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by

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Focus and movement in a variety of K'ichee'

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Focus and movement in a variety of K'ichee'

by

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In memory of Ruth and Moritz Velleman, who would have made room for it on the shelf.

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This dissertation describes two related phenomena in the syntax and semantics of K'ichee' (Mayan), concentrating on the variety spoken in and around Nahualá.

The first phenomenon is focus, the special discourse status granted to constituents which provide new and important information. The second phenomenon is syntactic movement, which occurs in several different constructions in K'ichee' — most relevantly, that of focus movement. Across languages, focused constituents are highlighted in one way or another; and in Mayan languages, this highlighting often takes the form of movement to a position immediately before the verb. But I show that the relationship between focus and movement in K'ichee' is less straightforward than has previously been assumed. In particular, it is often possible for a focused constituent to remain in situ.

Having shown that focus in situ is possible, I turn to the question of when it occurs. I show that focus in situ follows an ergative/absolutive pattern: it is impossible for transitive subjects, but possible for all other constituent types. This pattern is compared to ergative/absolutive patterns found elsewhere in K'ichee' grammar, and in other languages.

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Chapter 1

Introduction

This dissertation aims to describe the grammar of information-structural focus and syntactic movement in K'ichee', a Mayan language — with emphasis on the variety of K'ichee' that is spoken in the central parts of Nahualá and Ixtahuacán and in neighboring villages.

In Mayan languages, information structure and clause-level syntax have long been studied in tandem. Indeed, the earliest proposals on Mayan language information structure were offered as solutions to a basically syntactic puzzle.

The puzzle was as follows. Below the level of the clause, the Mayan languages are rigidly head-initial. For instance, all Mayan languages have prepositions rather than postpositions, and have complementizers which precede rather than follow their complements. Determiners generally precede nouns; and possessors, relative clauses and most other types of modifiers follow them. But at the level of the clause, Mayan language syntax is apparently much more flexible. In many Mayan languages, including K'ichee', all six possible orders of subject, object and verb are attested:¹

^{1.} Throughout this dissertation, when clause-level word order is relevant, I will label K'ichee' examples with abbreviations like these, indicating the order of constituents. In later examples, I will also annotate these labels to indicate the scope of focus and the syntactic cause for noncanonical word orders — using arrows for movement and commas to set off left-dislocated constituents.

I use the following abbreviations for syntactic functions: S for intransitive subject, A for transitive subject, O for transitive object, X for adjunct. In pseudotransitive clauses (*cf.* §2.2.2 and §3.3.2) — whose subjects behave like ordinary transitive subjects for morphological purposes, but like intransitive subjects for syntactic and information-structural purposes — I adopt the convention of labeling subjects as S rather than A, in keeping with their syntactic and information-structural behavior.

- (1) K'a tee ka-r-il le achih ri jun keej xaa maa pwaq k-u-kisi-ij. V A O even then INC-A3s-see D man D one horse just EXCL money INC-A3s-shit-ss
 Suddenly the man sees a horse that is just shitting money. Mondloch 1981, p. 335
 (2) K-u-b'an u-pataan le are'. V O A
- (2) K-u-b'an u-pataan le are'. V O A

 INC-A3s-do A3s-ceremony D 3sg

 He was performing a ceremony. Guarchaj
- (3) X-u-b'an =k'u jun q'iij,

 CPL-A3s-make =then one day

 ri' ri masaat, qas tajin k-u-tij u-joroon. A V O

 DEM D deer really PROGR INC-A3s-drink A3s-water

 Well, one day, the deer was drinking water... Masaat
- (4) Ri a're', xaa s+taq ch'aap s+taq lanse't ka-ki-koj a're'. A O V

 D 3pl merely AFF+DISTR arrows AFF+DISTR lances INC-A3p-use 3pl

 They only used arrows and lances. Ajpacajá
- (5) Jun juyub' entera k-u-b'an ri jun laj alah.

 O V A
 one mountain entire INC-A3s-do D one DIM boy

 The little boy does an entire mountain.

 Mondloch 1981, p. 334
- (6) Aree =k'u ri mansa'n, aree le ixoq tajin ka-tij-ow-ik.

 CONTR = then D apple CONTR D woman PROGR INC-eat-AF-SS

 As for the apple, it's the woman who's eating it.

 QUIS

This flexibility is not what we would expect in a language with rigidly head-initial word order elsewhere, and in the 1970s researchers began to consider how it could be explained.

The solution which is now almost universally accepted was first proposed by William Norman in an unpublished but widely cited conference presentation (Norman, 1977), and was elaborated upon by Larsen (1988), England (1991) and Aissen (1992) among others. On this now-standard view, the Mayan languages have head-initial basic word order even at the level of the clause: either voa or vao depending on the language. But there are several operations which can disrupt this basic word order, by relocating constituents to the beginning or end of the clause. In K'ichee', which has voa basic word order, there are three such operations:

- 1. Extraposition of prosodically heavy constituents to the end of the clause.
- 2. Left-dislocation of one or more constituents to the beginning of the clause.
- 3. Movement of a single constituent to a position immediately before the verb.

In other words, the K'ichee' word orders can be generated from the following schema:

In clauses with a single constituent before the verb, it could be either left-dislocated or moved — though in most cases, either prosodic or morphosyntactic cues will let us determine which it is. For instance, in 7, the AV order is a result of left dislocation of the A argument. (One way we can tell that this is the case is because of the prosodic boundary after the A argument, which I represent here as a comma.)

(7) Aree = k'u le qa-taat qa-naan, na ka-ki-k'am = taj. A, V

CT = CT D A1p-father A1p-mother, NEG1 INC-A3p-take = NEG2

But our ancestors didn't accept it. Ajpacajá

In 8, the AV order is a result of movement of the A argument. (We can tell that this is the case because of the lack of a prosodic boundary, and also because a special verb form has been used — the so-called AF form — which is only found in clauses from which A arguments have moved.)

In addition to this syntactic component to Norman's proposal, there was an information-structural component. Norman proposed that two of his three operations, left-dislocation and movement, were both motivated by information-structural factors. Left-dislocation affects highly topical constituents. (The term he used was "theme," following Chafe 1976.) And movement affects what he called "prominent" constituents — which subsequent authors have interpreted as referring to constituents which are focused (Larsen, 1988; England, 1991; England, 1997; Aissen, 1992; Can Pixabaj and England, 2011).

This link between information structure and syntax which characterized Norman's analysis has remained influential in subsequent work. However, the relationship between the information structure and syntax — and in particular, between focus and movement — is more complicated than some have assumed.

On one natural interpretation of Norman's analysis, what he was proposing was a one-to-one relationship between syntactic position on the one hand and information status on the other hand. It would be natural to take him to have meant that *all and only* topical constituents are left-dislocated, and that *all and only* focused constituents are moved, giving us the pattern shown in Table 1.1.

I do not know whether this interpretation is actually what Norman intended. Whether it is or not, it is an interpretation that other authors have sometimes placed on his work — even

Information status	Syntactic realization
Topic	Left-dislocated
Focus	Moved
Neither topic nor focus	In situ (incl. extraposed)

TABLE 1.1: One interpretation: a one-to-one relationship between syntax and information structure.

to the point of mixing syntactic and information-structural labels: using "topicalized" to mean "left-dislocated," and "focused" to mean "moved." I should note that I will be avoiding this usage. In this dissertation, "focus" always refers to an information-structural property, and "movement" always refers to a syntactic operation.

In any case, the truth is more complicated than Table 1.1 would indicate. In particular, the relationship between focus and movement is *not* one-to-one. First of all, there are unfocused constituents which move. This is true in particular of wh-words in relative clauses and wh-questions — which do not count as focused in any useful sense of the word,² but which nevertheless must move. And more interestingly, across Mayan languages, there are focused constituents which are not required to move but may remain in situ.³

In K'ichee', the possibility of focus in situ depends in part on the grammatical function of the focused constituents. Nonsubjects and intransitive subjects which are focused may either move or remain in situ, whereas focused transitive subjects may not remain in situ, and must move. The resulting situation is summarized in Table 1.2.

I will refer to the pattern of focus in situ found in K'ichee' as an ERGATIVE FOCUS ASYM-

- 2. See Cable 2008 for discussion of this point in a non-Mayan language.
- 3. This has been noted previously in several of the Mayan languages: Yucatec (Kügler, Skopeteas, and Verhoeven, 2007; 2007; Gutiérrez-Bravo and Monforte, 2011; Skopeteas and Verhoeven, 2012; Skopeteas and Verhoeven, 2014), Tseltal (Polian, 2013), Tsotsil, (Aissen, 2012a) and K'ichee' (Baird, 2010; Baird, 2014; Burdin et al., 2013). Prior to this dissertation, the evidence for it in K'ichee' came exclusively from controlled multi-subject experiments, rather than from elicitation with an experienced consultant or from natural production.

Information status	Syntactic realization	Conditioning features
Topic	Left-dislocated (or in situ?)	
Focus	Moved or in situ Moved or in situ Moved	Nonsubjects Intransitive subjects Transitive subjects
Neither topic nor focus	In situ Moved	[-wH] [+wH]

TABLE 1.2: The true situation in K'ichee': no one-to-one relationship between focus and movement.

METRY. It is an *ergative* asymmetry in the sense of Deal 2012, because it meets two criteria: first, it treats transitive subjects differently from other types of constituent, and second, it treats intranstive subjects and transitive objects alike.

The ergative focus asymmetry in K'ichee' contrasts with *accusative* focus asymmetries which have been found in other languages. For instance, in colloquial spoken French, we find an asymmetry between focus in situ and clefting. Focused nonsubjects may remain in situ; but all focused subjects, both transitive and intransitive, must be clefted. If we constructed a table like Table 1.2 for French, the relevant part of it would be as follows:

Information status	Syntactic realization	Conditioning features
:	:	:
Focus	Clefted or in situ	Nonsubjects
	Clefted	Intransitive subjects
	Clefted	Transitive subjects
:	:	:

TABLE 1.3: Focus in French: an accusative asymmetry.

Similar accusative asymmetries are found in a number of languages of northern Subsaharan Africa (Hartmann and Zimmermann, 2007a; Hartmann and Zimmermann, 2007b;

Zimmermann, 2011). Indeed, Zimmermann (2011) has hypothesized that any focus asymmetry will follow the accusative pattern, marking subject focus more strongly than nonsubject focus. K'ichee' constitutes a counterexample to Zimmermann's hypothesis.

The question then arises: why is the K'ichee' asymmetry ergative rather than accusative? It is tempting to imagine that the answer has something to do with the pervasive ergative patterns found at other levels of K'ichee' grammar. K'ichee' is well-known for its morphological ergativity, and is one of the classic examples of a language whose morphological ergativity is not split: there are no conditions under which verb agreement follows an accusative or tripartite pattern instead. It also exhibits a phenomenon known as SYNTACTIC ERGATIVITY, in which transitive subjects are unable to undergo movement unless a special verb form is used. I will argue in this dissertation that syntactic ergativity and the ergative focus asymmetry are related, and will propose a possible explanation for this relationship.

Chapter 2 provides a more detailed background for the dissertation. First, it offers a definition for information-structural focus that will be used in the rest of the dissertation. And second, it fleshes out the points made above concerning K'ichee' morphosyntax, offering more detailed descriptions of the available clause-level word orders, the phenomena of morphological and syntactic ergativity, predication, and transitivity.

Chapter 3 gives a detailed description of the movement constructions found in K'ichee'. These comprise several types of relative clause; a type of UNCONDITIONAL CLAUSE which has not been previously described, similar in function to English WH-ever clauses; WH-questions; and focus movement clauses. It discusses two possible analyses for focus movement — one on which it is a monoclausal construction, and one on which it has a more complicated biclausal structure involving a free relative clause — and decides in favor of the monoclausal analysis.

Chapter 4 discusses the information structure of canonical clauses. I show that not all focused constituents move; demonstrate that focus in situ cannot be reanalyzed away; and

detail the circumstances under which focus in situ is possible, supporting the ergative focus asymmetry which was briefly described above. I go on to consider several possible approaches to understanding this focus asymmetry.

Chapter 5 concludes with a summary of the results of the dissertation and a discussion of prospects for future research.

Chapter 2

Background

2.1 Descriptive background

2.1.1 The K'ichee' language

K'ichee' is a member of the K'ichean branch of the Eastern Mayan languages, and is estimated to have roughly a million speakers spread over a large area of the western Guatemalan highlands and smaller portions of the neighboring lowlands near the Pacific coast. It is the best-described and best-documented member of that branch, and one of the best-described and best-documented Mayan languages overall.

Extant primary sources in K'ichee' include a substantial corpus of Colonial documents (the *Popol Wuuj*, the *Rabinal Achi*, and a number of historical narratives known collectively as *Titulos*); several Biblical translations, including an excellent translation of the Catholic *Misal* by Ajpacajá Tum and Baronti (1995); published works of modern poetry by the well-known poet Humberto Ak'ab'al and several lesser-known authors; many oral texts, especially folk tales and oral histories (Weisshaar and Hostnig, 1995; OKMA, 1998; Matazar González and Matazar González, 2001; Mondloch, 2012); and a few longer prose works by native speakers, mostly produced in connection with the primary and secondary schools (which are mandated by the current Guatemalan constitution to provide instruction in indigenous languages as well as Spanish). It is the subject of grammars by Fox (1965), Mondloch (1978), Larsen (1988), and López Ixcoy (1997) and Duncan (2010), of which Larsen's and Lopez's are of especially high quality; of several dictionaries (Edmonson, 1965; Pérez Medrano, 2010; Christenson, *n.d.* Ajpacajá Tum and PLFM, 1996) including a large and thorough monolin-

gual dictionary by Ajpacajá Tum (2001); and of many other scholarly publications.

One aspect of K'ichee' grammar which has received especial attention is its ERGATIVITY, which manifests itself at several levels in the grammar of the language. K'ichee' is one of the classic examples of a language with consistently ergative agreement marking and with no significant signs of split ergativity.¹ It also displays ergativity at several higher levels of its grammar, including its syntax and — as I will show in Chapter 4 of this dissertation — its marking of information structure.

Ergativity is far from the only aspect of K'ichee' grammar which has received attention, though. Other scholarly works on K'ichee' describe its phonology, with emphasis on prosody (Nielsen, 2005; Henderson, 2012; Baird, 2014); its general morphosyntax, with some emphasis on the syntax of focus movement (Trechsel, 1993; Can Pixabaj and England, 2009; Can Pixabaj and England, 2011; Velleman, 2012; Velleman, 2013; Yasavul, 2011; Yasavul, 2013b; Aissen, 2012b); its dialectology (Par Sapón and Can Pixabaj, 2000; Romero, 2000); and its acquisition by L1 speakers (Pye, 1980; Pye, 1991; Pye, 2001).

2.1.2 Data

This dissertation is based on fieldwork carried out over a total of about eight months between 2010 and 2014, and on a corpus of texts — some of which I collected during my fieldwork, and some of which were written or collected by other scholars. K'ichee' examples which are not followed by a citation to some other work or the name of a text in italics are elicited. Those labeled QUIS were elicited using the Questionnaire for Information Structure (Skopeteas et al., 2006), a protocol for systematic elicitation of data relevant to the study of information structure.

^{1.} This makes it a counterexample to Silverstein's (1976) early claim that split ergativity is universal in ergative languages. Larsen and Norman (1979) observed that many Mayan languages obey this claimed universal, but some — including K'ichee' — do not.

2.1.3 Target dialect

K'ichee' is a pluricentric language, with considerable variation between dialects. The Academia de Lenguas Mayas de Guatemala has attempted with some success to promulgate standards for orthography and for the grammar of the written language, but K'ichee' is rarely used as a medium for written communication; and many of the authors who do use it in writing have disregarded the ALMG standards. There is no *de facto* standard for the spoken language, though some spoken varieties have higher prestige or more presence in mass media, and others (such as Cunenteco, discussed in §3.3.3.3) are so clearly both innovative and sociolinguistically marginal that they can safely be described as nonstandard even in a situation where no true standard exists.

Because of this dialect variation, it is important to specify which variety of K'ichee' it is that I have worked on. (And this is not simply a matter of caution, either; there are some points which I have discussed in this dissertation on which it is clear that there is variation from one variety to the next.) Unfortunately, there are a few sociolinguistic facts that make it difficult to give a strictly accurate name to it.

Varieties of K'ichee' are generally described by naming the municipio in which they are spoken. *Municipio* is generally translated as "municipality," but in fact, municipios are often much larger and less centralized than this translation would suggest; they correspond more closely to North American townships or even counties. What's more, municipio boundaries do not generally correspond to cultural or linguistic boundaries, and many municipios are highly linguistically diverse.

The municipio of Nahualá, in which I carried out my fieldwork, is home to several different varieties of spoken K'ichee'. Some of Nahualá's territory is in the mountainous highlands; some is in what is called *taq'aaj* in K'ichee' and *boca costa* in Spanish — the low foothills which descend towards the Pacific coastal plain; and there are noticeable linguistic differences between the two regions. The cabecera of Nahualá — its central built-up area, corre-

sponding roughly to its county seat in North American terms — is in the highlands, and it is the highlands variety spoken there which linguists are most often referring to when they refer to Nahualá K'ichee'.

While the variety of K'ichee' spoken in the highland cabecera of Nahualá is different from the variety spoken in the lowlands, it is quite similar to the varieties of K'ichee' spoken in highland regions of neighboring municipios. In particular, it resembles the variety spoken in the cabecera of Santa Catarina Ixtahuacán so closely that the two are basically indistinguishable. This resemblance is due to a historical connection between the two municipios. The cabecera of Nahualá was once part of the municipio of Santa Catarina Ixtahuacán, was settled by emigrants from the Ixtahuacán's cabecera, and only became independent in the late 1700s.

The connection between Nahualá and Ixtahuacán is important because my own primary fieldwork has been in Nahualá, but many of the important secondary sources I will draw on come from Ixtahuacán. Pedro Florentino Ajpacajá, a resident of Ixtahuacán, was an accomplished orator, lexicographer and translator. He produced a monolingual dictionary of K'ichee' which is the largest single source of lexical data on the language, a translation of the Catholic *Misal* which is the largest work in idiomatic written K'ichee' by a native speaker, and (in collaboration with the Matazar brothers, a pair of K'ichee' speakers interested in oral history) many hours of audiotaped narration on the history, customs and folklore of Ixtahuacán. A large part of the corpus on which I have based this dissertation is drawn from the *Misal* and Ajpacajá's tapes. Ajpacajá's language is in some ways more conservative and more formal than the speech of my consultants in Nahualá, who are at least a generation younger and more modern and secular in outlook. But it is not substantially different in grammar — only in lexicon and style.

Another source which I have occasionally drawn on is a written prose collection, comprising local history, folklore and proverbs, written by students at a secondary school in

Ixtahuacán. The language found in this collection is even closer to that of my consultants in Nahualá.

Finally, I received a good deal of assistance in transcribing and translating recordings from Telma and Sindy Can, who are residents of yet *another* municipio: Santa Lucía Utatlan. Utatlan K'ichee' has some noticeable differences in lexicon and pronunciation from the varities spoken in the cabeceras of Nahualá and Ixtahuacán, but as far as I am aware there are no major differences in grammar.

The upshot of all this is that this dissertation describes a fairly cohesive variety of K'ichee' whose speakers are scattered across portions of three different municipios. For convenience I will refer to this variety as Central Nahualá K'ichee' or CNK. This is not an ideal label — for one thing, the Ixtahuaqueños whose writing I have consulted would surely not be happy with it — but it will have to do for now. CNK includes the varieties spoken in the cabecera of Nahualá, and in neighboring highlands towns including the cabecera of Ixtahuacán, but excludes varieties spoken in more remote parts of Nahualá, and especially those spoken along the *boca costa*.

2.1.4 Orthography

The consonant inventory of K'ichee' is given in Table 2.1, and its vowel inventory in Table 2.2. Both tables also list the orthographic representations I will be using for each phoneme in this dissertation.

For the most part, I have adopted the spelling conventions which were used by Ajpacajá in his dictionary; these differ in only a few places from the earlier conventions established by the Proyecto Lingüistico Francisco Marroquín, and by PLFM-afilliated linguists such as Thomas Larsen.² I have followed Ajpacajá and the PLFM rather than the ALMG standard be-

^{2.} Specifically, the PLFM wrote glottal stops using the character 7, and reserved the apostrophe for indicating glottalization of a preceding consonant; Ajpacajá abandoned this practice and used an apostrophe in both

/p/ p			ch	/k/ k	q								
/ b /	/t'/	/ts'/	/tʃ'/	/k'/	/q'/	/?/							
b'	ť	tz'	ch'	k'	q	,	_						
		/s/	/ʃ/		$/\chi/$			/i/	/i:/			/u/	/u:/
		S	X		j			i	ii or ih			и	uu or uh
/w/	/1/	/r/	/ j /				,	/e/	/e:/			/o/	/o:/
W	l	r	y					e	ee or eh			0	oo or oh
/m/	/n/									/a/	/a:/		
m	n						_			а	aa or ah		

TABLE 2.1: Consonant phonemes.

TABLE 2.2: Vowel phonemes.

cause the standard orthography does not represent vowel length — which is clearly phonemic in CNK. (See Larsen 1988 for a detailed discussion of the history of K'ichee' orthography.)

There is one orthographic oddity which I should alert the reader to here. As the table shows, long vowels can be spelled in two different ways: either with a double letter or with a single letter followed by h. Word-initially and word-internally, the double letter spelling is used. Word-finally, both spellings are found. This corresponds to an allophonic alternation found in some varieties of K'ichee', including CNK: word-final long vowels are realized as [Vh] sequences at the ends of phonological phrases (Larsen, 1988; Henderson, 2012). The PLFM adopted the practice of writing a final h in this context, and some, including Ajpacajá, extended this practice to writing final h even phrase-medially. This is perhaps not ideal, since it deviates from the norm of using one grapheme for each phoneme. But it is better than the alternatives: other widely used orthographies treat phonetic [Vh] sequences as *short* vowels when they are clearly underlyingly long.

cases.

I have deviated from Ajpacajá's orthography in three places.

- Ajpacajá writes some verb prefixes with a long vowel in certain contexts and a short vowel in others. But he is not perfectly consistent in doing so. What's more, vowel length is not contrastive in pre-root syllables. I believe this length alternation is probably best explained as a phonetic detail, possibly due to secondary stress. I consistently write prefix vowels as short.
- 2. Ajpacajá writes the determiners we and le with a long vowel (as "wee" and "lee"). I am not aware of any evidence that these vowels are long, and I write them as short. Among other things, this helps to distinguish the determiner we from the conditional conjunction wee "if."
- 3. Ajpacajá's orthography reflects vowel contraction to a greater degree than mine. In particular, he often writes out vowel contraction that occurs between neighboring enclitics; I do not, largely for the sake of clarity. For instance, Ajpacajá would write the enclitic pair =ta =ub'ik [=NEG2 =hence] as tu'b'ik. This reflects the usual pronunciation in fast speech, but obscures a word boundary.

In citing data from other sources, I have respelled it according to the conventions here except when some point of dialect variation in pronunciation is at issue. Essentially this means that I am treating Ajpacajá's dialect of K'ichee' as standard, and normalizing spellings to follow it even when representing other dialects. Very little of the K'ichee' data which I cite is drawn from non-CNK sources, and so this leads to very little distortion in practice.

There are several other orthographic conventions I should make note of here. Enclitic particles are written with a preceding equals sign: *e.g.* =aq'an "upwards." Unstressed particles and function words which are not enclitic often procliticize onto the following prosodic word; for the most part I will still write these as separate orthographic words, but there are

some combinations in which procliticization is essentially mandatory, and in these combinations I write the proclitic with a following plus sign: *e.g.* ch+u-paam [P+A3s-inside] 'inside it'. When a part of a word is deleted in phrase-medial position, or deleted before adding suffixes, or both (see §2.2.2 on the status suffix and §2.2.5.2 on prosodically triggered allommorphy in general), I will write that part in parentheses in giving the citation form of a word: *e.g.* kub'i(ij) 'he says it'. In some cases I will cite verbs as uninflected stems or bare roots rather than fully inflected words: *e.g.* -b'i(ij), the stem of the verb 'say,' or -b'i-, the bare root of the same verb.

When two morphemes cannot be cleanly segmented, I write a colon separating their glosses. This can happen because one of the two is an infix: $e.g.\ ka-b'aan-ik$ [INC-do:PASS-SS] 'it is done', where the long root vowel is a result of an infix which forms the passive stem. It can also happen because vowel contraction has taken place: $e.g.\ k-u'-b'an-a'$ [INC-go:A3s-do-ss] 'he goes and does it', in which the u'- is a result of contraction between two distinct prefixes, u- [A3s-] and e- [go-].

Occasionally I will note features of a morpheme which are not overtly marked in parentheses following the gloss: for instance, this permits me to distinguish between the intransitive verb root -wa'- [-eat(INTR)-] and the transitive verb root -tij- [-eat(TR)-].

2.2 Some morphosyntactic patterns

The basics of K'ichee' morphosyntax are exceptionally well described. The best and most detailed discussion of verb morphology — and especially the voice system — remains Mondloch 1981. Good general grammars include Larsen 1988 and López Ixcoy 1997. In this section I will not attempt a complete grammar sketch, but will only summarize the phenomena which will be most important in this dissertation. The major morphosyntactic patterns discussed here are morphological and syntactic ergativity (§2.2.1), the transitive/intransitive distinction (§2.2.2), and predication (§2.2.3). In §2.2.4 I discuss the pronouns and demon-

stratives of K'ichee', which will be important for the argumentation at several points, and in \$2.2.5 I mention a few minor patterns which will occasionally be relevant: the use of a special enclitic in clauses from which certain adjuncts have moved, and the existence of allophonic and allomorphic alternations conditioned by prosodic phrase boundaries.

2.2.1 Ergativity

ERGATIVITY describes a pattern which certain languages show in their treatment of core arguments. There are three basic types of core argument: intransitive subjects, which I will label, following Dixon (1979) and Dixon (1994), as S ARGUMENTS; transitive subjects (A ARGUMENTS); and transitive objects (O ARGUMENTS). It is common, though by no means universal, to find that a particular morphosyntactic phenomenon in a particular language groups two of these three categories together. The best-known examples of this occur in casemarking and agreement systems. In languages with overt case-marking, it is common to find only two case markers covering the three types of core argument. One frequent pattern is for S and A arguments to share one case marker, and O arguments to take the other. This pattern is known as NOMINATIVE/ACCUSATIVE. Another pattern — less frequent, but still quite well-attested — is for S and O arguments to share one case marker, and A arguments to take the other. This is known as an ERGATIVE/ABSOLUTIVE pattern of case marking.



FIGURE 2.1: Two common patterns of alignment.

Mayan languages are thoroughly headmarking, and do not have overt case marking on core arguments. But they do exhibit another morphological manifestation of ergativity, in

	v	C		V	C
A1s	inw- or w-	in- or nu-	а1р	q-	qa-
A2s	aw-	a-	A2p	iw-	i-
A3s	r-	u-	а 3р	k-	ki-
A2s.HON	=	la(h)	a2p.ноп	=a	laq

в1ѕ	in-	в1р	oj-
B2s	at-	в2р	ix-
в3ѕ	Ø	в3р	e-
B2s.HON	=la(h)	в2р.ном	=alaq

(b) Set B markers: absolutive

(a) Set A markers: ergative and possessive

TABLE 2.3: K'ichee' agreement morphology.

their system of verbal agreement morphology (Dayley, 1983). In the most basic pattern, S and O arguments control one set of agreement markers, known as SET B markers; and A arguments control another, known as SET A markers. With one exception which we will see in a moment, K'ichee' follows this basic pattern. The agreement markers are listed in Table 2.3, and are demonstrated in examples 1 and 2 below.

(1) X-oj-ki-to'-oh. (2) X-oj-b'iin-ik.

CPL-B1p-A3s-help-ss CPL-B1p-walk-ss

They helped us. We walked.

With one exception, the Set A markers are all prefixed, and the Set B markers are either prefixed or proclitic. The exception is the Honorific second person forms of the Set A and B markers, which are enclitics:^{3, 4}

- 3. The Set A and Set B forms of these honorific enclitics are identical with one another. In principle, this could sometimes give rise to ambiguity in transitive verbs, since there could be cases in which it was unclear whether the honorific enclitic was Set A or Set B. Mondloch (1981, p. 112–114) explains that in many cases where ambiguity would arise, transitive verbs are simply avoided: instead, the verb is detransitivized and one of its arguments expressed as an oblique.
- 4. The suffix *-oh* has disappeared from example 3, and the suffix *-ik* from example 4, for reasons having to do with prosody: these suffixes are lost whenever they are not phrase-final. See §2.2.5.2 for more information.

(3) X-oj-to' =lah. (4) X-b'iin =alaq.

CPL-B1p-help =A2s.HON

You, sir, helped us. You, sirs, walked.

There is one additional quirk of Mayan language agreement morphology, which does not relate to ergativity specifically but which it will nevertheless be convenient to note here. The Set A and Set B markers are not only found on verbs, but also on other constituent types. On nouns, Set A markers are used for possessor agreement, and on relational nouns — a category of words with noun-like morphosyntax but preposition-like semantics — Set A markers are used for complement agreement.

(5) ki-wuuj (6) k-uuk'
A3p-book A3s-with
their books with them

Finally, when nouns or adjectives are used as intransitive predicates (see §2.2.3) they mark subject agreement in the same way as intransitive verbs do, using Set B markers. It is common to write these Set B markers as separate orthographic words, as they have been argued to be proclitics rather than prefixes (Larsen, 1988). I write them with a following plus sign, as I do for other proclitics.

(7) Oj+ixoq-iib'. (8) Oj+k'ii.

B1p+woman-PL B1p+many

We are women. We are many.

Another manifestation of ergativity, found in many but not all Mayan languages, is syntactic. Once again, K'ichee' provides a basic and uncomplicated example of the phenomenon. In K'ichee', the subjects of transitive verbs in the active voice cannot ordinarily undergo movement. For instance, as we will see in a moment, focused constituents can generally be

moved to a position immediately before the verb in K'ichee'. But focused subjects of transitive active verbs cannot be moved in this way.

(9) Context: Who laughed?

 $[S]_F V t$

[John]_F laughed.

(10) Context: What are you eating?

[Kab']_F k-in-tij-oh. [sweet]_F INC-A1s-eat(tr)-ss I'm eating [candy.]_F $[O]_F \ V \ t$

(11) Context: Who helped you?

* Aree [$ri\ a$ Xwaan]_F x-in-u-to'-oh. FOC [D youth Juan]_F CPL-B1s-A3s-help-ss Intended: [John]_F helped me. * [A]_F V t

Other types of transitive subject movement — to form wh-questions or to form relative clauses — are similarly prohibited.

(12) * ri winaq ri in+ki-to'-oom.

* A V t

D people C B1S+A3p-help-PERF

Intended: the people who have helped me

(13) * Jachin at+ki-to'-oom?

* A V t

who B2S+A3p-help-PERF

Intended: Who helped you?

There are two strategies which can be used to circumvent this restriction. One is to antipassivize the verb. This results in an intransitive clause. One way we can tell that the clause has become intransitive is that its former object is demoted to an oblique introduced by the relational noun -ee(ch).⁵

(14) *Context*: Who helped you?

The other is to use a special verb form which has historically been known as the AGENT FOCUS form, and which I will refer to using the acronym AF. Unlike the antipassive form, the AF form is syntactically transitive. We can tell this because, unlike in antipassive clauses, in AF clauses there is no object demotion — the AF verb is able to license two full arguments.

(15) *Context*: Who helped you?

The AF verb form is also the exception which I mentioned above to K'ichee's otherwise ergative pattern of agreement marking. Unlike other transitive verbs, it is almost⁶ always restricted to agreeing with only one of its two arguments, using a Set B marker. In that case, which it agrees with depends on the person and number of the two arguments; agreement

^{5.} For further information on the transitive/intransitive distinction in K'ichee', see §2.2.2; for a discussion of the morphology of the antipassive, as well as the AF verb form discussed below, see §3.4.1.

^{6.} I wish to emphasize the word 'almost' here. The exception to this generalization involves AF forms with one honorific second person argument; I will discuss this further in §3.4.2.1.

is with the argument which is higher on the following hierarchy:

Both morphological and syntactic ergativity have been subjects of intense theoretical interest. (See Deal 2012 for a recent survey.) One interesting typological observation which has emerged from this interest is that the syntactically ergative languages are a subset of the morphologically ergative ones. That is, no language has syntactic ergativity of the type which I have described for K'ichee' without also having morphological ergativity in case-marking or agreement. This generalization holds true for the Mayan languages as well. All of the Mayan languages have at least some manifestations of morphological ergativity. But only a subset exhibit syntactic ergativity; as shown in Figure 2.2, these include all of the Eastern Mayan languages, and a small number of languages in the Western and Yucatecan branches.

Finally, in this dissertation I will argue for a third ergative pattern in K'ichee' grammar, which I will describe as INFORMATION-STRUCTURAL ERGATIVITY. This pattern concerns the possible realizations for constituents which bear information-structural focus; it permits focused nonsubjects and intransitive subjects to remain in situ, but requires focused transitive subjects to move.

2.2.2 Transitivity and the status suffix

The ergative patterns in the previous section all treat transitive subjects differently from other arguments. But as it turns out, there are actually two different notions of transitivity that are relevant in K'ichee' grammar.

On the one hand, we have morphological transitivity. A verb is morphologically transitive if it has two slots for agreement prefixes — one for a Set A marker and one for a Set B marker — and is able to agree with two arguments. (Depending on the person and number of its object, it may or may not have two *overt* agreement prefixes; recall that the third-person

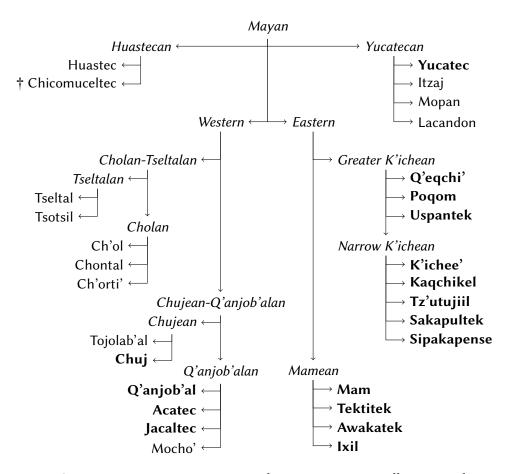


FIGURE 2.2: Syntactic ergativity among Mayan languages: syntactically ergative languages are shown in bold. (Data drawn from Stiebels 2006; Stiebels lists Tsotsil as syntactically ergative, but Aissen 1999 shows that it is better regarded as a direct/inverse language.)

singular Set B marker is zero.) A verb is morphologically intransitive if it only has one slot for an agreement prefix from Set B, and cannot take Set A markers.⁷

Morphological transitivity has another hallmark by which it can be recognized. All verbs in K'ichee' end in a STATUS SUFFIX⁸ — a portmanteau morph whose form depends on the transitivity of the verb, its conjugation class, its location within a prosodic phrase, and a number of other morphological factors which are grouped together under the label of STATUS. The inventory of status suffixes is shown in Table 2.4. Most details of this system are not important for purposes of this dissertation. What is important is that the status suffixes for intransitive verbs are distinct from those for transitive verbs. The choice of status suffix correlates perfectly with morphological transitivity: all verbs with two agreement slots will take a transitive suffix, and all verbs with one agreement slot will take an intransitive suffix.

The second notion of transitivity which will be relevant is that of syntactic transitivity. This is strictly speaking a property of entire clauses, and not of verbs. A syntactically transitive clause is one whose structure licenses two full DPs as arguments. Since K'ichee' is pro-drop, it will not necessarily be the case that two full DP arguments are present in a transitive clause; what matters is that the clause allows for their presence.

For the most part, morphological and syntactic transitivity go hand in hand. But there are two important sets of exceptions. First, the AF verb form — discussed in the previous

^{7.} There is one unusual case in which a morphologically intransitive verb nevertheless agrees with two arguments rather than one: an AF verb — which is morphologically intransitive but syntactically transitive, taking two syntactic arguments — can agree with both its arguments *if* one of them is an honorific second person. Crucially, the honorific second person agreement markers are enclitics rather than prefixes. So this preserves the generalization that morphologically intransitive verbs have only one agreement *prefix* slot. See §3.4.2.1 for more discussion on this point.

^{8.} Note that status suffixes are always added to otherwise-complete verb stems, after any other derivational suffixes, and are always the final suffix on a verb. The status suffix is chosen according to the properties of the stem as a whole, and not necessarily according to the properties of the root. Thus for instance an intransitive root followed by a causative suffix produces a transitive stem which will take a transitive status suffix; and a transitive root followed by any of K'ichee's several detransitivizing voice suffixes produces an intransitive stem which will take an intransitive status suffix.

		Suffix		
Status	Position	Intransitive	RTV	
PERFECT status (Verbs in the perfect aspect)	Medial	-(i)naq	-om ~ -um	-m
	Final	-(i)naq	-oom ~ -uum	-Vm
Dependent status (Imperatives, verbs w/movement prefix)	Medial	-а	-a' ~ -o' ~ -u'	-j
	Final	-оq	-a' ~ -o' ~ -u'	-Vj
INDEPENDENT status (All other verbs)	Medial	∅	∅	-j
	Final	-ik	-oh ~ -uh	-Vj

TABLE 2.4: Status suffixes for intransitive verbs and for the two major classes of transitive verbs. Verbs in the RTV class have CVC stems; those in the DTV class have vowel-final stems. When multiple allomorphs are given, it indicates that the suffix in question participates in vowel harmony, the details of which are not relevant here.

section — is morphologically intransitive, but heads a syntactically transitive clause. That is to say, it takes an intransitive status suffix and only a single Set B agreement prefix, but it licenses two full DP arguments.⁹

And second, Mondloch (1981) and Aissen (2012b) show that there are certain types of clause (which I will call PSEUDOTRANSITIVE) that are headed by a morphologically transitive verb but are syntactically intransitive. These clauses license only one full DP argument, and a second argument which must be a bare noun; and they exhibit several other syntactic properties which are characteristic of intransitive clauses.

I have mentioned three aspects of K'ichee' grammar which exhibit ergative patterns: morphological agreement, syntactic movement, and information-structural focus in situ. For purposes of morphological agreement, the type of transitivity which matters is morphological transitivity. For purposes of movement and focus in situ, though, the type of transitivity which matters is morphological transitivity.

^{9.} This is true throughout the Mayan family. Aissen (1992, p. 63) says "it is a general property of focus verbs [*i.e.* what I am calling AF forms] in Mayan that they can only carry absolutive affixes, not ergative ones. Thus, focus verbs are morphologically intransitive.

