On the word in Angami Naga*

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ABSTRACT

This paper seeks to expound and juxtapose two alternative approaches to linguistic wordhood as applied to Angami Naga, a Tibeto-Burman language of North East India. In the first of these approaches the criteria, which are laid out with ample exemplification, apply across the board, which results in the definition of only one kind of wordhood (viz. lexical wordhood). In the other approach different criteria apply in response to different levels (viz. the phonological, intraphrasal and interphrasal), resulting in a six-way typology of the Angami word. There is furthermore an attempt to define compound lexical units. Compounds, however, do not lend themselves to being analysed in terms of the second approach. Although this paper is basically empirically inclined, theoretical exegesis perfuses data-elucidation all along. We conclude that the disjunct approach explicates the phenomenon of the word in Angami in a more fruitful perspective than the conjunct approach.

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(a) Angami Naga, phonemically /ʔŋəmi nʌŋŋa/ belongs to the Western subgroup of the Naga group of the Tibeto-Burman family of languages. It is spoken in the hilly state of Nagaland in North-East India. Angami is a tone language, but tone is not marked here because it is irrelevant to the central thrust of this article. Intonation does bear on the problem of the word, but we lack sufficient data to take it into consideration here.

(b) Drs. E. Annamalai, D. P. Pattanayak (my linguist-colleagues) and Mr. Vishwanath Mirle (my redoubtable graduate teacher) have given ungrudgingly of their time and acumen in commenting on a first version. My gentle Angami friends Khose Sale, Ata Vizol, and Zakele Iralu, the willing celerity of whose response has been a great goad in my attempt at plumbing the depths of the language, never hemmed or hawed when accosted with a request for data. My daughter Usha helped tie up some loose ends in presentation, and converted my forbiddingly squiggly calligraphy into an incredibly neat manuscript. My devout thanks to and ready absolutions on all of them.

(c) This is a recension of a paper which was presented to the Third International Conference on South Asian Languages and Linguistics, 13-16 January, 1982, Mysore, India. I'm grateful for some piquant, if skimpy, feedback I got there.
To sift lexical units (words, compounds included) from the more numerous syntactic units (phrases) on the one hand and the less numerous sublexical units (bound forms) on the other, has seldom been an easy task in any language.\(^1\) As it happens, some of the criteria which make for the strainer are necessary without being sufficient, some sufficient without being necessary, none both necessary and sufficient, some neither. Two criteria may prove dissonant to each other in deciding the morphological, lexical or syntactic status of a linguistic structure, in which case one criterion may override the other, or the criterion that holds the stage in some specific cases may itself be overridden by others in certain others, or a single criterion may prove inconclusive in which case criteria apply in concert... In a word, there is about the defining criteria of the word a seemingly messy criss-crossing asymmetry.\(^2\)

I shall, in this exposition, sketch out and juxtapose two alternative approaches to wordhood, neither of which is admittedly entirely novel. The comparative juxtaposition will be more implicit than explicit as the differences between the two approaches will be quite obvious. I will prepare the ground for such an exercise by first laying out some well-defined and well-known criteria. These will establish under what conditions (a) phonic material is to be considered sublexical or bound, and (b) adjacent

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1 In languages where the rung of the word can be motivated in the linguistic-structural ladder, word segmentation is not an easy matter (especially in nonagglutinative languages). Any definitions of the boundaries of the word which are restricted to a gnomic sentence or two rarely, if ever, turn out to be unimpugnable. There is undoubtedly more to the linguistic unit of word than can be encapsulated in a couple of laconic sentences. Further, it is difficult to square the notion of a language with no well-motivated level of the word with the formidable position that the word is a primordial category that "mediates between linguistic entities (phrase, sentence, text) and (nonlinguistic) ontologic entities," so that prototypically — ontogenetically and phylogenetically — the speaking animal (homo loquens) is a lexical rather than a syntactic animal. Such languages also go against the position that "all regular word-formation rules are word-based." (Aronoff 1976:21)

2 Although most of the examples that are discussed in this article as compounds were listed under the rubric "word compounding" in my grammar of Angami, there were no heuristics advanced for doing so except the native speaker's intuition — which I dubbed "a rather dubious" criterion (Giridhar 1980:90). Although possibly a necessary criterion, it is never a sufficient one. Intuitional, introspective evidence is typically shored up by some kind of formal-structural evidence in language. Surely, there must be something in what the intuitions are about, which brings them into being in the first place. If the intuitions cannot be buttressed by any formal-structural evidence, one should doubt (the authenticity of) the intuitions rather than give them the benefit of the doubt. Which heuristics should override which, however, is determined both by metatheoretical and intuitional considerations. Even if the criteria behave erratically, there must presumably be some organizing principle which makes a [compound] lexical unit a [cultural] cognitive reality.
morphemes are to be construed conjunctively, as sub-constructions of a single distributional framework of morphemes (i.e. as a single word), or disjunctively, as constituents of different distributional frameworks (i.e. as different words). These conditions will set "autonomous" units apart from "syntagmatic" units, to use Trnka's terminology (Trnka 1960, quoted in Marchand 1969). In the first approach, these criteria apply indiscriminately across the board, without regard to levels (see Section 1). The underlying principle behind this way of looking at lexical distribution and categorisation is "once a word always a word," or "once an affix, always an affix." After noting their interactional behaviour, I shall suggest (1.7) a hierarchisation of the heuristics to circumvent the conclusion of the squishiness of the Angami word. A conclusion one is willy-nilly led to by the dissonant character of the criteria broached in our opening paragraph. Angami compoundhood (section 2), however, turns out to be a discrete rather than a squishy notion, because of the mutually agreeable nature of the structural attributes. The further question of deriving the compounds thus arrived at in terms either of transformational or lexical [derivational] rules is outside the scope of this study, as are the questions of morphological word-formation processes and lexemes. Nor will the paper address the theoretically pregnant topics of "word as articulated thought" rather than as a formal unit, and of the relative psychological reality of the two approaches. Changing tack, the analyst can explore an alternative theoretical possibility, viz. that the word is a variable notion and that word divisions could vary in response to linguistic levels, with distinct criteria applying at different levels. In this approach, there is a de novo consideration and definition of the boundaries of the word at each linguistic level. Section 3 expounds this theoretical posture.

1.0 The following characteristics governing the delimitation of the concept of "word" that defines the "upper and lower limits of morphological structure" (Nida 1949:102) in Angami keep simplex words and compounds separate from affixes and syntagms. Criteria 2.1 through 2.4 concern only compounds, i.e. complex words which are derived by combining two or more roots.

1.1. Noninterruptibility

That a linguistic unit which cannot be interrupted is a lexical unit seems a reasonable assumption.
1. unihl - u  
   eye  indsg  
   "the eye" 

2. tshū - lie  
   do  imp 
   "do"

Apparent counterexamples are 1a and 2a:  
1a. unihl  keza-u 
   big 
   "the big eye" 

2a. tshū  pevi-lie 
   well 
   "do well"

It might be argued that keza "big" and pevi "well" interrupt the structures in 1 and 2 respectively, and therefore 1a and 2a are counterexamples to 1 and 2. However, the fact that in Angami inflectional affixes close the phrase — NP or VP (branching leftward or rightward) — buttresses a possible initial hypothesis that 1a and 2a are not the interrupted versions of 1 and 2, and hence are not counterexamples to our statement. 4 The question, however, still remains whether 1 and 2 are morphological structures and -u and -lie bound morphemes. Even the

3 Abbreviations with their expansions and symbols are: ? = gloss uncertain; 3 = third person (coded in the verb or lexically marked in the subject); = morpheme boundary (word boundary is represented by space); A = the preanalytic, presystematic indeterminacy about (juncture at) linguistic boundaries; u = lower-high retracted unrounded central vowel, the retraction giving it a cock-eyed quality (inadequately described as a central vowel) in Girdhar (op. cit.7). This cock-eyed quality (for lay ears, that is) is even more conspicuous in Mao Naga, a sister language; n = palatal nasal; v = velar nasal; => = “can possibly become”; /= = "cannot possibly become"; ⌀ = zero; acc = accusative case marker; cmm = common gender; cntl = conditional mood marker; cnt = continuous participialiser; cntsv = contrastive particle; cntj = conjunctive participialiser; dat = dative case marker; def = definite suffix; dimnv = diminutive; emph = emphatic particle; ext = exertive mood marker; fem = feminine gender signaler; fut = future tense marker; flng = future negative indicative; gnr = generic proform; hab = habitual; imp = imperative mood suffix; indsg = individuated singularity marker; loc = locative; masc = masculine gender indicator; nom = nominative case marker; pl = plural marker; prf = perfective aspect marker; prg = progressive aspect marker; prpsv = purposive marker; prst = present tense marker; prtpt = participialiser; pst = past tense marker; Q = Interrogative marker; quit = quotative; sbj = subject; vr = valency role marker which indicates the number and nature of "players". See Girdhar (op. cit.63-65) for a brief sketch.

4 This of course could be true only of subordinate or attributive phrases, and not of coordinate phrases. In lesūda mu likhuo-u "book(s) and the bag", -u closes only the morphological structure that it forms along with likhuo "bag" and not the whole phrase. In fact, as the gloss shows, lesūda in the above phrase could mean "books".
knowledge that keza “big” in 1a is a word (za “be big”) does not help us as to the wordhood of u “the” which may very well close a phrase but still be a word. In different languages, elements opening or closing a phrase need not be affixes but may be words, as indeed the English articles are. The article in English opens rather than closes the NP. English being premodifying rather than postmodifying (except for right-recursive relative clauses and highly marked postmodifications like Alexander the Great). This, indeed, turns out to be the case with some units in Angami.

3. umhl puo  “one eye”

3a. umhl keza puo  “one big eye”

4. a tshū tyo
   l-nom do fut “I will do”
   (=Ø)

4a. a tshū pevi tyo  “I will do well”

Puo “one” in 3 and tyo “will” in 4, both of which close the phrase, are independent words by other criteria. It is the phonetic criterion and its syntactic correlates which decide the wordhood of 1 and 2. It seems necessary before accepting it as a valid heuristic principle to say what constitutes interruptibility, since the notion is not so self-evident as to be assumed without discussion. If a Δ b is a linguistic sequence, and if x which is a linguistic element cannot intervene to make it a Δ x Δ b, then a Δ b is a word (a-b), not a phrase (a b). Vo-krū [pig-fem] “female pig”, for instance, is a word because no linguistic material can come between vo and krū. By this token, participial nouns (e.g. ke-za-u [participializer-be big-the one (masc)] “the big one”, phu-ketyo-pʃu [marry (sbj:fem)-participializer-the one(fem)] “the one (human female) who is marrying”); the speaker-proximate deictic form (ha-nunu [here-from] “from here”), uko “we (incl pl)”; verbs coded for the person of the subject NP, (puo-nt [he-be] “happy (sbj: 3 sg)”; cardinals containing morpholexically obtained forms of decades (hte-pengu [ten-five] “fifty”, hte being the suppletive allomorph of kerū “ten”); ordinals (kente-u [two-ordinal marker] “the second”); lexical morphological units (e.g. thepu “to lend”, lesu “paper”, rūmho “be beige, grey”, puozzerū “seam in lohe, the most common Angami shawl”); derived causatives (e.g. pe-mhe [causativiser-go out [as fire]] “extinguish”); derived adverbs (e.g. pe-ʋi [adverbializer-be good] “well”); derived verbal participles functioning as nominal postmodifiers (e.g. ke-ti [participializer-be black] “black”); verbs reduplicated to express the iterative aspect (pu-pu [say-say] “say again and again” vo-vo [go-go] “keep going”, adjectives (partially) reduplicated for a
distributive function (kekri-kri [different-different] “different (spoken of multitudinous things)” are all words. Now consider

5. puo dukhrilie
he-acc kill-imp
(=Ø)
“kill him”

and the formally related, semantically identical
5a. puo dukhril-wa-lie
vr
“kill him”
or

6. sūu pro lho
it-nom fly ftng
(=Ø)
“It will not fly”

and the formally related, semantically identical
6a. sūu pro-lie lho
vr
“It will not fly”

