A grammar of Pacoh:
a Mon-Khmer language of the central highlands of Vietnam

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List of abbreviations and special glosses

The abbreviations in the table below are used primarily in the glosses for sample words and sentences throughout the grammar. Most abbreviations listed stand alone. Social pronouns (§7.3.5), however, are indicated by a combination of features. For example, *ʔa.caːj* is glossed as 'SPMY', meaning a socially-conditioned pronoun to address or to self-address a younger male.

Abbreviation	Term
1d	first person dual
1p	first person plural
1s	first person singular
2d	second person dual
2p	second person plural
2s	second person singular
3d	third person dual
3p	third person plural
3s	third person singular
EMPH	emphatic
F	female
IMP	imperative
INT	interrogative
LINK	linking word
M	male
N	neutral
ND&P	Nguyễn, Đoàn and Phan (1986)
O	older
PROG	progressive
RECIP	reciprocal
RLTR	relator word
SOC	socially conditioned
SP	socially-conditioned pronoun
UNIT	measure word
Y	younger

1 *Introduction*

This text is a descriptive grammar of the Pacoh language spoken primarily in the central highlands of Vietnam in the provinces of Thừa Thiên/Huế and Quảng Trị. It is a reworking of my dissertation 'A Pacoh Analytic Grammar' (University of Hawai'i, 2000). This section introduces the purpose and suggested use of this grammar; and gives the linguistic affiliation and Mon-Khmer typological characteristics of Pacoh; a brief description of the language situation and sociolinguistic profile; and previous research, data collection, and method of analysis for the data presented in this book.

1.1 Purpose and use of this grammar

The primary goal of this text is to provide a lightly technical description of Pacoh phonology, morphology and syntax. Presentation of analyzed data is considered the primary purpose, and so much of the specialized terminology from the original dissertation has been removed, changed to more accessible terms, or at the very least, described briefly. For questions about phonological, morphological, or syntactic issues that this work assumes, see the dissertation on which this text is based (Alves 2000). Other aims of this grammar are:

- To describe the language adequately to provide data for further linguistic research on Pacoh or other Mon-Khmer languages

- To use an analytical approach to deal with the linguistic qualities (phonological and morphosyntactic) typical of a Mon-Khmer language

- To note, with a comparative-typological perspective in mind, aspects of Pacoh grammar commonly seen in other Mon-Khmer languages

A related goal of this grammar is to combine traditional notions in grammar with explorative approaches to syntactic analysis since traditional descriptions in English syntax writings often employ European language models, which may not adequately or correctly deal with the typologically distinct patterns in Southeast Asian languages.

The expected audience includes those interested in finding data for general exploration of linguistic phenomena, and those who are involved in research of languages in Southeast Asia. The data are arranged so that the book answers the kinds of questions a linguistic researcher interested in various aspects of linguistic theory or linguistic typology might

ask. However, beyond the theoretical aspects, those motivated to do so could also use parts of this text to learn key aspects of the Pacoh language.

This is not a complete grammar of the language but rather just a partial work. I hope that others will continue the work begun in this grammar to provide a less theoretical and more practical grammar of Pacoh for those dealing directly with the Pacoh people, provided the Vietnamese government allows more access to the regions in which the Pacoh and other ethnic minorities in Vietnam live.

The use of this grammar depends, naturally, on the purpose of the reader. A quick view of Chapter 2 on Pacoh phonology, the overview of Pacoh syntax in Chapter 4, and the glossary in Chapter 12 should be helpful. The glossary, which is separated by part of speech, contains not only the Pacoh form and English meaning, but also the subsection(s) for each word, so that the reader can look for explanation on the syntactic usage. For other resources on the Pacoh language, readers are encouraged to explore materials published by Richard and Saundra Watson (see especially Cubuat and Watson 1976).

To locate a specific phonological, morphological, or syntactic aspect, see the table of contents. For a general overview of Pacoh syntax, see Chapter 4. As the syntax portion of the grammar is divided by part of speech, some general grammatical aspects may be spread throughout chapters. In such instances, other such subsections containing relevant information are noted. Comparative notes and comments on borrowed vocabulary are spread throughout the grammar and in footnotes.

Some general linguistic features of note are *vowel register* (§2.3), *reduplication* (§2.5, §3.3, §7.1.6, and §10.1.4), Mon-Khmer-style *causative affixes* (§3.2.1), *sentence particles* expressing the interrogative, imperative, and various moods (§9), *serial verb constructions* (§4.2 and §11), and *referential terms* (§3.1.3 and §7.3). As much as possible, terminology has been made as transparent as possible; more commonly known terms are put next to the selected terminology (e.g. VCT verbs in this grammar also mentioned as SVCs).

1.2   Linguistic affiliation and Mon-Khmer typological characteristics

Pacoh belongs to the Katuic subbranch (in central Vietnam, southern Laos, and parts of northeastern Thailand) of the Mon-Khmer language group, which is in turn part of the Austroasiatic language family spread throughout Southeast Asia and parts of eastern India. As for its position within Katuic, there is considerable variation of opinion among researchers. Ferlus (1974) and Diffloth (1982) claimed it to be part of a major Eastern Katuic subgroup; Miller and Miller (1996) put it in a somewhat smaller Western Katuic subbranch; L-Thongkum (2001) grouped it with Bru and So in a North East Katuic subbranch; and Sidwell (2005) considers Pacoh a language isolate within Katuic.

Pacoh is clearly a Mon-Khmer language, as seen by its basic Mon-Khmer vocabulary as well as its linguistic structure. It shares 23%–30% of its core vocabulary with various Mon-Khmer subbranches, which is roughly the same range among the other subbranches (Thomas & Headley 1970). The Mon-Khmer typological characteristics (some of which apply to other Southeast Asian languages too) of Pacoh include the following.

- **Sentence structure**: topic-comment type, a basic subject-verb-object order
- **Noun phrase structure**: classifier language, noun-modifier word order, lexically-indicated plurality (not affixes)
- **Modal aspects**: time aspect and the interrogative are indicated by adverbs and sentence particles (not conjugated verbs or affixes)
- **Word-formation:** presyllables (e.g. deriving causative verbs) and infixes (e.g. nouns derived from verbs), partial/alternating reduplication
- **Phonological word shape:** sesquisyllabic word structure in which presyllables are unstressed and somewhat reduced in form, consonant clusters on main syllables
- **Phonology:** vocalic/register differences on vowels, four-way place of distinction of consonants (labial, dental, palatal, and velar)

1.3 Pacoh linguistic situation and sociolinguistic matters

Pacoh is the language spoken by an ethnic minority of part of the central highlands of Vietnam. The Pacoh number over 10,000, though this number is difficult to verify; indeed, the Vietnamese official listing of ethnic minorities does not even include the Pacoh.[1] The central district in A-Lưới valley is a kind of cultural center for the Pacoh, though the Pacoh language is spoken in other districts in the same Thừa Thiên province and by smaller populations of Pacoh in areas in Quảng Trị province to the north.

As the infrastructure in Vietnam improves and the Vietnamese continue to move into highlands where there exists substantial available land, the traditional Pacoh lifestyle is changing, with parallel linguistic changes. The Pacoh have traditionally been swidden agricultural farmers as well as hunters using both weapons and traps (see Watson 1970 for more on the Pacoh culture). Today, that lifestyle is being replaced with low-paid manual labor and vending jobs. Many younger Pacoh have lost, and are continuing to lose, knowledge of Pacoh traditions and agricultural and hunting practices. The consequences are that the associated vocabulary and patterns of phonology, morphology, and syntax are also being lost. Moreover, with increased usage of Vietnamese by Pacoh in schools and with increased Vietnamese migration to the highlands, Vietnamese grammar (e.g. increased used of words meaning 'give' and 'make' to indicate causation rather than verbs with causative morphology) and related vocabulary (e.g. Vietnamese *là* 'to be' and *bằng* 'by means of') that have entered Pacoh will likely become increasingly common. Finally, there is substantial pressure—social, economic, and political—towards the use of Vietnamese instead of Pacoh.

1.4 Previous research and data collection

Research on the Pacoh language began in the middle 1960s when Richard and Saundra Watson, both researchers for the Summer Institute of Linguistics, spent years living with

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[1] Instead, the Taoih, who are a different but closely related group and who primarily reside within bordering Laos territory, are officially listed. Taoih and Pacoh are distinct languages both lexically and phonologically, as shown in a 1984 Vietnamese-Pacoh-Taoih dictionary (ND&P).

the Pacoh and studying their language. Their work resulted in numerous linguistic publications in the 1960s and 1970s, as listed in the bibliography. These works—primarily published as articles in the Mon-Khmer Studies journal—described the phonology, morphology, syntactic and discourse properties of Pacoh, and a Pacoh language-learning text was created as well. In the early 1980s, Vietnamese linguists did research on Pacoh as well as Taoih, which resulted in a Vietnamese–Pacoh–Taoih/Pacoh–Taoih–Vietnamese dictionary which included a brief grammatical description and some language practice texts.

The writing of the present grammar takes into account the descriptions and data from those sources. However, the primary resource for examples and the theoretical testing comes from my own data collection (with the assistance of two researchers from the Institute of Linguistics in Hanoi) over three main data-collecting sessions with native speakers of Pacoh in 1997 and 1998. Before researching Pacoh as a dissertation topic, I spent some time working with data on Pacoh during my graduate studies. At that time, Richard Watson generously provided me with unpublished materials of his own, including cassette tapes and transcripts. Those tapes combined with the Vietnamese dictionary provided me with a modest amount of useable linguistic knowledge to aid in the data collection in Vietnam. The first trip in 1997 resulted in data collected over a week's time from several Pacoh students at a high school just outside of Hue city. In 1998, I worked with three Pacoh gentlemen over the age of 50 over a period of about two weeks. It must be made clear here that I do not consider my limited amount of fieldwork time spent anywhere near sufficient to truly do justice to the language of the Pacoh people. In fact, Richard and Saundra Watson would be the best people to create a grammar. Still, considering the small size of the Pacoh population and the rapid increase of Vietnamese influence in the area in which the Pacoh reside, it is best to publish this somewhat raw and incomplete information now rather than to wait until the political situation in Vietnamese allows for ready access to field data collection.[2]

1.5   Data analysis and concepts

After the available literature was reviewed and data was collected from native-speaking Pacoh, the phonology, morphology, and syntax were formally analyzed. Regarding phonology, the analysis, with a few exceptions, follows that of Richard Watson (1996), with additional reference to recorded data and some modest acoustic phonetic analysis. Similarly, the description of word-formation patterns partially follows the work of Saundra Watson (1966) on verbal morphology, though with a reorganization of presentation of the patterns and some additional analysis of the patterns. This was in part due to the view of morphology as a system of analogical word-formation based on phonological material that may consist of anything from intonation to phonemes, affixes to words, and from phrases to clauses. As for the syntax, more substantial reorganization of the facts was made. Using the Lexicase syntactic theory, a monstratal dependency grammar with a focus on the

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[2]   In addition to other words cited in this grammar, during the original writing of the dissertation, I made use of ideas and data presented in works by Banker and Bahnar (1964a, b), Nguyễn, X.H. on familial systems in Katuic languages (1998), and Starosta on the Lexicase syntactic framework (1988, 1998 and 2003).

lexicon and case, I determined the seven parts of speech and their various subtypes according to their semantico-syntactic distributional properties. This stage was completed with the use of the available data from all sources, but I relied most heavily on the data I personally collected from native speakers. Some of the recurring and hence characteristic relevant semantico-syntactic issues include topic-comment constructions (topic focus, informational interrogative questions, non-contrastive flexible word order), location as a verb/preposition to noun, and human semantic properties (certain subclasses of common nouns, classifiers, pronouns, and conjunctions).

Within the morphosyntactic description, some of my own more particular views are shown. The purpose of this grammar is not to promote any particular theoretical framework, but it still is appropriate and necessary to discuss briefly what some of the theoretical assumptions are herein.[3] The three main assumptions are that (1) syntax is explained at one level of representation (though semantic and semantically-related factors are important), (2) the spoken word is the syntactic centre of syntactic constructions, and (3) homophony accounts for a great deal of seeming distributional variation. First of all, the morphosyntactic descriptions in this grammar do not assume underlying representations or transformations. Varying lexical distributions or apparent 'movements' are simply acceptable or common syntactic patterns for the language and may be related to information structure and semantic and/or pragmatic focusing. The next assumption is that the lexicon and words are the central elements in syntactic constructions, and words (instead of abstract, unspoken grammatical categories) are the heads of their own phrases. While the dissertation on which this grammar is based made extensive use of Lexicase lexical features for analyzing lexical categories and subcategories, those have been removed without significant effect on the linguistic description contained here. Finally, the acknowledgment of homophony frees the linguist to see otherwise aberrant or non-categorizeable forms as distinct lexical entries in a speaker's mental lexicon. This also fits in with the two previous assumptions in the focus on the spoken word and the lack of a need for transformations to account for data.

As a descriptive work, the terms and concepts used for the most part are typical and kept as non-theoretical as possible. However, as there can be no truly objective description of language, some linguistic notions that consider palatable are thus used. When certain terms and/or concepts are considered more specialized, idiosyncratic, or in other ways less accessible, they are described.

A final warning is due regarding the issue of local/regional variation and issues of contact-induced language change. Pacoh speakers are in contact with speakers of Vietnamese and various minority ethnic groups, most typically other Katuic-language-speaking groups such as Taoih, Katu and Bru. Thus, the data will certainly not cover every aspect of every variety of Pacoh, and indeed, the language is likely experiencing changes of various types.

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[3]   The original dissertation employed the Lexicase framework, developed primarily by Stanley Starosta (1939–2002) and his students at the University of Hawaii from the early 1970s until his passing. It is a lexically-focused, monostratal grammar that made substantial use of case and lexical features. Many of the assumptions of morphology and syntax in this grammar are based on that framework although an attempt has been made in this grammar to keep Lexicase-specific terminology to a minimum.

2   *Phonology*

To those familiar with sound systems of Mon-Khmer languages, Pacoh phonology clearly shares many traits with those languages, including a large vowel inventory enriched by a vocalic register difference and vowel length, consonant categories with a five-way place distinction (labial, alveolar, palatal, velar, and glottal), 'sesquisyllabic' word structure and intonation, and reduplicative morphophonology having patterns of both copying and alternations. This chapter discusses the overall phonemic system of Pacoh—consonants, vowels, word and phrasal prosody, reduplication, among other special issues.

2.1   The system of transcription

While Pacoh has no official script, it has been transcribed in a handful of works, each differing as to the base script, either IPA-based orthographies (Alves 2000 and Pejros 1996) or Quốc-Ngữ-based orthographies (ND&P 1984 and various works by Richard and Saundra Watson). The system used in this grammar is a phonetically-oriented IPA-based system. In general, transcriptions of the consonants are transparent, while the transcriptions for vowels require special attention, as attended to in later sections.

2.2   Consonants

Pacoh has twenty-three consonant phonemes, as listed in Table 1. R. Watson (1964) provided examples of and evidence for eighteen consonant phonemes through examples of minimal distinctions. The additional five are accounted for here by the inclusion of three aspirated stops and two post-glottalized glides.[4] Phonemes in loanwords from Vietnamese (see §2.7) are not included in Table 1 since they are limited to a small set of lexical items. In subsequent sections, some additional statements are made regarding general feature-based categories as well as specific phonemes that are phonetically complex or show phonetic variation, such as the palatal fricative and the post-glottalized glides.

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[4]   For a discussion on the differences of phonological analysis between this work and previous work by the Watsons, see Alves (2000).

Table 1: Pacoh consonants

	Bilabial	Alveolar	Palatal	Velar	Glottal
Stop, unvoiced	*p*	*t*	*c*	*k*	*ʔ*
Stop, aspirated	*pʰ*	*tʰ*		*kʰ*	
Stop, voiced	*b*	*d*	*ɟ*		
Nasal	*m*	*n*	*ɲ*	*ŋ*	
Fricative			*ʃ*		*h*
Liquid, non-lateral		*r*			
Liquid, lateral		*l*			
Glide	*w*		*j*		
Post-glottalized	*wʔ*		*jʔ*		

2.2.1 Consonant classes

The distribution of Pacoh **voiceless stops** is as follows: (1) they occur in both syllable-initial and syllable-final positions, (2) they are onsets in presyllables, and (3) in word-final position, they are unreleased. The sounds /p/, /t/, and /k/ occur in all positions with the highest frequency of all consonants,[5] which is primarily due to their use in word-initial affixes (many of which have those sounds) in bisyllabic words. In monosyllabic words, the overall distribution of those sounds is generally comparable to that of other categories of phonemes.

Table 2: Distribution of Pacoh voiceless stops

	Initial	Final	Presyllable
/p/	*peʔ* 'banana'	*kɨːp* 'each'	*pa.kɔh* 'Pacoh'
/t/	*toʔ* 'arrive'	*pɨːt* 'big'	*tər.piən* 'exchange'
/c/	*cɔː* 'return'	*ʃeːc* 'meat'	*ci.caː* 'to eat (general)'
/k/	*kɛt* 'small'	*daːk* 'water'	*kəm.maŋ* 'listen'
/ʔ/	*ʔeː* 'many'	*taʔ* 'do'	*ʔa.ʔiɲ* 'hate'

Voiced stops occur only as syllable onsets (never as codas) in both main syllables and presyllables. These sounds often occur in reduplicant forms as presyllable onsets.

Table 3: Distribution of Pacoh voiced stops

	Initial	Presyllable-initial
/b/	*bul* 'stone'	*ba.bɛːt* 'a swift (bird)'
/d/	*daːk* 'water'	*dən.doːŋ* 'pregnant'
/ɟ/	*ɟaːŋ* 'to pass over'	*ɟən.ɟɛl* 'in a flash'

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5   Of the approximately 2,200 entries in ND&P (1986), [p], [t], and [k] constituted about half of the initials. This number is inflated by their usage in word-formation primarily of bisyllabic verbs but also nouns.

Aspirated stops occur strictly as onsets in main syllables. They are less common in available data than other phonemes.[6]

Table 4: Distribution of Pacoh aspirated stops

	Initial
/pʰ/	*pʰɔːʔ* 'mud'
/tʰ/	*tʰet* 'wrong'
/kʰ/	*kʰir* 'jump over'

Pacoh has two **fricatives**, both of which may appear in onset and coda positions in main syllables. In available data, only /ʃ/ occurs as the onset of a presyllable in a few words, and then, only as part of a reduplicant. When /ʃ/ is a coda, an epenthetic palatal glide occurs after the main vowel, resulting in what sounds variously like a complex affricated palatal glide [jʰ] or a single unvoiced palatal glide [j̊]. The fricative /ʃ/ shows significant variation in its phonetic realization (see §2.2.1.2).

Table 5: Distribution of Pacoh fricatives

	Initial	Final	Presyllable
/ʃ/	*ʃɔr* 'to ascend'	*riəʃ* 'root'	*ʃa.ʃuə* 'rummage'
/h/	*hɔːj* 'time'	*dah* 'to dare'	--

Pacoh **nasals** have a complete range of distribution throughout syllables; all Pacoh nasals can occur both syllable-initially and syllable-finally in both main syllables and presyllables (though Pacoh nasals rarely occur as presyllable onsets in available data except, again, as reduplicants). Moreover, nasals, in addition to vowels, can be syllable peaks in presyllables, in which case they always have epenthetic glottal-stop onsets. As presyllable finals or syllabic peaks, they match the place of articulation of the main syllable's onset.

Table 6: Distribution of Pacoh nasals

	Initial	Final	Presyllable-initial	Presyllable-final	Presyllable-peak
/m/	*mɔːh* 'nose'	*nam* 'if'	*ma.mɔːjʔ* 'to hunt'	*təm.mɛː* 'new'	*ʔm.piən* 'top'
/n/	*niːm* 'only'	*ʔiən* 'easy'	*na.naʔ* 'oneself'	*kən.tiʔ* 'time/trip'	*ʔn.tih* 'that (far)'
/ɲ/	*ɲoŋ* 'watch'	*pɛːɲ* 'shoot'	*ɲəɲ.ɲɛːl* 'prompt'	*kəɲ.cɔːl* 'to dance'	*ʔɲ.cɛː* 'louse'
/ŋ/	*ŋɛʔ* 'all'	*kliŋ* 'many'	*ŋəl.ŋah* 'show off'	*pəŋ.kraː* 'repair'	*ʔŋ.koh* 'that'

Pure consonant **liquids** in Pacoh include /r/ and /l/. Like nasals, Pacoh liquids may occur in both syllable initial and final positions in both main and presyllables. The alveolar liquid /r/ is often trilled in careful speech in all positions and even as the second consonant in clusters (see §2.4.5).

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[6]   That these are single consonants and not consonant clusters is supported by two facts. First, the original prefixes some of these sounds developed from are no longer productive. Second, while a small number of forms exist with infixes that show an earlier distinction, this author considers those examples insufficient for inclusion in a synchronic description.

Table 7: Distribution of Pacoh liquids

	Initial	Final	Presyllable-initial	Presyllable-final	Presyllable-peak
/l/	*lɔːm* 'liver'	*vɛːl* 'village'	*la.luh* 'to run'	*pəl.lɔː* 'tube'	*ʔl.lam* 'one unit'
/r/	*raːw* 'to clean'	*baːr* 'two'	*ri.rɔːj* 'a fly'	*pər.ran* 'bait'	*ʔr.baːŋ* 'sky'

Pacoh has two types of **glides**, plain and post-glottalized. They are distinguished from the offglides of diphthongs since they all can follow any vowel or diphthong without restrictions. Only /w/ is found to occur in existing data as a presyllabic onset (a reduplicant of the onset of a main syllable). In fact, /w/ initially is often realized as [v] in onset positions. Plain glides occur in both initial and final positions in main syllables, while post-glottalized glides occur only in syllable-final positions.

Table 8: Distribution of Pacoh glides

	Initial	Final
/w/	*wiː (viː)* 'to have'	*ʔn.naw* 'who'
/j/	*jəw* 'friend'	*kəm.paj* 'wife'
/wʔ/	--	*ʔiəwʔ* 'old'
/jʔ/	--	*ləjʔ* 'no'

2.2.1.1 The glottal stop

In Pacoh, glottal stops are distinctive and deserve status as phonemes since, in word-final position, there are minimal pairs that show glottal stop cannot be predicted (e.g. *dɔː* 'he' versus *dɔːʔ* 'put'). This is most significant in the transcription used here, since no syllable peaks (including both vowels and nasals) are shown without some kind of consonant initial. Glottal stops in Pacoh are clearly distinctive within words in intersyllabic positions. In addition, glottal stops serve to satisfy the overall requirement of Pacoh syllables to have initial consonants.

Glottal stop		**Other phoneme**	
ʔa.ʔaj	'ill'	*ʔa.kaj*	'child'
pa.ʔoh	'to scold'	*pa.ŋoh*	'to put in'

In word onset position, however, the distinctiveness of the glottal stop is not always apparent although, without glottal stops, we might expect certain natural intersyllabic assimilatory phenomena. Some evidence from Pacoh reduplication demonstrates the distinctiveness of glottal stops in both word-initial and syllable-initial position. In these samples, both base forms reduplicate entirely with an additional syllable [ʔi]. Without glottal stops, we might expect to see the incorrect form *[ɛk.ʔi.jɛk], with an epenthesized palatal glide or the final [k] or [h] of the first syllables to resyllabify with the following syllable, creating the incorrect forms *[ʔɛ.ki.ʔɛk] and *[haː.hi.haːh]. The Vietnamese Quốc-Ngữ-based scripts do not clearly show this detail.

Pacoh	**Gloss**	**Quốc-Ngữ**
ʔɛk.ʔi.ʔɛk	'peals (of laughter)'	*ék-i-ék*
haːh.ʔi.haːh	'gape (while smiling)'	*háh-i-háh*

Glottal stops are also clearly phonetically distinctive in phrases consisting of more than one syntactic word. In speech sequences, consonant finals do not resyllabify with the vowel of the next word. This suggests that glottal stops are present in phonological representation before syllabification. Thus, both phonetically and phonemically, all Pacoh syllables require initial consonants, which can include glottal stops. Similarly in sentences, the glottal stops typically prevent phonetic changes.

2.2.1.2   *The palatal fricative*

This section discusses allophonic variations of the palatal phoneme /ʃ/. R. Watson (1964) considered 's' to be a voiceless alveo-palatal fricative, though noting that it alternated freely with [ç]. In my own recordings of several speakers, the sound ranged from an alveolar to a palatal fricative. Assimilatory processes between nasal presyllables and the 's' onset of main syllables suggest that this phoneme is indeed a palatal. All presyllabic nasal peaks assimilate to place of articulation of the main syllable onset. Thus, the presyllabic nasal is a palatal nasal before all three palatals /c/, /ɲ/ and /ʃ/.

Pacoh	Gloss
ʔɲ.ʃɥər	'to tell old stories'
ʔɲ. cɛ̰ː	'louse'
ʔɲ.ɲɔ̰ːp	'ugly'

2.2.1.3   *The post-glottalized glides*

The word-final transcribed sounds 'iq' and 'uq' used by the Watsons and ND&P are here considered to be single complex segments, post-glottalized glides, /jʔ/ and /wʔ/. Since the proposed maximal syllable shape in Pacoh is CCV:C (see §2.4), those sounds may not be sequences of diphthong off-glides and separate final glottal stops as they appear as the codas of words that already have diphthongs (e.g. *ʔiəwʔ* versus **ʔiəuʔ* 'old'). Moreover, final clusters go against general typological tendencies in the phonological systems of neighboring Mon-Khmer and Tai languages, whereas glottalized finals are entirely typologically sound there.

Another question is where these sounds fit in the overall phonemic system. Questions of the overall phonemic system, as well as historical and typological details, suggest that these sounds are distinct from voiced phonemes. Watson (1964) suggested that 'uq' and 'iq' are allophones of /b/ and /ɟ/ in an attempt to balance the overall phonemic system of Pacoh. However, having only two finals corresponding to voiced consonants while excluding /d/ still creates a somewhat uneven and less likely system.

Another problem with positing these as correspondences with voiced stops is typological in nature. Most neighboring Mon-Khmer and Tai languages do not have syllable-final voiced stops, a statement that can be made of other closely related Katuic languages, such as Taoih (ND&P 1986), Bru (Hoàng & Tạ 1998), and Katu (H.H. Nguyễn & V.L. Nguyễn 1998).[7]   Furthermore, postglottalized continuants do exist in neighbouring Mon-Khmer languages, such as the Viet-Chut language Ruc and the Katuic languages Ong

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[7]   Some exceptions include some Aslian languages in Malaysia (cf. Benjamin 1976 (Temiar), Diffloth 1975 (Jah-Hut), and my own field notes (Semai) taken in 1998).

and Talan. Also, historically, Pacoh /jʔ/ usually corresponds to Taoih /c/[8] and probably comes from Proto-Katuic *c/ (cf. Pejros 1996). Pacoh /wʔ/ is the same as in cognates in Taoih and is of uncertain historical origins. Positing that both glides have post-glottalized counterparts is a slightly more balanced picture and matches the typological and historical picture as well.

2.2.2 Conditioned changes

This section discusses conditioned changes of consonants, including palatal epenthesis, fortition, and rounding. First, there is a noticeable **palatalization** of vowel off-glides before the voiceless palatal fricative /ʃ/ in coda position, resulting in a phonetically complex segment. In the Viet and Watson scripts, this sound is represented as 'ih'. The phonetic realizations of /ʃ/ include [ʃ], [jh] and [j]. The latter two result from a weakening of the /ʃ/ closure.

Gloss	Alves	Phonetic	Watson
'monkey'	ʔa.dɨəʃ	ʔa.dɣajʃ	adoaih
'root'	r̪iəʃ	r̪ęajʃ	reaih
'firewood'	ʔuːʃ	ʔuːjʃ	uih

Pacoh has two instances of **word-initial fortition**: spirantization and epenthesis. The first case is the fricativization of /w/ to [v] word-initially, and the other case is the insertion of phonemically non-distinctive glottal stops before nasal presyllables. In Pacoh, [w] and [v] occur in complementary distribution, [w] in word-final position (never [v]), and [v], word-initially (rarely [w]).

Form	Gloss
viː / wiː	'to have'
vit / wit	'to toss away'
tiəw	'spice'
ʔa.ciəw	'knife'

In the initial position, [v] is the dominant form in Pacoh speech, and is the symbol used to represent the sound in Watson and Viet scripts. However, phonetic variation of the initial /v/ and /w/ did occur, suggesting that these are allophones of the same phoneme. The view taken here is that /w/ is the base phoneme, and is realized as [w] word-finally, though with alternation with [v] initially. The phonetic realization of /w/ as [v] in most cases is the result of a process of word-initial labial fortition. In the sonority hierarchy, [w] is more sonorant than [v]. Syllables tend to be less sonorant at the edges, particularly word-initially.

The other case of fortition is the requirement of a non-distinctive glottal stop before sonorant (nasal or liquid) presyllables. When nasals and liquids occur as presyllables, they always have a glottal stop, which can serve to prevent incorrect syllabification (see §2.2.1.1 on glottal stops). Nasals are consonants, but they are sonorants like vowels, and thus the non-sonorant glottal stop maximizes the syllable shape. The insertion of a phonemically non-distinctive glottal stop, as opposed to any other non-sonorant stop, is natural since it is a minimally distinctive and minimally sonorant consonant.

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[8]   All data on Taoih come from ND&P (1986).

Finally, in Pacoh, there are instances of **syllable-final rounding**, in which /ŋ/ and /k/ become [ŋʷ] and [kʷ] after [-RTR] back round vowels /o/ and /u/.[9] Thus, for example, Pacoh [duŋ] 'house' can be realized phonetically as [duŋʷ]. The roundness of the vowels tends to induce labialization of the consonants although the process is not consistent and varies according to rate and clarity of speech. A complete shift to [m] is not acceptable. This tendency patterns with the regular rounding in the same phonetic environment in Vietnamese and may be an areal tendency.

2.2.3 *Nasal assimilation in presyllables*

Pacoh shows a consistent pattern of matching place of articulation between the nasals of presyllables (either presyllable coda nasals or presyllable nasal nuclei) and the onsets of following main syllables.

Gloss	Form	Gloss	Form
'which'	*ʔm.mɔː*	'new'	*təm.mɛː*
'this'	*ʔn.tih*	'star'	*pən.tǫːr*
'louse'	*ʔɲ.cɛ̣ː*	'to dance'	*kəɲ.coːl*
'that'	*ʔŋ.koh*	'to change'	*pəŋ.kɔːŋ*

It can also be posited that nasals in this position are unable to maintain their own point of articulation.[10] In all other positions, Pacoh nasals permit distinctive points of articulation phonologically unrelated to other segments, as shown in Table 9. The initials of presyllables are copied from initials of the main syllables as a result of word-formation processes. No constraints have been shown, and any reduplicated consonants can occur in this position without phonological constraints.

Table 9: Unconditioned Pacoh nasals

Position	Form	Gloss
main syllable, initial	*mat*	'eye'
	nam	'if'
	ɲǫŋ	'to look'
	ŋɛʔ	'all'
main syllable, final	*cɔːm*	'to know'
	jɔːn	'to give'
	diːɲ	'long time'
	joːŋ	'far'
presyllable, initial	*ma.mɔːjʔ*	'to hunt'
	ŋa.ŋɛʔ-ŋɛʔ	'to contort one's neck'
	ɲa.ɲǫ̣ːl	'prompt'

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[9] The [+RTR] vowels do not cause the same change. The reason for this is not clear.

[10] Padgett (1995) posits that the primary factor in similar cases of nasal assimilation is whether or not the nasal is in a position of phonetic release. In Pacoh, the coda position of unstressed presyllables is a very weak position and is thus more liable to be affected by constraints than positions in the main syllable or the onset of the presyllable.

2.3 Vowels

The Pacoh vowels are here phonemically categorized by four primary features: height, backness, length and tongue root position. This section summarizes the overall system, while subsequent subsections deal with vowel classes, diphthongs, and the issue of retracted tongue position (the register system).

2.3.1 Summary of the vowel system

The Pacoh vowels have been analyzed in two ways, with a three-way height distinction with a split of the mid-vowels of clear versus pharyngealized and with a two-way height distinction with all vowels subcategorized into retracted and nonretracted tongue-root position. Alves (2000), ND&P (1986), and Watson (1964, 1966b) followed the three-way height distinction, while R. Watson has used the registers-system analysis in publications since 1980.

Table 10: Early analysis and current transcription of Pacoh vowels and diphthongs.
RTR = retracted tongue root

	Short				Long		
	Front	Central	Back		Front	Central	Back
High	*i*	*ɨ*	*u*		*iː*	*ɨː*	*uː*
Mid [-RTR]	*e*	*ə*	*o*		*eː*	*əː*	*oː*
Mid [+RTR]	*ḙ*	*ə̭*	*o̭*		*ḙː*	*ə̭ː*	*o̭ː*
Low	*ɛ*	*a*	*ɔ*		*ɛː*	*aː*	*ɔː*
+RTR					*iə*	*ɨə*	*uə*
-RTR					*i̭əː*	*ɨ̭əː*	*ṷəː*

While Alves (2000) considers the two-way height distinction marked and the phoneme-phonetic disparity too severe for several of the phonemes, this work accepts Watson's later position as reasonable from the theoretical perspective of overall phonemic balance and typological accordance with the register systems of a Mon-Khmer language. The number of phonemes, however, remains the same; Pacoh has twenty-four monophthongs and six diphthongs. In Table 11, the lower two rows are both +RTR in the current phonological analysis. While Table 11 shows the preferred phonological analysis, the system of transcription used in this work (and Alves (2000)) is used to accord with phonetic realizations of these vowels in Table 10, as discussed in §2.3.3.