	Morphologically	Agreement	Syntactically	Full args	Subj. mvmt.	Subj. focus in situ
Ordinary transitive clause	Transitive	A & B	Transitive	2	Impossible	Impossible
AF clause	Intransitive	B only	Transitive	2	Mandatory	N/A
Pseudotransitive clause	Transitive	A & B	Intransitive	1	Possible	Possible
Ordinary intransitive clause	Intransitive	B only	Intransitive	1	Possible	Possible

TABLE 2.5: Summary of transitivity properties for the major K'ichee' clause types. Morphological transitivity consists in having two agreement marker slots on the verb. Syntactic transitivity consists in licensing two full arguments, and also predicts the possibility of subject movement and subject focus in situ. The question of subject focus in situ does not apply to af clauses, since their subjects can never remain in situ.

sitivity which matters is syntactic transitivity. Subject movement in syntactically transitive clauses requires the use of an AF verb, while subject movement in syntactically intransitive clauses is unrestricted regardless of the verb's morphological details. And subject focus in situ is impossible in syntactically transitive clauses, but possible in syntactically transitive clauses.

Table 2.5 summarizes these patterns. Much of the remainder of the dissertation will be devoted to fleshing these patterns out in greater detail. In particular, Chapter 3 will explore the possibilities for subject movement, and Chapter 4 will explore the possibilities for focus in situ. The fact that both subject movement and subject focus in situ are sensitive to the same morphosyntactic conditions will be important in determining how these patterns should be explained.

2.2.3 Predication and syntactic categories

Mayan languages exhibit a great deal of syntactic flexibility, especially with respect to predication: members of any open word class, including nouns and adjectives as well as verbs, can function as syntactic predicates. K'ichee' is no exception to this. Nominal and adjectival predicates occur in the same syntactic position as verbal predicates — before any

in situ arguments, but after material which has been left-dislocated or moved. As we saw in \$2.2.1, both nominal and adjectival predicates mark subject agreement using procliticized Set B markers.

This syntactic flexibility, combined with several other facts about Mayan language morphosyntax which I will outline shortly, have led some authors to describe these languages as OMNIPREDICATIVE in the sense of Launey 1994. In an omnipredicative language, while there might be a morphological difference between verbs, nouns and adjectives, there is no syntactic difference: all belong to a single uniform syntactic class Pred. What's more, any Pred can be used as a syntactic predicate (*i.e.* as the head of a clause) with equal ease, and without derivation; and if any Pred is to be used as a referring expression or a modifier rather than as a predicate, it must be relativized. It is not clear whether any languages following this description actually exist; but I will argue here that K'ichee' definitely does not follow this description, and makes a clear syntactic distinction (though a subtler one than English makes) between nouns, adjectives and verbs. This will be important in later sections in determining the correct syntactic analysis for focus movement and other noncanonical constructions.

Tonhauser (2003) and Tonhauser (2005) and Bohnemeyer (2014) have described Yucatec as an omnipredicative language, and have both invoked its omnipredicativity as an explanation for its use of non-verb-initial word orders to mark focus. In Velleman 2011a I explored the possibility of extending a similar explanation to K'ichee'. But in spite of my initial enthusiasm for the idea, I have come to see it as implausible; for as it turns out, there are clear differences between verbs, nouns and adjectives in K'ichee' — not only in their morphology, but also in their syntactic behavior.

We have already seen that K'ichee' meets the first part of Launey's definition of an omnipredicative language: it allows verbs, nouns and adjectives to be used as the heads of clauses with equal ease, and with no additional derivation needed. The only question is whether it meets the second half of the definition — whether we can reanalyze referring expressions and modifiers as relative clauses. And here, ultimately, the answer will be "no."

This reanalysis does come quite close to succeeding, for several reasons. First of all, as we have already seen, the third person singular Set B marker is zero, meaning that any noun or adjective in isolation can be interpreted as a third-person singular nonverbal predicate. *Wuuj*, generally glossed 'book', can also be used to mean '(it) is a book'; *nim*, glossed 'big', can also be used to mean '(it) is big'; and so on.

Second, one of the particles which is used to indicate plurality in a noun phrase is *ee*, and this is homophonous with the third person plural Set B marker, meaning that for instance the expression *ee qa-taat qa-naan* [PL A1p-father A1p-mother] could be translated either as 'our ancestors' or as '(they) are our ancestors' depending on the context.

Third, K'ichee' uses the same three particles — *ri*, *le* and *we* — both as definite articles and as complementizers in forming relative clauses; and it permits free relative clauses (*cf.* §3.1.2 in Chapter 3). Thus, the phrase *ri ee qataat qanaan*' in 18 could be analyzed either as a syntactically simple noun phrase meaning 'our ancestors' or as a headless relative clause meaning 'those who are our ancestors'.

```
(18) Jee ri' x-u-b'an-oh
like DEM CPL-A3s-do-ss

aretaq x-ul-ki-riq-a' =kan ri' ri sin ki-lugar
when CPL-come-A3p-find-ss =behind DEM D AFF A3p-place
ri' ri ee qa-taat qa-naan...

DEM D PL A1p-father A1p-mother
```

That's what happened when our ancestors came to find this place... Ajpacajá

This suggests that it will in general be possible to reanalyze K'ichee' DPs as relative clauses. And finally, K'ichee' permits "naked" relative clauses which are not introduced by an overt complementizer, such as *xeb'ee pa ri ch'a'ooj* 'who went to fight' in 19.

(19) Ee+k'ii ri winaq.

B3p+many D people

Ee+miles, ee+miles ri achi-jaab' x-e-b'ee pa ri ch'a'ooj.

B3p+thousands B3p+thousands D man-PL CPL-B3p-go P D fight

The people were many. They were thousands, thousands, the men who went to fight.

Ajpacajá

This suggests that it will in general be possible to reanalyze K'ichee' postnominal modifiers as naked relative clause modifiers, and bare nouns as naked free relative clauses.

If the data shown above were the whole story, it would be possible to treat K'ichee' as an omnipredicative language. But these data are not the whole story. There are several important syntactic differences between nouns, verbs and adjectives which the discussion above glosses over.

First, as we will see in §3.1.2 of Chapter 3, naked relative clauses are only permitted as bound postnominal modifiers. They cannot occur free. This leads to a syntactic distinction between nouns and other parts of speech: bare nouns can be used as arguments, but bare verb and adjectives cannot.

(20) K-in-tij ichaaj. (21) * K-in-tij k-in-a-ya'-o.

INC-A1s-eat vegetables Inc-A1s-eat INC-B1s-A2s-give-ss

I eat vegetables. Intended: I eat what you give me.

Second, adjectival modifiers in K'ichee' can occur before nouns as well as after. Prenominal adjective modifiers are subject to several constraints: only one can occur on a single noun, and in many cases it must bear either the attributive suffix -a or the superlative suffix

	Used bare as an argument?	Used as a prenominal modifier?	Used as head of a clause?
Nouns	✓	Х	✓
Verbs	×	Х	\checkmark
Adjectives	×	✓	✓

TABLE 2.6: Distinctive syntactic behaviors of the major part-of-speech categories.

-alaj, neither of which occurs on a postnominal adjective modifier. Crucially, only adjectives can be used as prenominal modifiers: nouns and verbs cannot.

(22)g'an-a ichaaj (23)utz-alaj ichaaj yellow-ATTR vegetable good-intens vegetables carrots (lit. 'yellow vegetables') very good vegetables (24) * is(-a)(25) * x-in-a-ya'(-a)ichaaj ichaai sweet.potato(-ATTR) vegetable CPL-B1S-A2S-give-ATTR vegetable *Intended*: sweet potato greens *Intended*: vegetables you gave me

This establishes a syntactic difference between adjectives on the one hand and nouns and verbs on the other.¹⁰

In short, in K'ichee' any open class word *can* be a predicate, but not every open class word *is* used as a predicate. Nouns and adjectives can be used as predicates just as verbs can; but they can also be used in ways that verbs cannot — nouns as bare arguments, and adjectives as prenominal modifiers. See Table 2.6 for a summary of these properties.

There is one last point I should make here about predication. While members of lexical

^{10.} We must make a distinction here between two different — though similar — perfect aspect forms of transitive verbs. One is the perfect participle, which behaves like an adjective and can appear as a prenominal modifier; the other is the perfect finite verb, which behaves like a verb and cannot appear as a prenominal modifier. The perfect participle and the perfect finite verb are formed by identical suffixes, but can be distinguished because they are inflected differently: for instance, a perfect participle never bears Set A prefixes, while the perfect finite form of a transitive verb always does.

word categories can be used as predicates, members of most functional categories cannot. In particular, demonstratives, determiners and prepositions cannot be used as predicates.

(26) ee+kunanel-aab' (27) ee+nim
B3p+doctor-PL
B3p+big
they're doctors they're big

(28) * ee+lee' (29) * ee+pa
B3p+DEM B3p+P

Intended: they're there Intended: they're on (it)

And nor can DPs headed by an overt determiner, or PPs headed by an overt preposition.

(30) * ee+ri kunanel-aab' (31) * ee+pa ri b'eh
B3p+D doctor-PL B3p+P D road

Intended: they're the doctors

Intended: they're on the road

Relational nouns which are always preceded by a preposition cannot be used as predicates, but this is consistent with the generalization that PPs cannot be predicates. The few relational nouns which can be used without being preceded by a preposition can be used as predicates — suggesting that in this respect at least they behave, as their name would suggest, like nouns.¹¹

(32) * ee+ch+u-paam ri jah

B3p+P+A3s-in D house

Intended: they're in the house

(33) ee+w-eech in

B3p+A1s-POSS 1sg

^{11.} One exception to this is the reflexive pronoun *-iib*', which is traditionally described as a relational noun, and which is never introduced by a preposition, but which cannot be used as a predicate. As we will see in \$3.4.2.3 of Chapter 3, the reflexive pronoun exhibits other behaviors that are unusual for freestanding nouns, suggesting that it merits some sort of special syntactic status.

There are two strategies available to circumvent these restrictions on what can be used as a predicate. A full DP predicate can be introduced by the copular particle *aree* 'be'.

```
(34) Le nab'ee cofradia, aree le Santa Cruz,

D first cofradia BE D Santa Cruz

aree la' nab'ee cofradia,

BE DEM first cofradia

y le ukaab' cofradia, aree le Sacramento.

and D second cofradia BE D Sacramento
```

The first cofradia was the Santa Cruz, that was the first cofradia, and the second cofradia was the Sacramento.

Ajpacajá

And a PP predicate can be introduced by the existential predicate k'oo(lik) 'exist, be at (a location)'.

(35) Ka-ki-ch'ob'-oh chi k'is waraal x-b'aan =wi la' le campañas
INC-A3p-tell-ss that all here CPL-make:PASS =ADJ.F DEM D bells
le k'oo ch+wi' le iglesia chaniim.
C EXS P+A3s:on D church now

They say that all the bells were made here that are on top of the church now.

Guarchaj

2.2.4 Pronouns and demonstratives

The pronouns and demonstratives in K'ichee' exhibit a few unexpected syntactic behaviors which will occasionally be relevant in this dissertation. The personal pronouns are nouns, not determiners; and like other nouns, I will argue, they can occasionally be used as nonverbal predicates. There is also a set of demonstratives which can be used either as DP modifiers or as adverbs. And the third-person pronoun *are*' is closely related in form to

a number of other function words, including the copular particle *aree*, the contrastive topic marker aree (=k'u), and the focus particle aree.

2.2.4.1 Personal pronouns and pronominal predicates

Personal pronouns in K'ichee' behave somewhat unexpectedly on the part-of-speech diagnostics disucssed in §2.2.3. I will suggest following Larsen (1988) that they are nouns rather than pronouns; and will argue that, like other nouns, they can function as nonverbal predicates.

1sg	in	1pl	oj
2sg	at	2pl	ix
2sg honorific	laal	2pl honorific	alaq
3sg	are'	3pl	a're' < *ee are'

TABLE 2.7: The personal pronouns.

The forms of the pronouns are given in Table 2.7. Note that outside the third person, the pronouns have the same segmental form as the Set B markers. There is an important difference between them, though, albeit one that does not show up in writing: the personal pronouns are independent prosodic words, able to bear stress and host enclitics.

(36) In =b'a in+aj+u-tza'm u-sill u-meesa ri Qa-qajaaw.

1sg =then B1s+NMLZR+point A3s-seat A3s-table D A1p-lord

Me, I am a servant (lit. 'am one at the corner of the chair, the table') of our Lord.

Misal p. 61, Luke 1:38

```
(37) Are' x-u-b'i-ij

3sg CPL-A3s-say-SS

«m-i-xib'i-j iw-iib'.

N.IMP-A2p-scare-SS A2p-self

Ix =k'ut k-i-tzuku-j ri u-k'ajol ri Dios ri Jesus.»

2pl =then INC-B2p-seek-SS D A3s-child D God D Jesus

He said, "Don't be startled. As for you, you are looking for Jesus the son of God."
```

Mixib'ij Iwiib'

The Set B markers, on the other hand, cannot host enclitics and are stressless, as the ungrammaticality of 39demonstrates.

(38)
$$At+achih$$
. (39) * $At+=chi$ $achih$. B2s+man B2s+=now man You are a man. Intended: You are now a man.

Rather, enclitics are hosted elsewhere — often on the word to which the Set B marker attaches:

(40) At+achih =chik.

B2S+man =now

You are now a man.

Syntactically, the personal pronouns are nouns rather than determiners. One piece of evidence for this is that they can combine with an overt determiner just as other nouns can (41), but can also be used without an overt determiner as bare arguments (42).

(41) Inche ka-tzuku-x jun laj u-mesa ri' ri are' entonces.

well INC-seek-PASS a DIM A3s-table DEM D 3sg then

Well, then a table is found for him.

K'ulaneem

(42) *Y* ri' ri aj+Sija-ab' x-e-pee a're', x-a'nima-j =loq.
and DEM D NMLZR+Sija-PL CPL-B3p-go 3pl CPL-B3p:hurry-ss =hither

And those from Sija, they left, they hurried here.

Ajpacajá

(My impression is that the use of pronouns with an overt determiner is more common in other varieties of K'ichee'. It is not terribly common in CNK, but it does occur.)

Like other nouns, the personal pronouns can be used as non-verbal predicates. They do not take overt agreement morphology when they do so, though we might assume that they are preceded by the silent third-person singular Set B marker. (Compare English *it is I* and *it is they*, with third-singular agreement even when a non-third-singular pronoun is used as a predicate.)

(43) At =ne =lo ri' ri achih ri k-a-wok =na jun w-o'ch

2sg =SCAL =DUB DEM D man C INC-A2s-build =PROSP one A1s-home

k-aw-a-aj...?

INC-A2s-want-ss

Are you the man who wants to build me a house...?

(lit. 'Is the man who wants to build me a house you?')

Misal p. 59, 2 Samuel 7:5

- (44) La at =k'u ri' ri k-ajawaal ri ee Judiy?

 Q 2sg =then DEM D A3p-king D PL Jew

 Then are you the King of the Jews?

 (lit. 'Is the King of the Jews you?')

 Misal p. 218, Matthew 27:11
- (45) No', la' le k'ache'laaj, xaq si in =wih.

 no dem d forest just really 1sg =POL.F

 No, in fact I am the forest.

 (lit 'the forest is me'; Spanish: el bosque soy yo)

 K'ache'laaj

We can tell in the examples above that we are looking at pronouns and not Set B markers because the words in question are clearly full prosodic words and not agreement proclitics. They can host enclitics (which only full prosodic words can do); and if they were agreement proclitics, we would expect the constituent onto which they procliticize to be one which can be a nonverbal predicate — but instead, either they are followed by a DP which cannot function as a nonverbal predicate, or (in 45) they are not followed by any independent constituent at all.

So this shows that they are pronouns. As for the claim that they are pronominal *predicates*, the evidence here comes from the structure of the clauses in which they occur. Each clause is made up of two constituents: the pronoun itself, and a definite DP. And in each case, the translation given suggests that we are looking at a complete copular clause rather than a sentence fragment. Since there is no overt copula, and since the DP cannot be the predicate, the pronoun itself must be. Word order corroborates this analysis: in examples where the pronoun precedes the DP, there is no intervening pause, suggesting that these examples are in canonical predicate-first order; in 45, where the pronoun follows the DP, there is a pause, suggesting that here the DP has undergone left-dislocation.

2.2.4.2 The demonstratives

In addition to its personal pronouns, K'ichee' has three widely used demonstratives: wa', la' and ri', interpreted as proximal, medial and distal respectively. It is not entirely clear to me what part of speech category these should be assigned to, and it is possible that they are multi-categorial. The one point I want to make here is that at least sometimes, they behave

^{12.} Wa' is consistently used for objects that are close at hand. Speakers often assert that la' is used for objects which are visible and ri' for objects which are out of sight; if we take this as a literal claim there are plentiful counterexamples, but I suspect it captures an intuition about some sense in which ri' is felt to be more remote.

There are also two less-widely-used demonstratives which are closely associated with bodily gestures: *lee*' is used when pointing to or indicating something, and *rii*' is used when handing something to someone. Neither of these is common in the corpus of texts which I have used in this dissertation.

like adverbs.

The best-described use of these demonstratives is as part of a DP. They can either precede or follow the rest of the DP, and it is sometimes possible for several of them to occur together.

But there are also examples of demonstratives which cannot plausibly be analyzed as an argument, and which I believe must instead be analyzed as adjuncts of some sort. The reason an argument analysis is implausible here is that in these examples, no third-person argument is licensed. For instance, in the first clause of 46, the verb is intransitive and the only argument is first-person singular; so the demonstrative here cannot be an argument or part of an argument, and must instead be some sort of adverbial.

(46) X-in-kam =ta wa', wee =ta ma =ta at+k'oo-lik.

CPL-B1S-die =IRR DEM if =IRR NEG =IRR A2S+EXS-SS

I would have died if you hadn't been here.

Ajpacajá

(47) *Ka-qa-yuj q-iib' ri' k-uuk'*.

INC-A1p-mix A1p-self DEM A3p-with

We mixed ourselves with them.

Ajpacajá

(48) Jawi in+k'oo =wi wa'?
where B1S+EXS =ADJ.F DEM
Where am I?

K'ache'laaj

(49) "X-in-b'aan =b'a wa'," ka-cha'.

CPL-B1s-do:PASS = then DEM INC-say

"I am finished (i.e. dead)," he said.

Masaat

```
(50) Wee =ta ma =ta k'oo wa' we w-aqan,
if =IRR NEG =IRR EXS DEM D A1s-leg

ya x-in-kam =ta wa',
already CPL-B1s-die =IRR DEM

ka-cha ri' ri masaat.
INC-say DEM D deer
```

"If it hadn't been for my legs I would have died," said the deer.

Masaat

These adverbial uses of demonstratives follow the verb; and in almost all cases, they follow immediately after the verb, separated only by enclitics. (Example 47, with a reflexive pronoun in between the verb and the adverbial demonstrative, is an exception to this.)

2.2.4.3 A brief note on determiners and complementizers

Clearly related to the demonstratives are a set of definite determiners, we, le and ri — once again interpreted as proximal, medial and distal respectively. I assume these represent the syntactic category D. We have already seen examples of them in the discussion of part-of-speech categories in $\S 2.2.3$.

Homophonous with these are a set of particles which are used to introduce relative clauses, and which occasionally also appear in wh-questions and other movement-related constructions. Mondloch (1981) refers to these as "relative pronouns," but in fact I believe it is more reasonable to analyze them as complementizers. One reason for this is that, as we will see in §3.1, overt wh-words in relative clauses — which are themselves more closely analogous to relative pronouns — move to a position *before* these particles. Both Aissen (1996) and Henderson (2012) identify that position as the leftward specifier of CP, which makes it reasonable to assume that the particle which follows is the head of CP.

Occasionally it will be impossible to tell whether a specific token of the word *we*, *le* or *ri* is serving as a complementizer or a determiner. In particular, this problem arises in dealing

with free relative clauses: there are some examples in which a free relative clearly has an overt determiner and a zero complementizer, and some in which a free relative clearly has a zero determiner and an overt complementizer; and this in turn means that in ambiguous cases, both analyses are plausible. When this happens, I will refer to the word in question as a "determiner/complementizer" and gloss it as D/C.

2.2.4.4 Are' and aree

Finally, the third-person pronoun *are*' is closely related in form to a number of other function words. For the sake of clarity, I will maintain a distinction between five different lexical items:

- The third person singular personal pronoun are', glossed as 3sg.
- The copular particle *aree*, glossed as BE, which is used to equate two referring expressions (Larsen, 1988), and also I will argue in certain kinds of cleft construction.
- The temporal particle *aree* or (more often in CNK) *aretaq*, glossed as when, which is used to introduce temporal subordinate clauses (Larsen, 1988).
- The contrastive topic particle *aree* or (more often in CNK) *aree* = k'u, glossed as CT, which is used to indicate that a left-dislocated topic should be interpreted as a contrastive topic (England, 1997; López Ixcoy, 1997; Can Pixabaj and England, 2011)
- The focus particle *aree*, glossed as FOC, which is used in some varieties to indicate than an ex situ or in situ focused constituent should be interpreted as a contrastive focus (Yasavul, 2013b). In CNK, this *aree* is essentially mandatory in certain cases of ex situ focus (Larsen, 1988; López Ixcoy, 1997; Can Pixabaj and England, 2011), and has lost some of its contrastive impact in those contexts, but continues to have a contrastive interpretation in those contexts where it is not mandatory.

The last of these items, the focus particle *aree*, will be especially important in what follows. It is used in two different ways. In a clause involving ex situ focus, *aree* appears before the focused constituent, which is in turn located in a position immediately before the verb.

```
(51) Aree [ ri b'alam ]<sub>F</sub> ka-k'is-ow tziij pa nu-wi'.

FOC [ D jaguar ]<sub>F</sub> INC-end-AF word P A1s-on

It is [the jaguar]F that will kill me.

Ajpacajá
```

In a clause involving in situ focus, it appears immediately before the verb itself.

```
(52) Aree x-kam [ri keej.]_F
FOC CPL-die [D horse]_F
It was [the horse]_F that died.

Ajpacajá
```

It is hard to believe that the similarity in form between these five lexical items is coincidental. In fact, Larsen 1988 notes that word final vowel-plus-glottal-stop sequences are often realized as long vowels; and this makes the four items not only similar in form but potentially identical — since some or all of the forms realized as *aree* could underlyingly be *are*. The fact that pronouns can be used as predicates in K'ichee' further encourages the idea that these four items could be merged into a smaller number of lexical entries; for it is tempting to argue that the copula is really just the third person pronoun being used as a predicate. And further encouragement still comes from the fact that in many other Mayan languages, words in some or all of the above functions are homophonous or nearly so. 14

With all that said, I will argue in this dissertation that the focus particle *aree* cannot simply be merged with or reanalyzed as any of the others. There are two main reanalysis

^{13.} For that matter, even in languages which do not have pronominal predicates, it is still common to see copulas which are homophonous with a third-person pronoun — Hebrew is one well-known example.

^{14.} For instance, according to Dayley (1985) Tz'utujiil uses ja(a') as a third-person pronoun, and also as a focus particle in certain cases (for instance, in negated focus movement sentences such as i); and uses $ja \ k'aa(r)$ and $ja \ k'ii(r)$ as contrastive topic markers.

strategies that I will argue against. One strategy would be to claim that when *aree* occurs immediately before an ex situ focus, it is really a copula in some sort of cleft construction. I argued for a version of this position in Velleman 2011a; but I have since concluded that it is not viable, and will state the case against in in §3.2.1. The other strategy would be to claim that when *aree* occurs immediately before the verb itself, it is really an ex situ focused pronoun. But this strategy, too, falls apart, as I will show in §4.2.2.

2.2.5 Loose ends

2.2.5.1 The ADJ.F enclitic

In §2.2.1 we saw that transitive subjects cannot move unless a special AF form of the verb is used — a pattern known as syntactic ergativity, and widely studied. There is a second pattern of this same sort in K'ichee' grammar, which is descriptively well-established but has recieved much less theoretical attention. In this second pattern, certain kinds of adjunct cannot move unless the particle =wi(h) (which I gloss as ADJ.F) is encliticized to the verb. For instance, a locative adjunct is free to appear in situ after the verb in 53, but attempting to move a locative adjunct without other changes results in ungrammaticality, as shown in 54.

- (53) X-in-b'ee pa chaak iwiir.

 CPL-A1s-go P work yesterday

 I went to work yesterday.
- (54) * Jawi x-at-b'ee iwiir?
 where CPL-A2s-go yesterday

 Intended: Where did you go yesterday?
- (i) Ma ja(a') =ta ja ch'ooy xtijowi ja kéeso. not it =irreal the rat B3.ate.foc the cheese

It wasn't the rat that ate the cheese.

Dayley 1985, p. 322

Somewhat confusingly, Tz'utujiil also uses ja(r) as a definite article; it can be distinguished from the pronoun and focus particle ja(a') when these words take their full forms, but not when they take their shorter forms. I suspect there is more work to be done in sorting out the details of this set of words in Tz'utujiil.

15. Though see Henderson 2007 for a discussion of the phenomenon in the closely related language Kaqchikel, and Ayres 1983 for a similar phenomenon in Ixil.

Adding the particle = wi(h) to example 54 restores gramaticality.

(55) Jawi x-at-b'ee =wi iwiir?
where CPL-A2s-go =ADJ.F yesterday
Where did you go yesterday?

Other types of adjuncts whose movement triggers the use of =wi(h) include recipients, themes and instruments.

- (56) Jachin ch+ee x-a-ya' =wi ri wuuj?
 who P+A3s:DAT CPL-A2s-give =ADJ.F D book
 Who did you give the book to?
- (57) Jas ch+r-iij x-ki-ch'ab'e-j = wih? what P+A3s-about CPL-A3p-talk-SS = ADJ.F What did they talk about?
- (58) Jas r-uk' x-ki-b'an =wih? what A3s-with CPL-A3p-do =ADJ.F What did they do it with?

Not all uses of =wi(h) indicate that an adjunct has undergone movement, however. The particle =wi(h) can also be used to indicate polarity focus: insistence on the truth of a proposition (Can Pixabaj, 2009). In this use I gloss it as POL.F rather than ADJ.F.

(59) *Pero a're', xaq si na k-u-maj =ta =wi ki-wach.*but 3pl just really NEG1 INC-A3s-begin =NEG2 =POL.F A3s-face
But they really just did not like it.

In this respect the enclitic =wi(h) differs from the AF form of the verb — which always indicates movement of an A argument, and is ungrammatical if such movement has not occurred.

2.2.5.2 Prosodic allomorphy

K'ichee' has a number of morphemes which participate in prosodically triggered suppletive allomorphy (Henderson, 2012). We have already seen several examples of this phenomenon among the status suffixes shown in Table 2.4.

There are also non-status-suffix morphemes which participate in prosodically triggered allomorphy, including many enclitic particles and certain adjectives. These morphemes have one form which occurs at the rightmost edge of an intonational phrase (known as the phrase-final form) and another which occurs elsewhere (known as the phrase-medial form). For instance, the status suffix on the verb in 60 is realized as *-oq* because it appears phrase-finally, and in 61 the same suffix is realized as *-a* because it appears phrase-medially.

In particular, there are a number of morphemes which are truncated or deleted entirely in phrase-medial position. Examples 62 and 63 demonstrate truncation: the negative enclitic on the verb is realized as *=taj* phrase-finally and as *=ta* phrase-medially. A number of other particles exhibit this same truncation pattern, with a CVC phrase-final form and a CV phrase-medial form.

=nah.

Examples 64 and 65 demonstrate deletion: on this verb, the final status suffix is realized phrase-finally, and deleted phrase-medially.

(64)
$$K$$
-inw-il-oh. (65) K -inw-il = nah. INC-A1s-see=SS INC-A1s-see = PROSP I see it. I still see it.

Material that is deleted or changed phrase-medially is given in parentheses when giving the citation form of a word. So the verbs whose allomorphy was demonstrated in the preceding examples have the citation forms *chatwar(oq)* and *kinwil(oh)*, and the enclitic whose allomorphy was demonstrated has the citation form =ta(j).

With few exceptions, intonational phrase boundaries in K'ichee' correspond to CP boundaries in syntax (Henderson 2012; and see Aissen 1992 for evidence that this is true in other Mayan langauges as well). So phrase-final forms are found at the ends of main or subordinate clauses, where the right CP boundary corresponds to an intonational phrase break; and also immediately before subordinate clauses, where the left boundary of the subordinate clause corresponds to an intonational phrase boundary. (In all of the examples below, parentheses indicate prosodic phrasing rather than optionality of a constituent.)

- (67) (Aretaq tajin k-a-b'an-oh,) (x-at-inw-il-oh.) when PROGR INC-A2s-do-ss CPL-B2s-A1s-see-ss While you were doing it, I saw you.
- (68) (X-inw-il-oh) (jas x-a-b'an-oh.)

 CPL-A1s-see-ss what CPL-A2s-do-ss

 I saw what you did.
- (69) (X-inw-il-oh) (chi tajin k-a-b'an a-chaak.)

 CPL-A1s-see-ss that PROGR CPL-A2s-do A2s-work

 I saw that you were doing your job.

2.3 Background to the study of movement

2.3.1 Distinguishing movement from left-dislocation

On Norman's word order model, there are two ways for a constituent to appear before the verb: left-dislocation and movement. This means that based on word order alone, there are two possible analyses for an avo clause — the A argument could have been left-dislocated, or it could have been moved; and the same two possibilities arise for the O argument in an OVA clause. In order to determine which of the two analyses is correct for a particular clause, we must look more closely and consider factors other than word order that let us distinguish left-dislocation and movement from one another.

The first distinguishing factor is prosodic. Left-dislocated constituents are followed by an intonational phrase boundary. This boundary is often realized as an audible pause. And even when it is not, it has other audible effects. First, it gives rise to a boundary tone (Nielsen, 2005). And second, it causes particles which participate in prosodically triggered allomor-

phy to take their phrase-final form. ¹⁶ Thus, for instance, in 70, the fact that the enclitic =k'u(t) is realized with a final t is evidence that it is followed by an intonational phrase boundary, which is consistent with its having been left-dislocated.

(70) Chaniim = k'ut, aree = chi ka-qa-b'i-j keeb' oxiib' u-b'i' taq le juyub' ri now = then FOC = now INC-A1p-say-ss two three A3s-name PL D mountain C nim u-b'an-taj-iik ch+ki-wach ri ee+qa-maam qa-qajaaw.

great A3s-do-CP-NMLZR P+A3p-front D PL+A1p-grandfather A1p-lord

Now, we'll say a few of the names of the mountains that were of great importance to our ancestors.

Ajpacajá

Moved constituents are generally not followed by an intonational phrase boundary, although there is apparently some variation here. Henderson (2012) finds no such boundary in Santa Cruz K'ichee': apparently in that variety, enclitics hosted on a moved constituent consistently take their phrase-medial forms. Yasavul (2013a) finds some examples with a boundary and some without in Playa Grande K'ichee', again as diagnosed by the appearance of phrase-medial or phrase-final allomorphs. And there is similar variation present in CNK. Still, it is probably safe to say that if an enclitic hosted on a pre-predicate constituent does take its phrase-medial form, that constituent is moved rather than left-dislocated, since left-dislocated constituents are always followed by a boundary.

There are also morphosyntactic factors that are used to distinguish left-dislocation from movement. The most widely used are the AF verb form (see §2.2.1) and the ADJ.F enclitic (see §2.2.5.1) which are triggered by movement but not by left-dislocation. As discussed in those sections, when an A argument undergoes movement, it triggers the use of the AF

^{16.} Verbs, some directional enclitics hosted on the verb, and some adjectives also have phrase-medial and phrase-final forms; but verbs (and their enclitics) and adjectives are rarely if ever left-dislocated, so the fact that they participate in this alternation is not relevant here.

form of the verb, and when a locative adjunct undergoes movement, it triggers the use of the ADJ.F particle =wi(h); left-dislocation does not trigger either effect.

Negation offers another disambiguating syntactic factor. Negation in K'ichee' is generally marked by two particles, na and =ta(j), the latter of which is an enclitic. Left-dislocated constituents occur before na, as in 71 — where we can confirm that winaq has moved by the use of the AF verb form. Moved constituents, on the other hand, occur after na (and often end up providing a host for =ta(j); see Henderson 2012 and Yasavul 2012), as in 72 — where we can confirm that winaq has not moved by the use of a regular active verb form.

(71) Na $[winaq]_F = ta$ x-b'an-ow-ik. (72) Le winaq, na x-ki-b'an = taj.

NEG1 $[people]_F = NEG2$ CPL-do-AF-SS D people NEG1 CPL-A3S-do = NEG2 $[People]_F$ didn't do it. As for the people, they didn't do it.

Yet another disambiguating syntactic factor comes from the use of complementizers.¹⁷ Left-dislocated constituents occur before the complementizers *wee* 'if, whether, perhaps' and *laa* (marking polar questions), as shown in the examples below.

- (73) Ri a-taat, la utz u-wach?

 D A2s-father Q good A3s-face

 Your father, is he well?
- (74) Ri naan Xe'p, wee =ne na x-u-riq =taj.

 D doña Josefina perhaps =SCAL NEG1 CPL-find =NEG2

 Maybe doña Josefina didn't find it.

Moved constituents, on the other hand, come after these complementizers; contrast 74 above, where the lack of an AF verb indicates left-dislocation, with 75, in which the AF verb shows

17. See Aissen 1992 for discussion of similar facts about complementizers in other Mayan languages.

that movement has taken place.¹⁸

```
(75) Laa aree [ ri naan Xe'p ]<sub>F</sub> x-riq-ow-ik?

Q FOC [ D doña Josefina ]<sub>F</sub> CPL-find-AF-SS

Was it [ doña Josefina ]<sub>F</sub> who found it?
```

In these two examples, the position of the constituent in question differs with respect to the complementizer *wee*.

So much for morphosyntactic factors. Now I will turn to the use of certain pragmatically important particles: a certain amount of help in distinguishing left-dislocation from movement comes from the use of contrastive topic particles (with the former) or focus particles (with the latter), but there are some important complications here that have not been

18. Confusing matters somewhat, there is a construction which I will call the 'clothed-coda construction', discussed in §3.2.2.1, where a constituent that shows signs of having been moved comes *before* one of the complementizer/determiner particles *we*, *le* or *ri*, as in i.

```
(i) Chaniim, na [jun xpeq]<sub>F</sub> =ta =chik le k'oolik.

now NEG1 [a frog]<sub>F</sub> =NEG2 =now C/D EXS

Now it's not [a frog]<sub>F</sub> that's there.
```

QUIS

As I will discuss in that section, there are some important open questions about how to analyze a sentence like i. If we assume that this sentence is a single clause in which *jun xpeq* has undergone movement, we are forced to analyze *le* as a complementizer; and then we have a puzzle about the location of complementizers: for in example 75 the complementizer *laa* comes before the moved constituent while in i the complementizer *le* comes after it. (One possible solution to this would be to posit two distinct complementizer positions; but I will not explore this possibility in detail.)

On the other hand, there is at least some evidence that the clothed-coda construction does not have such a straightforward structure. If that is the case, then we are free to analyze *le* as a determiner, and the puzzle about complementizer locations dissolves.

Regardless, left-dislocated constituents are never followed by one of the complementizer/determiner particles:

```
(ii) Aree = k'u le jun xpeq, (*le) k'oolik.

CT = CT D one frog C/D EXS

As for that one frog, it's there.
```

This gives us a diagnostic for distinguishing the clothed-coda construction (however we analyze it) from left-dislocation.

previously recognized.

First, some background on these particles is in order. Left-dislocated constituents can have two possible pragmatic interpretations. Their referent may be a continuing topic, or it may be a contrastive topic (Can Pixabaj and England, 2011). Contrastive topics generally occur in pairs or larger sequences, and often one contrastive topic in such a sequence — most commonly the last (England, 1997) — is marked with a particle or series of particles. In CNK, the particles used for this are *aree* = k'u. 19

```
(76) Ri al Ixchel, x-u-tzak kinaq'.

D miss Ixchel CPL-A3s-cook beans

Ri al Ixkik', x-u-k'ili-j iik.

D miss Ixkik' CPL-A3s-toast chile

Aree =k'u ri al Nikte', x-u-lej ri wah.

CT =CT D miss Nikte', CPL-A3s-make.tortilla D tortilla

Ixchel, she cooked beans. Ixkik', she toasted chiles. And as for Nikte', she made tortillas.

Can Pixabaj and England 2011
```

But as with prosody, the use of these particles is somewhat more complicated than past discussions have recognized. Occasionally we find the sequence aree = k'u before a constituent which is not a contrastive topic. This is because = k'u(t), in addition to its role in marking contrastive topics, is a widely used discourse particle (roughly translatable as 'then' or 'so'). It will sometimes be the case that a clause which begins with aree for some other reason besides contrastive topic marking will also be marked with this discourse particle. For instance, in 77 aree functions as a copula, and = k'u(t) as a discourse marker.

^{19.} In some other varieties, the particle used is *aree* alone. This introduces certain complications: see next footnote.

(77) *Context*: Concluding a discussion of the tasks carried out by an *ajq'iij* in the old days.

So that's what their job was.

Ajpacajá

If example 77 were analyzed as a contrastive topic ("...and as for their job..."), we would expect it to differ from the topic of the prior material, and to be followed by a clause expressing a comment on the new topic. But here it does just the opposite: it sums up a discussion of an existing topic, and is not followed by a comment clause. Another example of aree = k'u la' in a function other than contrastive topic marking is found in 78. Here, I believe aree is best analyzed as a focus particle, since the clause resembles an ex situ focus clause in all other ways. In any case, it is hard to justify an analysis on which it marks la' as a contrastive topic ("...and as for that, I've come to ask you about it..."), since there is nothing else present for it to contrast with.

(78) *Context:* A woman's husband has been stolen by the spirit of a mountain, and she has gone to ask a diviner what happened to him.

```
Ri w-achajiil x-b'ee pa le k'ache'laaj

D A1s-husband CPL-go P D wilderness
```

$$y$$
 na w -eta'm =taj jas x - u - b 'an-oh.
and NEG1 A1s-know =NEG2 what CPL-A3s-do-ss

$$Y$$
 aree = k 'u [la ']_F $sin k$ - ul - nu - taa ch + $eech$ = lah , $taat$: and FOC = then [DEM]_F AFF INC-come-A1s-ask P+DAT = A2s.HON sir

Jas x-u-b'an ri w-achajiil? what cpl-A3s-do D A1s-husband

My husband went into the wilderness and I don't know what became of him. So

[that]_F is what I come to ask you about, sir: What became of my husband?

K'ache'laaj

Still, this sort of thing is rare, and in most cases, the presence of aree = k'u before a constituent is enough to diagnose that constituent as a contrastive topic which has been left-dislocated.

Moved constituents, on the other hand — especially those which have undergone focus movement — are often preceded by *aree* alone. The sentence in 79 exhibits both a contrastive topic (*ri kamiik* 'today') and a moved focus (*ri b'alam* 'the jaguar').

(79) *Context*: The hero of the story has escaped from a number of dangers, only to encounter a jaguar. He complains that, after surviving the other dangers...

Aree = k'u ri kamiik, aree ri b'alam ka-k'is-ow tziij pa nu-wi'.

CT = CT D today FOC D jaguar INC-finish-AF word P A1s-head

Now, it is the jaguar that will finish me off.