-wa and -lie are valency-role markers in the verb and are optional, as 5 and 6 bear out. Now are we to consider wa and lie as material which interrupts the verb complexes in 5 and 6? Clearly not. Paradoxical as it may seem, even though there is grammatically determined potential room for affixes, e.g. for -wa- in dukhrilie “kill”, there is no potential pause between dukhri and -lie. Suffixes have immutably determined places in the linearized verb morphology. In 5a and 6a, -wa and -lie are only taking their appointed places in morphotactic space rather than interrupting such space. This is true also of infixes, which “interrupt” root morphemes. Further, these affixes are not PARENTHETICALLY added, and such “expansion” is not potentially unlimited as it is with phrases. In the case of “interruption” by compound elements, the “interruption” is uniquely limited, as in the “expansion” of umhliu “the eye” to upht-mhiu “leg-eye (=the ankle)” where the “interrupting” compound element is uniquely -phi “leg”. This unique limitedness is both paradigmatic and syntagmatic, i.e. no other member of the form class to which the “interrupting” material -phi belongs can replace it, and no other linguistic material can either precede or follow it. A parallel in English is the “expansion” of blacks to the compound blackbirds. In the case of “interrupting” phrasal elements on the other hand, the “expansion” is potentially unlimited. In the “expansion” of umhliu “the eye” to umhi ketiu “the black eye”, for instance, not only does the phrasal element keti “black” belong to an open ended lexical class, but admits of linguistic
elements preceding or following it. An English parallel would be the "expansion" of blacks to the phrasal black birds. These then are cases which do not illustrate interruption, though they apparently seem to do so. We have now delimited the range of the word "interruption" in three ways by saying that

1. affixes can close syntactic phrases,
2. they can take their appointed places right in the middle of morphotactic expanses, and
3. "interruption" by nonaffixes or free forms which are compound elements is uniquely limited both vertically and horizontally.

Incidentally, while both kinds of interruption can add new dimensions of meaning to the interrupted chunk (cf. 8-8a for examples of interruption in the delimited sense and 7-7a for examples of interruption in the non-delimited sense), none can change the semantic head of the construction. Thus, the analyst can à priori rule out the possibility that the English blackbirds (and black birds) are cases of interrupted blacks. However, such delimitation, correct as it seemingly is, does not take one very far, because irrespective of how the term is defined, to rule that certain interruptions are not interruptions proper, one has to invoke the wordhood status of the interrupted and interrupting elements. If a sequence cannot be interrupted at all in any sense, it is a word structure rather than a phrase structure. If a sequence is interrupted, one could not, ipso facto, conclude that it is a phrase structure rather than a word structure. The surprising conclusion that follows is that while Noninterruptibility is necessary, sufficient and therefore definitive, Interruptibility is not. Interruptibility and Noninterruptibility are not parts of the same statement. If a Δ b is not interruptible, it is a word all right, but if x is a suffix and b is one too, then a Δ x Δ b would be a word (a-x-b), not a phrase (a x b); if, on the other hand, x is a word, irrespective of whether b is a suffix or a word, a Δ b would be a phrase (a b), not a word (a-b). In empirical terms

7. puo vor-te
   he-nom come prf
   (=O)
   "he has come"

7a. puo vor lie-te
    exrt
    "he has managed to come; he has made it"

7b. puo vor ba-te
    "he has come and sat"

On the other hand,
8. puo vor tyo  
     will  
"he will come"

can be "expanded" to give  
8a. puo vor ba tyo  
"he will come and sit"

Both vor-te (of 7) and vor-lie-te (of 7a) are words, but neither vor ba-te  
nor vor ba tyo is. These conclusions are reached not on the basis of the  
criterion of interruptibility, but on the basis of the status of the interrupted  
and interrupting chunks as to wordhood. If -te (7) and -lie (7a) are affixes,  
then vor-lie-te (7a) would be a word. If, on the other hand, the  
"interrupting" ba is a word, vor ba-te (7b) would be a phrase irrespective of  
whether te is a word or not. Te in vor ba te (7b) is a suffix while tyo in vor  
ba tyo (8a) is a word. But both vor ba te and vor ba tyo are phrases. Further,  
one the working grammarian is sure about the monomorphemic status of a  
linguistic element, this heuristic is of no avail. -lie, the exertive mood  
marker, -ro, the conditional protasis-clause marker, and tyo, the future  
tense marker are all monomorphemic, and tautologically, noninterruptible.  
Since monomorphemic linguistic utterances may be either words or  
onwords, the conclusion that this criterion leads one to is misleading. By  
other criteria, only the last one turns out to be a word while the former two  
turn out to be nonwords. The criterion does not, of course, come into play  
in case of monophonemic morphemes, e.g. a syllable consonant with  
morphemic content like n "your".

Scholars (e.g. Kramsky 1963:37 ff, Matthews 1972:98 fn 2) have  
insisted on the extraneous character of the interrupting material. That a  
word structure "cannot be interrupted by rearranged material from  
elsewhere within a given sentence" (Mathews:ibid),\(^5\) but only by a fresh  
piece as in 5a and 6a, seems to make good sense at first. (Notice that the  
word "interruption" is used in the ordinary sense, not in any restricted or  
technical sense.) However, Tibeto-Burman languages in general, and Angami  
in particular, falsify Matthews' statement endorsing Kramsky and others.  
Consider:

9. no haki vor-lie  
you here come imp  
"you come here"

9a. no vor haki-lie  
"you come here"

\(^5\) It is surprising that Matthews should stress that "in the sentence it is possible, even  
normal, for a syntagm to be interrupted by certain extraneous elements", while in a footnote  
on the same page, the word "extraneous" is explained to be extraneous to the sentence and it is  
averred that morphological structures can be "interrupted" only by extraneous elements.
10. mhai thu -sū -lie “write quickly”
   quickly write vr imp

10a. thu-sū mhai-lie “write quickly”

Vor-lie in 9 and thu-sū-lie in 10 are words, morphological structures, and the interrupting material, viz. hakt “here” in 9a and mhai “quickly” in 10a, are not extraneous to the sentence, but are from elsewhere in the sentence. Vor-lie and thu-sū-lie are, in fact, “interrupted by rearranged material from elsewhere within a given sentence”. That the “interruption” or rearrangement results in a redrawing of word boundaries is beside the point. The following phrase marker may be said to express what is happening.

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Pred P
  VP
    V adv
    or
    adv V
  Imp
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This is a syntactic phrase marker, which does not represent information about morphology. For instance, the fact that the imperative marker and the verb root together make up a word in 9 is not representable in a syntactic phrase marker.

Angami has what could be suspected to be “classifiers” — consistently recurrent morphemes which mark a semantic class. For instance, u- and a-mark the semantic classes of body parts and kinship terms respectively. These “classifiers” are dropped in specifiable contexts, e.g. they are deleted when a pronoun or proper noun precedes:

11. ubuco “wrist”
11a. puo buco “his wrist”
11b. atha buco “Atha’s wrist”
12. apuo “father”
12a. n puo “your father”
12b. zakilie puo "Zakielie's father"

Now the problem is to decide whether the preceding elements in the a and b examples above are paradigmatic replacements of the semantic class markers by the possessive (pronouns, or syntagmatic additions with a morphophonological deletion of u- and a-. The heuristic criterion of Noninterruptibility does away with all possibilities except that of syntagmatic addition. Ubuco "wrist" is not interruptible while puo buco and atha buco are:

11a. puo buco "his wrist"
11c. puo puo buco "his father's wrist"
11b. atha buco "Atha's wrist"
11d. atha puo zeu buco "Atha's father's friend's wrist"

As pointed out earlier, one should, however, know a priori that the interrupting materials are words belonging to an open-ended lexis. Incidentally the above is a classic example of morphological structures or words being internally not expandable, as against phrase structures which are. This also lends analytical support to the orthographic decision taken by the community (Sekhose 1973: 16, 17) that a word of the type ubuco be written as one "complete" word while an utterance like atha buco be written as two words. As we will see, the criterion of Substitutability also lends incontrovertible evidence in favour of our conclusion. In sharp contrast, the grammatically conditioned variability of the pronominal copy in the verb exemplifies paradigmatic replacement. Angami verbs descriptive of mental, emotional states are coded, in optimal grammatical pleonasm, for the person and number of the subject NP.

13a. a a-ni ba "I am buoyant"
   l-nom  l-be happy  prg
   (=Ø)

b. no n-ni ba "you are buoyant"
   you-nom  you-be happy
   (=Ø)

c. puo puo-ni ba "he is buoyant"
   he-nom  he-be happy
   (=Ø)
d. uko u-nl ba "we are buoyant"
we(incl.pl) we-be happy
-nom(=Ø)

Clearly, the variability of the grammatically coded person-number prefix in agreement with the subject NP is a matter of syntactically triggered paradigmatic replacement. *Puo* "his" of 11a and *n* "your" of 12a are "additive roots", while those in the verb complexes of 13b and c are "replacive prefixes". The latter are in fact bound alternants of free forms. Notice also that the grammatically conditioned choice is between members of a highly restricted, closed paradigm. Supporting our conclusion is the structural attribute of Noninterruptibility. The verb roots in 13 a-d are not interruptible in any sense, which suggests their lexical-morphological status.

**COMPOUNDS**

Compounds are invariably noninterruptible internally cohesive, even if complex, units.

14. lesū - kep ro  "kite"
   paper  flying

15. thevo - k t  "pigsty"
    pig    house

16. nyo - kra  "chalk"
    mud    be-white

17. dzū - vū    "swim"
    water  beat

*14a. lesū keza kep ro  "big kite"
    big

*15a. thevo keza k t  "big pigsty"*

*16a. nyo keza kra  "big chalk"*

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6 The Angami form corresponding to the allegedly ambiguous English "big pig house" is not ambiguous: the modified compound can refer only to the big enclosure. The language makes use of a phrase to express the portliness of pigs:

thevo keza \(-ko\) kl  "the big \{pig's\} house"
17a. dzü kemekou vū "swim in cold waters"?

Contrast examples 14-17 with

18. lesū pro-ketyo paper fly-ent "flying paper"
19. nyoba kekra "white clod"
20. tsali tshū song do "sing (a song)"
21. dzü rūlu water pour-onto "to have a bath"
22. vor ba-lie "come and sit"

which can all be interrupted:

18a. lesū keza proketyo
19a. nyoba keza kekra
20a. tsali puo tshū-sū-lie song one sing-vr-imp
21a. dzü kele (se) rūlu-lie hot with
22a. vor haki ba-lie come here sit-imp

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7 For the way the concept is expressed, see example 73. The participial form of dzū-vū "swim" viz. dzū-ke-vū is not a counterexample for reasons set forth in the following pages. In a nutshell, they are:
(a) the positional relationship of ke- with its linguistic context is grammatically conditioned, it can only be prefixed to verbs, and vū is the verbal component of the compound;
(b) the "interposition" by ke- is nonparenthetical;
(c) it is uniquely limited; and
(d) ke- cannot be from elsewhere in the sentence.

The last of the reasons holds here although it is not a universally valid postulate, and is, in fact, not generally true in Angami, as we shall see.
The latter (exs. 18-22) are thus syntactic units, rather than lexical units. If a phrase is not expandable, it is because of an adventitious conceptual constraint rather than a linguistic-structural one.

1.2 Potential Pause

There is no potential pause between components of a lexical unit. They cannot be temporally stretched except in hesitations which are triggered by speaker-indecision, in pedagogically oriented enunciations of utterances and in pathological language behaviour. If the sequence $a \Delta b \Rightarrow a \ b$, then $a \Delta b$ is $a\ b$, not $a\ b$. In 1 and 1b below

1. umhi-u
   eye-indsg
   "the eye"

1b. dzü-vü
   "to swim"

as opposed to

23. umhi hau
    eye    this
    "this eye"

20. tsall tshü
    song   do
    "sing"

there is no pause between the two components. In contrast, if the speaker so wishes, he could parenthetically pause between the two elements in 23 and 20. This criterion is buttressed by

(a) 1.1. viz. that parenthetical material can be interposed in a phrase and not a lexical unit. As Sadock (1980:303) puts it, "error correction can take place only at the boundaries of words."