Table 11: Theoretical analysis of Pacoh vowel phonemes

		-RTR			+RTR		
		Front	Central	Back	Front	Central	Back
Short	High	*i*	*ɨ*	*u*	*i̭*	*ɨ̭*	*ṷ*
	Low	*e*	*ɣ*	*o*	*ḙ*	*ɣ̭*	*o̭*
Long	High	*iː*	*ɨː*	*uː*	*i̭ː*	*ɨ̭ː*	*ṷː*
	Low	*eː*	*ɣː*	*oː*	*ḙː*	*ɣ̭ː*	*o̭ː*
Diphthongs		*iə*	*ɨə*	*uə*	*i̭ə*	*ɨ̭ə*	*ṷə*

2.3.2 Vowel length

While vowel length has no observable effect on vowel quality (e. g. diphthongization on long vowels doesn't occur), it is a phonemically significant feature, as shown in the list of minimal pairs in Table 12.   Long vowels can occur in both open (having no final consonant) and closed (having final consonants) syllables, while short vowels occur only in closed syllables. The phonetic duration ratio of long versus short vowels is sometimes as high as 1.5 to 1 (150 versus 100 milliseconds).

Table 12: Minimal pairs of Pacoh long and short vowels

Vowel	Example	Gloss
ɔː	*pa.lɔːŋ*	'to set adrift'
ɔ	*pa.lɔŋ*	'to spit out'
iː	*piːh*	' a kind of poison'
i	*pih*	'to fill holes'
aː	*paːh*	'spacious'
a	*pah*	'to slap'
o̩ː	*ʔa.to̩ːh*	'to fall'
o̩	*ʔa.to̩h*	'weevil'
ɛː	*hɛːŋ*	'yellow bee'
ɛ	*hɛŋ*	'sharp'

2.3.3 The 'altered' register: [+RTR] vowels

The term 'register' in Mon-Khmer phonology refers to a vocalic distinction that doubles vowel inventories by having 'clear' vowels, phonemically and phonetically unmarked sounds, and the 'altered' vowels, which manifest themselves in a variety of ways among Mon-Khmer languages, but generally have some kind of phonation effects, such as breathiness, creakiness, or raspiness (Matisoff 1973; Gregerson 1976). Moreover, these vowels tend to mutate in terms of vowel quality, which, historically, causes continual reanalysis of the phonemes and reemerging phonemic vowel systems (as in Thurgood 1999). R. Watson (1996) notes that these shifts have caused 'clear' vowels to correspond with 'altered' vowels in other Mon-Khmer languages.

In Pacoh, the phonetic feature RTR ('retracted tongue root') is used to describe this series of altered vowels. When the tongue root is retracted, the phonetic consequence in Pacoh is a raspy sound in those vowels. There are distributional constraints on these sounds in Pacoh words; the [+RTR] vowels appear only in main syllables, never presyllables.[11] However, most notable is the fact that the +RTR vowels, having a higher F1, are phonetically lower than their -RTR counterparts.

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[11]   Mon-Khmer presyllables typically permit few vowels, some even having only schwa. Pacoh and some other Katuic languages allow three, [i], [a] and [u].

Table 13: Former and current phonological analyses of the RTR vowels of Pacoh

Former analysis				Current analysis			
+RTR	e̞	ə̞	o̞	+RTR	i̞	ɨ̞	u̞
-RTR	ɛ	a	ɔ	+RTR	e̞	ɣ	o̞

Each of the basic six [+RTR] vowels differ somewhat from their clear counterparts (see Table 13). They are realized in rough phonetic terms as follows: /i̞/ is realized as a glottalic [e̞]; /ɣ/ is lowered to [a]; /u̞/ is realized as a glottalic [o̞]; /e̞/ is lowered to [ɛ]; /ɨ̞/ sounds like a glottalic schwa [ə̞]; /o̞/ is lowered to [ɔ].

2.3.4 Diphthongs

Diphthongs are all inherently long vowels in Pacoh that can occur in both open single and main syllables (Table 14). Phonetically, they are pronounced about as long as long vowels, lasting about 15 milliseconds more than other long vowels. The final off-glides are transcribed as schwa, though the phonetic realization of these off-glides depends on the position of the diphthong peak. The three basic diphthongs are split into two classes by the feature [±RTR].

Table 14: Distribution of Pacoh diphthongs

Diphthong	Example	Gloss
iə	viək	'matters'
	ʔm.piən	'top'
ɨə	kɨə	'to saw'
	triəŋ	'school'
	ka.nɨə	'a saw'
uə	ʃuə	'to search'
	kruəŋ	'earth'
	kər.nuət	'necklace'
i̞ə	ʔi̞ə	'invite village to feast'
	ʃi̞əŋ	'wind'
	ku.ti̞ək	'earth'
ɨ̞ə	bɨ̞əjʔ	'fish'
	ʔa.dɨ̞əʃ	'monkey'
u̞ə	ju̞ə	'to call'
	pu̞ən	'four'

2.4 Phonological word and syllable structure

Pacoh syllable and word structure are characterized in terms of prosody and segmental phonotactic constraints. In Pacoh, phonological words have a minimum segmental sequence of CV: or CVC and a maximum of CVC.CCV:C.

The **phonological word** in Pacoh consists of at most two syllables, while the **syntactic word** has no phonological limit, thereby allowing for longer sequences representing single semantic concepts. While the phonological word in Pacoh has only one main stress, a syntactic word may have more than one. Reduplicants and a variety of lexical compounds that are derived from monosyllabic forms in Pacoh consist of two phonological words, since they consist of single syllables, but two equal degrees of stress. A hyphen is used in transcription to separate phonological words[12] in a single syntactic word, while periods separate syllables within a phonological word. Examples of different combinations of phonological and syntactic words are shown in Table 15.

Table 15: Examples of the marking of syllables and phonological compounds

	Form	Interlinear	Gloss
1.	*ʔi.ŋáj-ʔi.nóː*	'day-previous'	'yesterday'
2.	*jɔ́w-báːj*	'friend-friend'	'friends (in general)'
3.	*ʔu.ráʔ*	'paper'	'paper'
4.	*ʔu.ráːʔ-ʔu.ʔáːr*	'paper-REDUP'	'writing (in general)'
5.	*jéːl-jɔ́ːl*	'drift-REDUP'	'to drift'

The first two examples show single syntactic words formed through word-formation based on other free forms.[13]   The fourth and fifth examples are formed through reduplicative word-formation. Stress is indicated here on each phonological word that bears it, though throughout this grammar, stress is not marked, being predictable. Every phonological word has a single stress on final syllables.
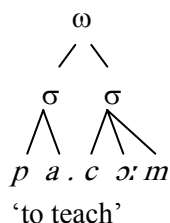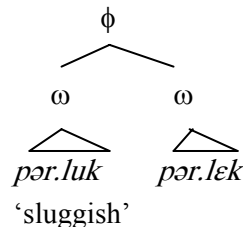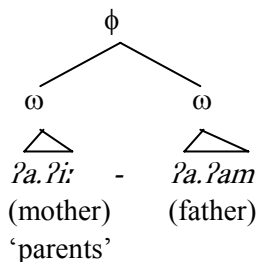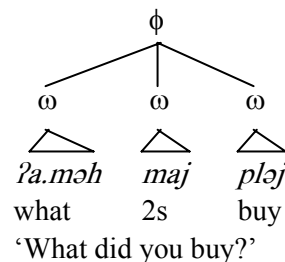
Figure 1: Word-dominated and phrase-dominated substrings

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[12] These are not meant to separate morphemes, but rather to highlight connected phonological words.

[13] Evidence for these forms as single lexical items rather than phrases composed of multiple lexical items comes from the fact that the form /ʔi.noː/ does not occur as a separate lexical item and that the two syllables in /jaw-baːj/ cannot be reversed.

Above the level of phonological word is the **phonological phrase**, which bears a single primary stress and may consist of one or more phonological words. A phonological word in Pacoh, being no more than two syllables, is always equivalent to a prosodic foot, and so words and feet are coextensive. Pacoh has trochaic mora feet, and a single unfooted mora is allowed on the left. A phonological word in Pacoh may have one or two syllables. A syllable in Pacoh consists of one or two moras, depending on the stress; stressed syllables are bimoraic, and unstressed syllables are monomoraic. Though vowels generally satisfy moraic weight requirements, consonants can too.

2.4.1 Overall syllable and word structure

The Pacoh phonological word consists of an obligatory main syllable and an optional presyllable. All syllables must have sonorant nuclei (including a vowel, nasal, or liquid) and must have initial consonants (which can also be glottal stops[14]). Main syllables and presyllables differ in several ways, as discussed below.

Pacoh main syllables can have both single consonants and consonant clusters syllable-initially. The second segment of a cluster is either [l] or [r] in native Pacoh vocabulary, but some glides ([j] and [w]) occur in that position in some Vietnamese loans (see § 2.7). These main syllables must bear stress and must have two moras. The mora weight requirement can be met either by long vowels or by a vowel with a final consonant. The full range of main syllable shapes is shown in Table 16. 'C' represents consonants, 'L' refers to liquids, and the colon ':' marks long vowels 'V'. Main syllables can be pronounced (1) alone, (2) with a secondary presyllable, or (3) (in reduplicant words) with other main syllables.

Table 16: Main syllable shapes in Pacoh

Gloss	Form	Sequence
'to eat'	*caː*	CV:
'eye'	*mat*	CVC
'time of day'	*peːl*	CV:C
'head'	*ploː*	CLV:
'silver'	*praʔ*	CLVC
'mynah bird'	*traːw*	CLV:C

Pacoh presyllables differ in shape, weight, stress and distribution. All Pacoh presyllables have at least an initial consonant and sonorant peak. However, consonant clusters are not allowed and the vowels are always short. These syllables are never stressed and have only one mora. One notable aspect of Pacoh presyllables is that nasals or liquids can satisfy the requirement for a sonorant peak. Vowels in Pacoh presyllables are restricted to /i/, /a/ and /u/ in open syllables, but /ə/ in presyllables with codas, which are always liquids or nasals. Table 17 shows examples of the three possible presyllable shapes in Pacoh. 'S' refers to sonorant consonant nuclei (including nasals and liquids) which, in

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14   In previously published orthographies, glottal stops were not used in word-initial position, suggesting that those words were vowel-initial words, whereas it is posited here that these words have initial glottal stops (see §2.2.1.1).

Pacoh, are always preceded by a phonemically non-distinctive glottal stop. In Table 17, V is /i/, /a/ or /u/, C_1 may be any consonant, C_2 is /ə/, and S is any nasal or liquid. All recorded possible combinations of main and presyllables are shown in Table 18.[15]

Table 17: Presyllable shapes in Pacoh

Gloss	Form	Sequence
'to smile'	*ka.caŋ*	CV-
'to exchange'	*tər.piən*	$C_1əC_2$-
'one unit'	*ʔl.lam*	ʔS-

Table 18: Bisyllabic range in Pacoh

Gloss	Form	Sequence
'where'	*tu.mɔː*	CV.CV:
'field'	*pi.daj*	CV.CVC
'many (plural)'	*pa.piːt*	CV.CV:C
'owl'	*ka.truː*	CV.CLV:
'to spill accidentally'	*ta.trọh*	CV.CLVC
'dry (plural)'	*pa.prɛːŋ*	CV.CLV:C
'to search for each other'	*tər.ʃuə*	CəS.CV:
'wife'	*kəm.paj*	CəS.CVC
'to dance'	*kəɲ.coːl*	CəS.CV:C
'to keep'	*təm.pruh*	CəS.CLVC
'a bought (of rain)'	*kən.trọːʔ*	CəS.CLV:C
'of his'	*ʔn.dɔː*	ʔS.CV:
'that'	*ʔŋ.koh*	ʔS.CVC
'materials'	*ʔm.maːr*	ʔS.CV:C
'string'	*ʔn.traʃ*	ʔS.CLVC
'chicken'	*ʔn.truəj*	ʔS.CLV:C

2.4.2 *Prosodic constraints*

This section discusses the constraints on syllables, words, and larger phonological units. Every syllable in Pacoh requires a consonant onset and a sonorant peak. The sonorant peak can be a vowel in any syllable, but it can be nasal or liquid in presyllables. Pacoh presyllables may have combinations of CV, CVS or CS, while main syllables may be CV:, CVC or CV:C (C = consonant, V = vowel, S = nasals or liquids, : = indicates long vowels). Sonorants as peaks in presyllables are always preceded by a glottal stop and no other consonant. The vowels /i/, /a/ or /u/ appear in open presyllables, but only schwa appears in presyllables with final consonants (i.e. checked syllables).

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[15]   The only possible shape for which no example was found is CəS.CLV:.

All stressed syllables in Pacoh, including monosyllabic words and the second syllable of bisyllabic words, have two moras. Unstressed syllables take only one mora. Single moras correspond either to short vowels (in either presyllables or main syllables) or presyllables with nasal nuclei. Pairs of moras in the same syllables correspond to long vowels, diphthongs, or combinations of short vowels and consonant codas. Consonant codas of syllables with long vowels or diphthongs are not assigned moraic weight. A consequence of these constraints is that presyllables, which are always unstressed, always have just a single mora whether or not the syllable has a consonant coda. Main syllables, which always bear stress, always take two moras. Thus, these syllables are required to have either a long vowel or a vowel and a consonant. Each mora must have an associated segment to satisfy its weight requirement. VC combinations contain either long or short vowels, but in cases of long vowels, the long vowel contributes to the weight of both moras.

Figure 2: Minimal syllable shapes in Pacoh

The phonological word in Pacoh, having at most two syllables, always has one main stress, which is always final. Thus, there are only two types of phonological words in Pacoh: stressed monosyllabic and ultimate-stressed bisyllabic words. Stressed syllables are pronounced longer and with higher loudness.

Morphophonological processes reveal phonological pressure towards reduction to bisyllabic words. For example, in a time-word compound, the word [ku.mɔː] 'year' plus a numeral such as [ʃoːŋ] 'five' are used as the phonological input to produce the bisyllabic form [ku.moːŋ], rather than the hypothetical [*ku.mɔː.ku.moːŋ].[16]

The prosodic levels of a few Pacoh phonological words are shown in Figure 3, containing levels of consonants and vowels, moras, syllables, and phonological words.
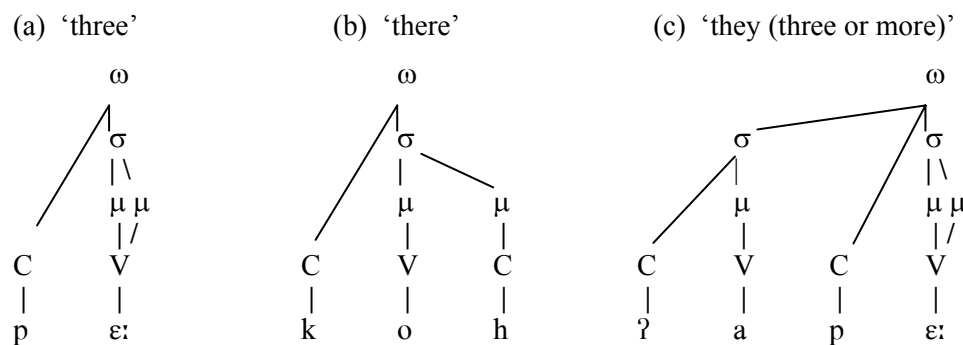
Figure 3: Three representations of Pacoh words

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[16]   This is a modifying dependent of the noun [ku.mɔː], creating [ku.mɔː-ku.moːŋ] 'five years from now'.

2.4.3 *Phonotactic constraints*

This section deals with the attested distribution of consonants and vowels. R. Watson (1964) characterized Pacoh phonotactics in terms of the presyllable and main syllable. The basic templates that Pacoh words can have were discussed in §2.4.2. Briefly, the syllables of Pacoh words consist of a CV(C) structure, with some variants. However, main syllables and presyllables differ in a few respects.

Presyllable	Main syllable
$C_1V_1C_2$	$C_3C_4V_2C_5$

C_1 can consist of any Pacoh consonants except for post-glottalized glides and aspirated stops. C_2 consists only of sonorants, including the nasals and liquids (but not the glides). C_3 can be any consonant from the Pacoh vowel inventory except for post-glottalized glides. However, the main syllable onset position is restricted to the voiceless stops /p/, /t/ and /k/ when preceding the liquids /r/ or /l/. C_4 consists of the liquids /r/ and /l/ in consonant clusters. C_5 consists of all consonants except for voiced or aspirated stops. Consonants in this position are optional after long vowels, but obligatory after short vowels. V_1 includes only the vowels /i/, /a/ or /u/ in open presyllables, and only schwa in closed syllables. All vowels in this position are short, and there is no [±RTR] distinction here. V_2 can be any vowel from the Pacoh vowel inventory.

Clusters in Pacoh increase in sonority towards the peak of syllables, generally moving towards liquids. Though there are no glides in the second consonant position in clusters in native vocabulary, there are such forms in Vietnamese loans (§2.7), which still follows the sonority constraint (in Pacoh, from least to most sonorant: obstruents, nasals, liquids, glides, and vowels). This demonstrates that Pacoh does not have a constraint against glides in that position.

The occurrence of post-glottalized stops makes sense considering the sonority hierarchy constraint. These complex segments move from more to less sonorant, which is acceptable at syllable codas but not syllable onsets.

The Pacoh presyllable, which is always unstressed, shows fewer feature distinctions. There are no [+RTR] vowels in this position, and the vowels in that position have only a three-way contrast—/i/, /a/ and /u/—being at the extremes of the phonetic range of the Pacoh vowel phoneme inventory. In closed presyllables, there are no vowel contrasts; only schwa occurs. In addition, the presyllable shows a general tendency to rely on the main syllable in both segmental and prosodic features. The final nasals of presyllables are homorganic, matching the place of articulation of initial consonant of the main syllable (§2.4.4). Also, in initial-C reduplication processes (§2.5.2), the presyllable relies on segmental material from the main syllable, copying the initial consonant.

2.4.4 *Sonorant presyllables: nasals and liquids*

Pacoh nasals (/m/, /n/, /ŋ/, and /ɲ/) and liquids (/l/ and /r/) may serve as sonorant presyllables lacking vowel nuclei. All such syllables have epenthetic glottal stop onsets to satisfy syllable structure constraints (§2.4). The presyllabic nasals consistently match the place of articulation of the initial consonants of main syllables. Phonetic evidence supports the claim that these nasal syllables entirely lack vowels. Spectrographs show that they do

not have second formant frequencies as would be expected of vowels, and they have a relatively lower intensity than presyllables with vowel peaks.

Table 19: Pacoh sonorant presyllables

Form	Gloss	Form	Gloss
ʔm.mɔː	'which'	*ʔl.paːʔ*	'armpit'
ʔn.tih	'this'	*ʔr.baːŋ*	'sky'
ʔɲ.ceː	'louse'	*ʔl.lɔːj*	'forget'
ʔŋ.koh	'that'	*ʔr.naːm*	'vegetable'

2.4.5 *Consonant clusters*

Pacoh has five consonant clusters involving sequences of voiceless stops and liquids, including [kl], [kr], [pl], [pr], and [tr]. Both the Watsons and ND&P considered the phonetic sounds [pʰ], [tʰ], and [kʰ] to be consonant cluster phonemes. This view does have merit, in that it parallels the shape of other Pacoh clusters (e.g. /pr/, /kl/ etc.). R. Watson's (1964) primary argument is a morphophonological test, one of infix insertion. Presently, such insertion appears only in a few fossilized remnants but is no longer active (e.g. *kʰiər* 'to sweep yard' becomes *ka.niər* 'a yard broom', in which the [h] is lost). A consideration of these single segments acknowledges the typological tendency in Southeast Asia toward onset cluster reduction. The reduction from word-initial consonant clusters to single phonemes is a natural phonological process that has occurred and is taking place in languages in this region.[17]

Table 20: Consonant clusters

Cluster	Example	Gloss
[kl]	*kliŋ*	'many'
[kr]	*krum*	'thunder'
[pl]	*ploh*	'to ask'
[pr]	*prɛːŋ*	'dry'
[tr]	*truː*	'deep'

2.5 Reduplication

This section deals with phonological changes in bisyllabic and reduplicant polysyllabic words (see §3.3 for morphological and semantic details of Pacoh reduplication). There are several types of reduplication in Pacoh, generally involving copying and alternating segmental material within the same reduplicant. Pacoh presyllables exhibit phonological reduction, such as nasal assimilation and vowel reduction in closed syllables.

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[17]   For example, the Chamic languages of the Vietnamese have shown this kind of loss (Lee 1974; Đoàn 1988; Thurgood 1999).

Reduplication is a prosodically-oriented word-formation strategy, which in Pacoh consists of four types: template (full and alternating), presyllabic, partial, and template-plus-affix reduplication. In Pacoh, the two most commonly occurring types are template reduplication and initial-consonant reduplication. In template reduplication, the prosodic template of an entire phonological word is copied. Some segmental material is copied as well, but a vowel, consonant, or the syllable rhyme (essentially the mora portion of a syllable, including the vowel and any final consonants) may be altered. In template-plus-affix reduplication, a full syllable is copied, separated by syllables such as [ʔi] or [ʔm], or an onset may be copied to the onset of an added presyllable. In both cases, either mono- or bisyllabic words provide a base for the reduplication.

Table 21: Examples of Pacoh reduplication

Category	Form	Gloss
Template	*vaŋ-vəːŋ*	'clumsy'
	tuəp-ɟuəp	'ruffled (of hair)'
	ɟɛːl-ɟoːl	'to drift (of leaves)'
	təːp-həːp	'a big empty place'
	ɟiːl-ɟɥəʔ	'to imitate'
	kiːl-kuːl	'fragrant (of tree sap)'
	ʃɛɲ-ʃɛl	'to cackle'
Template-plus-affix	*pa.piːt*	'big (of a group of things)'
	vɨəl-ʔi.vɨəl	'full of twists and bends'
	taʔ-ʔm.biʔ-ʔi.biʔ	'to pretend to sleep'
Clause-incorporation	*ŋaːɟ-taʔ-prɥəʔ-taʔ-təm.paʔ*	'They're working.'
	they do work do work	

Figure 4 provides examples of reduplication. From the base, the initial consonant is copied for the presyllabic reduplicant (with /a/ inserted for that particular kind of prefix), or for template reduplication, the entire syllable template is copied, but with some phonological material alternated (in this case, the vowel). In addition to those two types, there is a combination of both presyllable and template reduplication, as discussed in §3.3.

Base	**Presyllabic reduplicant**	**Template reduplicant**
(a) 'big'	(b) 'big (of a group of things)'	(c) 'biggish'
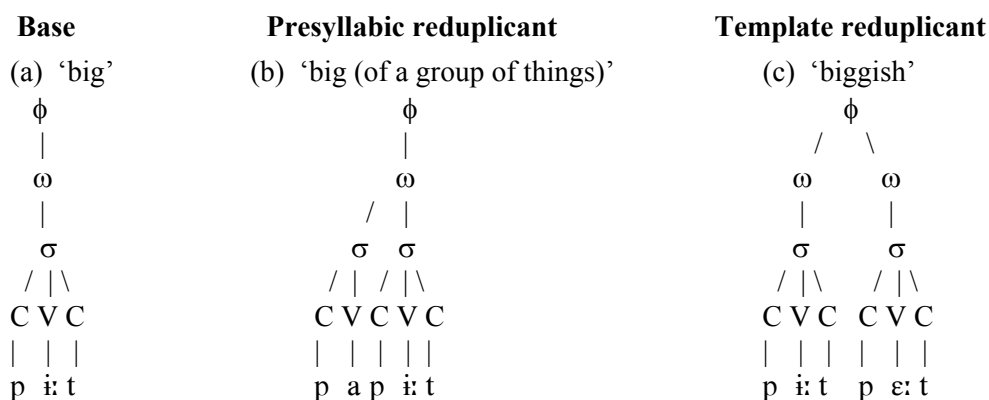
Figure 4: Examples of base and reduplicants in Pacoh

2.5.1 Template reduplication

In prosodic template reduplication, the reduplicant is a segmentally unspecified syllable filled in by segmental material from the base, as listed in Table 22 and demonstrated with examples.[18] All of the consonants and vowels have subscript numerals to differentiate between changed and unchanged segments.

Table 22: Types of reduplication

Category	Template	Examples
Repetitive (No alternation)	$C_1V_1C_2$-$C_1V_1C_2$	ʃɔː-ʃɔː 'pleasant'
Rhyming (Onset alternation)	$C_1V_1C_2$-$C_{\underline{3}}V_1C_2$	tɔk-vɔk 'endless amount'
Ablauted (Vowel alternation)	$C_1V_1C_2$-$C_1V_{\underline{2}}C_2$	puːc-paːc 'flutter'
Alliterative (rhyme alternation)	$C_1V_1C_2$-$C_1V_{\underline{2}}C_{\underline{3}}$	kʰaŋ-kʰɛr 'push rice into mouth continuously'
Onset-Vowel (coda alternation)	$C_1V_1C_2$-$C_1V_1C_{\underline{3}}$	krɔːŋ-krɔːw 'property'

The subscripts of changed/alternating segments are underlined. This first pattern shows non-alternating/total segmental reduplication, the least common type of reduplication in Pacoh. The other patterns, all of which are instances of 'alternating reduplication', show segmental differences between the base and the reduplicant portion. Any of the single segments or the rhyme of the template may alternate. Thus, template reduplication may result in full reduplication with no changes to the segments; however, in general, template reduplication in Pacoh alternates, with some segments being copied and others alternated, hence the term 'alternating reduplication'. Alternating segments correspond in prosodic function to the segments of reduplicant bases (i.e. a consonant in the base corresponds to a consonant in the reduplicant portion, and likewise for vowels). There are currently no identifiable patterns of alternations involving phonological category, such as voicing or place of articulation (e.g. a nasal in the base can have a corresponding non-nasal voiceless stop in the reduplicant).

S1 shows examples of each type of reduplication, in which the consonant, vowel, or combination that alternates is in bold print. There are no documented alternations of a combination of vowel and initial consonant, nor do both consonants alternate while the vowel is copied.

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[18]   Huffman (1970:298) described the same types of alternations in Khmer reduplication. Huffman used the terms 'ablauted', referring to alternations of vowels, 'rhyming', referring to alternations of initial consonants, 'alliterative', referring to alternations of rhymes, and 'repetitive', referring to the copying of all segmental material. All of those reduplication patterns are listed in the table. In addition to those types in Khmer, Pacoh also has reduplicants that copy the first CV of a syllable and alternate the coda, called simply onset-vowel reduplication.

S1: Four types of segmental alternation

to̰k.vo̰k   *kʰaŋ.kʰɛr*

(a) 'endless amount'   (b) 'push rice into mouth continuously'

puːc.paːc   *ʃɛɲ.ʃɛl*

(c) 'flutter'   (d) 'to cackle'

2.5.2 Initial-C reduplication

Initial-C reduplication involves the copying of the initial consonant of the base and the insertion of [a]. The only examples of these presyllables have monosyllabic bases, not polysyllabic forms. For example, Pacoh [pɨːt] 'big' is the phonological base for [pa.pɨːt] 'big (in regard to plural 'subjects')', while [kɛt] 'small' is the base for [ka.kɛt] 'small (in regard to plural 'subjects')'. The basic prosodic template for these presyllabic reduplicants is shown in Figure 4. The presyllable has an unspecified onset, which is filled in by material from the base, and the vowel [a].

2.5.3 Partial reduplication

Partial reduplication is reduplication in which only part of the base is copied, in this case, the main syllable of a bisyllabic word, resulting in an additional syllable following the base. The reduplicated syllable copies the main syllable of the base exactly with no segmental alternations. In the examples in S2, the base is the first phonological word. In each case, the main syllable of the bisyllabic words is copied completely with no alternating segments.

S2: Partial reduplication in Pacoh

kən.tɨʔ.tɨʔ   *tər.kit.kit*

(a) 'sometimes'   (b) 'be close to'

2.5.4 Infix and template reduplication

Pacoh has a type of full template reduplication with an additional non-reduplicative /-i-/ infix.

S3: Presyllabic and template reduplication

ʔɛk.ʔi.ʔɛk

'raucous laughter'

2.6 Intonation

An intonational unit is characterized by having one primary phrasal stress, beyond the lexical stress of individual words. Attributes of intonation include pitch, contour, loudness, and pauses, among other related phenomena.

Pacoh is primarily a mora-timed language. The second syllables of bisyllabic words always have two moras and tend to be more phonetically prominent. As a result, bisyllabic words can in part condition phrasal intonation since stressed syllables tend to create intonational peaks in phonological phrases. However, the phonological shape of words

may not contribute as much to the intonation as the difference between content and function words. Content words tend to have more intonational prominence than grammatically functional words. Consider S4, which contains two intonational phrases to form a sentence. In each phrase, the intonation peak falls on a verb (content words), while the grammatical vocabulary (function words) tends to be low.

S4: Sample Pacoh intonational unit

'When it reaches here, it falls down here.'

	toʔ arrive	*ʔnnoh* there	*kiː* so	*dɛːʔ* fall	*ʔnnoh* there
3	●			●	
2			●		
1		●			●

In general, non-interrogative statements have falling pitches at the ends of sentences, as in S5 and S5b, while interrogative statements rise, as in S5a. Despite the grammatical function of the interrogative sentence particle, the question intonation requires a rise in pitch, though the loudness of both words in the sentences is about equal.

S5: Interrogative versus statement intonation

(a) 'Is that right?'   (b) 'No, it's not.'

liː   *ləjʔ*   *ləjʔ*   *liː*
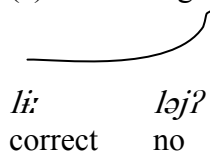
correct   no   no   correct
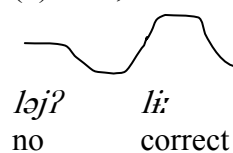
2.7 Loanword phonology

Pacoh has experienced prolonged and increasingly intense language contact with Vietnamese. The most immediate effect of this is the borrowing of Vietnamese vocabulary. The phonologies of Pacoh and Vietnamese differ in a number of ways, and in borrowing from Vietnamese, Pacoh has either adopted the Vietnamese words without phonological changes or it has changed Vietnamese loans to fit Pacoh phonological constraints. In both cases, the loanword phonology reveals something about the range of phonological constraints in Pacoh, including some that are not otherwise attested in native Pacoh vocabulary.

Vietnamese is a tonal language, meaning it has lexically distinctive prosodic pitch and contour. Pacoh is not tonal and has not developed tones as a result of borrowing Vietnamese vocabulary. Still, glottalization of Vietnamese tones, which lasts the duration of the sonorant parts of Vietnamese syllables, is reflected in Pacoh phonology. In Table 23, the Vietnamese and Pacoh forms are compared. Vietnamese tones,[19] based on Central Vietnamese around the city of Hue, are indicated using the 5-point (5 being high and 1 low). Glottalized tones are marked with a following small 'g'. The name of the city of Hue reveals the possibility of a sonorant in a consonant cluster in contrast with native vocabulary (§2.4.3).

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[19] For a modern description of these tones, see Alves (forthcoming, SEALS XII) on Vietnamese dialects.

Open and checked (i.e. having non-sonorant finals) syllables are, except for tones, unchanged. The borrowing of glottalized forms from Vietnamese, however, has led to the creation of a post-glottalized nasal in Pacoh. Although native Pacoh words contain only post-glottalized glides, apparently no phonological constraints exist to prevent them.

Table 23: Vietnamese loanwords in Pacoh

Gloss	Vietnamese	Pacoh
'hour'	*jɔː³³*	*jɔː*
'often'	*tʰɨəŋ³³-tʰɨəŋ³³*	*tʰɨəŋ-tʰɨəŋ*
'also'	*kuːŋᵐ³¹ᵍ*	*kuːŋˀ*
'punish'	*faːtᵈ⁵*	*faːt*
'study'	*hɔːk¹³ᵍ*	*hɔːk*
'artisan'	*tʰɔː¹³ᵍ*	*tʰɔːʔ*
'Huế city'	*hweːᵈ⁵*	*hweːʔ*

3 *Morphology*

The word-formation patterns[20] dealt with in this chapter are grouped by syntactic category (i.e. nouns, verbs, or adverbs) and phonological type (i.e. reduplicatives or clause-incorporative forms).[21] Affixes and reduplicants are discussed in this grammar in terms of analogical patterns. Analogical sets are provided showing bases and derived forms. Table 24 lists the affixes associated with classes of verbs and nouns, including the affixes, the syntactic categories of both source and derived word forms, associated meanings shared by the derived forms in each affix category, and comments on the phonological constraints. /C/ indicates a consonant copied from the initial of the root, and /V/ a vowel copied from the root. Throughout this section, affixes are marked off with brackets to indicate their abstract phonological forms as opposed to their actual allomorphic variation.

