

THE BASIS FOR NOUN CLASSIFICATION IN TIV

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Abstract

This study investigates noun classification in Tiv, aiming to establish the basis for classification specifically; it seeks to determine whether noun class assignment is based on internal features of nouns or on external grammatical elements such as concord. The analysis draws on a corpus of utterances from native speakers, supported by secondary sources. Generative and lexical phonological frameworks are used to analyse the data, with key findings presented in tabular form. The study reveals that Tiv has a complex noun class system supported by a strong agreement mechanism. Noun classification is not solely dependent on internal morphology but arises from a combination of internal and external factors. Specifically, Tiv noun classes are determined by: (a) morphological features (class affixes), (b) phonological features (tone), (c) syntactic features (concordial markers adjacent to nouns), and (d) semantic generalisations (shared meaning properties within classes). This research contributes to a deeper understanding of the structure of the Tiv language and its noun system, shedding light on how form and meaning interact. It also offers broader insights into the typological characteristics of noun class systems in Tiv and Niger-Congo languages in general.

Keywords: Tiv, noun class, morphology, concordial elements, semantic domain.

Introduction

Tiv is a Bantu language, part of a vast linguistic family in Africa, spoken by an estimated 15 million people across the continent. According to Morrison (2017), Bantu languages are characterised by complex grammatical structures, tone systems, and noun classification systems. A distinctive feature of these languages is the noun class system, where singular and plural nouns are categorised into different classes, governing agreement patterns. Bantu languages exhibit varying numbers of noun classes, ranging from a few to as many as 21 (Morrison, 2017).

The classification of nouns into classes has been a longstanding topic of scholarly inquiry. Despite its significance in Bantu languages, including Tiv, noun classification remains poorly understood due to limited research by Tiv linguists. Previous studies, including those by foreign scholars, have not provided a clear basis for classification, while efforts by local scholars have fallen short in explaining the criteria for noun classification in Tiv. This study aims to address the knowledge gap by examining the noun classes of the Tiv language and establishing a foundation for their classification.

Review of related literature.

Noun class language: definitions and debate

Noun class

A noun class language, as defined by Msaka (2019), is a language that categorises nouns into distinct classes based on their grammatical properties such as part of speech, number, case, tense, aspect, mood and agreement. This classification is morpho-syntactically reflected through grammatical agreement with other words, such as adjectives and verbs. Sanusi (2003:2) offers a differing definition: “language in which nouns are grouped into several semantically based classes with each class having its distinct class markers”. According to Sanusi, words are grouped according to their shared common semantic properties such as animacy, shape or form, function and purpose and size or magnitude. This classification, according to the author, reflects a logical or intuitive connection between the noun’s meaning and its class.

These definitions reveal a disparity in the basis for classifying nouns into noun classes. Msaka emphasises grammatical properties while Sanusi advocates for shared common semantic

properties. The lack of consensus is echoed in Katamba (2006), who notes that the system of classifying nouns into noun classes varies significantly across languages in terms of:

1. Number of classes
2. Nature of agreement systems

The absence of consensus regarding the criteria for classifying nouns into noun classes underscores the importance of this study.

The criteria for classifying nouns of nouns into the various classes

According to Msaka (2019), the criteria for classifying nouns into noun classes have been debated for over four decades. Three primary criteria are:

1. Noun Class Prefix (NCP)
2. Grammatical agreement (concord)
3. The semantic criterion.

Noun Class Prefix (NCP criterion)

Bleek (1862) developed the NCP frame for classifying nouns into noun classes in his work, *A Comparative Grammar of South African Language*. Bleek's system identified 18 classes and prefixes, which have undergone revisions by scholars such as Meinhof (1899, 1906; 1932), Guthrie (1948, 1967), Meeussen (1973), Maho (1999), Katamba (2003), and Msaka (2019). These scholars have carried out their findings in many Bantu languages including Swahili.