(b) the Elicitability test which says that only word-sized units can be elicited through the interrogative kedipua "what", in case the interlocutor did not hear the speaker well in the first instance. Thus, one can have a repetition

23. umhi hau
    eye    this

but not
1. umhi-u
eye-indsg

in response to

23a. umhi kedipua...?
eye what

One elicits the (whole) word viz. umhi-u "the eye" by such interpolated interrogation, not the nonword -u "the". This also works the opposite way round. The possibility of 23a suggests that umhi is a word too.\(^8\) If a sequence like

24. lesu -ki "school"
paper house

is a compound, which indeed it is, a question like

24a. shupuo ki (ga) "whose house?"
whose house Q

is not likely to yield 24 as an answer, whereas such a question is perfectly possible with a phrase like

25. vizol ki "Vizol's house"
Vizol house

24a. shupuo ki (ga) "whose house?"

This criterion as defined above would not be sufficient. Disyllabic morphemes which happen to be bound (eg. -ketsu, the gerundializer), one could argue, are phonologically cohesive in that there can be no pause

\(^8\) a. In some forms of spoken English at least, this is a compelling reason to consider the determiner the a word. An interpolated "the what?" is possible in response to a declarative like "I am basking in the balmy bracing opulence of my consciousness" because the is an integral linguistic unit, a construction rather than a subconstruction.

b. Pike and Pike (1977/80:113) consider the and a to be grammatical words but phonological nonwords (in other words, elitics) because "(they) are not stressed and normally are not isolatable." I am not sure stress group should be considered criterial in all cases. The Elicitability test (and the Substitutability test) point(s) rigorously to the fact that the and a are NOT phonologically bound. The same is true of the unstressed, weak forms viz. [t]\(\text{u}\) and [t]\(\text{a}\) of the English preposition/infinitiviser to, the stressed strong form being [t]\(\text{u}\). Phonologically bound phonemic material does not pass these tests. A neat solution is to call the combination of the unstressed, "weak" material plus the stressed form it leans on "a phonological phrase".
between the two syllables, and hence are words. But the question to ask is not whether -ketsu is in itself a word, but whether it is a word in a natural utterance like

26. themie dukhri-ketsu vi mo
  man-nom(=Ø) kill-grn be good -prs(=Ø) neg
  "killing human beings is not good."

In the context of a constitute, Potential Pause is sufficient. The Chomsky and Hallean definition of the word reflects this: "a string of formatives (one or more) contained in the context # # # # and containing no occurrences of # #." (Chomsky & Halle 1968:12-14)9

Bound morphemes would be integral words in meta-linguistic statements. This is predicted by the operation of this heuristic in sentences. The criterion, putatively the most overarching of the criteria of wordhood in language, is not necessary in Angami, since there is at least one case where it is overridden. Tyo, the future tense marker is isolable. But there is no potential pause between it and the phonie material preceding it, a case of isolability dominating Potential Pause.

A final point that is germane here is that morphophonemic alternation does not give one the lead as to the lexical wordhood of the interacting linguistic chunks, for sandhi could be either word-internal or word-external.

27. vor + ro ===> voro "if (someone) comes"
16b. nyoba + kra ===> ny-o-kra "mud-be white (=chalk)"
11a. puo + ubuco ===> puo buco "his wrist"

27 exemplifies intraword or internal sandhi (specifically, loss of intermorphemic gemination), while 16b and 11a illustrate crossword or external sandhi (loss of the final syllable and of the initial vowel). Absence of sandhi changes, on the other hand, is not diagnostic of (compound) wordhood vis-à-vis phrasehood. While compounds may be either parathetical or nonparatheetical, phrases may also consist of either phonologically noninteracting or interacting free morphemes.

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9 Bh. Krishnamurthy, discussing this definition in the National Seminar on Morphology (Jan. 6-7, 1984), Hyderabad, India, dubbed it "circular": that Chomsky and Halle a priori decided that determiners in English were words and then went on to define the word the way they did. I, for one, do not find any circularity in the definition per se inasmuch as it is an empirical issue whether a phonemic sequence contains an occurrence of # #.
1.3 Isolability

Linguistic material which is isolable either from an immediate linguistic context (i.e. from part of a sentence) or from a larger linguistic context (i.e. from a sentence), is a word. If $a \Delta b \Rightarrow b$, $a$ is a word. Linguistic material which is isolable from part of a sentence can perform the potential phrase function, i.e. it can stand for the whole phrase, while linguistic material which is isolable from the sentence can perform the potential sentence function, i.e. it can stand for the whole sentence. The former is exemplified by the future tense marker *tyo*, and the future negative marker *lho*.

28. puo sodu n kî nu vor tyo
    he-nom(=Ø) tomorrow your house to come fut
    "he will come to your house tomorrow"

28a. puo tyo
    he-nom(=Ø) fut

29. puo sodu n kî vor lho me
    fîng  Ø
    "will he not come to your house tomorrow?"

29a. puo lho
    "he will not"

*Työ and lho* stand for the predicate phrases in 28 and 29 respectively. Isolability of the second kind is illustrated by all lexical-morphological units, which can stand alone as answers to questions about extralinguistic reality\(^\text{10}\). This is what is meant by Matthews (*op.cit.96*) when he calls the word "minimal sentence construction" and Pike and Pike (1980:11) when they speak about "isolability". Neither of them, however, brings up the question of isolability at the phrase level.

D1  A: no kîra vo ga
    you(sg)-nom(=Ø) where go-pst(=Ø)  Ø
    "where did you go?"

B: kewhîra
    Kohima
    "Kohima"

\(^{10}\) This is a nonrestrictive relative clause.
D2 A: n miz gi kebau kedipuo ga
your table on that-which-is what Q
"what is that which is there on your table?"

B: lesūda
book
"a book"

Linguistic material in the response slots of the above verbal exchanges stand for whole sentences. A subword could not perform either the potential phrase or the potential sentence function, so that the criterion of isolability is a sufficient criterion to distinguish wordhood from affixhood. Sentential isolability, however, is not sufficient, as phrases can also stand for sentences. Thus in dialogue D2, a phrase could also fill the response slot:

D2: A: n miz gi kebau kedipuo ga
"what is that which is there on your table?"

B: (1) lesūda "a book"
(2) phizo lesūda "Phizo’s book"
(3) phiso zeu lesūda "Phizo’s friend’s book"

Isolability of either kind is not necessary, since notionally dependent forms (e.g. noun attributes, the disjunctive and conjunctive coordinators, etc.) are not isolable but are clearly words by other criteria. For example, kevi “good” as in

30. lesūda kevi “good books”

is not isolable. In fact, it has no existence except in the company of the noun it modifies. But it is a word by the criteria of Noninterruptibility and Potential Pause. Further, phrasal isolability conflicts with the criterion Potential Pause. There is no potential pause between vor “come” and tyo “will” in 28, but tyo is isolable as we saw, and is clearly an integral element. In the case of tyo, Isoablility overrides Potential Pause. In the case of postpositions, on the other hand, Potential Pause overrides Isoablility. The sequence of a noun and the following postposition can be separated in time and hence the postposition is a word. But the postposition is not isolable. Isolability conflicts with Elliptibility, as we shall see.
1.4. Elliptibility

A syntactic test of lexical wordhood, this principle states that phonetic material which can be deleted on identity with a trigger either in a linguistic or pragmatic context is a word. Ellipsis is a communicative option available for the speaker to delete linguistic elements which are contextually retrievable. If \( a \Delta b \Delta c \rightarrow a \ b \ \emptyset \), \( c \) is a word. In the following interaction, the ellipted material symbolised by \( \emptyset \) constitutes a word each:

D3 A: kiezotuo kira vo -zhie ga
    Kiezotuo-nom(=\( \emptyset \)) where go prg \( \emptyset \)
    "where is Kiezotuo going?"

    B: \( \emptyset (=kiezotuo) \) n ki nu \( \emptyset (=vo-zhie) \)
    your house to
    "(=Kiezotuo) \( \emptyset (=is\ going) \) to your house"

Subwords are not elliptible. -zhie is the bound morpheme in D4:

D4 A: kiezotuo kira vo\(_1\) -zhie\(_2\) ga
"where is Kiezotuo going?"

    B: a \( \emptyset (=kiezotuo) \) n ki nu \( \emptyset (=vo-zhie) \)
    "(=Kiezotuo) \( \emptyset (=is\ going) \) to your house"

*b. \( \emptyset (=kiezotuo) \) n ki nu vo-\( \emptyset_2 (=zhie) \)
    "\( \emptyset (=Kiezotuo) \) \( \emptyset (=\ -is\ -ing) \) go to your house"

A third type of response by B, viz.

*c. \( \emptyset (=kiezotuo) \) n ki nu \( \emptyset_1 (=vo)-zhie \)
    "\( \emptyset (=Kiezotuo) \) is \( \emptyset (=going) \) to your house"

is not possible either, leading one to the conclusion that vo "to go" is not elliptible and hence is a subconstruction rather than a construction. vo in D4 B: c cannot be ellipted, not because it is intrinsically non-elliptible, but because it is a part of a word in the sentence under consideration. It forms a word together with -zhie, the bound morpheme. Supporting evidence comes from constructions where the linguistic material in the immediate

\[11\] There is an important (Chomskian) hedge to all statements which relate language structure to the function of communication viz. that language is an emergent, stimulus-free, creative instrument of self-expression. Its role as a social semiotic, a mediator of social purpose is an incidental, overlaid function.
linguistic context of vo is not phonologically bound, but is free and isolable (tyo in the following example), and where vo is a word, not a part of a word.

D5. A: n nyo vo tyo me
    your son go ft Q
    "will your son go?"

B: a nyo Ø (=vo) tyo
    "my son will Ø (=go)"

Notice that the isolability of an element entails the ellipsis of certain other elements in the sentence. The response in Dialogue 5 (D5) illustrates at the same time the elliptibility of vo and the isolability of tyo. The converse viz. that ellipsis entails isolability is not true.

Elliptibility is not necessary, since it is often sensitive to the syntactico-semantic nature of the linguistic material in question, not solely to its status as to wordhood. Phonologically independent but linguistically and notionally dependent linguistic material cannot be ellipted. For instance, the individual constituents of modifier-head-modifier constructions are not subject to ellipsis:

D6 A: tiso kí kesa kíra ba ga
    Teiso house new where be-prs(=Ø) Q
    "where is Teiso's new house?"

B: a Ø (=Teiso's new house) lunu ba
    there
    "Ø (=Teiso's new house) is there"

*b. Ø (=tiso) kí kesa lunu ba
    "Ø (=Teiso's) new house is there"

*c. tiso Ø (=ki) kesa lunu ba
    "Teiso's new Ø (=house) is there"

*d. Ø (=tiso ki) kesa lunu ba
    "Ø (=Teiso's house) new is there"

*e. tiso ki Ø (=kesa) lunu ba
    "Teiso's Ø (=new) house is there"
In the above dialogue, *tiso, ki* and *kesa* are constituents of an NP. None of them could be deleted to the exclusion of the others. But all of them are words by other criteria.

**Elliptibility is not sufficient** because it is diagnostic of wordhood vis-à-vis affixhood, but not of wordhood vis-à-vis phrasehood. Not only words but phrases (D7 below) and sentences within sentences (D8 below) may be ellipted as well:

**D7.** A: tefù pengu-co kira ba ga dog five-pl-nom(=Ø) where be-prs(=Ø) Q where are the five dogs?“

B: Ø (=tefù pengu-co) hanu ba “Ø (=the five dogs) are here”

**D8.** A: saville dimapur nu vo ke idi Saville-nom(=Ø) Dimapur to go down-pst(=Ø) qut n nu shupuo pu-sù you to who-nom(=Ø) say-pst(=Ø)-vr “who told you that Saville went down to Dimapur?”