Table 24: Pacoh verbal affixes[22]

Affix	Source form	Derived form	Derived form meaning	Constraints on base form
[pa-]	verb	trans. verb	'to cause to X'	1 or 2 syllables
[ta-]	verb	verb	'to X involuntarily'	1 syllable only
[pi-]	stative verb	causative verb	'to cause to be X'	1 syllable only
[par$_2$-]	transitive verb	causative verb	'to cause each other to X'	1 syllable only
[ti-]	transitive verb	stative verb	'to be X-ed'	1 syllable only
[Ca-]	transitive verb	intrans. verb	'to do X completely'	1 syllable only
[tar-]	transitive verb	intrans. verb	'to X each other'	1 or 2 syllables

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[20] The primary sources on Pacoh word-formation patterns include articles by R. Watson (1966), S. Watson (1964, 1966), by Nguyễn Văn Lợi, Đòan Văn Phúc, and Phan Xuân Thành (1986, hereafter ND&P). S. Watson described Pacoh pronoun paradigms and a variety of noun and verb word forms.

[21] The data accounted for are not complete. S. Watson (1966) deals with a few other types of verb-related word-formation patterns. The data I collected included some, but not all, of the categories S. Watson described. Regional variation, language contact with Vietnamese or neighbouring, non-Vietnamese languages, and general language change over time (since the 1960s) may have contributed to apparent differences in data.

[22] Most of the affixes listed in Table 24 exhibit some phonological variation with no apparent phonological justification, suggesting fossilized changes in progress.

Affix	Source form	Derived form	Derived form meaning	Constraints on base form
[CV-]	intrans. verb	intrans. verb	'to X in general'	1 syllable only
Reduplicant	intrans. verb	intrans. verb	'to pretend to X'	1 or 2 syllables
[par$_1$-]	verb	noun	'the action of X'	mostly 1 syllable some bisyllabic
[Can-]	verb	noun	'the result of X' 'the instrument for X' 'the location of X'	1 or 2 syllables

Though the degree of productivity of Pacoh affixes is difficult to posit precisely (and indeed, this productivity may be changing), the affixes can be put into three general categories—high, medium, and low—based on the number of occurrences of those substrings with over 1,000 Pacoh words[23] (taken from S. Watson (1966)). Only those in the high range can still freely form new words, while those in the medium range have minimal productivity, and those in the low range are essentially fossilized remnants. Reduplication has not been tested for productivity, but with such a substantial number of reduplicative forms, it appears to be at least somewhat productive.

Table 25: Degree of derivational productivity in Pacoh[24]

Range	Form	Monosyllabic	Bisyllabic	Total
High	[par$_1$-]	631	15	646
	[tar-]	467	151	618
Medium	[ta-]	346	0	346
	[pa-]	299	20	319
	[CV-]	203	0	203
Low	[-an-]	106	42	148
	[pi-]	74	0	74
	[par$_2$-]	42	0	42
	[ti-]	14	0	14
	[Ca-]	13	0	13

3.1 Noun morphology

Nouns created with affixes in Pacoh include common nouns, lexical compounds of semantically specialized and generalized nouns, pronominal nouns, time word nouns, and kinship and animal nouns.

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[23] Some of these phonological words could actually represent more than one syntactic word in the mental lexicon, each belonging to a different subcategory of the same part of speech.

[24] These statistics are based on data in the late 1960s, three decades before the writing of this grammar. Many of the speakers with whom I came into contact in 1997 and 1998 still recognized some of those forms, but others did not, suggesting that some of those forms are being lost.

3.1.1 Common nouns

Pacoh has a class of bisyllabic nouns derived from verbs and containing the infix [-an-], or various allomorphs, at their syllable junctures.[25] The consonants in these substrings assimilate partially to place of articulation of following consonants or completely into following /l/ or /r/ segments; however, these are tendencies rather than absolutes, and exceptions exist. The vowel in the infix is always realized phonetically as schwa in closed presyllables.

Table 26: Common noun word-formation

Verb	Noun
ka.tip 'to cork'	*kən.tip* 'cork'
ta.paʔ 'to make fish sauce'	*təm.paʔ* 'fish sauce'
ta.ɲih 'to breathe'	*tər.ɲih* 'breath'
kar 'to drill a hole'	*ka.naːr* 'hole-driller'
kaj 'to plow'	*ka.naj* 'plow'
klaʔ 'to prop'	*kəl.laːʔ* 'prop'
kuəjʔ 'to scoop up with one's hands'	*ka.ɲuəjʔ* 'two handfuls'

These words have expected syntactic distributional properties according to their semantic features (e.g. being count or non-count nouns and what kinds of measure words semantically match them). S6 contains a sentence with two words derivationally related by this infix, *kɔh* 'to cut' and *kən.nɔh* 'a cutting tool'. Some additional analogical pairs are given in S7.

S6: Derivationally related verb and noun
pɛːh kən.nɔh kɔh ʃɛːc buəjʔ
take   cutter   cut   meat   fish
'Take the cutter and cut the fish meat.'

S7: Analogical set for [-an-] nouns
taːʃ 'to hammer'   :   *tər.naːʃ* 'a hammer'   ::
klaʔ 'to prop'   :   *kəl.laʔ* 'something that props'

3.1.2 Kinship and animal noun word-formation

Most Pacoh kinship terms share the presyllable [ʔa-].[26] The process of developing these kinship terms apparently has been fossilized, for no analogical paradigm exists without [ʔa-]. Table 27, which contains a list of Pacoh kinship terms, is representative, not exhaustive.

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[25] While historically this represents the Proto Mon-Khmer instrumental infix [-rn-], and Pacoh shows some fossilized remnants of it, this grammar lists only the one infix for the synchronic description.
[26] This is also the case for other Katuic languages, such as Bru, Katu, and Taoih, as described in X.H. Nguyễn (1998).

Table 27: Pacoh kinship terms

Form	Gloss
ʔa.miəŋ	'brother, older'
ʔa.kaj	'child'
ʔa.kaj-ʔa.kan	'daughter'
ʔa.ʔam	'father'
ʔa.ka:ʔ	'grandmother'
ʔa.ʔiː	'mother'
ʔa.ʔɛːm	'sibling, younger'
ʔa.mo̞ːʔ	'sister, older'
ʔa.kaj-ko̞ːɲ	'son'
ʔm.piːt	'uncle, older'
ʔa.ɲiː	'uncle, younger'

A noticeable number of Pacoh words for animals also have the word-initial [ʔa-] form, including a large number of terms for animals common in the Pacoh environment. Table 28 with examples is not exhaustive since about four dozen lexical entries for animals with [ʔa-] are found in ND&P's Pacoh–Taoih–Vietnamese dictionary.[27]

Table 28: Pacoh terms for animals[28]

Form	Gloss
ʔa.ʔət	'animal'
ʔa.ɲiːt-ɲɔːt	'bee (mason)'
ʔa.ce̞ːʔ	'bird'
ʔa.me̞ʔ	'cat'
ʔa.cɔː	'dog'
ʔa.taː	'duck'
ʔa.ciəŋ	'elephant'
ʔa.kuət	'frog'
ʔa.di̞əʃ	'monkey'
ʔa.bil	'mouse'
ʔa.liːk	'pig'
ʔa.piəŋ	'spider'

3.1.3 *Pronoun morphology*

Pacoh pronominal nouns related by affixes include pronouns and demonstratives. The Pacoh pronoun system (§7.3.3) is systematic, having a three-way distinction of both person and number, thereby creating a basic nine-pronoun set. This basic set of nine pronouns is tripled by the addition of the dative and possessive sets.

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[27] This form, seen in both cognate and non-cognate roots in other Katuic languages, and indeed, other Mon-Khmer branches, is most likely a Proto Mon-Khmer velar as posited by Smith (1975).

[28] The Pacoh forms for 'dog' and 'bird' are Mon-Khmer cognates, as is most likely the Pacoh word for 'elephant', sometimes thought to be a Tai-Kadai loanword.

Table 29: Pacoh pronouns

Number	Person	General	Dative	Possessive
Singular	first	*kɨː*	*ʔa.kɨː*	*ʔŋ.kɨː*
	second	*maj*	*ʔa.maj*	*ʔm.maj*
	third	*dɔː*	*ʔa.dɔː*	*ʔn.dɔː*
Dual-Plural	first	*ɲaŋ*	*ʔa.ɲaŋ*	*ʔɲ.ɲaŋ*
	second	*ʔi.ɲaː*	*ʔa.dɔː-ʔi.ɲaː*	*ʔn.dɔː-ʔi.ɲaː*
	third	*ʔaɲaː*	*ʔa.dɔː-ʔa.ɲaː*	*ʔn.dɔː-ʔa.ɲaː*
Plural	first	*hɛː*	*ʔa.hɛː*	*ʔŋ.hɛː*
	second	*ʔi.pɛː*	*ʔa.dɔː-ʔi.pɛː*	*ʔn.dɔː-ʔi.pɛː*
	third	*ʔa.pɛː /*	*ʔa.dɔː-ʔa.pɛː /*	*ʔn.dɔː-ʔa.pɛː /*
		ŋaːj	*ʔa.ŋaːj*	*ʔŋ.ŋaːj*

Among non-singular pronouns, second person pronouns have [ʔi-] presyllables, and third person pronouns have [ʔa-]. Dative pronouns share the prefix [ʔa-]. Possessive pronouns have homorganic nasal prefixes, matching place of articulation. Bisyllabic pronouns take third person pronouns as special affixes.

Pacoh demonstrative pronominal nouns (§7.3.1) have similar overall prosodic and phonological shapes, being bisyllabic and having homorganic nasal presyllables and final [h] consonants. Medial and distal demonstratives differ in vowel length, having short and long vowels respectively.[29]

Table 30: Pacoh demonstrative pronominal nouns

Distance	Fore/Higher	Aft/Lower	Beside
Proximal	*ʔn.nɛh / nɛh*		
Medial	*ʔŋ.koh / koh*		
	ʔn.tih	*ʔn.tɔh*	*ʔn.trah*
Distal	*ʔn.tiːh*	*ʔn.tɔːh*	*ʔn.traːh*

3.1.4 Lexical compounds

Considering all noun-noun sequences to be syntactic constructions rather than single lexical items causes difficulties in analyzing semantic compositionality and case analysis, and misses cross-linguistic generalizations about the way languages form single lexical items with phonetic material from two nouns.[30] Hence, such forms are treated here as single words rather than syntactic constructions with two nouns. For example, in S8, the resulting forms with the word /juən/ 'Vietnamese' cannot be separated by other words; additional modifiers can only be added outside the forms.

S8: Analogical set for semantically specified nouns

tər.haw 'medicine'	:	*tər.haw-juən* 'Vietnamese medicine'	::
duŋ 'house'	:	*duŋ-juən* 'Vietnamese house'	

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29 The correspondence between length and distance in demonstratives is even more complex in the closely related language, Bru (cf. Hoàng V.M. (1997)).

30 As discussed in Ng and Starosta (1996) on this matter in discussing Chinese word formation.

Taking this approach is crucial for Pacoh semantically generalized nouns, formed with phonological material from two or more nouns that have overlapping semantic fields, as exemplified in S9. This word-forming strategy works with more than two words for the analogical input, as in S10. Such nouns also provide phonological material used in clause-incorporation, as discussed in §3.3.1.

S9: Analogical set for semantically generalized nouns

duŋ	*ve̤ːl*	:	*duŋ-ve̤ːl*	::
'house'	'village'		'society'	

ʔa.ʔiː	*ʔa.ʔam*	:	*ʔa.ʔiː-ʔa.ʔam*	
'mother'	'father'		'parents'	

S10: Analogical set for generalized nouns

ʔn.truəj	*ʔa.cɔː*	*ʔa.lik*	:	*ʔn.truəj-ʔa.cɔː-ʔa.lik* ::
'chicken'	'dog'	'pig'		'domestic animals'

praʔ	*ti.riəʔ*	*ʔa.kaj*	:	*praʔ-ti.riəʔ-ʔa.kaj*
'money'	'buffalo'	'child'		'wealth'

3.1.5 *Time-word morphology*

Pacoh has a highly explicit system of referring to the past or future by number of days or years, from one up through ten, as listed in Table 31.[31] These words show analogical sets for four affix types: (a) previous day, (b) previous year, (c) coming day, and (d) coming year. These affixes apply with complete regularity to those time nouns referring to three or more, but vary phonologically somewhat for reference to two years or days. All contain words for 'day' or 'year', and most have rhymes of numerals from 3 to 10 matching the number of days or years indicated. Past forms for both days and years have the segment [-ʔn.tr-], while future days [pər] differ from future years [-ku.m-].

Table 31: Pacoh time reference paradigm

Gloss	Form	Gloss	Form
day	*ʔi.ŋaj*	year	*ku.mɔːŋ*
today	*ʔi.ŋaj-kiː / ʔi.ŋaj-ʔŋ.koh*	this year	*ku.mɔː-ʔn.nɛh*
yesterday	*ʔi.ŋaj-ʔi.noː*	last year	*ku.mɔː-ʔi.noː*
2 days ago	*ʔi.ŋaj-ʔn.troː*	2 years ago	*ku.mɔː-ʔn.traː*
3 days ago	*ʔi.ŋaj-ʔn.trɛː*	3 years ago	*ku.mɔː-ʔn.trɛː*
4 days ago	*ʔi.ŋaj-ʔn.truɐn*	4 years ago	*ku.mɔː-ʔn.truɐn*
5 days ago	*ʔi.ŋaj-ʔn.troːŋ*	5 years ago	*ku.mɔː-ʔn.troːŋ*
6 days ago	*ʔi.ŋaj-ʔn.trat*	6 years ago	*ku.mɔː-ʔn.trat*
7 days ago	*ʔi.ŋaj-ʔn.tro̤ːl*	7 years ago	*ku.mɔː-ʔn.tro̤ːl*
8 days ago	*ʔi.ŋaj-ʔn.trɔːl*	8 years ago	*ku.mɔː-ʔn.trɔːl*
9 days ago	*ʔi.ŋaj-ʔn.tri̤əʃ*	9 years ago	*ku.mɔː-ʔn.tri̤əʃ*
10 days ago	*ʔi.ŋaj-ʔn.trit*	10 years ago	*ku.mɔː-ʔn.trit*

---

[31]   Similar patterns are seen throughout Katuic, West Bahnaric, Kasseng and Alak (Paul Sidwell, pers. comm.).

Gloss	Form	Gloss	Form
tomorrow	*ʔi.ŋaj-pər.noː*	next year	*ku.mɔː-ʔn.nɛh*
2 days later	*ʔi.ŋaj-pər.ra*	2 years later	*ku.mɔː-ku.mɔː*
3 days later	*ʔi.ŋaj-pər.rɛː*	3 years later	*ku.mɔː-ku.mɛː*
4 days later	*ʔi.ŋaj-pər.rɥən*	4 years later	*ku.mɔː-ku.mɥən*
5 days later	*ʔi.ŋaj-pər.roːŋ*	5 years later	*ku.mɔː-ku.moːŋ*
6 days later	*ʔi.ŋaj-pər.rat*	6 years later	*ku.mɔː-ku.mat*
7 days later	*ʔi.ŋaj-pər.rɔːl*	7 years later	*ku.mɔː-ku.mo̰ːl*
8 days later	*ʔi.ŋaj-pər.roːl*	8 years later	*ku.mɔː-ku.mɔːl*
9 days later	*ʔi.ŋaj-pər.rɟəʃ*	9 years later	*ku.mɔː-ku.mɟəʃ*
10 days later	*ʔi.ŋaj-pər.rit*	10 years later	*ku.mɔː-ku.mit*

3.2 Verb morphology

   Pacoh verb morphology shows several semantic functions, some with more significant syntactic effects regarding the distribution of subjects and objects.[32]

3.2.1 Causative verbs

   What S. Watson (1966) called 'causative verbs' constitutes a verb category also seen in many other Mon-Khmer languages.[33] Such verbs share a presyllable with the general shape [pa-] and the semantic function of causing their objects to perform an action. Table 32 is a partial list.

Table 32: Pacoh causative verbs

Form	Gloss
pa.kləw	'to cause to answer'
ta.ho̰ːm	'to cause to bathe'
pa.ŋɔːjʔ	'to cause to drink'
pa.caː	'to cause to eat'
pa.cɔːm	'to cause to know'
pa.hɔːk	'to cause to learn'
pa.klɔn	'to cause to play'
pa.ʔaːk	'to cause to play'
ʔa.ʃər	'to cause to rise'
pa.hɛt	'to cause to sniff'

---

[32] S. Watson (1966) described nine verb morphemes and their assorted allomorphs. The primary affixes tested during my own fieldwork included those that form causative verbs, reciprocal verbs, and continuative verbs. Watson also described what she called resultant-state, involuntary, and completive verbs, forms that did not occur in my data and have not been included in this grammar.

[33] For descriptions of causative verbs and related word forms in other Mon-Khmer languages, see Costello (1966) on Katu, Jenner and Pou (1982) on Khmer, Hoàng and Tạ (1998) on Bru, V.L. Nguyễn (1993) on Ruc, and H.H. Nguyễn and V.L. Nguyễn (1998) on Katu.

Each of these verbs has a derivationally related non-causative verb, as in S11. While the source may be from any syntactic verb class, most are monosyllabic. The phonological base, whether phonologically conditioned or not, does have a number of phonological variants. In addition to the initial [p], some have initial [t] and [ʔ], demonstrating the irregularity of lexical derivations as well as the likelihood that these forms have a long existence in Pacoh, which accounts for such variation.

S11: Analogical set for verbs with causative presyllables

kap 'to bite'   :   *pa.kap* 'to cause to bite'   ::
biʔ 'to sleep'   :   *pa.biʔ* 'to cause to sleep'

Pacoh causative verbs cross over several verb subcategories, as listed in Table 32, taking various arguments and complements.[34] Some take merely subjects and objects, as in S12, while others require locational or verbal complements, such as in S13 with a dative complement and S14 with an additional lower verb complement.

S12: Causative simple transitive verb

kɨː pa.ŋɔːjʔ   jəw
1s   make-drink   friend
'I had my friend drink.'

S13: Causative transitive oblique-object verb

kɨː pa.cɔːm baːj   ʔa.dɔː
1s   teach   lesson   to-3s
'I taught the lesson to him.'

S14: Causative predicate-taking dative verb

kɨː pa.caː ʔa.dɔː caː do̰ːj
1s   feed   to-3s   eat rice
'I made him eat the rice.'

3.2.2   Verbs with [ʔu-] and [ʔi-] pronominal prefixes

Verbs in Pacoh that have prefixes[35] [ʔu-] or [ʔi-] may not take overt subject nouns. The entire range of linguistic functions (i.e. semantico-syntactic and pragmatic) and degree of productivity of these affixes has not been entirely determined.

S. Watson (1964:88) noted the occurrence of [ʔu-] verbs, which, she stated, substitutes for the third person pronoun, as in S15. The resulting forms take only human-subject interpretations, as some examples show in S16.

S15: [ʔu-] verb

ʔu.toːŋ niːm məh naʔ ʔa.caːj
3s-say   only   one   UNIT   brother
'He said he has only one brother.'

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[34]   See Alves (2001) for a discussion of the subcategories of Pacoh causative verbs as well as those in other Mon-Khmer languages.

[35]   Another hypothesis is that these are clitics, that is, phonologically bound but syntactically free forms. There is insufficient data at present to deal with this question.

S16: Analogical set for [ʔu-] verb

poːk 'go'   :   *ʔu.poːk* 'He/she goes'   ::

dɔːk 'read'   :   *ʔu.dɔːk* 'He/she reads'

The presyllable [ʔi-] is used with verbs to indicate indefinite person (see §10.2.3). R. Watson (1966a:168) termed these presyllables 'subject fillers'. It may have an impersonal reference to refer to an action in a general sense, as in S17(a), but it often follows a stative verb, as in S17(b). It is also seen in topic-comment constructions in lieu of passive marking (see §4.1),[36] as in S18.

S17: [ʔi-] verb as impersonal

ʔi.taʔ   *pəl.loː*   *ʔa.lɔːŋ*

one-make   tube   wood

(a) 'One makes a wooden tube.'

ʔn.nɛh   *ʔɔː*   *ʔi.caː*

this   good   one-eat

(b) 'This is good for one to eat.'

S18: [ʔi-] verb

ʔn.kar   *ʔa.pən*   *hoːj*   *ʔi.sɨp*

skin   bear   able   one-wear

'As for bearskin, one can wear it.'

3.2.3 Plural stative verbs

The presyllable [Ca-] ('C' is a consonant copied from the initial of the base form) combines with monosyllabic stative verbs to indicate that the semantic properties refer to plural subjects (overtly marked plural or not) which generally are inanimate nouns.

S19: Plural stative verb

duŋ   *ka.kɛt*

house   small (plural)

'The houses were small.'

S20: Plural stative verbs

bɛ̰ːɲ 'healthy'   :   *ba.bɛ̰ːɲ* 'healthy (plural)'   ::

prɛːŋ 'dry'   :   *pa.prɛːŋ* 'dry (plural)'

3.2.4 Reciprocal verbs

Certain Pacoh verbs with the presyllable [tər-] (and similar phonological forms, such as [ʔr-] and [kər-]) mark reciprocity, and reciprocal Pacoh verbs thus require plural or coordinative subjects. A related form is the word-initial [pər-], seen in verbs that are both causative and reciprocal.

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[36]   The notion of a language without passive (at least in the traditional European sense) is controversial. Arguments for such are seen for Vietnamese (Alves (1998) with various citations).

S21: Analogical set for reciprocal verbs

taʔ 'to fight'   :   *tər.taʔ* 'to fight each other'   ::

ʃuə 'to search'   :   *tər.ʃuə* 'to search for each other'

3.2.5 Resultative adverbs

The prefix [ʔa-], always seen in combination with monosyllabic verb roots, marks adverbs with resultative meanings (see §5.4). Few examples exist in available data.

S22: Analogical set for resultative adverbs

ʃaj 'full'   :   *ʔa.ʃaj* 'fully'   ::

prɛŋ 'dry'   :   *ʔa.prɛŋ* 'to a degree of dryness'

3.3 Reduplication

Reduplicative patterns in Mon-Khmer languages exhibit a wide range of semantically complex and explicit words (typically active and stative verbs, but also nouns and adverbs), for example, words expressing a very specific kind of body shape or the specific kinds of movements made by animals or other natural phenomena.[37]

Some common semantic fields expressed by Pacoh reduplicants include some that are, being semantically highly specific, difficult to translate precisely, such as physical sensations, odours, confused/disordered situations, and semantically specialized actions. Pacoh reduplicants include verbs (both stative and non-stative), nouns and adverbs. Of the ninety-eight reduplicants in available data, nine are adverbs, twenty are nouns, twenty-five are non-stative verbs, and forty-two are stative verbs.

Reduplication in Pacoh, as in many Mon-Khmer languages, often involves both the copying of prosodic templates and the simultaneous alternation of segmental material, such as a consonant or the rhyme of a syllable. This subsection describes three types of reduplicative patterns in Pacoh: template reduplication, template-plus-presyllable reduplication, and clause-incorporation, as shown in Table 21 in §2.5.

3.3.1 Clause-incorporative word-formation

This reduplicative word-formation process involves phonological material from sentences or parts of sentences in reduplication.[38] They generally involve reduplicant words and generalized nouns, as in S23(a) and (b) respectively, in which the reduplicant

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[37]   See V.H. Hoàng (1979, 1985, 1987, 1993, all in Vietnamese) for discussion on reduplication in Vietnamese, the Katuic languages, and other Mon-Khmer languages. Bahnar reduplication (Banker 1964b) expresses contrariness of notions of expectation, disgust, actions to be followed by other actions, and intensification. To give an indication of the productivity of this word-forming process, an entire dictionary (Viện Ngôn Ngữ Học 1995), containing about 5,000 entries, has been devoted to reduplicant forms in Vietnamese.

[38]   The primary source on this clause-incorporation process comes from R. Watson (1966b) where these constructions are called 'post-predicate predicate-takings.' Vu (1998) dealt with the same issue in Vietnamese. Both recognized that these 'splittable compounds' involved either reduplicants or lexical compounds that have generic meanings.

for 'sad' *rəw-ʔi.riː* and the generalized noun 'to work (non-specific)' *prɰəʔ-təm.paʔ* are split, while the non-reduplicants are copied.

S23: Regular and clause-incorporative verb

ʔa.kəp-rəw-ʔa.kəp-ʔi.riː
don't-sad-don't-sad[39]
(a) 'Don't be sad.'

ŋaːj taʔ-prɰəʔ-taʔ-təm.paʔ
3p   do-work-do-work
(b) 'They're working.'

The starting point for the reduplication can be either the verb or subject of a sentence (R. Watson 1976), the latter instance resulting in complete sentential reduplication. The word-formation strategy uses prosodic feet as the basis for the analogical pattern. An analogical set is given in S24, in which there are sequences of three prosodic feet for the nouns in the input.

S24: Analogical set for clause-incorporation reduplication

joːl   *praʔ-ti.riəʔ-ʔa.kaj*   :   *joːl-praʔ-jol-ti.riəʔ-jol-ʔa.kaj*   ::
'still have' 'wealth'   :   'still have wealth'

taʔ   *kər.riəŋ-kər.rɔːŋ*   :   *taʔ-kər.riəŋ-taʔ-kər.rɔːŋ*
'make'   'fences'   'make fences'

3.3.2 Presyllable plus template reduplication

In template-plus-presyllable reduplication, monosyllabic verbs are copied and the syllable [ʔi] is added between the two identical forms. The resulting intransitive verbs focus on the semantic generality of the actions. The fact that these verbs are always intransitive is part of the semantic generalizing.

S25: Analogical set for generalized verbs

caː 'to eat'   :   *caː-ʔi.caː* 'to eat in general'   ::
taʔ 'to work' :   *taʔ-ʔi.taʔ* 'to work in general'

One pattern of reduplication that Watson (1976) described as having the semantic properties of pretence involves the use of the verb *taʔ* 'to do' and a reduplicant verb, the first verb having a homorganic nasal, and the second, a [ʔi-] word-initial presyllable. In S26, periods link syllables while the hyphen links feet/phonological words.

S26: Analogical set for pretence verbs

biʔ 'to sleep' : *taʔ-ʔm.biʔ-ʔi.biʔ* 'to pretend to sleep'   ::
cɛt 'to die'   : *taʔ-ɲ.cɛt-ʔi.cɛt* 'to pretend to be dead'

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[39]   Hyphens, as used in transcriptions in this grammar, indicate phonological words, not morphs. However, to clarify the portions of the incorporated forms, in this subsection, the 'morphs' of transcriptions and interlinear glosses do correspond as indicated by hyphens.

3.3.3 *Template reduplication*

Template reduplication involves entire phonological words—either one or two syllables. The phonological patterns are consistent in number of syllables (one to two or two to four) and the overall syllable shape (CV to CVCV or CVC to CVCCVC), though there are several patterns of segmental alternations (§2.5.3).

The difference between verbs and derivationally related reduplicant forms often involves some kind of semantic specialization, as in S27, though the exact result is not predictable.

S27: Analogical set for reduplication with semantic specialization

kəl.laːʔ 'timid/shy'   :   *kəl.laːʔ-kəl.lɨ̯ər* 'cowardly'   ::

ka.caŋ 'to smile'   :   *ka.caŋ-ka.biːp* 'to smile faintly'

For noun reduplicants in particular, there is often a generalized meaning that refers to a whole class of nouns rather than to one member of the set, as in S28. The phonological material from these generalized nouns can take part in the clause-incorporation discussed in § 3.3.1.

S28: Analogical set for reduplicant nouns

ʔa.lɔːŋ 'tree'   :   *ʔa.lɔːŋ-ʔa.lɛː* 'vegetation'   ::

ʃɕ̥ːc 'meat'   :   *ʃɕ̥ːc-ʃɛːŋ* 'meat in general'

4 *Overview of basic phrase structure*

While the remaining sections on lexical subcategories contain substantial discussion on more specific aspects of distributional properties of Pacoh word classes, this section summarizes briefly what the overall structure is for basic and complex sentences as well as noun phrase structure and relationships between noun phrases.

4.1 Basic sentence structure

In Pacoh, subjects precede verbs, and objects often follow verbs. Notable issues include subjectless sentences, topic prominence (fronting) of objects (what in some cases can be considered middle voice), and the varying positions of location and time phrases and question words/phrases. In general, Pacoh should be viewed as a language with topic-comment structure and the likely order of elements that obtain from such syntactic typology, such as the apparent use of the middle voice.

- Pacoh is generally an SVO language. Note in S29 that while the imperative does have a subject pronoun, the lower clause does not.

    S29: SVO order in Pacoh

    ʔa.ʔɛm   ʔaj   biʔ   pat   dɛn
    you (lower) remember sleep extinguish   lamp
    'Remember when you (younger than speaker) sleep to put out the light.'

- While subjects are often used in Pacoh sentences, they may be omitted in appropriate discourse contexts and with certain kinds of verbs (e.g. impersonal verbs §10.5).

    S30: Subject dropped in discourse

    ʔa.lɛːʔ   ʔi.joːh
    tired   yet
    (a) '(Are you) tired yet?'

    joːh   ʔa.lɛːʔ
    not yet   tired
    (b) '(I'm) not yet (tired)?'

S31: Subjectless verbs of existence or state

yoːl   d̪o̠ːj   lə̠jʔ
remain   rice   not
(a) 'Is there still some rice left?'

ʔa.to̠ʔ   lə̠jʔ   ʔiŋ   ŋɔːjʔ   siːw
hot   no   want   drink   liquor
(b) 'When it (the weather) is hot, you shouldn't drink liquor.'

- As a topic-comment language, Pacoh does have objects that occur sentence-initially in topicalized constructions. Generally, these are objects of verbs with more transitive-like meanings. However, subjects, locations, and other argument complements may also be focused at the fronts of sentences. Topicalization can occur with a lexical marker (such as *ʔn.nɛh* 'this' or *kiː* 'that') or without one. See §9.4 for further details.[40]

S32: Topic-comment sentences in Pacoh

ʔm.bar   ʔən   dɔː   plə̠j   kɨː   lɨː   ʔiŋ
thing   that 1s   buy   1s   really   want
(a) 'It's the one that he bought that I really want.'

kɨʔ   ʔn.naw   ʔən   lə̠jʔ   hoːj   taʔ   tu.miəŋ   kiː   plə̠j
thus   who   that no   able   make crossbow   LINK buy
(b) 'So whoever can't make crossbows buys them.'

- Equational constructions can occur with or without a linking word. The linking word (comment sentence particles §9.4) is more of a link between topic and comment than it is between subject and predicate.

S33: Contrasting Pacoh and English equational constructions

ʔn.nɛh   laː[41]   krɨp
this   LINK   mousetrap
(a) 'As for this, it's a mousetrap.'

ʔn.nɛh   krɨp
this   mousetrap
(b) 'This is a mousetrap.'

- There are instances in which there appears to be a kind of middle voice (see §10.1.2); there is no genuine passive marking in Pacoh.

S34: Middle voice

ʔa.bil   cut   siŋ
mouse   trap mousetrap
(a) 'The mouse was trapped by the mousetrap.'

---

[40]   Two useful works on topic-comment constructions in Vietnamese are those of Cạo (1992) and Clark (1996).

[41]   This word is a Vietnamese loanword *là* meaning 'to be' in equational sentences, though it is also used in similar topic-comment constructions in Vietnamese.

kɨp   taʔ   baŋ bul
trap   make   by   stock
(b) 'The *kup* trap is made of rock.'

- Negation in Pacoh is of two types: verbal negation and nominal negation. The general verbal negator is *ləjʔ* (§11.6), while nouns are negated by the word *ʔih* (§11.6).

    S35: Negation in Pacoh

    kɨː   ləjʔ cɔːm   taʔ   tu.miəŋ
    1s   no   know   make   crossbow
    (a) 'I don't know how to make a crossbow.'

    kɨː   ʔih   ti.kuəj jɯ̯ən
    1s   not   person   Vietnamese
    (b) 'I am not a Vietnamese.'

- Comparison generally occurs with comparative prepositions (see §8.2), as in S36(a), though they are not absolutely necessary, as in S36(b). There is no distinct word to indicate the superlative.

    S36: Comparison in Pacoh

    praʔ   kɨː   pɨːt   ti.lət   ʔm.maj
    money   1s   more   than   yours
    (a) 'I have more money than you do.'

    həmɔːŋ   kɨ.dɨːt lɨː   jɯ̯ən
    Hmong   poor   very   Vietnamese
    (b) 'The Hmong are poorer than the Vietnamese.'

- Intensification is generally indicated by the word *lɨː* 'very' (homophonous with the word meaning 'true'), which occurs typically before or after (more typically, after) certain stative verbs, as in S37(a) and (b), though active verbs may also be intensified, as in S37(c).

    S37: Intensification in Pacoh

    hɔːk   kaːŋ   pa.cǫh lɨː   ʔiən
    study   speech   Pacoh   truly easy
    (a) 'Learning Pacoh is very easy.'

    dɔː   hoːj   lɨː   taʔ   tu.miəŋ
    3s   able   very make   crossbow
    (b) 'He is very capable at making crossbows.'

    dɔː   mǫːt toʔ duŋ   ʔa.cɔː kap   lɨː
    3s   enter to   house dog   bite very
    (c) 'He went into the house, and the dog gave him a really bad bite.'

- Location and time phrases may be flexibly placed at either ends of phrases.

    S38: Location and time phrases in Pacoh

    kɨː   poːk   toʔ duŋ   ʔn.tih
    1s   go   to   house that
    (a) 'I went to that house.'

to? duŋ   ?n.tih ki: po:k
to   house that   1s   went
(b) 'It was to that house that I went.'

