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The interplay of nominality and adverbiality in Phola

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ABSTRACT

Some Yi/Ngwi languages exhibit functionally versatile word classes, including nouns which can be used as both referential arguments and adjuncts, covering functions typically associated with adverbs. As a result, adverbs are often treated as a residual word class in the literature on these languages. This article aims to complement the picture of adverbiality in this subbranch of Tibeto-Burman by offering novel data on Phola, a Yi/Ngwi language of Yunnan. It is shown how adverbial expressions of time, space and manner exhibit unique constructional properties, which set them apart from nominal expressions. Very particularly, Phola adverbial expressions, in contradistinction to canonical nouns, must be relativised before they can be used as noun-modifiers. This suggests they are underlyingly part of the verb phrase, a property that lexical adverbs exhibit in languages where their existence as a word class is uncontroversial. The Phola facts are compared to those of other Ngwi languages, especially Lahu, the single best described Ngwi language, where adverbial expressions are largely found to be constructionally identical with canonical nouns. The differences between such two closely related languages highlight the need for a stronger focus on language-internal distributional criteria when addressing the thorny task of defining and assigning word classes.

KEYWORDS

word classes, adverbs, nouns, noun phrase, syntax, relative clauses, nominalisation, possessive modification, syntactic tests, constructions, Tibeto-Burman, Yi, Ngwi

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The interplay of nominality and adverbiality in Phola

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1 Introductory remarks

The study of word classes and parts of speech in European languages has a noble tradition that goes back to ancient Greece, e.g., the τέχνη γραμματική ‘Art of grammar’ written by Dyonisios Thrax (217-145 BC). While the European tradition has informed and continues to inform linguistic description and theorisation, there has also been a significant push for a cross-linguistically sensitive approach to the study of word classes in human languages that does not simply foist Eurocentric categories onto the languages of the world at large (Rijkhoff 2007; Schachter & Shopen 2007; Evans & Levinson 2009; Bisang 2011). For example, several Asian and Pacific languages have been assessed to exhibit a substantial degree of underspecification in their word classes when compared to Indo-European languages (cf. Evans & Osada 2005 for an important survey of the issues). This has been mainly noted for the verb-adjective distinction (e.g., Li & Thompson 1981: 141 for Mandarin Chinese) and the verb-noun distinction (e.g., Bisang 2008; Sun 2020 for Mandarin Chinese), which often are not particularly categorical. Crucially for the purposes of this article, something similar has sometimes been assumed to apply to the design space spanning nouns and adverbs in the Ngwi branch of Tibeto-Burman (cf. Bradley 2012; 2017).

According to an influential functionalist definition, adverbs are modifiers of non-nominal heads (Hengeveld 1992: 58; Croft 2001: 65). While adverbs are considered a major word class by some typologically minded linguists, it is significantly less commonly attested than nouns, verbs and adjectives (Givón 2001: 87). Adverbs have been described as a “catch-all” category encompassing any semantically full words which fail to meet the criteria for nounhood, verbhood and adjectivehood (Payne 1996: 69; Tallermann 2015: 65). For this reason, it is not always easy to identify canonical members. However, a number of ontological-semantic categories are commonly lexicalised into adverbs, such as time, space, manner, degree and quantity. Canonically, the function of an adverb is to modify verbs or verb phrases (Dixon 2009: 109; Tallerman 2015: 63), with which they stand in some form of constituency relation, e.g., by being adjoined to them in English (Dalrymple 2001: 269). Additionally, adverbial expressions tend to be able to modify other non-nominal heads, such as adjectives or other adverbs (Hengeveld 1997: 121).

In Yi/Ngwi languages (formerly known as Loloish, a term now considered derogatory), there is a range of well-established periphrastic adverbial constructions, often involving adverbialising markers such as Nuosu *mu*³³ (Gerner 2013: 383) and Lisu *mu*⁴⁴ and *be*⁴⁴ (Bradley 2012: 11), which may attach to nouns and/or verbs. Meanwhile, in Lisu (Bradley 2012; 2015; 2017) and, especially, the single best understood Ngwi variety, i.e. Lahu (Matisoff 1973), adverbs have been described as a marginal non-productive class, whose prototypical functions are taken over by other major word classes. In particular, bare nouns can serve to specify the spatial and temporal circumstances

concomitant to the action encoded in the main verb of the clause, while manner and quantifying expressions are often derived from other word classes through prefixation and reduplication. This has led some prominent researchers to systematically treat most adverbial expressions as underlyingly nominal (e.g., Bradley 2015). Likewise, in his Lahu grammar, Matisoff treats only a dozen or so residual exceptions as “true adverbs”, including most prominently the negation and prohibition morphemes (1973: 265); and regards the remaining event-modifying expressions as either “nadverbials” (1973: 265), i.e., nouns used adverbially, or adverbially used verbs.

Gerner’s grammar of Nuosu includes a whole chapter devoted to adverbs. This is also standard practice in Chinese-language grammars of Ngwi languages such as Bai et al. 2013’s sketch of Hlersu (Central Ngwi), which has a relatively substantial section on adverbs. However, these treatments typically present a wide range of morphosyntactically heterogenous adverbial expressions, which are identified on the basis of their representational meanings rather than their function and behaviour or an admixture thereof (Gerner 2013: 383–402; Bai et al. 2013: 203–210). They thus leave open the question of whether there truly exists a dedicated adverb word class in these languages. For example, we learn that Hlersu adverbs can appear before or after the element they modify depending on their semantics, but no consideration is given to a formal characterisation that would allow us to group them together as a syntactically defined word class on language-internal grounds. Huang’s grammar of Kua-nsi has a section on adverbs, which the author claims, but does not necessarily demonstrate, “are a morphosyntactically unified class; and subclassification of adverbs are based on the semantics” (2024: 128). The only distributional feature that is explicitly addressed, but again, not necessarily demonstrated, is that “They usually occur before the predicate complex” (ibid). Likewise, Donlay’s grammar of Khatso (Central Ngwi) explicitly recognise a separate class of lexical adverbs (2019: 325–326), which we learn are negatively defined as verb-modifying words which cannot be satisfactorily classed as nouns, verbs or particles, but which are otherwise morphologically and distributionally heterogenous, thus defying a positive formal definition that would apply to all of them (326–339). Importantly, Bradley, arguably the most vocal proponent of a single large multifunctional class of nouns, merely limits himself to declaring on multiple occasions that “Temporal phrases, which are most often clause-initial, **are NPs in origin and in form**” (Bradley 2017: 906 [my bolding]) or that “in Lisù, temporal and locative expressions **are nouns**” (Bradley 2012: 10 [my bolding]), without going into any kind of syntactic demonstration of how or why expressions prototypically and cross-linguistically lexicalised as adverbs are to be considered nouns in this language.

All in all, the status and exact nature of adverbs and adverbial expressions in Ngwi languages is a notable area of descriptive difficulty. Against this backdrop, the present paper has a two-fold objective. First, it provides novel empirical data on the basic grammar of Phola, a minoritised Ngwi language of Yunnan Province of China, with a particular focus on the structure of the noun phrase. Secondly, it discusses a number of key syntactic-distributional differences between canonically nominal vs adverbial expressions of a spatial, temporal and manner nature in Phola. Most importantly, it is shown how, in contradistinction to canonical nouns, Phola adverbial expressions must be relativised before they can be used as noun-modifiers. This strongly suggests that they are underlyingly part of the verb phrase, a property that lexical adverbs overwhelmingly tend to exhibit in languages where their existence as a word class is uncontroversial. The Phola facts are compared to those of other Ngwi languages, especially Lahu, the single best described Ngwi language, where adverbial expressions are largely found to be constructionally identical with canonical nouns. The

substantial differences between such two closely related languages belonging to the same subbranch of Tibeto-Burman call for a stronger focus on language-internal distributional criteria.

While primarily descriptive, this article is theoretically inspired by usage-based and constructionist approaches to the study of language, where parts of speech are considered to be a matter of language-specific patterns defined by particular constructions with an important functional load (cf. Croft 2000; Croft 2001; Croft 2005). Constructions or rather clusters of constructional properties may serve to define prototypical members of a part of speech. In line with cognitive linguistics approaches (e.g., van der Auwera & Gast 2010), there may not always be sufficient and necessary conditions that may be used to exhaustively define a given part of speech, without incurring in what Croft calls “methodological opportunism,” i.e., cherry-picking some features rather than others (2001: 30; 41). However, while wholeheartedly sympathetic to the notions of gradience, flexibility and underspecification in parts of speech systems (cf. Bisang 2008), this article is built on the premise that constructional differences, however subtle, are relevant to an empirically sound characterisation and comparison of parts of speech both within and across languages. As forcefully argued by Dixon (2004), lumping property-encoding words together with verbs in languages like Mandarin Chinese misses some important constructional properties that quite clearly set aside adjective-like verbs from more prototypical, i.e., event-encoding, verbs. Importantly, precisely those constructions that set aside Mandarin Chinese property-encoding verbs from event-encoding verbs are such that they clearly point at their “adjectival” nature from a semantic, pragmatic and functional viewpoint. Inspired by the spirit of such radical construction grammarian approaches, the present article reports on constructional evidence for distinguishing between adverbs and nouns in particular syntactic patterns that are functionally and semantically linked to the cross-linguistically attested differences between these two classes, in languages where the distinction is uncontroversial.

The structure of the article is broken down as follows. Section 2 offers some background theoretical remarks on adverbs and adverbiality. Section 3 provides a minimal typological introduction to the Phola language. Section 4 delves into the structure of the noun phrase in Phola providing an empirical platform for Section 5, which discusses syntactic evidence for the adverbial nature of time, place and manner expressions in Phola. Section 6 offers a comparative outlook vis-à-vis other Ngwi languages, especially Lahu. Finally, Section 7 summarises the key findings and hints at their implications for the study of Ngwi-Burmese, Tibeto-Burman and analytic languages.

2 Adverbs and adverbiality

From a semantic perspective, adverbs are verb-modifying words that express circumstantial or event-structuring information surrounding a happening or a state of affairs. Typical notional categories encoded by adverbs encompass manner, instrument, space (e.g., location, direction, source) time, aspectuality, degree/extent, epistemicity, modality, deontic evaluation, discourse management and intersubjective engagement (Payne 1996: 70; Givón 2001: 88-94). The focus of this article will be primarily placed on adverbial expressions of time, space and manner, arguably the single most common ontological dimensions that are prototypically lexified as adverbs in the world’s languages.

Terminologically, some linguists distinguish between ADVERB and ADVERBIAL. While the former refers to an actual linguistic instantiation, the latter refers to the prototypical functional correlate of the former (Tallerman 2015: 65). This is useful to highlight the conceptual similarity between formally disparate types of expression including different word classes, e.g., nouns and adjectives, and multi-word constructions. Thus, as Examples (1-3) illustrate, adpositional phrases in

3 Overall typological features of Phola

Phola, natively known as $p^h\gamma^{31}la^{33}\eta i^{33}$, is a minoritised Ngwi language spoken by about 4000 farmer-herders in southeastern Yunnan Province of China in the area highlighted in Figure 1 (cf. González Pérez 2022; 2024 for details on the sociolinguistic situation). It is part of a cluster of about 22 closely related southeastern Ngwi varieties known as Phula languages (Pelkey 2011: 398), which were first identified around 2005 by Jamin Pelkey’s extensive sociolinguistic survey of the area.

