

The Syntax and Pragmatics of Word Order in Pahka'anil (Tübatulabal) Narrative Discourse

Michael Ahland

California State University, Long Beach

Pahka'anil (Tübatulabal [tub],) is a Uto-Aztecan language spoken in the Kern River/Lake Isabella area of central California. Pahka'anil's syntax is marked by high variability in word order, challenging notions of an identifiable 'basic order.' Voegelin noted the variability and described the word order as 'stylistic' (1935a: 151). No discussion of the degree of variation nor the forces which impact word order has heretofore been undertaken. Building on Ahland and Lycan (2019), this study examines the order of core constituents across 12 Pahka'anil narratives, highlighting the degree of variation and identifying the pragmatic conditioning factors which shape the order of elements in narrative discourse: activation of new concepts, establishment of expectation for later reference, topic shifts, switches in reference, and identifiability.

1. Introduction

Pahka'anil (exonym: Tübatulabal--TUB, ISO 639-3) is a Uto-Aztecan language spoken in the Kern River area around present-day Lake Isabella¹ in Kern County, California. The geneological position of Pahka'anil is not entirely settled: some consider it to be its own branch within Uto-Aztecan (e.g. Munro 1977; Mithun 1999: 539) while others position the language as one of the four branches of Northern Uto-Aztecan: Numic, Tübatulabal, Takic, and Hopi (Campbell 1997: 134). Manaster Ramer 1992 and Jane Hill 2009 have suggested that Pahka'anil subgroups with Tongva (Gabrielino) and Cupan as part of an early split in the development of Northern Uto-Aztecan (see Golla 2011: 185).

While no first-language speakers of the language remain today, language revitalization and reclamation efforts are underway through the work of the Pakanapul Language Team (PLT).² Pahka'anil is currently spoken by a growing population of heritage learners, including language

¹ Golla provides a map of the area (2011: 185).

² This work would not be possible without the support of the Pakanapul Language team, especially Robert Gomez (tribal chair) and Tina Guerrero (former tribal vice-chair). The work is also deeply indebted to Lindsay Marean who has shared her textual and lexical databases with me, and who has graciously given of her time to introduce me to the Pahka'anil data. The work has been supported through a variety of internal grants at Cal State Long Beach.

teachers on the PLT as well as other members of the Tübatulabal/Pakanapul community across the Kern County area.³

Pahka'anil grammar is marked by high degrees of variability in word order, challenging the identification of a 'basic word order.' Voegelin, in his *Grammar of Tübatulabal* (1935a), reported that word order in Pahka'anil is 'stylistic' and highly variable (1935a: 151). No discussion of the degree of variation nor the forces which impact word order have heretofore been undertaken.

1.1 *Overview and scope*

³ This study is part of the larger *Pahka'anil Text Project*. This project grew out of collaboration between the Pakanapul Language Team, tribal leaders, myself, and my students. The aim of the project is 1) to carry out an examination of Pahka'anil narrative discourse patterns (event line expression, verbal aspect, word-order, etc.) and their relationship to grammar and 2) to support the Pakanapul Language Team's revitalization efforts by providing online access to time-aligned, fully-interlinearized texts and newly-recorded audio in a user-friendly format. Thus far, we have worked mainly with texts from Charles Voegelin's published corpus (1935b) as well as Voegelin's field notebooks which have been recently made available to tribal leadership from the American Philosophical Society. The Project's site is here: (<https://web.csulb.edu/colleges/cla/projects/lingresearch/pahka'anil/>).

This study builds on Ahland and Lycan (2019) and examines word order patterns across a set of 12 Pahka'anil narratives (a total of 561 clauses, in natural context) in an attempt to better understand the degree of variation and the conditioning factors which shape the order of overt, non-pronominal, NP subjects and objects in narrative discourse (see footnote 3 and section 3, below) . As suggested above, no basic order for core elements in the clause was suggested in Voegelin's grammar, and the issue has not been taken up in the broader literature.

The goal of this chapter is to provide an explanation of the variation in Pahka'anil word order, shedding light on the motivations and pressures which shape constituent order in the language. After a brief discussion of relevant features of Pahka'anil morphosyntax (section 1.2), the discussion turns to an examination of typologically established correlation pairs (section 2), e.g. the order of adposition and noun phrase, which have been shown to correlate with the order of verb and object cross-linguistically (Dryer 1992). The discussion then turns to text counts, examining the relative frequencies of the different orders of core constituents relative to the verb (section 3). Analysis and discussion of factors correlating with word order are discussed in section 4, and section 5 summarizes the findings and highlights their implications.

1.2. Pahka'anil preliminaries

Before examining word order itself, we need to briefly highlight certain relevant morphosyntactic features of Pahka'anil. The data in this paper are presented in the Pakanapul Language Team's practical orthography.⁴ The data used throughout are pulled from a variety of sources: Voegelin's grammar of Tübatulabal (1935a), Voegelin's corpus of texts (1935b), and the text "Brownie and Girl" (Marean et al. 2021). The data taken from these sources have been rewritten using the Pakanapul Language Team's practical orthography and interlinearized following Lindsay Marean's unpublished lexical (2015) and textual databases.⁵

1.2.1. Case marking and noun classes

Given that much of the focus of this paper is on the order of argument NPs, case marking will be very important in identifying the core arguments. Pahka'anil nouns can be used in two different basic domains: in citation form or in possessed form (in Voegelin 1935a: 144-135, these two domains are termed 'absolute' and 'relative', respectively). The citation

⁴ In the practical orthography, currently in use by the Pakanapul Language Team, stress is not marked. Orthographic vs. IPA equivalent for some of the more difficult-to-decipher graphemes are provided here: c [ʃ], j [dʒ], ng [ŋ], ngg [ŋg], r [ɾ], tc [tʃ], ts [ts], x [x], ü [i], and ' [ʔ]; long vowels are written as geminate sequences.

⁵ The grammatical abbreviations used throughout are the result of my team's analytical work and revisions of Marean's foundational work. Any errors therein are fully my own.

and possessed forms interact in complicated ways with the language's complex noun class and case systems.

First, nouns in citation form take one of three noun class suffixes -l (class A), -t (class B) and -Ø (class C).

	A	B	C
(1)	<i>tohii-l</i>	<i>ic-t</i>	<i>naadü-Ø</i>
	deer-NCM.A	coyote-NCM.B	cat-NCM.C

These noun class markers are then followed by core case marking (Table 1).

Table 1. Noun Class and Case Marking on Citation Nouns

	Class A	Class B	Class C
Nominative	-Ø	-Ø	-Ø
Accusative	-a	-a	-i
Genitive	-ing [-a'ang in a small subclass]	-ing	-ing

The nominative case is morphologically unmarked on citation nouns across all classes. In (2), the class A noun 'deer' is zero-marked for nominative case, while the class C noun 'wolf' is marked for accusative case.

- (2) *pic=kitc tohii-l-Ø tuuci*
 then=REP deer-NCM.A-NOM straight.on
üü~cüdüük taawüg-üic tübaij-i
 MOM~be.restless see-SS wolf-ACC
 'Then, it is said, the deer move when they see the wolf.'
 (from Hoarded Game, Voegelin 1935b)

In (3), below, the class B noun 'coyote' is zero-marked for nominative case.

- (3) *pic ic-t-Ø ü~wük tohii-l-ing*
 then coyote-NCM.B-NOM MOM~grab deer-NCM.A-GEN
alhan-i-n
 jawbone-NREFL.POSS.ACC-3SG.POSS
 'Then coyote grabbed the deer's jawbone.'
 (from Coyote's Mother in Law, Voegelin 1935b)

The class-C noun 'cat' is shown below in accusative case ('wolf' in (2) is also a class-C noun bearing the accusative suffix).

- (4) *haca=k aacina-an naadü-i*
 NEG=1SG.NOM bathe-BEN cat-ACC

'I can't bathe the cat for him.' (from Marean 2015:28)

Adpositional forms license accusative case, and those that have become phonologically bound attach following the case marking;⁶ in (5), the locative /-p/ follows the accusative marker.

(5) *wah=kitc* *ü~büł* *tohii-l-a-p*

DIST:LOC=REP MOM~arrive deer-NCM.A-ACC-LOC

'He arrived there near the deer.' (from Bat and Horsefly, Voegelin 1935b)

Possessed nouns are not marked with the noun class marker found on citation forms. Rather, they are marked as either reflexive (where the possessor is the grammatical subject of the clause) or as non-reflexive (where the possessor is not the grammatical subject).⁷ Possessed nouns

⁶ Contra the recommendations of one of my anonymous reviewers, I use the term 'bound postposition' for those adpositional elements that have become bound while maintaining their adpositional function; this is in keeping with Payne (1997: 100-101). The primary reasoning for using the term 'adposition' in this manner in this chapter is rooted in the need to compare the relative orders of forms which appear to carry out related functions.

⁷ Voegelin uses the terms *suus* and *ejus* for the reflexive possessed and non-reflexive possessed relative nouns, respectively (1935a: 144).

exhibit far more variation in morphological marking than citation nouns and are sensitive to the A, B, and C classes as well as B and C subclasses of nouns. These have been carefully documented by Voegelin (1935a: 144-153). Kinship terms and many body parts may only be found in the possessed form (i.e. inalienably possessed). Table 2 provides these possessed noun forms.

Table 2. Case Marking on Possessed Nouns

		Class A	Class B					Class C	
			1	2	3	4	5	1	2
Nominative		-Ø	-Ø	-Ø	-Ø	-Ø	-Ø	-Ø	-a
Accusative	Reflexive	-(i)	-Ø	-ts	-Ø	-Ø	-(i)	-(i)	-(ai)
	Non-Reflexive	-yi	-yi	-tsi	-nini	-dzi	-i(yi)	-i(yi), -ni,	-ayi
Genitive		-in	-in	-in	-in	-in ⁸	-in	-'in	-a'in

On possessed nouns, nominative case is generally zero-marked just as on citation nouns.⁹ Only class C.2 shows a nominative marker /-a/. Voegelin

⁸ Voegelin reports that "No examples were found for the relative [possessive] genitive of B4 nouns" (1935a: 147). This may be an artifact of sample size. Given that very nearly all other genitives are /-in/, the /-in/ is a reasonable guess.

⁹ The citation form of nouns bear only the class marker; they are zero marked for case, as are all nominatives (Table 1). Zero marking is not generally indicated throughout these data and is only mentioned where of particular importance to the discussion at hand.

(1935a: 146-147) reports phonologically conditioned allomorphy in many of the non-reflexive suffixes (the conditioning factor involves the consonant at the end of the stem, 1935a: 146). A number of the reflexive suffixes alternate with zero (here indicated by the parentheses). The reader is directed to Voegelin 1935a: 144-153 for the details; the discussion of all the variants would lead far from our current purpose.

In (6), the object 'beads' is marked as reflexively possessed by the subject 'coyote.'

- (6) *pic=kitc waihai ic-t*
 then=REP DIST:LOC:FROM coyote-NCM.B
 tugumba-i ü~wük
 bead-REFL.POSS.ACC MOM~grab
 'The from there Coyote took his own beads.'
 (from Coyote and Bear, Voegelin 1935a).

Example (7) below illustrates the accusative marking on the reflexively possessed noun 'eye' (i.e. the possessor is coreferential with the subject). In this instance the subject 'Bat' has already been established as a topic in the discourse and is, as a result, not overtly expressed (this is the case with 3SG subjects which are already activated topics--see section 4.1.4, below).

- (7) *pic=kitc üyaa-l-a ü~wük*

then=REP low.cactus-NCM.A-ACC MOM~grab

pundz-i=gitc *hiiip iyyaa-l-a-c*

eye-REFL.POSS.ACC=REP rub low.cactus-NCM.A-ACC-INS

'Then (Bat) grabbed the cactus and rubbed his own eyes with the cactus.'

(from Bat and Horsefly, Voegelin 1935b)

While the possessor in the case of reflexively possessed nouns is always the grammatical subject, non-reflexive possessive accusative suffixes must be specified for the possessor with an additional suffix; the most frequent is the 3SG possessive suffix /-(i)n/.¹⁰

(8) *pic=kitc* *wahai* *ic-t*

then=REP DIST:LOC:FROM coyote-NCM.B

pundz-iy-n *ü~wük* *wahai=gitc*

eye-NREFL.POSS.ACC-3SG.POSS MOM~grab DIST:LOC:from=REP

'Then from there Coyote grabbed the eyes, from there.'

(from War with Yokuts, Voegelin 1935b)

¹⁰ In (8), the possessor of 'the eyes' is Lapapil who was killed in a battle. Presumably 1st and 2nd person possessors are also possible on non-reflexive possessive accusative forms, but these have not been identified in Voegelin's texts.

If an overt NP possessor is specified in the clause, that possessor (e.g. 'deer' in 9, below) carries the genitive case and the possessed noun carries the non-reflexive accusative and 3SG possessive suffixes.

- (9) *patsaawa-l=gitc* *ii~mi* *wügii-yi-n*
bat-NCM.A=REP MOM~go tracks-NREFL.POSS.ACC-3SG.POSS

tohii-l-ing
deer-NCM.A-GEN

'Bat took leave (following in) the tracks of the deer.'

(from Bat and Horesfly, Voegelin 1935b)

Given that nominative case is the only case which is zero-marked for each of the three noun classes, it will not be shown nor glossed overtly in these data in the following sections. The noun class C zero marker will also not be indicated.

1.2.2. Pronominal enclitics

Many natural clauses in Pahka'anil discourse do not have overt, lexical NPs. In fact, the most frequently attested way to express participants in natural discourse is through the use of pronominal enclitics (Table 3, below). Previously mentioned (activated) or established topical participants in discourse are referenced through the use of encliticized

forms; full lexical NPs may be used as well, but, in these less frequent instances, those full lexical NPs are positioned postverbally when a pronominal enclitic is used.