■ The distribution of question words is complicated by Pacoh's proximity with and influence from Vietnamese, a language which typically keeps its question words in their case-marked positions instead of sentence-initially. Information question words tend to be fronted in Pacoh, but fronting is not a requirement and exceptions occur (see §7.3.2 on interrogative pronouns).

S39: Question word positions

?a.məh   maj   pa.pi:
what   2s   discuss
(a) 'What are you talking about?'

maj   pok   tu.mɔ:
2s   go   to where
(b) 'Where are you going?'

■ Affirmative-negative questions, mood, and imperative tones may be indicated by the use of sentence-final particles (see §9).

S40: Sentence particles

ki: pa.pi: jɔ:n   ?a.maj   kam.maŋ   ?aw
1s   speak   for   to-2s   listen   IMP
(a) 'When I talk to you, listen.'

?a.pɛ: ?a.?ɛ:m   cɔ:m   ləj?
plural   SPNY   know   INT
(b) 'Do you youngsters understand?'

4.2   Complex sentence structure

Independent clauses combine into multi-clause phrases in two ways in Pacoh, either with or without overt marking by words, such as conjunctions or clause-linking adverbs. While complex sentences with overt lexical markers are clearly identified, those without are identified by intonation and semantic context. Such multi-clause phrases have single intonational units and are, without one of the clauses, semantically incomplete within a discourse context.

■ Condition is expressed with or without the lexical form *nam* 'if' or with a sentence particle clause connector (see §9.3 and §9.4) such as *la:* in S41(b).

S41: Conditional sentence

?a.tọ? ləj?   ?in   ŋɔ:j? si:w
hot   no   want   drink liquor
(a) 'When it (the weather) is hot, you shouldn't drink liquor.'

nam ?a.ca:j ta? viək   ?a.rə? ?ŋ.koh la: ?a.lɛ:? li:
If   SPMY   do   matters like   that   LINK   tired very
(b) 'If you work like that, you'll be very tired.'

- Contrast can be implied but is generally indicated with the conjunction *ma:* 'but'.[42]

> **S42: Contrasting sentences**
>
> *ho:m   ŋa:j   taʔ   ma: kɨ: ləjʔ   cɔ:m   taʔ*
> see   they   make   but   1s   no   know   make
> 'I've seen people make them, but I don't know how to make them.'

- Time sequence in multi-clause constructions is often not lexically marked, as in S43(a), although additional clause-linking words can be used, as in S43(b).

> **S43: Sequence of events**
>
> *kɨ: khir   ʔn.noh   la:jʰ*
> it   jump over   this   fall
> (a) 'Then it jumps over this and falls.'
>
> *jɔ: hɛ: si.se:t   ŋɛʔ   ve:l   hɛ: li: bu:j-ʔe:m*
> after   3p   harvest   all   village   3p   very   pleased
> (b) 'After harvesting, the whole village was pleased.'   (R. Watson 1976)

- Purpose is typically expressed linearly, with the goal first and the purpose second. The second verb is generally unmarked, though *jɤ:n* 'in order to' can be used.

> **S44: Purpose sentence**
>
> *taʔ   siŋ   ʔa.cuət   ʔa.bɨl*
> make   trap   catch   mice
> (a) 'Make a trap to trap mice.'
>
> *kɨ: taʔ   jɤ:n   bo:n   ca:*
> 1s   work   in order   able   eat
> (b) 'I work in order to be able to eat.'

4.3 Noun-phrase structure

Pacoh noun-phrase structure is strictly right-branching, descriptive modifying elements that follow the words they modify. However, beyond this general statement, the order of categories of elements follows some other more arbitrary rules. S45 demonstrates the order of elements in a Pacoh noun phrase.

> **S45: The Pacoh noun phrase**
>
> *ba:r   lam   ʔa.lik   ʔən   ʔɔ: kɨ: ʔn.neh*
> two   UNIT   pig   RLTR   good   1s   this
> 'these two good pigs of mine'

- Scope nouns (such as *mɤ:j* 'each' or *ŋɛʔ* 'all') may precede any noun subclass in accordance with expected semantic restrictions.

> **S46: Non-distributive scope noun**
>
> *ŋɛʔ   pɛ: naʔ   cɔ:m   jɔ:*
> all   three   UNIT   know   already
> (a) 'All three of those people know already.'

---

[42]   This is likely a Vietnamese loanword (*mà* 'but') also seen in languages of other ethnic minorities, such as the Bru (Katuic) and the Chrau (Bahnaric).

moːj naʔ ti.kuəj viː   baːr lam   mat
each UNIT person have two UNIT eyes
(b) 'Every person has two eyes.'

- Numbers precede count nouns, and in the majority of instances, require count nouns, whether classifiers or measure words, to be grammatical. Without semantic context, S47(b) is not grammatical without *lam*, a commonly used unit noun for various categories of non-count nouns.[43]

S47: Numbers in quantified noun phrases

moːj ti.ŋaːn cɛː
one cup   tea
(a) 'a cup of tea'

puən lam   ti.kuəj
four UNIT human
(b) 'four people'

- Count nouns precede non-count common nouns of corresponding semantic categories. In S48(a), the unit noun can only be followed by nouns having human semantic properties, while in S48(b), the unit noun requires noun dependents having the semantic property of roundness.

S48: Count nouns and required co-occurring non-count nouns

soːŋ naʔ   ti.kuəj təm.moːj
five UNIT person   visit
(a) 'five visitors'

mu.cit kəl.ləŋ peʔ
ten   UNIT   banana
(b) 'ten bananas'

- After common nouns come descriptive stative verbs, adjective clauses, possessive pronouns, and demonstratives.

S49: Common nouns and their modifiers

ʔa.cɔː kɛt   ʔn.dɔː
dog   small that
(a) 'that small dog'

ʔa.boːʔ maj
family   2s
(b) 'your family'

ti.kuəj ʔən tər.doːk
person that lazy
(c) 'a person who is lazy'

---

[43] See Jones (1970) and T'sou (1976) for further discussion of classifier constructions in Southeast Asian languages.

▪ Count nouns themselves can take this syntactic slot and be modified similarly.

S50: Count nouns with modifiers

lam   ʔɔn   pi:t   li:
unit   that   big   very
'a very big one'

4.4 Expressing relationships between nouns: prepositions and relator nouns

Location and direction in time and place are indicated in Pacoh through both prepositions (see Chapter 8) and what are called relator nouns (see §7.5 for a list of relator nouns). Though there is distributional overlap (both classes of words precede their noun complements) and some functional overlap between these two lexical categories, there are some reasons to keep them separate.

The primary reason is the ability of relator nouns to function as sentence subjects/topics and predicates/complements, in contrast with prepositions, which are non-predicational adjuncts. While both categories express location in a general sense, the locational prepositions are allative, indicating direction (as in S51(a)), while relator nouns are static, expressing essentially inalienably possessed location (as in S52(a)). Prepositions tend to be more grammaticalized and semantically abstract, for example, expressing comparison (as in S51(b)), while relator nouns express possession (as in S52(b)), in parallel with the possession location function.

While not a syntactic criterion, the historical derivation of these categories differs; Pacoh relator nouns are historically derived from nouns, while Pacoh prepositions tend to be derived from verbs. For example, while the dative preposition *jɔ:n* is most likely derived from a homophonous verb meaning 'to give' (an extremely common grammaticalization cline in East and Southeast Asia), the dative relator noun *ʔa.dɔ:* is related to the homophonous dative pronoun meaning 'of him/her/it'..

S51: Prepositional phrases of direction and comparison

dɔ: luh   tɛ: kəl.luŋ   duŋ
3s   run   from inside   house
(a) 'He ran from inside the house.'

lam   ʔn.nɛh   ʔɔ: ti.lət   dɔ: ʔn.tih
UNIT   this   good   more-than   3s   that
(b) 'This one is better than that one.'

S52: Relator noun phrases

daŋ   duŋ   bar   naʔ   ʔa.ʔi: ʔa.kaj
place house two   UNIT   mother   child
(a) 'At home, there is a mother and child.'

ʔn.nɛh   ʔn.dɔ: tʰɔj
this   of   teacher
(b) 'This is the teacher's.'

5 *Adverbs*

Pacoh adverbs are postverbal elements that take their preceding verbs (or nominal or prepositional predicates) as their semantic scope. Pacoh adverbs consist of five categories, expressing or modifying in some way manner (including the interrogative), intensity, result, or simultaneous action or states. While general manner and result adverbs form hypothetically open classes, intensity, interrogative, and simultaneous adverbs are limited to small sets of words. Time nouns (§7.2.2) and prepositional phrases (§8.6.1) expressing time are dealt with in their respective sections.

Some adverbs in Pacoh have corresponding homophonous verbal forms. In S53(a), $ho:j_1$ is a stative verb and the predicate centre of its clause, while in S53(b), $ho:j_2$ is an intensifying adverb. The adverb $ho:j_2$ cannot be preposed in S53(b), and interpreting $ho:j_2$ as a separate verb would cause a somewhat different interpretation (i.e. it does not mean 'He tells stories, and he is very capable.').

S53: Comparing homophonous verbs and adverbs

dɔː hoːj₁   liː
3s   capable   very
(a) 'He's very capable.'

dɔː ʔɲ.ʃu̯ər   hoːj₂   liː
3s   tell stories   capably   very
(b) 'He tells stories very capably.'

The defining characteristic of adverbs precludes verb-complement-taking verbs such as *liəh* 'again', with similar semantic functions, from being categorized as adverbs as seen by their ability to take the subject-replacing presyllable [ʔu-] (§3.2.2).

S54: Repetition predicate-taking verb with subject prefix

ʔu.liəh   buːj-ʔeːm
3s-again   happy
'He was happy again.'

5.1 General adverbs

Pacoh manner adverbs constitute the largest subclass of adverbs, covering a wide range of semantic fields, as listed in §12.1. Most adverbs in §12.1 are manner adverbs, though

there are also adverbs of extent, repetition, sequence, and singularity. S55 demonstrates some intensified adverbs. Notice in S55(c) that the manner adverb is kept before the object, 'the Pacoh language'.

S55: Manner adverbs

dɔː   la.luh   ɲaʔ   lɨː
3s   run   fast   very
(a) 'He ran very fast.'

ʔa.kəp   toːŋ   ŋən   lɨː
don't   speak   loud   very
(b) 'Don't speak loudly.'

maj   hɔːk   ʔɔː   kaːŋ-pa.koh
2s   learn   well   Pacoh language
(c) 'You've learned Pacoh well.'

Manner adverbs are the adverbial complements (i.e., they are required) of inanimate-subject intransitive verbs (§10.1.2), which require inanimate subjects where the verb semantically 'affects' the verb, as in S56.

S56: Adverb after inanimate-subject verb

ʔaːw   ʔŋ.koh   ʃɨːp   pɨəjʔ
shirt   that   wear   suitable
'That shirt fits well.'

There is one repetition adverb, *lɔːj*, meaning 'again' or 'more'. S57(a) and (b) show the position of the adverb both before and after objects.

S57 Repetition adverb

toːm   lɔːj   mo̰ːj   kən.tɨːʔ
say   again   one   time
(a) 'Say that again one time.'

caː   do̰j   lɔːj
eat   rice   more
(b) 'Eat more rice/eat rice more.'

The forms *boːm* and *ʔn.da̰j* are emphatic self adverbs, expressing 'oneself' or 'one's own'. In S58a, the adverb precedes the object.

S58: Emphatic self adverbs

kɨː   taʔ   boːm   pi.daj
1s   work   self   field
(a) 'I worked on the field myself.'

baːr   naʔ   ʔa.ɲaː   ʔat   ʔn.da̰j
two   people   they   live   self
(b) 'Those two live by themselves.'

The two sequential adverbs refer to the actor performing the action either before or after another external actor.

S59: Sequential adverbs

ʔa.ɲaː toʔ   trɨəŋ   ʔa.ʃuəj tʰɔj-jawʔ toʔ   ta.tun
3d   arrive   school before teacher arrive after
'They came first, and the teacher came after.'

5.2   Intensifying adverb

The only word in this class, *lɨː₃* 'very/really', is clearly related to the stative verb *lɨː₁* 'true/correct', as well as the VCT verb *lɨː₂* (§11.2), which also acts to intensify. The differences between these three homophonous forms are shown in S60(a) to S60(c). Both the adverb and the predicate-taking verb share the semantic function of intensification. The adverb, in its postverbal position, is considered by some speakers to be more natural than the predicate-taking verb, though both are nonetheless considered grammatical.

S60: *lɨː₁*, *lɨː₂*, and *lɨː₃*

lɨː₁   *ləjʔ*
true   no
(a) 'Is that right?'

kɨ   *lɨː₂*   *ʔa.lɛʔ*
1s   truly   tired
(b) 'I'm really tired.'

ʔŋ.koh   *pɨːt*   *lɨː₃*
that   big   very
(c) 'That's very big.'

The word *lɨː₃* also appears with other adverbs as well as indefinite numeral nouns, such as *ʔeː* and *klɨːŋ* 'many' and *bɨəʔ* 'few'.

S61: Intensifying adverb with degree numeral noun

dɔː cɔːm ʔeː   lɨː   kaːŋ pər.naːj hɛː pa.kọh
3s know many very UNIT story   1p Pacoh
'He knows very many stories about us Pacoh.'

This adverb has semantic features beyond the meaning 'very', as demonstrated by its ability to occur as the dependent of non-degree verbs. What semantic restrictions there may be on this usage is not yet clear.

S62: *lɨː* with non-degree verbs

maj boːn lɨː   praq
2s   have really money
(a) 'You really have money.'

mọːt toʔ duŋ   ʔa.cɔː kap   lɨː
enter to   house dog   bite really
(b) 'If you go into the house, the dog will really bite you.'

5.3 Interrogative adverbs ('how' and 'why')

The interrogative adverbs *ʔi.mɔː* 'how' and *viː ʔi.mɔː* 'why', while phonologically related, have some distributional differences. *ʔi.mɔː* 'how' appears somewhat flexible in its position, as in S63(a) and (b), while *viː ʔi.mɔː* 'why' generally appears sentence initially, as in S64.

S63: 'How' sentence-initially and post-verbally

hɔːj   ʔn.nɛh ʔi.pɛː tu.mɒŋ ʔi.mɔː
time   this   2p   live   how
(a) 'How are you living now?'

ʔi.mɔː ʔi.sər   kəm.pɔːŋ ʔn.nɛh
how   one-climb   ladder   this
(b) 'How does one climb this ladder?'

S64: 'Why' sentence-initially

viː ʔi.mɔː ʔa.caːj pən   hɨk   liː
why   SPMY   wait much very
'Why are you waiting so long?'

5.4 Result adverbs

Result adverbs share the semantic property of extent of completion but differ according to the presence or absence of the presyllable [ʔa-] (§3.2.5). Result adverbs that do not have the suffix are homophonous with their stative verb counterparts, as in S65.

S65: Homophonous verb and result adverb

ti.ŋaːn dɔː   truː
dig   that deep
(a) 'That cup's deep.'

piʔ truː
dig deep
(b) 'Dig deep.'

Result adverbs marked phonologically by [ʔa-] are more easily differentiated from verbs. The use of the preposition *jɔːn* 'in order to' can be used with semantically similar results (see §8.6.2 for examples).

S66: Result adverb word forms

taɲ   ʔa.kjər
weave   to thickness
(a) 'Weave (it) thick.'

caː ʔa.ʃaj
eat fullness
(b) 'Eat till you're full.'

To refer to the completeness of stative verbs (§10.1.4), the form *ŋɛʔ₂* 'completely', which is homophonous with the noun *ŋɛʔ₁* 'all', is often used, as in S67.

S67: Completed resultative adverb

mo:h ki: du:t   ŋɛʔ
nose 1s   congested completely
'My nose is completely stuffed up.'

5.5 Simultaneous adverb

The single simultaneous adverb in Pacoh, *ʔm.bọʔ*, co-occurs strictly with verbs having plural or coordinated subjects. This adverb can express simultaneous action, as in S68(a), or actions suggesting reciprocity, as in S68(b).

S68: Mutual verb expressing simultaneous action or reciprocity

pyən naʔ ʃuə   ʔm.bọʔ
four person searching together
(a) 'The four are all looking at the same time.'

ʔa.ɲa: vɨə la.luh vɨə pa.pi ʔm.bọʔ
they both run   both speak together
(b) 'They walked and talked together.'[44]

---

[44]   The pattern *vɨə* + VERB + *vɨə* + VERB, a borrowing from Vietnamese, indicates that two actions occur simultaneously.

6 *Conjunctions*

While juxtaposition without lexical marking is common in Pacoh, a handful of conjunctions are sometimes used to express addition, alternation, or contrast. In addition to the semantic roles of these conjunctions, their co-occurrence restrictions (in addition to their general conjunctive semantic roles) follow the material connected, whether non-predicate nouns or predicates, and in the case of nouns, human versus non-human nouns. Table 33 contains a list of the conjunctions, their meanings, and whether they take (1) nouns or predicates, (2) only human nouns, or (3) only predicates.

Table 33: Pacoh conjunctions

Sample from category	Gloss	Complements
mɔːjₐ, ʔa.liŋ₇, ʔa.ɲaːₐ	'and'	nouns or predicates
ʔi.ɲaːₐ, ʔa.ɲaːₐ, ʔi.pɛːₐ, ʔa.pɛːₐ	'and'	human nouns
mɔːj₃	'and'	predicates
ʔa.liŋ₅	'or'	predicates
maː	'but'	predicates

6.1 Additive conjunction ('and')

Additive conjunctions (*mɔːjₐ*, *ʔa.liŋ₇* and *ʔa.ɲaːₐ* all meaning 'and') connect nouns as subjects or objects (as opposed to noun predicates). In S69, the form *ʔa.liŋ₇* is homophonous with the comitative preposition *ʔa.liŋ₁* 'with'. The comitative preposition generally co-occurs only with subjects, while the conjunction can appear more freely with subjects or objects.

S69: General conjunction *ʔa.liŋ*

kɨː viː mɔːj naʔ ʔa.caːj ʔa.liŋ₇ baːr ti.kuəːj ʔa.ʔɛːm-kɔːɲ
1s   have one UNIT brother and   two   UNIT   sibling-male
'I have one elder brother and three younger brothers.'

S70: General conjunction *mɔːj*

viː   li.mɔː lam duŋ   mɔːj₃ mu.lam   triəŋ
exist several UNIT house and   one-UNIT school
'There are several houses and a school.'

S71: General conjunction *ʔa.ɲa*

mɔːj	*ti.kuəj*	*viː*	*baːr*	*lam*	*ʔa.tiː*	*ʔa.ɲa₃*	*baːr*	*lam*	*ʔa.ɟɨŋ*
one	person	has	two	UNIT	hand	and	two	UNIT	leg

'A person has two arms and two legs.'

6.2 Person conjunctions ('and')

Person conjunctions in Pacoh co-occur only with human nouns as their coordinated complements. All of these conjunctions are homophonous with bisyllabic pronouns in Pacoh, and all share semantic features with those related forms. These conjunctions require their complements to be human, second or third person, and consist of either two or more than two nouns. Table 34 lists the words and the types of complements they take, as discussed in S. Watson (1964).

Table 34: Co-occurring nouns with general person conjunctions

Form	No.	Person
ʔi.ɲaː₂	2	second dual
ʔa.ɲaː₂	2	third dual
ʔi.pɛː₂	3+	second plural
ʔa.pɛː₂	3+	third plural

S. Watson (1964) also noted that the forms *ʔa.ɲaː₂* and *ʔa.pɛː₂* can take a combination of a singular noun and a semantically plural noun. There is apparently semantic agreement between the factors of number and person. In each case, the required features of the complements of the conjunctions match the features of the homophonous pronoun forms.

S72: Person non-predicate conjunctions

ʔa.ʔiː	*ʔa.ɲaː*	*ʔa.ʔam*
mother	and	father

(a) 'mother and father'

maj	*ʔi.ɲaː*	*ku.buət*
2s	and	NAME

(b) 'you and Cubuat'

In data collected in 1997 from Pacoh speakers who were sixteen to twenty years old, the form *ʔa.ɲaː* 'and' was used without regard either to the quality of the noun (human or non-human) or the number of complements involved. In S73, the conjunction has non-human complements, and in S74, it has two plural complements. The conjunction *ʔa.ɲaː* is considered, at this point, to be a non-person non-predicate-taking conjunction. Unless this turns out to be a regional variant, the conjunction paradigm described by Watson may be in the process of being lost, and the conjunction *ʔa.ɲaː* is becoming the standard default conjunction.

S73: *ʔa.ɲaː* **with non-human nouns**

kɨː	ʔiɲ	pləj	baːr	lam	ʔa.cɨːw	ʔa.ɲaː	mọːj	lam	kuək
1s	want	buy	two	UNIT	knife	and	one	UNIT	hoe

'I want to buy two knives and a hoe.'

S74: *ʔa.ɲaː* **with plural nouns**

hɛː	ʔa.ɲaː	ŋaːj	tər.pən
1p	and	3p	RECIP-wait

'We and they are waiting for each other.'

6.3 Predicate-taking additive conjunction ('and')

While juxtaposition is common when connecting verbs in Pacoh, the conjunction *mọːj₃* is sometimes used, specifically when the two verbs are simultaneous rather than sequential.

S75: **Predicate-taking additive conjunction**

dɔː	cɔːm	ʔa.mọːʃ	ŋaːj	mọːj₃	liː	ʔɔː-lɔːm
3s	know	pity	3p	and	really	good-hearted

'He knows how to pity others and has a good heart.'   (S. Watson 1976)

6.4 Alternative conjunction ('or')

There are no semantic co-occurrence restrictions on the single alternative conjunction *ʔa.liŋ* 'or', which can be used to connect nouns or complete predicates.

S76: Alternative conjunction

dɔː	pləj	ʔa.lik	ʔa.liŋ	ʔn.truəj
3s	buy	pig	or	chicken

(a) 'Did he buy a pig or a chicken?'

liː	ʔa.liŋ	ləjʔ
correct	or	not

(b) 'Is that right or not?'

6.5 Contrast conjunction ('but')

The single contrary extension conjunction in Pacoh is *maː* 'but'. It typically occurs with two verbs as complements, as in S77(a), though it can even take noun predicates as complements, as in S77(b).

S77: Contrast conjunction

hoːm	ŋaj:	taʔ	maː	kɨː	ləjʔ	cɔːm	taʔ
see	3p	make	but	1s	no	know	make

(a) '(I've) seen them make them, but I don't know how to.'

ŋaːj	toʔ	ʔn.nɛh	ʔih	ti.kuəj-viət	maː	ti.kuəj-pa.kọh
3s	come	here	be not	Vietnamese	but	Pacoh

(b) 'Those people who came weren't Vietnamese, but rather were Pacoh.'

7 *Nouns*

Pacoh has several subcategories of nouns, including common nouns, count/unit nouns, pronominal nouns (including pronouns, demonstratives, and words with specific anaphoric reference), numerals and other quantity nouns, relator nouns (which indicate a variety of grammatical relations), and scope nouns (which indicate totality or individual reference). All of these subcategories and their various additional subcategories are described in the following sections. See §4.3 for a discussion of noun phrase structure.

7.1 Common nouns

There are five primary subcategories of Pacoh common nouns: general, human, mass, proper, semantically-generalized, and speech clause common nouns. The rest of this subsection discusses general properties of common nouns while the additional subcategories are dealt with in various subsections.

As in other classifier languages in Southeast Asian languages, common nouns are, for the most part, non-count nouns in that they can only appear in quantified noun phrases when they have an accompanying classifier or measure word (§7.2) with which they have semantico-syntactic agreement. Pacoh common nouns are unspecified for plurality and definiteness, and so co-occur with words that provide such features, such as quantity nouns or demonstratives, as in S78(a), or those features may be gained from discourse context. Common nouns without other marking may be interpreted as plural by plural stative verbs (§3.2.3 and §10.1.4) or reciprocal verbs (§10.1.3).

S78: Plurality and definiteness in Pacoh common nouns

bar-pɛ: lam duŋ dɔ:
a few   UNIT   house   that
(a) 'those few houses'

ʔa.cɔ: tər.klɛ:ŋ
dog   follow (recip.)
(b) 'The dogs followed each other.'

Outside of an established discourse context or without the use of demonstratives or genitive nouns, common nouns may refer to all the members of that set as an indefinite mass noun rather than as definite countable units. Thus, in S79(a), in an example without a

demonstrative, both glosses—definite and indefinite—are possible depending on the discourse context; however, with the demonstrative as in S79(b), only one interpretation is possible.

S79: Common nouns with demonstratives

ʔa.cɔː   ʔɔː   lɨː
dog   good   very

(a) 'This dog is good.'/'A dog is good.'

ʔa.cɔː   ʔn.nɛh   ʔɔː   lɨː
dog   this   good   very

(b) 'This dog is good.'   (*A dog is good.')

7.1.1 General common nouns

General common nouns have the fewest syntactic distributional restrictions although other semantic restrictions apply to individual words and semantic word classes. Table 37 in §7.2.3 contains a list of classifier unit nouns and their selectional restrictions for the common nouns with which they co-occur. General common nouns have semantic features that allow them to co-occur with certain classifier nouns, as demonstrated in Table 35.

Table 35: List of common nouns and associated features

Classifier	Category	Gloss	Noun
kəl.lɔːŋ	small and round	'bananas'	*peʔ*
		'coconut'	*tuəŋ*
		'rice, unhusked'	*trɔː*
		'star'	*pən.tọːr*
laːŋ	sheet	'washcloth'	*kʰan*
ʔn.traʃ	thin and long	'string'	*ʔn.tar*
		'writing utensil'	*ʔr.viət*
lam	general	'bird'	*ʔa.cẹʔ*
		'dog'	*ʔa.cɔː*
		'house'	*duŋ*

Common nouns also include an additional group, namely, time nouns that cannot be the dependents of numeral nouns, though there are time unit nouns (§7.2.2). Already having semantic features marking number, they cannot occur in quantified noun phrases. These nouns refer to the past or future by number of days or years (see §3.1.5).

S80: Non-unit time nouns

ʔi.ŋaj-ʔn.trɔːŋ   dɔː   toʔ   ʔn.nɛh
five days ago   3s   arrive   here
'He arrived five days ago.'

7.1.2 Human common nouns

Human common nouns co-occur with person classifier unit nouns (§7.2.3), as in S81(a), and person conjunctions (§6.2), as in S81(b). Nouns in this category include words within various semantic fields having to do with humans, such as family relations, age groups, professions, and ethnic groups. See §12.3 for additional nouns in this category.

S81: Human common nouns

li.mɔː   naʔ   ʔa.kaj
how many   UNIT   child
(a) 'How many children?'

ʔŋ.koɲ ʔa.ɲaː   ʔŋ.kan
man   and (pers.) woman
(b) 'men and women'

7.1.3 Mass common nouns

Pacoh common nouns, without marking for number or definiteness, have semantic and syntactic properties of mass nouns. Still, certain nouns can be placed specifically in this category and not merely for their general semantic properties. Mass common nouns co-occur with non-classifier countable measure words, such as *ti.ɲaːn* 'bowl', *baːw* 'bag', or *ʔa.tɛːh* 'basket', but never with classifier unit nouns, the latter of which select for certain properties (§7.2.3).

S82: Mass common noun

dɔː doːŋ baːr bɛː   daːʔ
2s   bring two bottle water
'He brought two bottles of water.'

Some non-mass nouns may function as mass nouns subcategory, words that are typically contained in such measure units. In S83(a), 'banana' is a single unit, while in S83(b), 'banana' refers to the content of the basket.

S83: Mass versus non-mass common nouns

mo̤ːj lam   peːʔ
one   UNIT   banana
(a) 'a banana'

mo̤ːj ʔa.tɛːh peːʔ
one   basket   banana
(b) 'a basket of bananas'

7.1.4 Speech noun clauses

Speech noun clauses (viewed here as single syntactic constituents) are nominal complements of speech verbs (§10.4.2), as in S84.

S84: Quote simple oblique-object verb

dɔː   pa.ʃɔːl   baː-ʔəːj-poːk-hɔːk

3s   call   Hey, Ba! Let's go study.

'He called, "Hey, Ba! Let's go study".'   (ND&P)

7.1.5 Proper common nouns

Proper common nouns in Pacoh primarily include the given names of places, names of ethnic groups, and other non-human names. Some examples in available data are names of local areas, such as the district *ʔa.liəj* 'Aluoi', where many Pacoh live, or *miːʔ* 'the United States'. As unique entities, such nouns do not occur after unit nouns in quantified noun phrases. Proper pronominal nouns (§7.3.4), unlike proper common nouns, generally have human reference (or at least animate nouns with human-like attributes) and carry pronominal features related to humans.

7.1.6 Semantically-generalized compound nouns

Semantically-generalized compound nouns constitute a class of polysyllabic words that can participate in clause-incorporation (§3.3.1). These nouns contain phonological material that resembles two or more words overlapping in semantic scope and refers to a shared general semantic scope. For example, *jəw-baːj* 'friends (in general)' shares phonological material with two distinct words that each mean 'friend', and *duŋ-vẹːl* 'society' consists of phonetic forms for 'house' and 'village' respectively. Data on clausal reduplication in Pacoh is provided in the works of R. Watson (1966b and 1980). In S85, the compound meaning 'literate' contains the verb *cɔːm* 'to know' and the generalized reduplicant noun *ʔu.raʔ-ʔu.ʔar* 'writing'.

S85: Separable common noun

dɔː   cɔːm-ʔu.raʔ-cɔːm-ʔu.ʔaːr

3s   literate

'He's literate.'

Such nouns do not occur as dependents of numeral nouns or unit nouns nor do they take other words as dependents. This lack of number and definiteness emphasizes the generic semantic nature of these words.

7.2 Count/unit nouns

The primary characteristic of unit nouns is that they are the only words that can be within the direct semantic scope of numerals and quantity nouns. As such, unit nouns have the syntactic function of relating numerals to other nouns, typically common nouns, which are not inherently quantifiable.[45]

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[45] Common nouns in Pacoh and other Southeast Asian languages are essentially non-count nouns since they cannot be directly quantified with numbers. A kind of correlate of this fact is that 'classifiers'— words that follow numerals and co-occur with these otherwise uncountable common nouns (either before or after them, depending on the language) of specific semantic classes—are often seen in assisting with quantification of common nouns. See Jones (1970) for discussion of geographic distribution of noun quantification in Southeast Asia.

S86: Quantified noun phrase

ba:r   lam   ka.di:
two   UNIT   creel basket
'two creel baskets'

Pacoh unit nouns include classifiers, countable measure words, and certain time words (see §12.7). As the human/non-human distinction is seen elsewhere in Pacoh syntax,[46] the classifiers are here further separated into those that take human versus non-human nouns as their grammatically selected common noun correlates.

Table 36: Unit noun subcategories and samples

General	Time	General classifier	Person classifier
bɛ: 'bottle'	*ku.mɔ:* 'year'	*lam* (general)	*ti.kuəj* (people)
ti.ŋa:n 'cup'	*ki.ʃaj* 'month'	*ʔa.lɔ:ŋ* (trees)	*naʔ* (people)
ʔa.tɛh 'basket'	*kən.tiʔ* 'time'	*kəl.lɔ:ŋ* (small round)	

Classifiers and other countable nouns in Pacoh are indeed nouns, as they can serve as the syntactic heads/syntactically essential elements of noun phrases (S87) that can occur in subject or object positions (S88 and S89).

S87: Unit nouns in three positions in a noun phrase

(a)   *ba:r*   *lam*   'two things'
(b)   *lam*   *ʔn.nɛh*   'this thing'
(c)   *ba:r*   *lam*   *ʔn.nɛh*   'these two things'
          'two'   'unit'   'this'

S88: Classifier unit noun as head of subject noun phrase

lam   ka.di: ka.cat   pe:ʔ   tə.lih daŋ   ʔn.lɔŋ
UNIT   creel   contain   banana put   side   door
'Put the creel basket containing bananas at the door.'

S89: Classifier noun as head in object of a preposition

ɟiəl   təŋ.hɔ:k   pɔk   dɔːj   toʔ lam ti.ŋa:n ʔn.nɛh
take   spoon   scoop rice   to   UNIT bowl   this
'I took a spoon and scooped rice into this bowl.'

Classifiers and countable measure words both take noun dependents, but they differ in that classifiers take only non-mass nouns and general nouns may take both mass and non-mass nouns, as in S90. S90(a) and S90(b) clearly show the restriction of the classifier, while c and d show the lack of a syntactic restriction, though something of a semantic one.

S90: Classifiers versus measure words

(a)   *ba:r to:m ʔa.lɔ:ŋ*   (two-unit-tree)   'two trees'
(b)   **ba:r to:m ʔa.riəw*   (two-unit-liquor)   '*two liquors'
(c)   *?ba:r bɛ: peʔ*   (two-bottle-banana) 'two bottles of bananas'
(d)   *ba:r bɛ: ʔa.riəw*   (two-bottle-liquor) 'two bottles of liquor'

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[46]   Pacoh has a class of human conjunctions (§6.2) and human numerals (§7.4.3).

7.2.1 General measure words

General measure words, including containers (i.e. 'a basketful of') and units of weight, require mass nouns (§7.1.3) as their selected measured nouns.