Msaka (2019) summarises the various revisions of the number and prefix system as shown in Table 1 below:

Table 1: *Versions of the proto-Bantu noun class system*

	Bleek's Ancient Bantu (Bleek, 1869: 282ff.)	Meinhof's UB (Meinhof & Van Warmelo, 1932: 39ff.)	Meeussen's PB (Meeussen, 1967: 97)	Guthrie's PB (Guthrie, 1967: 9)	Welmers's PB (Welmers, 1973)
1	*mũ	*mu-	*mu-	*mo-	*mo-; 1a ø
2	*ba-	*ua-	*ba-	*ba-	*va-; 2a *va
3	*mũ	*mu-	*mu-	*mo-	*mo-
4	*mi-	*mi-	*mi-	*me-	*me-
5	*di - *li-	*li-	*i	*yi-	*le
6	*ma-	*ma-	*ma-	*ma-	*ma-*ma-
7	*ki-	*ki-	*ki-	*ke-	*ke-
8	*pi-	*vi-	*bi-	*bi-	*vi-; 8x *li
9	*n	*ni-	*n-	*ny-	*ne
10	*thin- *li- ne	*li-ni-	*n-	*ny-	*li-ne
11	*lu-	*lu-	*du-	*do-	*lo
12	*ka- (13)	*ka- (13)	*ka-	*ka-	*ka-
13	*tu- (12)	*tu- (12)	*tu-	*to-	*to-
14	*bu- *vu- *vo	*bu-	*vu-	*bo-	*vo-
15	*ku-	*ku-	*ku-	*ko-	*ko-
16	*pa-	*pa-	*pa-	*pa-	*pa-
17	-	*ku-	*ku-	*ko-	*ko-
18	-	*mu-	*mu-	*mo-	*mo-
19	-	*pî-	*pi-	*pi-	*pi-
20	-	*yu-	-	-	*yo
21	-	*yî-	-	-	*yi-
(22)	--	-	-	-	*ya-
23		-	-I (24)	-	*ye-

Source: Msaka (2019)

Msaka (2019), notes that many Bantu scholars have adopted the Bleek (1862, 1869) and Meinhof (1899, 1906; 1932) noun classification scheme, which has come to be known as the Bleek-Meinhof system. This system classifies nouns based on their morphological markers; specifically, noun class prefixes (NCP). This study deviates from the Bleek-Meinhof system due to its limitations in describing Tiv morphology. Specifically, Tiv prefixes are not consistently found on every noun or in every noun class. Instead, Tiv nouns exhibit diverse affixes:

1. Prefixes as in, **u**-ya (compounds) Prefix(pl)stem
2. Prefixes and infixes as in, **i**- t-**y**-ar (Nations) Prefix(Pl) infix
3. Circumfix as in, **m**-cambe-**m** Prefix stem- suffix. (Fingerlings)
4. Suffix as in, nomso-**ov** Stem –suffix (men)
5. Ø affix, ø- **ave** Suppletive (hands)

Noun agreement class criterion

According to Matthews (2007), Agreement is a syntactic relationship between words with compatible features. In Bantu languages, including Tiv, noun class agreement is a phenomenon where words change form to agree with the noun class of the modified or referred noun (Ndimele, 1993). Noun class agreement involves a grammatical relationship between sentence elements, requiring corresponding forms (Maw, 1992). In Tiv, noun prefixes convey information about the class, number, person, and agreement (Adzer, 2019). Adjectives must align with their noun class, and the copula serves as the key. This study concurs with Matthews (2007), Maw (1992), Adzer (2019), and Maho (1999) that Tiv noun categorisation requires consideration of syntagmatic relationships and morphological structure.

Semantic criterion

Semantic classification of nouns is a universal aspect of human language, but patterns displayed in languages are language-specific (Breedveld, 1995). Selvik (2001) examined the semantics of prefix usage in Setswana, revealing semantic diversity among classes. He found that semantic content contributes to noun class assignment, with noun categories exhibiting polysemous characteristics. Selvik's (2001) analysis is relevant to this study in that it highlights the potential role of semantics in Tiv noun classification and provides a comparative framework for understanding noun class systems in Bantu languages. Atoh (2001) analysed the semantic properties of Dholuo nouns, investigating relationships within sentences based on distinctive properties. His study showed that Dholuo nouns fall into the domains sharing semantic

resemblances and common componential features:

- Family domain: wuoro (father), miyo (mother) and ner (uncle)
- Colour domain: rachar (white) and rabuor (brown)
- Physical features domain: aoro (river) and got (mountain)
- Human beings domain: dhako (woman), nyako (girl) and dichwo (male).

Atoh's analysis demonstrates the feasibility of semantic analysis for nouns in any language, relevant to this study.

Phonological criterion.