B: Ø (=saville dimapur nu vo ke idi) (a ki) a puo pu-sù “my father said (to me) Ø (=that Saville went down to Dimapur)”

Elliptibility conflicts with the criteria of Potential Pause and Isolability. Postpositions illustrate its conflict with Potential Pause:

**D9.** A: saville shupuo kínu priesa se vor ga -pst Saville-nom(=Ø) who from money with come Ø (=Ø) “who did Saville bring the money from?”

B: *saville selei Ø (=kínu) priesa se vorú “Saville brought money Ø (=from) Selei”*  

*kínu “from”* is not elliptible but is a word by the criterion of Potential Pause. The conflict between Elliptibility and Isolability is illustrated by *ltho “will not”* and manner adverbs:
31 a puo themuo sā lho
   he-nom(=Ø) meat have-more stng
   "he will not have more meat"

   b. puo lho
      "he will not"

32. puo themuo sā
    have more-pst(=Ø)
    "he had more meat"

Sentence 31b illustrates the isolability of lho which stands for the whole predicate phrase. Sentence 32 does not illustrate its elliptibility because 31 and 32 are not derivationally related. On the other hand, manner adverbs are elliptible (B:a), but are not isolable (B:b):

D10. A: puo tshū₁ pevi₂ -lie me
     he-nom(=Ø) do well vr Ø
     "did he do well?"

   B: a. puo tshū Ø₂ -lie
      "he did Ø (=well)"\textsuperscript{12}

      *b. puo Ø₁ pevi-lie
         "he Ø₁ (=did) well"

\textsuperscript{12} a. This is not possible in English:
   A: Has he done well?
   B: (a) Yes, he has done well.
      (b) Yes, he has.
      *(c) Yes, he has done.

   b. By this test, the and a in English could be nonwords, contrary to the conclusion averred in footnote 8:
      A: Is there a book/is the book there?
      B: (a) Yes, there is a book/the book is there.
         (b) Yes, there is/it's there.
         *(c) Yes, book is there/there is book.

Quite possibly, the Elicitability test overrides both the (Pikian) phonological test of stress group and the syntactic test of Ellipsis. One could of course take the tack that we took as regards the nonisolation of modifiers and postpositions viz. their notional dependence on heads of construction. The formal (not notional in this case) and unilateral dependency relationship between determiners and head nouns rules out both elliptibility and isolability for the former.
1.5 Substitutability

A first approximation of this heuristic principle is that if a can substitute for b, and if b is a word, a is a word too. By this criterion, buco of ubuco “wrist” is established as a word, although buco can never be established as an utterance in its own right.

33. ubuco “wrist”

33 a. atha buco “Atha’s wrist”
   b. atha zeu “Atha’s friend”

Since buco occupies the same linguistic role (viz. the ultimate element in an NP string) and more importantly, plays the same role as zeu (viz. the head of an NP), buco may be said to be in a relation of substitution with zeu. Since zeu is a word preanalytically, buco is a word too. Similarly, possessive pronouns are established as words:

34. apuo “father”

34 a. savilie puo “Savilie’s father”
   b. a puo “my father”
   c. n puo “your father”
   d. puo puo “her father”

a “my”, n “your”, and puo “her” occupy the same prehead position and have the same function (viz. nominal attribute) as savilie, a proper noun. They are therefore in a relation of substitution with savilie. Given that savilie is a word, a, n, and puo are words too, and 34b-d are to be construed disjunctively, i.e. as phrases.

If on the other hand a can substitute for b, and if b is an affix, a is an affix too.

35 a. ki -u “the house”
   house indsg
   b. ki -nic “the two houses”
   inddu
   c. ki -ko “the houses”
   indpl
-\textit{u} immediately follows the noun root, which is its location in linguistic space. It marks individuation (sg), which is its linguistic role. -\textit{nie} also immediately follows the noun root and marks individuation (du). Given that -\textit{u} is an affix, -\textit{nie} is an affix too. Similarly, -\textit{ko} of 35c is an affix since it immediately follows the noun root and marks individuation (pl). Consider now the case of \textit{puo} "one" as in

36. \textit{kt puo} \hspace{1cm} "one house"

\textit{puo} follows the noun root all right, but does not play the same linguistic role as -\textit{u} of 35a. does, i.e. it does not mark individuation. It expresses a cardinal number, not grammaticalised number. \textit{puo} is therefore not in a relation of substitution with -\textit{u}. So no judgement could be pronounced regarding its status as to wordhood using the criterion of Substitutability.

The substitutes in 35 belong to a morphological substitution class (MSC) while those in 33 and 34 belong to a syntactic substitution class (SSC). A crucial difference between MSC's and SSC's is that MSC's do not allow expansion while SSC's do. \textit{ko-yo} as in

35 d. \textit{kt-ko-}yo \hspace{1cm} "the small houses"

where -\textit{yo} marks diminution does not substitute for -\textit{ko} of 35c. -\textit{ko} and -\textit{yo} belong to different MSC's as they play different linguistic roles. -\textit{ko} belongs to a three-member MSC (-\textit{u} and -\textit{nie} being the other members), and -\textit{yo} to a single-member MSC. But SSC's allow unlimited expansion. In 34, \textit{sau}tide could be replaced not just by single-word utterances like a "my", but also by phrases as in

34 b. 1. a puo "my father"
2. a zeu puo "my friend's father"
3. a zeu kimi puo "my friend's wife's father"

All of these phrasal substitutes occupy the prehead position and function as genitival attributes to nominal heads. Substitutability, therefore, is not sufficient. (Syntactic) substitutes could either be words or phrases. A first rephrasing of the principle of Substitutability would state that if \textit{a} can substitute for \textit{b} and if \textit{b} is a word, \textit{a} could be either a word or a phrase.

The discrepancy in expandibility between MSC's and SSC's calls into question Nida's seventh structural contrast between morphological and syntactic structural levels (Nida 1949:102) which states that "morphological structures have a more limited substitutability of expanded expressions". As
pointed out in the foregoing paragraph, members of an MSC cannot be expanded. "Goings on" is an expansion of "go on", but not an expanded substitute. In contrast, the phrase "a dumpy girl" is both an expansion and a substitute, or an expanded substitute for the word "girl". Clearly, it should be a discrete either-or statement, not a gradient more-less statement. Impugnably, Nida's is a gradient more-less statement. In Mao Naga, a Tibeto-Burman language closely related to Angami, case markers may be bound morphemes or postpositions.

36 a. aï doktar-yi nie
   I-nom(=Ø) doctor-DO see-pst(=Ø)
   "I saw the doctor"

   b. aï doktar he tae
   I-nom(=Ø) doctor near go-pst(=Ø)
   "I went to (lit. near) the doctor"

   -yi, the direct object marker as in 36a, and he, literally "near" marking the allative in 36b, obviously belong to a substitution class: the former to a morphological substitution class and the latter to a syntactic substitution class. doktar-yi and doktar he have "equally" limited substitutability of expanded expressions.

   Whatever expanded expression can substitute for the former can substitute for the latter as well, as 36c and d. show. That is, both the verb phrases in 36a and b have equally limited substitutability of expanded expressions. Whatever can expand 36a can also expand 36b, but the former is a morphological structure and the latter is a syntactic structure:

   36 c. aï doktar mamũl kazhu thopfu-yi nie
       good-looking all-DO
       "I saw all the handsome doctors"

   d. aï doktar mamũl kazhu he tae
       "I went to all the handsome doctors"

   It appears that when elements have grammatical meaning, expanded substitutability has more to do with the linguistic role the element plays than with its status as to wordhood. "Substitutability of expanded expressions" in the case of doktar-yi (36a) and doktar he (36b) is determined crucially by the case-marking function of -yi and he. It has little to do with the fact that -yi is an affix and he is a postposition, a word.
Substitutability, however, is necessary. A major difference between this heuristic principle and the others is that in the case of Substitutability, one needs to know a priori the wordhood status of another piece of phonetic material, whereas the other heuristics do not need such knowledge. Note that Isolability and Substitutability are in conflict in cases like buco "wrist" and puo "father". buco and puo are not isolable but are words on the criterion of Substitutability. Substitutability is used in a slightly different sense in the second approach.

1.6 Potential Mobility

Phonic material which is potentially mobile across linguistic space is a word. If \( a \Delta b \Rightarrow b \ a \), then \( a \) and \( b \) are words. The Angami sodu "tomorrow" and a "I” in 37 and mhatšu "to eat food" and rũkũ "fast" in 38 are words because they can move across an utterance.

37 a a sodu vor tyo
   l-nom(=Ø) tomorrow come fut
   "I will come tomorrow"

b. sodu a vor tyo

38 a a mhatšu rũkũ si -ya
   l-nom(=Ø) eat food fast always hab
   "I always eat my meal fast"

b. a rũkũ mhatšu si-ya

In contrast, -u the definite article of lesūda-u “the book” as in 39; -lie, the imperativizer of vor-lie “come” as in 40; and -krũ, the feminine gender marker of fũkũ “female dog” as in 41, are not words because they are not mobile, but are subject to a rigid linear order:

39 a lesūda-u kira ba ga
   book-indsg-nom(=Ø) where be-prs-(=Ø) Ø
   "where is the book?"

*b. u-lesūda kira ba ga

40 a hakl vor -lie
   here come imp
   "come here"
b. haki lie-vor

41 a. puo fū-krū kente ba
    he-nom(=Ø) dog-female two be-prs(=Ø)
    "he has two dogs"

b. puo krū-fū kente ba

The sequential order of elements within a lexical unit is invariant.\(^{13}\) By our operational definition of this heuristic principle, not only -u, but lesūda in 39 would not be a word either. This is met by the same argument that was adduced in the case of Elliptibility (1.4). lesūda in 39 is part of a word, not a word in itself. Whole words, not parts of words, are scrambled across. This is confirmed by sentences where lesūda constitutes a word:

42 a. hako lesūda
    these-nom(=Ø) book-pl(-=Ø)
    "these are books"

b. lesūda hako

Mobility is not necessary, since phonetic material which obviously constitutes word-sized units by other criteria need not be potentially mobile. The constituent elements in the subject NP in 43 are not positionally free:

43 a. a a kī kezhivi kewhira ba
    my house beautiful Kohima be-prs(=Ø)
    "my beautiful house is in Kohima"

b. kezhivi kī a kewhira ba

a "my" and kezhivi "beautiful" cannot move across the phrase, but are still words. The Angami Naga verb-complex is constrained by a rigid morpheme order:

44 a. a rū pevi tyo
    1-nom(=Ø) write well fut
    "I will write well"

\(^{13}\) Cases apparently refuting this universally valid metatheoretical postulate (or empirical regularity) of fixed morpheme order within the word have been reported (Stevens 1971) from Madurese (Austronesian, Indonesia) and Bicol (Southeast Luzon, Philippines). See Stevens for an exposition of the reasons why they are not completely cogent counterexamples.
*b. a pevî rû tyo

c. a tyo pevî rû

d. a tyo rû pevî

But each of the three constituents of the verb-complex in 44 is a word by various other criteria. Potential Mobility is not sufficient either, as phonetic material subject to mobility may constitute a phrase as well. That is, Potential Mobility may keep the word and the bound morpheme apart, but could not keep the word and the phrase apart. Thus, in the variant pair of sentences

45 a a¹ puo² puo³ ze⁴ kese⁵ tyo⁶
"I¹ will⁶ meet⁵ with⁴ his² father³"

b. puo² puo³ ze⁴ a¹ kese⁵ tyo⁶

the moveable linguistic chunk viz. puo puo ze which changes its position with a "I" is not a word but a three-word phrase by other, more dominant criteria.

Potential Mobility conflicts with both Potential Pause and Isolability. Postpositions are marked by potential pause at their boundaries but are not mobile. tyo, the future tense auxiliary is isolable but not mobile. What is more, mobility may be sensitive to the nature of the lexical unit, not exclusively to its woodhood. si, the aspectual adverb meaning "always", for instance, does not show the same degree of mobility as mhatzû "to eat a meal" and rûkî "fast" do. The sentence

38 c. a si rûkî mhatzû-ya
l-nom(=Ø) always fast eat

is not as felicitous as

b. a rûkî mhatzû si-ya

The positive and the negative sides of a heuristic principle must be polar opposites. Gradience invalidates its heuristicity. The word "mobility" has perforce a slightly different sense in the second approach to wordhood.