S91: General measure word

maj   pləj   ʔa.li.mɔː   kən   trɔː
2s   buy   how many   kilo   rice
(a) 'How many kilograms of rice did you buy?

bar   bɛː   ʔa.riəw
two   bottle liquor
(b) 'two bottles of liquor'

7.2.2 Countable time nouns

Certain time words (see §12.7 for various Pacoh time words) in Pacoh may directly follow numeral and quantity nouns. Many time words themselves need not take additional following nouns or modifiers.

These nouns do not include semantically uncountable locus time words, such as *ʔi.ŋaj-ʔi.noː* 'yesterday' or *ku.mɔː-ʔn.trɛː* 'three years ago'. See §3.1.5 for the morphological aspects of such Pacoh time words.

7.2.3 Classifiers

Classifiers semantically select common nouns with appropriate features. In Pacoh, the three general subcategories of classifiers are the general 'default' classifier *lam*, which takes many more nouns than the other classifiers, the human classifier *naʔ* (and the less commonly used *ti.kuəj*), which takes only human nouns, and the various non-human classifiers, all of which select nouns based on semantic properties of shape and size. The person classifier is of particular note since the distinction between human and non-human nouns is seen in other lexical subclasses, such as person conjunctions and person numerals, all of which only take human noun complements.

Table 37: Pacoh classifiers (not exhaustive)

Forms	Semantic category
pəl.luk	book
ʔm.pət, ʔn.nət	bunch
ţiəh	flat expanse
pla:h	flat objects/garments
lam	general
kən.ţoh	group/flock/herd
la:ŋ	leaf/sheet
naʔ	persons
kəl.lɔːŋ	round objects
ʔn.traʃ	small, long objects
ʔn.noːm	stalk
toːm	tree

It would be misleading to claim that classifiers are always used without exception in Pacoh; exceptions indeed do exist in available data and this may reflect the fact that the proliferation of classifiers in Pacoh is still in the process of spreading. To provide a point of comparison, Pacoh classifiers are used with somewhat less regularity than in Vietnamese, in which classifiers have reached an extreme of syntactic and pragmatic prominence.

7.3 Pronouns and other pronominal nouns

Pacoh pronominal nouns all have anaphoric reference within a discourse context. In addition to definiteness, number, person, location, and gender, age and social status are also important factors in pronoun usage (as is the case in many languages in Southeast Asia[47]). This combination of grammatical, semantic, and pragmatic features is what determines the usage of Pacoh pronominal nouns.

7.3.1   Demonstrative pronouns

Demonstratives have anaphoric reference to things based on their physical and temporal position in relation to the speaker. Pacoh demonstratives often appear near the ends of noun phrases, as in S92(a), though they can stand alone as bare noun phrases as well, as in S92(b).

S92: Demonstrative as modifier and as single noun

ŋɛʔ ʔu.raʔ ʔŋ.koh
all   pen   that
(a) 'all those pens'

ʔn.nɛh yoːh   ʔŋ.ŋaːm
this   not yet   ripe
(b) 'This isn't ripe yet.'

Though demonstratives typically occur at the ends of noun phrases, locational adjuncts follow them, as shown in S93.

S93: Demonstrative and locational adjunct

ti.kuəj ʔŋ.koh kəl.luŋ duŋ
person   that   inside   house
'that person in the house'

Pacoh demonstratives differ semantically according to proximity (proximal, medial, and distal (following Fillmore 1982:48)) and position (fore and aft, above and below, and beside). Table 38 follows the analysis of ND&P (1986:45–46), with English translations and the medials *ʔŋ.koh* and *koh* added. The demonstratives *ʔn.nɛh/nɛh* 'something here' and *ʔŋ.koh*/*koh* 'something there' do not specify height and direction, while all the other

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[47]   Southeast Asian languages that use similar systems of personal reference include Cambodian (Huffman 1970:356–357), Hokkien Chinese (Chang 1979:233–234), Vietnamese (Thompson 1984–85:299–306), Indonesian (Wolff et al. 1992:17–18) and Laotian (Hoshino & Russell 1997:144–147). Cooke (1968) deals with the Thai, Vietnamese and Burmese pronominal systems.

demonstratives do. One aspect of word shape worth noting is that all Pacoh demonstratives have word-initial nasal presyllables and word-final /-h/. The difference between the medial and distal category is vowel length (see §3.1.3). The most commonly occurring forms in existing data are the two semantically least marked forms, *ʔn.nɛh* and *ʔŋ.koh*, occurring variously with common nouns, time nouns, and social pronouns, while the remaining demonstratives are less commonly used.

Table 38: Pacoh demonstrative pronominal nouns

Distance	Fore/Higher	Aft/Lower	Beside
Proximal	*ʔn.nɛh / nɛh*		
Medial	*ʔŋ.koh / koh*		
	ʔn.tih	*ʔn.tǫh*	*ʔn.trah*
Distal	*ʔn.tiːh*	*ʔn.tǫːh*	*ʔn.traːh*

Demonstrative nouns, when occurring as dependents of time unit nouns that are not already marked for definiteness, provide temporal definiteness.

S94: Pacoh demonstrative dependent of time noun

ʔi.laʃ   ʔn.nɛh kɨː poːk taʔ   pi.daj
morning   this   1s   go   work   field
'In the morning, I work in the field.'

However, demonstratives are not locational nouns, as they are in other languages (e.g. Vietnamese and English) since they cannot be the direct complements of locative verbs or prepositions but instead require intervening locational relator nouns, such as *daŋ*, as shown in S95(a) and (b).

S95: Demonstrative with and without locational relator noun regent

kɨː ʔat   daŋ   ʔn.nɛh
1s   live   at   here
(a) 'I live here.'

*kɨː   ʔat   ʔn.nɛh
1s   live here
(b) 'I live here.'

7.3.2 Indefinite and interrogative pronominal nouns

Indefinite pronominal nouns serve either as interrogative pronouns or general indefinite pronouns, as listed in Table 39. Indefinite pronominal nouns cannot take definite demonstrative nouns as dependents, as in S96. These words appear in subject or object positions, a criterion that excludes interrogative adverbs *ʔi.mɔː*₁ 'how' and *vɨ-ʔi.mɔː* 'why' (§5.3).

Table 39: Homophonous interrogative and indefinite pronouns

Interrogative	Indefinite
ʔn.naw₁ 'who'	*ʔn.naw₂* 'whoever'
ʔə.məh₁ 'what'	*ʔə.məh₂* 'whatever'
tu.mɔːₗ 'where'	*tu.mɔːₗ* 'wherever'
mɔːₗ 'which'	*mɔːₗ* 'whichever'

S96: Indefinite versus other pronouns

*ʔn.naw   ʔn.nɛh
 who   this
(a) 'this whoever'

ʔa.ʔɛːm   ʔn.nɛh
SPNY   this
(b) 'this young person'

The status of indefinite pronouns as interrogative is determined by syntactic distribution, discourse context, and intonation. A specific distinguishing property is that, whereas the indefinite form may occur within an affirmative-negative question, the interrogative cannot, since only one word in the sentence can carry the interrogative property as a semantico-syntactic feature. Thus, as in S97, the sentence can only be interpreted as 'Do you know where he is?', and the form *tu.mɔː* must be indefinite and not interrogative.

S97: Double-interrogative constraint

maj   cɔːm   dɔː   ʔat   tu.mɔː   ləjʔ
2s   know   3s   located   where   no
'Do you know where he is?'

Another characteristic that distinguishes interrogative from non-interrogative pronominal nouns is that interrogative words often occur in the clause-initial position, as in S98(a), while non-interrogative words tend to stay in their case-marked positions, as in S98(c). While fronting of the interrogative forms is the dominant pattern, variation of this in available data, as in S98(c), suggests possible influence from Vietnamese, in which interrogative words are never fronted but stay in their original case-marked positions.

S98: Distributional differences of interrogative and indefinite pronouns

ʔa.məh   ʔi.pɛː   caː
what   3p   do
(a) 'What did you all do?'

ʔi.pɛː   caː   ʔa.məh
3p   do   what
(b) 'What did you all do?'

heː   ləjʔ   caː   ʔa.məh
1p   no   do   whatever
(c) 'We didn't eat anything.'

7.3.2.1 'Where' and 'wherever'

The Pacoh locational indefinite interrogative pronoun *tu.mɔː* 'where' can co-occur with the locative verb *ʔat* 'to be situated', a verb that requires locational complements, which in Pacoh are typically locational relator nouns (§7.5.4). In S99(a) and (b), the locational words may follow *ʔat* while the non-locational nouns in S99(c) and (d) may not.

S99: Locational nouns

dɔː ʔat   tu.mɔː
3s   located   where
(a) 'Where is he?'

dɔː ʔat daŋ   duŋ
3s   at   place   home
(b) 'He's at home.'

*dɔː ʔat   ʔm.mɔː
 3s   located   which
(c) 'Where is he?'

*dɔː ʔat   duŋ
 3s   located   home
(d) 'He's at home.'

The distribution of location pronouns is somewhat flexible; they can appear at the beginnings or the ends of clauses, as in S100(a) and (b), though not between subjects and verbs. S101 shows that the locational interrogative can also occur with stationary verbs, in contrast with the directional verbs of S101 (see §10.6 on locative verbs).

S100: Two positions of locational pronouns

maj poːk tu.mɔː
2s   go   where
(a) 'Where are you going?'

tu.mɔː maj poːk
where   2s   go
(b) 'Where are you going?'

S101: Non-direction location interrogative pronoun

tu.mɔː tʰɔj   biʔ
where   teacher   sleep
'Where are you staying, teacher?'

7.3.2.2 'Who' and 'whoever'

The human indefinite and interrogative *ʔn.naw₂* 'who' and 'whoever' carries the semantic features of humans and so can occur as the complement of person possessional relator nouns (§7.5.5). In S102, the word for 'what' is not grammatical.

S102: Human indefinite pronoun

ʔn.nɛh   ʔn.dɔː   ʔn.naw
this   poss.-of   who

(*ʔn.nɛh   ʔn.dɔː   ʔə.məh)
                        what

'Who does this belong to?'

One way to use the non-interrogative form is to emphasize the inclusion of all members of a set, as in S103.

S103: Indefinite pronoun to indicate inclusion

ləjʔ   viː   ʔn.naw   ʔən   cɔːm
no   exist whoever   that know

'There's absolutely no one that knows.'

7.3.2.3 'What', 'whatever', 'which', and 'whichever'

The general indefinite and interrogative pronouns are *ʔə.məh* 'what/whatever' and *ʔm.mɔː* 'which/whichever', both of which can be used as bare noun phrases or with other nouns.

S104: Indefinite pronominal nouns

ʔm.mɔː   maj   pləj
which   2s   buy
(a) 'Which did you buy?'

ʔə.məh   ʃaːc   maj   pləj
what   book   2s   buy
(b) 'What book did you buy?'

ʔə.məh   maj   pləj
what   2s   buy
(c) 'What did you buy?'

ʔm.mɔː   ʃaːc   maj   pləj
which   book   2s   buy
(b) 'Which book did you buy?'

The interrogative *ʔa.məh* commonly appears in the clause-initial theme position, while interrogative *ʔm.mɔː* generally stays in the case-related position with its regent noun, as in S105. In S105, the typical positions for each type are shown, but they can be reversed.

S105: Distribution of indefinite pronominal nouns

ʔa.məh   ʔiɲ   pləj
what   want   buy
(a) 'What will you buy?'

ʔiɲ   pləj   lam   ʔm.mɔː
want   buy   UNIT   which
(b) 'Which one will you buy?'

With certain verb types, such as stative verbs of sickness or pain, the question word cannot be preposed but must stay in its expected complement position.

S106: Interrogative pronoun and verb of illness

ʔa.ʔɛm   ʔŋ.koh   ʔa.ʔaj   ʔa.məh
3s-SOC   that   sick   what
'Where does it hurt?'/'What's her sickness?'

7.3.3 Personal pronouns

The basic set of personal pronouns in Pacoh is divided by number (singular, dual, and plural) and reference (first, second, and third person). This basic set is then divided into general, dative, and possessive sets by various morphological features (§3.1.3). Those three main categories are dealt with in the following subsections.

Table 40: Pacoh pronominal nouns

Number	Person	General	Dative	Possessive
Singular	first	*kɨː*	*ʔa.kɨː*	*ʔŋ.kɨː*
	second	*maj*	*ʔa.maj*	*ʔm.maj*
	third	*dɔː*	*ʔa.dɔː*	*ʔn.dɔː*
Dual-Plural	first	*ɲaŋ*	*ʔa.ɲaŋ*	*ʔɲ.ɲaŋ*
	second	*ʔi.ɲaː*	*ʔa.dɔː-ʔi.ɲaː*	*ʔn.dɔː-ʔi.ɲaː*
	third	*ʔa.ɲaː*	*ʔa.dɔː-ʔa.ɲaː*	*ʔn.dɔː-ʔa.ɲaː*
Plural	first	*hɛː*	*ʔa.hɛː*	*ʔŋ.hɛː*
	second	*ʔi.pɛː*	*ʔa.dɔː-ʔi.pɛː*	*ʔn.dɔː-ʔi.pɛː*
	third	*ʔa.pɛː /ŋaːj*	*ʔa.dɔː-ʔa.pɛː /ŋaːj*	*ʔn.dɔː-ʔa.pɛː /ŋaːj*

7.3.3.1 General pronouns

General pronouns have the least restricted usage of pronouns, occurring in most case-marked positions as subjects, direct objects, oblique objects, and possessors, as in S107 to S109.

S107: Personal pronouns as subject and prepositional complements

kɨː   poːk   toʔ   dɔː   ɟeː
1s   go   with   3s   already
'I went toward him.'

S108: Personal pronouns as subject and object

ʔi.ŋaj-koh   kɨː   tu.mɔːŋ   maj
tomorrow   1s   meet   you
'I will meet you tomorrow.'

S1091: Personal pronouns as a possessor

ʔn.nɛh   vɛ̣ːl   kɨː
this   village   1s
'This is my village.'

Pacoh pronouns do not take dependent demonstratives, though it might appear so in S110. However, the demonstrative is likely a discourse-related word that marks the pronoun as a topic in a topic-comment construction.[48]

S110: Topic-marking word

dɔː ʔn.nɛh ləjʔ ʔi.caː pɛː   ʔi.ŋaj
3s   here?   no   to eat three day
'As for that guy, he didn't eat for three days.'

Personal pronouns can take descriptive modifiers but typically in more formal registers.

S111: Pronominal noun with relator noun dependent

dɔː ʔən   ʃuk-pər.ɲaː
3s   that   prosperous
'He who is prosperous.'   (R. Watson 1980)

7.3.3.2 *Possessive pronouns*

Possessive pronoun pronominal nouns are possessive absolutes, meaning they occur as bare noun phrases and anaphorically refer to someone's possession, like English 'mine', 'hers', etc. In Pacoh, these pronouns may also indicate the location of existential impersonal verbs, as discussed towards the end of this subsection. These possessive forms, all of which have nasal-initial word shapes, are not simply combinations of the extension relator noun *ʔən* and general pronouns, though that is most likely the historical origin. They are single words, as can be seen from the phonological reduction of these presyllables as opposed to the extension relator noun, which shows phonological distinctiveness that suggests its syntactic separateness. The presyllables of the possessive pronouns are homorganic nasal syllables. Despite their possessive meanings, they cannot be modifying possessors of nouns, the task of general personal pronouns, as in S112.

S112: General versus possessive pronouns

ʃac   kɨː
book   1s
(a) 'my book'

*ʃac   ʔŋ.kɨː
 book   of-1s
(b) '*the mine book'

ʃac   ʔən kɨː
book   of   1s
(c) 'the book of mine'

In available data, Pacoh possessive pronouns most commonly occur in the predicate position, as in S113.

S113: Possessive pronoun as predicate

ʔr.vɪət ʔn.nɛh ʔih ʔm.maɟ
pen this be-not yours
'This pen is not yours.'

These pronouns can occur in case-marked positions as well, though there are limited examples in the dataset. The only way these were used in the data provided by S. Watson (1966) and ND&P (1986) was with an indirect possessive meaning. They are viewed here as dependent theme nouns of impersonal verbs.

S114: General versus possessive pronoun

kɨː vɪː praʔ
1s have money
(a) 'I have money.'

ʔŋ.kɨː vɪː praʔ
of-1s exists money
(b) 'Of that which is mine, there is money.'

7.3.3.3 Dative pronouns

Dative pronouns always follow verbs (i.e. they do not follow prepositions, and they are not fronted), though when they co-occur with direct objects, there is no specified order, as in S115(a) and (b). They are not locational and so cannot be the complements of locative verbs but only of ditransitive verbs (and various non-transitive oblique-object verbs, as discussed in various verb subsections), as in S116.

S115: Dative pronoun before and after the indirect object

ɟǫːn ʔa.kɨː ʃaːc ʔŋ.koh
give to 1s book that
(a) 'Give me that book.'

ɟǫːn ʃaːc ʔŋ.koh ʔa.kɨː
give book that to 1s
(b) 'Give that book to me.'

S116: Dative pronoun versus locational preposition

*kɨː vit peːʔ toʔ ʔa.dɔː
3s

kɨː vit peːʔ toʔ dɔː
1s toss banana to 3s
(a) 'I threw the banana at him.'

*kɨː ɟǫːn peːʔ dɔː
to-3s

kɨː ɟǫːn peːʔ ʔa.dɔː
1s give banana to-3s
(b) 'I gave him the banana.'

As dependents of non-fact VCT verbs (verbs that require subjectless lower clauses, as discussed in §11), dative pronouns appear only before the lower verb complement, as in S117. Linear precedence is strict here; the dative pronoun dependent of these VCT verbs cannot occur after the lower verb.

S117: Causative verb and dative pronoun

    kɨː pa.ŋɔːjʔ   ʔa.dɔː   ŋɔːjʔ
(*kɨː pa.ŋɔːjʔ   ŋɔːjʔ   ʔa.dɔː)
  1s   make-drink for-3s   drink
'I make him drink water.' (lit. 'I made for him to drink water')

The third person singular pronoun *ʔa.dɔː₁* has a homophonous dative relator noun *ʔa.dɔː₂* (§7.5.1), as shown in S118.

S118: Ditransitive verb and dative relator noun

ʔa.ʔiː   pləj   ʔa.dɔː₁   mu.toːj   tət
mother buy   for-3s   a-pair   sock
(a) 'The mother bought her a pair of socks.'

ʔa.ʔiː   pləj   ʔa.dɔː₂   ʔa.kaj   kan   mu.toːj   tət
mother buy   for-3s   UNIT   daughter a pair   sock
(b) 'The mother bought her daughter a pair of socks.'

7.3.4 Proper nouns: human pronouns

While human names are typically used in the third person in Pacoh,[49] they may be used with second person reference, particularly among Pacoh youth.[50] These words can be used in various contexts in which nouns with human semantic features are required, such as person conjunctions or person relator nouns (see §6.2). Proper pronominal nouns can be the modifiers of social pronouns, the latter of which provide socially conditioned respect, as in S119.

S119: Proper pronominal nouns with social pronominal nouns

naːm   ʔa.kaj   ko̜ːɲ   ʔm.pɨːt   poːn
NAME child   boy   SPMO   NAME
'Nam is the son of Mr Pon.'

7.3.5 Social pronouns

Pacoh has a class of social pronouns that are homophonous with (and hence semantically and syntactically distinct from) certain kinship and professional terms, the latter of which are common nouns.

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[49] In my original dissertation, I described Pacoh names as having variously first, second, and third person reference, as is the case in Vietnamese. In fact, while some of my personal fieldnotes contain such suggestions, Pacoh in fact uses pronouns and kin terms for such purposes. The exceptions are likely the result of language contact with Vietnamese.

[50] Richard Watson (pers. comm.)

Table 41: Pacoh term of address pronouns

Form	Social pronouns	Homophonous nouns
ʔa.caːj	'somewhat older male'	'older brother'
ʔa.ʔɛːm	'somewhat younger person'	'younger sibling'
ʔm.pɨːt	'much older male'	'uncle'
tʰəj-jaw	'teacher'	'teacher'
ʔi.taʔ	'nurse'	'nurse'
ʔa.ʔiː	'mother'	'mother'

Pacoh social pronouns differ from personal pronouns in that they express politeness by referring to the speaker, listener, and others based on gender and age. In addition, these pronouns can express second or third person. For example, a female speaking to a somewhat older male addresses herself as *ʔa.ʔɛːm* 'somewhat younger person' while addressing him as *ʔa.caːj* 'somewhat older male'. Likewise, he addresses her and refers to himself using the same terms, namely, *ʔa.ʔɛːm* for her and *ʔa.caːj* for himself. The glosses for these words are indicated by the following abbreviations: SP (social pronoun), M (male), F (female), N (neutral, either male or female), Y (younger), or O (older).

As these words are derived from nouns with human reference, such as kinship terms and professions, they still carry human attributes and distribution.[51]   In S120, the social pronoun is the complement of the person dative relator noun.

S120: Social pronominal noun as human

kɨː   jɔːn   ʔn.nɛh   ʔa.dɔː   ʔa.caːj
1s   give   this   to   SPMY
'I'm giving this to you, sir.'

Social pronominal nouns are the only pronominal nouns that can take demonstratives,[52] specifically marking third person, though it is not entirely necessary since features for person can be determined in the discourse context. Social pronominal nouns are the only pronominal nouns that are underspecified for definiteness (S121) and plurality (S122), like their kinship common noun derivational correlates. These social pronouns can serve as titles for human proper nouns.

S121: Plurality and definiteness with social pronouns

ʔa.caːj   ʔŋ.koh
SPMY   that
(a) 'he (respectful)'

pɛː   ʔa.ʔɛːm
three   SPNY
(b) 'you three young people'

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[51]   There are some occasional noted variants in story-telling where animals are personified.
[52]   Another possibility is that these are lexicalized forms formed through ordinary word-formation strategies.

ʔa.pɛː ʔa.caːj ʔŋ.koh
few   SPMY   that
(c) 'those gentlemen.'

S122: Social pronominal as a title

ʔa.caːj noː
SPMY   NAME
'Mr Nô'

As for plurality, social pronouns may be marked by person indefinite numeral nouns
(§7.4.4), as in S123(a) and (b). Thus, in fact, they constitute a special subclass of unit
nouns.

S123: Social pronoun with person numeral noun

bɨəʔ ʔa.ʔɛːm ʔŋ.koh
few   SPNY   that
(a) 'those few young people'

pɛː   ʔm.pɨːt ʔa.kiː
three   SPMO   there
(b) 'those three gentlemen'

They can serve as possessors and as complements of directional relator nouns, as in
S124.

S124: Social pronouns

kɨː pa.cɔːm kaːŋ   pa.koh ʔa.dɔː ʔa.caːj
1s   teach   language Pacoh   to   SPMY
'I'm teaching the Pacoh language to you.'

The pragmatic usage of social pronominal nouns is complex and beyond the scope of
this work. The system shares some similarities with that of Vietnamese in expressing
politeness and familiarity. However, pronouns are used perhaps as much as social
pronominal nouns in Pacoh, while in Vietnamese, pure pronouns are used in very restricted
social circumstances.[53]

7.4 Numerals and quantity nouns

Numerals and other quantity expressions are nouns as they can serve as the heads (i.e.
highest syntactic element) of noun phrases, requiring count nouns in almost all cases
(§7.2). In S125, 'three' is the head of a predicate noun phrase of existence.

S125: Definite numeral noun as predicate head

ʔat   daŋ duŋ   pɛː naʔ ʔa.ʔiː ʔa.kaj
at/in/on side home three UNIT mother children
'There are three people at home, a mother and children.'

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[53]   For a description of the Vietnamese system, see Thompson (1984–85:299–306).

Quantity expressions in general consist of definite and indefinite numbers and are thusly classified in the following subsections. Definite numbers include cardinals (S126) and ordinals, while indefinite number nouns include degree (S127), general, interrogative (S128) and person numeral nouns.

S126: Definite numeral noun

moːj	*ʔi.ŋaj*	*puəh*	*tɛː*	*ʃoŋ*	*toʔ*	*mu.cit*	*pəl.loː*
each	day	set	from	five	to	ten	tube-trap

'Each day one sets from five to ten tube traps.'

S127: Degree indefinite numeral noun

viː	*klɨŋ*	*ti.kuəj*	*ʔən*	*ləjʔ*	*hoːj*	*toːŋ*	*kaːŋ*	*pa.kọh*
exist	many	human	that	not	able	speak	language	Pacoh

'There are many people who can't speak the Pacoh language.'

S128: Interrogative numeral noun

ʔa.caːj	*boːn*	*pləj*	*li.mɔː*	*bɛː*	*ʔa.riəw*
SPMY	able	buy	how many	bottle	liquor

'How many bottles of wine were you able to buy?'

Numeral nouns, particularly indefinite numbers, can stand alone as bare noun phrases, as in S129, but are typically followed by countable nouns, as in S130.

S129: Numeral noun as a complement

kɨː	*viː*	*klɨŋ*
1s	have	many/much

'I have many/much.'

S130: Numeral noun as noun phrase head

klɨŋ	*luəjʔ*	*tər.haw*	*ti.kuəj*	*pa.kọh*
much/many	type	drug	person	Pacoh

'many kinds of Pacoh medicines'

7.4.1 Cardinal and ordinal numbers

Pacoh has a basic set of ten numerals, which serve as the phonological base forms for the numbers 11 to 99 (see §12.4).

S131: Definite numeral noun

pɛː	*ʔa.tɛh*	*ʔa.ʔɨm*	*ʔŋ.koh*
three	basket	corn	those

'those three baskets of corn'

Definite numeral nouns differ from the other numeral nouns, which are all indefinite, by their ability to be dependents of the singular distributive scope noun (§7.6), *tal* 'each', as in S132. In contrast, this scope noun cannot take indefinite numerals.

S132: Definite numeral noun as a dependent of a scope noun

tal	*pɰən*	*naʔ*	*jɰə̯n*
each	four	UNIT	Vietnamese

(*tal	*li.mɔː*	*naʔ*	*ti.kuə̯j)*
	how many		

'each of the four Vietnamese people'

Definite numeral nouns also have the capacity to be compared (e.g. 'more than three') and put in a range context (e.g. 'from two to four').

S133: Definite numeral and comparison

ti.lət	*ʃɔːŋ-cit*	*ku.mɔː*
beyond	fifty	year

'more than fifty years'

Pacoh ordinals can be indicated in two ways, either with the use of the predicate-taking relator noun *ʔən* or the ordinal marking form *tʰɨː*.[54]

S134: Ordinal numbers

ʔa.kaːj	*ʔən*	*pɛː*	*kɨː*
child	which	three	1s

(a) 'my third child'

lam	*ʔa.ciːw*	*ʔən*	*tʰɨː-pɛː*
UNIT	knife	which	third

(b) 'the third knife'

7.4.2   Degree indefinite numerals

Degree indefinite numeral nouns (*ʔeː* and *kliːŋ* 'many' and *bɨə̯ʔ* 'few') may take the intensifying adverb *liː* 'very', as in S135. They are commonly used as impersonal nominal predicates (i.e. lacking overt subjects) and often have locational topics, as in S136. Pacoh degree numeral nouns are the only numeral nouns that, in the data, freely occur as the sole heads of noun phrases (i.e. do not co-occur with unit noun dependents).

S135: Degree indefinite numeral with degree adverb

kɨː	*viː*	*bɨə̯ʔ*	*liː*	*lam*	*peːʔ*
1s	have	few	truly	UNIT	banana

'I have very few bananas.'

S136: Degree numeral noun with intensifying adverb

kəl.luŋ	*ʔm.buːt*	*ʔeː*	*liː*	*noh*	*ʔa.lɔːŋ*
inside	jungle	many	very	UNIT	tree

'In the jungle, there are many kinds of trees.'

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[54]   This form is a Vietnamese loan, *tʰɨ³⁵*, which precedes numerals and indicates they are ordinals.

7.4.3 General and person indefinite numeral nouns

The general indefinite numerals include the non-interrogative *li.mɔː* 'several' and *baːr-pɛː* 'a few'.[55] Indefinite nouns are also semantically and syntactically plural, as they can occur as subjects of reciprocal verbs. The form *ʔa.pɛː* 'a number of', which is derivationally related to the third-person plural pronoun *ʔa.pɛː* 'they,' can only take semantically human nouns, as in S137.

S137: Person and non-person numerals

ʔa.pɛː   ʔa.caːj
a few   SPMY
(a) 'a few guys'

baːr   lam   peːʔ
two   item   banana
(b) 'two bananas'

S138: Comparing person and non-person numerals

(a)   *baːr lam*   'two of them'
(b)   *baːr naʔ*   'two people'
(c)   *ʔa.pɛː naʔ*   'a few people'
(d)   **ʔa.pɛː lam*   'a few of them'

7.4.4 Interrogative numeral noun

There are three words in this category, *li.mɔː*, *ʔa.li.mɔː* and *li.mɔː-ʔeː*, all meaning 'how many/how much'.

S139: Interrogative numeral noun

ʔa.caːj   ʔn.taːŋ   li.mɔː   kən
SPMY   weigh   how many   kilogram
'How many kilos do you weigh?'

7.4.5 Numerals without countable nouns

While numeral nouns almost always co-occur with unit nouns, they are still optional in some cases, though the contexts in which this is the case is not entirely clear based on available data. A number of examples show count nouns dropped in parallel constructions, as in S139 and S140.

S140: Numeral noun with non-unit noun

duŋ   heː   viː   pɛː   lam   ti.kuəj   ʔŋ.kɔn   pɯən   ʔŋ.kan
house   our   has   three   UNIT   person   male   four   female
'Our house has three men and four women.'

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[55]   *baːr-pɛː* shares phonological material with the Pacoh numerals for 'two' and 'three,' *baːr* and *pɛː* respectively.

S141: Numeral nouns with stative verb modifiers

mat   dɔː mo̰ːj lɔːm   mo̰ːj   pluːʔ
eye   3s   one   black   one   gray
'He's got one black eye and one grey eye.'

7.5   Relator nouns of location and possession

The term 'relator noun' has been used in Southeast Asian linguistic literature to refer to what are sometimes taken for locational prepositions (see §4.4 for a discussion of the distinction).[56] In Pacoh, words in this class mark location, possession, the dative voice, instruments, and relative clauses, as illustrated in S142 to S144. See §12.6 for a list of Pacoh relator nouns.

S142: Possessive and predicate-taking relator nouns

ʔn.nɛh ʔn.dɔː   tʰɔj
this   of   teacher
(a) 'This is the teacher's.'

ti.kuəj ʔən   hoːj   liː
person   that capable   very
(b) 'people who are very capable'

S143: Locational and instrumental relator nouns

ciəm ʔn.truəj   toʔ kər.ruːŋ duŋ
raise chickens   at   beneath   house
(a) '(We) raised chickens under the hut.'

puh ʔa.bil   tək   duːj
hit   mouse   with   stick
(b) '(I) hit the mouse with a stick.'

S144: Dative relator noun

dɔː pa.cɔːm baːj   ʔa.dɔː naːm
3s   teach   lesson   to   NAME
'He taught Nam the lesson.'

7.5.1   Dative relator nouns

Pacoh has one dative relator noun, *ʔa.dɔː* 'to/for', which may be either a complement or adjunct (i.e. required or optional) depending on verb subclasses. A difference in usage is

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[56] The question of whether relator nouns are different from prepositions still carries some controversy. Nonetheless, relator nouns differ from prepositions in a handful of ways. While prepositions tend to express direction and location, relator nouns often express parts of a noun. Prepositions can be fronted in Pacoh while the distribution of relator nouns tends to be more strictly postverbal. Finally, relator nouns in some cases are genuinely historically derived from nouns and maintain some of the semantic and syntactic features of those nouns. Alves (2000) contains additional general information, and Alves (forthcoming, SEALS XIII), on the topic of Pacoh grammaticalization, explores the historical development of this class of nouns in Pacoh. See also Indrambarya (1995) on Thai and Sak-Humphry (1996) on Khmer.

for indirect objects, as in S145, versus beneficiaries or recipients of actions in a general sense, as in S146. In S145 the relator noun is a complement of the ditransitive verb 'to give'.

S145: Dative relator noun

ŋaːj   jɔːn   pi.neːʔ   ʔa.dɔː   ku.mɔːr
3s   give   gift   to   girl
'They give gifts to the girls.'

S146: Beneficiary dative relator noun

ʃiŋ   ʔn.nɛh   taʔ   ʔa.dɔː   ʔa.bɪl
trap   this   make   for   mouse
'This trap is made for mice.'

7.5.2 *Predicate-taking relator nouns*

The only Pacoh predicate-taking relator noun *ʔən* is similar to a relative pronoun in function since it is followed by a predicate, creating a modifying clause (see also §7.5.5). The time relator nouns *ʔn.dɔŋ* and *hoːj* 'when/while' (the latter, a Vietnamese loanword, *hồi*) also take following clauses, which are sometimes non-finite verbs with the /ʔi-/ prefix, as in S147(c).

S147: Predicate-taking relator nouns

ti.kuəj   ʔən   hoːj   liː
people   that   skilled   very
(a) 'the very skilled people.'

ŋaːj   ʔən   la.ləw
3p   that   male
(b) 'those fellows' (Lit. 'they who are male')'

ʔn.dɔŋ   ʔi.taʔ   tu.miəŋ   kiː   hoːm
when   to-make crossbow 1s   watch
(c) 'When they made crossbows, I watched.'