Phonology plays a crucial role in noun classification in Bantu and other African languages (Mtenje, 1985; Hyman, 1985). Phonological factors influencing noun class assignment include:

1. Vowel harmony: In Dagaare, [+ATR] vowels select specific affixes (Mtenje, 1985).
2. Tone patterns: Yoruba distinguishes noun class through tone (Hyman, 1985).
3. Prefixes and suffixes: Swahili uses phonological changes in prefixes to indicate class membership (Nurse & Phillipson, 2003).
4. Consonant mutation: Welsh signals noun class through consonant mutation (Hannahs, 2013)
5. Syllable structure: Arabic structure influences class assignment (Ryding, 2005)
6. Phonological features: Igbo distinguishes noun classes through nasality (Greenberg, 1978)
7. Prosody intonation affects noun classification in Zulu (Yip, 2002)
8. Phonological alternations: Assimilation indicates class membership in Shona (Archangeli, 1984)

A deduction from the scholars whose works are reviewed on the influence of phonology in determining the classification of nouns into noun class is that understanding phonological influences will enhance accurate noun class assignment, as tone and vowel harmony play key roles in determining noun class membership in Tiv.

Previous works on Tiv noun classification system

Early work by Malherbe (1930) laid the groundwork for understanding Tiv noun classification. In his *Tiv-English dictionary*, Malherbe identified three characteristics for categorising Tiv nouns:

1. The forms of the nouns (singular and plural)
2. The copula of the noun
3. The genitive, i.e., connective, particle of the noun.

Malherbe's classification comprises nine noun classes, each with a distinct copula. His work is outlined in Table 2 below:

Table 2: *Noun classification according to number*

	affixes		Pl. Formation	Genitive markers	copula
	prefixes	suffixes			
1. ngu	1.Wan(an) 2. Or 3.Various initial letters	-----	1. wan>an, with 'm' or 'v' suffixed 2. or>mba with v sometimes suffixed. 3. (a) .initial 'a' prefixes 'mba' (b) initial consonant prefix 'u' (or 'ev) Plurals fall into mba class	u	ngu
2. mba	'an' (wan) 'mba' 'u' Sing. fall into ngu class	'm' 'v'	-----	mba	mba
3. ngi	'i'		1. Initial 'i' remains 'i' 2. Initial 'i'> 'a' Pl. of 2 falls into Nga Class	i	ngi
4. nga	'a' Sing. fall into ngi class or ku class		-----	a	nga
5. ki	'i'	'gh'	1. Final 'gh' dropped and 'v' suffixed 2. Initial 'i' and final 'gh' dropped and initial 'm' and final 'm' added. Pl. fall into Mbi or Ma class		

6. mbi	'i' Sing. fall into ki class	'v'	-----	mbi	mbi
7. ma	'm' Some Sing. fall into ki class	'm'			
8. mbu	'v'		--(rarely initial 'i' prefixed	mbu	mbu
9. ku		'gh'	'gh' dropped and initial 'a' prefixed Pl. fall into nga class	ku	ku

Source: Malherbe (1930).

This study builds upon Malherbe's foundational work, adopting his classification system. However, a notable gap in Malherbe's work is the lack of exploration into the roles of phonology and semantics in Tiv noun classification. This study aims to address this gap, providing a more comprehensive understanding of the Tiv noun classification system.

Abraham (1940) observed that logical grouping fails to explain noun classes in Tiv and other Bantu languages. While Tiv exhibit some patterns, such as special classes for persons, certain trees, and collective nouns, most cases lack a logical guide for determining class membership. However, morphophonological features such as prefix, suffix, and tone consistently indicate noun class membership, providing a reliable guide.

Abraham classified Tiv nouns into 11 classes based on morphophonological features, as shown in Table 3 below:

Table 3: *Noun classes according to Abraham (1940)*

(i) singular class			
	Class	characteristics	examples
1	ngun	Begins with consonant including the down glide (ii). Begins with a and a (iii). Begins with i	tɔr 'chief' swam 'boar' anyam 'leopard' ifi 'ocean'
2	ngi-n	Begins with i.	inyam 'animal' iji 'flea'
3	ngi-n	Begins with i (high)	Iji
4	ngu-n	Begins with a consonant or u (high)	Kon 'tree' ; toho 'grass' ; uwer 'moon'
5	kun	End in mobile gh.	Wegh 'hand'
6.	kin	Begins in i (high) and ends in mobile gh	
ii plural class			
3	ngu-n	Begins in i (high)	iji flies
7	mbun	Ends in mobile v	angev 'illness'
8	mbin	Begins in i (high) and ends in mobile v	Ityouv 'head'
9	nga-n	Begins in a (high)	Aji
10	man	Both begins and end in mobile m	m-kurem 'oil'
11	mban	Prefixes u or mba. Suffixes v	utor 'chief' mbaadza 'plates' kasev 'women'

Abraham's numbering is arbitrary, and his approach overlooks morphosyntactic and semantic criteria, leaving room for further exploration.