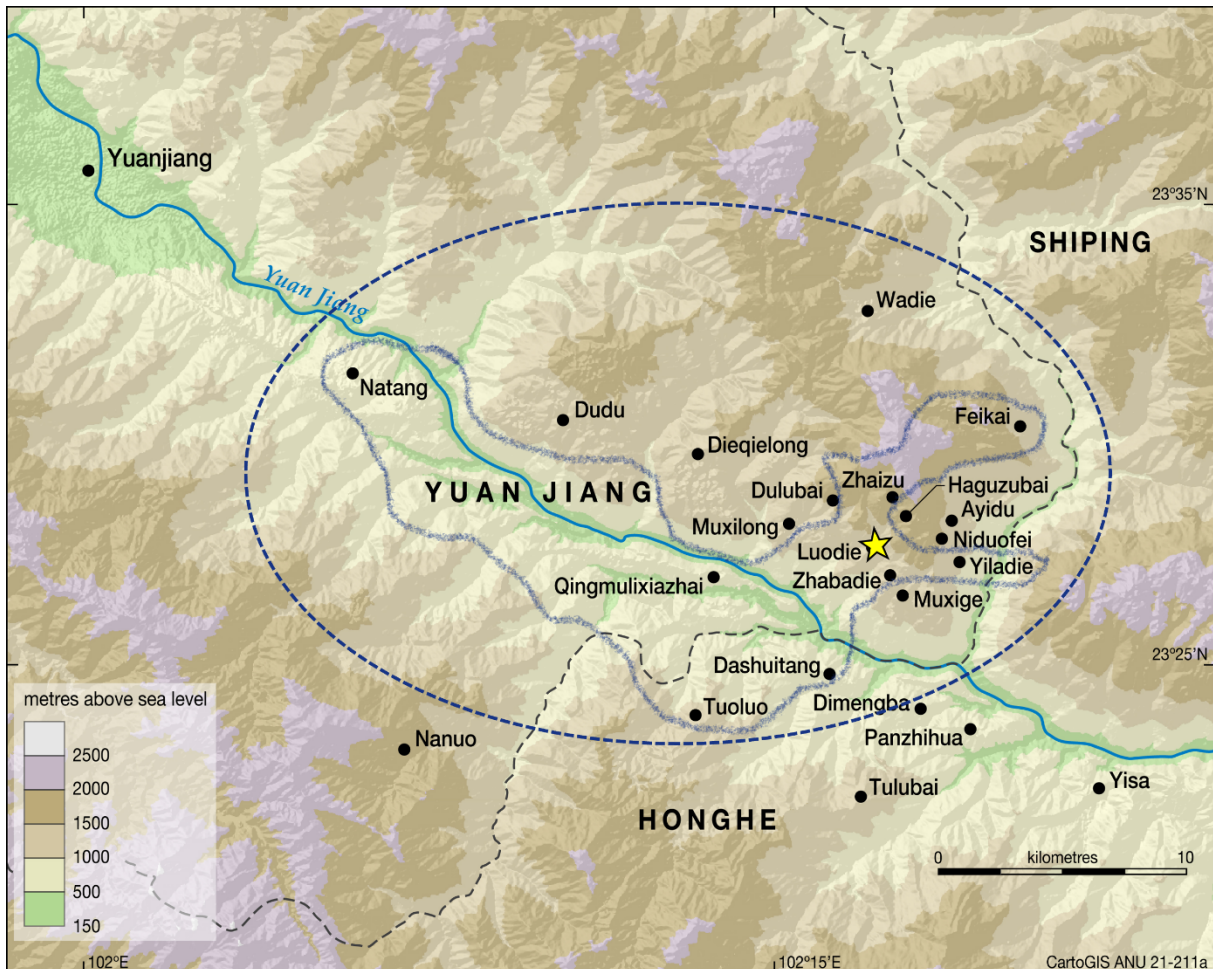


Figure 1. Location of Phola speaking area and Luodie village within the broader geographic context

Pelkey (2011) provides a wordlist and a phonological sketch of 5 Phula varieties, including Luodie Phola, which he registered at SIL under the ISO-code *ypg*. A preliminary grammatical sketch of Phola is provided in my PhD thesis (González Pérez 2022), and ongoing documentation funded by an Individual Postdoctoral Fellowship (ELDP - IPF0428) is on track to produce a full reference grammar of the language. Phonologically, Phola has 8 vowels, 35 consonants and 5 primary lexical tones (subject to various forms of fusion and sandhi). In terms of its general morphosyntactic features, which are most relevant for the purposes of this article, Phola generally aligns well with the analytic type although it exhibits some derivational morphology and three major grammatical

systems involving inflection, namely the personal pronoun paradigm, the demonstrative paradigm and the dimensional extent paradigm. Other than these exceptions, the language shows little regard for abstract structural categories, such as number, gender, tense, transitivity and argument structure, which are commonly grammaticised in the world's languages. Instead, Phola is highly sensitive to material and social aspects of the speech situation and expresses a wide range of phenomenological and interactional nuances through principled sets of lexical resources at various dedicated loci of the noun phrase, the verb phrase and the clause, including a large repertoire of aspectual, mood, modal, epistemic, discourse and procedural-illocutionary particles. As such, it can be characterised as a pragmatics-based language (Bisang 2009; Donlay 2019: 340).

While there is no indexing, flagging or agreement, Phola, like most other Tibeto-Burman languages, exhibits a relatively fixed word order following an SV and AOV pattern, as illustrated in Examples (4-5) for an intransitive and transitive clause, respectively. This can be, however, subverted through topicalisation and fronting. Moreover, as is the case in other Ngwi languages, zero-anaphora is exceedingly common (cf. Donlay 2019: 241; 344; *passim*), and the presence of more than one fully spelt out verb argument usually involves a prosodic breakdown into separate intonation groups, as is the case in Example (5), where the A constitutes a topical prosodic unit followed by OV in a separate prosodic unit working as a commentary. While the basic sentence is relatively simple, serial verb constructions, multi-verb constructions and complex clauses do exhibit a wide range of types and variations. Overall, the language is highly sensitive to discourse patterns interfacing with prosodic features and relational usage of tone.

- (4) BLW: u³³ za³¹ ke³¹ⁿte⁵⁵ lɿ²² ||
 3.POSS son down.there **come**

‘His son **came** down there.’

(YPG1-20190430_01-ext1Q8, 00:06:36.08—00:06:37.41) (indoor stories)

- (5) BLW: u³³ za³¹ ke⁵⁵ | xa³¹ tʰi³³ kʰi⁵⁵ ŋɔ²² ||
 3.POSS son that.down bird one CLF **see**

‘Her son **saw** a bird.’

(YPG1-20190430_01-ext1Q8, 00:07:12.21—00:07:14.25) (indoor stories)

Arguments are normally realised as noun phrases, whereas adjuncts are expressed with noun phrases, postpositional phrases and adverbs. Each argument and adjunct may be realised by more than one element, which usually involves coordination through =æ²² or nɿ³³ as in Example (6). While semantic roles can be optionally marked, with næ³¹ for the agent/instrument; and kʰi⁵⁵ for the patient/recipient, the usage of these postpositions is pragmatically motivated by a (perceived) need to dispel ambiguities. Hence, in Example (6), for instance, no marking obtains since it is obvious which participant inflicts the eating upon which participant.

(6) BLW: la³³ [...] tɕ^hi³¹ nɿ³³ ju³¹ nɿ³³ vɕ³³ ke⁵⁵ tsɕ³¹ ||
 tiger goat **and** cow **and** pig that.down eat

‘Tigers... eat goats and cows and pigs.’

(YPG1-20191202_02-ext1Q8, 00:06:09.86—00:06:13.42) (indoor monolingual transcription session)

Most Phola words are nominal or verbal in nature in that they are tightly syntactically integrated into the noun phrase or the verb phrase, respectively. Nominals include head nouns and pronouns, as well as numerals, classifiers and nominal demonstratives, whereas verbal elements include different kinds of predicative words encoding a wide range of categories from events to properties all the way to abstract TAME-like meanings. As is common in the Ngwi branch of Tibeto-Burman and in the broader geographical area, adjective-like predicates share some central constructional properties with event-encoding predicates, most importantly the fact that they are all directly negatable through the Pan-Tibeto-Burman negator, whose Phola reflex is *ma*³³ (cf. Matisoff 1973: 193; Donlay 2019: 240; González Pérez 2022: Ch. 4). Hence, they are treated in González Pérez (2022: Ch. 4) as a class of stative verbs (but cf. Dixon 2004 on the dangers of conflating adjectival verbs with prototypical verbs). Beyond nominal and verbal expressions, there is an important set of heterogenous words that do not fit the syntactic (and semantic) characterisation of either class. This includes postpositions, conjunctions, various kinds of particles, adverbs and a special close-ended set of six dimensional extensives. A preliminary proposal for Phola word classes is given in Table 1.

Nominal domain	Verbal domain	Neither
Nouns	Main verbs	Adverbs
Pronouns	Secondary verbs	Dimensional extensives
Nominal demonstratives		Conjunctions
Numerals		Particles
Classifiers		

Table 1. Phola word classes

Before launching into a discussion of nominal and adverbial constructions in Phola, which shall serve to delineate some unique syntactic properties buttressing the existence of a class of lexical adverbs in Phola, it is worth noting that membership to a word class is not necessarily a matter of clear-cut and mutually exclusive parameters but of prototypicality. As is common in some Tibeto-Burman languages, some Phola words can appear in the slot/function of two or more distinct major (i.e. open-ended) word classes, thus exhibiting multifunctionality (Ding 2014: 73). Consider for example how the phonologically identical syllable /tɕ³³/ can be used as a primary verb (7), a secondary verb (8) and a nominal classifier (9) with a clear identity in the schematic meaning it expresses, namely upward-oriented motion, often appearing twice in the same utterance in two different grammatical-referential roles (10). Crucially, however, as discussed in the coming sections, the focus

of this article is on adverbial expressions that are not amenable to a multifunctional analysis, since they are used exclusively as adverbs rather than as nouns (or verbs).

- (7) MSN: t^ha³³ **ta**³³ le³³ || ɣi²² **ta**³³ m^Λ³³ p^he³³ niæ³³ ||
PROH **go.up** go DEONTIC **go.up** NEG allowed EP

‘Don’t **go up**! It’s not allowed to **go up**, obviously!’

(YPG0149-M_e, 00:06:04.19—00:06:06.77) (outdoor dialogues)

- (8) LTS: ta³³tsɔ²² ts^hɔ³¹ **ta**³³ lɿ³³ || væ³³ **ta**³³ le³³ mæ²² ||
ladder prop.up **upward** SEQ climb **upward** go MOD

‘Having propped **up** the ladder he was getting ready to go and climb **up**.’

(YPG1-20181217_03-ext1H5, 00:00:13.69-00:00:16.31) (indoor video description task)

- (9) BLW: e⁵⁵ t^hi³³ **ta**³³ le³³ ma⁵⁵mi²²tsɿ²² tiæ⁵¹ = xi⁵⁵ ||
this.SPKR one **CLF.upward.slope** TOP mango plant = NMLZR

‘This **ascending slope** is (one that is) planted with mango.’

(YPG1-20190427_04-Q8a, 00:13:42.39—00:13:58.71) (outdoor dialogues)

- (10) LJF: ɲæ⁵⁵ = ɲɔ³³ t^hi³³ **ta**³³ lu²² **ta**³³ = lɔ³¹ m^Λ³³
INTF = height.EXT one **CLF.upward.path** fly **upward** = away NEG
ki³¹ se³³ ||
able still

‘(The juvenile bird) can still not fly **up** to the extent of a very high **upward path**.’