1.7 Of the six heuristics laid out in the foregoing section, only one viz. Potential Pause is phonetic, the rest are all syntactic except that
Substitutability can be morphological as well. While Elliptibility and Mobility are neither necessary nor sufficient, there is no heuristic which is both necessary and sufficient. Potential Pause and Isolability are sufficient without being necessary. Substitutability is necessary without being sufficient. Potential Pause agrees only with Noninterruptibility in both directions. That is, whenever a morpheme boundary is marked by potential pause, parenthetical material can interrupt the sequence of morphemes (the delimited definition); wherever parenthetical material can intervene, the site of intervention is characterised by potential pause. Potential Pause need not agree with Isolability in either direction, i.e. whenever a sequence is marked internally by potential pause, none of the elements need be isolated, and whenever an element is isolable, there need be no pause between it and an adjacent element. Isolability works at cross purposes with Potential Pause (1.2), Elliptibility (1.4) and Substitutability (1.5). Potential Mobility does not agree with Isolability and Potential Pause, and what is more, it may vary in degree in response to the nature of the lexical unit, having nothing to do with its status as to wordhood (1.6). The Angami word is a squishy phenomenon in that there is a clash among the criteria that define it. Let us fashion a hierarchy to resolve the clash:

Isolability/Potential Pause
Isolability/Substitutability
Elliptibility
Noninterruptibility
Potential Mobility

A hierarchy may be implicational either in the sense of entailment or domination. The two are of course typically related, as they seem to be here. Entailment implies that a criterion lower in the order of precedence entails the one(s) above in a relation of inclusion. Thus, Potential Mobility entails Interruptibility. Interruptibility entails Elliptibility. Elliptibility entails Isolability Substitutability, and so forth. Domination implies that in case of dissonance, the criterion above holds the stage overriding the one(s) below it. Thus, if an element is substitutable for another but there is no possible pause in the speech continuum that it constitutes along with the preceding or following element, it is an infra-word unit rather than a word; if a sequence of linguistic elements is rigidly ordered but is interruptible or is characterised by potential pause, it exemplifies a phrase structure rather than a word structure; if an element is isolable but not elliptible, it is a word, Isolability overriding Elliptibility.

Hierarchised, some of the criteria, then, dovetail into an agreeable whole, but only some. It is difficult to rank Isolability vis-à-vis
Substitutability and Isolability vis-à-vis Potential Pause, because Isolability and Substitutability override each other in different instances, as do Isolability and Potential Pause. This is indicated in the proposed hierarchy by placing them on a par. And entailment is, only typically, not uniformly, unidirectional. Elliptibility, for example, only typically entails Isolability, i.e. whatever is elliptible need not always be isolable. The adverb pevi “well” is elliptible (dialogue D6), but is not isolable. All this notwithstanding, it is possible to formulate a complicated, inelegant rule which could lead one to the discrete Angami word. In fact, except when it is overridden by Isolability, Potential Pause will determine word boundaries. Whether the unit we are trying to define is discrete or nondiscrete, this approach is narrowly conceived, blinkered and to that extent, attenuated in value.

2.1 Supervening Meaning

Compounds, unlike phrases, may have a meaning which is not a straight sum of the meanings of its constituent elements, a meaning which is at some level absolute rather than composite. The word “may” is used advisedly: this is a sufficient, not a necessary criterion. Compounds with such supervening meaning and their phrasal parallels are ideationally different. nyoba kekra “white clod of earth” and lesū proketyo “flying paper” are the phrasal parallels of nyo-kra “mud-be white (=chalk)” and lesū kepro “paper-flying (=kite)” in 16 and 14.

It is possible to say

16 b. no nyo-kra ketl ngu-wa-te me
    you-nom(=Ø) mud-be white black see vr prf Ø
    “have you seen a black mud-be white(=chalk)?”

but not

*16 c. no nyoba kekra ketl nguwate me
    “have you seen a black white clod?”

It is possible to say

14 b. lesū -kepro hau pro -lie lho
    paper flying this-nom(=Ø) fly vr ftng
    “this kite will not fly”

but not
That is to say, the compounds ny-o-kra “chalk” and lesû-kepro “kite” differ in morphemic content from the members of the corresponding syntactic sequence classes. They have truth values and ontologies which are different from their phrasal congeners. As part of the process of acquiring a new semantic identity in conjunction with the combining component, nonheads of noncompositional compounds shed their “sense” and retain only “reference”. “Sense”, to quote Lyons (1968:424), “is the place in the system of relationships a word contracts with other words in the vocabulary” whereas “reference” is “the relationship that holds between words and the things, events, actions and qualities, they stand for” (ibid:427). ny-o-kra ketti “black mud-be white (=black chalk)” is possible because kra “be white” no longer has its meaning defined by a network of relationships of contrast in which ketti “black” is a member: kra “be white” as part of the compound

14 There are some borderline cases. There is a question mark about the compound status of dzû keza “water-big (=ocean)” going by this test. The first sentence is not possible. If anything, says my informant, the second is possible:

* hau dzû keza ketsû puo
  this-nom(=Ø) water big small one
  “this is a small big-water (=ocean)”

? dzû keza hau tsû
  water big this-nom(=Ø) be small-prs(=Ø)
  “this big-water (=ocean) is small”

It is nevertheless a compound because of the following evidence:

klû nu dzû keza penggû ba
world loc water big be-prs(=Ø)
[*dzû]

“there are five [big-water (=ocean)]s in the world”
[*water]

dzû keza “water big (=ocean)”, if our conclusion about its compoundhood is right, runs counter to the argument towards the end of 2.1, where the compoundhood of dzû-le “water-be hot (=hot water) will be brought into sharp focus in terms of a comparative juxtaposition of dzû kele
“water hot (=hot water)” and dzû-le. dzû-za “water-be big” exemplified in a sentence like

dzû-za u la vi se
water be big-nom(=Ø) us for be good very-prs(=Ø)

“water-be big (=kind of salty water) is very good for our health”

refers to a kind of nutritious brine that is found deep down in the earth. It appears that dzû keza and dzû za do not pattern the way dzû kele and dzû-le do, since both of the former pair are compounds, unlike the latter pair. This leaves one with an additional perspective on (though not with an additional structural type of) the Angami compound, which will not be further examined in this paper.
has no "sense" vis-à-vis *kēti "black". Even if a hypothetical compound *nyo-ti "mud-be black" were possible, and in the event that such a compound were noncompositional, ti "be black" would still have no sense vis-à-vis *kra "be white" or vis-à-vis any member of its semantic class in particular or any member of the vocabulary in general.

The test of (negative) equational or definitional sentences where part of the compound is repeated as part of the predicate points to this kind of exocentric meaning that a compound acquires. It is possible, for instance, to say

46. uphi-mhl umhi mo
   leg eye eye not
   "leg-eyes (=ankles) are not eyes"

but not

*46 a a umhi umhi mo
   "my eye is not an eye"

A problem about this test is that at some level of meaning, the sentences strained out by it seem perspicuous.

47 a a mhl umhi mo
   "my eye is no eye"

47a, for instance, is possible as an utterance by a blind man. Further, the (im)possibility of a sentence like

47 b. "tears (eye-water) are not solid"

does not say anything about the compound status of "tear (eye-water)", because unlike "leg-eye (=ankle)", which is not an eye, both tears and water are liquid. Notice, however, that the compound in 47b (viz. eye-water) is compositional. The test is generally valid for noncompositional compounds. 47a seems a special case. Contrast 48 with 48a:

48. lesū -nyū nhanyū mo
    paper leaf-nom(=Ø) leaf neg
    "paper-leaf (=page) is not a leaf"
Noncompositional compounds are nearly always structurally paralleled by phrases, unless semantic considerations rule them out (cf. ?lesu nhanyu “paper’s leaf”). mht-rho “eye-open (=open eyes)”, for instance, has no phrasal counterpart, whereas nyo-kra “mud-be white (=chalk),” fū-ti “dog-be black (black dog),” lesu-kepro “paper-flying (=kite)” do. This parrallellism of lexis and syntax is evidence of, or at least constitutes a prima facie case for hypothesizing noncompositionality.

When the noncompositionality of the meaning of a compound is not obvious, these tests can be particularly decisive. Angami has a class of compounds of the structural type N+V. dzū-le “water-be hot (=hot-water),” fū-ti “dog-be black (=black-dog),” and the already discussed nyo-kra “mud-be white (=chalk)” exemplify this class. The lexical dzū-le “water-be hot”, a canonical example of this class of compounds, has a structural parallel in the phrasal dzū kele “hot water”. dzū-le does not quite have a whole-different-from-the-sum-of-its-parts meaning. But consider

49. dzū le le mo luo
    water be hot-nom(=∅) be hot neg yet
    “water-be hot (=hot-water) is not hot as yet”

where something is predicated of water which is hot to a degree. A particular kind of object (viz. dzū-le) someone has asked for is not as hot as one would like it to be. Note that le “be hot” of dzū-le, the subject in 49, evinces no reaction to the sentential constituent which is its own token and which heads the VP (viz. le “be hot”). But 49a below with the phrasal dzū kele “hot water” is a blatant contradiction in terms:

*49 a dzū kele le mo luo
    water hot-nom(=∅) be hot neg yet
    “hot water is not hot as yet”

kele is a true adjective. It has the function of making a more inclusive class a less inclusive one. It modifies, from the outside as it were, the nonlinguistic entity symbolized by dzū “water”. The modification is word-external, making dzū kele “hot water” a kind of water, not one of various kinds of objects in the universe; whereas the predicative modification in dzū-le is gestalt-internal, making the word complex a notionally unitized atom. an ideational primitive, one of various kinds of objects in the universe,
rather than one of various kinds of water. In a situation where the speaker is identifying (50a) or choosing between hot and cold water (50b-c), dzū-le is incongruous. The attributive, identificatory dzū kele is the structure to use:

50 a hau dzū [kele]  
this-nom(=Ø) water [hot]  
[*-le]  
[be hot]  
"this is hot water"

b. a dzū [kele] se tyo  
1-nom(=Ø) water [hot] use fut  
[*-le]  
[be hot]  
"I will use hot water (rather than cold water)"

c. puo dzū₁ [kele] se Ø₁ rūlu -wa tyo  
she-nom(=Ø) water [hot] using: wash; vr fut  
with pour  
[*-le] onto  
[be hot]  
"she will bathe with hot water (not with cold water)"

On the other hand, when talking about habitual dispositions (51a) or when choosing not between hot and cold water, but between hot water and rice-beer (51b), for instance, dzū kele is odd:

51 a puo dzū₁ [-le] se dzū rūlu-wa -ya  
she-nom(=Ø) water [be hot] with water hab  
[*kele]  
[hot]  
"she habitually bathes with [hot-water]" [*hot water]

b. a zhu krie tyo no dzū  
1-nom(=Ø) ricebeer-acc(=Ø) drink fut you-nom(=Ø) water  
[*-le] krie -lie  
[be hot]-acc(=Ø) drink imp  
[*kele]  
[hot]  
"I will drink ricebeer, you drink [hot-water]!"  
[*hot water]
Finally, in contrast with the phrasal dzū kele, dzū-le passes all tests suggestive of a lexical entity. It cannot be stretched in time and cannot be interposed. Neither of its constituents can be ellipted or isolated. It thus satisfies the overarching structural requirement of compound lexical units viz. syntactic insularity (see 2.6). Unlike dzū kele, it cannot be modified. se "very" is the postmodifier in 52:

52. pekrio dzū (kele) se se puo-ni mo
    Pekrio-nom(=Ø) water [hot] very with he-like neg
    [-le]
    [be hot]

    "Pekrio does not like very [hot water]"
    [*hot-water]

Unlike dzū kele, dzū-le is closed for identity erasure. Compare 50c, where dzū of dzū kele acts as an antecedent triggering the deletion of dzū of dzū rūlu, with 51a where dzū of dzū-le does not.