Table 3. Participant Reference Marking with Pronominal Enclitics

Subject		Object	
1SG.NOM	=gi	1SG.ACC	=ni
1DU.NOM	=gila	1PL.ACC	=dzii, =dzüŋ
1PL.INCL.NOM	=giluuts		
11PL.EXCL.NOM	=gila'ang		
2SG.NOM	=bi	2SG.ACC	=düŋ , =ding, =lüŋ
2PL.NOM	=buumu	2PL.ACC	=dulu
3SG.NOM	=Ø	3SG.ACC	=Ø
3PL.NOM	=da	3PL.ACC	=dapü

The 1st and 2nd person enclitics are generally required (regardless of activation status in previous discourse), except in the rare instances when free pronoun forms are used. In the case of 3rd person, pronominal enclitics are not required in first mentions (when the full lexical NP is needed), but, as noted above, they are required after a referent has been activated through mention and is continuing in discourse. Full lexical NPs that have been recently activated are most frequently not attested in natural discourse; in the rare instances where the full lexical NP is found

after activation, it is positioned postverbally as an appositive—this is discussed again in sections 3-5 (below).

The pronominal enclitics (in Table 3, above) are generally reductions of the free pronouns; this is particularly true for 1st and 2nd person. The 3SG nominative and accusative categories are meaningful zeros--all other person, number, and case categories are indicated overtly (Table 3). Voegelin's analysis of these forms supports the meaningful zero analysis of 3SG:

“The third person singular is usually expressed by a zero form; that is, when the pronouns expressing other persons or number do not appear, third person singular is indicated.” (Voegelin 1935a: 136)

Pahka'anil's pronominal enclitics most frequently attach to the end of the first word in a sentence, regardless of syntactic category (i.e. as a 2nd position enclitic), but they can attach to any element in any position in the sentence--the details of their positioning is not fully understood. Examples (10) illustrates the 1SG nominative enclitic while (11) illustrates both the 2SG nominative and the 1SG accusative. These are by far the most frequent means of referring to the speech act participants in natural Pahka'anil discourse.

(10) *pic=ki* *ü'~ülüük*

then=1SG.NOM MOM~wake.up

‘Then I woke up.’

(from Bull Dream, Voegelin 1935b line 9)

(11) *aa~hyakinaa=bi=ni*

MOM~leave-ACT>COME=2SG.NOM=1SG.ACC

unung-apüü-p

pound-NMLZ-2SG.NOM

‘You left me and went away to your pounding.’

(from Yüha'awal Steals Girl, Voegelin 1935b line 48)

As mentioned above, third person references are zero when the referent is singular, but the form /=da/ (frequently devoiced to [=ta]) is used for 3PL. In (12) the 3PL enclitic co-occurs with the NP subject /piniyu/.

(12) *pic=ta=gite piniyu aa~dawüük*

then=3PL.NOM=REP everyone MOM~see

‘Then everyone saw it.’

(from How the Earth was Made, Voegelin 1935b)

Pahka'anil's participant reference enclitics do not obligatorily co-occur with an overt, coferential NP; rather, the referent is usually already

activated (cf. Chafe 1994) in the minds of the hearers through previous mention and is thus referenced only through the enclitic, repeatedly. Example (13) contains an excerpt of three sentences. The participants Coyote and mother-in-law are introduced in (1) and then referenced via the enclitic /=ta/ in (3) and (4).

(13) 1 *pic=kitc ic-t pingg-ūt wacumbic*
 then=REP coyote-NCM.B say-DUR spouse's.parent
 'Then Coyote says to his mother-in-law,'

2 *ii~mi-caa=gihuuts nüxmanaak*
 MOM~go-FUT=1PL.NOM Nihmanak
 "'We will go to Nihmanak.'"

3 *pic=kitc=ta tuugu-k-ang u'~uganw*
 then=REP=3PL be.dark-INTER-DS MOM~get.ready
 'Then they got ready at night.'

4 *pic=kitc=ta ii~mi*
 then=REP=3PL.NOM MOM~go
 'Then they took leave.'

(from Coyote's Mother-in-Law, Voegelin 1935b)

The behavior of the 3PL enclitic is important to the argumentation and discussion later in the chapter (section 4.1.4). One very important aspect of the 3PL enclitic is that it allows one to see the behavior of the enclitic system for third persons. Since the 3SG (nominative and accusative) involves only zero marking, the 3PL category is highly instructive--illustrating how the third person enclitics reference concepts first introduced as nouns and how they may co-occur with overt, coreferential nouns which are already established and activated. In short, pronominal enclitics are central to understanding the overall lack of full lexical NP subjects in areas of high referential continuity in Pahka'anil discourse. The lack of overt lexical NPs is evidence of the pronominal enclitics' ability to satisfy fully the requirements of grammatical subjects, as seen in the examples above.

2. Typological overview of Pahka'anil constituency order

Before examining the degree of variation found in core constituent orders in Pahka'anil narratives, it is important to consider the sorts of word order correlations that may be expected. Dryer's work, in particular, has established cross-linguistic evidence of correlations in order between certain grammatical elements. The discussion below briefly highlights a selection of Dryer's most robust correlation pairs and examines the

Pahka'anil data in light of these typological tendencies. The examination focuses on whether strong correlation pairs can be identified in the Pahka'anil data or whether variations in order are frequently attested across these pairs.

2.1. Dryer 1992's correlation pairs

Dryer's work has examined Greenberg's claims that the order of some pairs of grammatical forms correlates with the order of verb and object (see especially Dryer 1992). Through careful, empirical study of 625 languages, Dryer offers an important corrective in our understanding of word order patterns and correlations: there are some pairings which do in fact correlate with the order of verb and object.¹¹ Dryer's correlation pairs are summarized below (Table 4).

¹¹ While some scholars have more recently argued against some of Dryer's findings (Dunn et al. 2011, for instance), Dryer has suggested that his correlations do hold up when scholars consider the interaction of dominance and harmony principles. Dominance principles refer to the order of two elements independent of other phenomena (like noun - relative clause order over relative clause - noun order) (Dryer 2011: 341). The harmony principle refers to a principle which "relates two typological parameters and favors two of the four language types, one of which is the opposite of the other" (e.g. OV + relative clause - noun and VO + noun - relative clause) (Dryer 2011: 341).

Table 4. Dryer's Correlation Pairs (from Dryer 1992: 108)

	Verb Patterner	Object Patterner
1.	verb	object
2.	verb	subject
3.	adposition	NP
4.	copula	predicate
5.	'want'	VP
6.	tense/aspect auxiliary verb	VP
7.	negative auxiliary	VP
8.	complementizer	sentence
9.	question particle	sentence
10.	adverbial subordinator	sentence
11.	article	N
12.	plural word	N
13.	N	genitive
14.	N	relative clause
15.	adjective	standard of comparison
16.	verb	PP
17.	verb	manner adverb

Dryer's work explores various kinds of explanations that have been offered for such correlations and notes that the most popular view was the

Head-Dependent Theory (HDT), where "verb patterners in correlational pairs are heads and object patterners are dependents" (1992: 87). And the implication has often been that languages tend toward head-initial or head-final patterns. Dryer's early work rejected HDT¹² for a more preferred Branching Direction Theory (BDT) where the explanation is rooted in a non-branching/non-phrasal patterner (e.g. verb) and a branching/phrasal patterner (e.g. object) (1992: 89)--essentially the tendency then is for phrasal, branching categories to be positioned before non-phrasal categories in OV systems and the converse in VO (1992: 133). In Dryer's later work however, BDT is itself called into question as an adequate explanation for some correlational pairs (2009).

Finally, it is perhaps worth noting several of the pairings that were considered in Dryer's work but which were not supported as correlational pairs with the order of verb and object cross-linguistically. These include adjective and noun, demonstrative and noun, intensifier and adjective, negative particle and verb, and tense/aspect particle and verb. Since Dryer did not find these to be correlational with respect to the order of object and verb, they are not considered for Pahka'anil.

¹² An important observation is that "adjectives, demonstratives, and numerals ought to be object patterners [i.e. dependents]," but they do not cross-linguistically correlate with the order of the verb and object (Dryer 2009: 186).

2.2. Pahka'anil correlation pairs

The discussion below explores Dryer's correlational pairs with respect to Pahka'anil data. First, there are six correlation pairs which Dryer reports but which cannot be examined for Pahka'anil because one of the members of the pair does not meet the criteria set forth in Dryer's work. First, no tense/aspect marked auxiliary verbs have been identified in the corpus or in Voegelin's grammar, so tense/aspect auxiliary verb and VP (#6) cannot be examined. Second, the negative and VP (#7) pair cannot be examined because negative forms in Pahka'anil do not exhibit verbal properties (as discussed in Dryer 1992: 101); they are better seen as indicative of Dryer's negative particle category, which is a non-correlational pair with the VP (1992: 97). Third, there is no single grammatical structure allocated to the function of marking complements (#8); the nominalizer /-apüü/ frequently functions as a relativizer and in some cases marks headless relatives which can serve as complements. Fourth, no adverbial subordinator (#10) has been identified in Pahka'anil. Generally, such clause combinations make use of bound switch reference subordinators not free adverbial wordforms. Fifth, no article (#11) has been identified in Pahka'anil (in Voegelin's grammar or in the corpus). Finally, there are no plural words in Pahka'anil (plurals are formed either through suffixation or reduplicative prefixation--Voegelin 1935a: 140).

For those pairings which can be considered, all the data are taken from my fully annotated version of Voegelin's original text corpus (1935b)--not the smaller subset of 12 texts for which all frequency counts for overt NPs are taken (see Table 7, below). After the data are illustrated and discussed, two questions will be considered: Are there clear preferences of one order or another across these correlational pairs--i.e. are there any tendencies in order related to elements which are typically verb-patterning or object-patterning? and Where is there frequent variation in order of correlational pairs? The aim is to try to determine whether some orders are obligatory (or nearly so) due to syntax and, if so, which pairs show more rigid syntactic patterns and which appear to be more flexible with respect to other pressures, e.g. discourse and pragmatics. This section does not provide actual counts of frequency of all correlational pairs. Rather, it serves simply to highlight what orders are attested in my database of 25 Voegelin texts.¹³

¹³ There are two databases to which I refer in this chapter. One database includes 25 of the 27 Voegelin texts (two texts are left out of the set because they have not yet been processed and annotated as an ELAN file); this database is fully interlinearized but not coded for grammatical subject and object order. The other database, which houses the corpus upon which the frequency counts of core NP arguments relative to the verb, includes a total of 12 texts (11 of which are texts from Voegelin; the other is "Brownie and Girl" which was originally recorded by Hansjakob Seiler in 1954 and translated line by line by Sydney Lamb and deposited in the Tübatulabal collection LA 80 at Berkeley

2.2.1 Selected correlational pairs in Pahka'anil

Each correlation pair is introduced below with an italicized heading and number corresponding to Table 4, above. Within each italicized subheading, the first element corresponds to the verb-patterner and the second element to the object-patterner.

2.2.1.1 *Verb and object (1)*. The basis of Dryer's correlational pairing involves the order of verb and object. Both VO and OV orders are quite frequently attested in the corpus (14-15).

	V	O
(14)	<i>wah=kitc=ta</i>	<i>a~ta'aga</i>
	<i>taatwa-l-a</i>	
	DIST=REP=3PL.NOM	MOM~meet
		man-NCM.A-ACC
	'There they met the man.'	
	(Yüha'awal Steals Girl, Voegelin 1935b)	

O **V**

Language Center (UC Berkeley)). "Brownie and Girl" is now published as an interlinearized, fully annotated text (Marean, et al. 2021). Actual frequency counts of core constituents relative to the verb for this 12-set corpus are provided in Table 7, below.

(15) *pic=ki* *tooro'-i* *aa~dawüük*

then=1SG.NOM bull-ACC MOM~see

‘Then I see the bull.’

(Bull Dream, Voegelin 1935b)

The frequency of each order (VO and OV) is substantial enough that no overwhelming tendency is observed in the corpus. Out of the 561 clauses in the 12 texts examined in this study, there are 39 instances of VO and 30 instances of OV attested (see Table 7). Perhaps the order of V and O (as core elements of a clause) is more sensitive to pragmatic pressures than some of the other correlational pairs. The discussion which follows attempts to find and shed light on correlational pairs, whether they exhibit any clear preferences for order and if so, what the implications might be for understanding Pahka'anil constituent order.

2.2.1.2 *Verb and subject (object-patterner) (2)*. While there is less variation in the order of verb and subject than with verb and object (SV is much more dominant), both SV and VS are clearly attested (16, lines 1 and 2).¹⁴

¹⁴ It is important to note that 16 (lines 1 and 2) are adjacent lines in the same text. Later discussion will highlight how the order of S and O relative to the verb is sensitive to

S V

(16) 1 *wah=kitc tübaitc hal-üt.*

DIST:LOC=REP wolf live-DUR

‘Wolf is sitting there.’

V S

2 *taawüğü'-at=kitc tübaitc cuuna-yi-n*

look.about-DUR=REP wolf heart-NREFL.POSS.ACC-3SG.POSS

hanii-l-ing

house-NCM.A-GEN

‘Wolf looks around inside the house.’

(Hoarded Game, Voegelin 1935b)

Considerations and counts of verb and subject orders throughout this chapter include only full lexical NP arguments; pronominal clitics are not counted.

pragmatic pressure and status of concepts: including new, activating, identifiable, and more.

2.2.1.3 *Adposition and NP (object-patterner) (3)*. The order of adposition and NP in Pahka'anil is complicated. There are clear examples of postpositions which are phonologically bound to the nouns which they follow, but there are many other forms, which Voegelin has lumped into a larger category of 'particle,' that function as adpositions but which do not appear to have a fixed position relative to the NP. These are discussed below.

Many of the most frequent adpositions in Pahka'anil are phonologically bound to their preceding nominal complements.¹⁵ These postpositional forms obligatorily assign accusative case to their nominal complements (17 and 18).