Ajpacajá

The use of *aree* with a constituent that has undergone focus movement often indicates that that constituent is *contrastively* focused; though as we will see, in CNK there are some cases where the use of *aree* is obligatory or nearly so, and its contrastive effect may be somewhat bleached in those cases. In any case, *aree* alone is almost never found before a left-dislocated constituent in CNK, and so its presence before a preverbal constituent is generally enough to diagnose that constituent as focused (Can Pixabaj and England, 2011).²⁰

Finally, example 79 demonstrates another disambiguating factor: constituent order among pre-predicate constituents. At most one constituent in a clause can undergo movement. (See \$3.3 for discussion on this point). This means that if there are two or more constituents located before the predicate, at least the first of them has to be left-dislocated. In some cases

^{20.} This does not hold true for all varieties, however. There are dialects of K'ichee' in which contrastive topics can be marked by *aree* alone rather than by aree = k'u. In these dialects, the presence of *aree* alone is not sufficient to diagnose movement, since it is compatible with either movement of a contrastive focus or left-dislocation of a contrastive topic.

it is possible for both to be left-dislocated, for there is no absolute limit I am aware of on the number of left-dislocated constituents in a clause.²¹

In this section I have tried to be as clear as possible about the complications we might encounter in distinguishing left-dislocated from moved constituents. But I should also emphasize that the complicated cases are few and far between. In most of the examples that I will consider in this dissertation, all of the factors mentioned here — intonational prosody, allophonic or allomorphic changes triggered by prosody, presence or lack of AF or ADJ.F morphology, presence or lack of the contrastive topic marker *aree* = k'u or the contrastive focus marker *aree* — all align, making it unambiguously clear which of the two syntactic operations we are facing.

2.3.2 Views on the syntax of movement

Scholars have taken a number of different positions on the syntax of movement in Mayan languages. In this dissertation I will assume a configurational model of the clause that is fairly standard in generative syntax, and will argue that movement operations target the specifier of CP. In this section I briefly sketch the alternatives to this model: a nonconfigurational and omnipredicative syntax; a configurational model in which ex situ focus is analyzed as clefting; and configurational models in which movement targets some other specifier position besides the specifier of CP. I will quickly set aside the nonconfigurational, omnipredicative analysis — for as we have seen, K'ichee' cannot be analyzed as an omnipredicative language. For more detailed argumentation against the other alternatives, see §3.2.1.

^{21.} In clauses with multiple left-dislocated constituents, it will usually be the case that all but one are so-called FRAME-SETTING topics: expressions of place, time, etc. that set the scene for the action described in the clause. These frame-setting topics are adjuncts rather than arguments. I am not aware of any clear cases where both arguments in a transitive clause undergo left-dislocation.

1. Focus as predication in an omnipredicative, nonconfigurational syntax The most radical of these positions is Tonhauser's (2003; 2005) nonconfigurational analysis of ex situ focus in Yucatec, in which she denies that any movement at all takes place. In clauses where Norman's model posits movement, Tonhauser argues that the "moved" constituent is actually the main syntactic predicate of the clause, and is base-generated in clause-initial position just like any other predicate. As a result, Tonhauser assigns exactly the same syntactic structure to "focus movement" and "wh-movement" clauses as she does to canonical clauses.

One motivating intuition behind Tonhauser's proposal is that the information-structural division between topic and comment or background and focus, and the syntactic division between subject and predicate, have something in common. Krifka and Musan (2012) point out that this is quite an old idea, surfacing among other places in a distinction between "psychological subject" and "psychological predicate" made by early German grammarians, and in the some work by the Prague School linguists. Other, more language-specific motivations behind Tonhauser's work on Yucatec include the fact that Yucatec shows many characteristics of an omnipredicative language²², and the fact that it has both predicate-initial canonical word order and a clause-initial position for ex situ focus. These facts all combine to suggest that in Yucatec, ex situ focus simply *is* predication. This would permit a simple and elegant expression of the syntax/pragmatics mapping in Yucatec: the syntactic predicate is always the information-structural focus.

This proposal depends crucially on the idea that Yucatec is an omnipredicative language, such that any constituent can be analyzed as the head of the clause. Whatever the merits of an omnipredicative analysis for Yucatec, we have seen that such an analysis will not work for K'ichee'. Another problem with this proposal is that it depends on the assumption that focused constituents are always found in clause-initial position. But as we will see this is not

^{22.} Like K'ichee', it permits members of any open class to function as predicates, has no overt marking of subject agreement on third-person singular nonverbal predicates, and is fairly flexible with respect to relativization. See Vapnarsky 2013 for more discussion of these points.

true, either in K'ichee' or in Yucatec. So we can set Tonhauser's proposal aside.

2. Focus as predication in a configurational syntax: ex situ focus as a biclausal construction I said above that Tonhauser's nonconfigurational analysis stems in part from the intuition that focus is something like predication — both in a general and language neutral way and also, in Mayan languages at least, in some language-specific ways. Here I will discuss one way to preserve that intuition without insisting on omnipredicativity, based on a suggestion made by Larsen (1988) and discussed further in Velleman 2011b. The basic idea is that canonical sentences are monoclausal, but that "focus movement" sentences are biclausal, with the focused constituent as the predicate of the higher clause and the unfocused remainder of the sentence as a subordinate or relative clause.

As we will see in Chapter 3, this proposal has a number of merits. But ultimately it will prove to be inconsistent with the facts about the syntax of relativization in K'ichee'.

3. Clause-internal movement in a configurational syntax The remaining proposals on the syntax of movement in K'ichee' are all configurational and monoclausal. Ultimately I will argue that it is this set of proposals which are correct. However, within this set of proposals there are some important differences, concerning which futher discussion is warranted.

Aissen (1992) — and Duncan (2010) and Henderson (2012) following her — all assume a syntax for the clause in which lexical heads have their specifiers to the right, but functional heads have their specifiers to the left, as shown in Figure 2.3. This means that the subject is generated as a (rightward) specifier within the VP, producing VOA order; but it allows for (leftward) functional specifiers which can host left-dislocated or moved constituents. On this model of syntax, most left-dislocation and movement is analyzed as taking place within the clause, targeting one of these functional specifiers.²³ In particular, ex situ focus clauses

^{23.} This model leaves open the possibility that in *e.g.* complement clause constructions, movement from within the subordinate clause can target a specifier position in the main clause. In other words, it does not require *all*

are held to have the same hierarchy of projections as their canonical counterparts; they differ only in that a specifier position is filled in ex situ focus clauses which goes unfilled in canonical clauses.

These authors differ on some details. Many of the differences between them concern the syntax of left-dislocation; and the details need not concern us here. But there is one question on which they disagree that will concern us in this chapter: which specifier position do moved constituents move to? Figure 2.5 summarizes their positions (omitting details that are only relevant to their analyses of left-dislocation). Aissen (1992) is largely concerned with focus movement, which she argues targets the specifier of IP; she hypothesizes that wh-movement targets the same position. Aissen (1996), discussing Tsotsil, argues that wh-movement targets a higher position, the specifier of CP, but that focus movement targets the specifier of IP; and Henderson (2012) adopts this proposal for K'ichee'. Duncan 2010 largely follows Aissen 1992, but argues for a second specifier of IP in which words bearing 'negative focus' appear.²⁴

I will assume, following Henderson, that wh-movement targets the specifier of CP. And, as I said in §2.2.4.3, I will assume that the particles *ri*, *le* and *we*, when they occur in wh-movement clauses, are not determiners or relative pronouns (contra Mondloch 1981) but complementizers.

For focus movement it is less clear what the target of movement is. The crucial question is how we should analyze a fairly rare construction I will call the clothed-coda construction. If the clothed-coda construction has essentially the same structure as is found in ordinary ("naked-coda") focus movement clauses, then it constitutes evidence that focus movement

movement to be clause-internal. But unlike the cleft account, it allows movement in the simplest cases to be analyzed as clause-internal.

^{24.} I will argue against Duncan's syntactic distinction between 'negative focus' and other focus types in §3.2.2. See also Yasavul 2011 and Yasavul 2012 for an argument that there is no need to make a semantic or pragmatic distinction between 'negative focus' and ordinary focus.

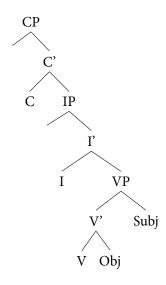


FIGURE 2.3: Consensus on overall clause structure, following Aissen 1992: lexical specifiers to the right, functional ones to the left.

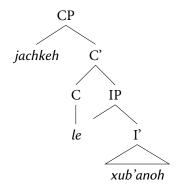


FIGURE 2.4: Evidence for wh-movement targeting the specifier of CP, following Hunderson and *contra* Duncan and Aissen.

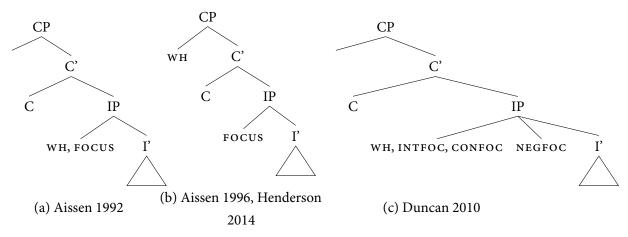


FIGURE 2.5: Three authors on the target of movement in Mayan languages. Duncan 2010 assumes multiple specifiers, and concludes that different subtypes of focus target different positions: INTFOC is "interrogative focus," i.e. focus in content questions; CONFOC is contrastive focus; NEGFOC is focus of words targetted by negation.

is to the specifier of CP. But it is not clear that these two constructions do have the same structure; and if they do not, then we are free to follow Aissen, Duncan and Henderson in assuming that focus movement is to the specifier of IP.

2.4 Background to the study of information structure

On Norman's model of Mayan language word order, noncanonical word orders are triggered by marked information structure. This has led some authors to begin using the word "focus" to refer to a *syntactic* notion — what I am calling "movement" in this dissertation. But this usage is a nonstandard one, and it creates an unfortunate ambiguity. For elsewhere in linguistics, "focus" is generally used to refer to an *information-structural* notion, having something to do with the highlighting of new, important or contrastive information (*e.g.* Halliday 1967; Jackendoff 1972; Chafe 1976; Rooth 1985; Rooth 1992; Roberts 1996; Krifka 2008). This general use of "focus" as an information-structural label pre-dates the Mayanist use of "focus" as a syntactic label. And indeed, when Mayanists began using the word "focus" to refer to syntactic movement, it was based on the idea that syntactic movement and information-structural focus always go hand-in-hand. For instance, Larsen (1988) says:

I will refer to this [immediately pre-verbal] position as "Focus Position" due to the fact that constituents placed in this position are generally understood to be "focused" (*i.e.* contrastive; see Chafe 1976, p. 33–8). (p. 337)

The trouble is that syntactic movement and information-structural focus are not so perfectly aligned as we might hope. On the one hand, there are constituents which move but which do not count as information-structurally focused on any standard definition. The most widespread example of this involves wh-movement: in all Mayan languages, wh-words in interrogative clauses move into immediately preverbal position (*i.e.* so-called "Focus Position"); but they do not count as focused in the information-structural sense of

the word. And on the other hand, there are constituents which *do* count as information-structurally focused, but which *do not* move.

One major goal of this dissertation is to thoroughy disentangle (syntactic) movement and (information-structural) focus from one another in the grammar of K'ichee'. Chapter 3 is dedicated to syntactic movement constructions — including some, such as wh-movement, which do not involve information-structural focus. Chapter 4 is dedicated to the realization of information-structurally focused constituents — including those which do not undergo syntactic movement.

2.4.1 What counts as focused?

In pursuit of this goal, the first order of business is to define the information-structural notion of focus. The easiest way to do this is by listing the various types of constituent that will count as focused.

(80) Focus: ostensive definition

- a. In the answer to an (overt or implicit) question, the ANSWERING CONSTITUENT counts as focused.
- b. In a set of contrastive sentences, the CONTRASTING CONSTITUENTS count as focused.
- c. In a sentence containing a focus-sensitive particle, the CONSTITUENT WHICH SEMANTICALLY ASSOCIATES with that particle counts as focused.

Example 81 demonstrates a question/answer pair in English, in which the answering constituent *John* is focused. In English, focused constituents are generally MARKED by means of prosodic prominence, and this example is no exception: the answering constituent is pronounced with higher pitch and greater intensity than any later constituent in the clause, which is how English generally implements prosodic prominence.

(81) A. Who laughed?

в. [Joнn]_F laughed.

Example 82 demonstrates a contrastive pair of sentences. In the second sentence, the contrastive element is focused; and as before, its status as focused is marked by means of prosodic prominence.

- (82) A. I think Mary laughed.
 - в. No, [Joнn]_F laughed.

Example 83 demonstrates a set of sentences, containing the focus-sensitive particle *only*, which differ only with respect to the location of focus. In each one, the focused constituent is prosodically prominent. The important observation to make here is that the meaning of the sentence changes depending on where focus falls; it is due to this fact that we describe *only* as focus-sensitive, for sentences containing *only* will generally exhibit this property.

- (83) a. Mary only took [John]_F to the movies yesterday.
 - b. Mary only took John [to the MOVIES] yesterday.
 - c. Mary only took John to the movies [YESTERDAY.]_F

Butthe definition offered above has one somewhat unsatisfying property. We have listed three apparently unrelated types of constituents — answering constituents, contrastive constituents, and constituents associated with a focus-sensitive particle — and asserted that they should be treated as members of a single class. But we have not yet offered any evidence for that assertion. On first glance, there is no clear reason why these three types of constituent should be treated together.

Now, the examples above demonstrate one point of commonality: all three types of constituent listed in 80 are marked by prosodic prominence in English. But this is not a very

satisfying reason to class them together. After all, that sort of shared marking can occur by accident. The categories "third person singular present-tense verb" and "plural noun" are both marked with the suffix *-(e)s* in English; but this is not sufficient reason to lump them together.

It turns out that the three types of constituent listed in 80 are marked similarly, not just in English, but in many other languages as well; and this is somewhat more encouraging, as it suggests that the facts about prosodic prominence in English are no mere coincidence. For instance, in Mayan languages, all three types of focused constituent can be marked by movement to immediately pre-verbal position (though as we will see, this is not the only way they can be marked).

- (84) A. Jachin x-tze'n-ik? who cpl-laugh-ss Who laughed?
 - B. Aree [$ri\ a$ Xwaan]_F x-tze'n-ik. FOC [D youth Juan]_F CPL-laugh-ss [John]_F laughed
- (85) A. Wee =ne x-tze'n ri al Mari'y.

 perhaps CPL-laugh D miss Mary

 Perhaps Mary laughed.
 - B. No', aree [ri a Xwaan]_F x-tze'n-ik. no Foc [D youth Juan]_F CPL-laugh-ss No, [John]_F laughed

- (86) a. Ri al Mari'y, xeew [pa K'ichee']_F k-u-ch'ab'e-j =wi le ak'al-aab'.

 D miss Mary only [P K'ichee']_F INC-A3s-address-ss =ADJ.F D child-PL

 Mary only speaks to the children [in K'ichee'.]_F
 - b. Ri al Mari'y, xeew [le ak'al-aab']_F k-u-ch'ab'e-j pa K'ichee'.
 D miss Mary only [D child-PL]_F INC-A3s-address-SS P K'ichee'
 Mary only speaks to [the children]_F in K'ichee'.

And in many other languages, we find a similar pattern. Other languages where all three types of constituent are marked prosodically include Chicheŵa, German, Greek and Japanese (Büring, 2008); others where all three can be marked by movement include Hungarian (Kiss, 1998), Hausa (Hartmann and Zimmermann, 2007a) and Nlekepmxcin (Koch, 2008; Koch and Zimmermann, 2010).

2.4.2 Focus and alternatives

Seeing that the types of constituents listed in 80 are marked similarly across languages gives us an empirical reason to group all three together under the heading of "focus." But what's more, it turns out there are theoretical as well as empirical reasons for treating answering constituents, contrastive constituents and particle-associated constituents as members of a single category.

Let's assume that the ordinary meaning of a sentence, without taking focus into account, is a single proposition. For instance, the meaning of the sentence *John laughed* might be something like LAUGHED(JOHN). Then the effect of focusing a constituent within this sentence is to evoke a set of alternative propositions. For instance, if we focus *John* in our example sentence, then the alternatives are all propositions of the form LAUGHED(x) for some entity x. In other words, the alternatives are all propositions which state that someone or something laughed.

(87) [John]_F laughed.

- a. Ordinary meaning: LAUGHED(JOHN)
- b. Alternatives evoked by focus: {LAUGHED(AARON), LAUGHED(ABBY), . . .
 . . . , LAUGHED(ZOE), LAUGHED(ZYGFRIED)}

Focusing a different constituent in a sentence will generate a different set of alternatives. If we instead focus *laughed* in our example sentence, then the alternative propositions will all be of the form P(JOHN) for some property P. In other words, this time the alternatives are all propositions which state that John did something.

(88) John [laughed.]_F

- a. Ordinary meaning: LAUGHED(JOHN)
- b. Alternatives evoked by focus: {abstained(john), accelerated(john),, zipped(john), zoomed(john)}

And more generally, the effect of focus within a sentence is to evoke a set of alternatives in which the meaning of the focused constituent has been replaced by some other meaning of the same type. Thus, in 87, the meaning of the focused constituent *John* was replaced by other entities; while in 88, the meaning of the focused constituent *laughed* was replaced by other verb meanings.

This insight forms the basis for Rooth's (1985; 1992) ALTERNATIVE SEMANTICS for focus. Alternative Semantics specifies in more formal detail how sets of alternatives are to by calculated; and it holds that all effects of focus can be described in terms of these sets of alternatives.

Perhaps the simplest type of focus to explain, on Rooth's account, is contrastive focus. What contrastive focus does is indicate that at least one of the focal alternatives to the sentence in question is salient in the current context. So to say [John]_F laughed, with contrastive focus on John, indicates that there is some other salient proposition of the form

LAUGHED(x). This explains why the discourse in 89 is felicitous; for 89A is a salient focal alternative to 89B. On the other hand, it explains why the one in 90 is infelicitous; here, 89A is not one of the focal alternatives to 90B, and so the use of contrastive focus in 90B is unjustified.

(89) A. I think Mary laughed.

(90) A. I think John was crying.

в. No, [John]_F laughed.

в. # No, [John]_F laughed.

To account for answering focus, Rooth posits a principle of QUESTION/ANSWER CONGRUENCE. This principle states that if Q is a question and A is offered as an answer, then all the possible answers to Q must be among A's focal alternatives. For instance, consider the discourse in 91.

(91) A. Did John laugh or did Mary?

Possible answers: {LAUGHED(JOHN), LAUGHED(MARY)}

в. [John]_F laughed.

Focal alternatives: $\{LAUGHED(x) : x \in PEOPLE\}$

Here, the question in 91A offers two possible answers: *John laughed* and *Mary laughed*. Both of these are among the focal alternatives to 91B, and so the discourse is felicitous. Similarly, while the question in 92A offers an infinite number of possible answers, all of them are among the focal alternatives to 92B, and so the discourse is still felicitous.

(92) A. Who laughed?

Possible answers: $\{LAUGHED(x) : x \in PEOPLE\}$

в. [John]_F laughed.

Focal alternatives: $\{LAUGHED(x) : x \in PEOPLE\}$

By contrast, 93 violates question/answer congruence. One of the possible answers to 93A — namely, *Mary cried* — is not among the focal alternatives to 93B; and infelicity results.

(93) A. Did John laugh or did Mary cry?

```
Possible answers: {LAUGHED(JOHN), CRIED(MARY)}
```

B. # [John]_F laughed. Focal alt

Focal alternatives: $\{LAUGHED(x) : x \in PEOPLE\}$

And in 94, there are an infinite number of possible answers to 94A which are not among the focal alternatives to 94B, resulting again in infelicity.

(94) A. What's going on?

Possible answers: any proposition

в. # [John]_F laughed.

Focal alternatives: $\{LAUGHED(x) : x \in PEOPLE\}$

For focus sensitivity, there are a number of possible approaches based on Alternative Semantics; indeed, it is possible that different approaches will be required for different focus-sensitive expressions (Beaver and Clark, 2008). The fine details of these approaches are not necessary for purposes of this dissertation. But by way of illustration I will give one example. Let's consider the so-called quantificational sense of the particle *only* — that is, the sense on which *only* [John]_F laughed means "John laughed and nobody else did," and john only [laughed]_F means "John laughed and he did nothing else." This sense of the word *only* has the effect of ruling out focal alternatives to a proposition. Simplifying slightly,²⁵ we can say that *only* p entails that p is true, and that none of p's focal alternatives are true. So for instance, *only* [John]_F laughed entails two things: first, that John laughed; and second, that no other proposition of the form LAUGHED(x) is true.

- (95) [John]_F laughed.
 - a. Ordinary meaning: LAUGHED(JOHN)
 - b. Alternatives evoked by focus: {LAUGHED(AARON), LAUGHED(ABBY), . . .
 . . . , LAUGHED(ZOE), LAUGHED(ZYGFRIED)}
- 25. See Beaver and Clark 2008 and Coppock and Beaver 2014 for a less-simplified version.

- (96) Only [John]_F laughed.
 - a. First entailment: LAUGHED(JOHN)
 - b. Second entailment: $\forall q \in \{LAUGHED(AARON), LAUGHED(ABBY), ..., LAUGHED(ZOE), LAUGHED(ZYGFRIED)\}, \neg q$

The fact that all three types of focus can be implemented using the same formal mechanism (in addition to being marked in similar ways across languages) provides further support for the idea that all three do indeed form a natural class. What's more, it suggests a more unified definition for focus, which in the form I will give here was articulated by Krifka (2008):

(97) Focus: unified definition

Focus indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions.

2.4.3 Broad and narrow focus

It is important to note that in Alternative Semantics, all sentences are treated as containing focus on some constituent or another. When intuitively speaking it seems like there is "nothing focused" in a sentence, what that often means is that we are looking at a case of BROAD FOCUS.

So far we have been considering examples of NARROW FOCUS — that is, focus on a verb, a single argument or adjunct, or an even smaller constituent. But there is another possibility: broad focus, which falls on an entire clause, or on everything in the clause except for a single topical constituent (usually the subject). Broad focus falls on a matrix clause in the answers to questions like "What happened next?" or "What did he do next?"

- (98) A. And when we came back, we saw our car had been broken into.
 - B. So what did you do?
 - A. Well, first we [called the police...] $_{F}$

It falls on a subordinate clause in the answers to questions like "Why did you do that?"

- (99) A. Why did you do that?
 - B. We did it [because we hoped they would catch the burglar]_F.

What these cases have in common is that the answering constituent is an entire clause, or most of one. Similarly, broad focus can be found in contrastive pairs of sentences, and occasionally in association with a focus-sensitive particle.

- (100) A. Seems like an overreaction to me.
 - B. Oh come on. We didn't [call in the National Guard.] We only [called the police!] F

Broad focus is often treated as a sort of default. For instance, in attempting to elicit the basic word order of a language, or its default prosodic pattern, it is common to introduce a context which will tend to induce broad focus. Narrow focus, on the other hand, is generally treated as a deviation from the default. Narrow focus sometimes induces some sort of non-canonical construction: for instance, non-default prosody in English, or noncanonical word order in K'ichee'. But as we will see, some cases of narrow focus are consistent with canonical prosody and word order. For instance, the narrow focus English sentence in 101 has the same default prosody as the broad focus one in 102.

- (101) A. What did Mary write a book about?
 - B. Mary wrote a book about [BATS.]_F

(102) A. What happened next?

B. [Mary wrote a book about BATS.] F

And as we will see, though K'ichee' uses word order variation to mark narrow focus, not all instances of narrow focus are marked in this way: most kinds of narrow focus can be realized in situ as well as ex situ.

There is another useful sense in which broad focus can be thought of as a default: In many types of text, broad focus is more common than narrow focus. This is true, for instance, in narrative, where at most points in the story the implicit question the hearer is expected to be asking himself is "And then what happened?" This question induces broad focus on the answer. When we find narrow focus in a narrative, it is because some special communicative need has arisen: a question-and-answer sequence in reported dialogue, a contrast between two possible courses of action, or something of that sort.

2.4.4 Diagnostics for focus

The previous sections gave an informal sketch of a formal semantics for focus which was proposed by Rooth and which has been widely adopted both by formal semanticists and by fieldworkers. The reason this is important for the purposes if this dissertation is that it gives us a clear and language-independent way to diagnose focus on purely information-structural grounds. Broadly speaking: since focus indicates the presence of relevant alternatives, we can tell where focus falls in a sentence by looking at *which alternatives* are relevant in the context where it is used. This has led to a set of widely adopted diagnostics for focus. (See Skopeteas et al. 2006 for one discussion of these diagnostics, along with extensive suggestions for operationalizing them in the form of a questionnaire.)

The most reliable contexts for diagnosing focus consist of overt question/answer pairs. We have already seen that answering constituents consistently count as focused. When an overt question is immediately followed by a direct answer, it is easy to tell with reasonable

certainty which constituent counts as the answering constituent. This can be done based on naturally-occurring question/answer pairs, such as 103, which is a piece of reported dialogue from a story about the founding of Nahualá; or in elicitation, by constructing question/answer pairs.

(103) *Context*: The townsfolk asked themselves, "What sort of thing do we need in our town?"

```
"Aree ka-qa-b'an-a' [ jun sin qa-tyoox," ]_{\rm F} k-e-cha'.

FOC INC-A1p-make-SS [ one AFF A1p-church ]_{\rm F} INC-B3p-say

"We should make ourselves [a little church,"]_{\rm F} they said.

Guarchaj
```

A slightly less reliable way to diagnose focus is by making assumptions about *implicit* questions which might be under discussion. I will avoid doing this whenever possible; and in particular, I will avoid using it as a way of diagnosing narrow focus. But it is sometimes useful as a way of diagnosing broad focus. For instance, in a narrative, there will often be long stretches where the implicit question is consistently "And then what happened?" or "And then what did they do?" These questions induce broad focus, since the entire sentence (in the former case) or all but the topical part of the sentence (in the latter case) constitutes an answer to the question.

Another slightly less reliable way to diagnose focus is by looking for contrastive pairs of sentences. We need to be somewhat careful in doing so because it is often possible to convince yourself that a particular constituent must have been intended contrastively — especially when you have a theory that dictates that that constituent ought to count as focused, but have no other evidence that it actually is. The simplest safeguard here is to restrict ourselves to cases in which the contrast is between two or more overt sentences. In other words, if for example we see the sentence in 104a alone, it is risky to assume that the pre-verbal constituent is contrastively focused; but if we see it together with the sentence in 104b, it becomes somewhat less risky.

```
(104) a. Na xaq =ta [apachike si']<sub>F</sub> ka-w-a-aj.
NEG1 just =NEG2 [any.old wood]<sub>F</sub> INC-A1s-want-ss
I don't just want [any old wood.]<sub>F</sub>
b. Aree k-a-tzuku-j [ri uk'aa'.]<sub>F</sub>
FOC OPT-A2s-find-ss [the madroño]<sub>F</sub>
```

Find [madroño wood.]_F

Xan Kata'l

Another safeguard against imagining spurious instances of contrastive focus is to look for independent evidence that a contrastive discourse relationship between two sentences was intended by the speaker. In K'ichee', I will argue in Chapter 5, the emphatic particle *aree* serves as a marker of contrast. This means that when two overt sentences occur together, if the second is marked with *aree* (as it was in 104), that gives us another boost in our confidence that the two were intended by the speaker to form a contrastive pair. Still, I will try whenever possible to avoid drawing a conclusion based on contrastive pairs alone, and will regard evidence from question/answer pairs as more reliable.

Chapter 3

The syntax of movement

As we saw in the previous chapter, K'ichee' clauses exhibit a wide range of surface word orders. In a transitive clause, all possible orders of V, O and A are attested. There is long-standing consensus that this diversity of surface word orders is derived from an underlying verb-initial word order via a small set of syntactic operations. Of especial interest in this dissertation are the operations by which a wh-word or a narrowly focused constituent moves to a position immediately before the verb.

These movement operations the site of a syntactic phenomenon generally described as AGENT FOCUS or AF, a form of syntactic ergativity which has attracted a great deal of attention both descriptive (Mondloch, 1978; Mondloch, 1981; Larsen, 1988; Can Pixabaj and England, 2011) and theoretical (Davies and Sam Colop, 1990; Stiebels, 2006; Coon, Mateo Pedro, and Preminger, 2011; Aissen, 2012b). In fact, "agent focus" is a misleading label; the syntactic phenomenon in question has nothing to do with semantic agentivity, and is only indirectly connected to information-structural focus. For continuity with the existing literature, I retain the acronym AF. In this phenomenon, the subjects of ordinary transitive clauses cannot undergo movement. Instead, one of two COMPENSATORY STRATEGIES must be used: either (a) the clause is detransitivized, or (b) a special verb form known as the AF form is used in place of the ordinary transitive verb.

In this chapter, I will describe the movement constructions of K'ichee' in somewhat more detail than they have previously been described. §3.1 covers wh-movement constructions, including bound and free relative clauses, unconditional clauses, and wh-questions.

§3.2 turns to focus movement, and argues based on the results from §3.1 that it should be given a monoclausal analysis following Aissen (1992) rather than reanalyzed as having a biclausal structure. (I will contrast this with several other constructions, not previously described, which I will argue *should* be given a biclausal analysis.) In §3.3 I consider whether wh-movement and focus movement are syntactically homogenous. Finally, in §3.4 I will summarize what is known about syntactic ergativity in K'ichee', drawing on work by Mondloch (1981) and Aissen (2012b) to make a precise distinction between ORDINARY TRANSITIVE CLAUSES, in which subject movement without AF is blocked, and PSEUDOTRANSITIVE clauses, in which it is possible.

3.1 WH-movement

K'ichee' has wн-words which, like their English counterparts, can be used either as interrogative or as relative pronouns. Their use as relative pronouns has not been well described in past work, and so I will go into additional detail on that point shortly. The sentence in 1 exemplifies an interrogative use, and the one in 2 exemplifies the use of the same wн-word as a relative pronoun.

(2) ri k'olb'al jawi ri at+k'oo =wih

DET place where c B2S+EXS =ADJF

the place where you are

The actual inventory of wh-words varies a great deal from one dialect of K'ichee' to another. In CNK, the wh-words used in questions and in ordinary relative clauses consistently begin with j; some of these also have counterparts beginning in ap which are used in unconditional clauses (see §3.1.3). The most commonly used wh-words are shown in Table 3.1.

jachin(aq)	'who'	apachin(aq)	'whoever'
jas	'what'		
jasa	'what'	apasa	'whatever'
jawi	'where		
jawije'	'where'	apawije'	'wherever'
jawichi'	'where'	apawichi'	'wherever'
jachkeh	'which'	apachkeh	'whichever'
jampa'	'how many,		
	when'		

Table 3.1: The wh-words of CNK.

In both wH-questions and relative clauses, these wH-words always undergo leftward abar movement to an immediately pre-predicate (IPP) position, which I will argue should be identified with the specifier of CP. Movement in a wH-question is exemplified in 3.

(3) Jachin x-opan t iwiir?

who CPL-arrive yesterday

Who arrived yesterday?

This movement is obligatory, and leaving the wH-word in situ is impossible.

(4) * X-opan jachin iwiir?

CPL-arrive who yesterday

Intended: Who arrived yesterday?

Indirect or embedded questions are formed in the same way.

(5) X-inw-eta'ma-aj jachin x-opan t iwiir.

CPL-A1s-learn-ss who CPL-arrive yesterday

I found out who arrived yesterday.

There are two sources of evidence that this constitutes a-bar movement. The first piece of evidence is that it is subject to island constraints.

- (6) Jachin aw-eta'm u-wach t? who A2s-know A3s-face
 Who do you recognize?
- (7) * Jachin aw-eta'aam jawi k'oo wih t₁t₂?
 who A2s-know where EXS ADJF

 Intended: Who is such that you know where he is?

If we take the AF verb form as diagnostic of a-bar movement, then this constitutes a second piece of evidence that wh-words undergo a-bar movement, for in questions where the wh-word is an A argument, the AF verb form is required.

Multiple-wH questions are judged to be unnatural by K'ichee' speakers, either with multiple wH-movement or with one of the wH-words left in situ (Duncan, 2010, p. 462); and there are no naturally occurring examples of multiple-wH in my corpus.

- (12) * Jachin jawi x-opan-ik? t₁t₂
 who where CPL-arrive

 Intended: Who arrived where?
- (13) * Jawi jachin x-opan-ik? t₁t₂
 where who CPL-arrive

 Intended: Who arrived where?

Similarly, wh-words in relative clauses undergo obligatory movement to an IPP position, identified once again with the specifier of CP.

(14) ri k'olb'al jawi ri at k'oo =wih.

D place where C B2S EXS =ADJF

the place where you are

And even in relative clauses with no overt wH-word, there is reason to believe that movement of a silent operator has occurred. For concreteness I assume this movement targets the same position as the other forms of wH-movement described here.

The evidence for a-bar movement in relative clauses — both those with an overt whword and those without — is similar to that for a-bar movement in interrogatives. The first bit of evidence, and the one which depends the least on other details of our syntactic analysis, is that both kinds of relative clauses obey island constraints.

(15) a. ri achih Op ri w-eta'm u-wach t

D man C A1s-know A3s-face

the man that I recognize

b. *ri achih Op ri w-eta'aam jawi k'oo wih t₁t₂

D man C A1s-know where EXS ADJF

Intended: the man such that I know where he is

- c. ri chokonsab'al jachke le ka-chok-on ch+ech t ch+u-b'an-ik le campana

 D material which c INC-use-AP P+A3s:POSS P+A3s-make-ss D bell

 the material which they would use to make the bell

 Guarchaj
- d. * ri chokonsab'al jachke le w-eta'aam jas ka-chok-ont₁ ch+eech t₂

 D material which c A1s-know what INC-use-AP A3s-with

 Intended: the material such that I know what they will use it for

As before, another piece of evidence can be gotten by using the AF verb form as a diagnostic for extraction. Whether or not an overt wh-word has used, relativization of a transitive subject triggers the use of the AF form. This suggests that even in the case with no overt wh-word, something has indeed moved.

(16) ri achih Op ri k-e'-to'-w-a ri' ri jya'xeel o ri alib'atz t

D man C INC-B3p:go-help-AF-ss DEM D son.in.law or D daughter.in.law

the man who comes to help the son-in-law or the daughter-in-law K'ulaneem

In both cases, movement is obligatory. In the cases with overt wh-words, we can see this by noting that the wh-word never surfaces in situ.

- (17) a. * ri k'olb'al ri at k'oo =wi jawi

 D place C B2S EXS =AJDF where

 Intended: the place where you are
 - b. * ri chokonsab'al le ka-chok-on ch+ech jachke ch+u-b'an-ik le campana

 D material C INC-use-AP P+A3s:POSS which P+A3s-make-ss D bell

 Intended: the material which they would use to make the bell

In cases with no overt wh-word, we can infer that the movement of the silent operator is still obligatory because its morphosyntactic effects — AF morphology and island effects — are obligatory.

There is one set of apparent exceptions to the rule that wh-words must undergo movement. Some of the wh-words can be used as placeholder nouns — similar to "whatchamacallit." The expression *jas u-wach* [what A3s-kind] 'what kind of thing?' is especially common in this usage. In fact, it is likely that lexicalization has occurred here, and that the multiword expression *jas uwach* has been reinterpreted as a noun *jasuwach*. In some cases, asked to translate a multiple wh sentence from Spanish to K'ichee', speakers will resort to these placeholder nouns.

(18) *Jachin tajin ka-tij-ow le jun jasuwach?*who prog inc-eat-af d one whatsit
Who is eating the whatchamacallit?

But sentences containing these placeholder nouns should probably not be regarded as true wh questions. One relevant piece of evidence is that these placeholder nouns can occur in clauses with an imperative verb — which would be incompatible with a true wh question.

(19) Ch-aw-il-a' la' le jun jasuwach lee'.

IMP-A2S-see-SS DEM D one whatsit DEM

Look at that whatchamacallit over there.

In another case, even more clear-cut lexicalization has occurred, involving the expression jas = taq [what =PL]. This expression can be used in contexts where an ordinary wh-word would be, such as in 20 and 21 where it introduces free relative clauses as part of a pluralized form of the expression $jas \ u$ -wach mentioned above. On this use, jas = taq always undergoes movement.

(20) ...ri' ri tz'alam, ri aq'een, ri jas =taq ri u-wach ri ka-ki-ch'uq-b'ej k-iib'

DEM D table D ?? D what =PL D A3s-kind C INC-A3p-hide-INSTR A3p-self

ch+wach ri' ri chikop.

P+A3s:face DEM D animal

...those tables, those ??, whatever kinds of thing they were using to hide themselves from that animal.

Ajpacajá

(21) Jas =taq =na =k'u u-wach ri x-wokaji-x-ik, are wa' le ki-chaak le a're'. what =PL =PROSP =then A3s-kind c cpl-build-pass-ss cop dem d A3p-work d 3pl Everything that was built (lit. "what kinds of things were built"), that was their labor. Ajpacajá

But it has also been lexicalized as a noun *jastaq*, meaning roughly 'stuff' or 'belongings' (and referring especially to clothes or other personal goods). We can tell here that lexicalization has occurred because the noun *jastaq* can be possessed, as in 22; possessive marking is normal for a noun, but impossible in general for wh-words.

(22) Maj u-jastaq.N.EXS A1S-StuffHe didn't have any belongings.

In addition to the above examples, I have one sentence in my corpus in which a wh-word remains in situ (indicated by a frame in 23) where the in-situ wh-word is best translated by an indefinite pronoun. I have insufficient data to tell whether this is the standard form which indefinite pronouns take in K'ichee' or an odd outlier of some sort.

(23) Jachin = k'u = ri' ri k-u'l-ch'ojo'man-a waral? who = then = DEM D INC-B3p:come-wash-ss here

$$K'oo = na = k'u = ri'$$
 jachinaq?
EXS = PROSP = then = DEM who

Who, then, come to wash here? Is there anyone?

Utikitajiik

Having discussed what wh-movement constructions have in common, I will turn to the details of each specific construction in which wh-movement occurs: bound relative clauses, free relative clauses, *ap*-clauses, and wh-questions.

3.1.1 The structure of bound relative clauses

A BOUND RELATIVE CLAUSE is one which modifies an overt noun head. In bound relative clauses in K'ichee', either a wh-word or a silent operator moves to the specifier of CP; this moved element may be followed by either an overt or a silent complementizer.

In the examples below, we find the most "crowded" possible configuration for a bound relative clause, containing both an overt wh-word and an overt complementizer. Past descriptions of K'ichee' relative clauses have not acknowledged the possibility of this crowded strategy; but my experience in Nahualá has been that it is a commonly used strategy in conversation, and it is well attested in my corpus. (In this section and the next one, all relative clauses will be surrounded by a frame.)

the place from which there really come rocks (*i.e.* the place where a lot of rocks are quarried)

Guarchaj

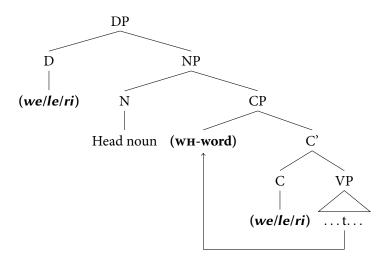


FIGURE 3.1: Structure of a bound relative clause; any or all of the optional elements shown in bold type may be absent. (Compare the free relative, shown in Figure 3.2, where this is not the case.)