The general predicate-taking relator is unrestricted in the kinds of noun and verb dependents it can take. In S147(a), the relator noun takes a stative verb; in S147(b), it takes a predicate noun; in S148(a), the relator nouns takes an active/non-stative verb; and in S148(b) below, a predicate numeral noun.

S148: General relator noun and with an ordinal

ʔa.cɔː   ʔən   poːk   ʔa.ɲaːʔ   ʔŋ.kiː
dog   that   go   quickly   of-1s
(a) 'The dog that goes fast is mine.'

bɛː   ʔa.riəw   ʔən   baːr
bottle   liquor   that   two
(b) 'the second bottle of wine'

Another word used to form ordinals is *tʰɨː*, a Vietnamese loanword (*thứ*), which is very restricted in that it only co-occurs with numeral nouns.

S149: Ordinal with relator and numeral

pɛː   ʔa.riəw   tʰɨː   baːr   ɲɨəm   ʔi.ŋɔːjʔ
bottle   wine   (-th)   two   tasty   to drink
'The second bottle of wine was tasty.'

7.5.3   Instrumental relator nouns

Three instrumental relator nouns occur in the data: *daŋ*, *tək*, and *baŋ*, all of which mean 'with/by means of'. The first word, which is related to the locational relator noun *daŋ* 'place', is the most commonly used of the three in the data, while the other two forms are loanwords (*tək* is from Bru in Quảng Trị province, and *baŋ* is from Vietnamese *bằng*).

S150: Instrumental relator noun

kɨə   daŋ   ka.nɨə
saw   by   saw
(a) 'to saw with a saw'

puh   ʔa.bil   tək   duːj
hit   mouse   by   stick
(b) 'Hit the mouse with a stick.'

The word *baŋ* occurs in available data as the complement of subjectless verbs that have the [ʔi-] presyllable (§3.2.2).

S151: Instrumental relator noun with non-finite verb

kɨp   ʔi.taʔ   baŋ   bul
kup trap   to make   by   stone
'As for the *kup* trap, it is made of stone.'

These words can serve as predicate heads, as in S152, in which the predicate is marked off by the clause-linking sentence particle *kiː*.

S152: Instrumental relator noun referring to material

kəl.laʔ   kiː   baŋ   ʔa.lɔːŋ
prop   LINK   by   wood
'As for the prop, it's of wood.'

7.5.4   Locational relator nouns

Locational relator nouns (several of which are listed in §12.6) share the capacity to occur as the complements of the locative verb *ʔat* 'to be situated at' or other locative verbs (§10.6). These locational relator nouns then take non-locational nouns as complements. The most general locational relator noun *daŋ* 'at the place/side of' occurs most often in the data, perhaps due to its minimally restrictive semantic features.

S153: Locative relator noun

ta.lih   Ɂŋ.koh   Ɂm.piən   ki.baːn
put   that   top   table
(a) 'Put that on the table.'

kɨː   Ɂat   daŋ   miːɁ
1s   at   place of   America
(b) 'I live in America.'

In the topic-comment constructions, these locational nouns are commonly the topics of impersonal verbs or existential nominal predicates, as in S153.

S154: Relator noun as a topic

Ɂi.dɨːp   klaːŋ   pɛː   Ɂa.nuːh
underneath   *klang*-layer   three   *anuh* layer
'Under the *klang* floor layer are three *anuh* floor layers.'

7.5.5 Possessional relator nouns

Pacoh possessional relator nouns include two words differentiated by their complements, whether human or non-human. The form *Ɂn.dɔː*, historically derived from [*Ɂən*] plus the third-person singular pronoun [*dɔː*], takes only noun complements with human semantic features. The other form is the non-person general possessional relator noun *Ɂən*, which takes any noun type (see also §7.5.2).

S155: Specific possessional relator noun

sɔːj   Ɂən   Ɂa.dḭəjʰ
tail   of   monkey
(a) 'the tail of a monkey'

duŋ   Ɂn.dɔː   Ɂa.caːj
house   of   SPMY
(b) his house'

7.6 Scope nouns

Pacoh scope nouns (listed in §12.8) refer semantically to the totality or the individual distribution of their dependents. Pacoh scope nouns appear at the leftmost position in all multiple-word noun phrases, as in S156 and S157, though some of them may also appear as bare noun phrases.

S156: Totality scope nouns

ŋɛɁ   pɛː   naɁ   cɔːm   ɟəː
all   three   UNIT   know   already
(a) 'All three of those people know already.'

ŋɛɁ   Ɂa.pɛː   ti.kuəj   pa.kọh
all   3p   UNIT   Pacoh
(b) 'All of them are Pacoh people.'

S157: Distributive scope nouns

(a) *tal pɥən lam peʔ*   (each-four-unit-banana)   'each of the four bananas'
(b) *tal naʔ jɥən*   (each-Vietnamese-person)   'each Vietnamese person'
(c) *kiːp ʔl.lam ʔa.lik*   (any-unit-pig)   'every pig'
(d) *mɔːj ʔn.naʔ*   (every person)   'every person'

In S157(a), the scope noun refers to the totality of a single unit. Totality scope nouns can occur as a bare noun in a case-marked position, as in S158(b).

S1582: Totality scope noun and scope noun as a bare noun phrase

ʔa.ʔaj ŋɛʔ   caʔ
hurt   whole   body
(a) 'My whole body hurts.'

ŋɛʔ poːk jɔː
all   go   already
(b) 'All (of them) went.'

The word *tal* 'each' is the only distributive scope noun that does not require a singular dependent. It has no constraint on plurality of its dependent and can take either singular and plural noun dependents, as in S159(a) and (b). In the data, there are no examples of this noun as the single element in a noun phrase.

S159: Poly-distributive scope noun

tal   pɥən   lam   ʔa.cɔː
each   four   UNIT   dog
(a) 'each of the four dogs'

tal   ʔn.naʔ
each   one-UNIT
(b) 'each person'

Mono-distributive scope nouns consist of the three words *tɔːʃ*, *tal* and *mɔːj*, 'every', which co-occur with singular numerals and unit nouns. The distributive scope nouns *tɔːʃ* and *mɔːj* (likely derived from the homophonous word for 'one'), which both mean 'every', refer to each of their dependents, as in S160, while *kiːp* 'any' refers to an indefinite range of members in a set, as in S161. There are no examples of these nouns as bare noun phrases.

S160: Mono-distributive scope nouns ('every')

tɔːʃ   ʔn.naʔ   ʃiər   ci.caː
every   one-UNIT   descend   eat
(a) 'Every person sat and ate.'

mɔːj   kən.tiʔ   tʰɔj.jawʔ   pa.ʃɔːl   ʔa.ɲaː
every   time   teacher   call   we
(b) 'Every time, the teacher calls us.'

S161: Mono-distributive scope noun ('any')

kiːp   lam   ti.riək
any   UNIT   buffalo
'any buffalo'

8 *Prepositions*

Prepositions in Pacoh serve a number of functions, including marking comitative, comparative, dative, equative, and locational constructions. Some of these semantico-syntactic categories are also expressed by the use of relator nouns (§7.5, and also see §4.4 for a discussion of the distinctions between the lexical categories).

8.1 Comitative preposition

The only comitative preposition in Pacoh, *ʔa.lɨːŋ* 'with', typically adds an optional subject. The comitative preposition is semantically similar to coordinative conjunctions, but comitative prepositions differ from conjunctions in taking only one complement, while coordinative conjunctions can connect more than two. *ʔa.lɨːŋ* may occur either before or after the verb phrase.

S162: Comitative preposition before verb

kɨː ʔa.lɨŋ kɛː   ŋɔːjʔ daːk
1s   with   friend drink water
(a) 'I drank water with my friend.'

kɨː ləjʔ dah poːk ʔa.lɨŋ ʔa.caːj
1s   no   dare go   with   SPMY
(b) 'I don't dare to go with you.'

As adjuncts, comitative prepositional phrases tend not to separate verbs from their complements. In S163, *ʔa.lɨːŋ* appears in its natural position, after the directional prepositional phrase complement.

S163: Comitative preposition as an adjunct

dɔː poːk mɔt duŋ   ʔa.lɨːŋ kɨː
3s   go to into house with   1s
'He went into the house with me.'

8.2 Comparative prepositions

Pacoh comparative prepositions *ti.lət* 'more than', *hɔːn* 'more than' (a Vietnamese loanword), and *lɨː* 'equal to' form prepositional constructions after degree stative verbs (§10.1.4).

S164: Comparative prepositions and degree stative verbs

lam   ʔn.nɛh ʔɔ: ti.lət   dɔ: ʔn.tih
UNIT this   good   more-than 3s   that
(a) 'This one is better than that one.'

dɔ: ʔa.jo̯ŋ li: ʔa.po:m
3s   tall   equal to   chest
(b) 'He is as tall as one's chest.'

When negation is used, the negation word precedes the stative verb and not the preposition, as in S165.

S165: Negation of stative verb in comparative construction

lam   ʔn.nɛh ləjʔ   ʔɔ: ti.lət   dɔ: ʔn.tih
UNIT this   no   good   more-than 3s   that
'This one is not better than that one.'

8.3 Dative prepositions

Pacoh dative prepositions *jo̯:n* 'to/for' and *ʔaliŋ* 'to' mark the recipients of actions, namely, dative objects. The semantic range of dative prepositions includes goals, as in S166, as well as beneficiaries, as in S167.

S166: Dative preposition with goal

dɔ: ləjʔ to:ŋ   ʔa.liŋ kɨ: mo̯:j kəl.lɔ:ŋ ta:j ʔm.mɔ:
3s   not   speak to   1s   one   grain   rice   whichever
'He didn't say one word to me. (He didn't speak even a grain of rice to me)'

S167: Dative preposition with beneficiary

kɨ: ləjʔ dah   pləj peʔ   jo̯:n ʔa.ca:j ʔŋ.koh
1s   not   dare buy   banana   for   SPMY   that
'I don't dare buy bananas for him.'

The preposition in S168 semantically refers to the beneficiary of an action. The noun complement of the beneficiary preposition is not receiving the rice, but rather is benefiting from the assistance of measuring the rice.

S168: Plain goal preposition

kɨ: po:k toʔ cə:ʔ   val   ʔa.ʃəʔ jo̯:n ʔa.ʔɛ:m
1s   go   to   market measure rice   for   SPNY
'I'm going to the market to measure the rice for you.'

8.4 Equative prepositions

The single Pacoh equative preposition, *ʔa.rəʔ* 'like/as', semantically associates the manner of the action of the main verb with its noun complement (e.g. 'Don't do it *like* that'). It co-occurs only with non-stative verbs and is thus considered syntactically as well as semantically distinct from comparative prepositions. This form is related to the homophonous oblique-object verb form *ʔa.rəʔ* 'to be like' (§10.4.3.1).

S169: Associative goal preposition

nam ʔa.caːj taʔ viək ʔa.rəʔ ʔŋ.koh laː ʔa.lɛːʔ liː
if SPMY do work as that LINK tired very
'If you work like that, then you'll be tired.'

8.5 Locational prepositions

Pacoh locational prepositions (*ti.lət* 'past', *tɛː* 'from', *toʔ* 'to/at', *ʔat* 'at', *mɔːt* 'into') indicate either stationary or directional meanings.[57] Stationary location prepositions express the location of an entire event, while the directional location prepositions are complements of verbs expressing movement. S170 contains an example of both kinds, since the form *toʔ* expresses both 'at' and 'to'.

S170: Stationary and non-stationary locational prepositions

toʔ ha.noːj kiː poːk toʔ duŋ ʔa.caːj ʔŋ.koh
at Hanoi 1s go to house SPMY that
'In Hanoi, I went to his house.'

Directional prepositions co-occur with verbs of movement, and they typically follow those verbs, as in S171, though they can precede them.

S171: Movement verb and non-stationary preposition

pɛː lam ʔa.ce̞ʔ par ti.lət ve̞ːl
three UNIT bird fly over village
(a) 'Three birds flew over the village.'

dɔː luh tɛː kəl.luŋ duŋ
3s run from inside house
(b) 'He ran from inside the house.'

There are two types of stationary prepositions, namely the locative preposition *ʔat*, which requires additional locational prepositions or relator nouns, and the non-locative types, *tɛː* (homophonous with 'from'), *tiː*, *toʔ* (homophonous with 'arrive' and 'to'), and *tuː*,[58] all of which mean 'at' and take non-locational noun complements.

S172: Stationary prepositions

kiː ʔat tɛː miːʔ
1s be at America
N V P N
(a) 'I'm in America.'

---

[57] Corresponding homophonous verbs exist for some of these. The preposition *ti.lət* comes from the homophonous verb meaning 'to pass', *toʔ* from 'arrive', *ʔat* from 'to reside', and *mɔːt* from 'enter'. This is a typical Pan-Asiatic form of grammaticalization (see Matisoff 1991).

[58] These four forms all express the same meaning and show no distributional differences in available data. The preposition *toʔ* is derived from the verb meaning 'arrive,' *tɛː* is most likely a Lao loanword, while the other two similar-sounding words are of unclear origins, though still possibly derived from the other words.

> *kɨː tu.mɔ̰ŋ ʔat daŋ   ʔŋ.koh*
> 1s   live   at   place there
> N   V   P   N   N
> (b) 'I am living there.'

The locative *ʔat* can also take locational prepositions as complements, as in S173, but those preposition complements are themselves non-locative and do not take locational words as dependents, as in S173(c).

S173: Locative versus non-locative locational prepositions

(a)	*ʔat to̰ʔ duŋ*	(at-at-house)	'at the house'
(b)	*ʔat tḭː duŋ*	(at-at-house)	'at the house'
(c)	**to̰ʔ ʔat duŋ*	(at-at-house)	'at the house'
(d)	**tḭ tɛ duŋ*	(at-at-house)	'at the house'

A typical use for Pacoh locational prepositions is to mark the location of impersonal verbs, as in S174.

S174: Locational preposition with impersonal verb

> *to̰ʔ kruəŋ-ku.t̪iə̰k hɛː viː   ti.kuəj pa.kọh ka.tuː vən-kiəw*
> at   region   1p   exist people   Pacoh   Katu   Bru Van Kieu
> 'In our region, there are Pacoh, Katu and Bru Van Kieu.'

Differentiating stationary and directional prepositions provides an explanation for the distributional differences of homophonous prepositional forms and verbs. In S175, whereas *ti.lət* can follow only 'run', the phonological form *to̰ʔ* can follow both 'run' and 'stay at', showing that this phonological form represents two words, *to̰ʔ*, a stationary preposition, and *to̰ʔ*, a directional preposition.

S175: Movement verbs and direction prepositions

(a)	*dɔː la.luh ti.lət duŋ*	(3s-run-past-house)	'He ran past the house.'
(c)	*dɔː ʔat to̰ʔ duŋ*	(3s-situated-at-home)	'He stays at home.'
(d)	**dɔː ʔat ti.lət duŋ*	(3s-situated-past-home)	'*He stays past the house.'

Time succession can be expressed using the time preposition *ɟeː / ɟəː* 'after' (related to the homophonous aspectual particle *ɟeː / ɟəː* 'already').

S176: Use of the completive time preposition

> *ɟeː   ʔŋ.koh   ɟiə̰l ra̰ːw   ʔɔː   cɛh*
> after that   take to clean good clean
> 'After that get water and wash it till it's clean.'   (Cubuat & Watson 1976)

8.6 VCT prepositions

VCT (verb-complement-taking) prepositions, like VCT verbs (§11), take predicates as complements, including both noun and verb predicates. This class of prepositions consists of purpose and temporal prepositions.

8.6.1 *Temporal prepositions*

Temporal prepositions (*toʔ* 'when' and 'until', *tɛː* 'from', *ɟeː* 'after', *ɟɔː* 'after', *kuə* 'after') in Pacoh indicate the completion or non-completion of their predicate noun or verb complements in relation to their clausal predicates. Existing data show prepositional phrases either in sentence-initial or sentence-final position.

Completive time predicate-taking prepositions include both prepositions that take clauses with subjects, as in S177, and those that take clauses without subjects, as in S178. The form *toʔ* functions to indicate a place in time or the goal of time, as in S179.

S177: Completed time VCT preposition with finite verb complement

ɟɔː   dɔː ki.kər   ʔaːn vɔːt   noh
after 3s afraid   3s   jump   here
'After it's startled, it jumps over this.'

S178: Completed time VCT preposition with non-finite verb complement

ɟɔː   ʔi.hɔːk   dɔː rɔːm ʔa.ʔiː   cɟəm   ʔa.liːk
after to study 3s   help father   tend to pig
'After studying, he helped his father tend to the pigs.'

S179: Goal and non-goal time prepositions

toʔ   ku.mɔː tu.pat tuəjʔ naːm   poːk hɔːk
when   year   seven age   Nam   go   study
(a) 'At the age of seven, Nam was able to go to school.'

kɨː   hɔːk   toʔ₅ cuːɲət
1s   study until Sunday
(b) 'I will study until Sunday.'

In available data, a few nouns recurred as predicate complements of these time prepositions, including *ʔŋ.koh* 'that', *pruəʔ* 'things to do/work', and time nouns (e.g. day, year, etc.). Unlike the complements of locational prepositions, these nouns are events in time, and so they can, in terms of time, be reached and co-occur with or be followed by other events.

S180: Time predicate-taking preposition with predicate noun

ɟɔː   pruəʔ   baː   la.luh toʔ duŋ-ʔi.teʔ
after matters NAME   run   to clinic
'After all was done, Ba ran to the clinic.'

8.6.2 *Purpose prepositions*

Purpose prepositions are not commonly used in Pacoh speech. More typically, sequences of verbs are used to express intention, as in S181.

S181: Intention expressed in a verb series

pɛːh daːʔ   ŋɔjʔ
get   water drink
(a) 'Get some water to drink.'

> *kɨ: taʔ   siŋ   ʔa.cuət   ʔa.bɨl*
> 1s   make   trap   to trap   mouse
> (b) 'I made a trap to trap mice.'

Intention predicate-taking prepositions. *jɔ:n* and *dɔ:ʔ* 'in order to',[59] are adjuncts used to express the purpose of an action. Their predicate complements may or may not contain subjects. The use of the intent preposition *jɔ:n* is much more common than *dɔ:ʔ*, the latter of which could be a recent Vietnamese calque.[60] Whereas verbs for 'to give' are common sources of intention prepositions in general among other Southeast Asian languages,[61] Pacoh has purpose meaning counterparts for the Vietnamese words for both 'to give' and 'to put', suggesting at least the possibility of language contact and influence.

Typically, when an upper clause has the same subject as a lower clause, the lower clause does not contain that noun. However, as in S182(a), it is possible to have an overt subject in the lower clause.

S182: VCT purpose prepositions

> *kɨ: taʔ   jɔ:n   kɨ: bo:n   ca:*
> 1s   work   so to   1s   able   eat
> (a) 'I work so that I can eat.'

> *kɨ: hɔ:k   ka:ŋ-pa.kɔh   jɔn   bu:j*
> 1s   study   Pacoh language   for   pleased
> (b) 'I study Pacoh in order to have fun.'

Subjectless [ʔi-] verbs can also be the complements of these VCT prepositions, as in S183.

S183: VCT preposition with non-finite [ʔi-] verb

> *kɨ: ta.lah   ʔn.truəj   ʔa.li:k   jɔ:n   ʔi.ca:-ʔi.ca:*
> 1s   let out   chicken   pig   for   to eat
> 'I let the chickens and pigs out to eat.'

Purpose prepositions are differentiated from their homophonous verb counterparts by the types of noun complements they take. In S184, the purpose preposition is not a verb taking the first person pronoun as an 'object'. The upper verb takes the goal of the action, as the [ʔa-] pronoun indicates, so the second pronoun must be the subject of the lower verb, not the complement of the intent preposition.

S184: Intent preposition versus a verb

> *vit   ku.laj   ʔn.tih   ʔa.kɨ: jɔ:n   kɨ: ca:*
> throw   fruit   that   to-1s   so to   1s   eat
> 'Throw that fruit to me for me to eat.'

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[59] These prepositions are homophonous with the verbs *jɔ:n* 'to give' and *dɔ:ʔ* 'to put'.

[60] Vietnamese *để* represents both the word meaning 'to put' and the word meaning 'in order to', both sharing distributional patterns with *jɔ:n* in Pacoh.

[61] Clark (1989) discusses this derivational pattern among Southeast Asian languages.

9   *Sentence particles*

Sentence particles in Pacoh either lie in sentence-final position, such as aspect, interrogative, or mood particles, or have other restricted positions, such as interclausal positions, though both types take entire clauses as their semantic scope. Sentence particles differ from adverbs in that while adverbs modify verbs semantically in terms of manner and aspect, sentence particles tend to indicate mood or inquiry. In addition, other sentence particles mark condition, cause and effect, topic and comment, among other interclausal relationships.

9.1   Aspect sentence particles (statements and questions)

Pacoh aspect sentence particles mark completion or inquire about completion of an action or state. The two phonetically similar aspectual sentence particles, *jeː* and *jɔː*, 'already', which mark the completion of an action or condition, occur without apparent restrictions on the co-occurrence of verb subtypes. In S185(a), a basic verb appears, while in S185(b) and (c), there are co-occurring progressive and negation preverbs.

> **S185:   Aspectual sentence particles as dependents of different verb subcategories**
>
> ʔa.pɛː   poːk   jɔː
> 3p   go   already
> (a) 'They've already left.'
>
> ʔa.pɛː   ʔat   taʔ   jɔː
> 3s   PROG   do   already
> (b) 'They're working already.'
>
> ʔa.pɛː   joːh   poːk   jɔː
> 3p   not yet go   already
> (c) 'They've not yet gone.'

The single aspect interrogative sentence particle *joːh* is used to ask whether or not an action has been completed. The responses consist of the verb in question plus an aspectual *jeː* to indicate completion, as in S186(b), or the homophonous auxiliary verb *joːh* 'not yet' to indicate lack of completion, as in S186(c).

S186: Aspect interrogative sentence particle

ʔa.lɛːʔ   joːh₂
tired   yet
(a) 'Are you tired yet?'

ʔa.lɛːʔ   jeː
tired   already
(b) 'I am.'

joːh₁   ʔa.lɛːʔ
not yet   tired
(c) 'Not yet.'

9.2   Interrogative sentence particle

Interrogative sentence particles are used to elicit affirmative-negative answers. They can occur in sentences with a rising interrogative intonational pattern. Both primary interrogative sentence particles have negation predicate-taking verb counterparts that can be used in responses.

S187: Interrogative intonation

liː   ləjʔ
correct   no?
(a) 'Is that right?'

ləjʔ   liː
no   correct
(b) 'No, it's not.'

The simple interrogative sentence particles *ləjʔ₂* and *bɨʃ* are used to elicit affirmative-negative answers. They occur with both nominal and verbal predicate regents. The answer is typically the head verb alone, as in S188(b).

S188: Simple interrogative sentence particle

joːl   dǫːj   ləjʔ
still-exist   cooked-rice   no?
(a) 'Is there still some rice left?'

joːl
still-exist
(b) 'Yes, there is.'

This subcategory also co-occurs with predicate noun regents.

S189: Predicate noun with sentence particle

ʔm.par   ʔn.nɛh   laː   ʔn.dɔː   tʰəj   ʔŋ.koh   ləjʔ
thing   this   be   of:3s   teacher   that   no?
'Is this that teacher's (possession)?'

The compound form *ʔa.lɨŋ-ləjʔ* 'or not' occurs in sentence-final position in the data. The form *ʔa.lɨŋ* is a conjunction meaning 'or'.

S190: 'Or not' sentence particle

ʔm.par ʔn.nɛh ʔa.caːj liː ʔa.liŋ-ləjʔ
thing this SPMY correct or not
'Is this yours?'

9.3 Clause-linking sentence particles

Sequences of clauses expressing cause and effect, condition and result, and chronological sequencing do not require overt lexical marking but rather may occur alone with simple juxtaposition of clauses, as in S191.

S191: Time versus condition

ʃjəŋ taʔ poh kɨə kɨː poːk ka.tik kɨə
wind cause open door 1s go close door
'The wind made the door open, (so) I went to close it.'

While such sentences are common, sentence particles, which clearly express intended clausal relationships, are also used. Clause-linking sentence particles[62] precede predicates and are syntactically bound to those predicates. Those clauses in turn are syntactically bound to other clauses, in which case they serve as dependents as in S192(a), or they may stand as root predicates bound semantically to a broader discourse context, as in S192(b).

S192: Clause-linking prepositions as dependents

dɔː toːŋ koh kɨː kəm.maŋ
3s talk so 1s listen
(a) 'He talked, so I listened.'

koh kɨː kəm.maŋ
so 1s listen
(b) 'So I listened.'

Clause-linking sentence particles have a range of semantic qualities and functions. They express cause (*viː* or *cɔː* 'because'),[63] result (*koh* 'thus'), and condition (*nam* 'if' and *ʔa.biːʃ* 'otherwise') while linking two predicates, as in the examples in S193(a) to S193(d).

S193: Clause-linking predicate-taking prepositions

viː ʔŋ.koh kɨː poːk
have that 1s go
(a) 'Because of that, I went.'

dɔː poːk koh kɨː dəːj poːk
3s go thus 1s too go
(b) 'He went, so I went too.'

---

[62] In Alves (2000), these words were considered to be predicate-taking (requiring predicate complements) prepositions.

[63] This form at first sight might appear to be a Vietnamese loanword, as in *vì* 'because (which itself is possibly a nativized Sino-Vietnamese form) though Pacoh has a homophonous form *viː* 'to have/exist.' Thus, Pacoh *viː* 'because' may also be the result of the grammaticalization of *viː* 'have/exist'.

nam   kɨː poːk   dɔː   ləjʔ poːk
if   1s   go   3s   no   go
(c) 'If I go, he won't go.'

maj   poːk ʔa.bɨːʃ   kɨː   ləjʔ poːk
2s   go   otherwise 1s   no   go
(d) 'Go, otherwise I won't.'

These sentence particles have general clause-linking functions, but often they are not needed to link sentences in Pacoh. Sentences like S194, which has no clause-linking sentence particle, are generally pronounced without intonational pauses.

S194: Predicate-taking verb with result complement

ʔn.truəj par jeː   kɨː ləjʔ boːn kɔːp   dɔː
chicken   fly already 1s   no   able catch 3s
'The chicken flew away (so) I couldn't catch it.'

The question work *vɨː-ʔi.mɔː* 'why' is here considered a sentence particle based on its distributional properties and its semantic scope.

S195: Interrogative clause-linking sentence particle

vɨː-ʔi.mɔː maj   ʔa.ŋoː kɨː
why   2s   rest   thus
'Why are you resting?'

Condition may be overtly expressed with either the word *nam* or *lah*. In available data, conditional clauses occur before the regent, as in S196, but they occur after as well, as in S197.

S196: 'If' before the regent

nam   pʉən naʔ ti.kuəj ʔi.taʔ   pɛː kər.lɔːh
if   four UNIT person   to make   three floor layer
'If there are four people, they can make three *karloh* floor layer sections.'

S197: 'If' after the regent

ʔi.taʔ   pɛː kər.lɔːh   nam   pʉən naʔ ti.kuəj
to make   three floor layer if   four UNIT person
'Three *karloh* can be made, if there are four people.'

In conditional constructions, the main verb may or may not co-occur with a 'thus' general predicate-taking sentence particle, as in S198.

S198: 'If' with and without 'thus'

nam   kəl.laʔ liː   luh
if   scared   very run
(a) 'If he's very scared he'll run away.'

nam   kəl.laʔ liː   koh   luh
if   scared   very thus run
(b) 'If he's very scared, he'll run away.'

Further data is needed to better understand the function of sentence particles in conditional and chronological relationships, which overlap semantically.

9.4 Comment sentence particles

Comment sentence particles serve as links in topic-comment constructions in which the initial element is highlighted as a theme, as in S199. The possible semantic relations that may obtain between the two connected elements are numerous, and may semantically highlight or simply propose semantic notions such as subjects, objects, time, location, cause, and condition (see §4.2 for additional examples).

> **S199: Comment sentence particle with subject theme**
>
> *ʔa.dɨəʃ   laː   ləjʔ hoːj dɔːʔ   ʃɔːʔ   maː   dɔːʔ   pa.ʃọːm*
> monkey LINK   no   able grow hair   but   grow   fur
> 'As for monkeys, they can't grow human hair but rather grow fur.'

There are four words in this class: *kiː, koh, maː* and *laː.* While all of these words may be followed by verbs, the sentence particle *laː* may also take nouns as complements. More than one noun can occur as the topic, as in S200.

> **S200: Comment sentence particle with object theme**
>
> *kəl.lɔː   ʃiŋ   kiː   ʔi.cɔːm taʔ*
> trap   trap LINK   to know make
> 'As for the *kallo* and *sing* traps, I'm able to make them.'

Theme-marked nouns are syntactically distinct (though semantically/logically related) from complements of verbs in the comment portion of a sentence. Thus, a sentence can have both a noun as a topic and a semantically corresponding subject in the comment clause, as in S201.

> **S201: Semantically linked topic and subject**
>
> *ʔa.bil   kiː   ʔan mọt   toʔ noh*
> mouse   LINK   3s   enter to   here
> 'As for the mouse, it goes in here.'

While comment sentence particles are common, a topic can appear in the sentence initial position without the sentence particle, as in S202, though topics still may be highlighted by an intonational pause.

> **S202: Theme without comment sentence particle**
>
> *ʔa.ʔeːm   ʔa.cɔː kap   ɟeː*
> 3s (younger) dog   bite   already
> 'It was he who the dog bit.'

The comment sentence particle *laː* is also used to link nouns in copula-like constructions since they connect topic nouns with predicate nouns in equational constructions.[64] Noun predicates without lexical marking are prevalent in Pacoh, so *laː,* which is optional and

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[64] This may be in part due to the original function of this Vietnamese loanword, *là*, which is to link two nouns in an equational construction, though it is also used in Vietnamese in more typical topic-comment constructions.

parallel in distribution to other sentence particles, does not have verb status. Moreover, the form *laː* is not considered a verb since it cannot be negated.[65] Such constructions function not only in equational construction but in existential ones as well, as in S203.

S203: Locational topic and existential comment

ŋɛʔ duŋ-vẹːl hɛː laː   ti.kuəj pa.kọh
all   village   1p   LINK   people   Pacoh
'Throughout our whole village, there are Pacoh.'

Theme-marked nouns appear either with or without comment predicate-taking sentence particles, as in S204(a) and (b).

S204: Equational construction with and without sentence particle

ʔn.nɛh   ʔŋ.kɨː
this   mine
(a) 'This is mine.'

ʔn.nɛh   laː   ʔŋ.kɨː
this   (link)   mine
(b) 'As for this, it's mine.'

9.5   Imperative sentence particle

Urging another person can be done with a sentence-final particle *ʔaw*, as in S205. Urging can also be expressed with *həː* and *hɨː*.

S205: Imperative sentence particle and interrogative noun

pləj   ʔa.məh   ʔaw
buy   something   IMP
(a) 'Buy something.'

kɨː   pa.piː   jọːn   ʔa.maj   kam.maŋ   ʔaw
1s   speak   for   to-2s   listen   IMP
(b) 'When I talk to you, listen.'

9.6   Mood sentence particle

The mood sentence particles function to express emphasis or to lighten the sentence. Words such as *bəː*, *ʔən*, *həː* and *hɨː* and provide mild emphasis.

S206: Emphatic mood sentence particles

dọːj   ʔn.nɛh   ɉiəm   lɨː   həː
rice   this   tasty   very   EMPH
(a) 'Boy, this rice is good.'

lɨː   hɨː
correct   EMPH
(b) 'You're right, alright!'

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[65]   This is in contrast with Vietnamese *là*, which can be negated by *không phải* in equational constructions. Negation of nouns in Pacoh is accomplished by the use of the negation verb *ʔih* (see §11.6).

10 *Basic verbs*

Verbs in this grammar are divided primarily by distribution and secondarily by morphosyntactic and semantic properties. The primary division in this work is between verbs that take only nouns as complements and those that require verbs as complements (what are called verb-complement-taking verbs or 'VCT' verbs, dealt with in Chapter 11). The primary categories include intransitive, transitive, and ditransitive verbs as well as impersonal verbs (i.e. true subjectless verbs), stative verbs, locative verbs, mode verbs, oblique-object verbs, and various combinations of these primary verb subtypes.

In many cases, homophonous forms occur across subgroups, but as much as they maintain distinctions in semantic and syntactic properties, they are treated as distinct words. A lack of a complete paradigm further supports the idea that these are held in the mental lexicon as distinct words rather than classes of similarly derived word classes that could be accounted for simply by derivational or analogical rules.

10.1 Intransitive verbs

Intransitive verbs in Pacoh cannot take object complements. They are further divided into four subcategories: general, inanimate-subject (middle voice), reciprocal, and stative intransitive verbs.

10.1.1 General intransitive verbs

Pacoh general simple intransitive verbs encompass a wide range of semantic fields. The general intransitive verb subcategory is the least marked category and consists of the largest number of intransitive verbs. While these sentences often take subjects, subjects may be omitted in various discourse contexts

S207: Simple intransitive verbs

naːm   ləjʔ   ŋoː
NAME   no   rest
(a) 'Nam isn't resting.'

taːɲ   ʔa.kjər
weave   to thickness
(b) 'Weave it thick.'