NP P

- (17) *ii~mi haniil-a-p*
 MOM~go house-ACC-LOC¹⁶

¹⁵ One could avoid issues of boundedness (and perhaps the degrees of historical change it may indicate) by adopting 'flag' in the sense that Croft uses it: as a term that includes case affixes and adpositional forms, regardless of whether the morpheme is bound or not (Croft 2022: 117-118). In earlier work by Haspelmath, boundedness appears to be required of flags (Haspelmath 2019: 96). As noted in section 1.2.1, the term adposition is used throughout this chapter whether forms are phonologically bound or not.

¹⁶ The general locative form /-p/ can be used to express a range of locative meanings: at, on, into, etc.

‘He went in the house.’ (Voegelin 1935a:152)

The expression of source uses the locative postposition in conjunction with an additional postposition 'from' (Voegelin makes this observation as well (1935a: 152), noting that the form /-atsu/ can attach after other adpositions) (18).

NP P

(18) *ii~mi haniil-a-b-atsu*

MOM~go house-ACC-LOC-from

‘He went (away) from the house.’ (Voegelin 1935a: 152)

Additional bound postpositions in Pahka'anil include /-miik ~ -kiik/ 'toward' and /-c/ INS (instrumental) (Voegelin 1935a: 151).

Other adpositional forms, which Voegelin calls particles (a term used for many phonologically free elements whose position appears to be variable), may be positioned on either side of the noun. Examples (19-20) illustrate the form /aamaayu/ 'with (accompaniment)' (which is also sometimes represented as /aamaaiyu/ and /aamaaiy/ in Voegelin's texts and grammars--but with no indication of a morphological contrast related to those variants). In (19), the form follows the noun which is marked with accusative, just as other bound postpositions require.

NP P

(19) *ii~mi cigawiya-m-i aamaayu*

MOM-go Koso-PL-ACC with

‘He went with the Koso Indians.’

(Voegelin 1935a: 150)

In (20), the same form appears positioned before the nominal complement--again the noun is marked with the expected accusative case.

P NP

(20) *miy-at aamaayu kooim-i*

go-DUR with woman-ACC

‘He is going with the woman.’

(Voegelin 1935a: 176)

There are three other examples found in Voegelin's full corpus with this same form /aamaayu/ 'with'--one which follows the NP (21); one which precedes the NP (22);¹⁷ and one example where the accompanying participant is a possessor on another noun, referenced by the /-n/ on 'house' (23).

¹⁷ Example (22) also illustrates the form /-miik/ 'toward', which attaches to the accusative marked 'house'.

NP P

- (21) *cooyi=gi amaaiyu*

wife=1SG.NOM with

'(I am) with my wife.'

(Journey from Tejon, Voegelin 1935b)

P NP

- (22) *hanii-l-a-miik aamaay wal*

house-NCM.A-ACC-toward with DIST:ACC

oomoh-i

friend-REFL.POSS.ACC

'...toward the house with that one friend (of mine).'

(Miranda Autobiography, Voegelin 1935b).

NP P

- (23) *pic=kitc tūbaitc o~lhom' hanii-ba-n aamaaiyu*

then=QUOT wolf MOM~enter house-LOC-3SG.POSS with

'Then, it is said, Wolf entered the man's house with him.'

(Hoarded Game, Voegelin 1935b)

Finally, some of Voegelin's particles, which he suggests have
'prepositional' behavior, appear to have developed from postpositional

phrases, e.g. in (24) the final [p] in /akadzip/ is likely the locative /-p/ and the /-i/ which precedes it is likely the ACC case marker. That said, no noun form similar to /akadz/ has yet been identified in the available data--as a result, the suspected case and postposition have not been parsed. In (24), below, one cannot be certain if accusative case on 'canyon' is assigned by 'across' or by the verb 'go'. There are clear examples in the texts, that movement predications such as 'go' (and 'come') do indeed assign accusative case to goal NPs.

- | | | | | | | |
|------|--|------------------|--------------|---------------------|--|----------------|
| | P | NP | | NP | | P |
| (24) | <i>akadziip</i> | <i>oholaal-a</i> | <i>ii~mi</i> | <i>cigawiya-m-i</i> | | <i>aamaayu</i> |
| | across | canyon-ACC | MOM-go | Koso-PL-ACC | | with |
| | 'He went with the Koso Indians across the canyon.' | | | | | |
| | (Voegelin 1935a: 150) | | | | | |

Ultimately, it does appear that postpositions, while not the only adpositional form in Pahka'anil, are likely the older, more established means of adpositional function. Both their morphological size (typically one or two syllables at most) and the fact that they are phonologically bound to their complements suggests they are likely older, more grammaticalized.

2.2.1.4 *Copula and predicate (object-patterner) (4)*. Predicates follow the copula verb, whether the verb is in a frozen form (25) or inflected (26).

COP PRED

(25) *wün wookan*

be soon

'It is the end.'

(Jimsonweed Dream, Voegelin 1935b)

For presentational functions, the predicate always appears to follow the copula.

COP PRED

(26) *ku=di ü~wün woo paahuu-l*

also=CONJ MOM~be two arrow-NCM.A

'And also there were two arrows present.'

(Hoarded Game, Voegelin 1935b)

'want' and subordinate verb (object-patterner) (5)

The desiderative form /-(i)ba'/ DES (meaning 'want') is suffixed to the lexical verb--similar to auxiliary verb behavior in many verb-final systems. Durative aspectual marking is suffixed to the 'want' suffix--i.e. the end of the verbal word (28).

V want

(27) *pic=kitc pitcoogic-t e~he'ewiin-iba'*

then=REP horsefly-NCM.B MOM~lift-DES

'So, Horsefly wanted (began) to lift (it).'

(Bat and Horsefly, Voegelin 1935b)

V want

(28) *ii'i-ba'-at moomoh-t-a*

drink-DES-DUR jimsonweed-NCM.B-ACC

'He wants to drink Jimsonweed.'

(Speech to Boys, Voegelin 1935b)

Question particle and sentence (object-patterner) (9)

In Dryer's work, of those languages where question particles occur on the periphery of the sentence, the S is object-patterner in OV language while the the results are more mixed for VO languages--depending on the part of the world where the language is spoken (1992: 102). For Native American languages, the S is strongly an object-patterner, regardless of the order of O and V (Dryer 1992: 102). In Pahka'anil, polar question markers are procliticized to the beginning of the interrogative clause. According to Dryer's findings, this intial position is a feature more commonly associated with VO orders.

QP

- (29) *an=bi tiika-t*
QP=2SG.NOM eat-DUR
'Are you eating?'

QP

- (30) *an=meeda=kü=kitc taa-l*
QP=ready=QUOT=REP sun-NCM.A
'"Are you ready? says Sun.'
(Coyote Rescues Babies, Voegelin 1935b)

2.2.1.5 *Noun and genitive (object-patterner) (13)*. Voegelin notes that Genitive-Noun order is "preferred" (1935a: 151), but the Noun-genitive order is also quite frequently observed. In fact, across my database of 25 Voegelin texts, there are 19 instances of the N – GEN order and 25 instances of GEN – N. Regardless of order, the possessor takes the genitive suffix while the possessed noun takes a general 3rd person (non-reflexive) possessive suffix /-n/ (cf. Voegelin 1935: 150-1)

- (31) *halü-t=kija mügütih tii*
live-DUR=REP Migitih and

	N	GEN
<i>tciitc co'ibi-t</i>	<i>utsuu-n</i>	<i>mügütih-ing</i>
one old.woman-NCM.B	grandmother-3SG.POSS	Migitih-GEN

wooyo-o-da halü-t.
 both-oh-3PL.NOM live-DUR

‘Migitih is living, and one old woman, the grandmother of Migitih;
 they are both living.’

(Blood Clot Boy, Voegelin 1935b)

The next sentence of the same text shows Genitive-Noun order (32).

	GEN	N
(32)	<i>mügütih-ing</i>	<i>aabuu-n</i>
	Migitih-GEN	mother-3SG.POSS

honokang-gi im~bingk co'ibi-t-a
 pregnant-1SG.NOM MOM-say old.woman-NCM.B-ACC

‘The mother of Migitih said to the old lady, "I am pregnant" (for
 Migitih is in her womb).’

(Blood Clot Boy, Voegelin 1935b)

2.2.1.6 *Noun and relative clause (object-patterner) (14)*. Voegelin notes in his grammar that relativized verbs (and other nominalized verbs) precede the nouns they modify (i.e. their heads) (Voegelin 1935a: 174-175)—features commonly associated with OV patterns. However, in the texts, there are examples where the relativized verb follows the modified noun (33 and 34) as well as a number of headless relative clauses which themselves function as complements.

N REL CL

- (33) *met aaiyaamuuts üüdzüm miy-apüü-ts*
 already 1PL.NOM long.time go-REL-REFL.POSS.ACC
 ‘...already a long time that we had been gone.’
 (Voegelin 1935b: Miranda Autobiography, line 714)

- (34) *pic=ki tumuuga ümbü*
 then=1SG.NOM dream again

N REL CL

- wal uuna-l-a un~dumuug-apüü-i*
 DIST:ACC bear-NCM.A-ACC MOM~dream-REL-REFL.POSS.ACC
 ‘Then I dreamt again (of) that bear that I dreamt about.’
 (Voegelin 1935b: Bear Dream, line 18)

Example (35), below (from the same text as (34)), is more perplexing structurally. The structure may be an example of the relative clause - noun order Voegelin mentions in his grammar or it may be more akin to a genitive construction as Voegelin's translation suggests (Voegelin's translation is the upper one); If this is like a genitive construction, it must be noted that there is no formal genitive case on the nominalized / relativized verb (compare to 36 below).

(35) *pic=ki* *a~magamin*
 then-1SG.NOM MOM~remember

REL CL	N
<i>un~dumuug-apüü-i</i>	<i>uuna-l-a</i>
MOM~dream-REL-REFL.POSS.ACC	bear-NCM.A-ACC

'Then I remembered my own past dream (of) the bear.' OR

'Then I remembered the bear that I dreamed about.' (My Translation)

(Bear Dream, Voegelin 1935b)

The /-apüü/ structure can function as a nominalizer more generally, as in the example below, where the preceding NP is marked with the GEN and modifies the following relative/nominalized verb.

- (36) *pic=ki woo-camaana-'ang*
 then=1SG.NOM two-week-GEN
un~dumuug-apüüi-i
 MOM~dream-NMLZ-REFL.POSS.ACC
ii~mi bicip-miniik
 MOM~go Bishop-toward
 'Then two weeks after my own dream, I took leave toward Bishop.'
 (Bear Dream, Voegelin 1935b)

2.2.1.7 *Adjective and standard of comparison (object-patterner) (15).*

Dryer's findings support the link that Greenberg found between VO and Adjective-Marker-Standard order (Greenberg 1963; Dryer 1992: 91-92). In his work, Dryer ignores the position of the marker in comparative constructions. Pahka'anil's pattern shows the order Adjective – Marker – Standard in its comparative construction (a non-active complement construction with a zero copula). The only examples I've been able to find are in Voegelin's grammar--none have been identified in his texts.

- | | Adjective | | Standard |
|------|---|----------------|-----------------|
| (37) | <i>pülü' tohii-l</i> | <i>ooyanac</i> | <i>paaim-i</i> |
| | heavy deer-NCM.A | than | some-ACC |
| | 'The deer is heavier than some.' (Voegelin 1935a:176) | | |

2.2.1.8 *Verb and adpositional phrase (object-patterner) (16)*. The order of the verb and adpositional phrase is the strongest correlation found in Dryer's set of correlation pairs (Dryer 1992: 92); the adpositional phrase is overwhelmingly patterning with the object. Perhaps, then, it is no surprise that in Pahka'anil, both preverbal and postverbal adpositional phrases are commonly attested. Pahka'anil's unambiguous postpositional phrases may precede or follow the verb. Examples (17 and 18, above) show the PPs following the verb, and example (38) shows the locative PP 'on top of the mountain' preceding the verb.

PP

- (38) *pic=kitc=ta muwaa-l-ing uku-baa-n*
 then=REP-3PL.NOM mountain-NCM.A-GEN top-LOC-3SG.POSS

V

üü~bül-üüla

MOM~arrive-GO<ACT

'Then they went and arrived on top of the mountain.'

(How the Earth was Made, Voegelin 1935b)

Example (24, above) shows two adpositional phrases--one on each side of the verb.

2.2.1.9 *Verb and manner adverb (object-patterner) (17)*. Adverbial forms expressing manner pattern as objects do in Dryer's study (1992: 93). And in Pahka'anil, both the post- and pre-verbal orders are attested. Voegelin's grammar has a few instances of forms which can function attributively (as adjectives) or as adverbs--Voegelin uses the term 'attributive particles' in an attempt to encompass both functions (1935a: 175). In each of the cases (1935a: 175), the adverbial form is post verbal.¹⁸

V Adverb

- (39) *miy-at eweewibi-l*
 go-DUR light-NCM.A
 'He is going lightly.'
 (Voegelin 1935a: 175)

In the texts, other manner adverbial forms can also occur preverbally (40-41).

Adverb V

- (40) *pic=kitc wahai ic-t üüibitc ing~gim*
 then=REP DIST:LOC:from coyote-NCM.B slow MOM~come

¹⁸ Interestingly, the related adjectival forms provided are always pronominal (Voegelin 1935a: 175).

'Then from there Coyote slowly came.'

(War with the Yokuts, Voegelin 1935b)

Adverb V

(41) *pic=kitc=ta ala'ac ü~tük*

then=REP=3PL.NOM quickly MOM~eat

'Then they ate quickly.'

(Bat and Horsefly, Voegelin 1935b)

2.2.2. Summary of correlational findings

We now return to the questions at the beginning of section 2: 1) are there clear preferences for one order or another across these correlational pairs?

and 2) where is there frequent variation in order of correlational pairs?

Across the twelve correlational pairs that have been examined for

Pahka'anil, there are no clear preferences for one order over another. No

variation has been identified in three pairs of the order verb patterner -

object patterner: copula and predicate, question particle and S, and

adjective and standard (Table 5). Two other pairs exhibit no variation in

the object patterner - verb patterner order: NP and bound adposition and

subordinate verb and 'want'.