- (25) le chokonsab'al jachke le ka-chok-on ch+ech ch+u-b'an-ik le campana
 D material which C INC-make-AP P+A3s.DAT P+A3s-make-NMLZR D bell
 the material which they would make the bell with

 Guarchaj
- (26) ch+la' ch+kaaj, jawi ri ka-qa-tz'elewachi-j =wi =na ri Koloneel

 P+DEM P+heaven where c INC-A1p-await-ss =LOC =PROSP D savior

 in heaven, where we will await the Savior

 Misal, Phillippians 3 : 20 (p. 134)

Note that in these examples, the wh-word appears before the complementizer. This is a useful bit of evidence confirming that our assumptions about relative clause structure are correct. If the wh-word does indeed move to the specifier of CP, and the complementizer does indeed occupy the head of CP, then this is the order which we would predict, as shown in Figure 3.1.

In fact, it is also possible for the wh-word, the complementizer, or both to be silent, resulting in a less-crowded structure. These less crowded strategies are described by Larsen

(1988, p. 502). Example 27 shows the specifier of CP overtly filled, but without an overt complementizer.

the rock where the deer had climbed

Masaat

The following examples have no overt wh-word in the specifier of CP, but do have an overt complementizer.

(28) "K'amal b'eh" u-b'i' ri' ri achih leader road A3s-name DEM D man

The man who comes and helps the son-in-law or the daughter-in-law (to make a formal proposal of marriage) is called "guide." *K'ulaneem*

(29) Tee =k'u ri', como k'oo le peine le ka-q'ax =wi taq le b'atz', when =then DEM since EXS D comb c INC-pass =ADJF DISTR D thread

entonces ka-tiiq-ik, ka-tiiq-ik pa le xyeb'.

then INC-plant:PASS-SS INC-plant:PASS-SS P D comb

After that, because there is a comb that the thread passes (through), then (the thread) is set up, is set up in the comb.

Batz

(30) Pero k-inw-il in cher aree mas ee k'ih =chi but INC-A1s-see 1sg that CONTR INTENS B3p many =now

But I see that now there are many children that go to school...

Ixoqiib'

And the following have no overt element in either position.

(31) Ee k'ih ri winaq x-e-kam pa ri ch'a'ooj.

B3p many D person CPL-B3p-die P D war

Many were the people who died in the war.

Ajpacajá

(32) X-ki-tan-ab'a' =kan chaak chla'

CPL-A3s-stand-CAUS =behind work DEM

They left off work there because of the problem they encountered.

Ajpacajá

Large was the land that was given to them (lit. "their land that was given") Ajpacajá

In all four types of relative clause, the relativization of an ordinary transitive subject triggers antipassive or AF morphology on the verb, and the relativization of locative adjuncts (and certain other types of adjunct) triggers the appearance of the particle =wi(h). This provides evidence that all four types of relative clause do indeed involve movement, even in those cases where there is no *overt* moved element.

Bound relative clauses almost always immediately follow the head noun which they modify. But occasionally, they are separated from their head noun by one or more constituents. I assume that this represents rightward extraposition of the relative clause, and that the underlying structure before extraposition is the same.

...where the altars are today which our ancestors have used.

Ajpacajá

3.1.2 The structure of free relative clausees

In a FREE RELATIVE CLAUSE, there is no overt head noun for the relative clause to modify. Henderson (2012) is the first to my knowledge to have pointed out that free relative clauses exist in K'ichee'. (Note that Henderson's data is drawn from a different variety of K'ichee'; *su* in Santa Cruz K'ichee' corresponds to *jas* or *jas uwach* in CNK.)

I grabbed what he bought

SANTA CRUZ K'ichee', Henderson 2012

Based on syntactic assumptions which we have already introduced, the most straightforward structure we could assume for free relatives is the one in Figure 3.2: this is simply the same structure as we assumed for bound relatives, only with a silent noun rather than an overt one. The three parenthesized elements in Figure 3.2 represent functional positions which might be filled by either an overt or a silent function word. I will show that this structure is indeed the one we find for free relatives in K'ichee'; and that all logically possible

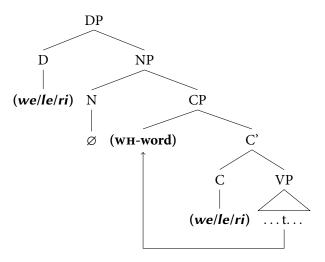


FIGURE 3.2: Structure of a free relative clause; unlike in a bound relative clause (see Figure 3.1), at least one of the three optional elements shown in bold type must be present.

instantiations of it are possible, with one exception: it is ungrammatical to construct a free relative in which all three of the functional positions are empty. Following Shklovsky (2012) I will refer to these ungrammatical constructions as "naked" free relatives.

I have in my corpus one example in which all three positions are filled. In 36 *le* can be analyzed as a determiner, *jasa* as a wh-word in the specifier of CP, and *ri* as a complementizer. The order of the three elements is consistent with the structure in Figure 3.2.

Now we'll discuss (*lit.* "say") for a bit what they did with their homes and dwelling places... *Ajpacajá 2*

And there are more numerous examples in which two of the three positions are overtly filled. In examples 37–39, an overt wh-word precedes an overt complementizer. In 40, an overt

WH-word follows an overt determiner.1

(37) Pero ch-i-b'ij che na k-u-b'an =ta =chik jachke le x-u-b'an-oh.

but opt-a2s-say that neg inc-a3s-do =neg =again what c cpl-a3s-do-ss

But tell him not to do again what he did.

Guarchaj

(38) X-ok k-etaal chi ki-palaaj jachin =taq ri k-e-b'ee pa chaak.

CPL-enter A3p-sign P A3p-forehead who =DISTR C INC-B3p-go P work

Marks were put (*lit*. "entered") on the foreheads of those who went to work.

Ajpacaj⊠a 2

(39) Si =ta ka-r-a-aj jampa' ri k-u-b'inb'e-j =b'ik so =neg inc-a3s-want-ss how.much c inc-a3s-scamper-ss =away

jampa' ri ka-xk'an-ik how.much c INC-jump-ss

ronojel u-choq'aab' ronojel ri r-aniim k-u-koj-oh.

all A3s-strength all D A3s-speed INC-A3s-use-ss

He wanted however much he could scamper away, however much he could jump, to use all his strength and all his speed.

Masaat

(40) X-e-b'ee ch+u-wach la' le juyub'

CPL-B3p-go P+A3s-face DEM D mountain

They went up the mountain, near to where that one big rock was.

Guarchaj

^{1.} We can identify these as complementizers in 37–39, and as a determiner in 40, by their position relative to the wh-word. As shown in Figure 3.2, the head of the DP is expected to precede the specifier of CP, and the head of the CP is expected to follow its specifier.

There are also well-attested "uncrowded" examples in which only one position is filled. Henderson's example in 35, repeated below, has only an overt wh-word, and no overt determiner or complementizer; and this same strategy is attested in data from Nahualá, such as example 42.

I grabbed what he bought

SANTA CRUZ K'ichee', Henderson 2012

Nothing will happen (*lit.* "there is no what will happen")

Guarchaj

The other possible "uncrowded" strategy has either an overt determiner or an overt complementizer — it is not generally possible to determine which, since the determiners and relative complementizers are homophonous:

(42)
$$Ch$$
- iw - il - a' = mpe' le ka - ki - b' a n - oh , k - e - cha' . OPT-A2 p -see-SS =HORT D/C INC-A3 p -do-SS INC-B3 p -say

"Look at what they're doing!" they said.

Ajpacajá

B'atz'

But what has helped us the most in addition is, you know, all the tourists.

(44) Ka-yaa sin u-trago pues para que k-u-riq ri k-u-b'i-ij INC-give:PASS DIM A3S-gulp well so.that INC-A3S-find c/d INC-A3S-say-SS

He's given a drink (of liquor) so he can think of what to say.

K'ulaneem²

(45) Ma =b'a utz =ta wa' we x-in-b'an-oh

NEG =well good =NEG DEM C/D CPL-A1s-do-ss

ka-cha ri' ri masaat.

INC-say DEM D deer

"Well, surely what I've just done isn't good," said the deer.

Masaat

(46)
$$Ri k-in-b'ee = wi in$$

C/D INC-B1s-go = ADJ.I 1sg

na k-at-kowin =ta at k-at-ter-i' =b'i ch+w-iij kamiik.

NEG INC-B2S-can =NEG 2Sg INC-B2S-follow-INTR =away P+A1S-behind today

Where I am going, you cannot follow me today.

Misal p. 255, John 13:36

Despite all this variation, there is one logically possible strategy for forming free relatives in K'ichee' which is not attested. We do not find naked. free relatives in which there is no overt determiner, no overt specifier in CP, *and* no overt complementizer.

^{2.} This sentence is interesting because it runs counter to the generalization by Henderson (2012) that the boundaries of subordinate finite clauses are mapped to intonational phrase (ιP) boundaries. If an ιP boundary preceded the free relative here, we would expect the verb to take its phrase-final form *kuriqoh* rather than its phrase-medial form *kuriq*. Judith Aissen (p.c.) points out that this could be an argument for analyzing the c/D particle here as a determiner: for the boundaries of DPs are *not* mapped to intonational phrase boundaries. To support this argument, more data would be needed from the more crowded configurations in which a c/D particle can be unambiguously and independently identified as a complementizer or as a determiner.

- (47) a. * Mas oj to'-w-naq are la' le e turistas.

 most B1p help-AF-PERF COP DEM D PL tourists

 Intended: What has helped us the most is the tourists.
 - b. * Ka-yaa sin u-trago para que k-u-riq k-u-b'i-ij.

 INC-give: PASS DIM A3S-gulp so.that INC-A3S-find INC-A3S-say-SS

 Intended: He's given a drink so he can think of what to say.
 - c. * Ma = b'a utz = ta wa' x-in-b'an-oh.

 NEG = well good = NEG DEM CPL-A1s-do-ss

 Intended: Well, surely what I've just done isn't good.

Shklovsky (2012) describes a similar pattern in Tseltal free relatives: naked free relatives are unattested in Tseltal, but all other possible combinations of silent determiner, silent complementizer and silent whoperator are attested.

The use of AF and ADJ.F morphology makes it possible to distinguish free relatives in various functions even when no overt wh-word is used. For instance, free relatives with ADJ.F morphology are taken to have locative meaning even if no locative wh-word such as *jawi* "where" is used.

^{3.} Example 48, like example 44, could be taken to counterexemplify Henderson's claim that subordinate finite clause boundaries are mapped to µP boundaries: if a µP boundary were present here the verb would be *kub'anoh* rather than *kub'an*. But since example 48 is elicited rather than spontaneous, it may not constitute such reliable evidence as example 44. And as in 44, it is possible that analyzing the C/D particle here as a determiner could solve the problem.

(49) Nim u-b'an-taj-iik le ka-b'ee =wi le are'.

great A3s-do-CP-NMLZR C/D INC-go =ADF.J D 3sg

Where he's going is important.

3.1.3 The structure of ap-clauses

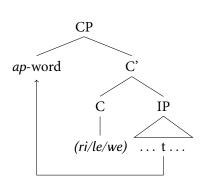
In the relative clauses described in previous sections, if there is an overt relative pronoun at all, it is one of the *j*-words shown in Table 3.1. But recall that some of these *j*-words also had a corresponding word beginning in *ap*.

These *ap*-words can be used to introduce a distinct type of relative clause, which I will call *ap*-clauses. To the best of my knowledge, *ap*-clauses have not been discussed in previous grammars of K'ichee'. Several examples of *ap*-clauses in isolation are given below. Note that all but one are from the *Misal*; in general, *ap*-clauses seem to be a feature of elevated poetic style.

(50) xaa =ta apawichi' at-b'e-naq =wih just =IRR wherever B2s-go-PERF =ADJ.F wherever you have gone

- Misal p. 60, 2 Samuel 7:9
- (51) xaa =ta =ne apasa u-b'an-oom
 just =IRR =SCAL whatever A3s-do-PERF
 whatever he has done

 Misal p. 183, John 11:15 (very loose translation)



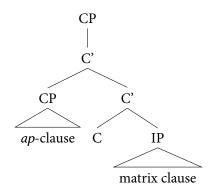


FIGURE 3.3: Internal structure of an *ap*-clause.

FIGURE 3.4: Ap-clause adjoined to matrix clause.

(53) xaq apawichi' k-e-chaku-n =wih
just wherever INC-B3p-work-AP =ADJ.F
wherever they work

Utikitajiik

As these examples show, the internal structure of an ap-clause is identical to that of other relative clauses; it is illustrated in Figure 3.3. The only difference is that ap-clauses cannot be introduced by a silent operator, but must be introduced by an ap-word — after all, they would be indistinguishable from ordinary free relatives if an ap-word were not present. The ap-word which introduces the clause sits in the specifier of CP, having moved there from a position within the clause. (As in other types of relative clause, this position in the specifier of CP puts it before an overt complementizer when one appears, such as for instance in 52.) If the ap-word functioned as a locative adjunct in the clause which it introduces, its movement causes the particle =wi(h) to appear, as in 50 and 53.

But the syntactic context in which *ap*-clauses appear is different from the syntactic context for other relative clauses. *Ap*-clauses cannot be the complement of a DP as free relative clauses are, or an NP-internal modifier as bound relative clauses are. Rather, they occur adjoined to the left (54) or right (55) of some matrix clause; this situation is illustrated in Figure 3.4. If the referent of the *ap*-clause also appears in the matrix clause, it will be realized

there using a resumptive element, such as the demonstrative *ri* in 54.

measure-cp.stat =now =then d axe

ch+u-pootz'-ik r-aa' =taq ri chee', arechi xaa =ta

p+A3s-chop-nmlzr A3s-root =distr d tree so.that just =irr

apachkeh chee' ri na k-u-ya =ta utz-alaj =taq wach
whatever tree c neg inc-A3s-give =neg good-intens =distr fruit

ka-jika-x =k'u =na ri'.

The axe is already aimed for chopping the roots of the trees, so that whatever tree does not give good fruit, it will be uprooted.

**Misal p. 33, Matthew 3:10*

(55) In aw-achi'lam =k'ut, xaa =ta apawichi' at-b'e-naq =wih.

B1S A2S-company =then just =IRR wherever B2S-go-PERF =ADJ.F

I have been with you, wherever you have gone.

INC-pull-PASS = then = PROSP DEM

Misal p. 60, 2 Samuel 7:9

Ap-clauses appear to be a feature of high poetic style, and may be somewhat archaic. In my corpus they appear almost exclusively in the *Misal*, and even then they are found predominantly in the more ornate passages — such as 56, which is one of the most finely adorned pieces of poetry in old-fashioned Mesoamerican style to be found in the book. In the *Misal* there is furthermore a strong collocation between the phrase *xaa* = ta or *xaa* = ta = ne and the ap-words, suggesting that these collocations may form a sort of poetic formula.

(56) Xuqe xaa =ta =ne apachikeh u-wach ri k-i-b'ii-j
also just =IRR =SCAL whatever A3s-nature c INC-A2p-say-ss

ch+wi ri i-tziij,
P+A3s:on D A2p-word

```
ch+wi ri i-ch'aab'al,
     P+A3s:on D A2p-language
                     apachikeh ri k-i-b'an-oh
xuq xaa = ta = ne
also just =IRR =SCAL
                     whatever c INC-A2s-do-ss
     ri k'oo ch+wi
                      iw-agan
    D/C EXS P+A3s:on A2s-leg
    ri k'oo ch+wi
                      i-g'ab' —
     D/C EXS P+A3S:on A2S-arm
r-onojel =k'u wa'
A3s-all =then DEM
    k-i-log'-chaku-uj
    INC-A2p-love-work-ss
     k-i-log'-patani-j
                               p+u-b'ii'
                                           ri Qa-qajaaw Jesus
     INC-A2p-love-bear.cargo-ss P:A3s-word D A1p-lord
ya'-b'al
          maltyox-ib'al r-umal ri Are' ch+eech ri Dios, ri Qa-taat.
give-INSTR thank-INSTR A3S-by D 3pl P+A3S:DAT D God D A1p-father
And whatever you say with your words, your language,
and whatever you do, that is on your legs, that is on your arms —
all of this you lovingly do, you lovingly perform in the name of our Lord Jeus,
as a gift, as a thanks through him to God our Father.
                                                      Misal p. 82, Colossians 3:17
```

Semantically, *ap*-clauses form the antecedents of UNCONDITIONAL sentences (Zaefferer, 1991; Bhatt and Pancheva, 2006). An unconditional sentence indicates that the consequent holds *regardless of* which of the alternatives specified by the antecedent are true. So for instance, in 55, the proposition expressed is that regardless of where the addressee has gone, the speaker has been with him; and the proposition expressed by 56is that regardless of what one says or does, one should do it in the name of Jesus.

Aside from the *ap*-clause construction described above, there is a second construction which is found with the *ap*-words; I will refer to it as the *ap*-NP construction. In an *ap*-NP, the *ap*-word introduces a non-clausal nominal expression rather than a subordinate clause. In 57 the *ap*-word behaves like a measure word, being separated from the noun it depends on by the preposition *chi*.

(57) Ma-saach i-k'u'x ch+u-wach xaa =ta apachkeh chi jastaq...

NEG-lose:PASS A2p-heart P+A3s-front just =IRR whatever P thing

Do not be anxious about anything... Misal p. 52, Phillipians 4:6

In 58 it modifies the noun which it depends on directly, as a prenominal adjective or an affective particle would.

```
(58) Kamik k-in-tij tuuj,
today INC-A1s-eat temascal

j-a'-tzuku-j =la ri sii',
MOV.IMP-GO:A2s-find-ss =away D wood

na xaq =ta apachikeh sii' k-w-a-aj,
NEG just =NEG whatever wood INC-A1s-want-ss

aree k-a-tzuku-j ri uk'a'.
CONTR INC-A2s-seek-ss D madroño
```

Today I will take a steam bath, go and find the wood. And it isn't just any old wood that I want. Find madroño.

Utikitajiik* p. 31

In this construction, there is no evidence that the *ap*-word has undergone any sort of movement within the *ap*-NP. Rather, it is reasonable to assume that the *ap*-word is base-generated in its surface position as a modifier within the *ap*-NP.⁴

4. Note that in , the entire *ap*-NP has undergone focus movement. But within the *ap*-NP, no movement has occurred.

It is tempting to describe the *ap*-NP construction as a syntactically simplified descendant of the *ap*-clause construction. My sense is that it is more common in casual conversation than the *ap*-clause construction, though I do not have statistics to back up this impression. More work would be needed to pin down its diachronic and sociolinguistic situation with any certainty.

3.1.4 The structure of wh-questions

WH-questions have a structure quite similar to the ones discussed above for free relatives and *ap*-clauses. As in those other constructions, so in wh-questions the wh-word moves into the specifier of CP. By definition, a wh-question has an overt wh-word. So here (as with *ap*-clauses) the only point of structural variation is whether there is also an overt complementizer. By far the most common pattern — and the only one described in past work — is for there to be no overt complementizer. But wh-questions with overt complementizers are also attested; examples are given below:

(59) Jasa u-wach ri x-i'w-il-a u-wach
what A3s-kind c cpl-go:A2p-see-ss A3s-face
pa ri poj-poj-alaj juyub' taq'aaj?
P D hill-REDUP-INTENS mountain plain

What did you go out into the rugged countryside to see?

Misal p. 46, Matthew 11:7

(60) Jas =k'u ch+eh ri ka-r-il =chi kamiik?
what =then P+A3s:DAT C INC-A3s-see =now today
How, then, can you see now today?

Misal p. 163, John 9:10

```
(61) Jawi =k'u ri x-b'ee =wi?
where =then c cpl-go =Adjf
Xeew le aree' maj;
only d 3sg N.EXS
jas =k'u le x-u-b'an-oh?
what =then c cpl-A3s-do-ss
```

Then where did he go? He alone is missing; so what did he do?

K'ache'laaj

(62) Uy, jas =k'u x-in-b'an =wa'?

ugh what =then CPL-A1s-do =DEM

Jawi we in k'oo =wih.

where C B1S EXS =ADJF

Ugh, what did I do? Where am I?

K'ache'laaj

(63) X-in-pe-tik taat, CPL-A3s-come-ss father

```
jawi ri k-in-chokon =wi =la taat ch+e =lah, where c inc-ais-serve =adjf =b2p.hon father p-dat =b2p.hon jas u-wach ri k-a-j =la ch+w-eh? what A3s-face c inc-want-ss =b2p.hon p+A1s-dat
```

I'm here, sir. Where can I serve you, sir? [i.e. "How can I be of service?] What do you want from me? *K'ache'laaj*

In all of these examples, the wh-word precedes the overt complementizers. This suggests that in wh-questions, as in relative clauses, movement is to a position above the complementizer — which I will continue to assume is the specifier of CP.

3.2 Ex situ focus and related constructions

In the last section we saw that wh-words undergo movement in order to form interrogative clauses and relative clauses. Movement in declarative main clauses has a different function — it is used in the ex situ focus construction, which is one of the devices which K'ichee' makes available for marking narrow focus on a constituent.

Example 65 demonstrates the ex situ focus construction, as well as the terms which I will use here for its parts.

(64) X-u-b'an ri chaak ri a Xwaan.

CPL-A3s-do D work D youth Juan

Juan did the work.

It was Juan who did the work.

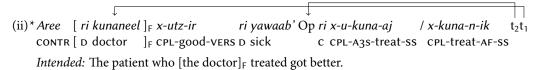
Several changes have taken place between 64 and 65. First, the subject DP *ri a Xwaan* has changed its position in the clause: it was postverbal in 64, and in 65 it occurs in IPP position. Second, the verb has taken its AF form. This suggests that movement of some sort has taken place.⁵ The simplest assumption would be that it is the subject DP which has moved, and this movement is how it came to be in IPP position — and I will argue that this is correct. But I will also consider another possible analysis: one on which this construction is biclausal,

5. Further evidence for movement comes from the fact that this construction is island sensitive.

```
(i)* Aree [ri\ a\ Xwaan]_F w-eta'aam jawi k'oo =wih t_1t_2 CONTR [D\ youth\ Juan]_F A1s-know where EXS =ADJ.F Intended: I know where [Juan]_F is.
```

with the coda as a relative clause. On that analysis, the moved constituent would not be the subject DP itself, but a silent operator within the relative clause which is coindexed with the subject DP.

The last change which has occurred in 64 is that the word *aree* has been added to the beginning of the clause. *Aree* belongs to a class of FOCUS PARTICLES which also includes the word *xeew* "only." These particles occur at the left edge of the clause, and have long been known to have some connection to focus movement, but there has been some debate over their syntax and semantics. In some varieties of K'ichee', the use of a focus particle is always optional (see e.g. Davies and Sam Colop 1990; Yasavul 2013b). In those varieties, 64 and 65 would have been equally grammatical without *aree*, and 66a–c are all grammatical. But in other varieties, including CNK, the use of a focus particle is required in focus movement clauses when the moved constituent is a definite DP (Larsen, 1988; López Ixcoy, 1997). In these varieties, removing *aree* from 64 and 65 results in ungrammaticality, and 66a is similarly ungrammatical. This DP effect will be further discussed in §3.2.1.1.



By contrast, left-dislocation — which is generally analyzed as not involving movement — is not island-sensitive.

- (iii) Ri a Xwaan, w-eta'aam jawi k'oo =wih t₁
 D youth Juan A1s-know where Exs =ADJ.F
 As for Juan, I know where he is.
- (iv) Ri kunaneel, x-utz-ir ri yawaab' Op ri x-u-kuna-aj / x-kuna-n-ik t₁ D doctor CPL-good-VERS D sick C CPL-A3s-treat-ss CPL-treat-AF-ss

 As for the doctor, the patient he treated got better.

- (66) DP effect: ex situ focus of a full DP requires a focus particle
 - a. *[$Ri\ a$ Xwaan]_F x-b'an-ow-ik.

 [Dyouth Juan]_F CPL-do-AF-SS

 Intended: [Juan]_F did it.
 - b. [Aree ri a Xwaan]_F x-b'an-ow-ik. [FOC D youth Juan]_F CPL-do-AF-SS [Juan]_F did it.
 - c. [Xeew ri a Xwaan]_F x-b'an-ow-ik. [only D youth Juan]_F CPL-do-AF-ss Only [Juan]_F did it.

Various syntactic and semantic analyses have been offered for these words — and especially for *aree*, which has been variously described as a focus-marking particle (López Ixcoy, 1997), as a copula in a biclausal construction (Larsen, 1988; Velleman, 2011b), and as a particle which distinguishes identificational from informational focus (Yasavul, 2013b). *Xeew* has been less-discussed, perhaps because it is less mysterious to foreign linguists, having a clear similarity at least in meaning to exclusive particles such as English "only."

More broadly, various analyses have been offered for the ex situ focus construction as a whole. In §2.3.2 I considered three such analyses, and concluded that two of the three were plausible candidates. The first plausible candidate is a monoclausal analysis, on which the IPP constituent has moved into a specifier position in the left periphery, and the coda is a remnant left behind by movement. The second plausible candidate is a biclausal analysis, on which the IPP constituent is the predicate in a higher copular clause, and the coda is a free relative clause. In this section I will consider these two analyses in more detail. I will show that the biclausal analysis has some appealing features, but that ultimately the monoclausal analysis is more successful.

In addition to ex situ focus, I will consider several rarer constructions in this section. Like ex situ focus, these constructions represent deviations from the canonical word order; and like ex situ focus, they show some signs of having a biclausal structure. But while I reject the biclausal analysis for ex situ focus, I will conclude that it is a plausible option — indeed, in some cases the only plausible option — for these other constructions.

3.2.1 On the proper analysis of ex situ focus

Ex situ focus places the focused constituent in IPP position. In Section 2.3.2 I briefly discussed possible explanations for this fact. I rejected omnipredicative analyses as implausible for K'ichee', leaving two major possibilities remaining.

Aissen (1992) analyzed the IPP position which hosts ex situ foci as a specifier position in the left periphery, similar to the one targetted by WH-movement; and most other authors on K'ichee' have followed her lead, including Duncan (2010) and Henderson (2012). On this analysis, a sentence with focus movement has the same hierarchy of projections as one in which no focus movement has occurred; the only difference is that in a focus movement sentence, a specifier position is filled by movement which would have gone unfilled in a canonical order sentence. Figure 3.5 illustrates this situation.

But Larsen (1988, p. 516) suggests an alternative analysis: a biclausal analysis on which the IPP constituent is a non-verbal predicate and the coda is a subordinate clause acting as its subject.⁶ This situation is illustrated in Figure 3.6. (Note that there are various assumptions we could make about the structure of non-verbal predication in K'ichee'. Here I will abstract over the differences between them, and adopt a provisional analysis on which a PredP dominates both the non-verbal predicate and its subject; this can be taken to stand in for some

^{6.} Larsen describes this structure as "not unlike the structure of cleft constructions in English"; in fact, it is one of the structures which have been suggested for pseudoclefts in English and other languages (*e.g.* Lambrecht 2001). However, pseudoclefts have a number of other special properties which it is not clear whether ex situ focus clauses share.

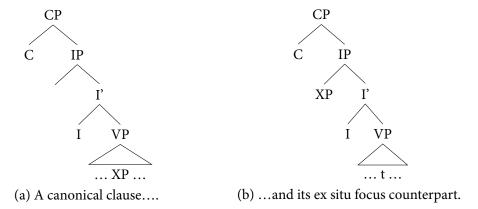


FIGURE 3.5: Canonical and focus movement clauses on the monoclausal analysis. The structures in (a) and (b) are identical; the only difference is movement of the focused XP in (b).

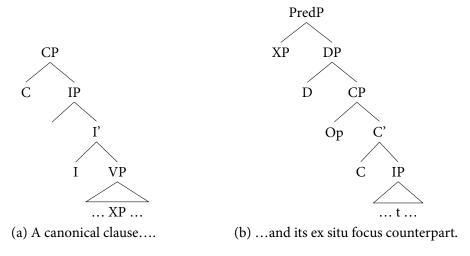


FIGURE 3.6: The biclausal analysis (to be rejected). On this analysis, ex situ focus clauses contain additional structure which is not present in canonical clauses.

other — likely more complicated — structure whose details do not matter here.)

Larsen offers one piece of evidence for the biclausal analysis: when the IPP constituent ends in a word that participates in phrase-medial/phrase-final allomorphy, that word takes its phrase-final form. For instance, in 67 the enclitic =ta(j) retains its final j, and in 68, the final [h] in jaah is pronounced.

- (67) Ma [are']_F =taj x-ch'ay-ow ri achii.

 NEG [3sg]_F =NEG CPL-hit-AF D man

 It wasn't [him]_F who hit the man. Momostenango K'ichee', Larsen 1988, p. 516
- [Ch+o jaah] k'oo = wiih.
 [P+A3s:in.front house] EXS = ADJ.F
 It's [in front of the house.]_F MOMOSTENANGO K'ichee', Larsen 1988, p. 537

He takes this to constitute evidence for the biclausal analysis:

This suggests that the Focussed constituent [*i.e.* the constituent in IPP position] is actually a non-verbal predicate and that there is a clause boundary before the Focus Antipassive [*i.e.* AF] verb form.

p. 516

Unfortunately, the data is not completely clear here. Henderson (2012) offers examples in which words at the end of the IPP constituent take their phrase-medial form, and concludes that there is no intervening clause boundary.

(69) Na iwir =ta x-r-il le k'amol b'e.

NEG yesterday =NEG CPL-A3s-see D leader

It wasn't yesterday that he saw the leader.

Henderson 2012

And Yasavul (2013a) finds variation between phrase-medial and phrase-final forms in this context.

(70) $[Kab']_F = ta \quad x-ki-tij-o. \quad X-ki-tij \quad [lej.]_F$ $[candy]_F = NEG CPL-A3p-eat-ss CPL-A3p-eat [tortilla]_F$ They didn't eat $[candy.]_F$ They ate $[tortillas.]_F$

(71) [Oj]_F =taj x-oj-war-ik. Aree [a Miguel.]_F
[1pl]_F =NEG CPL-A1p-sleep-ss foc [youth Michael]_F
[We]_F didn't sleep. It was [Miguel.]_F PLAYA GRANDE K'ichee', Yasavul 2013a

Still, let us suppose that a way could be found to account for this variation. There would appear to be another highly desirable consequence to adopting the biclausal analysis which Larsen suggests. As I argued in Velleman (2011b), such an analysis would provide us with an explanation for the DP effect in the IPP constituent which was mentioned above, and which will be described in more detail in the following section.

3.2.1.1 The DP effect

In at least some dialects of K'ichee', including CNK, there is a strong effect of syntactic category on the use of focus particles in focus movement clauses. If the IPP constituent in a focus movement clause is an adverb, a PP, or a nominal expression smaller than a full DP, the use of a focus particle is entirely optional.

- (72) (Aree) [leej] $_{\rm F}$ ka-tij-ow chla'. FOC [tortilla] $_{\rm F}$ INC-eat-UNACC DEM They eat [tortillas] $_{\rm F}$ there.
- (73) (Aree) [Nahualá]_F k-in-b'ee = wih. FOC [Nahualá]_F INC-B1S-g0 = ADJ.F I'm going [to Nahualá.]_F
- (74) (Aree) [p+u-wi' le jah]_F x-u-riq = wih. FOC [$p+a3s-top\ D$ house]_F CPL-A3s-find = ADJ.F He found it [on top of the house]_F (i.e. in the attic)

But if the IPP constitent is a full DP introduced by one of the overt determiners *ri*, *le* or *we*, the use of a focus particle becomes mandatory (López Ixcoy, 1997).

Aree is the most commonly used focus particle in this context, and it leaves the truth conditions of the clause unaltered. *Xeew* 'only' is also attested as a focus particle (López Ixcoy 1997, Can Pixabaj and England 2011), but it leads to truth-conditional differences.

Note that syntactic DP-hood, not semantic definiteness, is the crucial factor here. For instance, personal pronouns — which are semantically definite, but which constitute nouns in K'ichee' and not determiners or DPs, as we saw in §2.2.4.1 — can appear in IPP position in the ex situ focus construction without a focus particle.

(76)
$$[In]_F x$$
-in-riq-ow-ik.
 $[Isg]_F CPL$ -B1s-find-AF-ss
 $[I]_F found it.$

This use of *aree* with DPs in ex situ focus is reminiscent of another use of *aree* — in ordinary copular clauses. Recall from §2.2.3 that in K'ichee', bare nouns can be used as nonverbal predicates; and when they are used in this way, *aree* is not required.

But if a full DP is to be used as a predicate, it must be introduced by aree.

(78) Le nab'ee cofradia, aree le Santa Cruz,

D first cofradia BE D Santa Cruz

aree la' nab'ee cofradia,

BE DEM first cofradia

y le ukaab' cofradia, aree le Sacramento.

and D second cofradia BE D Sacramento

The first cofradia was the Santa Cruz, that was the first cofradia, and the second cofradia was the Sacramento.

Ajpacajá

In other words, both in the IPP constituent of an ex situ focus clause and in the predicate of a copular clause, we find the pattern shown in Table 3.2. This similarity between focus movement clauses and copular clauses suggests an analysis on which focus movement clauses simply *are* copular clauses — that is, suggests that the biclausal analysis is correct.

	Pivot in focus movement clause		Predicate in copular clause	
	With aree	Without aree	With aree	Without aree
Definite DP	√	х	✓	Х
Bare noun	✓	✓	✓	✓

TABLE 3.2: The DP effect in focus movement clauses and in copular clauses.

We might flesh out this suggestion as follows. Suppose we assume that copular clauses with and without *aree* have different structures, as illustrated in Figure 3.7. In those without *aree*, a bare noun or adjective functions as the head of a PredP; but a full DP cannot appear in this position. In those with *aree*, on the other hand, *aree* functions as the head of a PredP, and takes two arguments in the usual way; in that case, either argument — or both — can be a full DP with an overt determiner.

I should mention again here that I am using Pred and PredP as placeholders for whatever structure ought to be assigned to nonverbal predication clauses. The specific details of this

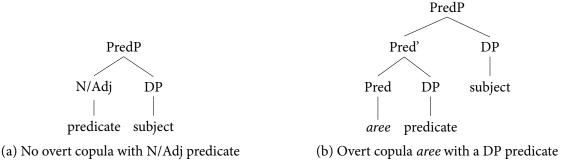


FIGURE 3.7: Two structures for copular clauses.

supposition are not important here; what is important is that two different structures are posited for copular clauses with and without *aree*. Given that, we might posit a similar distinction between two different types of ex situ focus clause, as illustrated in Figure 3.8. In those without *aree*, the IPP constituent is the head of a PredP; but as in ordinary copular clauses, it cannot be a full DP. In those with *aree*, the IPP constituent and the coda are both arguments of a copular predicate, and the IPP constituent may be a full DP with an overt determiner.

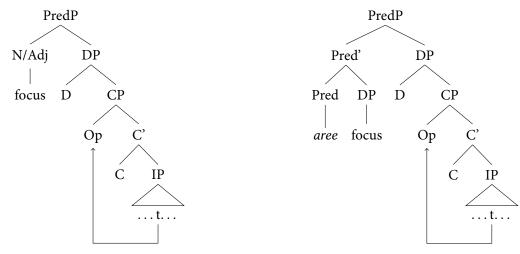
But there are several problems with the idea that the biclausal analysis could account for the DP effect seen with *aree*.

The first problem is that *aree* is not the only focus particle which can render a DP grammatical in IPP position. *Xeew* 'only' has the same effect.

(79) Pero xeew =na =k'u ri qa-taat qa-naan ri' eta'ma-n-naq jas ri qas but only =prosp =then D A1p-father A1p-mother DEM know-AP-PERF what c truly mera u-b'ii'. exact A3s-name

But surely only our ancestors knew its real name.

Ajpacajá



- (a) No overt copula with N/Adj ex situ focus
- (b) Overt copula aree with a DP ex situ focus

FIGURE 3.8: Biclausal analysis of ex situ focus (to be rejected): two structures for ex situ focus clauses.

If we assume that the effect of *aree* comes about because *aree* is a copular predicate, then we would also have to analyze *xeew* as a copular predicate. Such an analysis would not be totally unprecedented. Koch and Zimmermann (2010) show that in Nlekepmxcin, sentences with an exclusive particle corresponding to English 'only' in meaning also require a special form of the copula: *cuk*^w rather than the usual copula *ċe*; this suggests that it would not be a priori unreasonable to analyze K'ichee' as having a dedicated "exclusive copula." But I am not convinced that the K'ichee' data supports this analysis. We saw above that there was independent evidence for *aree* as a copular predicate — for we find clauses in which it joins two DPs. There is little independent evidence of this sort for *xeew* as a copular predicate. The one example I am aware of that might point to such an analysis is 80, in which *xeew* appears with a Set B agreement marker.

(80) X-u-ta-la =k'u ri Samuel ch+eech ri Jesé, CPL-A3s-ask-CELER =then D Samuel P+A3s:DAT D Jesse,

```
"La ee+xeew =ta =k'u a-k'ajool wa'?"

Q B3p+only =IRR =then A2s-son DEM

Ri are' x-u-k'ula-j u-wach, "K'a k'oo =na juun..."

D 3sg CPL-A3s-pair-ss A3s-face still EXS =PROSP one
```

Samuel said to Jesse, "Are these your only sons?" He replied, "There is still one more..."

Misal p. 158, 1 Samuel 16:11

The trouble is that some speakers I have worked with find the relevant clause in 80 odd or ungrammatical. In fact, the English or Spanish adnominal use of *only* or *único* — as in *your only sons* or *sus únicos hijos* — does not seem to have a straightforward counterpart in K'ichee'. In my experience, speakers asked for a literal translation of a sentence such as *Are these your only sons?* reply that there is no literal translation for it in K'ichee'; and asked to express the same thought in a different way, they will restructure the sentence so as to avoid the use of an adnominal exclusive particle. So while in general I have accepted the *Misal* as a reliable source of K'ichee' data, I am worried that in this particular case we may be looking at a translation effect — a K'ichee' speaker struggling to express in K'ichee' something that cannot be expressed without reformulation. This is especially worrisome because 80 is the only example I am aware of for the construction in question. More work is probably needed on this issue.

Another problem with using a biclausal analysis to explain the DP effect has to do with dialect variation. The generalizations about DPs given above hold true for the speakers of CNK with whom I have worked most closely. But they do not hold true for all speakers of K'ichee' — and perhaps not even for all speakers of CNK. Davies and Sam Colop (1990), the latter of whom was a native K'ichee' speaker from Cantel, give a number of examples in which a definite DP undergoes focus movement without *aree*.

- (81) Ri ak'al-ab' x-e-tzuqu-w ri a Lu'.

 D child-PL CPL-B3p-feed-AF D youth Peter

 The children fed Peter.
- (82) Ri a Lu' x-e-tzuqu-w ri ak'al-ab'.
 D youth Peter CPL-B3p-feed-AF D child-PL
 Peter fed the children. CANTEL K'ichee', Davies and Sam Colop 1990, p. 531

Yasavul (2011) and Yasavul (2013b) offers similar data from Playa Grande, a far northern variety of K'ichee'.