Willemson (2014) classified Tiv nouns into nine, based on affixes and agreement, as shown in Table 4:

Table 4: *An overview of Tiv noun classes*

Class/ subject concord	Noun affixes	Noun affixes examples	
^o gu	ø/(i-)ú-	(i-)k'è 'chicken' ø-z ^o a 'mouth' ø-wé '2SG' ù-ájé	k'è ^o gù vǎ 'the chicken is coming' z ^o a ^o gù vǎ 'the mouth is coming' wé ^o gù zǎ 'you are going' úájé ^o gù nù ^o bè 'the child is playing'
^o ba	m-m/m-/ú- á-m/ m'ba	m-tó-m 'heads' á-júá:-m 'dogs' m'ba-jé:v 'children' ù-ú má 'lives'	m-tóm ^o bá vǎ 'the heads are coming' á-júá:-m ^o bá 'these dogs' m'ba-jé:v ^o bá vǎ: 'the children are coming' ù-ú má ^o bá vǎ: 'the lives are coming'
ma	m-m/m-	m-gé: 'water'	m-gé: má fá 'there is water in heaven'
ki	i-	i-jò 'yam'	ijò kí hó: 'rotten yam'
^o bi	i-	ì-jò 'yams'	ìjò n'bi k'èhè 'fat yams'
^o ga	á-	á-kpè 'bottles'	ákpè ^o gá vǎ
^o gi	i-	í-kpè í-júá 'dogs'	íkpè ^o gí vǎ 'the bottles are coming' í-júá ^o gí vǎ 'the dogs are coming'
ku	-:	tó: 'ear' ^o gùhá: 'leg'	tó: kù ájùá 'the dog's ears' ^o gùhá kù vǎ 'the leg is coming'
^o bu	-v	é:v 'creation' á ^o gév 'illness'	é:v ^o bù b ^o á 'a toy cow (lit. creation of cow)' á ^o gév ^o bù jùgá 'diabetes' (lit. disease of sugar).

Source: Willemson's (2014)

It can be observed that Willemson (2014) agrees with Malherbe (1940) in terms of number of classes, but they are at variance about affixes. Abraham (1940) differs from both Malherbe and Willemson with respect to the number of noun classes. The disparity from these works about what is the basis for classification and the number of noun classes is the reason for this study.

Lexical phonological theory

Lexical Phonology (LP) is a phonological theory that explains the interaction between morphology and phonology in word formation. Developed by Kiparsky (1982) and Mohanan (1982),

LP posits that phonological rules apply in two distinct domains: lexically and post-lexically. Lexical rules interact with morphological rules, while post-lexical rules apply after syntax. The theory of lexical phonology provides a framework for understanding how words are formed and how phonological processes operate within words. It suggests that words are not formed arbitrarily, but rather through a process aimed at achieving meaning. LP also highlights the importance of the lexicon, which consists of ordered levels that are the domain for certain phonological or morphological processes.

The application of LP varies across languages and may differ in the number of levels they operate on. In the context of the Tiv language, LP provides a useful framework for understanding the phonological system and how words are formed. The uniqueness of the Tiv language phonological system allows for the operation of phonology, and LP provides a space for understanding these processes. Overall, LP is a valuable theory for analysing phonological data and understanding the interaction between morphology and phonology in word formation.

Methodology

This study employs a descriptive and analytical research design to investigate the Tiv basis for Tiv noun class system, specifically focusing on Tiv speakers in Benue State. As native speakers, the researchers leveraged their intuitive knowledge to elicit data. Additionally, oral interviews were conducted with competent native speakers, linguists, academics, and other key stakeholders of the Tiv language.