Table 5. Pahka'anil Correlational Pairs Showing No Variation in Order

No Variation in Order	
<i>verb patternner - object patternner</i>	<i>object patternner - verb patternner</i>
(4) Copula and Predicate	(3) NP and bound adposition P
(9) QP and S	(5) subordinate verb and 'want'
(15) Adjective and Standard	

And the most common finding (attested in seven of the twelve pairs) is variation in order (Table 6). Given the frequent variation of the order of verb and object, it is perhaps not a surprise that many of the pairs which may be expected to correlate with the order of verb and object, show frequent variation.

Table 6: Pahka'anil Correlational Pairs Showing Variation in Order

Variation in Order
(1) V and O
(2) V and S
(3) free adposition P and NP
(13) N and Genitive
(14) Relative Clause and N
(16) V and PP
(17) V and Manner Adverb

If we consider only those pairs that exhibit no variation in order, one may be tempted to argue for a slight preference for verb patternner - object patternner order. It is important to remember from the data above, though, that the second column of Table 5, showing the object patterning - verb patterning pairs, is potentially problematic because the final verb-patterning element is bound in both cases. Adpositions, when they are free, exhibit variation relative to their NP (see Table 6). The form 'want' (in the second column in Table 5) is also a verbal desiderative suffix today. This bound order, though, could be due to an older, more stable OV order in history.

Ultimately, in the final analysis, the Pahka'anil data offer no clear indication of any strong tendency in the order of verb patternner and object patternner across typologically attested correlation pairs; in Pahka'anil, variation in order is widespread and frequent in the majority of Dryer's correlational pairs. We now turn to an examination of actual core NP (Subject and Object) counts across a subset of the available texts and consider these data within the context of wider discourse.

3. Word order in narrative discourse

In order to examine word order variation in narrative discourse, a set of twelve narratives has been fully interlinearized and tagged for grammatical relations subject and object as well as the relative position of the verb. Ten of the texts were originally transcribed and translated into English (sentence by sentence) in Voegelin's *Tübatulabal Texts* (1935b): narrative recountings of dreams ("Bear Dream" and "Bull Dream," both told by Mike Miranda), personal narratives ("Fiesta near Bishop," "Deer Hunt," and "Journey from Tejon," also told by Mike Miranda), myths and tales ("Hoarded Game" told by Steban Miranda, "Coyote and Bear" told by Mike Miranda, "End of the Mythical Age" told by Steban Miranda, "The Winged One" told by John Tungate, and "Yüha'awal Steals Girl" by Legora Tungate). The eleventh text, "The Power of Jimsonweed," is a recounting of a dream by Mike Miranda and appeared at the end of Voegelin's *Grammar* (1935a: 183-188). Voegelin prepared this text with word-for-word glosses and a narrative English translation in addition to the transcription. The twelfth text is "Brownie and Girl" by Stefana Miranda Salazar. The text was originally recorded by Hanjakob Seiler in 1954 (Marean et al. 2021). This text has recently been fully interlinearized and published (see Marean et al. 2021).¹⁹

¹⁹ Seiler's recording was submitted to Indiana University's Voegelin Archives of the Languages of the World (accession number 85-615-F). Sydney Lamb also worked with a

While the word order counts presented in Table 7, below, are from this corpus of twelve texts, some illustrative examples of particular orders which follow are also pulled from other texts in the larger 25-text Voegelin corpus (1935b).

3.1. Text preparation and methodology

This study examines all clauses across the twelve narratives mentioned above. The 12 Voegelin texts were originally transcribed and translated by Voegelin while "Brownie and Girl" was translated by Lamb; however, all the texts were first interlinearized (morpheme by morpheme) by Lindsay Marean who created a Toolbox database while working with the Pakanapul Language Team. Because Marean's database followed Voegelin's sentence delineations (which at times include multiple independent clauses), I have further subdivided complex clauses and have also reworked the glossing and grammatical abbreviations to better represent my analysis of the morphosyntax. The NPs in these interlinearized narratives were then tagged for grammatical relation (subject and object), locative status, and main vs. subordinate clause status. I used a combination of databases: the ELAN Multiple EAF search

transcription of this text and completed a line-by-line translation into English (Marean et al. 2021).

tool, Toolbox (concordance and searching functions), and AntConc to examine the twelve text corpus.

The free, full NP (overt, non-cliticized) subjects and objects were counted (relative to their verb); the only exceptions include those NPs in non-finite subordinate clauses, and the subjects which follow the reduced ‘say’ quotative verb (these ‘said Coyote’ type structures are nearly always VS and would greatly impact the overall relative frequency of the VS). The only subordinate clauses whose NPs were counted were those which were fully finite utterances in the reported speech of a character. The results of the count are presented in Table 7.

3.2. Relative counts of overt NP subject, overt NP object and V

As expected, out of the 561 clauses in the study, not many (just over 4%) exhibit overt subject and object NPs with the verb in a single clause—15 of these are SVO.²⁰ Only 40% of the total number of clauses contain even one overt, core (subject or object) NP. Of those, the order SV is 4 times

²⁰ Du Bois’ work in Preferred Argument Structure incorporates this tendency across the world’s languages as a central constraint (Du Bois 2003: 34).

more frequent than VS.²¹ Interestingly, though, the VO and OV are more closely matched in frequency (Table 7).

²¹ Though of course this would change significantly, if we were to include the ‘said X’ structures in the counts.

Table 7. Frequency counts for overt lexical subjects and objects relative to verb

	#Clauses	SV	VS	VO	OV	SVO	SOV	OSV	OVS	VOS	VSO
Hoarded Game	103	25	2	7	3	5	0	2	0	0	0
Coyote and Bear	73	28	4	3	5	7	3	0	0	1	0
Yüha'awal Steals Girl	62	16	3	5	4	1	0	0	0	0	0
Bear Dream	29	1	0	6	0	0	0	0	0	0	0
Journey from Tejon	29	1	2	1	1	0	0	0	0	0	0
Deer Hunt	22	0	1	1	2	0	0	0	0	0	0
End of the Mythical Age	20	7	0	4	0	1	0	0	0	0	0
Fiesta Near Bishop	17	3	0	1	0	0	0	0	0	0	0
Bull Dream	13	0	0	0	5	0	0	0	0	0	0
The Winged One	8	4	0	0	0	1	0	0	0	0	0
The Power of Jimsonweed	31	2	3	2	6	0	0	0	0	0	0
Brownie and Girl	154	18	11	9	4	0	1	0	1	1	1
TOTAL (N)	561	105	26	39	30	15	4	2	1	1	1
TOTAL (%)	100%	19%	5%	7%	5%	3%	.7%	.4%	.2%	.2%	.2%

Should the more frequent SVO order be considered 'basic' in Pahka'anil?

It is true that in these texts (Table 7), SVO order is more frequently attested. Should that be seen as evidence for a basic--or at least preferred--order? Given that only 3% of the data under examination show the more frequent SVO order, that is not particularly strong statistical evidence.

Mithun makes the same argument: for languages where both subject/object NPs are rare in discourse, statistical frequency is unconvincing (1992: 20). It is also true, though, that in these Pahka'anil data, SV is far more frequent than VS, and VO is slightly more frequent (in these texts at least) than OV. This could be argued to support the SVO order as preferred. As is discussed in section 5.4 (below), Preferred Argument Structure (Du Bois 1987; 2003) offers some motivation for the preference of SVO order in those instances when two lexical arguments are found in Pahka'anil clauses.

The discussion which follows does not dispute that SVO could be somewhat preferred or basic. Rather, it seeks to explain the variations in order by identifying the factors that shape the order of constituents in narrative. As will be demonstrated throughout, the forces shaping constituent order are primarily functional and pragmatic, not syntactic.

4. Discourse functions shape constituent order

While there are clear tendencies in Pahka'anil word order (e.g. SV order over VS), almost any order of core NP elements can be found in the narrative corpus. And the most frequent pattern in Table 7 (around 60% of clauses) is no overt NP subject or object in the clause.

This lack of core NPs in many clauses is not particularly surprising. A central reason is that Pahka'anil employs pronominal enclitics for all persons and number, across both subject and object categories--the 3rd person (for both subject and object are zero)--see section 1.2.2., above and section 4.1.4, below. Full NPs are needed to introduce a concept, of course, and for speech act participants, the enclitics are sufficient for introductions; the full pronouns are not needed in those instances. But once a concept is fully accessible (believed by the speaker to be cognitively activated in the mind of the hearer (and especially if the concept has become the topic of discourse), the overt NP is not needed, and long stretches of discourse (particularly in environments of high referential continuity) can proceed without refreshing the referent with an overt form. In such environments, identifiable referents may be expressed as a 3SG zero until there is potential confusion with other referents or perhaps a shift in topic.²² Generally, then full NPs show up when there is

²² Identifiable is here used in the same sense as Payne 1992: "Information is identifiable if the speaker assumes that the hearer will be able to pick out and establish reference for

an introduction of a new concept, a shift in topic, a switch in reference of primary actor, or when the speaker perceives some other need requiring reiteration to disambiguate. And when an overt NP is used, the order of the NP, relative to the verb, is sensitive to these pragmatic environments (e.g. introduction of concepts, establishing or shifting topics, switching reference between primary actors) as well as the relative importance of a concept to the wider discourse (i.e. what Mithun has called 'newsworthiness', 1992: 31).

The discussion below is organized around structural orders SV vs. VS (section 4.1), OV, vs. VO (section 4.2), and those occurrences of clauses with two overt arguments: subject, verb, and object (section 4.3). Pragmatic pressures on word order will be illustrated and discussed within each section.

4.1 SV vs. VS orders

The sections below highlight the conditioning factors that have been observed to correlate with the SV vs. VS order. These include the introduction of new concepts (section 4.1.1.), the establishing and shifting of topics (section 4.1.2.), the switching of references between primary

it, based on information already available within the universe of discourse" (Payne 1992: 142).

actors in narrative (section 4.1.3), and the impact of the participant reference enclitic system and the 3SG zero in particular (section 4.1.4).

4.1.1 Introduction of concepts

There is variation in the order of subject NP and V when concepts are introduced in narrative discourse, even when the grammatical context/construction is controlled. Examples (42-43) exhibit variation in order of subject NP and V in the same presentational/existential construction in two different stories.

- | | S | | V |
|------|---|-----------|----------------------------------|
| (42) | tciitc=kitec taatwa-l | ku-di | cooyi-n halü-t |
| | one=REP | man-NCM.A | CONJ-also wife-3SG.POSS live-DUR |
| | 'Once there was a man and his wife...' | | |
| | (Yüha'awal Steals Girl, Voegelin 1935b) | | |

- | | V | | S |
|------|--|--|--------------|
| (43) | halü-t-kitec | | anghanii-l |
| | live-DUR=REP | | people-NCM.A |
| | 'There were people.' (Literally: 'People were living') | | |
| | (Brownie and Girl, Marean et al. 2021, line 1) | | |

The difference lies in the relative importance of the roles these participants play in the following lines. In "Yüha'awal Steals Girl" (in 42), the man and woman are important characters who are mentioned twice in the immediately following lines because their daughter is a central character in the story. In "Brownie and Girl" (43), however, the 'people' are not important themselves. The story continues with these people (referenced by the 3PL.NOM enclitic /=da/ in the following line) making acorn mush. Then one woman of that group has not finished, and the sky grows dark. This woman (and her child) are important characters, but the people are not referenced again. Both subject NPs are new, indefinite, and unidentifiable. Both subject NPs appear in the same construction with the verb 'live' (an existential/presentational construction in Pahka'anil). Payne's 1987 work in Papago (also Uto-Aztecan) presented similar findings: constituent order played a role in indicating whether a hearer needed to "open a new discourse file" for later reference (Payne 1987: 794-5). In Papago, information following the verb is either not important to later discourse or is already identifiable (Payne 1987: 795). This is discussed further in section 5.

The use of order as an indication for whether a hearer should expect a referent to be important in subsequent discourse has been identified in Papago (Uto-Aztecan) by Doris Payne (1987). Payne writes, "Non-identifiable (indefinite) information precedes the verb when the hearer is instructed to open a new active discourse file for it" (1987:

794).²³ Payne goes on to note that this may be rooted in expectedness, where Papago's preverbal material is inherently less expected than the identifiable (definite) material which is positioned postverbally (Payne 1987: 795). As will be illustrated below, new concepts in Pahka'anil which are introduced as subjects and which will be salient parts of later discourse are positioned preverbally. Introductions of objects in Pahka'anil are generally preverbal while objects whose referents are identifiable are positioned postverbally (see section 4.2, below).

4.1.2 Topic shift

The most common pragmatic function of preverbal NP subjects is topic shift--the establishment of a new topic which will be central for some lines following. In the brief excerpt from "Yüha'awal Steals Girl" (in 44), below, the 'offspring' is the daughter of the woman character introduced in example (42) above. The child is introduced preverbally (44 line 1) and will be a central character in the entire narrative to follow.

	S	V
(44)	1 <i>pic=kitc</i> <i>tuumu-pi-n</i>	<i>anang-at</i>
	then=REP offspring-DIM-3SG.POSS	cry-DUR

²³ For a more detailed discussion of "active discourse file," see Payne 1992:143.

2 *tcitwana'ac aabuu-i unung-aala-ng*
 always mother-REFL.POSS.ACC pound-GO<ACT-DS²⁴
 'Then her child is crying all the time when her mother goes
 pounding.'

V S

3 *pic=kite tii üülü'üng anang-at anaawic-pi-t*
 then=REP and evening cry-DUR girl-DIM-NCM.B
 'Then also in the evening the little girl cries.'
 (Voegelin 1935b: Yüha'awal Steals Girl, lines 6-7)

After the initial introduction of the daughter (in 44 line 1), she is referred to through the reflexive possessive marking in the subordinate clause in line 2 and then referred to again (this time as 'girl') in line 3. In line 3, though, the NP is postverbal. The concept (of the referents

²⁴ Pahka'anil exhibits associated motion constructions which derive from verbs of movement. These are glossed as follows throughout: -kin ACT>COME (venitive subsequent motion), -min ACT>GO (andative subsequent motion on durative verbs and completed action on momentaneous verbs), -giim COME<ACT (concurrent motion), and -la GO< ACT (andative concurrent motion (on durative verbs) or moves away to perform an action (on momentaneous verbs)--cf. Marean et al. 2021: S53).