(83) Al María x-tij-ow ri kab'.

female María CPL-eat-AF D candy

MARÍA ate the candy.

PLAYA GRANDE K'ichee', Yasavul 2011, p. 24

In both of these dialects, the particle *aree* does exist — but it is apparently never obligatory for purely syntactic reasons. Yasavul (2013b) argues that it functions as a marker of so-called "identificational" focus, making its presence or absence in a sentence a matter of semantics and pragmatics, not of syntax. The lack of a DP effect in these dialects would be consistent with a biclausal account *if* it were generally the case that definite DPs could serve as syntactic predicates in these dialects without being accompanied by *aree*. But I have seen no data suggesting that this is the case. For that matter, I have conversed with K'ichee' speakers in Nahualá who are willing to focus a definite DP without using *aree*, but I have not observed any Nahualeños using definite DPs as nonverbal predicates in other contexts.

The third problem — and, in my view, the most serious — is that some constituent types that cannot be nonverbal predicates can still appear in IPP position in an ex situ focus clause without the use of a focus particle.⁷ For instance, we saw in §2.2.3 of Chapter 2 that prepo-

7. I am grateful to Kiril Shklovsky and Murat Yasavul for discussion on this point.

sitional phrases cannot be used as nonverbal predicates; and the addition of *aree* does not remedy this.

(84) * Ri nu-taat, (aree) pa chaak.

D A1s-father BE P work

Intended: My father is at work.

Instead, the existential predicate k'oo(lik) must be used.

(85) Ri nu-taat, k'oo pa chaak.

D A1s-father EXS P work

My father is at work.

But PPs often occur as ex situ foci with no overt focus particle; and indeed, adding k'oo(lik) to these sentences results in ungrammaticality.

(86) Le awaj-iib', k-a-b'an k'ax ch+k-ee,

D animal-PL INC-A2s-do harm P+A3s-DAT

xaq si ch+w-ee in tajin k-a-b'an =wi
just really P+A1s-DAT 1sg PROG INC-A2s-do harm

Those animals, when you do harm to them, it is to me that you do harm.

K'ache'laaj

- (87) * ... $xaq \ si$ $k'oo \ ch+w-ee$ $in \ tajin \ k-a-b'an = wi \ k'ax.$ just really EXS P+A1s-DAT 1sg PROG INC-A2s-do =ADJ.F harm *Intended*: it is to me that you do harm.
- (88) Chla' k-u'-tij-a =wi le u-joroon.

 DEM INC-go:A3s-drink-ss =ADJ.F D A3s-water

That was where she drank water.

Masaat

Similarly, we saw that nominals preceded by a numeral, or by the indefinite marker *jun* which is derived from a numeral, were rare at best and ungrammatical at worst as nonverbal predicates. But such nominals are well attested in IPP position in the ex situ focus construction without use of *aree* (López Ixcoy 1997, Can Pixabaj and England 2011). In other words, if we add more complete data to the table in Table 3.2, we see that the initial similarity between focus movement clauses and copular clauses has broken down.

	Pivot in focus movement clause		Predicate in copular clause	
	With aree	Without aree	With aree	Without aree
Definite DP	✓	Х	√	Х
Bare noun	\checkmark	✓	✓	✓
Indefinite NP	✓	√	√	Х
Prepositional phrase	✓	✓	X	X

TABLE 3.3: The similarity between focus movement clauses and copular clauses (shown in Figure 3.2) breaks down with more data.

3.2.1.2 Evidence from agreement and from nakedness

So we've seen that a biclausal analysis cannot fully account for the DP effect as hoped. In addition to this setback, there are several additional pieces of evidence that the biclausal analysis is incorrect.

First of all, the monoclausal and biclausal analyses lead to different predictions about agreement when the IPP constituent is a first- or second-person pronoun. On a monoclausal analysis, the IPP constituent is an argument of the coda verb, and so we expect the coda verb

to agree with it in person. On the biclausal analysis, on the other hand, the IPP constituent is not an argument of the coda verb. Rather, it is coreferential with a silent operator which is an argument of the coda verb. We would expect this operator to always produce third-person agreement — as it does in English pseudoclefts such as the following:

- (90) a. I decide.
 - b. I am (the one) who decides / *decide.
- (91) a. You are bothering me.
 - b. What's bothering me is / *are you.

In order to apply this diagnostic in K'ichee' we should consider clauses in which a non-third-person pronoun is found in IPP position.

Now, it is often difficult to distinguish a pronoun in IPP position from one which has undergone left-dislocation, and occasionally too it is difficult to distinguish one from a homophonous Set B marker. The cases in which it is easiest to establish that we are looking a pronoun in IPP position are those in which the coda contains an AF verb, for this verb form would not occur with a left-dislocated subject. Several such examples are given below.

```
ch+eech r-umaal wa' ri are',
(92)
     X-taa
      CPL-ask:PASS P+A3S:DAT A3S-by DEM D 3Sg
           "La at =k'u ri' ri k-ajaw-aal
                                             ri ee Judiy?"
          Q 2sg =then DEM D A3p-lord-INAL D PL Jew
      X-u-k'ula-i
                     u-wach ri Jesús,
      CPL-A3s-pair-ss A3s-face D Jesus
           At = va
                        =ne k-at-b'i-n-ik
                                                lee'."
           2sg =already =scal inc-b2s-say-AF-ss DEM
      (Jesus) was asked by him, "Are you the King of the Jews?" Jesus replied, "Look, it's
      you who says it."
                                                           Misal p. 218, Matthew 27:11
```

(93) Xaq si in k-in-jaq-ow =na ri i-juul ix+muq-utal =wih. just really 1sg INC-B1s-uncover-AP =PROSP D A2p-hole B2p+bury-CP.STAT =ADJ.F It is I who will open up your graves in which you are buried.

Misal p. 179, Ezekiel 37:12

Another place where it is possible to make the distinction is in clauses with the enclitic =ta(j), either as a marker of negation or as an irrealis marker. A left-dislocated constituent cannot have =ta(j) hosted on it; rather, as in 94, =ta(j) will be hosted on a later constituent. A constituent in IPP position, on the other hand, can and often will have =ta(j) hosted on it, as in 95.

- (94) "Wee k-aw-a-j at k-at-ch'o'j-in-ik, k-at-ch'o'j-in-a =na =k'ut.

 if INC-A2S-want-SS 2Sg INC-A2S-fight-AP-SS, IMP-A2S-fight-AP-SS =PROSP =then

 Aree in, na k-in-kowin =taj," k-u-chex-ik.

 CT 1Sg NEG ING-B1S-be.able =NEG INC-A3S-reply-SS

 "If you want to fight, fight then. As for me, I can't," he replied.

 Ajpacajá
- (95) Ri Luu' x-u-k'ula-j u-wach, x-u-b'i-j

 D Peter CPL-A3s-pair-ss A3s-face CPL-A3s-say-ss

 "Ja'i' q'eh, nu-taat, na in =ta ri'!"

 no EXCL A1s-father NEG 1sg =NEG DEM

 Peter replied to him and said "No sir, not me!"

 Misal p. 238, Luke 22:58

This diagnostic yields a few examples in which we can clearly say that a pronoun appears in IPP position, such as 96.

(96) La laal =ta =k'u si lal+k'oo =na ch+wach ri qa-taat Jakob'...?

Q 2sg.F =IRR =then really B2s.F+EXS =PROSP P+A3s:face D A1p-father Jacob

Are you greater than our father Jacob...?

Misal p. 141, John 4:12

Finally, there are cases in which it is clear that a pronoun has undergone focus movement because it is followed by an overt complementizer. This is possible in focus movement, but not in left-dislocation.

In all of the above examples in which a non-third-person pronoun appears in IPP position, the coda clause agrees with the moved pronoun. This would be unexpected if the coda clause was a headless relative; it is unsurprising on the monoclausal and nonconfigurational accounts.

Finally: in §3.1.2 we saw that free relative clauses cannot be naked. This poses a serious problem for the biclausal account of ex situ focus, which posits that the coda is a free relative clause — for codas are naked more often than not. Indeed, in all of the examples of ex situ focus which we have seen so far, the coda has been naked.⁸ This is inexplicable on the biclausal account. But it is easy to explain on the monoclausal account, which posits that the coda is part of the matrix clause. After all, declarative matrix clauses in K'ichee' are essentially never introduced by an overt complementizer.

For the reasons discussed in this section and the previous one, I believe that the biclausal analysis of the K'ichee' ex situ focus construction cannot be sustained. there are some other constructions for which a biclausal analysis — involving a free relative as an argument of the higher clause — is more viable. I will discuss several such constructions in the next section.

3.2.2 Related constructions

3.2.2.1 The clothed-coda construction

In §3.2.1.2 I pointed out that codas in ex situ focus sentences were almost always naked, and that this constituted evidence against a biclausal analysis of these sentences. But this

8. Thanks to Kiril Shklovsky (*p.c.*) for pointing out this problem. In Shklovsky 2012, p. 133 he raises a similar objection to biclausal analyses of focus movement in Tseltal.

leads us to a slightly puzzling fact. Codas in K'ichee' are almost always naked, but they are not *quite* always naked, as shown in the examples below. We might call the construction found in these examples the "clothed-coda" construction.

- (97) Jun nim-alaj k'anti' le xim-ow-naq =chi le campana pa la' le juyub'.

 one big-intens snake d/c tie-af-perf =now d bell p dem d mountain

 A huge snake was what tied up the bell on that mountain.

 Ajpacajá
- (98) *Pe ma na nojel juyub' =taj ri utz ka-b'aan =wi kotz'i'j.*but because NEG1 all mountain =NEG2 D/C good INC-do:PASS =ADJF flower

 Because it's not on all mountains that ceremonies can be done. *Ajpacajá*
- (99) Chaniim, na jun xpeq =ta =chik le k'oo-lik.

 now NEG1 one frog =NEG2 =anymore D/C EXS-SS

 Now it's not a frog that's there.

 QUIS
- (100) Xaa =taq ak'al-aab' le ka-ki-ya' =kan ab'aj.

 merely =PL child-PL D/C INC-A3s-put =behind rock

 It's mere children who leave rocks (there).

 Guarchaj
- (101) Maja' naj ri k-in-pee in.
 not.yet long D/C INC-B1s-come 1sg

 It's not long since I was there.

 Guarchaj

The clothed-coda construction is important because, depending on how we analyze it, it may constitute a source of information about which specifier position is targeted by focus

^{9.} If we assume the monoclausal analysis of ex situ focus clauses, then we can show that these clauses involve a complementizer and not a determiner, because the monoclausal analysis does not involve a determiner projection above the coda. If we assume the biclausal analysis, on the other hand, they could be analyzed either as determiners or as complementizers.

movement. Recall that in §2.3.2 I mentioned two possibilities: focus movement could be to the specifier of CP or to the specifier of IP. If we assume that the clothed-coda construction has the same monoclausal analysis as the naked-coda construction, then — for reasons I will discuss in a moment — this will force us to conclude that focus movement is to the specifier of CP, *contra* Aissen (1992), Duncan (2010) and Henderson (2012). On the other hand, if we assume that the clothed-coda construction has a different structure, then it does not provide us with any information one way or the other about the naked-coda construction; and this will leave us free to follow Aissen, Duncan and Henderson in assuming that focus movement is to the specifier of IP.

Clothed codas are somewhat more common when the IPP constituent consists entirely of *aree* plus a demonstrative (102–108),¹⁰

```
(102) Aree la' le k'oo pa u-moxq'ab' q'iij.

aree DEM D/C EXS P A3s-left.hand day

That's what's to the south (lit. "to the sun's left")

Ajpacajá
```

(103) Choqje' le quul, le k'a'aam pa =taq k'ache'laaj,
also de quul, de rope de pedistr wilderness
aree la' le ka-ki-koj ch+ee xim-b'al r-ee =taq le k'im.
aree dem d/c inc-a3p-use p+a3s:dat tie-instr a3s-dat =distr de straw
Also the quul plant, the "rope of the woods," that's what they use to tie up the straw.

Ajpacajá

^{10.} There are actually two possible analyses for these sentences. One possibility is that *aree* is a focused instance of the pronoun which I usually write *are*, and the following demonstrative is being used adverbially. The other is that *aree* here is the copula, and the demonstrative when there is one is one of its arguments. On the first analysis, the tokens of *aree* in these examples should be glossed 3sg; on the second, they should be glossed BE.

(104) K-uk'a'-m ri ki-b'aatz', xaq si teren ch+k-iij,
A3p-carry-perf d A3p-thread just really following p+A3p-behind

y aree wa' we ka-ki-nuk' ri ki-q'aaq'...
and aree dem d/c inc-A3p-light d A3p-fire

They carried their thread (i.e. "tinder"), it was always with them (lit. "always")

followed them"), and that's how they lit their fire...

D CPL-A3p-use-CAUS-INSTR-SS aree D straw

her hair.

(105) Aree wa' le x-ki-jat'-ib'e-j r-eech =taq le u-wi' le k-o'ch, aree dem d/c cpl-a3p-be.useful-instr-ss a3s-dat =distr d a3s-top d a3p-house le x-ki-chokon-isa-b'e-ej aree le k'im.

That's what they used to make the roofs of their houses, what they used was straw.

Ajpacajá

Ajpacajá

Misal p. 182, John 11:2

(106) Wa' wee Mari'y, aree ri' ri x-koj-ow ri Qa-qajaaw pa k'ok'-alaj b'uuk,

DEM D Mary, aree DEM D/C CPL-use-AF D A1p-lord P sweet-INTENS??

xuq x-u-chaq-isa-j ri r-aqan ch+eech ri u-wi'.

also CPL-A3s-dry-CAUS-SS D A3s-foot P+A3s:DAT D A3s-hair

This Mary was the one who poured perfume on our Lord and dried his feet with

The clothed coda construction with *aree* and a demonstrative in IPP position seems to have been a favorite of Ajpacajá's; other speakers or writers in my corpus use it less frequently, but do occasionally use it.

(107) Aree la' le x-in-kowin-ik x-in-ya' k-estudio le =taq ee w-alk'u'aal. aree DEM D/C CPL-B1s-be.able-SS CPL-A1s-give A3p-study D =DISTR PL A1s-child With that I was able to give an education to my children. B'atz

(108) Aree la' le x-in-kowin-ik x-in-b'i-ij.

aree DEM D CPL-B1s-be.able-SS CPL-A1s-say-SS

That's what I could say.

K'ache'laaj

Something similar occurs when the IPP constituent is a pronoun followed by a demonstrative. Here too, clothed codas are fairly common.

(109) *Ix ri' ri ix+r-atz'am-iil u-wach uleew.*2pl DEM D/C B2p+A3s-salt-INAL A3s-face earth

It's you who are the salt of the earth. *Misal* p. 594, Matthew 5: 13–16

As I have already mentioned, there are two approaches we can take to the clothed-coda construction. One is to assume that it has fundamentally the same monoclausal structure as the more common naked-coda construction. The other is to assume that the clothed-coda construction has a biclausal structure while the naked-coda construction (for reasons argued above) has a monoclausal one. There are, in my opinion, advantages and disadvantages to both approaches.

Suppose we take the first approach, and assume that clothed-coda and naked-coda clauses have the same monoclausal structure. This assumption leads almost immediately to a conclusion that I mentioned in §2.3.2: that focus movement targets the specifier of CP, rather than the specifier of IP as previous authors have supposed. For on a monoclausal analysis, it is fairly clear that the particle which introduces the coda is a complementizer — just like the complementizers found in relative and interrogative clauses. (The alternative would be to analyze it as a determiner; but on the monoclausal analysis, no determiner projection is present at the correct level in the clause.) And then the same argument from word order which we applied in those clauses applies here too: since the moved constituent precedes the complementizer, it must be in the specifier of CP and not in a lower position.

The monoclausal analysis of clothed-coda clauses also offers an explanation for a property that would otherwise be hard to explain. In clothed-coda clauses, the coda is introduced by an overt complementizer. But — unlike, for instance, a relative clause — that complementizer is never preceded by a wh-word. (At the risk of stretching the metaphor to the breaking point, we might say that clothed codas are never *fully* clothed: the functional material which introduces them is never quite so elaborate as the functional material which introduces relative clauses.) For instance, in example 110 we find the wh-word *jachke* 'which' before the complementizer which introduces a relative clause; but as 111 shows, introducing this wh-word before the complementizer which introduces a clothed coda — in a context where it would be semantically appropriate — leads to ungrammaticality.¹¹

```
(110) le chokonsab'al jachke le ka-chok-on

D material which C INC-make-AP

ch+ech ch+u-b'an-iik le campana.

P+A3S.DAT P+A3S-make-NMLZR D bell

the material which they would make the bell with

Guarchaj
```

```
(111) Aree wa' (*jachke) le (*jachke) x-ki-jat'-ib'e-j
aree DEM which D/C which CPL-A3p-be.useful-INSTR-SS
r-eech =taq le u-wi' le k-o'ch,...
A3s-DAT =DISTR D A3s-top D A3p-house
```

That's what they used to make the roofs of their houses,... Adapted from *Ajpacajá*

The monoclausal analysis effortlessly predicts that this should be the case. For as we have seen, all wh-words must move to the specifier of CP. On the monoclausal analysis of the clothed-coda construction, this movement is blocked, because the specifier of CP is already filled by the word which has undergone focus movement.

11. And for that matter, *jachke* cannot be introduced after the complementizer either.

Despite these appealing features, there are two major problems with a monoclausal analysis of the clothed-coda construction. The first problem is that such an analysis would require us to posit an overt complementizer in a declarative main clause. And this is something that is not otherwise possible in K'ichee'; in particular, canonical-order declarative main clauses are never introduced by a complementizer. So we would need to explain why focus movement makes a complementizer possible in clauses that could not otherwise be introduced by one. I do not see any straightforward way of doing this.

The second problem with a monoclausal analysis of the clothed-coda construction is that it would require us to posit two nested complementizer positions in K'ichee'. As we saw above, it follows almost immediately from the monoclausal analysis that focus movement targets the specifier of CP, and that the particles *we*, *le* and *ri* that follow the focus in the clothed-coda construction are complementizers. And I think at that point it is only reasonable to assume that focus movement in naked-coda clauses is also to the specifier of CP, and not to some other position.¹³ But if we assume this then the problem arises of how to analyze

12. There is actually one small complication here, concerning the complementizer wee. This complementizer generally corresponds to English 'if' or 'whether', introducing the antecedent of a conditional or the complement of a verb of asking or wondering. But it is occasionally used in a way that corresponds more closely to English 'perhaps'; and on this use, it can introduce an independent, declarative main clause. This use is especially common when wee is accompanied by the scalar enclitic =ne(') (see Velleman 2011b), but occasionally it is used in this way without being accompanied by =ne('). If the wee that is glossed 'perhaps' is the same lexical item as the one that is glossed 'if' or 'whether' (or if it at least occupies the same syntactic position), then this would provide another example of an overt complementizer in a declarative main clause.

But actually, I am not sure if this would help with the problem at hand. As we will see in a moment, if we adopt a monoclausal analysis of the clothed-coda construction, it will force us to analyze K'ichee' as having two distinct, nested complementizer projections. The complementizers we, le and ri must be analyzed as heads of the lower CP, and the complementizers wee 'if, whether, perhaps', la (marking polar questions) and chi (introducing finite complement clauses) must be analyzed as heads of the upper one. So the use of wee discussed in this footnote would constitute evidence that the higher CP can have an overt head in declarative main clauses. But there would still be no independent evidence that the lower CP can have an overt head in declarative main clauses.

13. One reason for this is parsimony: it would be quite odd to assume two different kinds of focus movement, targeting two distinct positions, without positive evidence for it. What's more, if we did assume two different kinds of focus movement, we would need to explain why only one occurred in main clauses with an overt

sentences like 112, in which a moved focus follows the complementizer *chi*, or like 113, in which a moved focus follows the complementizer *wee* 'if'.

(112) *Context:* A woman whose husband has been 'stolen' by the spirit of a mountain goes to a diviner to ask where he has gone.

Y le are' x-u-b'i-j ch+eech chi aree le juyub' x-ow-an-ik.

and D 3sg CPL-A3s-say-ss P+A3s:DAT that FOC D mountain CPL-hide-AF-ss

And he said to her that it was the mountain who had taken him. K'ache'laaj

(113) Ma wee xaa jee ri' ka-qa-b'an-oh, na utz =taj.
but if just like DEM INC-A1p-do-ss NEG1 good =NEG2
But if that's the way we do it, it's no good.

Ajpacajá

The only possibility I see here is to assume a second, higher complementizer position.¹⁴ This is not entirely unprecedented. Rizzi ("The Fine Structure of the Left Periphery") among others has argued that CP should be split into two levels, with some of the evidence coming from similar word order puzzles involving left-dislocation or movement in other languages. (For instance, in Italian, the complementizer *di* introduces non-finite clauses and occurs *after* left-dislocated constituents, while the complementizer *che* introduces finite clauses and comes *before* left-dislocated constituents.) It is possible that this approach could be used

complementizer — that is, why clothed-coda clauses always have the moved focus *before* the complementizer and not *after* it.

Another reason is that only one constituent in a clause can undergo focus movement. If there were two possible focus positions — that is, if focus movement in naked-coda clauses was to the specifier of CP while focus movement in clothed-coda clauses was to the specifier of IP — then we would need to explain why it was never the case that both of those specifier positions were filled at the same time.

14. Aissen (1992, p. 74) discusses a similar issue with respect to left-dislocation rather than focus movement. She assumes that in Mayan languages with what she calls 'internal topics', left-dislocated constituents occupy the specifier of CP. But in these languages, left-dislocated constituents can occur in complement clauses — and when they do, they follow the complementizer. She suggests a possible analysis involving two nested CPs, but does not pursue it in detail.

to salvage the monoclausal analysis of the clothed-coda construction, but it is not clear to me whether the details in K'ichee' are compatible with the structures Rizzi and others have posited in other languages. I will set this question aside here.

Suppose, on the other hand, that we take the second of the two approaches I mentioned above, and assume that clothed-coda clauses have a biclausal structure while maintaining a monoclausal structure for naked-coda clauses. The simplest way to do this — and the only way, as far as I can tell, that would not require additional stipulations — would be to assume that clothed-coda clauses have precisely the same structure that I considered and rejected for naked-coda clauses in §3.2.1, in which the coda is a free relative and the focused constituent is a predicate taking the coda as its subject.

The first thing to note here is that this analysis immediately clears up the problems I described above concerning complementizers. We have said that complementizers do not generally occur in declarative main clauses. But on a biclausal analysis, the complementizer in a clothed-coda clause *is not in* a declarative main clause — rather, it introduces a subordinate clause of some sort. What's more, if we adopt a biclausal analysis of clothed-coda clauses, we regain some freedom in our choice of analyses for naked-coda clauses. We are no longer forced to assume that the focus in a naked-coda clause occupies the specifier of CP. (Recall that we only made this assumption in the first place in order to maintain similarity in structure between clothed-coda and naked-coda clauses. Once we abandon the idea that these two clause types have the same structure, facts about word order in clothed-coda clauses no longer constrain our analysis of naked-coda ones.) Instead, we are free to assume — following Aissen (1992) and Henderson (2012) — that the focus in a naked-coda clause is in the specifier of IP. This in turn relieves us of the need to posit a split CP or two nested CPs.

This biclausal analysis leads to some testable predictions, though I do not have sufficient data to test them. As discussed in §3.2.1.1, if we assume that the focused constituent in

this construction is a syntactic predicate, then it follows that there should be restrictions on the syntactic category of the focused constituent: that DPs should not be focusable in this construction without using the copula *aree*, and that PPs should not be focusable in it without using the existential predicate *k'oo*. In that section we saw examples of naked-coda clauses which clearly violate that prediction. But in the small set of clothed-coda clauses I have collected, there are no examples which violate it. If we assume the biclausal analysis of clothed-coda clauses then we predict that this is not an accidental gap, but that for instance the clothed-coda construction should be ungrammatical as a way of focusing a PP.

There is also one challenge I should mention for the biclausal analysis. In the discussion above of the monoclausal analysis, I mentioned that clothed codas are never 'fully clothed' — that is, that they are never introduced by a wh-word in addition to the complementizer. This fact was easy to explain on the monoclausal analysis. It becomes hard to explain on the biclausal analysis that I am considering here. If the coda is simply a free relative clause, then it should be possible to introduce it with any of the combinations of function words that can introduce any other free relative, including 'crowded' configurations involving two or even three function words. If we adopt the biclausal analysis, we must explain why this does not occur.

3.2.2.2 Free relatives as subjects

So we have seen that clothed-coda clauses *may* have a biclausal structure, in which a free relative functions as a copular subject. In this section I will present examples of two minor constructions which I belive *definitely* have this biclausal structure. In the first of these constructions, the free relative subject has undergone left-dislocation. In the second, the free relative is the subject of a predicational copular clause rather than a specificational one.

Left-dislocated free-relative subjects In general, it is common for copular subjects in K'ichee' to be left-dislocated. Indeed, it is difficult to find examples of copular clauses with *aree* whose subjects are not left-dislocated; the second clause in 114 may be such an example, if the demonstrative *la*' is analyzed as its subject — but left-dislocation occurs more often than not, for instance in the remaining clauses in 114.

```
(114) Le nab'ee cofradía, aree le Santa Cruz,

D first cofradía BE D Santa Cruz

aree la' nab'ee cofradía,

BE DEM first cofradía

y le ukaab' cofradía, aree le Sacramento,

and D second cofradía BE D Sacrament

o le Corpus Christi ka-b'i-x ch+ee,

or D Corpus Christi INC-say-PASS P+A3S:DAT

y urox cofradía, aree la' le Transfiguración o le Qajawaal...

and third cofradía BE DEM D Transfiguration or D lordship

The first cofradía was the Santa Cruz, that was the first cofradía, and the second
```

Unsurprisingly, then, we find examples of the same pattern where the left-dislocated copular subject is a free relative. We have already seen one example of this in 43, repeated below.

cofradía was the Sacrament or the Corpus Christi as it's called and the third

Ajpacajá

cofradía, that's the Transfiguration or "Qajawaal."

(43) Pero le mas oj to'-w-naq choq are la' le e turistas pues.

but D/C most B1p help-AF-PERF also COP DEM D PL tourists don'tchaknow

But what has helped us the most in addition is, you know, all the tourists.

B'atz'

Other examples include the following:

- (115) Le x-ki-chokon-isa-b'e-j aree le k'im.

 D/C CPL-A3p-useful-CAUS-INSTR-SS BE D straw

 What they used (for their roofs) was straw.

 Ajpacajá
- (116) Y le k'oo =apan ch+u-naqaaj aree le Uwa'l Ti'x.

 and D/C EXS =out P+A3s-near BE D Uwa'l Ti'x.

 And what's close by out there is (the river) Uwa'l Ti'x.

 Ajpacajá
- (117) Aree =k'u la' le x-ul =kan waraal, aree la' le waqiib'

 CT =CT DEM D/C CPL-arrive =down here BE DEM D six

 le xoq r-achi'l =loq x-pee-tik.

 c also A3s-with =hither CPL-come-ss

 As for the (bell) that arrived down here, it was the sixth, which had also come here together (with the others).

 Ajpacajá
- (118) Ri k'oo pa we Aab' Uxlaab' aree ri k'aslemaal.

 D/C EXS P D mist breath BE D

 What is in the Word (lit. "the mist, the breath") is life. Misal p. 78 John 1:4

Tellingly, in these sentences, the free relative — like other free relatives — cannot be naked. The initial determiner/complementizer cannot be removed without ungrammaticality resulting; we already saw one judgment to this effect in example 47a.

(47a) * Pero mas oj to'-w-naq choq are la' le e turistas pues.

but most bip help-af-perf also cop dem d pl tourists don'tchaknow

Intended: But what has helped us the most in addition is, you know, all the tourists.

This contrasts with ex situ focus sentences, in which the determiner/complementizer before the coda is optional and rarely overt. And it gives us strong evidence that, unlike ex situ focus sentences, these sentences really are biclausal and really do have free relatives as subjects.

Relatedly, we occasionally find left-dislocated free relatives functioning as frame-setting topics: rather than being followed by a copula with a DP complement, they are followed either by a copula with a full clause complement (as in 119, where the copula is in Spanish), or immediately by an independent clause, as in the other two examples below.

- (119) Le x-u-maku-j =k'ut es que ri' ri are', na utz ta

 D/C CPL-A3s-sin-ss =then is that DEM D 3sg NEG1 good =NEG2

 u-chokon-isa-b'e-x-ik le k'ache'laaj k-u-b'an-oh.

 A3s-useful-CAUS-INSTR-PASS-NMLZR D forest INC-A3s-do-ss

 What he did wrong is, he was mistreating the forest (lit. 'the use of the forest that he was making wasn't good').

 K'ache'laaj
- (120) Context: An account of the construction of the church in Nahualá

 Aree =k'u le x-u'-b'an-a' =wi pa ri nab'ee q'iij chaak,

 CT =CT D/C CPL-go:A3s-do-SS =POL.F P D first day work

 x-k-eta-j jampa' r-iij, jampa' le r-aqan, jampa' le

 CPL-A3p-measure-SS how.much A3s-back how.much D A3s-leg how.much D

 u-wach...

 A3s-face

As for what they did on the first day of work, they measured how broad, how tall and how wide it would be... *Guarchaj*

(121) *Context*: In the past, women were not valued equally with men or given opportunities, but...

```
Le ka-q-il kamiik pa le qa-tinamiit,

D/C INC-A1p-see today P D A1p-town

ee+k'oo =chi ixoq-iib' sin k-el-esa-m =chi jun ki-wuuj,

B3p+EXS =now woman-PL AFF INC-exit-CAUS-PERF =now one A3p-paper
```

```
ya ee+b'ee-naq =chi pa tijob'al.
already B3p+go-PERF =now P school
```

What we see in our town today, there are women who have earned (*lit*. 'taken out') a diploma, who have already gone to school.

Ixoqiib'

Free relative subjects in predicational clauses There is one more case where we can confidently say that a free relative clause is being used as the subject of a higher copular clause. This is when the higher clause is predicational rather than specificational. This construction is not especially common, but it certainly is attested, as in the following sentences:¹⁵

- (122) Xaq si tziij la' le ka-ki-b'i-ij.

 just really true DEM D INC-A3p-say-ss

 What they say really is true.

 Guarchaj
- (123) E+k'ii =na =k'ut ri x-ki-muli-j =la k-iib'.

 B3p+many =PROSP =then D CPL-A3p-gather-ss =hither A3s-self

 (Those) who were gathered together were many.

 Ajpacajá
- 15. Examples 48 and 49, repeated below, may also constitute instances of this construction.
- (48) Siib'alaj q'aaq' k-u-b'an le ka-b'ee =wi le are'. very hot INC-A3s-do D/C INC-go =ADF.J D 3sg Where he's going is very hot.
- (49) Nim u-b'an-taj-iik le ka-b'ee =wi le are'. great A3s-do-CP-NMLZR D/C INC-go =ADF.J D 3Sg Where he's going is important.

It is not entirely clear to me whether the free relatives in these examples should be analyzed as subjects ('Where he's going *is* very hot') or as locative adjuncts ('Where he's going, *it is* very hot').

(124) B'ay, ri' ri achih, x-u-ch'ob'-oh cher,
well dem d man cpl-A3s-understand-ss that
inche, na utz =ta ri tajin k-u-b'an-oh
yeah NEG1 good =NEG2 d PROGR INC-A3s-do-ss

Well, the man, he understood that, yeah, what he was doing wasn't good.

K'ache'laaj

Note that in these examples, the constituents which are analyzed as a free relative clause have the same properties as ordinary free relative clauses in K'ichee' — and in particular, they are not naked. Similarly, the constituents which are analyzed as predicates are constituents that we already know can be used as nonverbal predicates in other constructions: adjectives in both of the above cases. This means that the impediments we found to a biclausal analysis for ex situ focus sentences do not exist for examples like 123 and 124.

3.2.2.3 Free relatives as copular complements?

Since free relatives can be used as copular subjects, the question arises whether they can also be used as the complement of a copular clause. I am not aware of any unproblematic examples of this — and I find this surprising, since I am also not aware of any reason it should not be possible in K'ichee'. (Of course, it may be that the construction in question is grammatical, but rare enough — for pragmatic or stylistic reasons perhaps — that it does not occur in my corpus.) But consider the construction exemplified below:

(125) *Context:* A wild deer who always found his skinny legs unattractive has just escaped by running and jumping from a pack of wild dogs.

Y le w-aqan ri sib'alaj tyo'w k-in-na' ch+ee, and D A1s-leg c very fierce INC-A1s-feel P+A3s:DAT

```
aree [ x-yo'w = chi = na b'eh ch+w-eech x-in-k'asi'-k. ] aree [ CPL-give:AF = now = PROSP road P+A1s-DAT INC-B1s-live-SS ]
```

And my legs that I really disliked are what gave me a way to live.

Masaat

There are two analyses I can think of for this construction. The crucial question is how to analyze the constituent which I have placed in square brackets above. One possibility is to treat it as a free relative clause, and as the complement of copular *aree*. The problem with this is that if it is a free relative clause, it is a naked free relative clause — which is generally impossible in K'ichee'. The other possibility, then, is to treat the bracketed constituent as a matrix clause, and to reanalyze *aree* as a third-person singular pronoun *are*' which has undergone focus movement, as shown in 126. In this case, this construction is similar to the type of clothed-coda clause in which the IPP constituent consists of *aree* plus a demonstrative, or of another pronoun plus a demonstrative; the difference is that here there is no demonstrative, only *aree*. The property of the construction is similar to the type of clothed-coda clause in which the IPP constituent consists of *aree* plus a demonstrative, or of another pronoun plus a demonstrative; the difference is that here there is no demonstrative, only *aree*. The problem with the interval of the constituent consists of the crucial question is similar to the type of clothed-coda clause in which the IPP constituent consists of the crucial question is similar to the constituent consists of the crucial question is similar to the constituent consists of the crucial question is similar to the constituent consists of the crucial question is similar to the constituent consists of the crucial question is similar to the constituent consists of the crucial question is similar to the crucial question in the crucial question is similar to the crucial question in the crucial question is similar to the crucial question in the crucial question is constituent as the crucial question in the crucial question is constituent as the crucial question in the crucial question is constituent as the crucial question in the crucial question is constituent as the crucial question in th

```
(126) Y le w-aqan_i ri sib'alaj tyo'w k-in-na' ch+ee, and D A1s-leg C very fierce INC-A1s-feel P+A3s:DAT

[are'_i]_F x-yo'w = chi = na b'eh t ch+w-eech x-in-k'asi'-k.

[3sg]_F CPL-give:AF = now = PROSP road P+A1s-DAT INC-B1s-live-SS

And my legs_i that I really disliked, [they_i]_F gave me a way to live. Masaat
```

16. It is crucial in this example that the verb is an AF form. So we must analyze the clause which was placed in brackets in 125 as having had its subject extracted in one way or another. The free relative analysis and the reanalysis of *aree* as a focused pronoun *are* are both consistent with this; but other possible analyses would not be.

- 17. A similar construction has been noted by some authors in Yucatec.
- (i) Le ah kòonol_i =o', [leti'_i]_F túun y-áalkab.
 D M seller =CL, [that.one]_F PROG:A3 Ø-run
 The seller_i, [he_i]_F is running.

YUCATEC, Skopeteas and Verhoeven 2012

In the same story (indeed, immediately adjacent to the example in 125), there is the sentence in 127, which has the same structure.

```
(127) Le w-uk'aa' sib'alaj utz k-inw-il-oh,

D A1s-horns very good INC-A1s-see-ss

aree raj x-in-yo'w pa kamikaal.

aree almost CPL-B1s-give:AF P death
```

My horns that I liked so much are what almost sent me to my death. Masaat

And several other examples of this are found in other texts — for instance, in the final two clauses of 128, and in 129, both taken from a discussion of the duties of different municipal officers.

```
Ri are', are u-pataan k-u-tz'api-j
(128)
                                             le jun winaq pa chee'
       D 3sg aree A3s-cargo INC-A3s-shut-ss D one person P wood
            we k'oo jasa x-u-maku-uj.
            if EXS what CPL-A3s-sin-ss
                    =k'u x-u-b'an
       las
           =na
       what =PROSP =then CPL-A3s-do =hither
            wee x-q'aat
                            tziij p+wi'
                                           chi k-ook
                                                          pa carcel,
                CPL-cut:PASS word P+A3S:on that INC-enter P jail
            entonces aree ka-tz'api-n-ik,
                    aree INC-shut-AF-SS
            then
                xoq aree ka-tor-ow-ik.
            and also aree INC-open-AF-SS
```

(The mayor's) job is to shut a person in jail if there's something he's done wrong. Whatever he's done, if he's condemned (*lit*. "if word is cut on him") to go to jail, then (the mayor) is who shuts him in, and is also who lets him out. *Ajpacajá*

(129) Le mayor, aree ka-b'i-n ch+ee le aj+ch'ami'y.

D mayor aree INC-say-AF P+A3s:DAT D GENT+staff

The mayor is who tells it to the auxiliar (lit. "the staff-person"; the staff is a symbol of office).

Ajpacajá

3.2.3 Summary

The first order of business at this point is to summarize the constructions we have seen in the past few sections.

- **1. Ordinary (naked-coda) ex situ focus** This is the classic well-described focus movement construction in K'ichee'. The focused constituent occurs in IPP position, always preceded by *aree* if it is a definite DP (and optionally preceded by *aree* if it is not.) The coda is naked.
- **2. Clothed-coda construction** This is a variant of #1, but with the coda introduced by an overt complementizer. It is comparatively rare in my corpus, but becomes more common if the IPP constituent is *aree* or a personal pronoun.
- **3. Specificational clause with a left-dislocated free relative subject** This construction consists of an specificational copular clause whose subject is a free relative which has undergone left-dislocation (as copular subjects in K'ichee' quite frequently do).
- **4. Predicational clause with a free relative subject** This construction consists of a predicative copular clause whose subject is a free relative, either in situ or left-dislocated.
- **5.** The *Masaat* construction Two possible analyses were offered for this construction, which is found in only a small number of examples. One possibility is that it represents a copular sentence in which the predicate rather than the subject is a free relative. The other

Construction	Monoclausal?	Biclausal?
1. Ordinary (naked-coda) ex situ focus	✓	
2. Clothed-coda construction	?	;
Free relative subject		
3left-dislocated in a specificational clause		\checkmark
4in a predicational clause		\checkmark
5. Masaat construction	?	?

TABLE 3.4: Summary of constructions in §3.2 and their analyses.

possibility is that it represents ex situ focus of the pronoun *are*' without a subsequent demonstrative.

For construction #1, I have argued that a biclausal analysis cannot be sustained. For the others, though, a biclausal analysis is at least a possibility (#2, #5), and sometimes even the only possibility (#3, #4). Table 3.4 sums up these conclusions.

There is one more loose end that I have left hanging here. One motivation for pursuing a pseudocleft analysis of ex situ focus was that it seemed likely to provide an explanation for the DP effect observed with *aree*. Having rejected the pseudocleft analysis, we are left without an explanation for this effect. I leave this as a question for future research.