A purposive sample of 100 proficient native speakers was selected from Benue State, comprising 40 adult/elderly speakers, 10 clergymen, 30 academics, and 10 members of the Tiv Language Studies and Development Association (TILSDA). These individuals were chosen for their competence and proficiency in the language. The study also reviewed relevant literature on noun class systems and Tiv noun classification. Data is presented in tables and analysed using lexical phonological theories.

Bases for Tiv noun classification in noun classes

The Tiv noun classification system exhibits a complex interface

between morphology, phonology, syntax and semantics, characterised by a system covariance (strong bond/relationship/connection) among nouns, verbs, genitive particles, determiners, numerals and adjectives. This analysis investigates the relationship between the noun form and covariance with other linguistic components to determine their role in assigning class membership.

Noun Class Affixes (NCA) Criterion.

Table 5: *Classification of Tiv nouns based on Noun Class Affixes (NCA)*

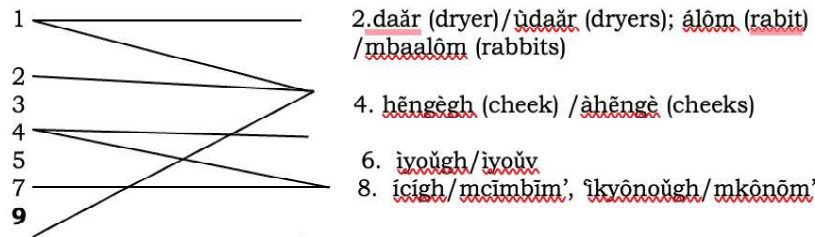
class	Class affixes	Examples
1	ø, i -, a-, an- or- wan	daār (dryer); ibyūmèòr (buffon); ávāngè (lizard); òryá (head of household); ānywá (dog); wānkyègh (chic)
2	u- 'an' (wan) mba-	ùtèr (fathers); ānvyoóv (goats); mbaalóm (rabbits)
3	i-	ihyév (rat); icéghèl (melon); ibyàvèr (information); iyyò (goat)
4	a-	álév (beans); áminé (millet); àhì (nuts); ábávèr (news)
5	i-, -gh	ityoúgh (head); inyàrégh (money); ibyūmègh (foolishness); iyoúgh
6	i-, v	icimbiv (trash); ihyòghónòv (rubbish); ityáv (war) íkyáv (load)
7	m-, an, -m	mngérēm (water); msôròm (alcohol); ānkaâm (things), ānmbiim (feaces)
8	-v	āngèv (sickness) tsáv (witchcraft) eêv (handwork) sév (day) táháv (authority)
9	-gh	wègh (hand); kpāndègh (tax); mègh (poison), toúgh (ear)

Table 5 shows that the classification of Tiv nouns into classes is partially based on affixes. The Noun Class affixes indicate whether a given noun is singular or plural. This study has identified nine noun classes based on affixes. Out of these classes, five are singular and 4 are plural. Noun class three is categorised both as singular and plural. The dual classification of the Tiv noun class three is phonologically determined. This will be discussed later in the study. The number classification of Tiv nouns is analysed in Table 5, in which singulars bear odd numbers while plural even numbers as recommended in the Bantu noun classification frame.

Table 6: Singular and plural affixes in Tiv

class	Singular class affixes	Examples
1	ø, i -, a-, an- or- wan	daär (dryer); ìbyùmèòr (buffon); ávāngè (lizard); òryá (head of household); ānywá (dog); wānkyègh (chic)
3	i-, -y-	ìhyèv (rat); ícéghèl (melon); ìbyàvèr (information); ìyyò (goat)
5	i-, -gh	ìtyoũgh (head); ìnyàrègh (money); ìbyùmègh (foolishness)
7	-v	āngév (sickness) tsáv (witchcraft) èv (handwork); sév (day) táháv (authority)
9	-gh	wègh (hand); kpāndègh (tax); mègh (poison), toũgh (ear)
	Plural class affixes	
2	u-'an' (wan) mba-	ùtèr (fathers); ānvyoöv (goats); mbaalôm (rabbits)
4	a-	álév (beans); áminé (millet); àhì (nuts); ábávèr (news)
6	i-, v	ícimbív (trash); ìhyòghónòv (rubbish); ìtyáv (war) íkyáv (load)
7	m-, an, -m	mngérèm (water); msòròm (alcohol); ānkaām (things), ānmbiim (feaces)

The singular and plural noun class pairing in Tiv.



