also contributes to the broader field of sign language linguistics by illustrating the diversity and complexity of negation across different languages. This diversity underscores the need for further research into the syntactic and pragmatic aspects of negation in sign languages, particularly those that have been less explored.

The implications of these findings extend beyond theoretical linguistics; they advocate for tailored pedagogical approaches in deaf education that align with ZSL's structural realities. Educators and curriculum developers should consider the unique aspects of ZSL when designing instructional materials and teaching strategies, ensuring that they are culturally and linguistically relevant to the deaf community in Zimbabwe. By incorporating insights from this research, educational practices can be enhanced to better support the linguistic development and communication skills of ZSL users.

Ultimately, this research contributes to the broader understanding of sign language typology and highlights the necessity for continued exploration of lesser-studied languages to refine cross-linguistic theories. As sign languages continue to evolve and adapt to new contexts, ongoing research becomes essential in documenting these changes and understanding their implications for language use and identity within deaf communities. By fostering a greater appreciation for the linguistic richness of sign languages like ZSL, we can promote inclusivity and accessibility for all individuals, regardless of their communication modalities.

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