'offspring'/'girl') has been established, and this corresponds to a postverbal positioning. It is also worth pointing out that the oblique of time 'evening' in line 3 is positioned earlier in the clause. This is not required by the syntax. Obliques, like all adjunct structures, in Pahka'anil, show great variability in their position. It is likely that the importance of the setting (the onset of evening) leads to the earlier positioning in the sentence.

There are many examples showing the prevalence of SV order corresponding with shifts in topic (whether the topic is new or is one that is being re-established after being introduced earlier in the narrative). In fact, in "Brownie and Girl," 12 of the 18 instances of SV order (see Table 7) are clear examples of topic shift (TS). For example, consider example (45) where the topic shifts from the 'girl,' who was taken by Ananggiyat (a brownie) and grew to be a woman while in captivity (in 45.1), to Ananggiyat (in 45.2).

(45) 1 *egeewan koim meeda*
 big woman already
 'She's a grown woman now.'

	S	V
2	<i>wal=gija</i>	<i>ananggiyat yühpa-at wal</i>
	DIST:ACC=REP Ananggiyat close-DUR DIST:ACC	
	<i>tünggii-l-a-b</i>	

rock.ledge-NCM.A-ACC-LOC

'Ananggiyat shut her in a rock ledge.'

(Brownie and Girl, Marean et al. 2021:S58, lines 25-26)

After this sentence, Ananggiyat is maintained as topic and (referenced only by a 3SG.NOM zero for 10 lines) until the NP is refreshed at a major thematic boundary (marked by the distal form /wahaai/) in the discourse where the scene shifts to Ananggiyat's return of the girl after she is grown (46).

S

V

(46) *pic=gija wahaai wa' ananggiyat pinggü-t*

then=REP DIST:LOC:from DIST Ananggiyat say-DUR

met=düing aabuu=ing ku'y-at

already=2SG.ACC mother=2SG.POSS want-DUR

poo'-iba'-at

kindle.a.fire-want.to-DUR

üü ~tüsi-iyi-n=güt=gija

COLL.PL~clothes-NREFL.POSS.ACC-3SG.POSS=QUOT=REP

'Then after that, that Ananggiyat says, "Now your mother is looking for you; she wants to burn your clothes," he says.'

(adapted from Marean et al. 2021: S59-60, line 36)

In (46), the refreshed topic/subject NP is marked as definite with the distal demonstrative *wa'* and is positioned before the verb because it will be maintained for multiple subsequent clauses.

4.1.3 Switching reference between primary actors

The SV order is also exploited for purposes of switch reference in conversation and in periods of alternating actions by multiple actors. This can be understood as related to topic shift, but because these instances may be seen as an important subset of topic shift, they are here discussed separately. And in instances where a reiterated subject NP shows up in close proximity to its earlier SV mention, the subject NP is positioned postverbally.²⁵ For instance, in "Hoarded Game," Wolf and a man are interacting, and both characters are accessible in the discourse: the man has been the principal actor for many lines, and Wolf has been introduced two lines before when he spooked some deer. In line (47.1), the man meets Wolf (one of the few instances we have of overt SVO). In line 2, the speaker, man, is expressed as a 3SG.NOM zero. In line 3, the speaker Wolf is represented by the 2SG.ACC enclitic and man is represented by the 1SG.POSS pronoun as well as a 3SG.NOM zero enclitic. In line 4, we switch

²⁵ Note, such an environment is distinct from the thematic boundary (marked with /wahaai/ seen in example (46)). The example in (47.6-7) is within a period of high referential continuity.

reference to Wolf--and the subject is preverbal. Also the man is expressed as the 3SG.POSS on the locative-marked house in line 4. In line 5, the man, who is already clearly established, is positioned post-verbally. In line 6, we switch reference again to Wolf, which is positioned pre-verbally, and in line 7, Wolf is again immediately mentioned, this time without any need to establish a switch in reference between the two actors. In such a case, Wolf is then positioned post-verbally.

S man V O wolf

(47) 1 *pic=kitc taatwa-l aa~dawüük tübaij-i üüwün-üng*

then=REP man-NCM.A MOM~see wolf-ACC stand.up-DS

'Then the man saw Wolf standing there.'

2 *kim-ah ala'ac=ku=kija*

come-IMP hurry.up=QUOT=REP

'"Come, hurry up!" he said.'

3 *tsungg-ut=ting nü'üng punggu-müü-n=kü=kija*

be.scared-DUR=2SG.ACC 1SG.POSS pet-PL-3SG.POSS=QUOT=REP

'"My pets are afraid of you," he said.'

S wolf V

4 *pic=kitc tübaitc o~lhom' hanii-ba-n aamaiiyu*

then=REP wolf MOM~enter house-LOC-3SG.POSS with

'Then Wolf entered his (the man's) house with him.'

V S man

5 *yandz-üh=kü=gija taatwa-l*

sit.down-IMP=QUOT=REP man-NCM.A

'"Be seated!" the man says.'

S wolf V

6 *wah=kitc tübaitc halü-t.*

DIST:LOC=REP wolf live-DUR

'Wolf is sitting there.'

V S wolf

7 *taawügü'-at=kitc tübaitc cuuna-yi-n*

look.about-DUR=REP wolf heart-NREFL.POSS.ACC-3SG.POSS

hanii-l-ing

house-NCM.A-GEN

'Wolf looks around inside the house.'

(from "Hoarded Game," Voegelin 1935b)

In (47), 'man' is the primary actor (an experiencer) in line 1 (SV) and is maintained as the speaker in lines 2 and 3 (both zero references). In line 4, reference is shifted to Wolf (SV). In line 5, the man speaks and tells Wolf to sit, and, interestingly, the NP subject 'man' is positioned to the right--the character is accessible already; the matrix verb in this construction is the encliticized 'say' quotative.²⁶ In line 6, reference is switched to Wolf again (SV) and then Wolf is reiterated in line 7 (VS). Switch references in lines 1, 4 and 6 correlate with preverbal position of the S while postverbal S positions (lines 5 and 7) correlate with a non-primary actor who has already been established and made accessible.

4.1.4 The impact of pronominal enclitics and 3SG zero

From the discussion above, one can see there is a preference for preverbal positioning of the S when a concept is a new topic or there is a switch in reference to a new primary (important/central) actor. After a concept is introduced, once it is fully accessible (or identifiable) to the hearer, the

²⁶ In my database, very nearly all characters who speak are referenced after the QUOT enclitic. These have not been counted because 1) the bound quotative is itself a questionable verbal form today (it is clearly derived from 'say' in Pahka'anil) and 2) there is no variation in these quotative - speaker constructions and their sheer number throughout the texts would greatly increase the VS order and obscure the facts of pragmatic impact on word order.

overt NP is not normally mentioned again until either the introduction of additional concepts leads to potential confusion and an overt NP is needed for reiteration or until the topic shifts or events in the narrative line lead to a new section of referential continuity. Before continuing, it is important to review a number of pertinent facts surrounding the pronominal enclitics. As discussed in section 1.2.2, the pronominal enclitics are used to express previously mentioned (activated) or established topical participants, and they are most typically found encliticized to the first word of a sentence, regardless of syntactic category. The pronominal enclitics may (but do not obligatorily) co-occur with an overt, coreferential NP. The 3SG enclitics (both nominative and accusative) are meaningful zeros—all other person enclitics are expressed with morphological material (see Table 3 above).

The series of examples below (48-52) is from "Brownie and Girl" (Marean et al. 2021). In line (48.1), the participant 'Indians' is introduced with the overt NP at the beginning of the sentence and then immediately referred to with the 3PL.NOM enclitic on that first phonological word and then again, following the quotative 'say' in line 3.

- (48) *1inyaana=gija=da=tii* *kim-at* *malap=bi*
 Indian=REP=3PL.NOM=CONJ come-DUR where=2SG.NOM
 2 *halü-apaan* *malap=bi* *ma'=bi* *ing~kim*
 live-PST.PROG where=2SG.NOM where=2SG.NOM MOM~come

3 *malap wün halü-apaan meeda*

where be live-PST.PROG already

üüdzümi'-apaan=güt=gija=da

be.long.time-PST.PROG=QUOT=REP=3PL.NOM

‘The Indians come. “Where were you living? Where did you come from? Where is it that you were living? Already you were gone a long time,” they said.’

(Brownie and Girl, Marean et al. 2021: S67)

The main character, the young woman who was taken by the brownies, then responds to the group of Indians (referring to them with morphological 2PL forms--an imperative and an accusative in in the next two lines, see Marean et al. 2021: S67-8). Example 49 provides the next line: here, we have a switch in reference again, from the young woman back to the Indians, and as a result, *inyaana* 'Indian' is again positioned early in the sentence (preverbally).

(49) *has inyaana yaan-at ohta-at ohta-at*

NEG Indian believe-DUR ask-DUR ask-DUR

‘The Indians don’t believe her; they ask and ask.’

(Brownie and Girl, Marean et al. 2021: S68)

The conversation continues between the young woman and the Indians, with both participants (the young woman and the group of Indians) referenced only through the person-marking enclitics. In lines 90 and 91 (Marean et al. 2021: S68), the 2PL.POSS enclitic is employed to refer to the group of Indians in 'your talk'; Examples (50 and 51) provide the next two lines from the narrative; here, both the 2PL.NOM and 3PL.ACC enclitics are used to refer to the Indians.

- (50) *maag-iba'-at=buumu kuu=buumu a~maag-ica*
 know-DES-DUR=2PL.NOM and=2PL.NOM MOM~know-FUT
wookan
 pretty.soon
 ““You all want to know, and you’re going to know right away.””
 (Brownie and Girl, Marean et al. 2021: S68)

- (51) *pic=gija=dapü aaw-in*
 then=REP=3PL.ACC tell-BEN
 ‘Then she told them.’
 (Brownie and Girl, Marean et al. 2021: S68)

Clearly, even with the switches between the speech act participants, the group of Indians is identifiable and indication with the enclitic is sufficient for understanding and for syntactic requirements.

Just three lines later, we again find the Indians referred to with the /-da/ 3PL.NOM enclitic (52). But interestingly, we also find an overt, NP 'those people' (referring to the same group of Indians and coreferential with the /=da/ 3PL.NOM enclitic) at the right edge of the sentence.

(52) *kuu hainda=bi ü ~tük=güt=gija=da*

and what.ACC=2SG.NOM MOM~eat=QUOT=REP=3PL.NOM

wanda anghanii-l

DIST:PL people-NCM.A

“‘And what did you eat?’” those people said.’

(Brownie and Girl, Marean et al. 2021: S69)

The NP 'those people' is positioned postverbally, as expected for already accessible referents in Pahka'anil (just as in example 47, lines 5 and 7, above).

It is important to note that there is no reason to assume that the full NP 'those people' (in 52) is required by the syntax. Clearly, the enclitics used throughout the above conversation were sufficient for participant reference in many clauses (within sections of discourse where there is high referential continuity). And clearly the enclitics are sufficient any syntactic requirements related to grammaticality--such as the indication of grammatical subject. It appears that once a referent has been introduced

(and is thus able to be expressed with the enclitic forms), it is no longer required by the grammar and is able to enjoy more variability in its position.

Example (53) illustrates one more example of the interaction between overt NPs and enclitics and the order change when an NP co-occurs with an enclitic. This example is an excerpt from the beginning of "Coyote and Bear" (Voegelin 1935b). At the beginning of this narrative, there are three participants: Coyote, Bear, and a group of people. The group of people is introduced in line 1 (53.1). And in line 2, the accessible / identifiable referent is expressed with the 3PL.NOM /=ta/ (53.2). Bear is introduced in line 3 (preverbally) and reiterated with the full NP (still preverbal) in line 4. But then, in line 5, Bear is expressed with a 3SG zero. The reader should recall that in Table 3 (section 1.2.2), the 3rd person singular form for subject and object enclitics is zero. All other person-number categories for both subject and object are allocated structure within the enclitic paradigm. As a result, then, zero 3SG subject form is meaningful--if there is no overt NP subject and there is no overt enclitic to reference the subject, the subject is understood as 3SG in Pahka'anil. And, of course, it is clear from context, that the 3SG referent is Bear since that referent has been established as a topic through the preverbal position of the NP in lines 3 and 4. In line 6, 'those people' are mentioned again (preverbally, contrasting with the other primary actor, Bear--'those people' bring deer while Bear brings nothing). In lines 7-10, Coyote is

S **V**

‘Many people were living, and also Coyote.’

'Then they are going hunting in the mornings.'

S V

'Then Bear goes out the other way.'

bear-NCM.A be=REP on.and.on like every morning

'Bear behaves like that every morning.'

5 *kuu=hac=kitc piin-at haainda üülü'üng*

and=NEG=REP bring-DUR something evening

'And (Bear) doesn't bring anything in the evenings.'

S

V

6 *kuu=gitc wanda anghanii-l piin-at*

and=REP DIST:PL people-NCM.A bring-DUR

tohii-l-a üülü'üng

deer-NCM.A-ACC evening

'...and those people bring deer in the evening.'

7 *pic=kitc ic-t manaauw-in-n*

then=REP coyote-NCM.B whereabouts-REFL.POSS.ACC-3SG.POSS

'Then Coyote says, "Where (does Bear go)?"'

8 *kuu=haaninda ogon in-üla-t*

CONJ=what.ACC on.and.on do-GO<ACT-DUR

"And what is (Bear) always doing?"

9 *ii uuna-l=kü=kitc ic-t haaiyi=haainda*

PROX bear-NCM.A=QUOT=REP coyote-NCM.B nothing=what.ACC

kiin-in

bring-BEN

"This Bear brings nothing,"

10 *üülü'üng üü~hüuw-icaa=gi=ling*

evening MOM~observe-FUT=1SG.NOM=2SG.ACC

"in the evening; I observe you" (says Coyote).'