Analysis in tables 5 and 6 and the singular and plural pairing shows that affixation is a key factor in noun class assignment in Tiv grouping and plural categories. However, the reliance on affixes, especially prefixes such a 'i-' which belongs to multiple classes, poses challenges in identifying specific classes' membership.

Morphosyntactic criterion

Tiv nouns exhibit a complex agreement pattern controlled by the noun form. The noun form determines the agreement element selected. The type of agreement element a noun selects further defines the class it belongs to Table 7 presents morphosyntactic classification on nouns in Tiv.

Key to Table 7 below

NC noun class

NCA noun class affixes

NCC	noun class copula verb
NCGP	noun class genitive particle
NCDA	noun class demonstrative adjective

Table 7: *Morphosyntactic classification on nouns in Tiv.*

NC	NCA	NCC	NCGP	NCDA		NCPA	
				Proximal	distal		
1	ø, i -, a-, an- or- wan	ngù	u	ngūn	ngùlá	wám sg. my	wou
2	u-'an' (wan) mbá -	mba	mbá	mbān	mbálá	áv	nav
3	i-,y-	ngì	i	ngīn	ngilá	yám	you
4	a-	ngà	a	ngān	ngilá	ám	
5	i-, -gh	kì	ki	kīn	kilá	yagh	you
6	i-, v	mbì	mbi	mbīn	mbilá	yáv	you
7	m-, an, - m	má	ma	mūn	mèlá	ám	ou
8	-v	mbù	mbu	mbūn	Mbùlá	ám	ou
9	-gh	kù	ku	kun	kùlá	ágh	ou

The above table presents noun class, noun affixes and the agreement elements: copulas, genitive particle, proximal and distal demonstrative adjectives, and possessive adjectives. From the table, it can be observed that class affixes in Tiv serve as the controls the choice of any agreement element a noun takes. They are controllers that specify the agreement of the accompanying nouns. These affixes dictate the agreement influencing the form of the target element –the element whose form is determined by the agreement as shown in examples 1 and 2 below.

1a. Bua ngu sha won

SG-Sbj- bua sg.cop ngu pp- sha won

Cow is at arena. There is a cow at the arena

b. í-byuâ ngí shá wôn

PL Sbj .i-byua PL-cop-ngi pp- sha won.

Cows are at arena. There are cows at the arena.

2a. kwàsè u Terna ngú shá h^½m^½n

SG-Sbj- kwase gen- u Terna sg-cop ngu pp- sha hemen

Woman of Terna is in front. Terna's wife is in front.

b. PL Sbj kasev PL.gen. mba Terna PL-cop mba

pp. sha hemen

women of Terfa are in front. Terna's wives are in front

The singular form of the noun Buâ, takes the singular copula 'ngü' while its plural ibyuâ takes the plural prefix, which controls it to take the plural copula 'ngâ'.

Morphophonological criterion

In Tiv, the morphophonological structure of the noun determines the choice of the copula verb and other agreement elements. Specifically, the tone of the noun influences the choices of the copula as well as other concord elements, and the sound properties of the noun (consonant/vowel) affect the phonological form of the agreement elements, especially the copula.

High tone nouns require high tone agreement elements

Low tone nouns require low tone agreement elements

Affixation changes the tone of the noun, influencing the concord choice

Vowels in nouns and concord choice must harmonise:

Examples

ícam ngì => átsām ngá singular / plural agreement

ícahul ngv => átsāhul ngá singular / plural agreement

ícagh kí => ?cāmbem má tone / consonant harmon

Table 8: *Affixes, copula and tone agreement in Tiv noun class assignment*

Class	Class affixes	copula	tone	
1	ø, i -, a-, an- or- wan	ngu	(L)	Bàgù, ifi
1b	ø, -, a-, an- or-	ngu	(H)	Kúnyá ányó
2	u- 'an' mbá -	mbá	H	úter, ányoöŋ
3	i-	ngi	L	Ìcàhúl
3b	i-, -y-	ngí	H	Ítyár
4	a-	ngá	H	Áhéngá
5	i-, -gh	Kí	H	íciġh
6	i-, -v	mbi	H	Ílév
7	m-, -an, -m	má	H	mngérēm
8	-v	mbú	H	tsáv,
9	-gh	Kú	H	Gboŋgh, wégh,

Semantic criterion

In Tiv, nouns are categorised into classes based on their semantic domain – a conceptual category or areas of meaning that group related concepts, words or phrases sharing common semantic properties. This classification is related to the concept of hyponymy (Brinton, 2000). This study classifies nouns based on the following semantic domains:

1. Concrete domain: animate (living entities) and inanimate (non-living entities)
2. Abstract domain: emotions, concepts, and abstract ideas
3. Event domain: events such as weddings and graduation
4. Temporal location: time and schedules.