(YPG1-20191128_04-ext1Q8, 00:57:16.05—00:57:18.28) (indoor monolingual elicitation)

4 The noun phrase in Phola

The macro-class of nominals is constituted by all the words that make up the noun phrase, whose basic structure is as illustrated in Example (11). The noun, which heads the phrase, appears at its leftmost edge and is optionally followed by a nominal demonstrative and a quantifier phrase composed of a numeral and a classifier, henceforth the NUM+CLF bundle, in that order.

- (11) LJF: ts^hɔ⁵⁵ e⁵⁵ t^hi³³ χɔ³¹ ||
 person this.SPKR one CLF.human
 NOUN DEM NUM CLF

‘This (one human) person.’

(YPG1-20181206_01-extH5, 00:04:10.08— 00:04:11.01) (indoor bilingual elicitation)

Beyond nouns proper, the head slot may be occupied by a personal or an interrogative pronoun, as illustrated in Examples (11) and (12), respectively. A special case involves the multifunctional interrogative pronoun *q^ha⁵⁵*, which appears in two syntactically and semantically differentiated types of noun phrases, as either a noun-like or a numeral-like element. Example (13) shows how it serves a quantificatory function when appearing directly before the classifier, whereas in Example (15), an intervening *t^hi³³* ‘one’ induces a referential-identificatory reading. Note that in quantificatory uses with or without *q^ha⁵⁵*, the head noun may be separated from the quantifying phrase by a brief prosodic pause as in Example (14).

- (12) YYH: ŋa²² ni³¹ χɔ³¹ le³³ p^hu³¹ m^hɿ³³ ki³¹ ||
 1 two CLF.human TOP blow NEG able

‘The two of **us** do not know how to blow (the flute).’

(YPG1-YPG1-20191229_04-intQ8, 00:19:28.71—00:19:34.20) (indoor dialogues)

- (13) MSN: a²²yi³³ne⁵⁵ le³¹lu²² p^ha²² || a²²te^hi³¹ t^hi³³ tɔ²² m^hpa³³ ki³¹ si³³
 past story FOC **what** one CLF.word say able still
 na⁵⁵ ||
 EV.Q

‘When it comes to stories from the past, **what** else (lit. **what** one word) can I still say!?’

(YPG1-20190424_04-ext2H5, 00:00:00.00—00:14:53.82) (indoor collaborative story-telling)

- (14) LJF: nu³³ n^hka³¹ | q^ha⁵⁵ t^hɔ³³ teɔ²² ||
 2.POSS **water** INT CLF.bucket have

‘**How many buckets of water** do you have?’

(YPG1-20181208_01-extH5, 00:07:07.48—00:07:09.86) (indoor bilingual elicitation)

- (15) LJF: q^ha⁵⁵ t^hi³³ k^hi⁵⁵ le³³ ze³¹ tɔ²² vi³¹ ||
 INT **one** CLF TOP run COMPL far

‘Which one runs far?’

(YPG1-20190425_02-ext2H5, 00:00:46.57—00:00:50.27) (indoor video description task)

The nominal head may fall by the wayside, which yields various possible types of reduced noun phrase. Thus, the noun phrase may be realised by a bare demonstrative, e.g., *ke*⁵⁵ ‘that (thing/person) down there’, by a bare quantifier phrase, e.g., *tʰi*³³ *ɲi*³³ ‘a (thing that is a) day’, or by these two elements without a head noun, e.g., *e*⁵⁵ *tʰi*³³ *χɔ*³¹ ‘this (thing that is a) person’. These scenarios are respectively illustrated in Examples (16–18). Note that in (17–18), the classifier provides the most direct piece of qualitative information regarding the relevant referent. It is worth noting that unlike other Ngwi languages, such as Lisu (Bradley 2012: 9; 2017: 907) or Khatso (Donlay 2019: 141; 201–202), Phola demonstratives are not normally followed by classifiers or any kind of nominaliser. More generally, classifiers are not required, indeed, allowed in any context other than explicit quantification after a numeral. A minority of (older) speakers accept sequences of demonstratives plus bare classifiers. In such uses, the demonstrative is used metareferentially, i.e. must strictly be paired with co-timed gestures showing a quantity-amount. Thus, for example, three fingers up co-timed with *e*⁵⁵ *χɔ*³¹ means ‘this many (i.e. three) people’; and can never be used referentially to identify a real-world referent, i.e. it cannot be used to mean ‘this person here’. Sequences like **tʰɔ*⁵⁵ *χɔ*³¹ ‘(intended) a person’ are entirely ungrammatical for all speakers.

(16) BLW: *ke*⁵⁵ *zæ*³¹ ||

that.down big

‘That one is big.’

(YPG1-20190430_01-ext1Q8, 00:05:09.52—00:05:12.08) (indoor stories)

(17) LTS: *tʰi*³³ *ɲi*³³ *pʰɑ*³¹ *kʰi*⁵⁵ = *vʌ*³³ *le*³³ ||

one CLF.day COND arrive = COS TOP

‘One day came...’

(YPG1-20190131_05-ext1H5, 00:01:47.70—00:02:37.58) (indoor stories)

(18) YYH: *e*⁵⁵ *tʰi*³³ *χɔ*³¹ *le*³³ *pʰu*³¹ *ki*³¹ ||

this.SPKR one CLF.human TOP blow able

‘This one (person) knows how to play it.’

(YPG1-YPG1-20191229_04-intQ8, 00:19:28.71—00:19:34.20) (indoor dialogues)

When all the slots are filled, the Phola noun phrase is syntactically strict and disallows moving any element from its prescribed slot. This neatly allows to syntactically define each of the four components of a noun phrase by reference to one another. Hence, nominals can be divided into four distinct grammatical classes: Nouns proper, nominal demonstratives, numerals and classifiers.

The Phola noun phrase can be expanded in some important ways. Most importantly for the purposes of this article, noun phrases and bare head nouns can be possessively modified by other nouns or noun phrases without any segmental material marking such genitival relations. As shown in Example (19), modifying nouns, either one or more, are merely juxtaposed to the left of the modified head noun.

- (19) BLW: mi²²ts^ha²² mi⁵⁵ | la³³lu³³ mi²²ts^ha²² nǎ³¹ m^hpa³³ ||
 village name Luodie village ADV.COMP¹ say

‘The village name was called Luodie village.’

(YPG1-20191202_02-ext1Q8, 00:01:51.87—00:01:54.76) (indoor stories)

Sequences of nouns can sometimes be ambiguous between compounds and head-modifier phrases, especially when it comes to things that have conventional associations, such as villages and names in Example (19). However, non-conventional associations behave the same way, as shown in Example (20).

- (20) YYH: ŋa⁵⁵mo³³ t^hɔ³³zæ³¹ i⁵⁵po³³ zɿ²² le³³ ɲæ⁵⁵ zæ³¹ ||
 1.mother friend father house TOP INTF big

‘My mother’s friend’s father’s house is very big.’

(YPG1-20181207_03-ext 1H5, 00:15:28.37—00:15:31.35) (indoor bilingual elicitation)

The modified and modifying nouns have a possessive link loosely understood, including relationships of material possession, kinship, appurtenance, category type, identity, meronymy, among others. Note that nouns and noun phrases can also be modified by entire noun phrases. This includes pronominal uses of nominal demonstratives, e.g., ke⁵⁵ k^hi²² ‘that one’s dog’, the NUM+CLF bundle, e.g., t^hi³³ χ^ɔ³¹ ɲi³³tu²² ‘one/a person’s portion’, or both, e.g., e⁵⁵ t^hi³³ χ^ɔ³¹ k^hi²² ‘this person’s dog’. Noun phrases without a head noun can also be modified by other noun phrases with or without a head, e.g., t^hi³³ ɲi³³ t^hi³³ ne⁵⁵mo³¹ ‘one day’s timespan’ composed of two NUM+CLF bundles. All these possibilities are illustrated in Examples (21-24).

- (21) ZDS: e⁵⁵ve³³ | za³¹
 this.SPKR | son

¹ It falls beyond the scope of this article to discuss the uses of nǎ³¹ as a complementiser. Whilst superficially similar to a nominal complementiser, this conjunctive element can be shown through complex syntactic tests to be actually adverbial in nature.

‘This one’s son (referring to hornet larvae in a hive).’

(YPG0240-M, 00:01:17.17—00:01:18.16) (outdoor dialogues)

- (22) PYNA: ts^hɔ⁵⁵ thⁱ33 χɔ³¹ | ɣi³³tu²² [...]
 person one CLF.human | portion

‘One person’s portion...’

(YPG1-20191118_06-Q8, 00:16:27.36—00:16:29.00) (indoor stories)

- (23) e⁵⁵ thⁱ33 χɔ³¹ | khⁱ22
 this.SPKR one CLF.human | dog

‘This person’s dog’

- (24) thⁱ33 ni³³ | thⁱ33 ne⁵⁵mɔ³¹
 one CLF.day | one CLF.timespan

‘One day’s timespan’

However, when a noun or noun phrase is modified by non-nominal elements such as verbs, verb phrases or adverbs, this must be formally marked through either =*xi*⁵⁵ or *qɿ*³³, two functionally similar nominalisers, which yield a relative clause. Relative clauses may either follow (cf. Example 25) or, less commonly, precede the head noun (cf. Example 26), when there is one, but must occur before the nominal demonstrative as well as the NUM+CLF bundle, as shown in Examples (25) and (26). Examples (27-29) illustrate how relative clauses may themselves work as nominal heads and be followed by a nominal demonstrative and/or the NUM+CLF bundle. Note that =*xi*⁵⁵ can also yield an abstract nominalisation of a verb phrase or single verbs as in Examples (28-29), respectively. Note that Phola does not have a canonical adjective word class, but rather a class of adjective-like stative verbs denoting properties, such as *zœ*³¹ ‘big’ and *i*⁵⁵ ‘small’ in Examples (26-27).

- (25) YYH: ŋa³³ te^hɔ³³ lɑ³¹pu³³ⁿte³³ teud³¹=xi⁵⁵ thⁱ33 χɔ³¹
 1.POSS friend **Yuanjiang** live=NMLZR one CLF.human
 ɲæ⁵⁵ lɑ³¹ ||
 INTF handsome

‘A friend of mine **who lives in Yuanjiang**, is very handsome.’

(YPG1-20181207_01-ext1H5, 00:29:44.50—00:29:50.07) (bilingual elicitation)

- (26) BLW: ŋa²² zæ³¹ qɿ³³ ɲu³¹mɔ³³ ke⁵⁵ mæ³³ tɔ²² ||
 1 **big** REL cow that.down want MOD

‘I am going to claim **the big** cow.’

(YPG1-20190430_01-ext1Q8, 00:04:11.92—00:04:13.80) (indoor stories)

- (27) MSN: $z\alpha^{31} = xi^{55}$ thi^{33} khi^{55} || $i^{55} = xi^{55}$ thi^{33} khi^{55} pi^{31} li^{33}
big = NMLZR one CLF **small** = NMLZR one CLF give hither
 $t\sigma^{22}$ ke^{22} [...]
 MOD CONC

‘He should have given (me) a **big one** and a **small one** but...’