ʔa.kəp   toːŋ   ŋən   liː
don't   speak loud very
(c) 'Don't speak loudly.'

10.1.2 *Middle voice: inanimate-subject intransitive verbs*

In contrast with general intransitive verbs (such as *ta.ɟiŋ* 'stand', *ŋoː* 'rest', *biʔ* 'sleep') which generally have animate subjects, certain verbs (such as *ʃɨp* 'to wear (on any body portion)', *truː* 'to wear (on the upper body)', *viət* 'to write') take inanimate subjects that are semantically the recipients of the action, as in S208 (cf. English 'This car drives well'). As there is no overt marking of the passive (morphological, verbal, or otherwise) in these instances, they are likely examples of middle voice constructions.[66]

S208: Middle voice verb

siŋ   ʔn.nɛh taʔ   cuət   ʔa.bil
trap this   make catch mice
(a) 'This sing trap is made to catch mice.'

kəm.pɔːŋ ʔn.nɛh sər   ʔa.ʔɔː
ladder   this   climb good
(b) 'This ladder is easily climbed.'

Inanimate-subject   intransitive   verbs   generally   have   homophonous   transitive counterparts. Such verbs often take general manner adverbs, as in S209(a), though some can take resultative adverbs as well, as in S208(b) and S209(b).

S209: Middle voice verbs with adverbials

ʔaːw   ʔŋ.koh   ʃɨːp   pɟəjʔ
shirt   that   wear suitable
(a) 'That shirt fits (you) well.'

peːʔ   ʔn.nɛh caː   ʔa.ɟiəm
banana this   eat   tasty
(b) 'This banana tastes good.'

Another subclass of verbs in this category is verbs that have the [ʔi-] prefix to indicate that an overt subject is not used.

S210: Middle verbs with the [ʔi-] prefix

kup   ʔi.taʔ   baŋ   bul
trap   one-make of   stone
(a) 'The *kup* trap is made of stone.'

ʔŋ.kar   ʔa.pən hoːj   ʔi.sɨp
skin   bear   able   one-wear
(b) 'Bearskin can be worn.'

In fact, these so-called 'middle voice' verbs that participate in this type of syntactic construction are common enough to demonstrate a more general fact about the topic-

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[66]   Also, see S37 in §4.1.

comment type syntax of Pacoh instead of a simply a special class of verbs. Nevertheless, the class of verbs that fit into this category does ultimately form a closed set of verbs (i.e. verbs that take inanimate nouns as their semantic patients).

10.1.3 Reciprocal intransitive verbs

Reciprocal simple intransitive verbs have either the non-causative word presyllable [tər-] (or one of its phonological variants) or the causative reciprocal form [pər-] (see §3.2.4).

Table 42: Reciprocal simple intransitive verbs

Non-causative	Causative
tər.taʔ 'fight with each other'	*pər.kləw* 'make each other answer'
tər.toːŋ 'talk with each other'	*pər.hɔːk* 'make each other learn'
tər.kap 'bite each other'	*pər.caː* 'make each other eat'

Both verb types require either nouns that are inherently plural (as in S211(a)) or subjects connected by conjunctions or comitative prepositions (as in S211(b)).

S211: Reciprocal verbs

ʔa.pɛː ʔat   tər.taʔ
3p   process   fight-RECIP
(a) 'They're fighting with each other.'

ʔa.maː ʔa.liŋ ʔa.caːj tər.rɔːm-rɔːm
SPFO   and   SPMY   fight-RECIP
(b) 'She and he are helping each other.'

There is a small subclass of causative reciprocal intransitive verbs that share the word-initial form [pər-]. Like non-causative reciprocal verbs, they require plural subjects, but they also have causative semantic properties with the effect that the nouns cause each other to perform some action.

S212: Causative reciprocal verb

hɛː pər.cuŋ   toʔ ʔŋ.kiːm triəŋ
1p   make-gather   at   middle   school
(a) 'We gathered in the middle of the school.'

li.mɔː   ti.kuəj tər.toːm
how many   person   spoke-reciprocal
(b) 'How many people talked with each other?'

10.1.4 Stative intransitive verbs

Stative verbs are those words in Pacoh that cannot be the dependents of the preverbal marker of the progressive *ʔat*, as in S213. The largest subclass of stative verbs in Pacoh is descriptive stative verbs, sampled in S214. These verbs participate in comparative constructions (§8.2).

S213: Non-stative versus stative verbs

dɔː ʔat   caː doːj
3s   PROG eat   rice
(a) He's eating rice.'

*dɔː ʔat   ʔa.lɛʔ liː
 3s   PROG   tired   very
(b) '*He's being very tired.'

S214: Descriptive degree stative verbs

ʔaːw ʔn.nɛh   ku.ban liː
shirt this   thin   very
(a) 'This shirt's pretty thin'

ʔa.lɔːŋ ʔŋ.koh kiː kɛt
tree   that   so   small
(b) 'As for that tree, it's small.'

Degree descriptive stative verbs also include a class of forms that share word shape and distributional requirements. Multitude general stative verbs share the [Ca-] presyllable, in which the initial consonant is the same as the derivationally-related monosyllabic base. These verbs interpret their subjects as plural, as in S215(b).

S215: Multitude general stative verb

ʔa.lɔːŋ kiː   pɨt
tree   that   big
(a) 'That tree is large.'

ʔa.lɔːŋ kiː   pa.pɨt
tree   that   big
(b) 'Those trees are large.'

Most descriptive stative verbs carry semantic properties of degree and can take as a dependent the intensifying *liː* 'very'.

S216: Degree stative verbs

baːj   diəjʔ   liː
lesson difficult very
'The lessons are very difficult.'

The non-degree stative verbs *ku.cɛt̪* 'die' and *cɛh* 'be born' cannot take intensifying adverbs.

S217: General non-descriptive stative verb

maj   ku.cɛt̪   vaːʃ   pi.nah
2s   die   become   ghost
(a) 'After you die, you become a ghost.'

tu.mɔː maj cɛh
where   3s   born
(b) 'Where were you born?'

Non-descriptive degree stative verbs, which are few in number, are verbs with cognitive semantic scope, including *ʔiŋ* 'to like', and *ʔa.ʔiŋ* 'to hate'.

S218: Cognitive degree stative verb

kɨː   *ʔiŋ*   *liː*
1s   like/want   very
'I like it a lot.'

10.2 Transitive verbs

Transitive verbs require subjects and objects, objects which are not locative, inchoative, or oblique objects. Typically, the objects of transitive verbs in Pacoh may be topicalized, that is, made into presentential themes, as in S219. Transitive verbs in Pacoh may belong to one of three subcategories: general, causative (having the [pa-] prefix), or [ʔi-] complement transitive verbs.

S219: Transitive verb with a presentential theme

ʔm.bar   *ʔən dɔː*   *pləj*   *kɨː*   *liː*   *ʔiŋ*
the one   that 3s   buy   1s   true   want
'I really want the one he bought.'

10.2.1 General transitive verbs

General transitive verbs are the least marked and most numerous in this category. S220 shows two sample sentences.

S220: Transitive verbs

kɨː   *ʔa.dah*   *təm.muh*   *ʔa.caːj*
1s   fear   meet   SPMY
(a) 'I was afraid of meeting you.'

kuːj   *ba.lɔː*   *ʔaw*
carry   backpack   IMP
(b) 'Carry the backpack.'

Two minor subclasses of general transitive verbs include the degree and the reciprocal subcategories. There is a small class of degree simple transitive verbs, including *ʔiŋ* 'like/want', *ʔa.mɔːʃ* 'love/be fond of', and *ʔa.ʔiŋ* 'hate'. Also, there are reciprocal transitive verbs which require plural subjects, as illustrated in S221(b). (See also §10.1.3 on reciprocal intransitive verbs.)

S221: Degree and reciprocal transitive verb

hɛː   *ʔa.mɔːʃ*   *liː*   *tʰəj-jawʔ*   *hɛː*
1p   love   very   teacher   1s
(a) 'We really love our teacher.'

baːr-pɛː   *ʔa.ʔɛm*   *tər.piən*   *ʔaːw*
a few   youth   exchange   clothes
(b) 'A few young people exchanged clothes.'

10.2.2 Causative transitive verbs

Causative transitive verbs, which share the word-initial form [pa-] (§3.2.1), generally have homophonous correlates in the transitive VCT (i.e. those taking lower clauses) verb subcategory. Some words found to belong to this subcategory include *pa.ʔaːk* 'to make play,' *pa.raːw* 'to cause to clean,' and *pa.hɛt* 'to cause to sniff,' though there are dozens of words in this category (see §3.2.1 and S. Watson 1966).

S222: Causative transitive verb

kɨː pa.hɛt   ʔa.cɔː
1s   make-sniff dog
'I made the dog sniff (at something).'   (S. Watson 1966)

10.2.3 Infinitival complement transitive verbs

Complement verbs in Pacoh share the [ʔi-] presyllable and do not take overt subjects.[67] They typically function like infinitives, following variously verbs, adjectives, and nouns. While this morpheme has some significant amount of productivity, it does appear to be restricted overall to active transitive verbs. These verbs function in several ways. First, they commonly follow stative verbs that semantically qualify the action, as in S223(a).

S223: Complement simple intransitive verb

ku.ʨǝk   ʔn.nɛh ʔiǝn   liː   ʔi.biʔ
ground   this   easy   very to dig
(a) 'This ground is easy to dig.'

piǝjʔ   ʔi.sɨp   lǝjʔ
fit   to wear   INT
(b) 'Does it fit you?'

Next, they sometimes follow nouns, describing their purpose or usage, as in S224.

S224: Purpose verbs after nouns

hɛː viː   do̯j ʔi.caː ʔaːw   ʔi.sɨp
1p   have rice to eat clothes to wear
(a) 'We have rice to eat and clothes to wear.'

kɨː ploːh ʔa.caːj baːr kǝw   ʔǝn   ʔi.ploːh
1s   ask   SPMY   two   question which to ask
(b) 'I'm asking you two questions.'

Third, these verbs sometimes follow certain grammatical words, such as the negative prohibitive 'don't', time words such as 'after', and certain auxiliaries, as in S225.

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[67] This category of affixed-verb is commonly used in Pacoh but is not seen in other Mon-Khmer languages. The special nature of these forms is dealt with in this grammar only to a basic degree, and certainly other syntactic and pragmatic aspects of these verbs have other details that need to be explored and explained.

S225: Purpose verbs after grammatical words

ʔa.kəp ʔi.jɔ:n ʔa.kaj ti.ku: ku.t̪iək
don't to-let child sit ground
(a) 'Don't let the child sit on the ground.'

jə: ʔi.hɔ:k dɔ: həp ca: dọ:j
after to-study 3s hurry eat rice
(b) 'After studying, he rushed to eat his rice.'

Finally, these verbs commonly appear as the predicates in middle voice constructions (§10.1.2) and topic-comment constructions (§4.2 and §9.4). The exact usage of these verbs forms need to be dealt with in more depth in future studies.

10.2.4 Locative transitive verbs

Transitive locative verbs require three complements: a subject, an object, and a locational goal. Often, locational goals must be marked by locative prepositions or relator nouns, as in S226(a) and (b). S226(b) also shows an example of the subclass of causative locative transitive verbs, such as *pa.ŋoh* 'bring out' and *ta.mọ:t* 'to bring in'.

S226: Locative transitive verb

dɔ:ʔ pɛ: ʔa.tɛh ʔa.ʔi:m ʃiər ku.t̪iəʔ
put three baskets corn down ground
(a) 'Put the three baskets down on the ground.'

ʔa.ʃər ʔe.ʔɛ:m toʔ duŋ
bring up child to house
(b) 'Bring the child up to the house.'

Transitive locative verbs differ from ditransitive verbs by the kinds of prepositions and relator nouns they can and cannot take as complements. Whereas oblique-object verbs (§10.4) require dative prepositions, relator nouns, or pronouns as complements, locative verbs require locational nouns or prepositions.

S227: Locative versus oblique-object verbs

kɨ: vit pe:ʔ toʔ dɔ:
1s toss banana to 3s
(a) I threw the banana to him.'

kɨ: jọ:n pe:ʔ ʔa.dɔ:
1s give banana to-3s
(b) 'I gave him the banana.'

10.3 Ditransitive verbs

Pacoh ditransitive verbs—which require a subject, direct object, and indirect object—consist of two subcategories—bare and non-bare. Non-bare ditransitive verbs require dative pronouns, dative relator nouns, or dative prepositions to mark the indirect object.

Bare ditransitive nouns, which are much less common in the data than their non-bare counterparts, take non-dative nouns as indirect objects.

S228: Non-bare ditransitive verb

dɔː pa.cɔːm baːj   ʔa.dɔː naːm
3s   teach   lesson to   NAME
'He taught Nam the lesson.'

When these verbs take theme nouns in topic-comment constructions, topicalized nouns only correspond to the direct object, as in S229.

S229: Direct object corresponding to topic

li.mɔː pəl.luk ʃaːc   ʔn.nɛh kɨː ɟɔːn ʔa.dɔː tʰɔj-jaw kɨː
several UNIT   books this   1s   give to   teacher   1s
'As for these several books, I'm giving (them) to my teacher.'

Bare ditransitive verbs take non-dative nouns, as in S230. Unlike their non-bare counterparts, bare ditransitive verbs require a specific order of indirect-before-direct objects. The only verbs found so far in this subclass are causative verbs.

S230: Causative transitive oblique-object verb

kɨː pa.caː dɔː do̤ːj
1s   feed   3s   rice
(a) 'I fed him some rice.'

ʔa.kəp pa.ʔaːk   ʔa.ʔɛːm ʔa.ciːw
don't   make-play   SPNY   knife
(b) 'Don't give him a knife to play with.'   (S. Watson 1966)

Non-bare ditransitive verbs are predominant in the data, occurring much more regularly than do the bare counterparts. Non-bare ditransitive verbs do not restrict the relative order of their postverbal direct and indirect objects, as in S231(a) and (b).

S231: Two orderings of direct and indirect objects

ɟo̤ːn ʔa.kɨː ku.laj
give   to-1s   fruit
(a) 'Give me the fruit.'

ɟo̤ːn ku.laj ʔa.kɨː
give   fruit   to-1s
(b) 'Give the fruit to me.'

These verbs differ from transitive locative verbs, which require either locational prepositions or relator nouns. The sentence in S232(a) is ungrammatical with a ditransitive verb with a locational preposition, but it is grammatical with a dative relator noun in S232(b), and a dative preposition in S232(c).

S232: Differentiating locative and oblique-object verbs

*ɟɰən   pa.tḛːc ʔa.lik toʔ pa.ko̤h
 Vietnamese   sell   pig   to   Pacoh
(a) 'The Vietnamese sell pigs to the Pacoh.'

juən   pa.tɛ̤ːc ʔa.lik   ʔa.dɔː pa.kɔ̤h
Vietnamese sell   pig   to   Pacoh
(b) 'The Vietnamese sell pigs to the Pacoh.'

juən   pa.tɛ̤ːc ʔa.lik   jɔːn pa.kɔ̤h
Vietnamese sell   pig   to   Pacoh
(c) 'The Vietnamese sell pigs to the Pacoh.'

There are causative ditransitive verbs with the [pa-] prefix, as in S233, which demonstrates that it is a non-bare verb requiring a dative complement.

S233: Causative non-bare transitive oblique-object verb

kɨː pa.cɔːm baːj   ʔa.dɔː hɔːk-ʃɨːɲ
1s   teach   lesson   to   student
'I taught the lesson to the student.'

The semantic goal of the action may be marked by dative pronouns, which all have the presyllable [ʔa-] (see §7.3.3.3), as in S234.

S234: Beneficiary pronoun as indirect object

ʔa.ʔam   naːm   pləj ʔa.dɔː mo̤ːj lam   bɔːŋ
mother   NAME   buy   for:3s one   UNIT ball
'Nam's mother bought a ball for him.'

10.4 Oblique-object verbs

Oblique-object verbs take nouns that tend not to be manipulated by actions but rather are the results of actions, as in S235(a), or the focus of conditions, as in S235(b). They differ from transitive verbs, in which the objects are directly manipulated goals of verbs, and moreover, regular objects may freely serve as topics in topic-comment constructions, while oblique-objects may not.

S235: Simple oblique-object verbs: result and focus

kɨː taːɲ   ʔa.cɔ̤ːjʔ
1s   weave basket
(a) 'I'm weaving a basket.'

kɨː ʔa.ʔaj pəl.luŋ   lɨː
1s   sick   stomach   very
(b) 'I'm very sick to my stomach.'

Simple oblique-object verbs constitute four main subcategories—general, goal, stative, and speech—which combine to create seven categories. Speech oblique-object verbs take quote nouns as complements. Goal oblique-object verbs take dative pronouns or dative relator nouns in the dative case form. Stative and general oblique-object verbs cannot be the dependents of the preverbal progressive marker *ʔat*. General oblique-object verbs tend to express the creation of things. Subsequent sections discuss each subcategory.

10.4.1 General oblique object verbs

General oblique-object verbs, which tend to have inchoative meanings, as in S236, do not have specific semantic requirements for their dependents, though the complements of these verbs are the results of the action rather than the affected 'objects' of the actions.

S236: General oblique-object verbs

kɨː   ti.ʔoːʔ   ʔa.vaːh
1s   vomit   rice
(a) 'I vomited rice.'

maj   ku.cẹt   vaʃ   pi.nah
2s   die   become   ghost
(b) 'When you die, you become a ghost.'

These verbs can take resultative adverbs or purpose predicate-taking prepositions, but only after noun complements, as in S237.

S237: General oblique-object verb with adverb

taːɲ   ʔa.coːjʔ   jọːn   ʔa.kiər
weave   basket   for   to thickness
'Weave the basket so that it's thick.'

10.4.2 Speech and quote oblique-object verbs

The verbs in this category take either nouns or quoted speech as complements. Speech oblique-object verbs require dative pronouns, relator nouns, or prepositions as complements.

S238: Goal oblique-object verbs

dɔː   toːŋ   ʔa.kɨː
3s   speak   to-1s
'He spoke to me.'

Speech oblique-object verbs (such as *toːŋ* 'to say', *pa.pɨ* 'to talk of', *ploh* 'to ask', and *ʔoːj* 'to answer') take quote-derived speech (§7.1.4) as complements.

S239: Speech oblique-object verb

kɨː   pa.pi   kɨː-poːk-juː-lic-toʔ-viət-naːm
1s   talk of   I went travelling in Vietnam
(a) 'I talked about my travelling in Vietnam.'

noː   ploh   maj-poːk-tu.mɔː
NAME   ask   where are you going
(b) 'Nô asked, "Where are you going?".'

These verbs may take dative nouns or prepositions as adjuncts to mark the goal of the speech, typically followed by the quote-derived speech.

S240: Bare transitive oblique-object verb

ploh   ʔa.dɔː   li.mɔː-praʔ
ask   3s   how much money
'Ask him how much money.'

These verbs can also take other nouns as complements while retaining the same basic semantic function of speech reference.

S241: Speech oblique-object verb

kɨː   pa.pɨː   duŋ-vɛ̰ːl
1s   talk about hometown
'I spoke about my hometown.'

10.4.3   *Stative oblique-object verbs*

Stative oblique-object verbs (which generally have homophonous stative simple intransitive counterparts) consist of two general types: condition stative verbs (*ʔa.ʔaj* 'sick/ hurt', *ʔn.taŋ* 'weigh') and possessive/existence stative verbs (*vɨː* 'have' and *ʔeː* 'be many/much').

10.4.3.1   *Condition stative oblique-object verbs*

Verbs in this category describe the condition of parts of things (e.g. *ʔa.ʔaj* 'pained') or the extent of a state (e.g. *truː* 'deep'). The difference between these verbs and their non-oblique-object verb counterparts is that, whereas the semantically affected noun is a subject of non-oblique-object verbs, as in S242(b), the same nouns only occur in the postverbal object position as oblique-objects, as in S242(a). An intensifying adverb can precede the oblique object, as in S243.

S242: Oblique-object versus non oblique-object verbs

kɨː   ʔa.ʔaj pəl.luŋ   lɨː
1s   sick   stomach   very
(a) 'I'm very sick to my stomach.'

pəl.luŋ   kɨː   ʔa.ʔaj
stomach   1s   hurts
(b) 'My stomach hurts.'

S243: Impersonal oblique-object verb

ki.ʃaj   təŋ.hiən bɔːŋ   lɨː   ku.laj
season   summer   plentiful very fruit
'In the summer, fruit is plentiful.'

There are both intensifiable and non-intensifiable stative oblique-object verbs, as in S244.

S244: Stative oblique-object verbs

kɨː   pluk   mat   liː
1s   bad (vision) eye   very
(a) 'I have very bad eyesight.'

ʃɔːʔ   truː   ʃoːŋ   troːʔ
stream deep five   (unit of length)
(b) 'The stream is five *troq* deep.'

These oblique-object verbs take interrogative pronominal nouns in the same case-marked positions as non-interrogative verbs, as in S245. That is, question words are not fronted with these verbs.

S245: Interrogative pronoun and oblique-object verb

ʔa.ʔɛm   ʔŋ.koh   ʔa.ʔaj   ʔa.məh
she-SOC   that   sick   what
'Where does it hurt'/'What's her sickness?'

The verb *ʔa.rəʔ₁* 'to be similar to' has the semantic function of expressing similarity or equality between subjects and objects. This word has a homophonous preposition counterpart, *ʔa.rəʔ₂* 'as' (§8.4).

S246: Comparison simple oblique-object verb

hoːj-ʔn.nɛh   ti.kuəj-pa.koh   ʔa.rəʔ   ti.kuəj-juən
currently   Pacoh   similar to Vietnamese
'These days, the Pacoh are like the Vietnamese.'   (R. Watson 1976)

10.4.3.2 Existence and possessive stative oblique-object verbs

Existence and possessive stative oblique-object verbs indicate the possession of objects. Verbs in this category include *ʔeː* 'many of', *viː* 'have', *boːn* 'have', and *joːl* 'still have/ exist'. The verb 'still exist' has a derivationally related homophonous impersonal correlate (§10.5).

S247: Possessive oblique-object verb

kɨː   joːl   praʔ-ti.riəʔ-ʔa.kaj
1s   still have   wealth
'I still have wealth.'

S248: Possessive simple intransitive verb

hɛː   ʔeː   liː   lᵷəj   ʔr.naːm
1p   many very types vegetables
'We have many kinds of vegetables.'

10.5 Impersonal oblique-object verbs

Impersonal oblique-object verbs—including *viː* 'there is', *kʰam* 'there is enough of', *ʔeː* /*kliːŋ*/ *ʔəp* 'there is much/are many', *biəʔ* 'there are few/is little', and *joːl* 'still have'—do not take subjects but instead require postnominal noun complements. In available data, the

few verbs in this category are all stative, and they all have related personal forms (i.e. requiring subjects).

There are two kinds of adjuncts that co-occur in the sentence-initial position and give some indication of spatial orientation or general point of reference. Impersonal oblique-object verbs often occur with locational adjuncts.

S249: Impersonal verb with locational adjunct

daŋ   nɛh   kʰam   ʔa.ʃəʔ   ʔi.caː
place here enough   rice   to-eat
'There's enough rice to eat here.'

These verbs also often take sentential themes, as opposed to subjects. In S250, the theme gives the general point of reference, and the impersonal verb provides the comment regarding the proposed set.

S250: Impersonal verb with a sentential theme

ŋɛʔ   kər.rɔʔ   ʔn.nɛh   viː   ti.kọːl   lam   kər.rɔːʔ   ʔŋ.kan
all   cattle   this   exist eight UNIT cattle   female
'As for all these cattle here, there are eight cows.'

Impersonal oblique-object verbs with time nouns as complements may indicate past occurrence, as in S251.

S251: Impersonal verb with time reference

viː   mọːj   kən.tiʔ   dɔː   kʰɔːjʔ   ʔa.ʔaj - ʔa.ʃan
exist one   time   3s   already have flu
'There was one time that he got the flu.'

10.6   Locative verbs

Locative verbs require locational nouns or prepositions as complements (see §7.5.4 and §8.5 respectively). Some words in this category include *luh* 'run', *ʃər* 'rise/climb', *poːk* 'go', *ŋoh* 'exit', and *mọːt* 'enter'. Locative verbs are divided into three subcategories: movement, non-movement, and impersonal non-movement locative verbs. Movement locative verbs require locational prepositions that indicate direction of movement, while non-movement locative verbs require stationary locational prepositions. Impersonal locative verbs cannot take overt subjects and are redundantly non-movement verbs.

Movement locative verbs require locational prepositions or nouns. Some of these verbs require locational prepositions and cannot take common nouns directly as locational complements, while others can take either category. While *luh* 'run', *poːk* 'to go', and *vɔːt* 'to jump' can only take locational nouns, *ti.kuː* 'sit on', *ti.lət* 'to follow', and *ʃər* 'to climb up' can take either locational nouns or regular common nouns directly. In S252(a) and b, the same verb 'to ascend' has two possible distributions, one with a preposition and one without. In S252(c) and (d), however, the verb 'to go' must in fact take a locational preposition.

S252: Comparing bare and non-bare locative verbs

dɔ: ʃər   toʔ duŋ
3s   go up to   house
(a) 'He went up to the house.'

dɔ: ʃər   duŋ
3s   go up house
(b) 'He went up to the house.'

dɔ: poːk toʔ duŋ
3s   go   to   house
(c) 'He went to the house.'

*dɔ: poːk   duŋ
 3s   went up house
(d) 'He went to the house.'

Another difference between bare and non-bare locative verbs is that while prepositional complements may precede the verb and 'subject', the noun complements of bare locative verbs may not and only follow their regents, as in S253.

S253: Contrasting bare and non-bare locative verbs

toʔ duŋ   dɔ: poːk
to   house 3s   go
(a) 'To the house, he went.'

*duŋ   dɔ: ʃər₂
 house 3s   went up
(b) 'Up the house, he went.'

Some bare locative verbs have related homophonous locational prepositions,[68] as exemplified in S254(a) and (b), in which the two functions of *toʔ* are contrasted.

S254: Locative verb versus locational preposition

kɨ: toʔ   kwaːŋ-triː hɔːk   kaːŋ-pa.kọh
1s   arrive Quảng Trị study Pacoh
(a) 'I came to Quảng Trị to study Pacoh.'

pi.liəŋ toʔ məm.mat
turn   to   right
(b) 'Turn it to the right.'

Non-movement locative verbs require stationary locational prepositions or nouns. Some words found to belong to this category include *ʔat* 'to be at', *tu.mọŋ* 'to reside', and *ti.kuː* 'sit'. They typically take the non-terminus preposition *toʔ* 'at' or the locational relator noun *daŋ* 'the place of'.

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[68]   Similar derivational patterns appear across the Pan-Asian region. See Clark and Prasithrathsint (1985) for a good summary of this phenomenon in several East and Southeast Asian languages.

S255: Non-movement locative verbs

dɔː ʔat daŋ ʔŋ.koh
3s be at place there
(a) 'He's over there.'

kɨː tu.mọŋ toʔ ʔa.lɨəj
1s live at PLACE NAME
(b) 'I live in A-Lưới.'

Rather than taking subjects, impersonal locative verbs take sentence-initial locational nouns as their locational thematic reference. These stative verbs describe some kind of condition, such as temperature or busy activity in a location. Locational noun and preposition dependents of impersonal locative verbs most often appear in the preverbal position in topic-comment type constructions. S256(a) and (b) demonstrate the difference between a personal stative verb and an impersonal one.

S256: Stative verb versus impersonal locative verbs

pər.baːŋ ʔa.tọʔ lɨː
weather hot very
(a) 'The weather is very hot.'

kəl.luŋ duŋ ʔa.tọʔ lɨː
inside house hot very
(b) 'Inside the house, it's very hot.'

11 *Auxiliary verbs, SVCs, and VCT verbs*

The term verb-complement-taking verbs, or VCT verbs, refers broadly to any verbs that require verbs as complements, thereby including auxiliary verbs, cognitive and causative verbs, and serial-verb constructions (SVCs),[69] among others. Unlike more general serial verb constructions that can occur with any sequence of verbs, VCT verbs in Pacoh tend not to be separated by clausal prepositions or conjunctions from their verb complements. Moreover, only the higher verbs, and not the verb complements, can be directly negated.

In Pacoh, these predicate-taking verbs include several subtypes and subcategory combinations, including intransitive, transitive, and oblique-object verbs. Additional predicate-taking verb subcategories include aspectual, motion, and stative verbs, all of which share the above-mentioned properties.

11.1 Aspectual VCT verbs

Aspectual predicate-taking verbs make reference to the statements aspect, that is, the state of completion of an action regardless of the actual time of the speech action. These verbs, which never occur as the dependents of other verbs, consist of four subcategories: the progressive, perfective, recent perfective, and near future forms. There are three perfective verbs: the general perfectives *kʰɔjʔ* and *jeː* and the recent perfective *təm.meː* and *bəːjʔ*.

> **S257: Perfective predicate-taking verbs**
> *kɨː kʰɔjʔ ʔa.ʔaj*
> 1s   already sick
> (a) 'I'm sick.'/'I've gotten sick.'

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[69] The approach in this classification of verbs follows the ideas of Wilawan (1993), who argues that what have often been called serial verb constructions (SVCs) in East and Southeast Asian linguistic language are examples of predicate-taking verbs: put simply, verbs that take other verbs as complements. In effect, these are verbs of various categories—auxiliary, negation, stative, active, among others—that share the requirement of predicate complements. The issue then becomes what kinds of complements these verbs take, such as finite versus non-finite (i.e. do or do not take subjects). Furthermore, there are verbs that can only occur as the highest verb and those that can be complements of other verbs.

dɔː   təm.mɛː   toʔ   ɟəː
3s   just   arrive   already
(b) 'He just arrived.'

S258: Progressive predicate-taking verb

hɛː   ʔat   pən   ŋaːj
1p   PROG   wait for   3p
'We're waiting for them.'

Expected future events can be left unmarked, but the verb *ʔiŋ* 'will' (homophonous with the verb *ʔiŋ* 'want to') can be used. In S259, the meaning of *ʔiŋ* is clearly future since it has no subject to have intention. The unreal perfective *təm.bəj* 'about to' indicates that the action is in the near future.

S259: Future VCT verbs

tu.man   ʔiŋ   tər.ŋap   ɟeː
soon   will   dark   already
'In a little while, it will be dark.'

11.2 Auxiliary verbs

General intransitive predicate-taking verbs include a class of normal verbs that take other verbs as complements and express a wide range of semantic fields and associated selectional restrictions. Such verbs may express ability, intention, or cessation. S260 to S262 show some representative examples.

S260: Abilitative predicate-taking verb

ʔa.caːj   boːn   pləj   ʔa.li.mɔː   bɛː
SPMY   able   buy   how many   bottle
'How many bottles were you able to buy?'

S261: Intention predicate-taking verb

ʔa.caːj   ʔiŋ   pləj   duŋ   ʔən
SPMY   want   buy   home   (yes-no)
'Do you want to buy a home?'

S262: Cessation predicate-taking verb

hɛː   ʔa.ŋoː   hɔːk
3p   rest   study
'We stopped studying.'

ND&P (1986) list three other words that fall into this subcategory. The word *nɔːŋ* expresses frequency (S267(a)), *pi.liː* expresses continuous action, and *kɔːm* expresses certainty (S263(b)). While these words may be translated into English as adverbs, consider the English 'He is certain to go', in which the verb-plus-adjective predicate is semantically equivalent to 'He will certainly go'. Semantic function and lexical category do not always correspond, and in Pacoh, these words with adverbial semantics are nevertheless auxiliary verbs that take verb complements.

S263: VCT verbs of frequency, continuous action, and certainty

dɔː   nɔːŋ   pọːr   jəw-baːj
3s   frequent help   friend
(a) 'He frequently helps friends.'   (ND&P 1986)

toʔ   sẹʔ   dɔː   kɔːm   poːk   boːʔ-dọːjʔ
reach mature 3s   certain go   army
(b) He's certain to join the army when he's older.'   (ND&P 1986)

11.3 Causative VCT verbs

Verbs in this category have causative meanings, verbs such as the general form *jɔːn* 'allow' as well as morphological causatives such as *pa.ŋɔːjʔ* 'make drink' and *pa.kap* 'make bite'.[70] These causative VCT verbs require dative pronouns or dative relator nouns, as in S264. The lower clause is non-finite (i.e. lacking a subject) since the indirect object is marked dative and thus cannot be the subject of the lower clause.

S264: Oblique-object VCT verbs with dative pronoun and relator noun

kɨː   pa.caː   ʔa.dɔː₁   caː   dọːj
1s   feed   to 3s   eat   rice
(a) 'I made him eat the rice.'

kɨː   pa.ŋɔːjʔ   ʔa.dɔː₂   jəw   ŋɔːjʔ
1s   make drink   to   friend drink
(b) 'I make my friend drink.'

These dative relator nouns and their dependent nouns cannot be postposed and always precede the lower verb in the clause.

S265: Non-causative oblique-object VCT verb

ʔi.bɨː   ʔn.nɛh   jọːn   ʔa.kɨː   caː   dọːj   ʔaw
evening   this   let   to-1s   eat   rice   IMP
'Let me eat rice tonight.'

11.4 Ditransitive VCT verb

Only one word has been found to belong to this category, *jọːn* (homophonous with the word for 'to give'). Such a verb often has multiple uses in other Southeast Asian languages,[71] and more data may reveal additional functions.