=S

V

11 *pic=kitc=ta ümbü ii~mi meedak*

then=REP=3PL.NOM again MOM~go morning

(appositive, coreferential with =ta, above)

wanda anghanii-l

DIST:PL people-NCM.A

'Then they went again in the morning, those people.'

(Coyote and Bear, Voegelin 1935b)

Example (53) illustrates several important phenomena. First, we can see that once a referent is established as identifiable through overt mention, the participant-reference enclitic may be used (as is the case with the 3PL.NOM in line 2). Example (53) also illustrates that when the enclitic is used and a coreferential NP is also used, the overt, coreferential NP is

positioned far to the right in the sentence (postverbally).²⁷ Presumably, this is because the enclitic is satisfying the need for the expression of a grammatical subject and the additional NP is an adjunct (essentially an appositive—a non-obligatory NP used for clarification). Perhaps the positioning of NPs (which are not new and important, shifted topics, or switches in reference between primary actors) was in-part made possible through the greater variability in order generally expected of appositive NPs.

Example (53) also illustrates how activated, singular referents can be expressed with a meaningful zero--in contexts, of course, where there is no potential confusion with other participants. This is why Bear can be expressed as a zero in lines 5, 7 and 8. In line 5, Bear is already established (from overt mention in lines 3 and 4 before). And in lines 7 and 8, the speaker is Coyote, so the only other accessible 3SG referent is Bear. There is thus, no potential confusion here. In the next line in the story, however, we have a return to Bear as a primary actor. Since there are two 3SG accessible referents which have been established, the overt NP is required; and this NP is positioned just as other NPs showing a switch in reference are positioned: preverbally (54).

²⁷ It is worth noting, as well, that I have yet to find an instance where a plural NP subject (i.e. 3PL) is positioned to the right, without a 3PL subject enclitic in the same clause.

S V

- (54) *pic=kitc uuna-l ii~mi*
 then=REP bear-NCM.A MOM~go
 ‘Then Bear took leave.’
 (Coyote and Bear Voegelin 1935b)

Might it not be the case then that just as the 3PL subject enclitic allows for the positioning of a coreferential NP to the right (postverbal) in the sentence, that the 3SG zero exhibits the same effect?²⁸ Perhaps this is why we find examples such as the following (55, copied here from example (47.6-7) above). In the first line (55.1), the reference switches back to Wolf (positioned preverbally). In the next sentence (55.2), Wolf is mentioned again (as subject) but is positioned postverbally. Given that Wolf is clearly established in line 1, it stands to reason that the 3SG zero enclitic (here indicated at the right edge of the first word in line 2, where a

²⁸ It is perhaps also important to note that the 3PL nominative enclitic is only thus far attested for personal 3PL forms (generally people, animals, or spiritual beings--all of whom are primary actors in Pahka'anil narratives). I do not know whether it is possible to use these enclitics for non-personal reference; therefore, as a result, I do not know whether the 3SG nominative zero enclitic would be a potential player for non-personal referents (e.g. satisfying the syntactic requirements and allowing a coreferential NP to be positioned to the right after being established).

subject enclitic would most typically be positioned in Pahka'anil) is what is satisfying the grammatical requirement for subject. Certainly, the 3PL subjects are expressed in all but only a very few cases²⁹--either as a full NP or with the enclitic /=ta/. I have re-labeled the constituents in line 2 to highlight this analysis: the S is expressed through a meaningful zero and the overt NP placed to the right as are other coreferential, overt NPs (as in examples 52 and 53).

S V

(55) 1 *wah=kitc tübaitc halü-t.*

DIST:LOC=REP wolf live-DUR

‘Wolf is sitting there.’

V =S (appositive)

2 *taawügü'-at=kitc=Ø tübaitc*

²⁹ I have found only two instances when a 3PL subject is not overtly expressed with either a full NP or the enclitic /=ta/; both are in Brownie and Girl: Marean et al. 2021: S66 (line 82) & S64 (line 65). Each of these instances involves a conversation where 'they' is speaking, and the 'they' is simply omitted in these two instances. All the other instances in Brownie and Girl and in the other texts exhibit some overt expression of the 3PL subject in all instances. Of course, this supports the notion that the 3SG zero is meaningful and grammatically satisfying.

look.about-DUR=REP=3SG.NOM wolf

cuuna-yi-n

hanii-l-ing

heart-NREFL.POSS.ACC-3SG.POSS house-NCM.A-GEN

‘Wolf looks around inside the house.’

(from "Hoarded Game," Voegelin 1935b)

In short, the data in (53) and (55) attest to the same pattern: when a 3rd person enclitic is used (whether an overt 3PL or a zero 3SG) as an expression of grammatical subject and the speaker wishes to clarify the already activated referent (due to changes in speakers, the topic of speech or the length of speech, etc.), the overt lexical NP is positioned post-verbally—not as a subject, but as an appositive, co-referential with the enclitic.

The discussion above highlights the impacts of topic shift, switch in reference from one actor to another, and the use of participant-reference enclitics in the positioning of the subject and verb. While both SV and VS orders are attested when concepts are first introduced in discourse, the predominance of SV is clearly related to the use of this order for topic shifts and the related switch in reference of primary actors in discourse. Apart from introductions (in a few places), the VS order is generally limited to elements which are already established as accessible in the mind and identifiable to the hearer. Most of the time, especially in narrative

environments of high referential continuity, the referent is not reiterated frequently as an overt, full NP. Rather it is expressed through the participant reference enclitic system. And when the full NP is used, it is then positioned to the right--presumably as an appositive, where the enclitic satisfies the syntax and the rightward coreferential NP is for clarification or emphasis. In the discussion below, we consider forces which correlate with VO and OV orders.

4.2 OV vs. VO orders

Unlike the SV vs. VS orders, where SV is far more commonly attested than VS, there is no strong tendency for one order over the others (OV is only 2% more common than VO--and neither is particularly common in discourse).³⁰

The strongest generalization is that new, inaccessible, unidentifiable (indefinite) concepts introduced as grammatical objects are positioned preverbally. Once a concept is identifiable to the hearer, if it is referenced with a full NP, that NP tends to be positioned postverbally, further to the right in the clause. Consider example (56), where 'mountain

³⁰ It should be noted, however, that this tendency holds only when there is no lexical subject NP present. In those cases, the order VO (SVO) is far more frequent; the implications of this and its relation to theory is discussed further in section 5.

quail' is introduced as a preverbal object (56.2) and is immediately referred to again in the next line postverbally (56.3). In line (56.4) 'chia seeds' is also introduced preverbally. It is not referred to again, however.

S

V

- (56) 1 *pic=kitc yüha'awa-l toh-at pini'ik taa-l*
 then=REP mythical.creature-NCM.A hunt-DUR every day-NCM.A
 'Then Yüha'awal hunts every day.'

O

V

- 2 *yoowo=gitc tuuh-t-a pin-a*
 many=REP mountain.quail-NCM.B-ACC bring-DUR
üülü'üng
 evening
 'He brings many mountain quail in the evening.'

V

O

- 3 *pic=kitc waa'-at tuuh-t-a kaaluk-p*
 then=REP broil-DUR mountain.quail-NCM.B-ACC armpit-LOC
 'Then he roasts the mountain quail in his own armpits,'

O

V

4 *ku=dii=gipc paacii-l-a haaiy-at*

CONJ=also=REP chia.seeds-NCM.A-ACC stir-DUR

hom'mo-l-a-p

cooking.basket-NCM.A-ACC-LOC

'And also, he stirs chia seeds in the cooking basket.'

V

5 *pic=kitc wah cingg-üt*

then=REP DIST:LOC blow.nose-DUR

hom'mo-l-a-p

cooking.basket-NCM.A-ACC-LOC

'Then he blows his nose there in the cooking-basket.'

(Yüha'awal Steals Girl, Voegelin 1935b)

In (56) the subject and topic is established in line 1 and is then referenced only through the 3SG zero for the remainder of the excerpt. It is clear that just as S arguments move postverbally once they are established and identifiable (that is, if they are referenced with a full NP at all), the O arguments appear to do the same. The preverbal / leftward position is associated with newer / less identifiable concepts (and, in the case of subjects, also with topic shift and switch reference) while the postverbal / rightward position is associated with older / identifiable concepts and is coreferential with a participant reference enclitic. That is, it may be the

case that just as already identifiable subject NPs are positioned to the right of the verb and referenced earlier in the clause through an enclitic (e.g. 3SG zero or 3PL /=ta/), object NPs appear to undergo the same phenomenon: introductions are preverbal while identifiable and definite objects are postverbal (presumably because they are coreferential with the accusative enclitic (3SG.ACC zero or 3PL.ACC /=dapü/).

Examples (57-59) are from "Brownie and Girl" and show the references to the primary female character ('woman') through one thematic section of the narrative. The woman has not been mentioned or referenced in any way for 8 sentences--since she had been described as having grown up and kept in a rock ledge (Marean et al. 2021: S58). In example (57.1), the woman is re-established as a primary actor (a preverbal O)--the recipient of a quail which Anangiyat has killed and cooked; the woman is immediately referred to again, as a preverbal S, in (57.2). In the lines which follow (illustrated in examples 58 and 59), woman (when referenced with the full NP) is positioned to the right of the verb and in both instances is preceded by the distal demonstrative, attesting to the definite status of the referent.³¹

³¹ While it is clear from the texts that the distal demonstrative can be used as a marker preceding highly identifiable nouns (as a functional definite article), it is by no means present on all identifiable nouns. There are many instances where identifiable referents are referenced with full NPs and no demonstrative is employed. The "Brownie and Girl"

O V

(57) 1 *koim-i* *maha-at*

woman-ACC give-DUR

‘He hands it to the woman;’

S V

2 *koim* *tük-at*

woman eat-DUR

‘The woman eats it.’

(Brownie and Girl, Marean et al. 2021:S59)

(58) 1 *ümbü’* *kutcwa-n* *hanii-l* *wah*

again little-3SG.POSS house-NCM.A DIST:LOC

V S O

2 *ü~tübü-ala* *wa’* *ananggayat* *wal* *koim-i*

text exhibits more instances of the /wal/ demonstrative functioning this way, where there is not always a clear spatial function and where the form may be best described as an incipient definite marker than do the Voegelin texts. It is unclear if this may be due to the storyteller, Stefana Miranda Salazar's, own speech patterns or grammatical changes that took place between the 1935 Voegelin texts and the 1954 recording of Brownie and Girl by Hansjakob Seiler.

MOM~put-GO<ACT DIST Ananggiyat DIST:ACC woman-ACC

‘That Ananggiyat went and put that woman there in another little house.’

(Brownie and Girl, Marean et al. 2021: S60)

- (59) *aamamüüin-at agi*
grobe.around-DUR who

V

O

a~ma'-amin wal koim-i

MOM~touch-ACT>GO DIST:ACC woman-ACC

‘She felt someone while groping around; she felt that woman.’

(Brownie and Girl, Marean et al. 2021: S61)

Example (60) provides a potential counterexample to the claim of identifiability as a primary factor in object - verb order. The example is an excerpt of the first 4 sentences of the text "Brownie and Girl". In (60.2), the people introduced in line 1 are pounding acorn mush. What is interesting here is that this completely new O is positioned postverbally (and is even preceded by the distal demonstrative which is normally only used for identifiable referents). While this appears to be a counterexample to the expected preverbal order of an unidentifiable O, the recording of the speaker suggests another possible explanation. In Hansjakob Seiler's

original recording of the speaker, there is a very clear, elongated final vowel on /wal-a/ and then a pause before the final noun /tcaami-l-a/ is uttered. While the interlinearization used below follows Marean et al (2021), Marean's own footnote mentions that the final accusative vowel on the already-ACCusative /wal/ demonstrative is unexpected (2021: S54)--compare to examples (58 and 59), above, where there is no additional accusative marking present. I believe the speaker was perhaps still activating information in her mind and working out what to say; and as a result, the new O is positioned at the end, as an afterthought. Certainly, in lines 3 and 4, acorn mush is mentioned again, and both times, it is preverbal (as expected for newer or less identifiable referents).

V **S**

(60) 1 *halü-at=kitc* *anghanii-l*

live-DUR=REP people-NCM.A

‘People are living.’

V **O**

2 *wuud-at=ta* *wal-a* *tcaami-l-a*

pound-DUR=3PL.NOM DIST:ACC-ACC acorn.mush-NCM.A-ACC

‘They’re pounding that...acorn mush.’

O **V**

3 *tcaami-l-a* *tu'li-at piniyu oko~koim*
 acorn.mush-NCM.A-ACC make-DUR every COLL.PL~woman
 'They're making acorn mush; All of the women.'

4 *pic=kitc=ta* *meeda wanda oko~koim*
 then=REP=3PL.NOM already DIST:PL COLL.PL~woman
 'Then already those women'

O

V

5 *tcaami-l-a* *a~ya'awa*
 acorn.mush-NCM.A-ACC MOM~finish
 'finished the acorn mush.'

(Brownie and Girl, Marean et al. 2021: S54)

Examples (61 and 62) include the next two references to 'acorn mush'. The first (61) is just three lines after (60.5) above. As expected, after 'acorn mush' has been established as identifiable, it moves into the postverbal position--and the object is also marked with the distal demonstrative. The same is true in example (62), which is another six lines later in the

narrative (after 61).³² Both these identifiable nouns are positioned postverbally, and both are also preceded by the distal demonstrative.