(YPG1-20190513_03-STH2n, 00:07:19.63—00:07:22.99) (indoor dialogues)

- (28) BLW: $z\alpha^{22}$ $ky^{33}tei^{55}$ $ku^{22} = xi^{55}$ $m\Lambda^{33}$ $\epsilon\sigma^{55}$ ||
home **near** **do** = NMLZR NEG clean

‘**Doing (one’s basic needs) close to the houses** wasn’t hygienic.’

(YPG1-20191227_04-ext1Q8, 00:14:22.10—00:14:23.56) (indoor stories)

- (29) BLW: $l\alpha^{31} = xi^{55}$ le^{33} ni^{31} || $mp\alpha^{33} = xi^{55}$ le^{33} vi^{31} ||
 stab = NMLZR TOP near shoot = NMLZR TOP far

‘**Stabbing** is (an action that happens) near. **Shooting** is far.’

(YPG1-20191220_02-ext1Q8, 00:29:22.89—00:29:25.99) (indoor monolingual transcription session)

There are some important differences between $=xi^{55}$ and $q\alpha^{33}$. $=xi^{55}$ is more general in meaning and appears in a broader range of contexts, including insubordinating (cf. Evans 2007) and discourse-emphatic uses (Liu & Shi 2022). Meanwhile, $q\alpha^{33}$ is always followed by a compulsory demonstrative such as $ke^{55}ve^{33}$ ‘that one down(hill)’ in Examples (30–31), and fulfils a more narrowly defined determinative function (in the sense of Diessel 1999: 108; González Pérez 2025), i.e., it serves the purpose of singling out a specific referent, which can be identified based on the information provided in the preceding relative clause. However, despite their differences, both nominalisers share two key properties for the purposes of this article, which as discussed in Section 6, make them different from their counterparts in other Ngwi languages, especially Lahu:

1. They are used to turn verbal constituents into nominal constituents
2. They cannot be used to link nominal expressions

As is the case in Example (30), the semantic relationship between the referent and the relativised verb phrase seems skewed toward core argument roles, i.e., the O in this case, but also S/A. However, Examples (31–32) illustrate how noun-modifying clauses can also commonly have looser semantic interpretations, where no constituent relation exists between the head and the modifying

clause (cf. Matsumoto 1997). In these cases, their relation can be described as final and instrumental, respectively, or simply discourse-topical (cf. Donlay 2019: 222-228 for a similar situation in the Central Nwgi language Khatso).

- (30) BLW: $\alpha^{22}\gamma^{22}t\alpha^{33}$ $l\alpha^{31}$ $q\Lambda^{33}$ $ke^{55}ve^{33}$ le^{33} $q^{h_2}{}^{3155}q^{h_2}{}^{31}$ $qa^{55}=l_2^{31}$ ||
 afterwards insert REL that.down TOP just.perfectly fall = away

‘The one **that** was inserted later fell through just right.’

(YPG1-20190425_02-ext1Q8, 00:03:55.83—00:03:57.73) (indoor video description task)

- (31) MSN: ${}^ntei^{22}$ ${}^nt\alpha^{22}$ $q\Lambda^{33}$ $ke^{55}ve^{33}$ pr^{33} na^{55} ||
 wine drink REL that.down cup EV

‘It’s a wine drinking cup (lit. the cup **of** the act of drinking **wine**).’

(YPG1-20190513_03-STH2n, 00:10:21.89—00:10:32.03) (indoor dialogues)

- (32) BLW: ${}^nk\alpha^{31}$ $t\alpha^{33}=l_2^{31}$ $q\Lambda^{33}$ $ke^{55}ve^{33}$ | $zi^{22}xu^{55}$ ||
 water exit = go.away REL **that.down** pond

‘**That thing with** water coming out is a pond.’

(YPG1-20190427_04-Q8a, 00:13:42.39—00:13:58.71) (outdoor dialogues)

Less commonly, the nominaliser $t\alpha^{22}$, may turn a verb phrase into a head noun, with a final or possibilitive reading, i.e., something that is geared toward or enables an action, such as ${}^nt\alpha^{22}$ ‘drinking’ in Example (33).

- (33) LHM: ${}^nt\epsilon i^{22}$ ${}^nt\alpha^{22}$ $t\alpha^{22}$ ke^{55} ||
 wine drink NMLZR that.down

‘**That thing for** wine drinking.’

(YPG1-20190513_03-STH2n, 00:10:21.89—00:10:32.03) (indoor dialogues)

Based on the patterns illustrated in this section, prototypical nouns in Phola are those words which can felicitously head a noun phrase, possessively modify and be modified by another noun phrase, and receive quantification through NUM+CLF without requiring overt nominalisation through $=xi^{55}$, $q\Lambda^{33}$ or $t\alpha^{22}$. As Figure 2 emphasises, relativisation/nominalisation is disallowed in between two canonical nouns.

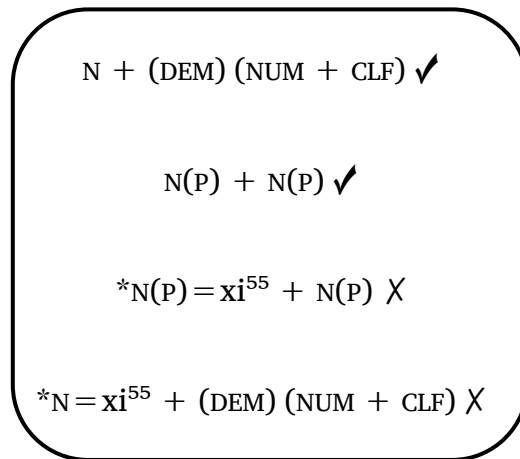


Figure 2. Syntactic features of canonical nouns

It is also worth highlighting that noun phrases, including minimal ones made up of a bare noun, act as referential arguments in both verbal clauses and nominal clauses (cf. Hengeveld 1992: 58). The former are briefly discussed in Section 5. The latter primarily include equational clauses made up of two juxtaposed noun phrases, as illustrated in Example (34) (cf. González Pérez 2022: Ch. 5 for a fuller treatment of nominal predicates). The first noun phrase may, but need not, be marked with the topicaliser *le*³³. Any non-nominal constituents need to be nominalised before they can appear as referential arguments, as in the equational clause provided in Example (32).

(34) BLW: ne^{55} $\text{t}^{\text{h}231}\text{ts}^{22}$ ||
 that.up pine.tree

‘Those ones up there are pine trees.’

(YPG1-20190427_04-Q8a, 00:13:45.56—00:13:49.34) (outdoor dialogues)

5 Adverbial expressions in Phola

Simple clauses in Phola, whose maximal schematic structure is provided in Table 2,² have a dedicated slot for adjuncts encoding circumstantial information. This is occupied by postpositional phrases (cf. Example 3), nominal phrases (cf. Examples 36–38), and monolexemic modifying words that constitute prime candidates for putative adverbs in that they provide contextual grounding for events along such ontological dimensions as space, time, manner, quality, degree and quantity. A prototypical example belonging to this latter set is $\text{a}^{22}\text{y}^{\text{i}33}$ ‘before’ in Example (35), whose main function is modifying the following verb.

² cf. González Pérez (2022: Ch. 5) for discussion of common realisations and variations.

1	2	3	4	5	6	7
NP _{S/A/T}	NP _{O/IO}	NP/POSTP/ADV	PTCL _{PREV}	V ₁	V ₂	PTCL _{POSTV}
S/A/T	O/IO	ADJUNCT	TAME	V _{PRIMARY}	V _{SECONDARY}	TAME
ARGUMENTS AND ADJUNCTS			VERB COMPLEX			

Table 2. Maximal structure of the simple clause in Phola

- (35) YYH: q^ha⁵⁵ve³³ a²²yi³³ nku²² ||
 which before do
 O ADJUNCT V

‘Which one (shall we) do **first**?’

(YPG1-20191229_04-STH2n/intQ8, 00:01:43.04—00:01:45.13) (indoor dialogues)

Nouns (and noun phrases) regularly express all kinds of circumstantial information in Ngwi languages (Matisoff 1973; Bradley 2012), and this is also the case in Phola. Indeed, bare noun phrases in Phola may also work as adjuncts providing information regarding the circumstances surrounding an action, usually of a spatial, temporal or qualitative kind, e.g., the destination or the duration in Examples (36) and (36), respectively. The NUM+CLF bundle is very common in this usage, which is semantically motivated by the semantic diversity of classifiers, which can encode circumstantial information of any kind, including time, as in Example (37), or manner, as in Example (38). As pointed out by a reviewer, note that adverbial expressions (whether nominal in nature or otherwise) may display scope over the entire proposition or the speech act as such, rather than the verb-encoded action itself. An example of this is provided in Example (39), where the noun phrase *t^hi³³ tɕ³¹* lit. ‘a little while’ is used as a pragmatic means to mitigate a request, much like the corresponding Mandarin Chinese expression 一会儿 *yí xià* ‘a little while (pragmatic mitigator)’.

- (36) PYNA: nu³³ zo²² qa⁵⁵ qo³³ le³³ || ŋa²²ka³³ ŋa³³ zo²² vi⁵⁵ qo³³ |
 2.POSS home go.down back go 1 also 1.POSS home cross back

‘Go back down to **your house**. I’m also going back over to **my house**...’

(YPG1-20191228_03-MIUI, 00:00:17.35—00:00:21.15) (outdoor dialogues)

- (37) LHY: tso³¹tsi⁵⁵ the⁵⁵ le³³ | t^hi³³ qo³¹ = æ¹¹ me²² m^Λ³³ na³¹ ||
 falcon that.ADR TOP one CLF.instant = DIM only NEG stop

‘As for falcons, which you are talking about, they only stop by **for an instant**.’

(YPG1-20191229_04-ext2Q8, 00:42:03.40—00:42:04.42) (indoor dialogues)

- (38) BLW: e⁵⁵ve³³ le³³ || zæ³¹ le³³ | t^hi³³ q^hɔ⁵⁵ zæ³¹ ||
 this.SPKR TOP use TOP **one** CLF.value use

‘As for these ones... As for using them, they are used **in one** (and the same) **way**.’

(YPG1-20191222_01-ext1Q8, 00:03:48.07—00:03:51.33) (indoor instructional speech)

- (39) MSN: nu²²-zi³³ p^hɑ³¹ si²² le³³ | ŋɑ²² k^hi⁵⁵ t^hi³³ tæ³¹
 2-PL COND know TOP 1 DO **one** CLF.instant
 ma²² lɑ²² ||
 teach come

‘Since since you guys know (a lot): Come teach me **a little bit** (lit. **a little while**).’

(YPG1-20190424_04-ext2H5, 00:16:17.48—00:16:20.66) (indoor dialogues)

Because of the adverbial potential of nominals, positing a separate adverb word class requires specific language-internal evidence comparing the morphosyntactic behaviour of putative adverbs with that of prototypical nouns (cf. Tallerman 2015: 65). Although he does not go into much detail, Donlay acknowledges this in his assessment that Khatso has lexical adverbs, which can be identified as a class because they “fail the tests for nounhood [...] they can neither serve as heads of possessive constructions or relative clauses like nouns, nor occur in simple noun phrases” (2019: 324).

As discussed in Section 4, prototypical nounhood in Phola requires an ability to head and/or directly modify noun phrases and/or an ability to be quantified. These criteria are fundamental because they allow us to distinguish nouns from other word classes.³ In particular, neither verbs nor, crucially, adverbs behave like nouns in that they cannot head or modify a noun phrase unless they undergo nominalisation through =xɪ⁵⁵ or qɑ³³. To illustrate, consider how space, temporal and manner adverbs, in Examples (40–42), respectively, must take =xɪ⁵⁵ to be able to appear in the slot of a quantified noun, i.e. the slot occupied by t^hɔ⁵⁵ ‘man’ in Example (11).