2.2 Unique Combinability

The combination of linguistic elements in a compound tends to be unique, in that one of the constituents need not occur freely with other elements that seem quite similar semantically and formally to its fellow-constituent. Put more technically, no subset of the set of compounds in a language constitutes an internal distribution class. The (compound) word for "well" is

53. dzū -khou
    water storage place

But it is not possible to have

*53 a lhako khou
    rice

to mean "place where rice is stowed away". khou does not combine liberally with (the semantically relevant) members of the form class to which dzū "water" belongs. I say "semantically relevant" because a sequence like tt khou "place where skies are stowed away" is not possible, one could argue, not because khou cannot combine well with tt "sky", but because the semantic result is balderdash.
Related to the above is another diagnostic test, viz. that synonyms\(^{15}\) can not be interchangeably used in compounds while they can very well be in phrases. In syntactic groups, the slots are invariably open-ended, which is why, unlike compounds, they are substitution frames. For instance, the gerundialiser in Angami is the prefix ke-, as in kedukhir “killing” derived from dukhri “kill”, which freely varies with the suffix -ketsu as in dukhriketsu:

26 a. themtie dukhriketsu vi mo
    man killing be-good neg

b. themtie kedukhri vi mo
    killing “killing (humans) is not good”

Despite the free variation between -ketsu and ke-, only lesu-kepro is a compound. lesu pro-ketsu is not:

54. lesu- kepro / *proketsu vi mo
    paper flying flying be-good not
    “the kite is not good”

55. lesu proketsu vi mo
    “to fly paper/the kite is not good”

This structural attribute of compounds is not necessary. Although mha, literally “material thing”, combines with a number of verbs to yield compounds, as 56a-d shows,

56 a. mha-tsu “to eat food”
    mha-tshu “to do”
    mha-cha “to cook food(?)”
    mha-dzü “to be poor”

the lexical class of the combining element is not open-ended. mha does not combine with rūnyū “to listen(to)”, for instance:

57. *mha-rūnyū “to listen (to)”

The heuristic is, however, sufficient, if the analyst keeps clear of phrasal unique combinability. The following illustrates unique combinability

\(^{15}\) As of now, I have no examples of synonyms.
which is phrasal. In Angami, verbs may be lexically marked, for instance, for
the direct object. meti “wash hands”, chu “wash face”, kenu “wash mouth”,
rulu “wash (the whole) human body”, khrū “wash other individual body parts
(eg. head, leg), utensils etc.”, and menyi “wash clothes” illustrate such
lexical marking. None of these verbs, except menyi which is marked for a
class of direct objects and khrū which is marked for a class of (sub)classes,
can take the interrogative direct object:

58. no kedipuo {*meti} ba ga
      you-nom(=Ø) what-acc(=Ø) {*chu} prg Ø
      {*kenu}
      {*rulu}
      {menyi}
      {khrū}

“what are you {*hand-} washing ?”
{*face-}
{*mouth-}
{*human body-}
{cloth-
body part-
utensil-}

etc.

Because meti “wash hands” combines uniquely with ujie “hand”, ujie meti
“wash hands” is not to be construed as a compound. The simple reason is
that ujie meti does not constitute a lexical unit, the primary prerequisite for
compoundhood: it can be interrupted (eg. n jie₁ kerhu meti-lie “wash your
dirty hands”), ellotted (Ø₁ meti-wa-te “[already] washed”) etc. dzū-khou
“well”, on the other hand, is a lexical unit by these criteria.

2.3 Syntactic Insularity

Compacted structures that they are, compounds are autonomous
islands in a syntactic sea. They are self-contained, seamless wholes which
lead syntactically insular existences. This is evidenced by the syntactic fact
of modification and the syntactic processes of anaphora, identity erasure etc.

2.3.1 Modification

Attributive phrases in Angami are either premodifying or post-
modifying or both at the same time:
59. umhi "eye"

59 a. n umhi "your eye(s)"
b. umhi kezhivi "beautiful eyes"
c. n umhi kezhivi "your beautiful eyes"

Nouns within compounds cannot be modified (60a-b below), but those in phrases can be (61a-b):

60. mhi -rhe -lle "open the eyes"
eye open imp

*60 a. mhi kezhivi -rhe-lle "open the beautiful eyes"
    beautiful
    "b. n mhi (kezhivi) -rhe-lle "open your (beautiful) eyes"

But

61. lesūda hle-lle "open the books"
61 a. lesūda kezhivi hle-lle "open the beautiful books"
b. n lesūda kezhivi hle-lle "open your beautiful books"

Postmodification is not reliable evidence because one could argue that the impossibility of 60a is not because the part mhi "eye" is closed to modification, but because mhi-rhe cannot be interrupted. Genitival premodification, however, constitutes ironclad evidence by means of which one may get around this analytical red herring.

2.3.2 Anaphora

Compounds are anaphoric islands (Postal 1970). Components of compounds cannot be referred to across syntactic space by anaphors. They can neither control (62a) nor be victims (62b) of pronominalization:

62 a. a vo dzū₁ vū₁
    l-nom(=Ø) go-pst(=Ø) water beat-prpsv(=Ø)

der1 {*sūu₁} mekou te
but {it₁} be cold vr-pst(=Ø)
{dzūu}
{water-the}

"I went to water₁-beat (=swim) but {*it₁} was cold"
    {the water}
b. dzūmekou tesūlā a
water-nom(=Ø) be cold vr therefore 1-nom(=Ø) {water}
(*sūu₁)
{it}
vūynobeat flng
"the water₁ is cold, so I will not {water-} beat(=swim)"
{*it}

Phrases, in contrast, are accessible to pronominalization. (Angami does not
backward-pronominalize):

63. a vo dzū₁ rūlu deri {sūu₁} mekou-te
{it}
{dzūu}
{the water}
"I went to water₁-pour onto (=bathe) but {it₁} was cold"
{the water}

2.3.3 Identity Erasure

Nominal components of compounds cannot be erased under identity
with their tokens elsewhere in the sentence. They can neither control nor
be victims of equi-NP deletion, both of which are illustrated by each of the
starred examples below.

64. a dzū -khou nu vo dí dzū -vū
1-nom(=Ø) water place to go-pst(=Ø) cnj water beat-pst(=Ø)
"I went to the water-place (=well) and water-beat (=swam)"

64 *a. a dzū₁ khou nu vo-dí Ø₁-vū
"I went to the water₁-place and Ø₁-beat"

64 *b. a Ø₁-khou nu vo-dí dzū₁-vū
"I went to the Ø₁-place and water₁-beat"

In contrast, syntagmas are of course accessible to identity erasure. 64
exemplifies forward equi-NP deletion while 66 exemplifies backward equi-
NP deletion:
65. a dzū₁ huo krie -di ₀₁ rūlu tyo
l-nom(=∅) water some-acc(=∅) drink cnj pour onto fut
“I will drink some water₁ and ₀₁-pour onto (=bathe)”

66. a ₀₁ rūlu di dzū krie tyo
“I will ₀₁ pour-onto (=bathe) and drink water₁”¹⁶

2.3.4 Absence of Contrast in Syntactic Space

Compounds being closed constructions, their constituents are not available for contrast with other sentential constituents. Sentence 67 choosing dzū “water” (instead of tiso “Teso (a human proper noun)”) from among the parenthesised alternatives is horrendous:

67. a we vo (Teso) vū tyo
l-nom(=∅) cntrsv go-cnj(=∅) (tiso)-acc(=∅) beat fut
(*dzū-)
(water)

derī no vo Khose vū- lie
but you-nom(=∅) go cnj(=∅) Khose-acc(=∅)
beat Imp

“As for me, I will go and thrash [Teso] and you go and thrash Khose” (*-water(=swim))

A more telling example is the one with the compound verb mha-dzū “thing-not to have (be poor)”:

68. puo pen dzū derī a
he-nom(=∅) pen-acc(=∅) not to have but l-nom(=∅)

{pen-dzū} dzū
{pen water} not to have-prs(=∅)
{[=ink]}
{*-mha-}
{thing}
“he does not have a pen, but I don’t have [ink]”
{*-thing (=am poor)
Note that *mha-dzū* "be poor" accords well with the conjunctive *mu* "and" rather than with the disjunctive *derl* "but". The compound sentence 68a signifies assonant, complementary conjunction unlike the complex sentence 63 which signifies dissonant, contrastive disjunction:

68 a. puo pen dzū mu a mha-dzū
  "he does not have a pen and I am poor"

The import is that the (referent of the) subject does not have a pen and the speaker does not have the means to lend him one or help him in any way. The conclusion is that *dzū* of *dzū-vū* "water-thrash (=swim)" and *khose* "Khose" of *khose vu-li* "beat Khose" in 67 on the one hand, and *pen* of *pen dzū* "not to have (a) pen", and *mha* of *mha-dzū* "thing-not to have (=be poor)" in 68a on the other, are not on a par. I am not sure if sentence 69 is a counterexample wherein *mha* of the lexical unit *mha-tsū* seems to behave on par with the syntactic *n biskits* "your biscuits". Or does it?:

69. a mha tsū tyo (derl) no n
   I-nom(=Ø) thing eat fut (but) you-nom(=Ø) your
   [mu]
   [and]

   biskits tsū -lie
   biskits eat imp
   "I will eat food/a meal (but) you eat your biscuits"
   [and]

2.4 Nonredundancy of Repeated Cooccurrence

This is a consequence of the previous generalized heuristic principle (2.3), but could in itself be used as a valid test. It states that if the concept expressed by the elements of a sequence has been institutionalized by a language and if the institutionalized sequence and one of the elements cooccur in the sentence, then the native speaker will tend to feel that the iterated cooccurrence is nonredundant. For instance, *mhi-rho* "eye-open (=open eyes)", *mhi-dzū* "eye-water (=tear)" are compounds because, *inter alia*, the cooccurrence of *umhi* "eye" with the former and *dzū* "water" with the latter is not felt to be superfluous. Such repeated occurrence does not lead to conceptual redundancy:

70. puo puo mhi mhi -rho
    he-nom(=Ø) his eye eye open-pst(=Ø)
    "he eye-opened his eyes"
71. puo dzū kemekou nunu dzū -vū
    he-nom(=Ø) water cold in water beat-pst(=Ø)
   "he beat-water (=swam) in cold waters"

This goes to show that compounds lead an independent insular existence in a syntactic expanse. They do not evince any response to their free-standing cognates in a sentence. In contrast, a sequence like dzū rūlu "water pour-onto; wash (=to have a bath)" falls this test, as in 72:

72. puo dzū kele se [?dzū] rūlu -wa -ya
    he-nom(=Ø) water hot with [water] wash; vr hab
    [Ø 1] pour-onto
   "he habitually takes hot baths",

where to retain the second instance of dzū leads to odd redundancy. Sentence 51a, where dzū of dzū rūlu is felicitously retained is not a counter-example because, since dzū-le "hot-water" is a compound, there is no antecedent to trigger the deletion of dzū: dzū rūlu "to bathe" is, therefore, not a compound.17 This decision is bolstered by the principles of Potential Pause, Noninterruptibility and Elliptibility, but contradicted by evidence from second language learning (see in 18). In 73, dzū rūlu is interrupted by kele (se):

73. a dzū kele (se) rūlu ba
    I-nom(=Ø) water hot with pour-onto; wash be(=prg)-prs(=Ø)
   "I am taking a hot water bath"

2.5 As is well known, suprasegmentals play a role in defining compoundhood.18 Stress in English, Intonation in Tamil, Kannada play such

17 Kannada, a South Dravidian language, has a (partial) parallel in ntrū erko/huyko "water pour onto-refl (=to bathe)". As in Angami, the nominal maî-ge [body-dat] "onto the body" is conventionally, not discourse-contextually, elided. However, with the verb being marked by the reflexive suffix -ko in Kannada, the person of the self (the subject) is doubly clear. ntrū eîr/huyyîr without the reflexive suffix would unambiguously mean "pour water onto someone/something other the person of the (referent) of the subject". Like its equivalent in Angami, ntrū erko/huyko is not a compound; the nominal syntagma ntrū of this syntagma is modifiable: biḥî (=hot) ntrū huyko/erko "take a hot water bath". Nominal components of compounds are not. The linguistic sequence can be interrupted. There are of course differences. ntrū "water" in the Kannada syntagm is a direct object whereas dzū "water" in the Angami syntagm could be interpreted either as a direct object or as a kind of instrument. Cf 21a.
18 Originally, I thought evidence from second language learning would constitute a heuristic too. That is, a compound in L1 may possibly make its counterpart in L2 a conceptually unitary
a role. Stress is not distinctive in Angami and Intonation has not been investigated here.