3.3 Are there more kinds of movement than this?

I have assumed in this chapter that there are only two kinds of movement in K'ichee': wh-movement and focus movement. Furthermore, I have assumed that all focus movement clauses have the same structure; and in particular that all focus movement (and, for that matter, all wh-movement) targets the same syntactic position. In this section I defend these assumptions, by taking care of several loose ends from the earlier descriptive literature, and one further loose end from my own data.

3.3.1 Multiple movement positions in one clause?

Norman's (1977) model of Mayan language word order posited a *single* position which is targeted by what we now analyze as movement. This predicts that multiple movement operations should not be able to occur in a single clause. We have already seen that in some ways this prediction is upheld — for instance, there are no multiple-wH questions. Here, I want to address a few casees where the prediction appears or has been claimed to fail, and give evidence suggesting that it really is upheld in these cases after all.

3.3.1.1 Duncan 2010: "negative movement" co-occuring with wh- or focus movement?

Duncan (2010), in his LFG grammar of Totonicapán K'ichee', makes a distinction between "interrogative focus" (not strictly speaking a form of focus at all, but rather what I refer to here as wh-movement in interrogative clauses), "contrastive focus" and "negative focus." What's more, he argues that negative focus moves to a different syntactic position from the other kinds. This argument is based on elicited examples such as 130, in which both ordinary focus movement and "negative movement" appear to have occurred: here the claim is that *lee aa Xwaan* has undergone "contrastive focus" movement, and that *wa* 'food' has undergone "negative movement."

(130) % Aree lee aa Xwaan ma wa =ta x-u-b'an-o.

CONTR D youth Juan NEG food =NEG CPL-A3s-make-ss

It was Juan who made no food. TOTONICAPÁN K'ichee', Duncan 2010, p. 446

I have two objections to this argument. First of all, 130 is ungrammatical for at least some speakers of CNK. But even if the sentence which Duncan reports in 130a is grammatical for some speakers, it is not necessarily an example of multiple focus movement. The reason is that the constituent *aree lee aa Xwaan* could equally well be interpreted as a contrastive topic.

Duncan glosses 130 as "It was Juan who made no food," suggesting a reading on which Juan is focused. But Duncan says nothing about the source of this gloss, and gives no independent evidence that the reading it suggests is correct. Can and England note that in some varieties of K'ichee', contrastive topics are preceded by *aree* alone, while in others, contrastive topics must be preceded by *aree* = k'u; and that CNK is among the latter group of dialects. This means that in Nahualá, focus movement and the left-dislocation of contrastive topics can be clearly distinguished. For the Nahualá speakers I consulted on this question, 130 (which in their dialect would only be consistent with multiple focus movement) is ungrammatical, but 131 (suggesting contrastive topic left-dislocation along with one instance of focus movement) is grammatical. I am therefore tempted to conclude that Duncan has misinterpreted the example in If true, this would suggest that multiple focus movement is similarly infelicitous in Totonicapán.

(131) Aree = k'u le a Xwaan, na wah = ta x-u-b'an-oh. CT = CT D youth Juan NEG food = NEG CPL-A3s-make-ss As for Juan, he didn't make [food.]_F

If we set aside Duncan's examples as likely misinterpretations, then there is no evidence that "negative movement" and focus movement target different syntactic positions. For that matter, there is no other syntactic difference between the two constructions that I am aware of. At that point, it is simpler and equally explanatory to treat "negative movement" as nothing more than focus movement followed by clausal negation. That is, 133b is simply a negated version of the focus-movement clause in 133a, just as 132b is simply a negated version of the canonical clause in 132a.

- (132) Canonical clause and its negation (133) Focus-mov't clause and its negation
 - a. X-u-b'an wah.

 CPL-A3s-make food

 He made food.
 - b. Na x-u-b'an =ta wah.

 NEG CPL-A3s-make =NEG food

 He didn't make food.
- a. Wah x-u-b'an-oh.
 food CPL-A3s-make-ss
 He made [food.]_F
- b. Na wah =ta x-u-b'an-oh.

 NEG food =NEG CPL-A3s-make-ss

 He didn't make [food.]_F

Similarly, Duncan asserts that wh-movement and "negative movement" can occur in the same clause, pointing to the elicited example in 134 as evidence.

(134) Jachin ma wa =ta x-u-b'an-o?
who NEG1 food =NEG2 CPL-A3s-make-ss
Who (was it that) made no food?

Duncan 2010, p. 470

For my consultants, sentences such as 134 are flat-out ungrammatical.

3.3.1.2 Focus movement of adverbs in a relative clause?

I am aware of one other set of data that could be taken to indicate that wh-movement and some sort of focus movement can co-occur. As background to these examples, note that adverbs appearing before the verb in K'ichee' often show signs of having arrived there via focus movement. In particular, when locative adverbs appear before the verb, as *waraal* 'here' does in 135, they trigger the use of the ADJ.F enclitic, which indicates movement of a locative adjunct.

(135) *Y choq waraal e+k'oo =wi Patziij Pachaj aretaq x-ul ri Tekum Uman.* and also here B3p+EXS =ADJ.F Patziij Pachaj when CPL-arrive D Tecun Uman And they were also here in Patziij Pachaj when Tecun Uman arrived. *Ajpacajá*

This is consistent with K'ichee's overall VOAX basic word order, according to which the unmarked position for most adjuncts which have not undergone movement is after the verb.

Given this, one might suppose that the non-locative adverb *utz* (meaning either 'well' or 'permitted') in the examples below had arrived before the verb via the same movement operation.

(136) Ka-tzuku-x juun ri utz ka-no'ji-n-ik,
INC-seek-PASS one c well INC-know-AP-SS

utz ka-choma-n-ik.

well INC-think-AP-SS

Someone is sought who thinks well.

Ajpacajá

- (137) Wee k'oo =ne jas u-wach utz ka-qa-ch'ob' =chi =na?

 if EXS =SCAL what A3s-kind well INC-A1p-tell =again =PROSP

 Is there something more we could tell?

 (lit. 'Is there what sort of thing we could tell?')

 Guarchaj
- (138) Ay, pero k'oo jun jastaq na utz =ta k-inw-il-oh,
 ay but Exs one thing NEG1 well =NEG2 INC-A1s-see-ss
 ka-cha' ri' ri jun masaat.
 INC-say DEM D one deer

Ay, but there's one thing I don't like (*lit.* 'one thing I don't see well'), said the deer.

Masaat

But in all of these examples, *utz* occurs within a relative clause; and we have already seen that relative clauses involve wh-movement of either an overt wh-word or a silent operator. And so, if we were to assume that *utz* had undergone focus movement, we would be forced to

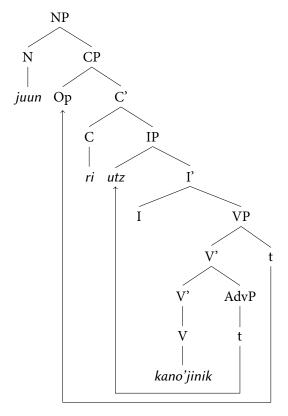


FIGURE 3.9: A portion of example 136, under an analysis (to be rejected) involving both whmovement and focus movement

conclude that focus movement and wH-movement could occur in the same clause. Figure 3.9 illustrates what this would look like. 18

However, there are several pieces of evidence against this conclusion. Note that we have not actually given evidence that *utz* undergoes movement when it is realized before the verb.

18. There are two things worth pointing out about this analysis.

First, note that if we adopted it, it would resolve the question (initially raised in §2.3.2) of which position focus movement targets: if wh-movement and focus movement can co-occur, and wh-movement targets the specifier of CP, then focus movement is left targeting another position — probably the specifier of IP, as many previous authors have assumed.

Second, I should point out that the structure which I have given the VP in Figure 3.9 is misleading: it suggests that the default position for adjuncts is *before* the subject, not after. But nothing important hangs on this issue and there is no need to take up the question of how to derive VOAX word order here.

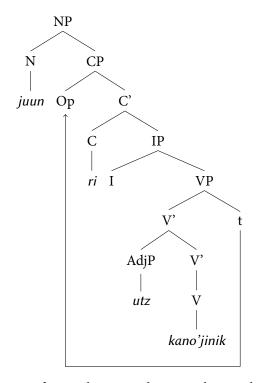


FIGURE 3.10: A portion of example 136, under an analysis without focus movement.

We had evidence that locative adverbs underwent movement to that position (due to the use of the ADJ.F enclitic), and we hypothesized that *utz* might do the same. But this means that if we find enough differences in behavior between locative adverbs on the one hand and *utz* on the other, it might be better to reject the hypothesis that they behave in the same way.

And there are at least two important differences in their behavior. The first difference concerns their distribution. Locative adverbs, as well as occurring before the verb as they do in 135, can occur after the verb, as in 139. This reinforces the idea that they are generated after the verb and arrive before the verb via movement.

(139) X-e-qaaj =lo waraal pa wa' we lugar oj+k'o =wi kamiik.

CPL-B3p-descend =hither here P DEM D place B1p+EXS =ADJ.F today

They came down to this place where we are today.

Ajpacajá

But *utz* cannot occur after the verb with the intended adverbial meaning 'well'. This sheds doubt on the idea that adverbial *utz* is generated after the verb and moves to a position before it, as was shown in Figure 3.9.

The second difference between *utz* and locative adverbs concerns the possibility of occurring before the verb in relative clauses. If *utz* were moving into a position before the verb in a relative clause, we would expect locative adverbs to be able to undergo this sort of movement as well. But I have no attested examples in which this has occurred. Rather, when locative adverbs occur in relative clauses, they consistently appear in their canonical position after the verb, as the following examples — involving *waraal* 'here' in a relative clause — demonstrate:

```
(141) Chla' pa España, chla' ka-pee =wi

DEM P Spain DEM INC-come =ADJ.F

ri taqanik ri x-ok waraal pa we tinamit.

D orders C CPL-enter here P D town
```

back in the day.

But there in Spain, that's where the orders came from that arrived here in this town. Ajpacajá

Ajpacajá

^{19.} Now, in addition to being an adverb, *utz* can also be an adjective meaning 'good'; and as an adjective, it can appear as a modifier in a noun phrase situated after the verb. But this is not germane to the topic at hand.

(142) *Context:* A discussion of how the cathedral bells in Santa Catarina Ixtahuacán were constructed.

```
Aree = k'u la' le x-ul = kan waraal, aree la' le waqiib'...

CT = CT DEM D/C CPL-enter = back here, BE DEM D six

And as for the one that arrived here back then, it was the sixth... Ajpacajá
```

As a result of all this, I believe that *utz* is simply generated before the verb, unlike locative adverbs which must undergo focus movement in order to arrive there. And this means that in examples 136–138 we are not looking at focus movement within a relative clause, which allows us to maintain that wh-movement and focus movement do not co-occur. Rather, these clauses involve wh-movement alone, as illustrated in Figure 3.10.²⁰

3.3.2 Two types of focus movement?

Another argument for multiple focus positions comes from Can Pixabaj and England (2011) They argue that there are two types of focus movement in K'ichee', which they label "Focus I" and "Focus II," and which they distinguish on both syntactic and pragmatic grounds. Focus I has all the syntactic hallmarks of focus movement which I have described in this chapter, while Focus II is claimed to crucially lack two of them: a definite DP can move to mark Focus II without triggering the use of a focus particle such as *aree*; and a

20. In Figure 3.10 I treat *utz* as left-adjoined to VP. Actually, there is another possibility which I find appealing. Mateo-Toledo (2003) and Coon (2010) argue that in Q'anjob'al and Chol respectively, adverbs which must occur before the verb are really matrix predicates, and the verb is the predicate of a subordinate clause. This argument is intended to explain the fact that in these two languages (and many other Mamean and Q'anjob'alan languages; see Larsen and Norman 1979) these preverbal adverbs trigger split ergativity — for it is also the case that these languages exhibit split ergativity in subordinate clauses.

K'ichee' has no such pattern of split ergativity to explain — not in subordinate clauses in general, nor due to any sort of preverbal adverb in particular. Still, it is possible that *utz* in K'ichee' should be analyzed as a matrix predicate along the same lines, so that *utz kanoji'nik* in 136 means something like 'it is well that he thinks' or 'the way he thinks is good' and *utz kaqach'ob'(oh)* in 137 means something like 'it would be good for us to tell (it)'. I am not sure whether this would be consistent with the observed facts about *utz* in relative clauses, for I have not examined in any detail the facts about relativization out of subordinate clauses.

transitive subject can move to mark Focus II without triggering AF morphology on the verb. As for their pragmatics, they argue that Focus I indicates contrastive focus, while Focus II indicates new information with no contrast. Prosodically, on the other hand, Focus I and Focus II are described as identical: neither one is followed by the distinctive pause which sets off topics and contrastive topics.

I will argue here that their examples of Focus II are better analyzed syntactically as instances of left-dislocation, and pragmatically as marking the first explicit mention of a discourse referent which previously has been implicitly assumed to exist.

In 143, the noun phrase *le don Santiago* exemplifies all of the properties claimed for Focus II. It is not followed by a pause; it is definite, but is not preceded by a focus particle; and it is a transitive subject, but the verb whose subject it is does not bear AF morphology.

(143) Chaniim, le don Santiago k-u-tzij ch+q-ee

Now D don Santiago INC-A3s-say P+A1p-POSS

jas le u-historia r-eech we jun tinamit Santa Lu's.

what C A3s-history A3s-POSS D one town Santa Lucia

Now, don Santiago will recount to us the history (lit. 'what is the history') of the

Can Pixabaj and England 2011

town of Santa Lucia.

Can and England do not present an explicit argument as to why *le don Santiago* should be regarded as focused here. But judging from discussion elsewhere in their paper, there are two contributing factors. One is prosodic: they state that "topicalized nominals in independent clauses have a pause [after them] while focused nouns do not." If this is true, then the lack of a pause in 143 is evidence that it is not a left-dislocated topic. The other factor which seems to have been relevant here is the discourse status of don Santiago as a referent. This is the first mention of don Santiago in the recording. (Indeed, it is the very first clause of the recording, so there is no earlier point when he *could* have been mentioned.) But Can and England assume that a referent cannot be topical unless it has already been mentioned:

Continuing topics do not have to continue from the immediately previous clause; they may continue from a clause a little farther back (but not too far away). Contrastive topicalization can also be used for topics that were mentioned a few clauses ago, or can be much more distant.

I do not see either of these as a very convincing reason. It is true that it is generally assumed that left-dislocated topical constituents are followed by a prosodic boundary. And this prosodic boundary represents a place where it is *possible* to pause without the appearance of disfluency. But this does not mean that a pause is *required* there. As for the discourse status of don Santiago, it is true that he has not been explicitly mentioned earlier in the recording. But it seems reasonable to assume that he was nevertheless highly salient to all participants in the speech event. The purpose of the recording session, as stated in 143 itself, was for don Santiago to tell a story. In Prince's (1981) terms, even if he was not textually given, surely he must have been *situationally given* — that is, identifiable by those present and active in their consciousness due to the nature of the speech event itself.

Can and England give two more examples of Focus II. In these examples, the prosodic situation is somewhat more complicated, because the pre-predicate constituent in question in each case is followed by an appositive phrase which is set off by prosodic boundaries. In 144 the appositive is *aree le koyo't* 'which are coyotes,' and in 145 it is *ri rajaw wu'lew rii'* 'who is master of this land.' This means that in both cases it is impossible to tell whether the pre-predicate constituent has an inherent prosodic boundary following it, or whether the boundary is only there because of the appositive.

```
(144) Le s+taq le lawe, ka-cha',

D AFF+DISTR D lawe INC-say

le s+taq ib'ooy, le lawe ka-cha',

D AFF+DISTR armadillo D lawe INC-say
```

```
le kumatz, le tz'i' are le koyo't

D snake D dog BE D coyote

e+sok-otaj-naq, ki-tij-om q'aaq'.

B3p+wound-cp-perf A3p-eat-perf fire
```

The lawes (as they say), the armadillos, the lawes (as they say), the snakes, the dogs (that were coyotes) had been wounded, had been consumed by fire.

Can Pixabaj and England 2011

(145) Es ke ri achi, ri r-ajaw w+u'lew rii', k'o jun u-tajkil aw-uuk'.

it.is that D man C A3s-lord D+land DEM EXS one A3s-errand A2s-with

It is that the man, he who is master of this land, has an errand with you.

Can Pixabaj and England 2011

Both of these examples introduce a referent which has not been present in the immediately preceding discourse. But in both of these examples, as in 143, the referents being introduced are not brand-new. In 144, although the animals have not previously been enumerated, their owner and his corral have been previously mentioned. This suggests that the animals themselves are inferentially accessible: the mention of a corral suggests the existence of animals kept in it. In 145, the situation is arguably similar, as land tends to be owned, so the mention of land makes salient the existence of its owner.

Apart from the lack of a pause in 143, there is no evidence against treating these as examples of left-dislocation; and as I have argued, there is no reason to insist that left-dislocated constituents always be followed by a pause. Indeed, insofar as we are willing to assume that AF morphology is a diagnostic of movement, and that movement and left-dislocation are the two routes by which an argument can arrive in the left periphery, there is some evidence *in favor* of treating these as examples of left-dislocation.

It seems to me, then, that what Can and England have really done here is pick out an interesting subset of the contexts in which left-dislocation can be used. These examples show

that left-dislocation is used not only for repeated mentions of textually given referents, but also for new mentions of referents who were previously only implicitly evoked. But they do *not* point to the existence of a second type of focus movement in K'ichee'. All focus movement is what Can and England call Focus I, and what they call Focus II is left-dislocation of a constituent with a situationally evoked or inferentially accessible referent.

That said, all of this discussion has been based on a very small number of examples — and at least when it comes to prosody, two of the three examples are unnecessarily complicated due to the presence of an appositive after the constituent in question. I cannot rule out the possibility that future work will reveal further unambiguous cases of Focus II. If it does — and if these further cases share with 143 the distinctive property of lacking a pause — then a case could be made for reopening this question.

3.4 Syntactic ergativity

In §2.2.1 we saw that K'ichee' exhibits SYNTACTIC ERGATIVITY. After briefly recapitulating the data that was presented there, in this section I will discuss the phenomenon of syntactic ergativity in greater detail, summarizing the descriptive work which has been done on it in order to explain its effects.

The basic phenomenon here is as follows. K'ichee' permits free extraction of most types of constituents, including intransitive subjects (146) and transitive objects (147).

(146) Context: Who laughed?

(147) Context: What are you eating?

[
$$Kab'$$
]_F k -in-tij-oh. [O]_F V t [sweet]_F INC-A1s-eat(tr)-ss
I'm eating [candy.]_F

But as 148 shows, the subjects of ordinary transitive clauses cannot be extracted.

(148) Context: Who helped you?

Rather, one of two compensatory strategies must be used. Either the verb must be antipassivized, as in 149, converting the transitive clause to an intransitive clause and the former transitive subject to a freely extractible intransitive subject; or the verb must be conjugated in what is known as the AF form, as in 150.

(149) Context: Who helped you?

(150) Context: Who helped you?

Following the distinction I described in §2.2.2 between morphological and syntactic transitivity, the AF verb is morphologically intransitive, but a clause headed by an AF verb remains

	CVC stem	non-CVC stem
Passive	stem vowel lengthens	-X
Completive passive	-(i)taj	-taj
Antipassive	-on ∼ -un	-n
AF	-ow ∼ -uw	-n

TABLE 3.5: Non-active voice markers found on transitive verbs.

syntactically transitive. And the AF verb not only permits its subject to be extracted, but requires it to be — it is not found in clauses in which subject extraction has not occurred.

3.4.1 The AF and antipassive verb forms

At this point it is worth saying a few words about the relevant pieces of verb morphology. K'ichee' has four non-active voice forms into which transitive verbs can be conjugated. These forms, and the affixes which mark them, are listed in Table 3.5. Of these forms, two — the antipassive and the AF — can be used to circumvent the constraint against extracting the subjects of transitive verbs.

The fact that the antipassive can be used this way emerges more or less as a side effect of its primary use, which is to detransitivize a verb and demote its former object to an oblique. This turns what was formerly the subject of a transitive verb into the subject of an intransitive verb — which makes it, like all other intransitive subjects, available for extraction. But the antipassive is not always used to permit its subject to be extracted. Indeed, this is not even its most common use. More often, if an antipassive verb has an overt subject at all, it is left in situ, as *ri qataat qanaan* 'our ancestors' is in 151and *ri pareyiib*' 'the priests' in 152.

(151) Xoq la'le pa Tekpan kamiik, also DEM D р Тесра́п today

x-e-chaku-n =na ri qa-taat qa-naan chla'

CPL-B3p-work-AP =PROSP D A1p-father A1p-mother DEM

ch+u-b'aan-ik b'eh, ch+u-wook-ik =taq jah.

P+A3s-do:PASS-NMLZR road P+A3s-build:PASS-NMLZR =PL house

Also where Tecpán is today, our ancestors worked on the building of the highway and the construction of houses.

Ajpacajá

(152) Chla' x-e-taq-on ri parey-iib'.

DEM CPL-B3p-order-AP D priest-PL

From there, the priests send orders.

Ajpacajá

The AF verb, on the other hand, has the sole function of permitting transitive subject extraction. Like the antipassive, it is morphologically intransitive: if it bears an overt status suffix, it is one from the intransitive set; and it never bears Set A agreement prefixes, only Set A. But unlike the antipassive, it is syntactically transitive in that it licenses two arguments, neither of which bears any oblique marking.

(153) Aree ri a Xwaan x-to'-w ri a Lu'.

FOC D youth Juan CPL-help-AF D youth Pedro

It was Juan who helped Pedro.

The AF verb is sometimes described as following a hierarchical pattern of agreement. Since it is morphologically intransitive, it can generally only agree with one of its two syntactic arguments.²¹ Which argument it will agree with is determined by the following hierarchy; agreement is with the highest-ranked argument (with one exception that I will discuss in a moment).

21. Though there is one exception to this which I will discuss shortly.

Coon, Mateo Pedro, and Preminger (2011) point out that its hierarchical pattern of agreement provides another piece of evidence that the AF verb is syntactically transitive. In other areas of K'ichee' verb morphology, only arguments can control agreement; adjuncts never do. Depending on the person and number of its subject and object, the AF verb agrees sometimes with one and sometimes with the other. This suggests that both must be arguments; for if either was an adjunct, we would not expect it to be able to control agreement on the verb.

Actually, there is one further complication that this hierarchical view of AF agreement does not capture. In addition to its ordinary second-person agreement markers, K'ichee' has a set of honorific second-person agreement markers that are realized not as prefixes to the verb iself, but as enclitics following the verb. According to Mondloch (1981), an AF verb may carry one of these enclitic markers in addition to a Set B prefix. This means that an AF verb can agree with two arguments *if* one of those two is an honorific second-person argument, as in the following examples:

```
(154) a. In x-in-chaab'e-n =alaq.

1sg CPL-B1s-address-AF =B2p.HON

I am the one who talked to you [honorific].
```

- b. Laal x-ee-kuna-n = lah.
 2sg.HON CPL-B3p-cure-AF = B2s.HON
 You [honorific] are the one who cured them.
- c. Alaq x-uj-to'-w =alaq.

 2pl.HON CPL-B1p-help-AF =B2p.HON

 You [honorific] are the ones who helped us. Mo

Mondloch 1981, p. 221

This complication provides yet more evidence that the AF verb is syntactically transitive; for it shows that there are some situations where an AF verb does agree overtly agree with both

its arguments.

The AF voice is thus unusual among K'ichee' voice morphology in that it does not change the valence of the verb. The other marked voices are either valence-increasing (causative, instrumental) or valence-decreasing (the remaining voices shown in Table 3.5: passive, completive passive, antipassive). The AF, by contrast, leaves the valence of the verb unaltered. What it alters is the accessibility of the verb's arguments to extraction. A transitive verb in the active voice cannot have its subject extracted.

(155) * Aree ri a Xwaan x-in-u-to'-oh.

FOC D youth Juan CPL-B1s-A3s-help-ss

Intended: It was Juan who helped me.

Inflecting the verb for the AF voice reverses the situation: now the subject of the verb *must* be extracted — either via WH-movement (156) or via focus movement (157).

- (156) Jachin x-in-to'-w-ik?

 who CPL-B1s-help-AF-SS

 Who helped me?
- (157) Aree ri a Xwaan x-in-to'-w-ik.

 FOC D youth Juan CPL-B1s-help-AF-SS

 It was Juan who helped me.

Attempting to leave the subject of an AF verb in situ, as in 158, results in ungrammaticality.

(158) * *X-in-to'-w ri a Xwaan.*CPL-B2S-help-AF D youth Juan *Intended:* Juan helped me.

The examples above support the following generalization:

(159) *The AF Generalization (first attempt)*Iff the subject of a transitive verb is extracted, the verb must be inflected for AF voice.

Though Mondloch (1981) and Aissen (2012b) have shown that this generalization is incomplete in several ways. In §3.3.2 I will summarize these results of Mondloch and Aissen's, and refine the generalization in 159 accordingly.

3.4.2 Refining the generalization

According to the generalization in 159, *all* transitive subjects in K'ichee' are subject to constraints on movement, and cannot be extracted unless an AF verb is used. In fact, it is well-known that there are a good number of exceptions to the generalization as it has been stated. Some refinements will be required in response to these exceptions.

3.4.2.1 Paradigmatic gaps

Mondloch (1981) points out that for certain combinations of subject and object features, no AF form is found: there are gaps in the AF paradigm when both subject and object are non-third-person (and non-honorific). So for instance, there is no way to form a grammatical sentence with an AF verb when the subject is first-person and the object (non-honorific) second-person, as the ungrammaticality of the following examples demonstrates:

c. * In x-at-in-to'w at. 1sg CPL-B2s-A1s-help:AF 2sg

Intended: $[I]_F$ helped you.

Note that in these examples, ungrammaticality results regardless of whatever agreement markers we attempt to use. The AF verb ordinarily only has one agreement prefix, but in this case it is not grammatical to use this prefix to agree with the subject (160a), or to use it to agree with the object (160b); and neither is it grammatical to attempt to use two agreement prefixes rather than one (160c). Similar paradigmatic gaps are found when the subject is (non-honorific) second-person and the subject is first-person.

Mondloch offers an explanation for these gaps, which hinges on the idea that non-third-person agreement must always be overtly marked.²² He points out that for the most part, there is no way to satisfy this requirement if there are two non-third-person arguments, since there is only one slot for an agreement prefix on an AF verb; and this, according to Mondloch, is why AF verbs do not occur under those conditions.²³

If we follow Mondloch's approach, we must allow that overt person marking for thirdperson arguments is not required as strongly as overt person marking for non-third-person

22. Actually, this is just one of two explanations that he proposes. His second proposal is that the use of the AF verb has a disambiguating function.

Seen in this context it is extremely significant that these two voice transformations [AF and passivization] are restricted so that they can only operate on underlying active clauses that have two third person participants. But, as already explained, it is precisely in clauses with third person participants where the problem of ambiguity arises in Quiché finite clauses. (p. 246)

This proposal strikes me as less helpful, though. It is specifically in clauses with two third-person participants that the need for disambiguation arises. But the AF verb is used in clauses with even one third-person participant. For more discussion of AF as disambiguation, see $\boxtimes 4.2.3$.

23. I say "for the most part" because there is one exception which Mondloch points out, and which was already demonstrated in §3.4.1. As we saw in that section, the second-person formal agreement markers are enclitics, not prefixes; and — apparently as a consequence of this fact — they do not occupy the single agreement prefix slot. The result is that it is possible for an AF verb to have one agreement prefix and one of the second-person formal agreement markers.

arguments.²⁴ After all, in forms like 161 and 162, overt agreement with a non-third-person argument precludes overt agreement with a third-person argument, and this does not lead to ungrammaticality.

- (161) $[In]_F$ x-in-riq-ow ri ak'al. $[sg]_F$ CPL-B1s-find-AF D child $[I]_F$ found the child.
- (162) $[In]_F$ x-in-riq-ow ri ak'al-aab'. $[1sg]_F$ CPL-B1s-find-AF D child-PL $[I]_F$ found the children.

Mondloch 1981, p. 220

Now, this is unsurprising when the argument that is not overtly agreed with is third-person singular, as it was in 161. After all, we already knew that third-person singular agreement did not always need to be overtly marked in K'ichee', since we already knew that the third-person singular Set B marker was zero. It is perhaps slightly more surprising in the third-person plural, as in 162. After all, since the third-person plural Set A and Set B markers are both nonzero, we might have supposed that third-person plural agreement was mandatory in K'ichee' in the same way Mondloch takes first- and second-person agreement to be. But in the AF form, if there is a non-third-person argument present, it precludes overt agreement with a third-person plural argument as well as with a third-person singular one.

The way Mondloch puts this is to say that "the plurality of the direct object is not marked in the verb [in cases like 162]. In...cases where the subject is non-third person singular the direct object is treated like a third person singular, which has no [Set B] marker" (p. 221). I think this is a useful perspective to take on the facts in 162, especially since England (2011)

24. Judith Aissen (p.c.) informs me that this is quite often the case in Mayan languages.

has shown that in general, number marking in the third person is optional in Eastern Mayan languages.²⁵

To sum up, then, the explanation for the distribution of AF forms, following Mondloch, is as follows:

- 1. The AF verb has only one slot for an agreement prefix, which must be of Set B.
- 2. Agreement with a third person singular argument does not occupy this slot, since the 3sg Set B marker is zero.
- 3. Agreement with a third person plural argument does not *necessarily* occupy this slot, since plural marking in the third person is optional. (But if no first- or second-person argument is present, plurality of a third-person argument can be marked by using a 3pl Set B marker.)
- 4. Agreement with a second person using the honorific Set B markers = la(h) and = alaq does not occupy this slot, since these are enclitics and not prefixes.
- 5. With the exception of the cases discussed in 2–4, all features of all arguments must be reflected in the form of the verb. If this requirement cannot be satisfied, then an AF verb cannot be used.

How, then, do we realize a clause with two non-third-person arguments in which the subject has been extracted? According to Mondloch, in the variety of K'ichee' which he

25. There is a slight complication here: England finds that in K'ichee', number marking for human referents is essentially mandatory. All else equal, this would predict that the sentence in 162 should be infelicitous, since the third-person referent whose plurality goes unmarked is human — and this prediction is not borne out. I think this complication can be dealt with by assuming that number marking for human referents is required by a pragmatic principle rather than a syntactic one, and that this pragmatic principle can be violated in order to satisfy morphosyntactic requirements. In other words, I am suggesting the correct generalization about number marking in K'ichee' is something like *mark the number of a human referent whenever it is possible to do so*— and that the odd morphology of the AF verb leads to some situations in which it is not possible.

studied, such clauses are often realized using an (active voice) transitive verb (p. 223). I have not observed this in CNK. The second strategy which Mondloch mentions — which I *have* observed in CNK — is to use the antipassive voice rather than the AF. As was discussed in \$3.3.1, because the antipassive verb is both morphologically and syntactically intransitive, its subject will always be available for extraction; and there are no person- or number-related gaps in the antipassive paradigm the way there are for the AF verb.

(163) AF Generalization (second attempt)

Iff the subject of a transitive verb is extracted, the verb will be inflected for AF voice, provided that an appropriate AF form exists that will realize all the person and number features that must be realized.

3.4.2.2 Pseudotransitives

There is another family of exceptions to the AF generalization as stated so far. This family was originally identified by Mondloch (1981), and was extended by a discovery by Aissen (2012b). To the best of my knowledge there is no existing umbrella term for the exceptional clauses in this family; for convenience, I will refer to them as PSEUDOTRANSITIVE clauses. In pseudotransitive clauses, an appropriate AF verb form exists (setting these examples apart from the ones in §3.4.2.1), but it is nevertheless not used.

The simplest kind of pseudotransitive clause are REFLEXIVES. These are formed in K'iche' using the relational noun -iib' whose possessed forms function as a sort of reflexive pronoun: w-iib' [A1s-REFL] 'myself', aw-iib' [A2s-REFL] 'yourself', and so on.

^{26.} Mondloch's field work was carried out in the municipal of Nahualá, but according to England (*p.c.*) it was mostly in the boca costa and not the highland region in which I worked. See REF for discussion of the possibility that there is a dialect distinction between these two regions of the municipio.

- (164) a. *X-a-sok* aw-iib'.

 CPL-A2S-wound A2S-REFL

 You hurt yourself.
 - b. X-in-xi'j w-iib'.

 CPL-A1s-scare A1s-REFL

 I scared myself; I was frightened.
 - c. *Ch-aw-il-a' aw-iib'*.

 OPT-A2S-See-SS A2S-REFL

 Look at yourself!

Note that the verbs in 164 are still morphologically transitive. When they take an overt status suffix (as in 164c) it is a transitive one, and they take Set A agreement markers. And at first glance it seems plausible to treat them as syntactically transitive as well. On this analysis, *-iib'* really would be a reflexive pronoun, and would fill the verb's internal argument slot in the usual way. If this were true, we'd expect the subjects of reflexive verbs to be unextractable without AF, as transitive subjects generally are. But as Mondloch (1981) points out, this is not what we observe. Instead, the subjects of reflexives extract freely without AF morphology:

- (165) a. *Jachin x-u-sok r-iib'?* who CPL-A3s-wound A3s-REFL Who hurt himself?
 - b. *ri alah ri x-u-xi'j r-iib'*DET boy REL CPL-A3S-Scare A3S-REFL

 the boy who scared himself; the boy who got scared

Indeed, AF morphology is not only unnecessary but outright ungrammatical in reflexive clauses whose subjects have been extracted:

```
(166) a. * Jachin x-sok-ow r-iib'?
who CPL-wound-AF A3s-REFL

Intended: Who hurt himself?
b. * K'oo tajin ka-xib'i-n r-iib'.
EXS PROG INC-scare-AF A3s-self

Intended: There's someone who's getting scared (lit. "scaring himself").
```

On 166b, one of my consultants commented *se usa*, *pero en otra persona*, *no en uno mismo:* 'It [that verb form] can be used, but with another person, not with *oneself*.' In other words, if we replace the reflexive object *r-iib*' with a reference to another person, as in 167, then the verb form *kaxib*' *in*(*ik*) becomes felicitous.

(167) *K'oo tajin ka-xib'i-n nu-naan.*EXS PROGR INC-scare-AF A1s-mother

There's someone who's scaring my mother.

Mondloch observed that the same is true for a class of clause that Aissen (1999) subsequently named EXTENDED REFLEXIVE clauses: clauses in which the subject is coreferential with the possessor of the object, rather than with the object itself, as in 168.

(168) a. X-in-sok w-aqan.
CPL-A1s-wound A1s-leg
I hurt my leg.
b. X-u_i-raq u_i-chii'.
CPL-A3s-split A3s-mouth
He screamed. (lit. "He_i split his_i mouth open.")

c. M-i-sach i-k'u'x.
 NEG-A2p-lose A2p-heart
 Don't get discouraged. (lit. "Don't y'all lose your hearts.")

As in true reflexives, in these clauses the verb appears to be transitive, but it does not take its AF form when its subject is extracted: the grammatical subject extraction sentences in 169, which contain plain active verbs, become ungrammatical if an AF verb is used instead as in 170.

- (169) a. $Jachin_i x-u-sok$ r_i -aqan? who CPL-A3s-wound A3s-leg

 Who_i hurt his_i leg?
 - b. In x-in-sach nu-k'u'x.1sg CPL-A1s-lose A1s-heartIt's me who got discouraged. (lit. "It's me who lost my heart.")
- (170) a. * Jachin_i x-sok-ow r_i -aqan? who CPL-wound-AF A3s-leg

 Intended: Who hurt his leg?
 - b. * In x-in-sach-ow nu-k'u'x.

 1sg CPL-A1s-lose-AF A1s-heart

 Intended: It's me who got discouraged. (lit. "It's me who lost my heart.")

Many K'ichee' idioms take the form of extended reflexive clauses: the examples above illustrate several.

A third class of pseudo-transitive clauses was recently discovered by Aissen (2012b). Aissen found that, in clauses whose object is a bare noun, there are two possible strategies for

extracting the subject. The AF verb form *can* be used in this context, as in 171a and 172b, but it does not *have* to be, as demonstrated by 171b and 172b.

- (171) a. Jachin x-loq'-ow uuq? (172 who CPL-buy-AF cloth

 Who bought cloth?
 - b. Jachin x-u-loq' uuq? who CPL-A3s-buy cloth Who bought cloth?
- (172) a. *Majuun k-tij-ow leej.*nobody INC-eat-AF tortilla
 Nobody is eating tortillas.
 - b. Majuun k-u-tij leej.
 nobody INC-A3s-eat tortilla
 Nobody is eating tortillas.

Moreover, she found a semantic or pragmatic difference between the two strategies. When the AF strategy is used with a bare NP object, it suggests that that NP is "high in specificity," or that it "points to a discourse referent whose existence is already presupposed." The evidence for this distinction is based on contextual felicity judgments: in some contexts, 171a and 172a are more appropriate, while in others the b examples are preferred.

My own data confirms that the two strategies are appropriate in different contexts. A pair of contexts illustrating the contrast is given below:

- (173) *Context*: Juan asks his mother which chores still need to be done. She wants to tell him that the firewood is already being taken care of.
 - a. *K'oo tajin k-paq-ow sii'*.

 EXS PROG CPL-chop-AF wood

 Someone is chopping firewood.
 - b. # K'oo tajin k-u-paq sii'.

 EXS PROG CPL-chop-AF wood
- (174) *Context:* A visitor is about to step out onto the patio. Juan tells him to be careful: someone's chopping firewood out there, and they should stay out of the way of the axe.

- a. # K'oo tajin k-paq-ow sii'.

 EXS PROG CPL-chop-AF wood
- b. *K'oo tajin k-u-paq sii'.*EXS PROG CPL-chop-AF wood

 Someone is chopping firewood.

This pair of examples is consistent with Aissen's judgment that something like givenness or specificity is the crucial factor here. In 173, the speaker has a specific, already-salient load of firewood in mind that needs to be chopped — the point is that *Juan's family's* firewood is already getting chopped. In 174, on the other hand, the point is merely that the (potentially dangerous) activity of firewood-chopping is going on; whose firewood is being chopped is beside the point.

Like the reflexive and extended reflexive constructions, the bare-noun pseudotransitive construction is a fruitful source of idiomatic expressions, such as the following:

```
a. Jachin x-u-koj aqan ch-eh?
who CPL-A3s-use leg P-A3s:DAT
Who kicked it? (lit. "Who used leg on it?")
b. Aree in x-in-tij anim.
it's 1sg CPL-A1s-eat quickness
It's me that ran (lit. "that ate quickness").
```

I should note that in some of these idioms, the bare-noun object is not merely nonspecific or discourse-new, but entirely nonreferential. The expression *-tij anim* in 175b is an example of this: it makes no sense even to ask "Which quickness did the subject eat?" or "Is this a familiar quickness or a newly introduced quickness?"