However, this categorisation is morpho-syntactically controlled. The form of a Tiv noun and its copula determine the semantic domain a noun belongs as illustrated in Table 9

Table 9: *Semantic Categorisation of Tiv Nouns.*

Noun class	Noun class affixes	copula	
1	ø, i -, a-, an- or- wan	ngu	Human, some animals, some reptiles, bodies water, shrubs, some crops
2	u- 'an' mbá - -v	mba	Human, some animals, bodies water
3	i-, -y-	ngi	Animate, plants, some crops,
4	a-	nga	Animate, plants, concepts
5	i-, -gh	ki	Inanimate nouns
6	i-, -v	mbi	Collective nouns, concepts
7	m-, an-, -m	ma	Mass, collective nouns
8	ø, -v	mbu	Abstract things
9	ø, -v	ku	Body parts

Table 9 demonstrates that Tiv nouns' semantic categorisation into noun classes is controlled by the morphological form the noun and the copula of the class. Notably, some classes encompass multiple semantic domains based on affixes and copula markings. Affixes regulate concordial elements and, consequently, determine a nouns semantic domain

In this regard some classes house more than one semantic domain based on the affixes and copula that mark the class. As affixes control the concordial elements of the noun, so they control which semantic domain a noun belongs.

Summary of findings.

This study found that:

1. Tiv noun classification is based on a complex interface between morphology, phonology, syntax and semantics.
2. Four criteria are used for classification: morphological (affixes), morphosyntactic (agreement pattern), morphophonological (tone, consonant harmony) and semantic (conceptual categories).
3. The study identified nine noun classes, with five singular and four plural classes. The study reveals that affixation is key in noun class assignment, but prefix ambiguity poses challenges.
4. Morphosyntactic agreement patterns are controlled by noun form morphophonological structures influences copula verb and agreement element choice. Morphosyntactic control determines semantic domain assignment.

5. The study applies Generative Phonology to analyze the morphophonological structure of Tiv nouns and its influence on copula verbs and agreement elements. Specifically, the study notes that high tone nouns require high tone agreement elements, while low tone nouns require low tone agreement elements. This demonstrates how underlying tone patterns determine surface forms, a key principle of Generative Phonology. Additionally, the study's analysis of tone patterns and their influence on agreement elements is another instance of Generative Phonology in action.
6. The study also employs Lexical Phonology to examine the interaction between morphology and phonology in Tiv noun classification. For example, affixation is shown to change the tone of nouns, influencing concord choice. This illustrates how phonological rules apply at different levels of morphological structure, a core tenet of Lexical Phonology. Furthermore, the study's analysis of morphophonological structure and its impact on copula verbs and agreement elements is another application of Lexical Phonology.
7. Overall, the study showcases the utility of both Generative and Lexical Phonology in understanding the complex noun classification system of Tiv. By applying these theories, the study provides insights into the morphophonological structure, tone patterns, and interaction between morphology and phonology in Tiv nouns

Conclusion

In conclusion, this study has significantly advanced our understanding of the Tiv noun classification system, revealing a complex interplay between morphology, phonology, syntax, and semantics. By applying generative and lexical phonological theories, we have demonstrated that Tiv noun classification is governed by a multifaceted system, where factors such as tone patterns, affixation, and morphophonological structure play crucial roles in determining noun class membership. The findings of this study contribute to the development of linguistic theory and language documentation and have implications for

language teaching and learning. Ultimately, this research provides a foundation for further studies on Tiv linguistics and Bantu languages, and sheds light on the rich and intricate nature of human language.

Recommendations:

The study recommends as follows:

1. Further research on Tiv linguistics and Bantu languages.
2. Development of language teaching materials incorporating noun class classification.
3. A detailed investigation of each of the bases of noun class assignment (morphological, phonological, syntactic, and semantic) in Tiv.
4. Investigation of the noun class system in other languages.

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