2.6 Two of the criteria that define only compounds, Syntactic Insularity and Conceptual Nonredundancy, are necessary and sufficient. Unique Combinability and Supervening Meaning are not necessary but sufficient. Intonation, not looked into here, would probably be a necessary constraint on compounds. Ranking these along a scale, as was done in the case of criteria of general wordhood (the first approach) is pointless because they operate fairly independently. None of them dominates the other(s), because, as a set, they are not locked in an internal clash. Syntactic Insularity, however, would be the most crucial heuristic principle, as it is diagnostic of the lexical wordhood of the compound. In other words, the notion of the compound word in Angami is neatly discrete, despite the marginal kind of indeterminacy indicated in fn 17. Generally, none of the criteria entails the other(s). Conceptual Nonredundancy, for instance, does not entail Supervening Meaning. The mhi "eye" of mhi-rho "eye-open", as in 70, would not be redundant in the presence of another of its tokens in its syntactic context, but there is no noncompositional meaning that it acquires as a compound. As noted, however, Syntactic Insularity entails Conceptual Nonredundancy. As for the structural attributes that characterize both kinds of lexical units (compound and noncompound), it does not make sense to ask which entails which, i.e. whether the heuristic, for instance, of Interruptibility entails that of Unique Combinability is not ad rem. Further, the definition of the compound does not vary in response to linguistic levels, as does general wordhood, as will be seen in Section 3. The criteria of compoundhood in any language essentially concern the compacting of two lexical units into a single structure, and this utilization has nothing to do with levels of linguistic structure. The above heuristics unearth the following structural typology. The arrow pointing rightwards indicates progressive dominance relation and the arrow pointing leftwards regressive

whole too. An example was dzû rulu [water pour onto: wash] "to bathe". An Angami was heard saying in the Naga Pidgin

ami pa:nl safa: karo ashe
I-nom water wash do am
"I am having a bath"

rulu translating as safa: "to wash" and dzû translating as pa:nl. In L2, i.e the Naga Pidgin, it means the unacceptable, facetious "I am washing water". This heuristic test is neither necessary nor sufficient. It does not seem to be a valid heuristic procedure because interference from the mother tongue is not infallibly predictable. It is at best collateral evidence corroborating what has already been established. Further, it is in conflict with the heuristics of Potential Pause, Noninterruptibility and Conceptual Non-redundancy because by all these tests, dzû rulu "to bathe" fails to qualify as a lexical unit. As we shall see, the heuristics of compound wordhood, in general, agree with one another, so the fact that this characteristic is the odd man out in its recalcitrance may not be accidental.
dominance relation. That is, \( \overline{\text{NV}} \) for instance, symbolizes an NV compound whose (resultant) external distribution class is V and not N. Similarly with \( \overline{\text{NN}}, \overline{\text{VV}}, \overline{\text{NV}}, \overline{\text{ADV}}, \text{and} \overline{\text{N}} \). A possible structural gap is \( \overline{\text{V}} \).

3.0 An alternative view of the linguistic word is one which emerges from the application of different criteria to different layers of the language system, resulting in an asymmetrical notion of wordhood. That is, what is phonologically one word, for instance, may be grammatically two or more words or vice versa. In contrast, the once-an-affix-always-an-affix approach elucidated in Section 1 marks out the boundaries of only one kind of wordhood, viz. lexical wordhood, which is normally coextensive with phonological wordhood. The notion of a linguistic unit could vary in response to levels, the defining criteria being different at each level. “Word” seems to be unique in so far as it is the only linguistic category which admits of a multi-level definition. There is, for instance, no phonological morpheme, syntactic morpheme, etc. The word in Angami is a unit which is amenable to such a disjunct definition. As against the one kind of wordhood that the first conjunct approach ends up defining, in the disjunct approach, the six criteria operating at the three levels at which “word” can be defined, suggest a six-way typology of Angami wordhood. As we shall see, the multi-level approach to wordhood is significantly different.

3.1 Angami seems to recognize three levels at which wordhood may be defined. “Word” is discrete rather than squishy at all levels except the phonological level, where whatever is true by the first approach holds good for this approach too. The levels are: (a) the phonological level where the phonological criterion (viz. Potential Pause) and all syntactic criteria except Substitutability operate to define what could be called the “phonological word”, which is coterminous with the “lexical word”, Matthews’ “word-form” (Matthews 1974:26); (b) the intraphrasal level (so called so for want of a better locution) where the syntactic criterion of Mobility applies to define what could be called the “grammatical word”; and (c) the interphrasal (Intra-sentential) level where the test of Substitutability operates to define what it is difficult to name.19 Essentially, if \( a(x) \) is a structure in a language, and if the relevant criteria operate to establish \( a(x) \) as an integral linguistic entity, one is speaking at the phonological level, of phonological wordhood; if either \( a \) or \( x \) of the phonological word \( a(x) \) is syntactically mobile, its scope ranging beyond morphology, over the syntactic expanse called the phrase, one is speaking at the intraphrasal level, of the grammatical word (the morphosyntactic word). Typically, these

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19 The expressions “intraphrasal” and “interphrasal” are woefully inelegant, if not entirely inadequate. We will make do with these in the absence of alternative holophrases.
are bound morphemes which are units of syntactic distribution. This is entirely different from Matthews' "grammatical word" (Matthews op. cit.:32,33). The "Past Participle of TRY", as in the word-form /traid/, is an example of his "(grammatical) word". Put in terms of a criterion of linguisticity viz. "double articulation", all units of grammatical articulation are "(grammatical) words" in Matthews' sense. They need not be in our sense. Derivational morphological units, for instance, are not. If either a or x can be isolated to expound either of the two major categorial syntactic constituents, the VP and the NP, one is speaking at the interphrasal level, of the "interphrasal word". Phonological wordhood and grammatical wordhood, however, may converge in a single lexical realisation, intraphrasal mobility then being characterised slightly differently (as seen in 1.0). Phonological words are linear units, while nonphonological words are hierarchical units. Finally English is said to distinguish between phonological, morphological and syntactic words. Thus the form compartmentalise-ation is said to be one morphological word which contains three phonological words, and the famous Chomsky-Halleian "The-BOOK was-in-an-UNLIKELY PLACE" is phonologically three words (centered around the capitalised forms) but syntactically more. Angami has no phonological word vs. morphological word opposition, so that phonological, morphological and lexical words have identical boundaries in Angami.

3.2.1 What follows is an elucidation of the six-way typology of Angami wordhood.

The first type is a convergence of phonological and interphrasal non-wordhood on the one hand, and intraphrasal wordhood on the other, e.g. -u, the singularity marker; -ko, the plurality marker; and -yo, the diminutive marker, which are all illustrated (at the risk of repetition) in the following utterances:

74 a. lesūda "book" lesūda ketu "black book"
   b. lesūda-u "the book" lesūda ketiu "the black book"
   c. lesūda-ko "the books" lesūda ketiko "the black books"

75 a. lesūda "book"
   b. lesūda-yo "the little book"
   c. lesūda keti-yo "the little black book"

76 a. hicko mha -tsū -ya "we eat our meals"
   w(e excl.pl) gnr eat hab
b. hleko mhatsû rûkri-ya
   fast
  “we eat our food fast”

c. hleko mhatsû rûkri si-ya
  “we always eat our food fast”

77 a. tsæl tshû -lîe
   song do imp
   “sing”

b. tsæl tshû pevi -lîe
   well
   “sing well”

c. tsæl tshû pevi se -lîe
   very
   “sing very well”

It is clear that -u, as in 74, can be suffixed either to the (head) noun lesûda “book” or to the verbal participle functioning as an adjective (“black”), its scope ranging over both the noun and the modifying verbal participle; the habitual aspect marker -ya could be added, as in 76, either to the verb root or to whatever adverb follows the verb root, its scope ranging both over the verb root and the adverb. They are thus not bound to particular word classes, but are grammatically free enclitics rather than suffixes: their spread is syntactic, not morphological. In contrast, the prefix pe- as in the manner adverb pevit “well” (vt “be good”), the verbal participialiser ke- as in keti (ti “be black”) on the one hand, and a- as in apuo “father”, the- as in thevo “pig” on the other are all phonologically as well as grammatically bound. “Phonologically bound” because of criterial attributes like Potential Pause, Potential Mobility, Isolability and Elliptibility. “Grammatically bound” prefixes rather than grammatically free, mobile proclitics, because they are “immobile” in the sense of being attached to a single morphological distribution class. They are found bound to an invariant form class, the former to the verb (root), and the latter to the noun (root). Whatever the preceding and the following linguistic context might be, pe- of pevit “well” or -krû of ûû-krû “female dog” are related immediately and solely to vt and fû respectively. This difference in constituent structure status and distributional behaviour must be reflected in any description of the Angami word.

3.2.2 The second type of the Angami word, the opposite of the first, is a phonological and interphrasal word but an intraphrasal nonword. This is numerically the largest class. It may be subclassified into simplex and complex subclasses, the parameter being the characteristic of asymmetry between phonological and grammatical wordhood. The simplex type which may be either morphologically simple (subtype a) or complex (i.e. bimorphemic, subtype b) is exemplified by (a) forms which are potential
syntactic constitutes, which, in Bloomfield's classic formulation, are called "minimum free forms", the kind that bulks large in traditional dictionaries; and (b) lexical items which are morphologically complex but one of whose constituent elements is a free form and the other a uniquely dependent form which is neither an inflectional nor a derivational formative: "uniquely dependent" in that it does not occur in combination with any other (free) form in the language. Words of the simplex type are at the same time phonological and grammatical words. That is, there is no asymmetry between phonological (=lexical) wordhood and grammatical wordhood. *galho* "a dish made of rice and greens", for instance, is phonologically as well as grammatically a word, whereas *-u* as in *lesúda-u* "the book" is phonologically a nonword but grammatically a word; *pe*- as in the adverb *pevi* "well" is phonologically and grammatically a nonword. The fifth of the six types of the Angami word exemplifies the last possibility: a phonological word which is a grammatical nonword. Further, it appears that only a form which is phonologically one word and grammatically at least one word (it could be more) can function as a minimum sentence unit.