- (40) LJF: q³¹ki³³ = xɪ⁵⁵ t^hi³³ k^hi⁵⁵ ||
downhill = NMLZR one CLF

‘(As for) **the one downhill** (or **the next one**).’

(YPG1-20190127_06-ext1H5, 00:15:44.61—00:15:45.75) (indoor bilingual elicitation)

³ Distinguishing nouns from pronouns, nominal demonstratives and postpositions requires additional tests, which fall outside of the scope of the present article (cf. González Pérez 2022: Ch. 3 for discussion).

- (41) BLW: $\alpha^{22}y_i^{33} = xi^{55}$ e^{55} $t^h i^{33}$ $k^h i^{55}$ le^{33} $t^h i^{33}n\ae^{31}\ae^{55}n\ae_{-}^{31}$ i^{55} ||
 before = NMLZR this.SPKR one CLF TOP a.bit.IDEOPH small

‘The one **that appeared before** is a bit small.’

(YPG1-20190425_02-ext1Q8, 00:03:46.83—00:03:48.46) (indoor video description task)

- (42) MSN: $ki^{33}si^{22} = xi^{55}$ $t^h i^{33}$ $p\gamma^{22}$ $n\alpha\ae_{-}^{51}$ ||
 like.that.down = NMLZR one CLF.bunch ask

‘(He) was asking a bunch of **things like that!**’

(YPG1-20190512_01-ext1H5, 00:01:03.78—00:01:05.67) (indoor dialogues)

Likewise, when adverbs modify nouns, they need to take $=xi^{55}$, which as shown in Figure 2 is disallowed for combinations of two canonical nouns (N+N). The nominalised adverb behaves just like a relative phrase in that it may appear either left of the noun, as in Example (43), or, somewhat more commonly, right of the noun, with no obvious meaning difference. Conversely, when adverbs appear in their typical adjunct slot, i.e., directly preceding the main verb, such as $ki^{33}si^{22}$ in Example (44), they do not take nominalisation. If $ki^{33}si^{22} = xi^{55}$ were to obtain in Example (44), the relativisation would pull the adverb into the orbit of the noun phrase yielding the meaning ‘allotting **such** sweet potatoes’, which is semantically and syntactically different from the adverbial use ‘allotting sweet potatoes **in that way**,’⁴ which leans toward an event-modifying function.

- (43) LJF: $q^b\alpha^{33}si^{22} = xi^{55}$ $n\alpha^{31}ji^{55}$ | $mi^{22}ts^h\alpha^{22}$ $k^h i^{55}$ qa^{55} ||
 how = NMLZR thing ground on fall

‘**What kind of thing** fell to the ground?’

(YPG1-20190123_06-ext1H5, 00:21:09.97—00:21:15.40) (indoor monolingual elicitation)

- (44) PYNA: $mi^{31}te^h u^{55}$ $ki^{33}si^{22}$ $ve\ae_{-}^{51}$ ||
 sweet.potato **like.that** allot

‘Sweet potatoes.... They distributed **that way**.’

(YPG1-20191118_06, 00:16:55:50—00:17:02:80) (indoor stories)

⁴ This contrasts with the situation in Lahu where adverbial expressions are ambiguous as to whether they belong in a noun phrase or a verb phrase (Matisoff 1973: 306-308).

Note that in Examples (40-43) an adverb constitutes the only overt element in the relative clause and thus appear directly before the nominalising particle. This can be interpreted as an abstract nominalisation, i.e., ‘that which is downhill/thus’ or as an elliptic relative clause, i.e., a verb phrase without a head verb. As Example (30) shows, adverbs, e.g., $a^{22}ɣɔ^{22}tɔ^{33}$ ‘behind; later’, revolve around a main verb, which they modify, e.g., $tɔ^{31}$ ‘insert’. Indeed, a verb can usually be felicitously inserted between a nominalised adverb and the nominalising particle. This may be a lexically specific verb, such as $tɔ^{31}$ ‘insert’, a semantically general verb such as $zæ^{31}$ ‘use’, or the existential/possessive copula $tɔ^{22}$ ‘exist; have; be’, which works as a support verb in light verb constructions whose main predicative element is not a canonical verb (cf. González Pérez 2022: Ch. 3 and 5).

The distributional similarity between adverbs and verbs can be understood as the result of ellipsis. However, some adverbs, especially demonstrative adverbs of manner and place, so frequently take nominalisation without any intervening verb, that it would seem artificial to posit ellipsis. Many languages exhibit deictics with predicative potential (cf. Hanks 2009; Guérin 2015; Killian 2022), and this seems to be the case for Phola demonstrative adverbs as well. Their functional overlap with verbs, the predicative word class par excellence, is most apparent in the fact that demonstrative adverbs can, given enough context, be used predicatively, both as self-contained utterances and together with referential arguments/topics, whenever speakers feel no need to specify a concrete action or event. Thus, the demonstrative adverb of space $e^{31n}te^{55}$ ‘here’ in Example (45) is the only element in a pragmatically imperative utterance, much like its English counterpart (over) here!, which may or may not be attached to a verb phrase (Diessel 2006: 474). Likewise, the demonstrative adverbs of manner $i^{33}si^{22}$ ‘like this’ and $t^hi^{33}si^{22}$ ‘like that’ in Examples (46) and (47), respectively, are often used as cataphoric and anaphoric placeholders for upcoming and already-mentioned content, respectively. These uses are somewhat reminiscent of demonstrative verbs, as described for languages such as Mapuche (Guérin 2015; cf. also Killian 2022), with meanings along the lines of ‘to be like this’. However, like other non-canonical predicates in Phola, the non-verbal nature of demonstrative adverbs with predicative functions is revealed yet again by a key constructional property. Namely, one can always felicitously insert the existential copula $tɔ^{22}$ ‘have; exist; be’ between a nominalised adverb and the nominalising particle, as demonstrated for $i^{33}si^{22}$ in Example (48).

(45) BLW: $e^{31n}te^{55}$ || t^he^{31} t^ha^{33} qa^{55} le^{33} ||
 here.SPKR there.ADR PROH descend go

‘(Come/It’s) **Over here!** Don’t go down there!’

(YPG1-20190503_01-intQ8c, 00:10:40:52—00:10:45:30) (outdoor dialogues)

- (46) BLW: u²² = ve⁵⁵ | i³³si²² | zi.²² ||
 3 = BRIDGE like.this.SPKR look.here.SPKR

‘As for that one, **it was like this**, listen to me!...’

(YPG1-20191220_02-Q8, 00:18:12.30—00:18:17.45) (indoor monolingual transcription session)

- (47) MSN: ŋa²² ka³³ t^hi³³si²² n^{ti}22vΛ³³ | t^hu.²² ||
 1 also like.that.ADR UCG look.there.ADR

‘C’mon! I also (said/did it) **like that!** There you go!’

(YPG1-20191217_01-H2na, 00:51:50.96—00:52:24.41) (indoor monolingual transcription session)

- (48) BLW: u²² k^hi⁵⁵ p^ha³¹ nɔ²² tɕɔ³¹ = ve⁵⁵ | nu²² = na⁵⁵ mΛ³³ lɔ³¹ | nu²² k^hi⁵⁵
 3 DO COND hurt hit = BRIDGE 2 = from NEG release 2 DO
 n^{ti}22 qu³¹te²² tɔ²² || γ³³pɔ³³ = æ²² nɣ³³ i³³si²² tɕɔ²² ||
 pounce CONT MOD bear = also and like.this.SPKR have

‘If you hurt (a leopard), it won’t leave you alone, it will keep pouncing at you. **It’s also like this** for bears.’

(YPG1-20191220_01-ext1Q8, 00:20:27.41—00:20:35.34) (indoor stories)

A key finding is that, despite the claims made (but not necessarily substantiated, cf. Section 6) for other Ngwi languages, like Lisu (cf. Bradley 2012: 10), temporal and spatial expressions can be divided into nominal and adverbial in Phola depending on their distributional behaviour in the relevant constructions. Not all of the relevant syntactic tests are readily applicable, for example because some nouns always surface without a quantifier group (NUM+CLF) in the surveyed naturalistic data, such as *pi³³mo³³* ‘the sun’ or *ly³³po³³* ‘the moon’, which encode uniquely identifiable singular entities and thus do not lend themselves so easily to the kind of fully expanded noun phrase shown in Example (11). This notwithstanding, many such nouns can still be told apart from adverbs on the basis of whether they can or cannot directly modify a noun to their right, in the kind of possessive construction shown in Example (49) for the noun *ly³³po³³* ‘moon’ which possessively modifies the immediately following noun *k^hi⁵⁵tɔ³³* ‘foot sole; (metaphorically) rays of light coming down from a celestial body’.

(49) LTS: $l\gamma^{33}p\alpha^{33}$ $k^h i^{33}t\alpha^{33}$ $sa^{55} = \alpha^{22}n\gamma^{33}$ ||
moon **foot.sole** shine = and

‘And the moon (lit. the **moon’s foot sole**) was shining and...’

(YPG1-20190131_05-ext1H5, 00:04:21.96—00:04:23.52) (indoor stories)

However, in some cases, the transcribed corpus data is not sufficient to reach a decision. For example, $pi^{33}t\alpha^{33}t\alpha^{33}$ ‘east(wards)’ and $mi^{33}ts^h a^{22}p\gamma^{22}$ ‘(on the) floor’ are not attested in the kind of maximal noun phrase shown in Example (11). But they are also not attested as noun modifiers in possessive constructions in the available data, where they exclusively appear used as adjuncts in a verb phrase as in Example (50). Whether they should be classed as nouns or adverbs depends on whether hypothetical combinations such as $pi^{33}t\alpha^{33}t\alpha^{33} p\gamma^{22}ti^{22}$ ‘east mountain’ and $mi^{33}ts^h a^{22}p\gamma^{22} z\alpha^{33}$ ‘floor mat’ are considered grammatical, which has not yet been specifically tested.

(50) LTS: $ts^h \alpha^{55}$ ke^{55} le^{33} $pi^{33}t\alpha^{33}t\alpha^{33}$ $x\gamma^{31}$ || $m p\alpha^{33}p\alpha^{31}$ ke^{55} le^{33}
person that.down TOP east stand cane that.down top
 $mi^{22}ts^h a^{22}p\gamma^{22}$ $t\alpha^{22}$ qa^{55} ||
ground hold down

‘That guy is standing **on the east side**. The cane is propped **on the ground**.’

(YPG1-20181211_07-ext2H5, 00:07:31.32—00:07:33.88) (picture matching task)

In other cases, there is elicitation data in favour of treating certain space-encoding and time-encoding lexemes as adverbs rather than canonical nouns. Examples (51-53), for instance, show how $a^{33}\gamma\alpha^{22}t\alpha^{33}$ ‘behind; later’ and $zi^{33}ni^{33}$ ‘today’ cannot possessively modify a following noun, and must be embedded in an (elliptic) relative frame before they can appear left of a noun.⁵ Examples (54-55) further show how such adverbs cannot head a quantified noun phrase unless they undergo nominalisation. The same situation applies to $a^{31}ki^{33}$ ‘downhill’, $k\gamma^{22}vi^{55}ni^{22}$ ‘(moving) across’, among others.