- (61) *met anghanii-l piniyu ii~miy hanii-b*
 already people-NCM.A every MOM~go house-LOC

V **O**
ü~wükü-amin wal tcaami-l-a
 MOM~grab-ACT>GO DIST:ACC acorn.mush-NCM.A-ACC
 ‘All the people already went home; they took that acorn mush.’
 (Brownie and Girl, Marean et al. 2021: S55)

- V** **O**
 (62) *pic=kitc ü~wükü-amin wal-a*
 then=REP MOM~grab-ACT>GO DIST:ACC-ACC
tcaami-l-a
 acorn.mush-NCM.A-ACC
 ‘Then she grabbed that acorn mush and left.’
 (Brownie and Girl, Marean et al. 2021: S56)

³² Example (62) shows the same double-accusative marking that was observed in (60.2) above. There is, again, a small pause before the noun (after the /wal-a/ demonstrative) in

Example (63) provides another possible counterexample to the hypothesis that only identifiable objects are positioned postverbally. This example is an excerpt from the beginning of "The Power of Jimsonweed" the only of Voegelin's texts to be included in his grammar. In these first lines of the narrative, the primary actor (a shaman) is introduced as an object (line 1). She is never mentioned with a full NP again in the narrative, but she remains the primary actor (along with the narrator) for a full nine clauses. This shaman is introduced postverbally, and, just as is seen with the 'acorn mush' in (60.2) above, the new NP is preceded by the distal demonstrative (which is normally reserved only for definite, identifiable referents, as in (61 and 62, above).

V O

(63) *pic=ki tumuuga wal aadzowaa-l-a*

then=1SG.NOM dream DIST:ACC shaman-NCM.A-ACC

'So, I dreamt of that shaman.'

ü~bül ü~üla wah

MOM~arrive MOM~move DIST:LOC

'She came and arrived there.'

pic=nin alaaw-in-at mac=pi halü-t ih ügü-t

then=1SG.ACC talk-BEN-DUR QP=2SG.NOM live-DUR PROX say-DUR

'The she talks to me and says "Why are you sitting here?".

(Power of Jimsonweed, Voegelin 1935a: 183)

While both examples (60 and 63) appear to be counterexamples of the postverbal object position's association with identifiability, the referents which are introduced in both instances are then topical in later discourse. Perhaps this is another function of the postverbal position: only objects which are important to the future discourse and will be referenced later may be mentioned first postverbally and these must carry the distal demonstrative. With only two examples, it is not possible to be certain. It may be that the disfluency involved in the production of (60.2) is unrelated to the position of the object. With so few examples, one cannot say for sure.³³

In short, from examples (56-63), a strong generalization can be made: unidentifiable objects are introduced preverbally while those which are identifiable are positioned postverbally. Thus far, two counterexamples have been identified (60.2 and 63) where objects are introduced postverbally, and both of these include the distal demonstrative.

³³ It is worth noting that if this interpretation of these two sentences is accurate, then Pahka'anil's postverbal position is associated with an unidentifiable but important and later-referenced element--this would be a distinct function of the postverbal category identified in O'odham (Papago) (Payne 1992: 145).

4.3 Two-argument clauses: subject, verb, and object orders

The overall infrequency of two-argument clauses (with subject, object, and verb) in a single clause is obviously somewhat problematic for analysis. It is worth noting that a total of 18 out of all 24 instances of three overt constituents (S, V and O) are in two texts: *Hoarded Game*, told by Steban Miranda, and *Coyote and Bear*, told by Mike Miranda (Steban's son). Both the elder and younger Miranda worked a lot with Voegelin. It is not clear whether an attempt to be as clear as possible encouraged less use of 3SG zero marking in these texts. Certainly there are multiple 3SG participants in both stories, and that complexity is perhaps the primary factor in more overt NPs.

That said, if we examine the few examples of two-argument clauses we have in light of the findings discussed in sections above, it is quite clear that the generalizations hold. Looking back at the frequency counts in Table 7 (above), it is clear that the most commonly attested orders involve the S before the V and the O before the S, between the S and V, and after the V. Orders that are attested multiple times are provided here (in order of frequency): SVO, SOV and OSV. The other attestations of subject, verb, and object in a single clause are attested only once in the corpus each; it is difficult to draw any conclusions with only single

examples. As a result, the focus of the following will be on those orders which are attested more than once.

4.3.1 SVO

In (64.4), we find an example of SVO order. The S 'wolf' and O 'pine nut' have both been introduced ('pine nut' in 64.1 and 'wolf' throughout the story but most recently in 64.3). Both these arguments are identifiable. And the SVO order is predictable from the generalizations discussed in sections 4.1 and 4.2 above: 1) the S is preverbal because there are two 3SG participants and (64.4) involves a switch to a new primary actor; and 2) the O is identifiable, and so if it is mentioned at all, it is mentioned postverbally.

(64) 1 *ü~wükü-kin* *paai'i=gite patsaahi-l*
MOM~grab-ACT>GO three-REP pine.nut-NCM.A
'He (the man) brought in three pine nuts'

2 *kullu-d-a-p* *müühü'a-t*
cup-NCM.B-ACC-LOC lie.down-DUR
'lying in a cup.'

3 *tük-ah=kü=itc* *tübaij-i*
eat-IMP=QUOT=REP wolf-ACC

"Eat!" he says to Wolf.'

S V O

4 *pic=kitc tübaitc ü~tük tciitc patsaahi-l-a*

then=REP wolf MOM~eat one pine.nut-NCM.A-ACC

'Then Wolf ate one pine nut.'

(Hoarded Game, Voegelin 1935b)

Example (65) illustrates another occurrence of SVO; this example is from "Coyote and Bear."³⁴ The SVO order is exhibited in line 6. While the S referent 'those people' is already introduced in line 1, it is preverbal in line 6 because of the switch in primary actor from Bear to people. But the object in line 6 is 'deer' which is not overtly mentioned in the text before this point. That said, unless some other animal is specified, 'deer' is generally implied by the verb 'hunt' throughout the texts.³⁵ It may be that there is even a connection between the lexical forms for 'hunt' and 'deer':

³⁴ Example (65) is part of an earlier, larger excerpt (example 53); this portion is repeated here for convenience.

³⁵ One can see the implication of 'deer' as the object of 'hunt' in scenarios like the opening to "Hoarded Game" (Voegelin 1935b), where Wolf and Coyote are living together and Wolf is hunting for days and days--Wolf's prey is not mentioned. Finally, after giving up, Wolf remarks to Coyote, "No deer!"

the verb 'hunt' (/tohaa/) in line 2 is phonologically very similar to 'deer' in line 6 (/tohii/).

(65) 1 *yoowi-gitc anghanii-l hal-üit ku-di ic-t*

many-REP people-NCM.A live-DUR CONJ-also coyote-NCM.B

'Many people were living, and also Coyote.'

2 *pic=kitc=ta tohaa-la-t pini'ik meedak*

then=REP=3PL.NOM hunt-GO<ACT-DUR every morning

'Then they are going hunting in the mornings.'

3 *pic=kitc uuna-l miy-at kitc=kiik*

then=REP bear-NCM.A go-DUR REP=toward

'Then Bear goes out the other way.'

4 *uuna-l wün=gitc ogon püniüü pini'ik meedak*

bear-NCM.A be=REP on.and.on like every morning

'Bear behaves like that every morning.'

5 *kuu=hac=kitc piin-at haainda üülü'üng*

and=NEG=REP bring-DUR something evening

'And (Bear) doesn't bring anything in the evenings.'

S

6 *kuu=gite wanda anghanii-l*

and=REP DIST:PL people-NCM.A

V O

piin-at tohii-l-a üülü'üing

bring-DUR deer-NCM.A-ACC evening

‘...and those people bring deer in the evening.’

(Coyote and Bear, Voegelin 1935b)

4.3.2 *SOV*

In the attested SOV examples, the preverbal S is due to switch reference between primary actors (a subtype of topic shift). The preverbal O is new and unidentifiable. In the setup for (66), people have been arriving in the evening, and Coyote is just sitting around in his house. Then Coyote takes action and grabs his beads, so he can buy a deer tenderloin from one of the men who arrived. This is the first mention of Coyote's beads--as expected, it is preverbal.

S O

(66) *pic=kitc wahaai ic-t tugumba-i*

then=REP DIST:LOC:from coyote-NCM.B clam.bead-REFL.POSS.ACC

V

ü~wük

MOM~grab

'Then, after that, Coyote took his own beads.'

(Coyote and Bear, Voegelin 1935b)

In (67), Coyote is watching Bear sleep in the preceding discourse.

The action is centered on Bear parting her thighs while asleep and so

Coyote decides to throw off his apron and try to copulate with Bear.

Coyote is positioned first (in 67) as the primary actor (switching from

Bear) and the apron (O) is entirely new and unidentifiable and is

positioned preverbally.

- | | S | O | V |
|------|---|---------------|----------------|
| (67) | <i>pic=kitc ic-t</i> | <i>nawi-i</i> | <i>a~palak</i> |
| | then=REP coyote-NCM.B apron.skirt-REFL.POSS.ACC MOM~threw | | |
| | <i>i-kiik</i> | | |
| | PROX-toward | | |
| | 'Then Coyote threw his apron this way.' | | |
| | (Coyote and Bear, Voegelin 1935b) | | |

4.3.3 OSV

The OSV order is the most perplexing of the three patterns (SVO, SOV and OSV). The reason is that while the S and the O may both be preverbal, only in these two very rare instances do we find the O preceding the S.

With only two examples, it is difficult to draw firm conclusions, but the examples below provide at least a hint of what might be in play here. And in fact, both examples are from the same story and dealing with the same primary conflict in the narrative: Coyote is starving and Wolf is trying to help--first with a salt-lick and then by hunting deer.

In the setup for example (68), Wolf is taking care of Coyote who is too weak from lack of food. So Wolf gives him a white ground substance (almost certainly salt). And Coyote quickly begins licking it. It is this substance that sustains Coyote for the entire length of the story while Wolf goes hunting, has an adventure, kills a deer, and then returns. So, in (68), the ground salt is very important to the story--it is the sustaining food for Coyote.

	O	S	V
(68)	<i>tuci-i=gite</i>	<i>ic-t</i>	<i>lelukpa-t</i>
	ground.something-ACC=REP coyote-NCM.B lick-DUR		
	<i>anoobiinac</i>		
	every.little.while		
	'Coyote is licking the ground-up substance that Wolf gave him.'		
	(Hoarded Game, Voegelin 1935b)		

In (69), Wolf has returned from his adventure with a deer. He offers to cook the liver for Coyote, who is near death but still able to speak. And as soon as Wolf gives it to Coyote, Coyote swallows it. And

immediately after swallowing it, he gets up and starts to help cook the deer.

- | | O | S | V |
|------|--|------------|---------------------------|
| (69) | <i>tuuci=gipc</i> | <i>wal</i> | <i>ic-t e~weleeha-min</i> |
| | straight.away=REP DIST:ACC coyote-NCM.B MOM~swallow-ACT>GO | | |
| | 'Right away, Coyote swallowed that (deer liver).' | | |
| | (Hoarded Game, Voegelin 1935b) | | |

Clearly the O in (69) is identifiable (expressed with a demonstrative, functioning as a pronominal), and it is in (68) as well. Why should it be positioned preverbally at all? Other identifiable O arguments (not expressed by pronominal enclitics) are postverbal, as seen in section 4.2. Both these objects (in 68 and 69) are central to the story. One sustains Coyote in Wolf's long absence, and the other brings the story to a close-- Coyote is returned to health and the two go off together to Mount Whitney. It appears that importance in the narrative may override even other pragmatic concerns (e.g. switching reference between primary actors, identifiability, etc).³⁶ The role of importance as a primary force in Pahka'anil pragmatics is taken up in the concluding discussion below.

³⁶ It is entirely possible that there may be other as yet unidentified forces involved in positioning the S and O before the verb. As noted by one of my anonymous reviewers,

5. Conclusion

Pahka'anil word order is primarily pragmatically ordered. While Voegelin has described the variability as 'stylistic' (1935a: 151), there are clear correlations which allow for understanding and even prediction of word order in natural narrative discourse (Table 8).

Table 8. Pragmatic Correlations with Preverbal and Postverbal Orders

	Preverbal Position	Postverbal Position
Subject	new concept with activation for later reference 42, 44	new concept with no activation for later reference
	topic shift	identifiable referent (with co-referential enclitic)
	switch in reference between primary actors	

the multiple motivations for preverbal placement of arguments (S and O) may interact in ways not yet understood. These orders are not frequent enough to draw firm conclusions (there are four instances of SOV and only two instances of OSV, cf. Table 7).

Object	unidentifiable	identifiable
---------------	----------------	--------------

The discussion and examples in section 4 highlight each of the correlations provided in Table 8. The correlations summarized in Table 8 are not attempting to suggest algorithmic choices; rather, they provide the (sometimes competing) motivations shaping speaker choice in constituent order.

5.1 The positioning of subjects

For subjects, the preverbal position is associated with new concepts that will be featured again (referred to again) and which need to be cognitively activated (examples 42 and 44), with the shift to a new topic (example 45.2), and switches in reference between primary actors (example 47). And the postverbal position for subjects is associated with new concepts which need not be activated (which will not be referenced later in the discourse) (example 43), and with identifiable concepts which are reiterated or disambiguated through full NP mention--these are not shifts in topics (example 52, 53.11, 55.2).

The only potential counterexamples (related to subject positioning) identified thus far involve the use of 3PL.NOM pronominal enclitic with a preverbal (rather than the expected postverbal) coreferential NP. Within the corpus 96% of the 50 attestations of the 3PL.NOM enclitic either do not

co-occur with any coreferential NP (expected) or occur with a postverbal coreferential NP. In two examples (4%), the 3PL.NOM enclitic is in conjunction with a preverbal coreferential NP. Both examples are in the "Brownie and Girl" narrative: line 4 (Marean et al. 2021: S54) and line 86 (Marean et al. 2021: S67). The first counterexample is already included as an example in this paper (example 60.4), above. Interestingly, there is a pause between lines 4 and 5 in example 60. It is not clear whether the speaker is initially re-establishing the topic and then decides to finish the clause. This appears to be a true counterexample. The typical pattern would be to have 'those women' positioned postverbally. In the second counterexample (line 86 in the same text), the subject Inyaana 'Indians' carries the 3PL.NOM enclitic itself, before the verb 'come'. While this is an example of the 3PL.NOM enclitic with a preverbal co-referential NP, the NP is positioned preverbally because this involves a switch in reference between primary actors: the woman and the group of people who are questioning her. That is, there are two forces at play here, and the positioning of the NP coincides with the switch in reference.