S266: Oblique-object transitive predicate-taking verb

kɨː   jọːn   dọːj   ʔa.dɔː   caː
1s   give   rice   to-3s   eat
'I gave rice to him to eat.'

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[70]   See Alves (2000) for more discussion on the distributional properties of Pacoh causative verbs.

[71]   See Clark (1989) for related discussion.

11.5   Motion intransitive VCT verbs

Motion intransitive VCT verbs express physical movement with the intent to perform another action in parallel with the common notion of serial verb constructions. These verbs are related to a class of homophonous non predicate-taking verbs, but, contrastingly, they generally do not take manner adverbs and the lower verbs are not negatable. The semantic difference between these two classes of verbs is the difference of focus on the movement (non predicate-taking) versus the redirected focus on the following action expressed by the verb complement, as illustrated in S267(a) and (b) with the verbs marked with subscript numbers.

S267: Contrasting VCT and regular motion verbs

dɔː   la.luh₁   ʔa.ɲaːʔ
3s   run   quick
(a) 'He ran quickly.

dɔː   la.luh₂   təm.muh   hɛː
3s   run   meet   3p
(b) 'He ran to meet us.'

S268: Motion VCT verb with multiple verb complements

hɛː   ʃiər   họːm   daːʔ   ʔa.baːʃ   byəjʔ
3p   descend   bathe   water   fish for   fish
'We went down to bathe and fish.'

S269: Motion VCT verb with verb complement

dɔː   ʃər   ʔa.lɔːŋ   ɲiəl   ku.laj
3s   climb   tree   take   fruit
'He climbed the tree and got some fruit.'

11.6   Negation: verb and noun negation VCT verbs

Pacoh negation includes both words that take verb complements and those that take noun complements.

Negation predicate-taking verbs constitute two subtypes: the imperative *ʔa.kəp* 'don't' and general negation predicate-taking verbs. The general negation verb most commonly used in all regions where Pacoh is spoken is *ləjʔ*.[72] Its primary semantic function is negating the truth value of an action.

S270: General negation predicate-taking verb

tu.miəŋ   kɨː   ləjʔ   cɔːm   taʔ
crossbow 1s   no   know   make
'As for crossbows, I don't know how to make them.'

This negation verb can take [ʔi-] non-finite verbs as complements, as in S271. It expresses non-completion of its verb complements, as in S272.

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[72]   The form *təjʔ* is used by some speakers in Quang Tri province.

S271: Negation predicate-taking verb with [ʔi-] verb

dɔː ʔn.nɛh ləjʔ ʔi.caː pɛː   ʔi.ŋaj
3s   this   no   to eat three day
'As for that guy, he didn't eat for three days.'

S272: Negation predicate-taking verb

kɨː ləjʔ viː   kəm.paj
1s   no   have wife
'I don't have a wife.'

The imperative negation predicate-taking verb can take an overt referential subject, though it generally does not.

S273: Imperative negation predicate-taking verb.

ʔa.kəp ca.cuŋ   ʔa.liŋ ʔa.pɛː
don't   get together with   3p
'Don't hang around with them.'

The word *ʔih* 'not', which negates nouns of any kind, can be used with a subject and following noun predicate in a negative equational construction, though it can also be used without a subject to negate a truth value (i.e. expressing 'It's not the case that …').

S274: Noun negation VCT verb

ʔu.raʔ ʔn.nɛh ʔih   ʔm.maj
pen   this   be not   yours
(a) 'This pen isn't yours.'

ʔiːh   ʃoːŋ-cit-ŋiːn
not-be   fifty-thousand
(b) 'It's not 50,000.'

Negation may occur with conjunctions without the repetition of the negation word.

S275: Negation in coordinative construction

ŋaːj toʔ   ʔn.nɛh ʔih   ti.kuəj-viət maː ti.kuəj-pa.kọh
3s   come   here   be not Vietnamese   but   Pacoh
'Those people who came weren't Vietnamese, but rather were Pacoh.'

There are exceptions to the usage. Some native speakers feel that the supposed nominal negator *ʔih* may be used with following verbs and that the verbal negator *ləjʔ* can be used with noun dependent, though generally that is not the case in available data.

S276: Exceptions of nominal negation verb

kɨː ʔih ʔiɲ
1s   not want
(a) 'I don't want.'

ʔa.caːj ʔŋ.koh ləjʔ ti.kuəj-viət
SPMY   that   not   Vietnamese person
(b) 'He's not Vietnamese.'

11.7   Stative VCT verbs

Stative general VCT verbs describe the subject, though the verb of the lower clause interprets the subject or object of the upper clause as its own subject or object. Verbs in this category include *buːj* 'pleased', *ʔiən* 'easy', *rəw* 'sad', or *hoːj* 'able'. S277 is an example in which the verb of the lower clause 'to meet' has the same subject as the upper clause. The lower verb is transitive, though in fact, the lower verb could as well be intransitive.

S277: Stative intransitive VCT verb

kɨː	*buːj*	*lɨː*	*təm.muh*	*ʔa.caːj*
1s	happy	very	meet	SPMY

'I'm very pleased to meet you.'

Verbs in the other subcategory are always transitive, and specifically, they often take transitive [ʔi-] non-finite verbs as complements.

S278: Stative VCT verb with [ʔi-] verb complement

ʔŋ.kar-ʔa.pən	*hoːj*	*ʔi.ʃɨp*
bearskin	able	to wear

(a) 'Bearskin is wearable.'

ʔa.lɔːŋ	*ʔn.nɛh*	*ʔiən*	*ʔi.kɨə*
wood	this	easy	to saw

(b) 'This wood is easy to saw.'

11.8   Thinking/speaking/feeling VCT verbs

The verbs in this category, which express assertions, beliefs and emotions, are followed by clauses containing finite verbs (i.e. verbs with subjects), as in S279 and S280. Though a majority of the verbs in this category are non-stative, there are a few stative verbs (verbs that cannot co-occur with the progressive *ʔat*) in this category as well.

S279: Active VCT verb

kɨː	*tiŋ*	*ʔn.truəj-ʔa.cɔː-ʔa.lik*	*toʔ*	*duŋ*	*hɨk*	*lɨː*
1s	count	domestic animals	at	house	many	very

'I counted that there were many animals at the house.'

S280: Stative VCT verb

kɨː	*rəw*	*lɨː*	*ʔa.caːj*	*cɔ̦ː*	*toʔ*	*miːʔ*
1s	sad	very	SPMY	return	to	America

'I'm sad that you're going back to America.'

11.9   Transitive VCT verbs

Transitive VCT verbs, which take objects and predicate complements, consist of three general subtypes: perception (*kəm.maŋ* 'hear' and *ɲoŋ* 'see'), causative (*pa.caː* 'cause to eat' and *pa.ʔaːk* 'cause to play'), and general transitive predicate-taking verbs (*kəjʔ* 'guide'

and *jɔːʔ* 'prevent'). The general transitive VCT verbs are further divided into those whose subjects of the lower verb are or are not referential with the subject of the upper verb.[73]

Perception verbs are used to indicate that the subject perceives the action or state of the object. Causative verbs initiate action for the object.

S281: Perceptual transitive VCT verb

kɨː kəm.maŋ   ʔa.caːj toːŋ
1s   hear   SPMY   speak
(a) 'I hear you speak.'

kɨː ɲo̰ŋ ʔa.ʔɛːm ʔɔː liː
1s   see   SPNY   nice very
(b) 'I see that you're very nice.'

S282: Causative transitive VCT verb

pa.kap   ʔa.cɔː kap   ʔa.bɨl
make-bite   dog   bite   mouse
'Get the dog to bite the mouse.'

Many verbs in Pacoh (such as *pləj* 'buy' or *ti.raʔ* 'prepare') do allow optional/adjunct lower clauses in serial verb constructions. However, they range in meaning but generally fall into the semantic scope of command or prohibition, as in S283 and S284. In Type 1 verbs, the subject of the lower verb is correferential with the subject of the upper verb, whereas in Type 2 verbs, the lower verb takes the upper verbs subject as an object.

S283: General transitive VCT verb (Type 1)

jɔːʔ   ʔa.kaj toːŋ   kɨː
prevent   kid   speak 1s
(a) 'Keep that kid from talking.'

ta.lah   ʔn.truəj-ʔa.liːk   ʔi.caː-ʔi.caː
let out   domestic animals   eat
(b) 'I let the domestic animals out to eat.'

S284: General transitive VCT verb (Type 2)

dɔː ɟiəl   tər.naʃ   taʃ
3s   take   a hammer   to hammer
(a) 'He took a hammer to hammer.'

kɨː ti.raʔ   ba.loː   poːk juː-lik
1s   prepare   backpack go   travel
(b) 'I got my backpack ready to travel.'

These verbs may take dependent transitive verbs and generally belong to the class of non-finite [ʔi-] verbs.

S285: VCT verb with [ʔi-] verb complement

hɛː viː   do̰j ʔi.caː ʔaw   ʔi.ʃip
1p   have rice to eat   clothes to wear
'We have rice to eat and clothes to wear.'

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[73]   These verbs have been called 'manner' verbs (Indrambarya 1994: §5.1.2.1).

12 *Glossary*

This glossary is grouped into tables each containing words belonging to the same part of speech (adverbs, conjunctions, nouns, prepositions, sentence particles, and verbs). Each table contains an English gloss, the Pacoh form, and the sections in which the syntax of such words or words of the same subcategory are described.

12.1 Adverbs

Pacoh adverbs consist of five main categories. The general adverbs discussed in §5.1 constitute the largest class, while the others are made up of a small group or words or words with specialized affixes.

Gloss	Pacoh	Sections
'additionally'	*lɔːj*	5.1
'afterward'	*ʔa.tuːn*	5.1
'again'	*lɔːj*	5.1
'alone'	*liːl-vɨːl*	5.1
'alone'	*bɔːm*	5.1
'before'	*ʔa.ʃuəj*	5.1
'capably'	*hoːj*	5.1
'completely/totally'	*ŋɛʔ*	5.4
'deeply'	*truː*	5.4
'difficult'	*diəjʔ*	5.1
'enough'	*ʃaj*	5.1
'far'	*joːŋ*	5.1
'firmly'	*kʰəm*	5.1
'fully'	*ʔa.ʃaj*	5.4
'gradually'	*tiʔ-ɲiʔ*	5.1
'happily'	*buj*	5.1
'happily'	*rəːr-riːc*	5.1
'hastily'	*pər.həp*	5.1
'how'	*ʔi.mɔː*	5.3
'hurriedly'	*kər.tuːh-tuːh*	5.1
'hurriedly'	*həp*	5.1
'thusly'	*ʔi.koh*	5.1

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Gloss	Pacoh	Sections
'loudly'	*ŋən*	5.1
'meticulously'	*məl-miʔ*	5.1
'oneself'	*boːm*	5.1
'oneself'	*boːm*	5.1
'own'	*ʔn.daj*	5.1
'quickly'	*ɲaʔ*	5.1
'simultaneously'	*ʔm.bo̦ʔ*	5.5
'sneakily'	*to̦ːjʔ*	5.1
'straight'	*ti.nəŋ*	5.1
'studiously'	*ʔm.min*	5.1
'studiously'	*pər.tat*	5.1
'suddenly'	*ki.kər*	5.1
'suitably'	*pi̯əʔ*	5.1
'very'	*liː*	5.2
'well'	*ʔɔː*	5.1
'why'	*viː-ʔi.mɔː*	5.3

12.2 Conjunctions

The five categories of Pacoh conjunctions are dealt with in Chapter 6.

Gloss	Pacoh	Sections
'and'	*mo̦ːj*	6.1, 6.3
'and'	*ʔa.liŋ*	6.1
'and'	*ʔa.ɲaː*	6.1, 6.2
'and'	*ʔi.ɲaː*	6.2
'and'	*ʔi.pɛː*	6.2
'and'	*ʔa.pɛː*	6.2
'but'	*maː*	6.5
'or'	*ʔa.liŋ₅*	6.4

12.3 Common nouns

As common nouns follow certain unit/count nouns, the subcategories list the kind of agreement features that help determine which unit nouns may co-occur.

Gloss	Pacoh	Sections
'America'	*miːʔ*	7.1.5
'animal'	*ʔa.ʔət*	7.1.1
'animals, domestic'	*ʔn.truəj-ʔa.cɔː-ʔa.lik*	7.1.6
'bait'	*pər.ran*	7.1.3
'bananas'	*peʔ*	7.1.1
'basket'	*ʔa.tɛh*	7.1.1
'basket, creel'	*ka.dɨː*	7.1.1
'bear'	*ʔa.pən*	7.1.1
'bee (mason)'	*ʔa.ɲiːt-ɲɔːt*	7.1.1
'bird'	*ʔa.ce̦ːʔ*	7.1.1

Gloss	Pacoh	Sections
'breath'	*tər.ɲih*	7.1.1
'brother, older'	*ʔa.miəŋ*	7.1.2
'buffalo'	*ti.riəʔ*	7.1.1
'cat'	*ʔa.mẹʔ*	7.1.1
'child'	*ʔa.kaj*	7.1.2
'coconut'	*tuəŋ*	7.1.1
'cork'	*kən.tɨp*	7.1.1
'daughter'	*ʔa.kaj-ʔa.kan*	7.1.2
'dog'	*ʔa.cɔ:*	7.1.1
'duck'	*ʔa.ta:*	7.1.1
'elephant'	*ʔa.ciəŋ*	7.1.1
'father'	*ʔa.ʔam*	7.1.2
'fence'	*kər.rɔ:ŋ*	7.1.1
'fish sauce'	*təm.paʔ*	7.1.3
'friends (general)'	*jəw-ba:j*	7.1.6
'frog'	*ʔa.kuət*	7.1.1
'grandmother'	*ʔa.ka:ʔ*	7.1.2
'ground'	*ku.tɨjək*	7.1.3
'Hmong'	*ha.mɔ:ŋ*	7.1.2
'hole-driller'	*ka.na:r*	7.1.1
'hometown'	*dun-vẹ:l*	7.1.6
'house'	*duŋ*	7.1.1
'man'	*ʔŋ.koɲ*	7.1.2
'materials'	*ʔm.ma:r*	7.1.3
'meat'	*ʃẹ:c*	7.1.3
'money'	*praʔ*	7.1.3
'monkey'	*ʔa.dɨjəʃ*	7.1.1
'mother'	*ʔa.ʔi:*	7.1.2
'mouse'	*ʔa.bil*	7.1.1
'mousetrap, stone'	*kɨp*	7.1.1
'mousetrap, tube'	*ʃiŋ*	7.1.1
'parents'	*ʔa.ʔi:-ʔa.ʔam*	7.1.6
'person'	*ti.kuəjₗ*	7.1.2
'pig'	*ʔa.li:k*	7.1.1
'pinch'	*təm.bọ:c*	7.2.1
'place, big and empty'	*tɔ:p-hɔ:p*	7.1.6
'plow'	*ka.naj*	7.1.1
'pole'	*ti.nọ:l*	7.1.1
'prop'	*kəl.la:ʔ*	7.1.1
'rice, unhusked'	*trɔ:*	7.1.1
'sibling, younger'	*ʔa.ʔɛ:m*	7.1.2
'sister, older'	*ʔa.mọ:ʔ*	7.1.2
'society'	*duŋ-vẹ:l*	7.1.6
'son'	*ʔa.kaj-kọ:ɲ*	7.1.2
'sound bamboo makes'	*krɔ:l*	7.1.3
'sound wood makes'	*kloʔ*	7.1.3

Gloss	Pacoh	Sections
'spider'	*ʔa.piəŋ*	7.1.1
'star'	*pən.to̞ːr*	7.1.1
'stone'	*bul*	7.1.1
'string'	*ka.ʃaɲ*	7.1.1
'string'	*ka.naŋ*	7.1.1
'string'	*ʔn.tar*	7.1.1
'student'	*ho̞ːk-ʃiɲ*	7.1.2
'teacher'	*tʰəj-jaw*	7.1.2
'thing that pushes up'	*pa.nək*	7.1.1
'uncle, older'	*ʔm.pɨːt*	7.1.2
'uncle, younger'	*ʔa.ɲiː*	7.1.2
'Vietnamese'	*ju̯ən*	7.1.2
'washcloth'	*kʰan*	7.1.1
'water'	*daːʔ*	7.1.3
'wealth'	*praʔ-ti.riəʔ-ʔa.kaj*	7.1.6
'woman'	*ʔŋ.kan*	7.1.2
'writing (general)'	*ʔu.raʔ-ʔu.ʔar*	7.1.6
'writing utensil'	*ʔr.viət*	7.1.1

12.4   Numeral nouns

Numeral nouns in Pacoh start with the digits 1 to 10, after which higher numbers are formed regularly with combinations of those same basic numbers. Pacoh numerals are discussed in §7.4.1.

Gloss	Pacoh
'one'	*mo̞j*
'two'	*baːr*
'three'	*pɛː*
'four'	*pu̯ən*
'five'	*ʃoːŋ*
'six'	*tu.pat*
'seven'	*tu.po̞ːl*
'eight'	*ti.ko̞ːl*
'nine'	*ti.kiəʃ*
'ten'	*mu.cit*
'eleven'	*mu.cit-mo̞ːj*
'fifteen'	*mu.cit-ʃoːŋ*
'twenty'	*baːr-cit*
'thirty'	*pɛː-cit*
'forty'	*pu̯ən-cit*
'fifty-one'	*ʃoːŋ-cit-mo̞ːj*
'sixty-seven'	*tu.pat-cit-ti.ko̞l*
'one hundred'	*məh-ku.lam*
'eight hundred'	*ti.ko̞ːl-ku.lam*
'nine thousand'	*ti.kiəʃ-ɲiːn*

12.5 Pronouns

Lists of Pacoh pronouns are contained in individual sections on those subcategories. They include demonstrative pronouns (§3.1.3 and §7.3.1), interrogative and indefinite pronouns (§7.3.2), personal pronouns (§3.1.3 and §7.3.3), and socially-conditioned pronouns (§7.3.5).

12.6 Relator nouns

The five subcategories of Pacoh relator nouns are discussed in §7.5.

Gloss	Pacoh	Sections
'at (the place of)'	*daŋ*	7.5.4
'at (the place of)'	*toʔ*	7.5.4
'back'	*ta.tuːn*	7.5.4
'front'	*məm.mat*	7.5.4
'inside'	*kəl.luŋ*	7.5.4
'middle'	*tər.diː*	7.5.4
'of (human)'	*ʔn.dɔː*	7.5.2
'of (possessive)'	*ʔən*	7.5.5
'outside'	*təl.tiəh*	7.5.4
'that/which'	*ʔən*	7.5.2
'to (dative)'	*ʔa.dɔː*	7.5.1
'top'	*ʔi.niəŋ*	7.5.4
'top'	*ʔm.piən*	7.5.4
'underneath'	*ʔi.dɨːp*	7.5.4
'when'	*ʔn.do̯ŋ*	7.5.4
'when'	*hoːj*	7.5.2
'with/by'	*daŋ*	7.5.3
'with/by'	*tək*	7.5.3
'with/by'	*baŋ*	7.5.3

12.7 Count/unit nouns and classifiers

All words which can directly follow numbers fall into the class of count nouns in Pacoh. These include general measure words, time nouns, and classifiers. They are dealt with in §7.2. Parentheses are used to identify classifiers (as opposed to measure words) and the semantic category of nouns with which they co-occur.

Gloss	Pacoh	Sections
'(flat area)'	*ṯiəh*	7.2.3
'(flat object)'	*plaːh*	7.2.3
'(general)'	*lam*	7.2.3
'(person)'	*naʔ*	7.2.3
'(person)'	*ti.kuəj*	7.2.3
'(tree)'	*toːm*	7.2.3
'afternoon'	*ʔi.bɨː*	7.2.2
'bag of'	*baːw*	7.2.1

Gloss	Pacoh	Sections
'ball of'	*kəl.lɔːŋ*	7.2.3
'basket of'	*ʔa.tɛh*	7.2.1
'bottle of'	*bɛː*	7.2.1
'bunch of'	*ʔm.pət, ʔn.nət*	7.2.3
'cup of'	*ti.ŋaːn*	7.2.1
'day'	*ʔi.ŋaj*	7.2.2
'group of'	*kən.tọh*	7.2.3
'hour'	*jɔː*	7.2.2
'kilogram'	*kən*	7.2.1
'kilogram'	*kən*	7.2.1
'month'	*ki.saj*	7.2.2
'month'	*ki.ʃaj*	7.2.2
'sheet of'	*laːŋ*	7.2.3
'stalk of'	*ʔn.noːm*	7.2.3
'stick of'	*ʔn.traʃ*	7.2.3
'time/episode'	*kən.tiʔ*	7.2.2
'type/kind'	*noh*	7.2.1
'year'	*ku.mɔː*	7.2.2
'year'	*ku.mɔː*	7.2.2

12.8 Scope nouns

The scope nouns constitute a small set. Their distribution is discussed in §7.6.

Gloss	Pacoh
'all'	*kaː*
'all'	*ŋɛʔ-kaː*
'all'	*ŋɛʔ*
'any'	*kɨːp*
'every'	*mọːj*
'every'	*tal*
'every'	*tɔːʃ*

12.9 Prepositions

The six main subcategories of Pacoh prepositions are discussed in Chapter 8.

Gloss	Pacoh	Sections
'after'	*jɔː*	8.6.1
'after'	*kuə*	8.6.1
'at'	*toʔ*	8.5
'at'	*ʔat*	8.5
'from'	*tɛː*	8.5, 8.6.1
'in order to'	*jọːn*	8.6.2
'in order to'	*dɔːʔ*	8.6.2
'in order to'	*jọːn*	8.6.2

Gloss	Pacoh	Sections
'into'	*mɔːt*	8.5
'like/as'	*ʔa.rəʔ*	8.4
'more than'	*ti.lət*	8.2
'more than'	*həːn*	8.2
'more than'	*liː*	8.2
'past'	*ti.lət*	8.5
'to'	*toʔ, tiː, tuː*	8.5
'to'	*ɟɔːn*	8.3
'to'	*ʔa.liːŋ*	8.3
'until'	*toʔ*	8.6.1
'when'	*toʔ*	8.6.1
'with'	*ʔa.liːŋ*	8.1

12.10 Sentence particles

The six subcategories of Pacoh sentence particles are discussed in Chapter 9.

Gloss	Pacoh	Sections
'(emphasis)'	*həː*	9.6
'(emphasis)'	*hɨː*	9.6
'(emphasis)'	*bəː*	9.6
'(emphasis)'	*ʔən*	9.6
'(urging)'	*ʔaw*	9.5
'already'	*ɟeː*	9.1
'already'	*ɟɛː*	9.1
'because'	*cɔː*	9.3
'if'	*nam*	9.3
'if'	*lah*	9.3
'no?'	*ləjʔ*	9.2
'not yet'	*ɟoːh₁*	9.1
'or not?'	*ʔa.liŋ-ləjʔ*	9.2
'otherwise'	*ʔa.bɨːʃ*	9.3
'then'	*kiː*	9.4
'then'	*maː*	9.4
'then'	*laː*	9.4
'then'	*koh*	9.4
'thus'	*koh*	9.3
'yet?'	*ɟoːh₂*	9.2

12.11 Verbs

The six major subcategories and additional minor subcategories are discussed in Chapter 10. Many have homophonous entries discussed in other subsections.

Gloss	Pacoh	Sections
'abandon'	*tah*	10.2.1
'answer'	*ʔoːj*	10.4.2
'arrive'	*toʔ*	10.6
'ask (someone)'	*ploh*	10.2.1, 10.4.2
'bad (of eyesight)'	*pluk*	10.4.3.1
'be at'	*ʔat*	10.6
'become'	*vaːʃ*	10.4.1
'big (plural)'	*pa.pɨːt*	10.1.4
'big'	*pɨːt*	10.1.4
'bite'	*kap*	10.2.1
'bite each other'	*tər.kap*	10.1.3
'born'	*cɛh*	10.1.4
'braid (hair)'	*klaːɲ*	10.2.1
'breathe'	*ta.ŋɨh*	10.1.1
'bring'	*doːŋ*	10.2.1, 10.2.4
'bring in'	*ta.mo̰ːt*	10.2.4
'bring out'	*pa.ŋoh*	10.2.4
'bring up'	*ʔa.ʃər*	10.2.4
'buy'	*pləj*	10.2.1
'cackle'	*ʃɛɲ-ʃɛl*	10.1.1
'call out'	*pəːh*	10.1.1
'carry'	*kuːj*	10.1.2, 10.2.1, 10.2.4
'catch'	*cuət*	10.1.2, 10.2.1
'cause each other to answer'	*pər.kləw*	10.1.3
'cause each other to eat'	*pər.ca*	10.1.3
'cause each other to learn'	*pər.hɔːk*	10.1.3
'cause to clean'	*pa.raːw*	10.2.2
'cause to play'	*pa.ʔaːk*	10.3
'cause to sniff'	*pa.hɛt*	10.2.2
'climb up'	*ʃər*	10.1.2, 10.6
'close'	*ka.tɨːk*	10.2.1
'clumsy'	*vaŋ-vəːŋ*	10.1.4
'cook'	*ta.ko̰h*	10.2.1
'cowardly'	*kəl.laʔ*	10.1.4
'cross over'	*ɟaŋ*	10.6
'cut'	*kɔh*	10.2.1
'deep'	*truː*	10.1.3, 10.1.4, 10.4.3.1
'die'	*ku.cḛt*	10.1.4
'difficult'	*diəjʔ*	10.1.4
'dig'	*piʔ*	10.2.1
'discuss'	*pa.piː*	10.4.2
'drift (of leaves)'	*ɟɛːl-ɟoːl*	10.1.1
'drill a hole'	*kar*	10.1.1
'drink'	*ŋɔːjʔ*	10.2.1
'dry'	*prɛːŋ*	10.1.4
'dry something'	*tiəŋ*	10.2.1

Gloss	Pacoh	Sections
'easy'	*ʔiən*	10.1.4
'eat'	*caː*	10.1.2, 10.2.1
'enough'	*kʰam*	10.5
'enter'	*mo̰ːt*	10.6
'exchange'	*tər.piən*	10.2.1
'exist'	*viː*	10.4.3.2
'exit'	*ŋoh*	10.6
'feed'	*pa.caː*	10.2.1, 10.3
'fight with each other'	*tər.taʔ*	10.1.3
'follow'	*ti.lət*	10.6
'fragrant (of tree sap)'	*kiːl-kuːl*	10.1.4
'full of twists and bends'	*vḭəl-ʔi.vḭəl*	10.1.4
'give'	*ɟo̰ːn*	10.3
'give birth to'	*cɛh*	10.4.1
'go'	*poːk*	10.1.1, 10.6
'hang'	*ɟoːŋ*	10.2.1
'hate'	*ʔa.ʔḭɲ*	10.2.1
'have'	*boːn*	10.5
'have'	*viː*	10.5
'hunt'	*pḛɲ*	10.2.1
'hurt/painful'	*ʔa.ʔaj*	10.1.4, 10.4.3.1
'in a hurry'	*həp*	10.1.4
'jump'	*vɔːt*	10.6
'know (things)'	*cɔːm*	10.2.1,
'level'	*liːp*	10.1.4
'like/want'	*ʔḭɲ*	10.1.4,
'listen to'	*kəm.maŋ*	10.1.1,
'little (exists of)'	*bḭə̰ʔ*	10.5
'live/reside'	*tu.mo̰ŋ*	10.6
'lose (something)'	*pit*	10.2.1
'love/be fond of'	*ʔa.mo̰ːʃ*	10.2.1
'lower'	*pa.ʃḭər*	10.2.4
'make/create'	*taʔ*	10.1.2, 10.4.1
'make fish sauce'	*ta.paʔ*	10.4.1
'meet'	*təm.muh*	10.2.1
'much (exists of)'	*hiːk*	10.2.1, 10.5
'much/many'	*ʔeː*	10.4.3.2, 10.4.3.2, 10.5
'open'	*poh*	10.2.1
'pleased'	*buːj*	10.1.4
'plentiful'	*bɔːŋ*	10.4.3.1
'plough'	*kaj*	10.1.1, 10.2.1
'put out'	*pa.ŋoh*	10.2.4
'put'	*dɔːʔ*	10.2.4
'raise'	*ʔa.ʃər*	10.2.4
'rest'	*ŋoː*	10.1.1
'rise'	*ʃər*	10.6

Gloss	Pacoh	Sections
'ruffled (of hair)'	*tuəp-juəp*	10.1.4
'run'	*luh*	10.1.1, 10.6
'scoop up with one's hands'	*kuəjʔ*	10.2.1
'sell'	*pa.te̤ːc*	10.3
'sharp'	*hɛːŋ*	10.1.4
'sick'	*ʔa.ʔaj*	10.1.4, 10.4.3.1
'similar to'	*ʔa.rəʔ*	10.4.3.1
'sit'	*ti.kuː*	10.1.1, 10.6
'sleep'	*biʔ*	10.1.1
'small'	*kɛt*	10.1.4
'smooth'	*pa.pat*	10.1.4
'speak'	*toːŋ*	10.1.1
'speak'	*pa.piː*	10.4.2
'stand'	*ta.ɟiŋ*	10.1.1
'still have/exist'	*joːl*	10.2.1
'string'	*kaŋ*	10.2.1
'study'	*riəŋ*	10.1.1, 10.2.1
'stuffed up'	*duːt*	10.4.3.1
'talk with each other'	*tər.toːŋ*	10.1.3
'teach'	*pa.cɔːm*	10.1.1, 10.2.3
'tell (someone)'	*toːŋ*	10.4.2
'tell stories'	*ʔn.ʃuər*	10.1.1
'thick'		10.1.4
'thin (of cloth)'	*ku.ban*	10.1.4
'thin (of people)'	*ʔɔːjʔ*	10.1.4
'throw (away)'	*pa.kʰir*	10.2.1
'tired'	*ʔa.lɛʔ*	10.1.4
'toss'	*vit*	10.2.1, 10.2.4
'treat (for sickness)'	*pa.laːj*	10.2.1
'turn'	*pi.liəŋ*	10.6
'vomit'	*ti.ʔoʔ*	10.1.1, 10.4.1
'wash'	*ʔa.raːw*	10.2.1
'wear (general)'	*ʃip*	10.1.2
'wear (on the upper body)'	*truː*	10.1.2
'weave'	*taŋ*	10.1.1, 10.4.1
'weigh'	*ʔn.taŋ*	10.4.3.1
'whittle'	*ciəh*	10.2.1
'write'	*viət*	10.1.2

12.12 Auxiliary/SVC/VCT verbs

VCT verbs (i.e. verbs that have lower verbs and clauses as complements) with the subscript two have non-VCT homophonous counterparts. This is generally the case for non-auxiliary verbs and those with more general, less grammatical functions.

Gloss	Pacoh	Sections
'able'	*boːn*	11.2
'able'	*hoːj*	11.7
'about to'	*təm.bəːj*	11.1
'already'	*kʰɔjʔ*	11.1
'already'	*jeːɜ*	11.1
'also'	*dəːj*	11.2
'also'	*cuŋʔ*	11.2
'ascend'	*ʃər₂*	11.5
'beg'	*ciːm*	11.2
'cause to bite'	*pa.kap*	11.3
'cause to carry on one's back'	*pa.kuːj₂*	11.3
'cause to eat'	*pa.caː₂*	11.3
'cause to play'	*pa.ʔaːk₂*	11.3
'certainly'	*kɔːm*	11.2
'continuously'	*pi.liː*	11.2
'cook'	*ta.kọh₂*	11.9
'count'	*tiɲ₂*	11.8
'descend'	*ʃiər₂*	11.5
'don't'	*ʔa.kəp*	11.6
'easy'	*ʔiən₂*	11.7
'give'	*ɟoːn*	11.4
'go'	*poːk₂*	11.5
'grab'	*təŋ.hɔːk₂*	11.9
'guide'	*kəjʔ₂*	11.9
'happy'	*buːj₂*	11.7
'hear'	*kəm.maŋ₂*	11.8
'hear'	*kəm.maŋ₂*	11.9
'in process'	*ʔat*	11.1
'just'	*təm.mɛː₂*	11.1
'let out'	*ta.lah₂*	11.9
'no/not (noun)'	*ʔih*	11.6
'no/not' (verb)	*ləjʔ*	11.6
'not yet'	*joːh*	11.6
'often'	*nɔːŋ*	11.2
'please'	*sɛːʔ*	11.9
'pleased'	*buːj₂*	11.8
'prepare'	*ti.raʔ₂*	11.9
'prevent'	*ɟɔːʔ₂*	11.9
'really'	*liː*	11.2
'remember'	*ʔa.jɨː₂*	11.8
'request'	*sɛːʔ*	11.9
'run'	*la.luh₂*	11.5
'sad'	*rəw₂*	11.8
'say'	*toːŋ₂*	11.8
'see'	*ɲọŋ₂*	11.9
'stop'	*ʔa.ŋoː₂*	11.2

Gloss	Pacoh	Sections
'take'	*pɛːh₂*	11.9
'take'	*ɲiəl₂*	11.9
'tell/order'	*juə₂*	11.9
'think'	*pər.ŋih₂*	11.8
'use'	*ka.diːŋ₂*	11.9
'want'	*ʔiɲ₂*	11.2
'will'	*ʔiɲ*	11.1

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