⁵ If the intended meaning is ‘behind the house’ then the nominal postposition $\gamma\alpha^{22}t\alpha^{33}$ is used, as in $z\gamma^{22}\gamma\alpha^{22}t\alpha^{33}$, never the adverb $a^{22}\gamma\alpha^{33}t\alpha^{33}$. This etymon is also not used to talk about the intrinsic back of a human or animal body. To say ‘my back’ for example, one has to use a completely different word, either $\eta a^{33} q\alpha^{22}m\alpha^{33}t\alpha^{22}$ ‘my upper back’ or $\eta a^{33} t\alpha^{22}t\alpha^{22}$ ‘my lower back’, which are in actual fact canonical nouns.

- (51) * $\alpha^{22}\gamma\alpha^{22}t\alpha^{33}/\text{zi}^{33}ji^{33}$ $\text{z}\gamma^{22}$
 behind/today house
 ‘(Intended) The house of behind/today.’
- (52) $\alpha^{22}\gamma\alpha^{22}t\alpha^{33}/\text{zi}^{33}ji^{33} = xi^{55}$ $\text{z}\gamma^{22}$
 behind/today = NMLZR house
 ‘The house of behind/today.’
- (53) $\alpha^{22}\gamma\alpha^{22}t\alpha^{33}/\text{zi}^{33}ji^{33}$ $u^{31} = xi^{55}$ $\text{z}\gamma^{22}$
 behind/today sit = NMLZR house
 ‘The house that is behind/today.’
- (54) * $\alpha^{22}\gamma\alpha^{22}t\alpha^{33}/\text{zi}^{33}ji^{33}$ $t^h i^{33}$ $k^h i^{55}$
 behind/today one CLF
 ‘(Intended) (The) one behind/today.’
- (55) $\alpha^{22}\gamma\alpha^{22}t\alpha^{33}/\text{zi}^{33}ji^{33} = xi^{55}$ $t^h i^{33}$ $k^h i^{55}$
 behind/today = NMLZR one CLF
 ‘(The) one behind/today.’

Temporal expressions are particularly interesting in Phola as they come in many structural shapes. Some of them are entity-individuating nouns and/or classifiers, especially the ones that encode duration or timespan, such as $na^{33}ta^{33}\text{c}\alpha^{22}$ ‘(one/the) morning(n)’, $l\gamma^{33}p\alpha^{33}$ ‘a month (n./clf.)’, ji^{33} ‘a day(n.)’, CLF.day’ and χa^{31} ‘night(n.)’, CLF.night’. Temporal nouns can head a noun phrase and be quantified, e.g., $l\gamma^{33}p\alpha^{33}ji^{31}k^h i^{55}$ ‘two months’. However, other temporal expressions, typically expressing deictic time, are adverbs, such as $\text{c}\alpha^{22}na^{33}$ ‘tomorrow’, $\text{zi}^{33}ji^{33}$ ‘today’, $a^{22}na^{33}$ ‘yesterday’, $i^{33}\text{c}\alpha^{22}ne^{55}$ ‘this morning’, $a^{33}na^{22}ta^{33}\text{c}\alpha^{22}$ ‘yesterday in the morning’, $a^{33}na^{22}k^h i^{22}$ ‘yesterday in the evening’, $t\text{c}^h i^{33}ji^{33}$ ‘this year’, $a^{33}ji^{33}na^{22}$ ‘last year’, $i^{33}t^h a^{31}$ ‘now’, among others.⁶ As shown in Examples (51-55) for $\text{zi}^{33}ji^{33}$ ‘today’, these adverbs cannot participate in nominal modification or head a noun phrase, unless they are embedded in a relative frame. Hence, they do not satisfy the criteria for canonical nounhood. As is the case for spatial-encoding expressions, some temporal expressions are ambivalent and exhibit some properties of both canonical nouns and adverbs. For example, $a^{22}ji^{33}ne^{55}$ ‘(in) the past’ can’t be quantified, which is an adverb-like property. However, it is attested as a modifier without an intervening nominaliser before a following noun,

⁶ Note that several of these deictic temporal adverbs are may historically derive from demonstrative roots through processes like phrasal chunking. However, crucially they are not synchronically analysable as productive derivations or constructions, nor do they inherently constitute compositional noun phrases.

which is a noun-like property. Such a usage is apparent in Example (13), i.e. $a^{22}yi^{33}ne^{55} le^{22}lu^{33}$ ‘stories **of/from the past**’. Interestingly, this same expression is also frequently attested in an embedded relative clause modifying a nominal head, with or without a semantically specific verb such as $tiæ^{51}$ ‘to plant’ in Example (56), which can be elided. This latter behaviour is more consistent with an adverb characterisation. Thus, the evidence points at ambiguity or multifunctionality for this particular item, which is to be expected under a functional and radical-construction-grammarians approach.

(56)	LHM:	$a^{22}yi^{33}ne^{55}$	($tiæ^{51}$)	$q\Lambda^{33}$	ke^{55}	$tiæ^{51}$		$tiæ^{51}$		ke^{55}
		in.the.past		plant		REL	that.down	plant		plant		that.down
		$t\gamma^{33}$		ki^{31}	se^{33}	$çia^{33}$	se^{33}	ke^{55}		$n\gamma^{22}$		se^{33}
		yield.fruit		able	still	fragrant	still	that.down		tasty		still

‘They are planting the one (mango variety) **that** (we planted) **in the past**... They are planting it! It can still yield fruits, it’s even more fragrant, it’s even more tasty (that the ones from the present times).’

(YPG0039-M, 00:02:42.65—00:02:45.96) (outdoor dialogues)

Beyond demonstrative adverbs of manner, monomorphemic lexical adverbs encoding qualitative information include $q\gamma^{33}lu^{22}$ ‘quickly’, $a^{33}l\gamma^{33}l\gamma^{33}$ ‘slowly’, $tu^{33}tu^{33}$ ‘in a straight line; orderly’, among others. While some of these may go back to derivational process such as chunking and reduplication, they are synchronically unanalysable. There are also many manner adverbs derived from stative verbs through reduplication, such as $na^{55}na^{55}$ ‘well’ from na^{55} ‘good’, $tçi^{31}tçi^{31}$ ‘tightly’ from $tçi^{31}$ ‘tie up; tighten’, $ni^{31}ni^{55}ni^{31}$ ‘in a chase-like fashion; quickly’ from ni^{31} ‘chase, prey upon’, and $q^{h\gamma^{3155}}q^{h\gamma^{31}}$ ‘correctly; precisely; justly; fairly’ from $q^{h\gamma^{31}}$ ‘right; correct; precise’.⁷ There is also a wide range of ideophonic and sound-symbolic expressions as well as polylexemic expressions that exhibit the same distributional behaviour as monolexemic adverbs, and that express perceptual qualities including sounds, tactile experiences, shape and dimensional properties, among others.

An important property of manner adverbs, in particular, is that they may be marked with the adverbialising marker $næ^{31}$, which can also be used to mark hypotactic clauses of an adverbial and gerundive nature (cf. González Pérez 2022: Ch. 5).⁸ This explicit adverbialiser is also to a lesser extent attested after some other kinds of adverbial expressions expressing temporality, frequency, degree and even space. In the case of sound-symbolic, perceptual and tactile adverbs, $næ^{31}$, often realised as $[(?æ)^{55}næ^{31}]$, is phonologically fused. To illustrate, contrast the prosodic and phonological

⁷ Some of these reduplications include special tonal properties which fall outside the scope of this article.

⁸ *Phola* $næ^{31}$ also works as an agent/instrumental marker after nominal arguments that are pragmatically marked or ambiguous in their role as agents/forces. It is unclear at this stage whether this is to be analysed as polysemy or homophony (cf. González Pérez 2022 for more details).

difference in its realisation in $p^h u a^{31} \eta a^{55} n a e^{31}$ ‘with a smashing sound’ in Example (57) vs $i^{33} s i^{22} n a e^{31}$ ‘in a way like this’ in Examples (58-59).

- (57) PYNA: $l x^{22} q x^{22}$ $ke^{55} - l a^{22}$ u^{31} | $l x^{22} q x^{22}$ $k h i^{55}$ **$p^h u a^{31} \eta a^{55} n a e^{31}$** $n^t e u^{33}$ |
stone that.down-at be stone on **smashing.sound** hit
 ηa^{33} $k h i^{55}$ ||
1.POSS leg

‘There was a stone there. My leg stumbled against the rock **with a smashing sound.**’

(YPG1-20191118_06-ext1Q8, 00:00:28.20 —00:00:32.07) (indoor stories)

- (58) BLW: $e^{55} v e^{33}$ $l e^{33}$ | $z i^{22}$ || **$i^{33} s i^{22}$** **$n a e^{31}$** $t^h u^{55}$ ||
this.SPKR TOP look.here.SPKR **like.this.SPKR** ADV thick
 $i^{33} s i^{22}$ **$n a e^{31}$** $t^h u^{55}$ ||
like.this.SPKR ADV thick

‘It’s like this, look here! It’s thick **in a way like this.** It is thick **in a way like this.**’

(YPG1-20191224_01-ext1Q8, 00:15:40.85—00:15:48.93) (indoor dialogues)

- (59) MSN: **$i^{33} s i^{22}$** **$n a e^{31}$** $z u^{33}$ $t^h i^{31}$ | $z a^{33}$ ||
like.this.SPKR ADV hold RSLT TAG

‘(I have to) hold it **like this,** right?’

(YPG1-20190513_03-STH2n, 00:04:00.78—00:04:02.13) (indoor dialogues)

Despite the evidence provided so far, it is worth noting that adverbs do exhibit some degree of distributional and functional resemblance to canonical nouns. For example, especially demonstrative adverbs of space and manner sometimes appear in slots that are syntactically and semantically ambiguous between nominal and adverbial. Thus, the adverb $e^{31} n^t e^{55}$ ‘here’ in Example (60) can be interpreted as an adverbial adjunct in a subjectless attributive clause, i.e., ‘it is easy to walk **here**’, or as topical theme, i.e., ‘**as for here** (i.e., **this place**) — is easy to walk.’⁹ This issue is largely a byproduct of the fact that simple verbal clauses in Phola, even transitive ones, typically contain a single overt participant (argument or adjunct), whichever one is deemed most pragmatically informative. It would be rare for Phola speaker to add an explicit subject-like NP, such as $\eta a^{22} z i^{33}$ ‘we’, in an Example like (60).

⁹ cf. González Pérez (2022: Ch. 5) for an overview of attributive and equational clauses in Phola.

(60) BLW: e³¹ⁿte⁵⁵ næ⁵⁵ ɛi²² na⁵⁵ ||
here.SPKR INTF walk good

‘It’s very easy to walk **here!**’ or ‘**This place** is very easy to walk.’