Examples of the simplex type:

**Subtype (a) all lexical morphological units**

78. *dzū* "water"
    *rūde* "Angami month around December"
    *cie* "now"
    *pfū* "measure of length, the distance between the tip of the little finger and the thumb stretched outwards; handspan"
    *ra* "mate with; make love to"
    *puo* "one"
    *sa* "have more"

**Subtype (b)**

79. *kewhi*ra "Kohima, the biggest settlement of Angamis in the Angami country"

Explicatory remarks on the single member subtype (b) are in order: *ra* meaning "place, village" is an independent form, as exemplified in phrases like *kelhupili*ie *ra* "Kelhoupilie's village", but *kewhi* is not. It occurs nowhere else in the language either as a bound form or as a free form. The word *kewhi*ra, of course, shares with examples of subtype (a) the type property of being at the same time a phonological and a grammatical word. The complex subtype exemplar comprises more than one morpheme, and
the number of words it may be said to contain is a function of the level of the linguistic hierarchy (of the phonetic, phonemic, morphological, syntactic or semantic rungs) that it is viewed from. Typically, it is a two-morpheme form. It is a single word at the level of phonology and two words at the level of grammar. This asymmetry between levels of linguistic structure vis-à-vis the same linguistic unit is what separates the complex subdivision from the simplex one. *puo-ue* "his; hers", for instance, is phonologically one word but grammatically two, because *-ue* is not inseparably attached to a single filler class. Its distribution is syntactic. The following example shows that it may be added not only to the grammatical filler class of nouns but also to that of verbal participles functioning as nominal postmodifiers:

80. *puo kimie*  "his wife"

    *puo kimie-vie*  "his wife's"

    *puo kimie kezhivi-vie*  "his beautiful wife's"

*kezhvi* "beautiful" is composed of *ke-*, the participializer, and the verb *zhtol* "be beautiful". Now, this way of treating *-ue* as a grammatically independent and syntactically pertinent form, and hence a (grammatical) word *per se*, its phonological dependence notwithstanding, seems to afford better insight into the NP than saying that *ue* closes the NP, as would be done on the first approach. *-ue* is an immediate constituent not of *kezhvi* which it "leans" on (the well-known etymological meaning of "clitic"), but of the whole phrase. So would be the case with a form like *lesūda-u* "the book", where *-u* is better treated as a grammatically integral word on the basis of its combinatorial or positional freedom, as in phrases like *lesūda kett-u* "the black book". Specially noteworthy and a distinctively different example is the modal auxiliary *moroshuo* "must". As noted, *mo-ro-shuo* literally means "if something does not happen, it will be bad, dangerous": *mo* "not", *ro* "if" and *shuo* "be bad, dangerous". This literal meaning is no longer present in the native speaker's consciousness. That the individual components of *moroshuo* have merged, fossilized in a larger, new identity of meaning is evidenced by its capacity to be isolated from the immediate linguistic environment, i.e. the verb root. Contrast 81b with 81d, whose un-grammaticality indicates that *mo-ro* *vl* is not isolable:

81  a. *a vorū moroshuo*  "I must come"

      b. *a moroshuo*  "I must"
c. a₁ vor² mo³ -ro⁴ vi⁵
   1-nom(=Ø) come not cnd be good
   "If I don't come, it's o.k."

*d. a moro vi   "If I don't. it's o.k."

moroshuo is a phonological word. There is no potential pause between its constituent morphemes and it is not interruptible. Contrast 81a and b with 81e where shuo is preceded by silence which marks phrasal juncture:

81 e. (1) a mo-ro shuo (-te)  "If I am not there, it
   (2) a mo-liro shuo (-te)  is bad (=I am necessary)"

That moroshuo is a gestalt is only half the story. The other half is that moroshuo is grammatically two words with shuo "be bad" continuing to retain the identity of its (general) external distribution class (as a verb),²⁰ even as it is frozen as part of another linguistic identity. Consider

81 f. a (vor) moroshuo-di vor "I should have come and I came"

81 g. a (vor) moroshuo tyo   "I should come in the future"

where shuo is conjugated for the conjunctive participle by -di and is followed by tyo, the future tense auxiliary, which are external distribution facts about the class of verbs. All linguistic sequences with inflectional affixes exemplify this subclass of the second type.

The third type is statistically the smallest class. Examples of this type are words at all the three levels at which the Angami word may be defined: the phonological, the intraphrasal, and the interphrasal. These come close to being lexical-morphological units. They are isolable, but not elliptible. Despite being phonological and grammatical words, they cannot be

²⁰ A terminological aside. Nida (op. cit.:98 in 25) equates general external distribution classes with the "so-called parts of speech, e.g. nouns, verbs, adjectives, adverbs and articles". But notably the equation is not complete. For instance, as Nida notes (ibid:99), "a word such as boys does not belong to the same (external) distribution class as the simplest member of the noun class". But both boy and boys are nouns, as is indeed implicit in Nida's statement. This skewness of range is also clear in statements like "[Inflectional formations] do not belong to substantially the simplest member of the class in question" (ibid). Inflectional formations do, however, belong to substantially the same part-of-speech category as the simplest member of the class. Interestingly, perhaps stultifyingly, the expressions "external distribution classes" and "simplest member of the class" in the above quotation are referentially distinct. More explicitly, depending on their morphological complexity, members of the class of nouns, for instance, could belong to different external distribution classes.
sentential constitutes. This is because they have no lexical-semantic content. This falsifies the assertion made earlier, i.e. that units which are phonological and grammatical words can function as sentences. *tyo “will”, *lho “will not”, *lro, the contingency mood marker meaning “in case; in the event of” are examples of this limited membership set.

3.2.4 The fourth type is the diametrical opposite of the third type. Exponents of this type are nonwords at all levels. All derivational affixes fall under this class: *pe- of *pe-shuo “badly” (shuo “be bad”), *ke- of *keza “big” (za “be big”) illustrate the type.

3.2.5 The fifth type is a phonological word but intraphrasal and interphrasal nonword. Predictably, they cannot perform the “potential sentence” function. Particles *se “very”, *zo “very” interrogative markers *si and *ga, postmodifying verbal participles like *ke-ti “black” etc., derived adverbs like *pe-ul “well” etc., coordinators like *mu “and” and *mort “or”, the disjunctive subordinator *dert “but”, and postpositions like *nunu “from (nonhuman)”, *kinu “from (human)” illustrate this type.

3.2.6 In a manner of speaking, there is no sixth type, for the exponents of this type are phonological and interphrasal words but intraphrasal nonwords, i.e. Type 2. It is, however, a class apart, since in an extremely interesting paradox, it exemplifies at once word structure and phrase structure. Exponents of this class are “morphosyntactic” words insofar as they are morphological structures which display significant syntactic behaviour. Members of Type 1 are morphosyntactic words too, as we have seen. But exemplars of Type 1 are syntactic in terms of constituent structure and distribution, but syntactic in terms of syntactic (transformational) behaviour. Let us explicate an example of this paradox: *mha-tsū means “eat a meal”. *mha, which literally means “(material) thing” means “meal” in combination with tsū “eat”. It is dropped when an object is specified (82b-c below). (Note that the “my” in the English translation cannot be realised in Angami with the verb *mhatsū):

82. (a) a mha-tsū tyo “I will eat my meal”
   l-nom(=Ø) fut
(b) a thevo-tsū tsū tyo “I will eat pork”
   pig flesh
*(c) a thevo-tsū mhatsū tyo “I will eat a meal of pork”

There is abundant evidence that *mha-tsū is a phonological word. There is no potential pause between the two components. It is not interruptible.
D 11. A: no mha -tsū mhał -ya
you-nom(=Ø) gnr eat quickly hab
"you eat meals fast"

B: *u a mha kevi tsū mhał -ya
"yes, I eat good food fast"

Further, the facts (a) that mha, the generic pro-form cannot be elicited by a wh-question (D12); and (b) that it cannot be pseudo-clefted (84) constitute unmistakeable evidence that mha is not a syntactic object, and that it is indeed a componential part (like mhi "eye" of mhi-rho "open eyes") of the verb mha-tsū "eat a meal":

D 12. A: no kedipuo tsū ga
you-nom(=Ø) what-acc(=Ø) eat-pst(=Ø) Q
"what did you eat?"

B: *(a) a mha -tsū  "I ate my meal"
*(b) a mha tsū

83. *a. n mha - tsū - lie  "eat your meal"
your gnr eat imp
*b. n mhi - rho - lie  "open your eyes"
   eye open imp
c. n mhi mhi - rho - lie  "open your eyes"
   eye eye open imp
d. n galho tsū -lie  "eat your galho"

*84. a ketsülle-u mha  "what I ate was a meal"

On the other hand, there is equally persuasive behavioural evidence that mha is part of a substitutional expanse of words and not of a distributional framework of morphemes. No nominal part of a compound can undergo syntactic processes like ellipsis, identity erasure or pronominalization (see 2.3.2.). mha lends itself to these with felicitous alacrity:

D 13. A: no mhał tsū -lie -te me
you-nom(=Ø) gnr eat vr prt Q
"have you eaten food?"
where mha is ellipted as a function of the interaction between intra-sentential structure and intersentential context.

85. hieko mha₁ - cha
    we(excl.pl)-nom(=Ø) gnr cook-pst(=Ø)-cnj(=Ø)
    Ø₁ -tsū
eat-pst(=Ø)
    "we(excl.pl) cooked food₁ and ate Ø₁".

where mha of mha-tsū "eat a meal" has been erased under identity with the mha of mha-cha "cook". One could question this example of identity-erasure, saying that the sentence-final Ø-tsū of 85, is in fact tsū, and not Ø-tsū because tsū can stand alone as evidenced in D13B. The answer to this objection is that tsū is a transitive verb which takes either a lexically defined and morphologically realised object, e.g. mha- (as in D13A) or a syntactic object (as in 83d). Either kind of object can be deleted under identity with a trigger in the discourse (cf. D13B). In other words, a sentence with only tsū "eat" in it, without a mha- or a syntactic object going with it, can never open a dialogue in Angami. Sentence 85a (which is sentence 85 minus mha-cha "cook food"),

85 a a tsū "I ate a meal"

cannot open a dialogue, but since 85 can, one is forced to conclude that 85 is in situ a mha-cha mha-tsū which is transduced as 85 through an obligatory rule. Consider also:

86. a mha₁ - tsū - lie deri puo-e sūu₁ cha
    I-nom(=Ø) gnr eat vr but he-nom it cook
    -sū
    vr-pst(=Ø)-prf(=Ø)
    "I ate my meal but he had cooked it".

where mha of mha-tsū "eat a meal" functions as the antecedent for the pronoun sūu "it". Verbs like mhatšu are exemplars par excellence of the possibility in language of units belonging to the morphology-syntax interface.
3.3 It need scarcely be belaboured that the second, disjunct approach describes the phenomenon of the Angami word with more interesting results than the first approach. It has demonstrated that lexical wordhood is not the only kind of linguistic wordhood. Other kinds of word, equally valid, become realities if different criteria apply at the levels where the different kinds of word may be said to have their being. There should, however, be a unifying property that entitles a linguistic entity to be called "word", whatever the level. Mobility is such an overarching property: the Angami word — phonological or intraphrasal or interphrasal — is mobile in some sense. A nonword is not mobile in any sense.\(^\text{21}\)

4.0 To perorate, criterial attributes of general wordhood (1.1-1.6) and compounds (2) have been discussed. Two possible theoretical positions with respect to the notion of word, i.e. (a) that of a single uniform set of criteria for all levels of language structure (the "conjunct" definition (1.7)), and (b) that word divisions could vary in response to linguistic levels, different (sets of) criteria applying at different levels (the "disjunct" definition (3)) were explored. With no heuristic principle proving to be both necessary and sufficient, and the criteria being found at odds with one another, they were hierarchised (1.7) so that the unit they sought to define could be discrete. The attempt met with limited success and in any case could not overcome the serious limitation inherent in the first approach, i.e. the definition of only one kind of wordhood. The second approach, on the contrary, conceived of and defined various kinds of wordhood at three different levels of language structure. The dynamics of wordhood at the phonological level, however, was treated in essentially the same way by the two approaches. We did not require explicit comparison to see that the perspectives opened up by the second approach to the Angami word were more fruitful than what the first approach had to offer.

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\(^{21}\) This paper for the most part works out a taxonomy rather than explicating the dynamics that lead to the taxonomy. For instance, one could see the distinction between syntactically pertinent inflectional affixes and affixes which are grammatically bound as a function of derivational history. An NP rewrite rule would formulate the grammatical independence or the phrasal pertinence of the affix in the former case, while the category would figure not in an NP rewrite rule but in a relatively later rule (e.g. a segment transformation or spelling rule) in the latter case. Conceivably, syntactically mobile affixes may represent a stage in the linguistic evolution of syntax becoming morphologised. A plausible conjecture is that a language like Angami could develop separate absolute forms for definite and indefinite adjectives, which would be a result of a syntactic category being morphologised. Now the definite article seems to belong both to syntax and morphology. In terms of physical realisation, it is morphological, but in terms of immediate constituency status and combinability it is syntactic.
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