3.4.2.3 Proposed explanations for pseudotransitivity

So we must modify our AF generalization again to account for pseudotransitivity. And in doing so, the question arises whether there is any crucial property that all three types of pseudotransitive clause have in common. I am aware of two proposals: one by Mondloch (1981) based on the premise that the AF voice is used to disambiguate otherwise ambiguous clauses; and one by Coon, Mateo Pedro, and Preminger (2011) which analyzes pseudotransitive clauses as clauses in which the object is pseudoincorporated into the verb. I will ultimately assume that something like the proposal of Coon et al is correct, and that what pseudotransitive clauses have in common is a structure which does not license a full DP object.

Pseudotransitivity as inherent unambiguousness Mondloch (1981) proposes that the AF voice has a disambiguating function in clauses where it appears; and that it is not required in reflexive and extended reflexive clauses because in these clauses no ambiguity arises (p. 238). He does not pursue this point in detail, but I think it is possible to reconstruct what he might have meant by it.

In true reflexive clauses, the point is quite straightforward. There is no need for disambiguation for two reasons, one having to do with its syntax and one having to do with its semantics. First, the reflexive pronoun must be interpreted as the object rather than the subject because it must be C-commanded by its binder. And second, even if it weren't for the first point, there would be no genuine ambiguity, because the two arguments in a reflexive clause are coreferential anyway.

In extended reflexive clauses, though, the point is more complicated because it seems at first glance that ambiguity can in fact arise in these clauses. For instance, unless we are already assuming that extended reflexive clauses exhibit pseudotransitive behavior, there does not seem to be any a priori reason why 176must mean '[the man_i]_F called his_i wife' and

not '[the man_i]_F called his_j wife' or 'his_i wife called [the man_j]_F' And this would mean that extended reflexives are not, as Mondloch suggests, inherently ambiguity-proof.

(176) Ri achih, x-u-sik'i-j r-ixoqiil.

D man CPL-A3s-call-ss A3s-wife
The man; called his; wife.

I think the charitable reading of Mondloch's point, when it comes to extended reflexives, is something like this. Let us assume that in the interpretation of the sentence in 176, the identities of the referents have already somehow been resolved, and that the only remaining issue is to determine the grammatical functions of the referring expressions — which one is the subject and which one is the object. Specifically, let us assume that the possessor of rixoqiil 'his wife' has been determined to be a silent pronoun bound by (and thus coreferential with) ri achih 'the man'. Once that determination has been made, the sentence becomes unambiguous, for essentially the same syntactic reason that true reflexives are unambiguous: in order for the possessor of rixogiil to be bound by ri achih, it must be C-commanded by ri achih, meaning that ri achih must be the subject and rixogiil must be the object. So it is reasonable to say that there is no ambiguity in 176 with respect to grammatical function alone — that the only ambiguity which arises is due to uncertainty about whether a silent pronoun is bound or free, and that once this is resolved in favor of the bound reading, no uncertainty about grammatical funciton arises. (On the other hand, if the pronoun is determined to be free, ambiguity remains: "[the man_i]_F called his_i wife" and "his_i wife called [the man_i]_F" are both possible readings. And so it makes sense that when the former is intended, the AF voice must be used to disambiguate.)

Still, there are a few problems with this proposal of Mondloch's. First of all, as Stiebels (2006) points out, there are some cases where the AF voice is used even though there is no need to disambiguate. For instance, sentences with one third-person participant and one

non-third-person participant are always unambiguous: a Set A agreement marker will be used to index the subject, and a Set B agreement marker to index the object, and since these markers will have different persons it will be possible to tell which is which, as demonstrated below:

So no need for disambiguation would arise even if subject extraction were permitted using the active verb forms above. But the AF voice is still used in such sentences if the subject is extracted — despite the fact that it is not needed for disambiguation.

(179)
$$[A're']_F$$
 x -in-to' w in. (180) $[In]_F$ x -in-to' w $[3pl]_F$ CPL-B1s-help:AF 1sg $[CPL$ -B1s-help:AF $]_F$ 3pl $[They]_F$ helped me. $[I]_F$ helped them.

For that matter, as Mondloch himself points out, there are sentences in which there is no need for disambiguation because world knowledge makes it the case that only one reading is possible. For instance, the only reasonable reading of 181 is "[the man]_F ate the tortilla." This would remain the only reasonable reading even if the verb form did not do any disambiguating work for us — because tortillas do not eat men. But the AF voice is still used here.

Another challenge for this proposal is that it is not entirely clear how to extend it to pseudotransitives involving a nonspecific bare noun object, such as 174 (repeated below).

The challenge here is to find a way in which the sentence in 174 less ambiguous in context than the one in 173 is, in order to explain why 174 does not need an AF verb while 173 does.

- (173) *Context:* Juan asks his mother which chores still need to be done. She wants to tell him that the firewood is already being taken care of.
 - a. *K'oo tajin k-paq-ow sii'*.

 EXS PROG CPL-chop-AF wood

 Someone is chopping firewood.
 - b. # K'oo tajin k-u-paq sii'.

 EXS PROG CPL-chop-AF wood
- (174) *Context:* A visitor is about to step out onto the patio. Juan tells him to be careful: someone's chopping firewood out there, and they should stay out of the way of the axe.
 - a. # K'oo tajin k-paq-ow sii'.

 EXS PROG CPL-chop-AF wood
 - b. *K'oo tajin k-u-paq sii'*.

 EXS PROG CPL-chop-AF wood

 Someone is chopping firewood.

I can see one possible way of doing this. Suppose we were to find that givenness, rather than specificity, was the crucial property in determining whether a bare-noun-object clause counts as pseudotransitive. Now, as I will discuss in §4.3.2.1, there is a rule of K'ichee' grammar requiring transitive subjects²⁷ to be given. So *once we have determined* that a bare noun argument is not given, it will become unambiguous that it must be the object of the sentence, since it would violate a grammatical rule to interpret a non-given constituent as the subject.

27. And also some intransitive subjects, but this is not relevant here.

But this is still not a perfect explanation. It does not account for the fact that only bare-noun objects lead to pseudotransitive behavior when they are non-given. For the rule I will discuss in §4.3.2.1 prohibits non-given subjects of any type — not only non-given bare noun subjects, but also non-given phrasal subjects. The explanatory strategy I have sketched here would therefore predict that any sentence with any sort of non-given object, bare noun or not, should count as pseudotransitive. And this is not the case.

Pseudotransitivity as object incorporation Coon, Mateo Pedro, and Preminger (2011) propose an alternative explanation for pseudotransitivity, not just in K'ichee' but in a number of Mayan languages in which it occurs, according to which pseudotransitive clauses are clauses in which the object has undergone pseudoincorporation into the verb.

One piece of evidence which Coon et al cite for this analysis is the requirement that the "objects" in pseudotransitive clauses be bare nouns. In particular, they cannot have determiners in K'ichee', or classifiers in Q'anjob'al:

- (182) a. Pseudotransitive: no determiner
 - Jachiin x-u-loq' (* rii) uuq? who cpl-A3s-buy D cloth

Who bought cloth?

Aissen 2012b

- b. Ordinary transitive: determiner possible
 - Jachin x-loq'-ow (ri) uuq? who cpl-buy-af d cloth

Who bought (the) cloth?

(own data)

(183) a. Pseudotransitive: no classifier

Maktxel max s-b'on (* te') s-na? who CPL A3s-paint CL A3s-house Who; painted his; (own) house? b. Ordinary transitive: classifier required

```
Maktxel max s-b'on-on *( te') s-na?
who CPL A3s-paint-AF CL A3s-house
Who; painted his; house?
```

Q'ANJOB'AL, Coon, Mateo Pedro, and Preminger 2011

Coon et al further point out that in Q'anjob'al, full DP objects can be coordinated with one another (as in 184a) but pseudotransitive objects — such as the reflexive pronoun in 184b — cannot be.

```
(184) a. Max w-il [ naq Matin k'al naq Ximon. ]

ASP A1-see [ CL Matin and CL Simon ]

I saw Matin and Simon.
```

```
b. * Max w-il [hin-b'a k'al naq Ximon.]

ASP A1-see [A1-self and CL Simon]
```

Intended: I saw myself and Simon.

Q'ANJOB'AL, Coon, Mateo Pedro, and Preminger 2011

And my own data suggests that the same is true in K'ichee'.

```
b. *X-inw-il [w-iib' chi'l ri taat Lu'.]

CPL-A1s-see [myself with D don Pedro]

I saw myself and don Pedro.<sup>28</sup>
```

Additional evidence for incorporation comes from word order. Coon et al point out that Q'anjob'al does not generally permit voa word order. But the "objects" in pseudotransitive clauses do come immediately after a verb, before an overt subject if one is present. This would be inexplicable if we treated them like any other full DP object — but can be explained if we assume they are incorporated.

(186) a. Ordinary transitive: VAO

Max y-il ix ix naq winaq.

CPL A3s-see CL woman CL man

The woman saw the man.

b. Pseudotransitive: VOA

Max y-il s-b'a ix ix.

CPL A3s-see A3s-self CL woman

The woman saw herself.

Q'ANJOB'AL, Coon, Mateo Pedro, and Preminger 2011

A similar argument can be made in K'ichee'. In K'ichee' transitive clauses, both voa and vao orders are possible, the latter due to extraposition. But in pseudotransitive clauses, the apparent "object" becomes difficult or impossible to separate from the verb. For instance, reflexive markers in K'ichee' must appear immediately after the verb; they cannot be extraposed, and the only things which can come between them and the verb are clitic particles hosted on the verb itself.

(187) Reflexive: VOA only

^{28.} This sentence may be grammatical on the reading "I, accompanied by don Pedro, saw doña Catalina." But this reading requires a different syntactic structure — one on which *chi'l ri taat Lu* "and/with don Pedro" is a clause level modifier and not a DP-internal conjunct.

- a. *Na* x-u-xi'j =ta r-iib' ri alah.

 NEG CPL-A3s-scare =NEG A3s-self D girl

 The girl didn't get scared ["scared herself"].
- b. * Na x-u-xi'j =ta ri alah r-iib'.

 NEG CPL-A3s-scare =NEG D girl A3s-self

 Intended: The girl didn't get scared ["scared herself"].

Object extraposition is similarly ungrammatical in non-reflexive pseudotransitive idioms.²⁹

- (188) Pseudotransitive idiom: VOA only
 - a. *X-u-koj aqan ch+eh.*CPL-A3s-use leg P+A3s:DAT

 He kicked it
 - b. *X-u-koj ch+eh aqan.

 CPL-A3s-use P+A3s:DAT leg

 He kicked it

Once again, this suggests that pseudotransitive "objects" are more tightly bound to the verb. (The same word order pattern — at least with respect to reflexives — is found in Tz'utujiil (Dayley, 1985, p. 337), and, according to England 1991, in a number of other languages.)

An even stronger case of this can be seen in Mam — and indeed, led England (1983) and England (1991) to argue independently of Coon et al that Mam reflexive markers were in-

So a more relevant question would be, can *non*-idiomatic, non-reflexive pseudotransitives be broken up? Unfortunately, I do not have the relevant data.

^{29.} On the other hand, it is crosslinguistically common for speakers to find split-up idioms odd. Compare English:

⁽i) * As for the bucket, he kicked it.

⁽ii)*He kicked violently the bucket.

corporated into the verb. The Mam word order facts are like those in Q'anjob'al, and support the same argument.

(189) a. Ordinary transitive: VAO

Ma chi kub' t-tx'ee'ma-n xiinaq tzee'.

REC B3p DIR A3s-cut-SUFF man tree

The man cut the trees.

IXTAHUACÁN MAM, England 1983, p. 182

b. Reflexive: VOA

Ma kub' ky-b'iyoo-n ky-iib' xiinaq.

REC DIR A3p-kill-suff A3p-self man

The men killed themselves.

IXTAHUACÁN MAM, England 1983 p. 187

But what's more, in Mam reflexive markers occur *before* clitics that would ordinarily be hosted on the verb, as in 190b where the reflexive *w-iib*' 'myself' precedes the clitic *=a*. This contrasts with ordinary transitive objects (such as *pwaq* 'money' in 190a), which follow such clitics.³⁰

(190) a. Ordinary transitive: object outside clitic

Ma tzaj t-q'o-'n = a pwaq q-ee = ky'.

REC DIR A2S-give-SUFF =CL money A1p-DAT =1p

You gave us money.

IXTAHUACÁN MAM, England 1983 p. 251

b. Reflexive: reflexive pronoun inside clitic

Ma b'aj n-tx'ajoo-n w-iib' =a.

REC DIR A1s-wash-suff A1s-self =CL

I washed myself.

IXTAHUACÁN MAM, England 1983 p. 187

^{30.} The clitic =a, found in both examples, plays a role in person marking. The details of its use and interpretation are somewhat complicated, and not especially germane to this example, where all that's at issue is its linear position.

England argues these facts suggest that the Mam reflexive marker is incorporated, since it is bound more tightly to the verb (*i.e.* is less separable from the verb by encliticized material) than other direct objects are.³¹

Aissen notes that the Mayan languages differ in terms of the pseudotransitive clause types they permit. In Q'anjob'al (Ordóñez, 1995; Pascual, 1995; Coon, Mateo Pedro, and Preminger, 2011) and Tzotzil (Aissen, 1999), reflexives and extended reflexives show pseu-

- 31. If this is indeed incorporatio, then (at least in Cajolá Mam) incorporation is also possible for indefinite bare nouns and even for some quantified or modified nouns as long as they are still indefinite (Pérez Vail, 2013):
- (i) Ma chin k'aayi-n maniil =e' tneejil.

 REC B1S sell-SUFF manilla =CL before

 I used to sell manilla.

CAJOLÁ MAM, Pérez Vail 2013

(ii) Ma chin k'aayi-n saq maniil =e' tneejil.

REC B1s sell-SUFF white manilla =CL before

I used to sell white manilla.

CAJOLÁ MAM, Pérez Vail 2013

(iii) Ma chi= kub' t-tzyu-'n kab'e' b'o's k'waal = a = ch.

REC B3p= DIR A2s-grab-suff two small child =CL =REP

You grabbed two small children, they say.

CAJOLÁ MAM, Pérez Vail 2013

It is not clear to me whether this represents something like bare-noun pseudoincorporation in K'ichee'.

All of this raises the question: what are the facts about pseudotransitivity in Mam? What we have said so far leads to the prediction that reflexives in Mam should show pseudotransitive behavior when it comes to extraction — that is, that they should permit subject extraction without any change to the verb. I believe that the example below may indicate that this prediction is borne out:

(iv) T-u'n = x jaaw t-ko'pa-n t-iib'. A3s-AGT = self DIR A3s-untie-SUFF A3s-self

He himself escaped. IXTAHUACÁN MAM, England and Domingo 1985 cl. 176

The question is how *tu'n* should be interpreted. If it is the subject of the clause, so that the literal translation is "it was he who untied himself," then this is indeed an example of subject extraction with no change in the verb. On the other hand, if it is an adjunct meaning something like "all by himself" or "on his own," so that the literal translation is "it was on his own that he untied himself," then this example is not relevant to the question at hand one way or the other.

It would appear that Mam extended reflexives do not exhibit pseudotransitive behavior: note that in the extended reflexive clause below, the verb has been antipassivized. (Mam is unusual among Mayan languages in that it has no distinct AF construction; antipassivization is the only compensatory strategy which it makes available for circumventing the constraint against transitive subject extraction.)

dotransitive behavior but verb-plus-bare-noun clauses do not. In Tz'utujiil, pseudotransitivity is impossible in extended reflexives, and is optional even in ordinary reflexives (Aissen, 2012b). In other words, when a subject is extracted from an ordinary reflexive clause, AF is optional but not required. Aissen does not suggest any semantic difference between cases where AF is used (191a) and those where it is not (191b).

- (191) a. *Nta* [x]-sil-o r-ii' pa q'aayiis.

 nothing CPL-move-AF A3S-REFL P bushes

 Nothing moved (*lit.* "moved itself") in the bushes.
 - b. Nta x-uu-sil r-ii' pa q'aayiis.
 nothing CPL-A3s-move A3s-REFL P bushes
 Nothing moved (lit. "moved itself") in the bushes.

Tz'urujiil, Aissen 2012b

On the incorporation account of pseudotransitivity, this can be explained as a crosslinguistic difference in the rules governing incorporation. In K'iche', any bare noun which does not introduce an independent discourse referent is incorporated. In Q'anjob'al and Tzotzil, bare nouns are only incorporated if they are part of the reflexive or extended reflexive construction. In Tz'utujiil, only the reflexive pronoun itself can be incorporated, and even it does not *have* to be incorporated.

(v) *Nya' Xwaan n-b'inchaa-n t-e t-jaa.*NEG Juan INC-construct-AP A3s-DAT A3s-house

It isn't Juan who is building his house.

CAJOLÁ MAM, Pérez and Jiménez 1997, p. 349

But as we will see in a moment, this is not surprising — for there is variation among Mayan languages as to which types of clause exhibit pseudotransitive behavior and which do not.

In the end, the only conclusion I am able to draw here is that a great deal more work on Mam is needed, both on clitic placement and on pseudotransitivity.

Summary In what follows, I will not be committed to the precise details of Coon et al.'s account of pseudotransitivity. But I will assume that the broad descriptive generalization they make is correct: that pseudotransitive clauses are ones in which the object is somehow less than a full-fledged argument. This is true in at least two ways. The objects of pseudotransitive clauses:

- are syntactically smaller bare nouns rather than full DPs;
- are syntactically more restricted they cannot be extraposed or left-dislocated in the
 way that ordinary transitive objects can; and

In §2.2.2 I drew a distinction between morphological and syntactic transitivity in K'ichee', and stipulated that syntactically transitive clauses had structures which would permit two full DP arguments. We are now in a position to see why I made this stipulation: according to this definition, pseudotransitive clauses do not count as syntactically transitive (though they do include morphologically transitive verbs).

Having described the features which pseudotransitive clauses have in common, we are now able to modify the AF generalization in order to include them.

(192) AF Generalization (final version)

- a. Iff the subject of a *syntactically* transitive clause is extracted, the verb will be inflected for the AF voice (provided an appropriate AF form exists).
- A clause only counts as syntactically transitive if it licenses two full DP arguments.

3.4.3 Further apparent exceptions resolved

In the previous section we handled exceptions to the AF generalization that required some change in the generalization to be made. In this section, I will present several apparent exceptions that I encountered in my own fieldwork, which I will show can be handled without any further change to the generalization.

3.4.3.1 The defective verb -a(aj) "want"

The verb -a(aj) 'want' is formally transitive. Its complement may either be a noun phrase denoting a desired *thing*, as in 193a, or a subordinate clause denoting a desired *state of affairs*, as in 193b.

- (193) a. *Ka-w-a-j jun w-elaad.*INC-A1s-want-ss a A1s-ice.cream

 I want an ice cream.
 - b. *Ka-w-a-aj* chi k-a-b'an a-chaak.

 INC-A1s-want-ss that INC-A2s-do A2s-work

 I want you to do your job (*lit*. "I want that you do your job")

If the subject of -a(aj) and the subject of the subordinate clause are the same, no overt complementizer is needed:

(194) Ka-w-a-aj k-in-b'ee pa ri k'ayib'aal.

INC-A1S-want-SS INC-A1S-go P D market

I want to go to market.

In at least some of these configurations, it is possible to extract the subject of -a(aj) without AF morphology:³²

32. Judith Aissen (p.c.) points out that this example may involve an IP complement, and in some Mayan languages these behave differently from DP or CP complements. Unfortunately, I am uncertain what the facts are concerning subject extraction from clauses where -a(aj) takes DP or CP complements in K'ichee'.

(195) Jachin ka-r-a-aj ka-b'ee-k? who INC-A3s-want-ss INC-go-ss Who wants to go?

Indeed, AF forms of -a(aj) do not appear to exist. The AF stem, if regular, would be -an(ik), but this form is rejected:

(196) * Jachin k-a-n ka-b'ee-k? who INC-want-AF INC-go-ss Intended: Who wants to go?

One might wonder whether the long vowel and final j in -a(aj) were actually part of the stem and not a status suffix. Then the predicted AF form would be -aaj-on(ik); but this is also rejected, as the following example shows:

(197) * Jachin k-aaj-on ka-b'ee-k? who INC-want-AF INC-go-ss

Intended: Who wants to go?

Further investigation shows that -a(aj) is morphologically defective in other ways.³³ At least for the speakers I have worked with, it has *no* voice forms other than the active — no passive, no completive passive, and no antipassive — and has no perfect form either:

(198) a. * k-a-x-ik [INC-want-PASS-SS] Intended: it is wanted b. * k-a-taj-ik [INC-want-CP-SS] Intended: it came to be wanted c. * k-a-n-ik [INC-want-AP-SS] Intended: s/he wants [things] d. * w-a-am [A1S-want-PERF] Intended: I have wanted it

33. Nora England (*p.c.*) tells me that the Mam verb -*aj* 'to want' is defective in similar ways.

These gaps are unlikely to be for purely semantic reasons, for the semantically quite similar verb -rayi(ij) 'desire' has all of these:

```
(199) a. ka-rayi-x-ik [INC-desire-PASS-SS] it is desired
b. ka-rayi-taj-ik [INC-desire-CP-SS] it came to be desired
c. ka-rayi-n-ik [INC-desire-AP-SS] s/he desires [things]
d. nu-rayi-im [A1S-desire-PERF] I have desired it
```

Similarly, -a(aj) lacks a progressive form. This seems like it could plausibly be for semantic reasons: wanting is a state, and predicates describing states often resist progressivization. But in elicitation, other state-denoting predicates in K'ichee' are judged felicitous in the progressive, as shown in both 200 and 201. The example in 201, which was offered by one of my consultants as a context in which *tajin kinkojoh* could be used, was translated into Spanish by that same consultant in a way that suggests to me that some sort of aspectual coercion has taken place — so that it means, not ?? I am believing, but I am beginning to believe.

- (200) Tajin k-in-rayi-j jun w-elaad.

 PROGR INC-A1s-desire-ss one A1s-ice.cream
 I'm longing for an ice cream.
- (201) Tajin k-in-koj-oh cher tziij ka-b'an-taj la' le jastaq lee'.

 PROGR INC-A1s-believe-ss that true INC-do-CP DEM D thing DEM
 I'm starting to believe that those things truly will occur.

Thus we might expect -a(aj) to undergo the same sort of coercion. But it apparently does not: *tajin karaaj is simply judged ungrammatical.

This pattern may already fall under the generalizations we have made above. We have already seen that for some speakers, when no appropriate AF form exists, an active verb may be used. The situation with -a(aj), then, may be just another manifestation of this pattern.

For other verbs, it is only in certain person/number combinations that the appropriate AF form is missing. For -a(aj), the AF form is always missing; what's more, its antipassive form is also missing, meaning that CNK speakers who would normally resort to the antipassive cannot do so here; and so the active form is used instead. Alternately, this pattern could be treated as a lexical exception to the AF generalization. But for the sake of simplicity of exposition I will assume that the former explanation is correct — that the behavior of -a(aj) is a special case of the behavior already observed surrounding missing forms, and that no further modification to the AF generalization is required.

3.4.3.2 Verbs of becoming: complement-taking intransitives

There is another class of verbs which fits into the generalizations in this chapter in a somewhat unexpected way. These are verbs of becoming — that is, verbs describing the beginning of a state — which participate in the construction exemplified below.

- (202) a. *Ri jun alah x-ux sootz*'

 Do one boy CPL-become bat

 The boy who became a bat (title of a folktale)
 - b. La xaa on aree k-iw-a-aj k-ix-ok u-tijoxel-aab' ix?

 Q just or CONTR INC-A2p-want-SS INC-B2p-enter A3s-student-PL 2pl

 Do you want to become his disciples too? Misal p. 164 (John 9:27)
 - c. ... x-ok k-anab' =ta le chee', ka-cha',

 CPL-enter A3p-sister =IRR D wood INC-say

 x-ok esclavos, ka-cha' pa kaxlantziij ...

 CPL-enter slaves INC-say P Spanish

...they became as if "sisters of the jail" (*lit*. "of the wood"), they're called, they became "slaves," as they're called in Spanish... *Ajpacajá*

At first glance it might be tempting to analyze these as transitive verbs. After all, they each appear to license two arguments: xux in 202a appears to take sootz as its direct object, and kixok in 202b appears to take utijoxelaab as its direct object. But we will quickly see that this is not viable.

Now, if we did analyze these verbs as transitive, we would need to explain why the subjects of these verbs are available for extraction, as in the following sentences:

```
(203) a. Jachin x-ux sootz'?
who CPL-become bat
Who became a bat?

b. Jachin x-ok masaat?
who CPL-enter deer
Who played the deer? (i.e. in a traditional dance)
```

Several possible explanations suggest themselves, based on the ways we have handled other seeming exceptions so far. For instance, we could treat the objects of these verbs as pseudoincorporated, and the clauses that they head as pseudotransitive clauses. This possibility is encouraged by the fact that full DPs cannot occur as complements of these verbs.

This same restriction against full DPs is found in the pseudoincorporation construction described above.

But there are a few major problems with the pseudoincorporation analysis. One is that, unlike pseudoincorporated objects, the complements of these verbs of becoming can be separated from the verb itself — as *jachke chikop* 'which animal' has been in 205a–b.

- (205) a. Jachke chikop x-ok =wi le al Gabi?
 which animal CPL-enter =ADJF D miss Gabi
 Which animal did Gabi play?
 - b. Jachke chikop x-ux =wi le achih.

 which animal CPL-become =ADJF D man

 Which animal did the man turn into?

And in any case, there is evidence that the verbs in question are not transitive anyway. Their citation forms when pronounced in isolation are *xuxik* and *xokik*, bearing intransitive status suffixes; and in the perfect aspect, they take the intransitive form *-inaq* of the perfect status suffix rather than the transitive form *-oom*:

(206) La at+ok-inaq masaat?

Q B2s+enter-PERF deer

Have you played the deer?

What's more, unlike transitive verbs, they do not take Set A markers — as demonstrated by the infelicity of 207.

(207) * La aw-ok-inaq masaat?

Q A2s-enter-perf deer

Intended: Have you played the deer?

So we have seen that these clauses do not behave like typical structurally transitive clauses, and that the verbs which head them are formally intransitive. All evidence points to an analysis on which they are simply intransitive clauses. But this leaves us with a problem. How are we to analyze the noun which follows the verb, if not as an ordinary direct object or even a pseudoincorporated object?

I believe the best move here is to treat them as complement clauses of some sort. There is some precedent in K'ichee' for intransitive verbs taking a clausal complement: the verb -kowin(ik) 'be able' is morphologically intransitive, as shown by its use of Set B markers for subject agreement and by its intransitive status suffix in 208; but it can take a finite complement, as demonstrated in 209.³⁴

```
(208) K-at-kowin-ik. (209) K-at-kowin-ik k-a-slab'a-aj.

INC-B2s-be.able-ss

You can (do it). You can move it.
```

And it permits free subject extraction, as in 210 (where *jachin* 'who' is its subject and has undergone wH-movement), suggesting that it can head syntactically intransitive clauses.³⁵

```
(210) Jachin = ta = k'u ka-kowin-ik ka-paq-i'
who = IRR = then INC-be.able-ss INC-high-vI
k'a p+u-wi u-juyuub' ri Yaa-Weh?
SCAL P+A3s-on A3s-mountain D Jehovah
Who then can climb up the mountain of Jehovah? Misal p. 56, Psalm 24: 3a
```

- 34. Interestingly, there are other complement-taking verbs in K'ichee' which are morphologically (and perhaps syntactically) transitive, including *-maj(ij)* 'begin'. It would be worth investigating whether the morphologically intransitive verbs in this class differ in a systematic way from the morphologically transitive ones.
- 35. Interestingly, this is true even when the complement clause is transitive, as in ii. The verb -tak'alib'e(ej) 'stand on' is a transitive active verb and not an AF verb as indicated by its agreement morphology, status suffix and lack of AF suffix but its subject, *jachin*, has been extracted. This fact probably merits further attention; I am not sure how to explain it, or whether there are other complement-taking verbs which permit subject extraction from a transitive finite complement.
- (i) Jachin =ta =k'u =lo ri ka-kowin-ik k-u-tak'al-ib'e-j
 who =irr =then =dub c inc-be.able-ss inc-a3s-stand-instr-ss
 u+pa ri tyox-alaj u-k'oolb'al.
 nmlzr+p d holy-intens a3s-place

Who then could be able to stand upon his sacred place?

Misal p. 56, Psalm 24: 3b

Now, there is one major difference between -ux(ik) and -ok(ik) on the one hand and -kowin(ik) in the other: the former verbs only take bare nouns as their complements, while the latter generally takes complement clauses headed by a finite verb. But as Pollard and Sag, among others, have noted, verbs of this sort often have idiosyncratic subcategorization requirements. Consider the following contrasts in English (Pollard and Sag 1987; Pollard and Sag 1994).

- (211) a. Kim grew political.
 - b. * Kim grew a success.
 - c. * Kim grew sent more mail.
 - d. * Kim grew doing all the work.
 - e. Kim grew to like anchovies.
- (213) a. Kim became political.
 - b. Kim became a success.
 - c. * Kim became sent more mail.
 - d. * Kim became doing all the work.
 - e. * Kim became to like anchovies.

- (212) a. Kim got political.
 - b. * Kim got a success.
 - c. Kim got sent more mail.
 - d. * Kim got doing all the work.
 - e. Kim got to like anchovies.
- (214) a. Kim ended up political.
 - b. Kim ended up a success.
 - c. * Kim ended up sent more mail.
 - d. Kim ended up doing all the work.
 - e. * Kim ended up to like anchovies.

For that matter, the K'ichee' verbs of becoming have other idiosyncracies which I have not fully explored. For instance, -ok(ik) participates in another verb-of-becoming construction in which the state which is beginning is expressed as a verbal noun which it takes as its subject rather than as a complement; and the person or thing entering that state is expressed as a possessor of that verbal noun. This construction is exemplified in 215; nuwaraam is literally 'my sleepiness'.

(215) X-ok nu-war-aam. (216) * X-in-ok nu-war-aam.

CPL-enter A1s-sleep-NMLZR

I got sleepy. Intended: I got sleepy.

There is probably a great deal more that could be said about these verbs. But what I have said here is sufficient, I think, to show that they are not simply straightforward transitives, and that therefore it is consistent with the AF Generalization as I have expressed it that their subjects can be freely extracted.

3.4.3.3 Dialects with weakened syntactic ergativity

In addition to the specific apparent exceptions mentioned above, there is a more general apparent exception to the patterns of syntactic ergativity which I have described in this chapter. A number of authors have commented that there are speakers for whom the use of the AF verb form is optional (Trechsel 1993, p. 75, Sis Iboy and López Ixcoy 1993, p. 136, Campbell 2000, p. 255). However, the speakers with whom I have worked uniformly reject the examples which these authors cite, and they produce similar sentences rarely enough that I am willing to write off the few tokens I have recorded as production errors.

This suggests to me that there is a good deal of undocumented sociolinguistic variation with respect to syntactic ergativity. In further support of this suggestion, Yasavul (2013b) describes one dialect of K'ichee' — spoken in Playa Grande, an isolated community far to the north of the core K'ichee'-speaking region — which consistently allows ordinary transitive subjects to move without an AF verb.

I had the opportunity to spend several weeks working with a K'ichee' speaker raised in Macalajau, an aldea in the municipio of Uspantán. Uspantán is best known to linguists as the home of the K'ichean language Uspanteko; but it is in fact quite large and linguistically

diverse — it also has areas where Q'eqchi' and K'ichee' are dominant.³⁶ Federico Vásquez was raised in a K'ichee'-dominant household; his mother's first language was Uspanteko, but she spoke it rarely at home, and his father's first language was K'ichee'. Don Federico himself speaks K'ichee' and Spanish fluently, but knows no more than a few words of Uspanteko.

For don Federico, it appeared that in at least some cases, the use of the AF verb was conditioned by semantic or pragmatic considerations as well as syntactic ones. For instance, he found both of the following sentences to be grammatical — 217a, with an AF verb, and 217b, with an active verb.

```
(217) a. Jachin x-b'an-ow-ik?
who CPL-do-AF-SS
Who did it?
b. % Jachin x-u-b'an-oh?
who CPL-A3S-do-SS
Who did it?
```

MACALAJAU K'ICHEE', ungrammatical in CNK

But he commented that the sentence in 217a struck him as carrying a tone of anger or blame. (The example he volunteered to illustrate the point was of a construction foreman arriving on a job site, noticing something had been shoddily built, and demanding to know which worker was responsible.) He did not feel that 217b had the same tone. But on further questioning, he also judged 217a to be acceptable in contexts in which the speaker was not angry; and I was not able to get a clear sense of the distinction in the limited time we spent on this topic.

There are a number of possible explanations for don Federico's judgments, and more work would be required to determine which is correct. One tempting possibility is that don

^{36.} Indeed, to non-linguists it is best known as the home of author and politician Rigoberta Menchú, a speaker of K'ichee'.

Federico was responding to a register difference, perceiving the prescriptively "correct" form in 217a as haughty, bossy or superior, and perceiving 217b as more colloquial and hence friendlier.

Finally, I should mention Cunenteco, which is another of the northern dialects of K'ichee', and by most accounts the most divergent. Indeed, some have argued that Cunenteco should be treated as an independent language in the K'ichean family. I spent two days in Cunen doing preliminary fieldwork, and got the impression that the dialect situation in the town was essentially diglossic: most residents spoke only a fairly "standard" variety of K'ichee'; but I met some older residents who were able to speak both standard K'ichee' and a much stronger and less standard Cunenteco dialect. (In one family, the parents spoke Cunenteco among themselves, and standard K'ichee' with their children, and their children reported being unable to speak or understand Cunenteco, suggesting some degree of mutual unintelligibility — though this may have been an exaggeration out of modesty.)

The only available work in Cunenteco is a SIL translation of the Gospels, and I have no idea how well it reflects the actual grammar of Cunenteco. (I spoke briefly with one Cunenteco-speaker who had been involved with the project, and he commented that the native speaker consultants had been *como mozos* 'like laborers', and had not been given much say in the output.) But two notable features of the grammar of the Cunenteco Gospels are worth mentioning here. One is an almost total breakdown of the K'ichee' determiner system. Definite nominals are not introduced by *ri*, *le* or *we*. They sometimes take the form of bare nouns — even in the singular, which is not an option in most varieties of K'ichee'. For instance, in 218 the bare noun *tilmit* clearly has a familiar singular referent, but it appears without any determiner.³⁷

^{37.} *Tilmit* is cognate with CNK *tinamit* 'town'. In CNK, we would expect to see either *ri/le/we tinamit* 'the town' or *jun tinamit* 'a town'; in this context, the former is more likely.

(218) Jesús x-ok pe tilmit Jerusalén, xoq'je' x-ok ch+pam Ø loq'laj jaj...

Jesus CPL-enter P town Jerusalem also CPL-enter P+A3s:in holy house

Jesus entered the town of Jerusalem and went into the temple...

CUNENTECO, Uyoloj Qajawal Dyos p. 96, Mark 11:11

When singular, they are sometimes introduced by *jn* — cognate with the standard K'ichee' *jun* 'one'. This can occur even in cases where the noun clearly has a given referent, as with the fig tree in 219.

(219) *Context*: Jesus curses a fig tree for bearing no fruit. He leaves, goes with his disciples into Jerusalem, and the next day they return to the same tree.

... te' x-k-il-o chir jn u-che'-al xikix then CPL-A3s-see-ss that ? A3s-tree-poss fig x-cheq-ej-ek suk'te' r-uk' r-a'. CPL-dry-VERS-SS straight A3s-with A3s-root

X-na'-taj ch+e Pedro, x-u-bij ch+e Jesús, cpl-feel-cp p+a3s:dat Peter, cpl-a3s-say p+a3s:dat Jesus

"Ajtyojnel, wula'much teacher behold

jn u-che'-alwikix chir x-a-ya'mixqab' p+u-wi'x-cheq-ej-ek."? A3s-tree-possfigthat cpl-A2s-put cursep+A3s-on cpl-dry-vers-ss

Then they saw that the fig tree had dried up from the root. This was noted by Pedro, and he said to Jesus, "Teacher, look, the fig tree which you put a curse on has dried up."

Cunenteco, *Uyoloj Qajawal Dyos* p. 97, Mark 11: 20–21

And they are sometimes introduced by jn and also followed by a suffixed or encliticized e', as with the second mention of the cursed man in 220.

(220) X-k'am =b'ik r-uk' Jesús jn chij chir k'o tzel santil p+u-k'aslemal,

CPL-take =away A3s-with Jesus ? man that Exs evil spirit P+A3s-life

chir u-b'on-om moy xoq'je' u-b'on-om mem ch+e,

that A3s-make-PERF blind also A3s-make-PERF mute P+A3s:DAT

ruk'ut Jesús x-r-esaj =b'ik jn tzel santil p+u-k'aslemal jn chij =e'.

and Jesus CPL-A3s-remove =away ? evil spirit P+A3s-life ? man =?

They brought before Jesus a man who had an evil spirit on his life that had made him blind and mute, and Jesus removed the evil spirit from the man.

CUNENTECO, Uyoloj Qajawal Dyos p. 25, Matthew 12:22

When plural they can be introduced by ni'j, with or without a suffixed or encliticized e'.

(221)

Also in the Cunenteco Gospels, there are frequent cases where a transitive subject moves without AF morphology on the verb. For instance, in the final clause of 222, *naq* 'who'³⁸ has undergone wH-movement, but the verb is an ordinary transitive active verb: it has no AF suffix, and a Set A agreement marker.

(222) X-ki-b'i-j =k'ut ch+e:

CPL-A3s-say-ss =then P+A3s:DAT

"R-uk' kux che q'atb'altzij ka-b'an wa' ri'?

A3s-with what P authority INC-do DEM DEM

Naq x-u-ya' q'atb'altzij ch+aw, chir k-a-b'an ni'j chpa'kux =e'?"

who CPL-A3s-give authority P+A2s:DAT that INC-A2s-do? things =?

They said to him, "With what authority do you do this? Who gave you authority, that you do [these things?]"

CUNENTECO, Uyoloj Qajawal Dyos p. 97, Mark 11:28

38. Cognate with CNK jachin(aq) 'who'.

The restructuring of the determiner system makes it difficult to tell how to analyze these. In standard K'ichee', the second clause in 222 would be analyzable as pseudotransitive, since its object *q'atb'altziij'* authority' is a bare noun. But in Cunenteco, it appears that the distinction between full DPs and bare nouns operates in a very different way, and I believe it would be hasty to interpret the second clause in 222 as pseudotransitive just because none of the familiar determiners from standard K'ichee' are present.

It is hard to judge what is going on here without more evidence. Indeed, one very real possibility is that some or all of these examples represent simple grammatical errors, since they come from a text which was translated by non-native speakers and it is unclear how much input native speaker consultants had in revising or checking the grammar of that translation. Still, another possibility is that Cunenteco — like its near neighbors Macalajau K'ichee' and Playa Grande K'ichee' — exhibits only a weakened form of syntactic ergativity.

Th moral here is that K'ichee' is a diverse language, and — despite increasing standardization — still in many ways a pluricentric one. There is a great deal of grammatical variation from one area to another, and in some cases between acrolectal and basilectal varieties spoken in the same area. I would argue that the data in this section strongly suggest that the use of AF verbs is an important locus of variation; and there is likely a great deal more work that could be done in mapping out that variation and understanding its causes and correlates. In the meantime, the conclusions which I have arrived at in this chapter should be understood as applying to CNK, and not necessarily to other varieties.