(YPG1-20190503_01-intQ8c, 00:10:40:52—00:10:45:30) (outdoor dialogues)

Another noun-like property of adverbs is that at least some of them may receive some forms of nominal modification to their left even if they may not themselves possessively modify nouns to their right. Thus, identically to nominal demonstratives, such as *ke*⁵⁵ ‘that down there’, demonstrative adverbs of space such as *ke*³¹⁽ⁿ*te*⁵⁵⁾ ‘down there’, may also be modified by a preceding relative clause. Do note, however, that while the demonstrative adverb of space *ke*³¹⁽ⁿ*te*⁵⁵⁾ works as the semantic and syntactic head that is modified by the relative clause in Example (61), it simultaneously works as an adjunct to the verb in the main clause, i.e., *qa*⁵⁵ ‘to go down’ and *u*³¹ ‘to be; sit’.¹⁰

(61) MSN: la³¹pu³³tsɿ²² || si²²tsɿ²² e⁵⁵ = xu³³ teɔ²² = xi⁵⁵ teɔ²² qa³³
kapok tree this.SPKR = size.EXT have = REL have REL
ke³¹ⁿte⁵⁵ ke³¹ qa⁵⁵ le³³ ji⁵⁵ qa³³ ke³¹
down.there **down.there** descend go RSLT REL **down.there**
u³¹ = xi⁵⁵ = niæ³³ | ŋa²² = næ³¹ ||
be = REL = EP 1 = AG

‘The kapok... So, it was me who was **down there where** we had already gone down, **down where** there is a tree that is this big. That’s what I’m (saying)!’

(YPG1-20190511_05-ext1H5, 00:51:19.32—00:51:50.56) (indoor dialogues)

Adverbs may also be modified by preceding nominals, including a single noun or pronoun, or a postpositional phrase. This is illustrated for spatial adverbs in Examples (62-65). Note that the postposition *n*te²² ‘among; at; with; around’ in Example (62), which is used after animate nouns to express proximity, involvement or possession, can be felicitously dropped without any change in

¹⁰ Importantly, relative clauses in Phola, as in other Ngwi languages like Khatso (Donlay 2019: 222-225), are not subcategorised for argument structure and allow very loose relationships between the head and the embedded clause, such that the head could be an instrument, a location, a topic, a manner. As a result, adverbs of space and manner can de facto head relative clauses, without them being interpretable as nominal arguments. This is incidentally also the case in languages like English, e.g. *there, where the waves crash* or German *so, wie du es gemacht hast*, where neither *there* nor *so* are nouns.

meaning. Lastly, prosodically integrated sequences of two different adverbs are also possible, whose semantic relation to one another can be one of (loose) modification or appositionality. Note in connection with Examples (61) and (64) how different variants of demonstrative adverbs stack onto one another following principles dealt with in González Pérez (2022: Ch. 7).

- (62) PYNA: $\eta\alpha^{22}(=n^{tse}{}^{22})$ e^{31} $q\text{ɔ}^{33}$ $l\gamma^{33}$ $m\alpha^{22}$ $t\text{ɔ}^{33}l\gamma^{33}$ $si^{33}=xi^{55}$
1(=amongst) here.SPKR return come will turns.out still=NMLZR
 $m\text{p}\alpha^{55}$ $t\text{ɕ}\alpha^{31}$ ||
 ADR.QUOT TAG

‘So you are saying that you will come back **here (amongst/with) us**, right?’

(YPG1-20190512_07-ext1Q8, 00:23:43.26—00:23:45.54) (indoor dialogues)

- (63) BLW: $p\gamma^{22n}ti^{22}$ kh_i^{55} je^{31} i^{55} $l\text{ɔ}^{31}$ ||
hill on up.there defecate away

‘People went defecate **uphill on the mountains.**’

(YPG1-20191227_04-ext1Q8, 00:12:28.54—00:12:29.66) (indoor stories)

- (64) LJF: $\alpha^{22}nu^{33}$ $ke^{31n}te^{55}$ || $ke^{31n}te^{55}$ ke^{31} $se\alpha^{31}$ $t\text{ɔ}^{22}$ ||
outside down.there down.there down.there slaughter MOD

‘**Outside down there.** (The pigs) will be slaughtered down there.’

(YPG1-20191125_05-MIUI, 00:00:02.75—00:00:04.90) (indoor dialogues)

- (65) MSN: $q^{31}ki^{33}$ $ke^{31n}te^{55}$ [...] qa^{55} le^{33} sa^{55} ||
downhill down.there descend go easy

‘**Downhill, down there...** It’s easy to descend.’

(YPG1-20190503_01_STH2n, 00:05:35.74—00:05:37.89) (outdoor dialogues)

6 Comparison to other Ngwi languages (Lahu, Akha, Nuosu, Lisu, Khatso, Kua-nsi)

The syntactic properties and tests that allow us to isolate and functionally define adverbial expressions for Phola do not readily extend to other Ngwi languages like Lahu (Central Ngwi), Lisu (Central Ngwi), Kua-nsi (Central Ngwi), Khatso (Central Ngwi), Nuosu (Northern Ngwi) or Akha (Southern Ngwi) for a number of reasons. The most interesting language for comparative purposes is Lahu, since this is the best described variety out of all the Ngwi languages. In this language, there

is a single syntactic strategy to link nouns to one another and to verb phrases. The form *ve*³³ works as a general nominal linker “of a highly abstract meaning” (Matisoff 1973: 141), which “serves both to connect a possessor nucleus to a possessed head in genitive constructions and to connect relative clauses to their head nouns” as respectively illustrated in Examples (66-67) taken from Matisoff (1973: 360). *ve*³³ “simply indicates that the preceding noun is viewed as having some connection with the following noun” spanning functions associated with genitive marking (Matisoff 1973: 141) and relative marking (Matisoff 1973: 472). The exact same situation obtains in Akha (Southern Ngwi), where the relevant nominal linker is *ə*, as shown in Examples (68-69) (Hansson 2017: 139-140). In Kua-nsi, both relations are most commonly unmarked. Whilst an infrequent relativiser, taking the forms *xu*⁵⁵ or *nu*³³, can be optionally inserted before a head noun, this appears to be used primarily in elicited speech as a strategy to translate the Mandarin Chinese relativiser *de* (Huang 2024: 367).

(66) *yaʔ⁵⁴p^hu³³qa¹¹ ve³³ ɔ²¹mu³³* (Lahu, Matisoff 1973: 360)

rooster GEN feather

‘The rooster’s feathers.’

(67) *ɕiʔ⁵⁴ tɔ¹¹ ve³³ ɔ²¹mu³³* (Lahu, Matisoff 1973: 360)

pluck PFV GEN feather

‘The feathers **which** have been plucked.’

(68) *xhàlà ə dòmì* (Akha, Hansson 2017: 892)

tiger GEN tail

‘The tiger’s tail.’

(69) *mínɑŋ lá ə xhó nji yà* (Akha, Hansson 2017: 893)

yesterday come GEN those two CLF

‘Those two persons **who** came yesterday.’

(70) *a³³pi²¹ ∅ bu²¹ ∅ mə³³* (Kua-nsi, Huang 2024: 153)

Api father field

‘Api’s father’s field’

- (71) t^hua²¹zi²¹ swa²¹ (xu⁵⁵/∅) dàxuéshēng xu²¹ (Kua-nsi, Huang 2024: 367)
 paper understand REL student DIST
 lu³³da²¹ dza⁵⁵
 many exist
 ‘There are many university students (**who are**) literate.’

Since forms like Lahu *ve*³³ or Akha *ð* are used to link a nominal head with either another nominal head or a verb phrase (Matisoff 1973: 360-363), there is much less of a difference between nominal vs verbal modification of head nouns in Lahu than in Phola. Because of this situation a multifunctional analysis of adverbial expressions is often compelling for many Lahu adverbs such as the interrogative *q^ha²¹q^he³³* ‘how’, which, as illustrated through Examples (70-71), “also functions like a noun, in which capacity it always appears as the possessor nucleus of a genitive construction with the meaning ‘what kind of’” (Matisoff 1973: 277). The multifunctional approach motivates the proposal of “nadverbs” or “nadverbials”, a category advocated by Matisoff for nouns that are used as adverbial expressions (Matisoff 1973: 265).

- (72) q^ha²¹q^he³³ te³³ tu²¹ ve³³ le³³ (Lahu, Matisoff 1973: 276)
 how do FUT NMLZR Q
 ‘How will you do it?’

- (73) q^ha²¹q^he³³ ve³³ kan⁴⁵ ya³³ te³³ tu²¹ ve³³ le³³ (Lahu, Matisoff 1973: 277)
 how GEN work must do FUT GEN Q
 ‘What kind of work will you have to do?’

In other Ngwi languages, like Nuosu, Lisu and Khatso, shown in Examples (72-77), there is a difference in marking of possessive vs relative relations, which in principle opens the door for the kinds of syntactic tests discussed for Phola being fruitfully applicable in these languages. Unfortunately, the authors do not discuss how verb-modifying expressions (of a temporal, spatial or manner nature) behave with respect to nominal modification and embedded relative clauses. It is thus impossible at this stage to offer any meaningful comparison vis-à-vis the facts of Phola discussed in this piece.

- (74) zhu³³zhu³³ ∅ pu³³jie⁵⁵ (Nuosu, Gerner 2013: 86)
 pearl price
 ‘The pearl’s price.’
- (75) a⁴⁴yi³³ o²¹bu³³ su³³ (Nuosu, Gerner 2013: 88)
 child intelligent NMLZR
 ‘Intelligent children (lit. children **that are** intelligent).’
- (76) ŋwa³³ ∅ ba³⁵ba²¹ (Lisu, Bradley 2017: 907)
 1SG father
 ‘My father’
- (77) p^hu³³ (a⁵⁵)mq⁴⁴ ĥi³³ t^h∅³³ t^hi²¹ ĥi³³ (Lisu, Bradley 2017: 909)
 white REL house this one CLF.house
 ‘This house, **which** is white.’
- (78) i²⁴la³¹ p^ɣ³²³ ŋa³³ (Khatso, Donlay 2019: 127)
 past POSS 1SG
 ‘The past’s me.’
- (79) sa⁵⁵ thei³²³ la²⁴ tsho³³ jo³⁵ (Khatso, Donlay 2019: 206)
 poor very REL person CLF
 ‘A person **that is** very poor.’

Although it goes somewhat beyond the scope of this study, it is worth noting that, similar to the Phola situation discussed in Section 5, Lahu, Kua-nsi, Nuosu, Lisu and Khatso all mark certain adverbial expressions—mostly expressing manner and often of a de-adjectival, de-verbal or de-classificatory origin—with a dedicated adverbialising morpheme, Lahu *ɛ*²¹ (Matisoff 1973: 278), Kua-nsi *su*²¹ (Huang 2024: 385), Nuosu *mu*³³ (Gerner 2013: 384), Lisu *mu*⁴⁴/*be*⁴⁴ (Bradley 2012: 11), Khatso *ni*³³ (Donlay 2019: 167; 325; 330; 334), Phola *nɛ*³¹, which is in some cases compulsory. Interestingly, in at least three languages, Lahu, Kua-nsi and Phola, this adverbialising marker appears both when the adverbial expressions act as a verb modifier and when it acts as a noun-modifier or head noun. This is shown in Examples (78-79) for Lahu, (80-81) for Kua-nsi and (82-83) for Phola. A commonly assumed, but not necessarily proven, interpretation is that this is a “manner nominalisation” (Bradley 2012: 11; Huang 2024: 384) yielding nouns that just happen to function adverbially (note that this marking is different from say instrumental-comitative case marking applying over canonical nouns). However, an alternative analysis is that the conceptually adverbial

nature of such qualitative, verb-adjacent expressions is being explicitly signalled through dedicated adverbial marking that gets imported even into nominal-modification contexts. This in turn suggests that adverbiality is very much a real structural-functional category in these languages and, crucially, one that sometimes simply cannot be replaced with canonically nominal grammar.