5.2 The positioning of objects

For objects, the preverbal position is associated with unidentifiable concepts (examples 56.2, 56.4), while the postverbal position is associated with identifiable concepts (examples 52, 53.11, 55.2). In fact, all examples

of objects marked as definite with the preceding accusative demonstrative /wal/ DIST:ACC are postverbal.

Two counterexamples involving unidentifiable, new objects positioned postverbally have been identified and discussed above (60.2 and 63). Interestingly, both of these examples involve the introduction of a new referent as a postverbal object and the object noun is preceded by the distal demonstrative--which itself is normally associated only with identifiable (definite) NPs. Furthermore, both these referents go on to be topical in the subsequent discourse.

5.3 Relative frequency of orders

With respect to the overall frequency counts, the most robust distinction is the preponderance of SV over VS: 105 vs. 26; the OV vs. the VO orders are much more similar in frequency: 39 vs. 30, respectively. All of the attested preverbal subject orders are related in some way to topic (establishing a new referent which will become a topic, shifting from one topic to another, or switching reference between primary actors). The postverbal subject is far less frequent. The majority of cases (21) are instances of mentioning an identifiable referent which has already been established. There are only five instances attested thus far of new concepts being mentioned that do not need to be activated for later reference.

The relative order of the OV vs. the VO is perhaps not a surprise, given that the more frequently attested preverbal position is for unidentifiable elements. Identifiable referents (especially those in high referential continuity sections of discourse) are often not mentioned overtly (as in the case of the 3SG zero--both nominative and accusative) or expressed through the 3PL nominative or accusative enclitics. Coreferential, overt NPs are normally only needed in the instances where disambiguation or perhaps emphasis is desired.

5.4 Preferred Argument Structure

As mentioned briefly in section 3.2, above, Preferred Argument Structure (Du Bois 1987; 2003) offers some motivation for the order of constituents in Pahka'anil. This is especially true for the higher frequency of SVO orders in those instances when two lexical arguments are attested. Preferred Argument Structure's (PAS) quantity pragmatic constraint limits the number of new core arguments to one (Du Bois 2003: 34). Du Bois writes, "The tendency to avoid more than one lexical core argument appears to be consistent across languages, in spontaneous spoken discourse" (Du Bois 2003: 35).

In the case of Pahka'anil, the preverbal position is associated with new concepts activated for later reference, topic shift (also new), switches in reference between primary actors, and unidentifiability (Table 8). The

postverbal position in Pahka'anil is associated with lexical arguments referring to identifiable concepts or new concepts with no activation for later reference (Table 8). In the case of Pahka'anil, the constraints of PAS suggest that once a speaker has chosen a new argument to fill the preverbal position associated with new concepts, any additional argument would tend to be positioned post-verbally in the position associated with old or identifiable concepts. The preverbal position in Pahka'anil is most frequently associated with subjects (see Table 7 with the counts of SV and SVO orders in particular), and therefore, if a new argument is positioned preverbally (as is the strong tendency for Pahka'anil subjects), then any other argument (including objects) would be identifiable and not referenced as new or activated for later reference. PAS provides cross-linguistically supported argumentation for why the SVO order is so much more frequently attested than all of the other two-argument predications in the the Pahka'anil texts: SVO order is likely more frequent because it is most frequently motivated by the system summarized in Table 8.³⁷

5.5 Newsworthiness

³⁷ I would like to express appreciation for one of my anonymous reviewers' comments suggesting PAS as particularly relevant for the SVO order.

Apart from the generalizations summarized in Table 8, another pragmatic feature that appears to be relevant in the data is newsworthiness (as mentioned in section 4.3.3.). For Mithun, the term newsworthiness is essentially an 'importance principle' (1992: 32), where the order of constituents is arranged from most important to least--an organizing principle which she has shown is relevant to constituent order in those languages which allow for pragmatics to shape word order: "new information is usually more important than old information" and thus relates to this newer vs. older order (1992: 32). Mithun continues, "Constituents may be newsworthy because they introduce pertinent, new information, present new topics, or indicate a contrast" (1992: 58). I have argued that the very rarely attested OSV in the Pahka'anil corpus may be the result of particularly important O arguments needing to be more saliently presented in the order. While the two OSV examples (67 and 68) are the only ones mentioned specifically with reference to newsworthiness, one could argue that an 'importance principle' is involved in the general shaping of order in Pahka'anil. Given that important, topical, contrastive and new, have been included as elements of newsworthiness, Pahka'anil's preverbal position correlates soundly with newsworthiness.

It is also important to note that the findings for Pahka'anil are congruent with a number of Doris Payne's findings for Papago (1987)--another Uto-Aztecan language. First, and perhaps most importantly, the very notion that the position of new information relative to the verb may

be sensitive to whether the hearer should "open a new, active discourse file...making it available for further deployment" was first established in Payne's Papago work (1987: 794-5). Second, information which follows the verb in Pahka'anil is either not important enough to be referenced again later, or it is identifiable. This also fits with Payne's findings:

Information follows the verb when the hearer is not instructed to open a new active discourse file for it. This category includes items for which active cognitive files are already available (e.g. identifiable, definite, and unique items)—as well as entities for which files are not to be established, including non-referential mentions. (Payne 1987: 795).

Finally, we turn to at least a cursory consideration of the development of such a system. Mithun has pointed out that when pragmatic ordering occurs in languages where word order is generally controlled by syntax, the result involves reordering elements into a theme-rheme/topic-comment order, where the newer and most newsworthy elements are positioned on the right of the clause (1992: 58). Just as Mithun illustrates with the pragmatically ordered languages she examines, Pahka'anil inverts this order, resulting in the newer and more newsworthy elements positioned earlier in the clause and the more expected or identifiable (less newsworthy) elements further to the right. Mithun's work

has offered two potential motivations for this order of elements in pragmatically ordered languages: 1) an intonational contour where the most prominent peak in amplitude and frequency is early in the clause and which attracts the most newsworthy left and right detached nominals in some languages (1995) and 2) the presence of a full paradigm of obligatory bound pronouns which mark the grammatical relations of the verb (1992: 69).

Mithun has argued that in some pragmatically ordered languages, the origin of the move from the widely attested known > unknown (topic-comment) order to unknown > known may be motivated by mapping the newer or more important (newsworthy) elements to the place of higher frequency and amplitude in the intonation contour--where the beginning has the highest frequency and amplitude (Mithun 1995). Pahka'anil's stress pattern, however, is clearly oriented to the end of the utterance: this results in the last syllable (and in some cases, the penultimate) being stressed, with alternating light syllables also stressed preceding that last stressed syllable and all long vowels also attract stress (see Voegelin 1935a: 65-75). Because the final (or penultimate) syllable is stressed in Pahka'anil, a prosody motivation for such a change in word order is not plausible. Even in cases like example (52), a right-positioned NP coreferential with the 3PL nominative enclitic is still prominently stressed. This is clear in the original "Brownie and Girl" recording. As a result, mapping of more

newsworthy elements to places of higher prosodic salience does not seem to be taking place in Pahka'anil.

Mithun's observation regarding obligatory bound pronouns does shed light on Pahka'anil. As highlighted in Table 3 (section 1.2.2) and illustrated in section 4.1.4, Pahka'anil's participant reference enclitic paradigm marks subject and object grammatical relations across all person-number categories except for 3SG, which is zero for both nominative and accusative. These enclitics, while variable in placement, most typically occur on the right edge of the first word in a sentence. The enclitics are not used at first mentions, normally, however. They are generally employed only after a concept has been activated and has become identifiable to the hearer (speech act participants, of course, need not be introduced first). I have suggested in this chapter that these enclitics actually carry the full weight of grammatical relation and satisfy the syntactic requirements for subject. Certainly, they are found most commonly with no coreferential, overt NP co-occurring in the same clause--attesting to their ability to satisfy the grammatical requirement of subject. The fact that the syntactic requirements are satisfied then allows any coreferential NP that does occur to be more variable in order (and in the case of Pahka'anil, most typically positioned far to the right, as an appositive or further disambiguation). Of course, the fact that objects carry accusative case marking also plays a role, allowing the hearer to parse the syntactic roles with no confusion.

There is still much to explore with respect to the order of constituents in Pahka'anil. This chapter is simply a first attempt. No underlying or basic syntactic order has been determined either in the correlational pairs which were examined or in the order of elements within the clause in wider discourse context. Just as Doris Payne found for Papago (1987: 802), Pahka'anil word order appears to be fully accounted for by pragmatic considerations.

Abbreviations

1	first person	MOM	momentaneous aspect
2	second person	NEG	negative
3	third person	NCM.A	noun class marker A
ACC	accusative case	NCM.B	noun class marker B
ACT>COME	associated motion: venitive subsequent motion	NCM.C	noun class marker C
ACT>GO	associated motion: andative subsequent motion	NMZL	nominalizer
BEN	benefactive	NOM	nominative case
COLL	collective plural	NREFL	nonreflexive
CONJ	conjunction	O	object
DES	desiderative	PL	plural
DIST	distal demonstrative	POSS	possessive
DS	different subject subordinator	PROX	proximal demonstrative
DUR	durative aspect	PROG	progressive
EXCL	exclusive	PST	past tense
FUT	future tense	QP	question particle
GEN	genitive	QUOT	quotative
GO<ACT	associated motion: andative concurrent motion	REFL	reflexive

IMP	imperative	REP	reportative
INCL	inclusive	S	subject
INS	instrumental	SS	same subject subordinator
INTER	interrupted (action of subordinate verb is interrupted by action of matrix verb)	V	verb
LOC	locative		

Bibliography

- Ahland, Michael and Bethany Lycan. 2019. Word order patterns in Pahka'anil (Tübatulabal) narrative. Paper presented at 22nd Annual Workshop in American Indigenous Languages (WAIL), University of California, Santa Barbara.
- Campbell, Lyle. 1997. *American Indian Languages: The Historical Linguistics of Native America*. New York/Oxford: Oxford University Press.
- Croft, William. 2022. *Morphosyntax: Constructions of the World's Languages*. *Cambridge Textbooks in Linguistics*. Cambridge: Cambridge University Press.
- Dryer, Matthew S. 1992. The Greenbergian word order correlations. *Language* 68: 81-138.
- Dryer, Matthew S. 2009. The branching direction theory of word order correlations revisited. In *Universals of Language Today*, [Studies in Natural Language and Linguistic Theory: 76], Sergio Scalise, Elisabetta Magni, Antonietta Besetto (eds.), 185-207. Kluwer Academic Publishers; Springer.
- Dryer, Matthew S. 2011. The evidence for word order correlations. *Linguistic Typology* 15: 335-380.
- Dryer, Matthew S. 2018. On the order of demonstrative, numeral, adjective, and noun. *Language* 94(4):798-833.
- Du Bois, John W. 1987. The discourse basis of ergativity. *Language*

63:805-55.

- Du Bois, John W. 2003. Argument structure: Grammar in use. *Studies in Discourse and Grammar*, John W. Du Bois, Lorraine E. Kumpf, and William Ashby (eds.), 11-60. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Dunn, Michael, Simon J. Greenhill, Stephen C. Levinson and Russell D. Gray. 2011. Evolved structure of language shows lineage-specific trends in word-order universals. *Nature* 473: 79-82.
- Haspelmath, Martin. 2019. Indexing and flagging, and head and dependent marking. *Te Reo* 62(1):93-115.
- Hill, Jane. 2009. "External evidence" in historical linguistic argumentation: Subgrouping in Uto-Aztecan. ms. [cited in Golla 2011:185]
- Manaster Ramer, Alexis. 1992. Tubatulabal 'man' and th subclassification of Uto-Aztecan. *California Linguistic Notes* 23 (2): 30-31.
- Marean, Lindsay. 2015. Lexical database. Unpublished manuscript.
- Marean, Lindsay, Michael Ahland, Bethany Lycan, Sergio Sandoval Sanchez, and Nicholas Sinetos. 2021. Pahka'anil (Tübatulabal): Two texts. In *Texts in the Indigenous Languages of the Americas* [supplement of the International Journal of American Linguistics, 87.S1], Gabriela Garcia Salido and Time Thornes (eds.), S51-S81. Chicago: University of Chicago Press.
- Mithun, Marianne. 1995. Morphological and prosodic forces shaping word

order. In *Word Order in Discourse*, Pamela Downing and Michael Noonan (eds.), 387-423. Amsterdam: John Benjamins.

Mithun, Marianne. 1996. General characteristics of North American Indian languages. In *Handbook of North American Indians, Volume 17: Languages*, Ives Goddard (ed.), 137-157 Washington: Smithsonian Institution.

Mithun, Marianne. 1999. *The Languages of Native North America. Cambridge Language Surveys*. Cambridge: Cambridge University Press.

Munro, Pamela. 1977. Towards a reconstruction of Uto-Aztecan stress. *Studies in Stress and Accent*, edited by Larry M. Hyman, 303-326. Los Angeles: University of Southern California.

Payne, Doris L. 1987. Information structuring in Papago narrative discourse. *Language* 63: 783-804.

Payne, Doris L. 1992. Nonidentifiable information and pragmatic order rules in O'odham. In *Pragmatics of Word Order Flexibility*. [Typological Studies in Language 22], Doris L. Payne (ed.), 138-166. Amsterdam: John Benjamins.

Payne, Thomas E. 1997. *Describing Morphosyntax*. Cambridge: Cambridge University Press.

Voegelin, Charles. F. 1935a. *Tübatulabal Grammar*. *University of California Publications in American Archeology and Ethnology*

34.2:55-190. Berkeley, CA: University of California Press.

Voegelin, Charles. F. 1935b. *Tübatulabal Texts*. *University of California Publications in American Archeology and Ethnology* 34.3:191-

246. Berkeley, CA: University of California Press. Berkeley, CA:

University of California Press.