(80) a²¹mi¹¹ji²¹ ni⁴⁵ ɛ²¹ to²¹ ve³³ (Lahu, Matisoff 1973: 287)

sparks red ADV burn GEN

‘The sparks burned red(ly).’

(81) ʃi⁴⁵ ɛ²¹ ve³³ a⁴⁵po²¹le²¹ (Lahu, Matisoff 1973: 288)

yellow ADV GEN sweater

‘A yellow sweater (lit. a sweater that (is/acts) yellowly).’

(82) bo³³bo³³ su²¹ k^ha²¹ u³³ tɕja³³ (Kua-nsi, Huang 2024: 82)

flat~RDP ADV cover get able.to

‘I can cover the bed flatly.’

(83) si²¹ni⁵⁵ni⁵⁵ su²¹ su³³ tɕ²¹ i³³ tu²¹ (Kua-nsi, Huang 2024: 82)

red~RDP ADV three CLF:flower bloom PFV

‘Three red flowers bloomed (lit. flowers **that are/behave redly**).’

(84) PYNA: ŋa³³ za³¹ [...] e⁵⁵=ŋɔ³³=æ⁵⁵=næ³¹ ta²²

1.POSS son this.SPKR = height.EXT = DIM = ADV leave

ʒi³¹=ʌ³³ ɕi⁵⁵=lɔ³¹ tɔ²² [...]

RSLT.leave.behind = SEQ die = away MOD

‘I was bound to die leaving my son behind **while** he was barely this tall (or: lit. barely this shortly...).’

(YPG1-20191118_06-ext1Q8, 00:05:21.92—00:05:25.18) (stories)

- (85) MSN: $\alpha^{22}t^h\text{ɔ}^{31} = \text{æ}^{22}$ si^{22} || $\alpha^{33}n\text{æ}^{31}$ $e^{55} = \eta\text{ɔ}^{33} = \text{æ}^{55} = ni^{55}$
 who = also knows child this.SPKR = height.EXT = DIM = ADV.NMLZR
 $m\Lambda^{33}$ si^{22} si^{33} $ti\text{æ}^{51}$ ||
 NEG know still CONTR

‘Anyone knows. Well: Children **who are** barely this tall don’t know yet (lit. **who are** barely this shortly).’

(YPG1-20191119_01-H2n, 00:17:23.12—00:17:25.84) (outdoors dialogues)

7 Summary and discussion

Defining and describing wordhood and parts of speech is a long-standing issue in the field of Tibeto-Burman Linguistics (e.g., Matisoff 1973; DeLancey 1997; Hildebrandt 2007; Bickel et al. 2009), not least due to the complexities and multifunctionality of nominal elements and nominalisation in this language family (Matisoff 1972; Noonan 1997; Bickel 1999; DeLancey 2002). This paper has contributed to the study of word classes in Tibeto-Burman on two main accounts. Firstly, it has provided the first ever in-depth description of the noun phrase in a southeastern Ngwi language, Phola, which behaves quite differently from Lahu, the best-described Ngwi language to date. It was shown how the Phola noun phrase has a largely fixed structure made up of distinct slots, which allows us to syntactically define nouns, nominal demonstratives, numerals and classifiers by reference to one another. Secondly, beyond their positional slot within the noun phrase, this article has discussed a number of syntactic tests, which allow us to distinguish canonical nouns from other word classes, in particular from lexical adverbs expressing time, place and manner. This is relevant because adverbial expressions, especially those encoding locative and temporal notions, have been assumed to be nominal or noun-adjacent in languages like Lisu (Bradley 2012: 10) and Lahu (Matisoff 1973: 265) where they appear to exhibit fewer obvious structural coding differences with respect to nouns. Moreover, even in the case of Tibeto-Burman languages with a recognised class of adverbs such as Burmese, the analytical decision to assign a given word to this class is recognised by grammarians themselves to be often arbitrary (cf. Jenny & San San Hnin Tun 2016: 56).

In Phola, canonically adverbial and canonically nominal expressions are more distinct. Since Phola formally distinguishes the way it marks nominal modification of a possessive kind from relativisation, we can distributionally distinguish canonical nouns from other types of words based on how they integrate into nominal frames. More to the point, two main syntactic constructions systematically distinguish Phola nouns from lexical adverbs. Firstly, nouns act as possessive modifiers to other nouns without any intervening material, whereas adverbs need to be integrated into a relative frame, marked with $=xi^{55}$ or $q\Lambda^{33}$, before they can modify a following noun. Crucially, both $=xi^{55}$ and $q\Lambda^{33}$ are ungrammatical between two canonical nouns, because they are inherently postverbal particles. Indeed, it was shown how adverbs nominalised through $=xi^{55}$ underlyingly presuppose a head verb, which may be contextually elided. The second syntactic test involves the ability to head a quantified and/or deictically determined noun phrase, which only canonical nouns can do. Again, adverbs and verbs alike must first be nominalised before they can act as the referential head of a noun

phrase and receive quantification and/or deictic determination. In summary, lexical adverbs can be syntactically defined in Phola as non-negatable full words, which cannot head or directly modify a noun phrase unless first nominalised, and which underlyingly belong into the phrasal orbit of a verb, which they modify.

Despite important syntactic differences vis-à-vis the remaining word classes, there are also some important similarities. Thus, for example, some Phola adverbs can receive, but crucially not enact, nominal modification, e.g., via a preceding relative clause, (pro)nouns or postpositional phrases. Moreover, Phola adverbs, especially those encoding spatial and manner notions, can be used predicatively in utterances where the relevant event or state of affairs is elided, whether because it is already established in discourse, pragmatically obvious or intentionally left underspecified. While this is symptomatic of their functional and syntactic proximity to the verb orbit, it is worth stressing that they fail the most important test for verbhood in that they cannot be negated through the Pan-Tibeto-Burman negator, whose Phola reflex is *ma*³³ (cf. Matisoff 1973: 193; Donlay 2019: 240; González Pérez 2022: Ch. 4).

All in all, the available syntactic evidence provides converging language-internal reasons to treat some of the most frequently used temporal, place and manner expressions in Phola as adverbs, a word class for which some scholars like Bradley (2012; 2017) see little evidence, but which plays an important role in the grammar of Phola.

A major methodological issue that this paper contributes to highlight is the need to assess the behaviour of functionally, areally and etymologically related expressions on the basis of detailed language-internal criteria. In Ngwi-Burmese, and more generally, analytic languages, membership to a given part of speech is usually morphologically unmarked (cf. Donlay 2019: 239). As briefly pointed out, the class of adverbs in Phola is fairly heterogenous in its morphological makeup, variously including monomorphemic forms, loanwords from Mandarin Chinese and Nisu, and denominal and deverbal forms derived through affixation, reduplication, tonal/vocalic alternations, and/or phrasal chunking. It is precisely for this reason that it is paramount to develop language-specific syntactic tests that allow us to disentangle different parts of speech. The main contribution of this paper in this regard has been to shed light over a particular area of functional and semantic overlap, namely the realm of circumstantial adjuncts in Phola, where nouns and adverbs exhibit some functional and semantic convergence, but crucially also syntactic differentiation.

The syntactic tests discussed in this paper would not be applicable to other Ngwi languages such as Lahu, Akha or Kua-nsi, where nominal modification and relativisation are coded through the same formal means, respectively the genitive markers *ve*³³, the genitive marker *ə* and *∅*. While they are semantically distinctive, many adverbial expressions of a lexical-representational nature in Lahu cannot be unambiguously kept apart from nouns because they can be used adnominally and be quantified following the same formal patterns as prototypical nouns (Matisoff 1973: 265). However, even in Lahu, a subset of adverbial expressions, especially manner/quality adverbs derived from adjectival/stative verbs need to be explicitly marked as adverbs before they can be used in genitival constructions as noun modifiers. This is another constructional reflex that can be interpreted as evidence supporting the reality of adverbiality as a conceptual and structural category in Ngwi languages.

Importantly, as pointed out by generalists and typologically minded syntacticians, functional and semantic criteria alone are often insufficient to reach a classificatory decision (cf. Tallerman 2015: 65), and hence distributional and constructional facts must be carefully pondered (Croft 2001: Ch. 2). Indeed, this paper has shown how different temporal and spatial lexemes cannot a priori be

assigned to the class of nouns or adverbs on the basis of their meanings. Rather, their word class status (or at least their underlying appurtenance to either the orbit of the noun or the orbit of the verb) can, indeed should, be assessed on a case-by-case basis through dedicated syntactic tests. In line with predictions from usage-based construction-grammatical approaches (e.g., Croft 2001), there will likely be cases where the data points at ambiguity and/or multifunctionality in syntactic mappings, as discussed for Phola $a^{22}y\dot{i}^{33}ne^{55}$ ‘the past(n); in the past(adv)’.

Future research shall expand on these findings by turning to five important issues not covered here for reasons of space. First, the syntactic and functional properties of other kinds of adverb-like expressions, very particularly a set of paradigmatically alternating pre-verbal particles with more abstract and procedural meanings such as the negator ma^{33} , the prohibitive t^ha^{33} , the intensifier nae^{55} and the marker of co-extensive aspect $y\dot{i}^{33}$. Second, the derivational and lexical morphology of adverbs vs that of nouns and verbs in Phola. Third, the behaviour of multifunctional words exhibiting properties of adverbs and either or both nominal and verbal constituents, such as dimensional extensives (on which cf. González Pérez 2022, Ch. 6). Fourth, the polysemous marker nae^{31} , which is used as a periphrastic adverbialiser but also as a morphologically bound element in sound-symbolic and dimensional expressions, as a co-exponent of diminutive degree, as a nominal postposition marking semantic agents and as a completive clausal conjunction. Fifth and finally, the syntax of adverbial clauses and their interrelations vis-à-vis nominal clauses.

ABBREVIATIONS

List of Phola native speakers (with gender and age group)

BLW	Bai Luwu	(male in his 80s)
LHM	Li Huiming	(male in his 50s)
LHY	Li Hongying	(female in her 60s)
LJF	Li Jiafu	(male in his 70s)
LTS	Li Tieshun	(male in his 70s)
MSN	Ma Sinu	(female in her 70s)
PYNA	Bai Yunnan	(female in her 70s)
YYH	Yang Yinghui	(female in her 40s)
ZDS	Zhang Dangsheng	(male in his 60s)

List of glosses and prosodic conventions

1	First person	IDEOPH	Ideophone
2	Second person	INT	Interrogative
3	Third person	INTF	Intensifier
ADR	Addressee as epistemic authority	INTJ	Interjection
ADV	Adverb(ialiser)	MP	Modal particle

AG	Agent marker	NEG	Negation
ASYM	Asymmetric access	NMLZR	Nominaliser
BRIDGE	Bridging linkage marker	PFV	Perfective aspect
CAUS	Causative particle	PL	Plural(iser)
CLF	Classifier	PROH	Prohibitive marker
COND	Conditional marker	Q	Question particle
CONTR	Contrastive particle	QUOT	Quotative marker
CORREL	Correlative degree marker	REL	Relativiser
COS	Change of state marker	RSLT	Resultative verb
DIM	Diminutive	SEQ	Sequential aspect
EMPH	Emphatic marker	TAG	Tag question
EP	Epistemic certainty marker	TOP	Tocaliser
EV	Evidential marker	UCG	Updating common ground
EXH	Exhortative		minor prosodic pause (<0.5 secs)
EXT	Dimensional extensive		Major prosodic pause (>0.5 secs)

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