Chapter 4

Focus in canonical and non-canonical clauses

In Chapter 3 we saw examples of various movement constructions — including focus movement, exemplified below by a natural example involving contrastive focus. In focus movement, narrow information-structural focus on a constituent (or on some part of it) causes that constituent to move to immediately pre-predicate (IPP) position.

```
(1) X-in-kolo-taj ch+o ri ab'aj,

CPL-B1s-save-CP P+A3s:in.front D rock,

x-in-kolo-taj ch+o ri k'atel koot,

CPL-B1s-save-CP P+A3s:in.front D ?? eagle,

pero aree = k'u ri kamiik,

but CT = CT D now

aree [ ri b'alam ]<sub>F</sub> ka-k'is-ow tziij pa nu-wi'.

FOC [ D jaguar ]<sub>F</sub> INC-end-AF word P A1s-head
```

I was saved from the rock, I was saved from the giant eagle, but now it's [the jaguar]_F that will kill me.

Ajpacajá

Indeed, K'ichee' has often implicitly been treated as a language in which focus movement is obligatory — that is, in which all narrowly focused constituents must move. But recent evidence suggests that under certain circumstances, focus movement is optional in K'ichee', and narrow foci can also be realized in situ. Examples of this so far have come from scripted production studies (Baird, 2010; Baird, 2014; Burdin et al., 2013); but natural examples are

also plentiful. Consider the contrastive pair in 2, in which the focus in 2b has not moved; or the question/answer pair in 3, in which the answering constituent in 3b has not moved.¹

- (2) a. Na xaq = ta [apachike si']_F k-w-a-j. [O]_F V t

 NEG1 just = NEG2 [any.old wood]_F INC-A1s-want-ss

 I don't just want [any old wood.]_F
 - b. Are k-a-tzuku-j [ri uk'a'.] $_F$ V [O] $_F$ Foc opt-A2s-find-ss [the madroño] $_F$ Find [madroño wood.] $_F$ Xan Kata'l
- (3) a. "Jas u-wach rajawaxik pa le qa-tinamit?" what A3s-face necessary P the A3s-town "What sort of thing do we need in our town?"
 - b. "Aree k-qa-b'an-a [jun sin qa-tyoox,"] $_F k$ -e-cha'. $V[O]_F$ FOC OPT-A1p-make-ss [a little A1p-church] $_F$ INC-B3p-say "We should make ourselves [a little church,"] $_F$ they said. Guarchaj

This chapter has two goals. The first is to document the use of in situ focus in a variety of contexts, including both elicited and spontaneous production data. These data confirm

1. When it is possible to do so without misrepresenting or distorting the syntactic details of the clause, I will mark all examples in this chapter with an abbreviation like this one, indicating the order of constituents; for non-verb-initial word orders, the way in which the constituents arrived in this order (using arrows for movement and commas to offset left-dislocated constituents); and the scope of focus.

In some cases, it will not be possible to give such a shorthand representation. In particular, if focus falls on a subconstituent of one of the arguments rather than a full argument, this cannot be represented without distortion, and so I will leave the shorthand representation off.

In this chapter, as in previous ones, I use the following abbreviations for syntactic functions: S for intransitive subject, A for transitive subject, O for transitive object, X for adjunct. In pseudotransitive clauses — whose subjects behave like ordinary transitive subjects for morphological purposes, but like intransitive subjects for syntactic and (as we will see) information-structural purposes — I adopt the convention of labeling subjects as S rather than A, in keeping with their syntactic and information-structural behavior.

that in situ focus is not just an artefact of a particular experimental design, but rather a widely-used expressive device outside of experimental contexts.

The second goal is to address the question of *when* in-situ focus is possible. Here, we find a set of syntactic constraints that have not previously been described. Intransitive subjects ("S arguments") and transitive objects ("O arguments") may be focused in situ, as 4 and 5 show.

(4) *Context:* What does María want to eat?

```
Aree k-u-tij [ le ichaj ] _{\rm F} le al Mari'y. V _{\rm FOC} INC-ERG3s-eat:TR [ D vegetable ] _{\rm F} D miss María María will have [the vegetables]._{\rm F}
```

(5) Context: Which of them is going to eat?

```
Aree ka-wa' [ le al Mari'y. ]_{\rm F} V [S]_{\rm F} FOC INC-eat:INTR [ D miss María ]_{\rm F} [María]_{\rm F} will eat.
```

But transitive subjects ("A arguments") may not be; the sentence in 4, which was felicitous in a context that induces focus on the O argument, becomes infelicitous in a context (e.g. in 6) that induces focus on the A argument.

(6) *Context*: Who is going to eat the vegetables?

```
# Aree k-u-tij le ichaj [ le al Mari'y. ]_{\rm F} # V O [A]_{\rm F} FOC INC-ERG3s-eat:TR D vegetable [ D miss María ]_{\rm F} Intended: [María]_{\rm F} will eat the vegetables.
```

In other words, K'ichee' has an ergative/absolutive asymmetry with respect to the choice of focus-realization strategies — the options available for realizing focused A arguments are

different than the options available for realizing other focused arguments.²

This ergative asymmetry is a typological novelty, falling outside of two broad patterns which have been described in other languages. On the one hand, a number of languages have been described with symmetrical patterns, in which focus movement is optional for *all* types of argument — or at least is conditioned by something other than gramatical function, such that for any argument type, we can find cases where focus movement occurs and cases where it does not. English is an example of this: any focused argument in English can be either clefted or left in situ, and the choice depends on pragmatic considerations (such as the tendency to use clefts in cases where a contrastive or exhaustive meaning is desired; see *e.g.* Horn 1981; Atlas and Levinson 1981; Kiss 1998) rather than on grammatical function. Other languages where this pattern occurs include Japanese (Truckenbrodt, 1995), Spanish³ and, according to evidence which I will review in §4.4.1, the Mayan languages Tseltal and Tsotsil.

And on the other hand, a number of languages have been described with asymmetric patterns. But so far these asymmetric patterns have always been of the nominative/accusative type, in which movement is mandatory for subjects and optional otherwise. Colloquial spoken French is an example of this: in colloquial French, focused subjects (both transitive and intransitive) must be clefted, while focused nonsubjects may be left in situ.⁴ Other languages where accusative asymmetries occur include Hausa (Zimmermann, 2006a; Hartmann and Zimmermann, 2007a) and a number of other West Chadic languages (Zimmermann, 2011).

- 2. Of course, examples 4 and 6 alone don't prove that the grammatical function of the focused constituent is the crucial factor. The full argument can be found in §4.2.
- 3. At least in some varieties: see Gabriel 2010. Some syntacticians, including Zubizarreta (1998), have described varieties of Spanish in which subjects cannot be focused in situ which would put those varieties in the category described in the next paragraph.
- 4. This is true both of Quebecois (Skopeteas and Fanselow, 2009) and of colloquial European French (Lambrecht, 2004; Hamlaoui, 2008; Destruel, 2013). Formal written and spoken french permit any constituent to be focused in situ, as English and Japanese do.

Table 4.1 summarizes the patterns of focus movement described here.

	A	S	О
English, Spanish, Japanese, Tsotsil?, Tseltal?	optional	optional	optional
K'ichee', Yucatec?	mandatory	optional	optional
Hausa, Spoken French	mandatory	mandatory	optional

TABLE 4.1: Crosslinguistic patterns of mandatory or optional focus movement.

Indeed, some authors have proposed universals to the effect that *all* asymmetrical patterns of optional focus marking will be of the nominative/accusative kind found in French, Hausa and so on (*e.g.* Zimmermann 2011). The ergative/absolutive asymmetry found in K'ichee' constitutes an exception to these claimed universals. (In §4.4.1 I will suggest that an asymmetry along these same lines is present in Yucatec; if true, this would constitute a second exception to these claimed universals.)

The ergative asymmetry in K'ichee' is also of interest because it represents a third ergative pattern in the grammar of the langauge, in addition to the two discussed previously. As we've seen in §2.2.1 and §3.4, K'ichee' exhibits morphological ergativity in its agreement system and syntactic ergativity in its system of constraints on a-bar movement. The asymmetry in focus marking could be described as a form of information-structural ergativity, since it is an ergative pattern in the realization of information-structurally marked constituents.

4.1 What does it mean to be pragmatically neutral?

In the last chapter, we considered the syntactic sources for different word orders in K'ichee'. The jumping-off point for this discussion was Norman's (1977) observation that, while all 6 orders of V, O and A are possible in K'ichee', voa order can be regarded as the most basic — and the other orders can be derived from it by means of three operations: left-dislocation, movement, and extraposition.

In this chapter, we will take up the question of the pragmatic causes of word order variation. Two of Norman's three operations, left-dislocation and movement, are generally held to be linked to information structure. Left-dislocation is held to reflect topichood, and movement — specifically, movement of a non-wh word — is held to reflect focus. (The third operation, extraposition, is probably motivated at least in part by prosodic weight and not by information structure. I will be assuming here, as I did in Chapter 3, that extraposition is basically a matter of production and not of syntax; and I will regard extraposed constituents as equivalent to in situ ones for all practical purposes.)

In this chapter, I will be considering the relationship between movement and focus more closely; and in doing this I will begin someplace perhaps counterintuitive: by considering the information structure of clauses in which focus movement has *not* occurred. With the few exceptions already mentioned, this is not a topic which has been closely considered in past work on K'ichee'. Much of the past literature on K'ichee' pragmatics has been motivated by typologists' interest in finding a basic word order for K'ichee'. The goal was thus to understand the (presumably) marked conditions under which deviations from the basic word order occurred; and the basic word order itself was treated as an unmarked default which required no explanation. As a result, the discourse conditions under which verb-initial word orders occurred were not given much attention; and in studying non-verb-initial word orders, the emphasis was on the information status of these arguments which remained in situ, such as subjects in ova clauses or objects in avo clauses.

The verb-initial word orders are often described as information-structurally "neutral" or "unmarked," or as occurring in pragmatically "neutral" or "unmarked" contexts. This was indeed one of the criteria which led Norman to select VOA as the basic word order in K'ichee'; Larsen (1988), in summarizing this aspect of Norman's work, writes that Norman assumed that

the basic order should be neutral with respect to "thematic structure" (i.e., theme vs. rheme or topic vs. comment) and "information structure" (new information, focus, etc). That is to say, the basic order should not be used for some marked discourse pragmatic purpose. (p. 333)

England (1991) likewise takes pragmatic neutrality as a criterion for basic word order; she writes that in seeking evidence for basic word order, we should consider clauses in which "no constituent is focused, topicalized, or otherwise highlighted" (p. 449). She acknowledges, though that such clauses are not necessarily common:

Few sentences in a segment of discourse contain both a lexical subject and a lexical object (Du Bois, 1987). Even fewer sentences are found to meet the additional criteria of simplicity, pragmatic neutrality, *etc*.

(p.450)

And indeed, she points out that the requisite sort of neutrality is not always easy to produce: "Elicited sentences are not, of course, pragmatically neutral, since speakers provide a context for them" (p. 450).

Let us suppose that there is something basically correct about these comments — that there is indeed some meaningful sense in which verb-first clauses in K'ichee' are more pragmatically neutral than others. The question then arises: in what does this pragmatic neutrality consist?

One possiblity would be to interpret "pragmatic neutrality" as meaning "broad focus." This would certainly be compatible with England's comments about pragmatic neutrality and context; for one common place in which broad focus clauses are heard is in out-of-the-blue comments. We can also find some support for this view in Norman's work; Norman (1977) reportedly used a version of the question/answer diagnostic in his own research, and found that verb-initial clauses are indeed used in contexts which induce (what we would now call) broad focus — namely, those in which the question is something like "What happened?"

(7) Context: What happened?

```
[ X-ki-k'ux lee atz'yaq lee ch'oh. ]_F [V O A]_F [ CPL-A3p-eat D clothes D mouse ]_F (Norman 1977, cited in Larsen 1988, p.334)
```

Now, as Larsen (1988) among others points out, clauses like 7 are in some ways unnatural. It is much more common to find that one or more of the referents is given, and so can be referred to using a null pronoun. Thus, for instance, in a context where the mice were already salient, we would be more likely to see a sentence like 8.

(8) *Context*: What happened? (mice already salient/topical)

```
[ X-ki-k'ux le atz'yaq \varnothing. ]_F [V O]_F [ CPL-A3p-eat D clothes PRO ]_F [They ate the clothes.]_F
```

Still, the examples in 7 and 8 are equally valid as instances of broad focus. If we considered these examples alone, then, it would be tempting to conclude that verb-initial orders always reflect broad focus, and that narrow focus of any sort requires a different word order.

4.1.1 Pragmatic neutrality as information-structural flexibility

In the rest of this chapter, though, I will argue that verb-initial clauses have a different sort of "neutrality." It is not that they necessarily indicate broad focus. It is rather that they are compatible with many different focus structures — including not only broad focus but often narrow argument or adjunct focus as well. For instance, a vo clause is compatible with narrow focus on the object (9) as well as with broad focus (7), and a vox clause such as 10 is compatible with broad focus (10a–b) or with narrow focus on either the object (10c) or the adjunct (10d).

(9) *Context*: What did the mice eat?

X-ki-k'ux [le atz'yaq]_F
$$\varnothing$$
.

CPL-A3p-eat [D clothes]_F PRO

They ate [the clothes.]_F

(10) a. Context: What happened? (mice already salient/topical)

[
$$X$$
- ki - k' u x le atz' yaq \varnothing ch + aq' a b' .] $_F$ [V O X] $_F$ [V O X] $_F$ [They ate the clothes last night.] $_F$

V [O]_F

b. Context: What did the mice do last night?

[
$$X$$
- ki - $k'ux$ le $atz'yaq$] $_F \varnothing ch$ + $aq'ab'$. [V O] $_F$ X [cpl - $a3p$ -eat D clothes] $_F$ PRO P+night They [ate the clothes] $_F$ last night.

c. Context: What did the mice eat last night?

$$X$$
- ki - $k'ux$ [$le\ atz'yaq\]_F $\varnothing \ ch$ + $aq'ab'$. $V\ [O]_F\ X$ CPL-A3p-eat [D clothes]_F PRO P+night

They ate [the clothes]_F last night.$

d. *Context*: When did the mice eat the clothes?

X-ki-k'ux le atz'yaq
$$\varnothing$$
 [ch+aq'ab']_F V O [X]_F CPL-A3p-eat D clothes PRO [P+night]_F They ate the clothes [last night.]_F

Similarly, in noncanonical clauses where some overt constituents remain in situ, those in situ constituents partake of a sort of pragmatic neutrality. But this neutrality should not be understood as obligatory broad focus, or as lack of narrow focus. Rather, it should be understood as *flexibility* with respect to information structure: in many cases, the in situ constituents can be construed either as focused or as unfocused, depending on context. In

the examples in 11, for instance, the constituent *le choh* "the mice" has been left-dislocated, producing AVOX word order rather than the canonical VOAX. But for the constituents which have not been left-dislocated, there is the same range of available interpretations with respect to information structure that there was for the sentence in 10.

(11) a. Context: What happened? (mice already salient/topical)

Le choh, [
$$x$$
- k i- k ' ux le atz ' yaq ch + aq ' ab '.] $_F$ A, [V O X] $_F$ D mice [cpl - $A3p$ -eat D clothes p + $night$] $_F$ The mice, [they ate the clothes last night.] $_F$

b. Context: What did the mice do last night?

Le choh, [
$$x$$
- k i- k ' ux le atz ' yaq] $_F$ ch + aq ' ab '. A, [V O] $_F$ X D mice [cpl - $A3p$ -eat D clothes] $_F$ p + $night$ The mice, they [ate the clothes] $_F$ last $night$.

c. Context: What did the mice eat last night?

d. Context: When did the mice eat the clothes?

Le choh, x-ki-k'ux le atz'yaq [
$$ch+aq'ab'$$
]_F A, V O [X]_F D mice CPL-A3p-eat D clothes [$P+night$]_F The mice, they ate the clothes [last night.]_F

Note that in the examples in 10 c-d, the narrowly focused constituents could equally well have undergone focus movement. The resulting sentences would have been both grammatical and contextually felicitous.

(12) a. Context: What did the mice eat last night?

So another way to think of the information-structural flexibility of canonical clauses is in terms of *optionality*. Focus movement is a means of overtly, syntactically marking narrowly focused constituents. But in many cases, syntactic marking of narrowly focused constituents is optional. Because canonical word order is information-structurally flexible, and is consistent both with broad and with narrow focus, it is often possible for narrowly focused constituents to remain in situ as well as to move, giving speakers two options for conveying the same message in the same context.

And the same point holds with respect to in situ constituents in non-canonical clauses. In the examples in 11, the narrowly focused constituents which are realized in situ could equally well have undergone focus movement.

(13) a. Context: What did the mice eat last night?

Le choh, aree [le atz'yaq]_F x-ki-k'ux ch+aq'ab'.

D mice FOC [D clothes]_F CPL-A3p-eat P+night

The mice, they ate [the clothes]_F last night.

b. When did the mice eat the clothes?

Le choh, [ch+aq'ab']_F x-ki-k'ux le atz'yaq.

D mice [P+night]_F CPL-A3p-eat D clothes

The mice, they ate the clothes [last night.]_F

We could equally well think of this in terms of optionality: in one and the same context, a speaker might have the option of producing an Avo clause (e.g. 11c or d) or an Avo clause (e.g. 13a or b).

Throughout this chapter I will make use of both of these perspectives on focus in situ, talking sometimes about the optionality of focus movement and sometimes about the information-structural flexibility of in situ constituents. Which way of talking is more natural depends on whose perspective we want to take among the speech act participants. In talking about optionality we tend to take the speaker's perspective — for it is the speaker who has the option of using or not using focus movement. In talking about flexibility we tend to take the hearer's perspective — for it is the hearer who must decide which of several possible construals for an information-structurally flexible constituent is most appropriate in a given context.

4.1.2 Movement and left-dislocation impose pragmatic constraints

§4.1.1 described in situ constituents as information-structurally flexible. The converse of this is also true: ex situ constituents are information-structurally constrained. That is, realizing a constituent ex situ forces the hearer to give that constituent one specific information-structural construal, or one of a reduced number of information-structural construals.

This is perhaps easiest to see with respect to left-dislocation. A constituent which is left-dislocated must be interpreted as some sort of topic. There are still several interpretive possibilities that this leaves open; depending on the context, the hearer might take the left-dislocated constituent as an aboutness topic, a contrastive topic,⁵ or a frame-setting topic. But it also forecloses on some options. A left-dislocated constituent cannot be interpreted

^{5.} Recall that, although K'ichee' uses the particles aree = k'u to mark contrastive topics, these particles are not always mandatory; in most cases, they are only found with the last in a series of contrastive topics. Thus, a left-dislocated constituent that is not marked with aree = k'u can still be interpreted as a contrastive topic — so long as the hearer anticipates that a left-dislocated constituent that is marked with aree = k'u is still forthcoming.

as part of the comment, and in particular cannot be interpreted as focused.

There is one thing here that is worth pointing out by way of clarification. The information-structural constraints which left-dislocation imposes are imposed upon a specific constituent, and not upon a specific referent. This is important when two distinct constituents in the same sentence are coreferential. In 14, the DP constituent *le al Mari'y* is left-dislocated. As a result, this constituent must be interpreted as topical, and cannot be interpreted as focused. But the constituent which *is* focused, in the context given, is the noun *riib* "herself" — which also refers to Maria. This is perfectly felicitous.

(14) *Context*: Who did Maria scare?

Le al Mari'
$$y_i$$
, x - u - xi '- j [r - iib'_i] $_F$ S_i , V [O_i] $_F$ D miss Maria CPL-A3s-scare-ss [A3s-self] $_F$ Maria $_i$, she scared [herself $_i$] $_F$

So much for left-dislocation. With movement, the situation is somewhat more complicated. First, we must make a distinction between wh-movement and focus movement. Wh-movement does not require the moved constituent to have any special information status; and indeed, most wh-moved constituents are neither topical nor focused. But focus movement does constrain the information status of the moved constituent. Roughly speaking, the constraint is exactly the one we would expect from the name of the operation: it requires the moved constituent to be focused. This expression of the constraint is not completely accurate, though; for it does not recognize the effects of pied piping. In focus movement, it is sometimes the case that more material moves than is strictly necessary, so that unfocused material is brought along with the focused material. Consider for instance the example of contrastive focus in 15.

```
(15) Na [p+u-wi']_F = ta ri teem k'oo = wih.

NEG [P+A3s-on]_F = NEG D chair EXS = ADJ.F
[Ch+u-xe']_F \text{ ri teem k'oo wih.}
[P+A3s-under]_F \text{ D chair EXS } = ADJ.F
It's not [on]_F the chair, it's [under]_F the chair.
```

In both sentences in 15, an entire prepositional phrase has undergone focus movement; but only a subset of it — the preposition and relational noun, but not the DP complement of the relational noun — is actually focused. The first sentence in 15 can also occur in the context in 16, which induces focus on the entire prepositional phrase.

```
(16) Na [p+u-wi'] = ta ri teem ]_F k'oo = wih.

NEG [P+A3s-on] = NEG D chair ]_F EXS = ADJ.F

[Ch+u-xe'] ri mexah ]_F k'oo wih.

[P+A3s-under D table]_F EXS = ADJ.F

It's not [on the chair,]_F it's [under the table.]_F
```

Similarly, in both 17 and 18 an entire noun phrase moves; but in 17 only the prenominal modifier is focused and in 18 the entire noun phrase is.

- (17) Context: Which boy is holding the shovel?

 Aree le [chom-a]_F alah chap-ow-inaq le cuveta.

 FOC D [fat-ATTR]_F boy grab-AF-PERF D shovel

 The [fat]_F boy is holding the shovel.
- (18) Context: Who is holding the shovel?

 Aree le [chom-a alah]_F chap-ow-inaq le cuveta.

 FOC D [fat-ATTR boy]_F grab-AF-PERF D shovel

 The [fat boy]_F is holding the shovel.

The result of this is that we cannot necessarily say that the entire moved constituent must be focused. Rather, the rule is that some subset of it must be focused. Still, this is a non-trivial constraint. In particular, it rules out examples like 19, in which a non-wh constituent has undergone movement but no part of it bears focus.⁶

```
(19) a. Context: What is the fat boy holding?
```

```
#Aree le chom-a alah chap-ow-inaq [ le cuveta. ]<sub>F</sub> FOC D fat-ATTR boy grab-AF-PERF [ D shovel ]<sub>F</sub> Intended: The fat boy is holding the [shovel.]<sub>F</sub>
```

b. *Context*: What is the fat boy doing?

```
#Aree le chom-a alah [ chap-ow-inaq le cuveta. ]<sub>F</sub> FOC D fat-ATTR boy [ grab-AF-PERF D shovel ]<sub>F</sub>
```

Intended: The fat boy is [holding the shovel.]_F

- 6. If we could interpret *le choma alah* as a contrastive topic in 19, these examples would become felicitous. But we cannot do so without at least one and possibly two changes in the clause: at very least, the verb must be in the active rather than the AF voice; and in Nahualá, it is preferred to add the enclitic =k'u, since *aree* alone is less common in Nahualá as a marker of contrastive topichood.
- (i) a. *Context*: What is the fat boy holding?

```
Aree (=k'u) [le chom-a alah, ]<sub>CT</sub> u-chap-om [le cuveta.]<sub>F</sub> CT =CT [D fat-ATTR boy]<sub>CT</sub> A3S-grab-PERF [D shovel]<sub>F</sub> As for [the fat boy,]<sub>CT</sub> he is holding the [shovel.]<sub>F</sub>
```

QUIS

b. *Context:* What is the fat boy doing?

```
Aree ( =k'u ) [ le chom-a alah, ]<sub>CT</sub> [ u-chap-om le cuveta.]<sub>F</sub> CT =CT [ D fat-ATTR boy ]<sub>CT</sub> [ A3s-grab-PERF D shovel ]<sub>F</sub>
```

As for [the fat boy,]_{CT} he is [holding the shovel.]_F

QUIS

4.1.3 Limits on the flexibility of in situ constituents

The discussion in the previous sections can be summarized with the following two generalizations.

- (20) Ex situ constituents are information-structurally constrained
 - a. A constituent which has undergone left-dislocation must be topical.
 - A constituent which has undergone focus movement must contain a narrow focus.
- (21) In situ constituents are information-structurally flexible

A constituent which appears after the verb is unconstrained with respect to its information structure. In particular, depending on the context of utterance, it may be construed as part of a broad focus; as narrowly focused; or as outside the scope of focus.

In fact, though, the generalization in 21 is not quite correct. The information-structural flexibility of post-verbal constituents is not perfect; as I will show in this section, it has limits. Some of these limits, resulting from general, language-independent considerations about discourse structure, have been discussed in previous work. But there are also some which, as far as I can tell, must be treated as part of the specific grammar of K'ichee'; in particular, I will present new data in this chapter showing that K'ichee' prohibits ordinary transitive subjects from bearing focus in situ, and I will argue that this prohibition cannot simply be seen as a result of crosslinguistic patterns in the information structure of transitive clauses.

4.1.3.1 To bear focus, a constituent must be overt and stressable

One such constraint is that constituents cannot bear focus or contrastive topic unless they are overt, prosodically independent, and able to bear stress.

At first glance it might seem that this constraint is trivial — especially in the case of focus. After all, focus is often understood in terms of new information; and intuitively, it seems impossible for new information to be conveyed by a covert constituent. But this is not necessarily the case. Consider this hypothetical. Suppose you are researching a famous murder, and wondering which of the co-conspirators actually killed the victim. And suppose you come across a written confession from one of the co-conspirators in which he writes the sentence in 22.

(22) X-kam-isa-taj w-umaal.

CPL-die-CAUS-CP A1s-by

He was killed by me.

Note that this written sentence provides enough information for you to answer your question. So in the absence of some rule to the contrary, we would expect it to be a felicitous conversational reply to the question "who was he killed by?" But it is not.⁷

This is because neither the Set A agreement marker *w*- nor the silent pronoun which controls it are able to bear focus — the former because it cannot be independently stressed, and the latter because it is not overt.

```
(23) Context: Who was the victim killed by?

# X-kam-isa-taj w-umaal [\varnothing]<sub>F.</sub>

CPL-die-CAUS-CP A1S-by [PRO]<sub>F.</sub>

Intended: He was killed [by me.]<sub>F</sub>
```

Rather, an overt pronoun must be present in order to bear focus.

7. It has been suggested that in narration, the implicit question which each new sentence is assumed to answer is "And then what happened?" (See Onea 2013 and citations therein for discussion on this point.) On that assumption, someone who wrote the sentence in 22 in a confession is likely answering the question "What happened?" or perhaps "What did you do?" In either case, it would be interpreted with broad focus rather than narrow subject focus.

(24) Context: Who was the victim killed by? X-kam-isa-taj w-umal [in]_F. CPL-die-CAUS-CP A1S-by [1sg]_F. He was killed [by me.]_F

Indeed, this is one of the most common purposes for which overt pronouns are used in K'ichee', since in most contexts there is no purely syntactic reason not to replace them with silent ones. In fact, I am tempted to hypothesize that *all* overt pronouns in K'ichee' are bearing some sort of marked information status: if not focus then contrastive topic or perhaps some other sort of topichood.

This constraint is a common one crosslinguistically, and it follows as a consequence from a proposed universal: it has been proposed that in all languages, focused constituents must be prosodically prominent (*e.g.* Büring 2008) — and prosodic prominence cannot be given to a constituent which is silent or stressless.

4.1.3.2 Givenness of in-situ agents

England (1989) argues that in situ transitive subjects in K'ichee' must be definite. This requirement constrains the interpretation of verb-initial transitive clauses: if there is one indefinite argument, it will consistently be interpreted as an object regardless of word order; and if there are two indefinite arguments, *both* will be interpreted as objects — implicitly conjoined — in order to satisfy the constraint.

(25) X-u-q'aluj jun ala le achi. CPL-A3s-hug a boy D man

a. The man hugged a boy.

$$V \; O_{[-def]} \; A_{[+def]}$$

b. # A boy hugged the man.

$$V A_{[-def]} O_{[+def]}$$

(26) X-u-q'aluj le achi jun ala. CPL-A3s-hug D man a boy

a. The man hugged a boy.
$$V A_{[+def]} O_{[-def]}$$

b. # A boy hugged the man. #
$$VO_{[+def]}A_{[-def]}$$

(27) X-u-q'aluj jun ala jun achi. CPL-A3s-hug a boy a man

c. S/he hugged a boy (and) a man.
$$VO_{[-def]}O_{[-def]}$$

I will show in §4.3.2 that two changes must be made to this generalization. First, there is reason to believe that it extends to all agentive arguments: not just transitive subjects, but also agentive subjects of intransitive verbs. And second, data show that indefinite, in situ transitive subjects are permitted in a limited set of circumstances: they can occur only so long as the indefinite subject does not introduce a new discourse referent. This means that, for instance, when speaking in general terms about what one does or does not do, it is possible to use a transitive clause whose subject is formally indefinite. But this is only permitted because these formally indefinite subjects do not have a specific referent which they introduce into the discourse.

This constraint and the one which follows — against *focusing* ordinary transitive subjects in situ — are intriguingly similar. Both constrain against providing some sort of new information (a new referent in this case; an answering constituent in that one) in a certain kind of syntactic slot (the subject of an agentive verb in this case; an ordinary transitive subject in that case). In §4.3.2 I will consider the possibility that the two constraints are indeed related,

and that one might be the underlying explanation for the other. But I will ultimately reject

this idea, and maintain the two as separate constraints.

A more likely source for this constraint is Du Bois's (1987) PREFERRED ARGUMENT

STRUCTURE: a crosslinguistic tendency to avoid discourse-new agents. In the end I will

agree with England's (1989) own assessment of this constraint — that it represents a categor-

ical and grammaticalized form of this tendency which is found in statistical form in most or

all languages.

A syntactic constraint on focus in situ

So far, the limits which I have mentioned on the information-structural flexibility of in

situ constituents have been due to general, crosslinguistic principles: the need for focused

constituents to be overt and stressable, and the tendency for semantic agents to be given

referents. But there is also at least one constraint in K'ichee' which does not reduce to general

principles in this way. The remainder of the chapter will concentrate to a large extent on

this K'ichee'-specific constraint; here I will present the basic generalization, with only a few

suggestive examples.

The generalization is this:

(28)*In situ focus generalization*

The subjects of ordinary transitive verbs cannot bear focus in situ.

The reader will note that in earlier examples demonstrating the information-structural flexi-

bility of canonical clauses, none were given involving focus on an ordinary transitive subject.

And in fact, such examples are systematically infelicitous.

(29) *Context*: What ate the clothes?

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a. #X-ki-k'ux le atz'yaq [lee ch'oh.]_F $\#VO[A]_F$ CPL-A3p-eat D clothes [D mouse]_F Intended: [The mice]_F ate the clothes.

b. #X-ki-k'ux [lee ch'oh.]_F $\#V[A]_F$ CPL-A3p-eat [D mouse]_F Intended: [The mice]_F ate them.

In §4.2.3 I give a more complete argument showing that grammatical function truly is the crucial factor here, and that it is ordinary transitive subjects — rather than any other class of constituents — that the prohibition on focus in situ applies to.

This constitutes a third ergative pattern in K'ichee', in addition to the two already introduced.

- (30) a. *Morphological ergativity*Transitive subjects control Set A agreement on active verbs.
 - b. *Syntactic ergativity* Ordinary transitive subjects trigger AF morphology if they move.
 - Information-structural ergativity
 Ordinary transitive subjects cannot bear focus in situ.

4.2 Focus in situ

In the overview in the preceding section, I asserted that — with the exception of ordinary transitive subjects — focused constituents may remain in situ. In this section I will back up that assertion with more extensive data.

Some evidence for in situ focus in K'ichee' already exists in the literature. In particular, Baird (2010) and Baird (2014) and Burdin et al. (2013) both give some evidence for in-situ

focus, but in both cases the evidence comes from a scripted task in the contexts of a phonetic experiment. In Baird 2010 and Burdin et al. 2013 participants were asked to read a part in a short dialog in which question/answer congruence induces either broad focus or narrow in situ focus.

(31) Interviewer: Jas x-k'ulmataj-ik? what cpl-happen-ss

What happened?

Participant: [X-pee ri nu-maam.]_F

[CPL-come D A1s-grandfather]_F

[My grandfather came.]_F

Interviewer: X-pee ri aw-ati't?

CPL-come D A1s-grandmother

Your grandmother came?

Participant: X-pee ri [nu-maam.]_F

CPL-come D [A1s-grandfather]_F

My [grandfather]_F came. (Baird, 2010)

In Baird 2014 participants were given information verbally by one interviewer and then asked a question by a second interviewer, again with the questions chosen so as to induce either broad focus or narrow focus. In this paradigm the participant is free to choose either in situ or ex situ realization of narrow foci; the example dialogue below demonstrates in situ realization.

(32) Interviewer 1: $[X-kam \ ri \ u-maam \ iwiir.]_F$ $[CPL-die D A3s-grandfather yesterday]_F$ Her grandfather died yesterday.

Interviewer 2: Jas x-k'ulmataj-ik? what cpl-happen-ss

What happened?

Participant: [X-kam ri u-maam iwiir.]_F

[CPL-come D A3s-grandfather yesterday]_F

[Her grandfather died yesterday.]_F

Interviewer 2: X-kam ri r-ati't iwiir?

CPL-die D A3s-grandmother yesterday?

Her grandmother died yesterday?

Participant: X-kam ri [u-maam]_F iwiir.

CPL-die D [A3s-grandfather] F yesterday

Her [grandfather]_F died yesterday. (Baird, 2014)

In §4.2.1 I will present data confirming that in situ foci also occur in spontaneous production and elicitation, and that K'ichee' speakers judge them to be felicitous when they are produced by others. In situ foci may be answering or contrastive foci, and may associate with a focus sensitive particle. Since, as discussed above, overt question/answer pairs are rare in K'ichee' texts — and since they tend to involve *short* answers when they do occur — fully spontaneous examples are more likely to involve contrast or association with focus, though a few fully spontaneous answering examples are given as well.

In §4.2.3 I turn to the cases in which in-situ focus is *not* possible, showing that there is a categorical prohibition on the in-situ realization of focused A arguments — and that this prohibition is based, not on some incidental feature associated with A arguments, such as semantic agentivity, but on their grammatical function itself.

4.2.1 When focus in situ is possible

First let us consider the situations under which in-situ focus is possible. We will see that broad focus, narrow adjunct focus and narrow S and O argument focus are all compatible with in-situ realization of the focused constituent.

The first of these cases — broad focus — is also the one in which in situ focus is hardest to diagnose. This is because it is often difficult to tell whether broadly focused constituents have undergone movement or not. If an entire unembedded clause bears focus, then there is no way to determine whether it has moved or not, because movement of an unembedded clause is string-vacuous. Movement becomes evident when one constituent moves *past* another, with the un-moved constituent serving as a sort of landmark; and if the entire clause is focused, there is nothing available for us to use as a landmark. Similarly, if the verb and object of a VOA K'ichee' clause were to undergo focus movement, there would not necessarily be any way for us to tell; for focus movement is to the left, and the only available landmark — the A argument — is already to the right of the other two constituents. Since the A argument is useless as a landmark, we cannot immediately tell whether the focused constituent has moved further to the left or not.

In an embedded clause, on the other hand, we can test whether a broadly focused constituent has moved or not, because the verb of the matrix clause serves as a landmark. If the embedded clause undergoes focus movement, we would expect it to occur before the matrix verb, as in 33.

(33) *Context*: What do you want to do?

? [
$$K$$
-in-chaab'e- j ri a T e' k] $_F$ k a- w - a - a j . ? [V_2 O_2] $_F$ V_1 t [INC-A1s-talk.to-ss D youth Diego] $_F$ INC-A1s-want-ss Intended: I want to [visit Diego.] $_F$

This is not generally what happens.⁸ More often, a broadly focused embedded clause is left in situ.

(34) *Context:* What do you want to do?

```
Ka-w-a-aj [ k-in-c-haab'e-j ri a Te'k. ]_F V_1 [V_2 O_2]_F Inc-a1s-want-ss [ Inc-a1s-talk.to-ss D youth Diego ]_F I want to [visit Diego.]_F
```

The above examples are elicited; but unelicited examples of broad focus in situ occur as well. The one in 35 comes from reported speech in the *Misal*; the one in 36 occurs in an oral narrative.

(35) *Context*: What do you want me to do for you?

```
Aree k-w-a-aj [k-in-ka'y-ik.]_F V_1[V_2]_F FOC INC-A1s-want-ss [INC-B1s-see-ss]_F What I want is [to see.]_F Misal, Mark 10:51
```

- 8. I have encountered one example which could be analyzed as involving focus movement of an embedded clause.
- (i) Jee wa' k-u-b'i-j ri Yaa-Weh:
 like DEM INC-A3s-say-ss D Jehovah

 At =ne =lo ri' ri achih

 2sg =SCAL =DUB DEM D man

 ri k-aa-wok =na jun w-o'ch k-aw-a-aj

 C INC-A2s-build =PROSP one A1s-home INC-A2s-want-ss

 ri k-in-mu'j-an =wih k-in-paan =wih?

 C INC-B1s-shade-AP =ADJ.F INC-B1s-shelter =ADJ.F

Thus spoke Jehovah: "Could you be the man who wants to build me a house, where I can shade and shelter?" *Misal* p. 59, 2 Samuel 7:5

The context does not provide clear evidence that the moved embedded clause should be regarded as focused — it is not an answering constituent, does not contrast with any overt material in a parallel sentence nearby, and is not associated with a focus sensitive particle. But on the other hand, it is not clear what besides focus could have motivated its movement. I suspect there is probably more work that could be one on this construction, should it prove possible to find further examples.

(36) Aree =na = k'u k-r-a-j = ri' ri Tekun Uman FOC =PROSP =then INC-A3S-want-SS = DEM D Tecun Uman [chi ma =ta =na =k'u x-ch'ak-itaj-ik.]_F V_1 A₁ [V_2]_F [that NEG =IRR =PROSP =then CPL-defeat-CP-SS]_F What Tecun Uman wanted was [not to be defeated.]_F Ajpacajá

For narrow adjunct focus, focus movement is an option. Nevertheless, it is quite common for focused adjuncts to be realized in situ. Indeed, my own subjective impression is that focused adjuncts are realized in situ more often than not, though I do not have quantitative data to back this impression up. The following elicited examples demonstrate the felicity of focus in situ for various kinds of adjunct: locative, purpose, manner, temporal and comitative.

(37) Context: Where are you going?

K-in-b'ee [Guate.] $_{\rm F}$ V [X] $_{\rm F}$ I'm going [to Guatemala City.] $_{\rm F}$

(38) Context: Why are you going?

K-in-b'ee [r-umal nu-chaak.] $_{\rm F}$ V [X] $_{\rm F}$ I'm going [because of my job.] $_{\rm F}$

(39) Context: How are you getting there?

K-in-b'ee [chi aqan.]_F $V[X]_F$ INC-B1S-go [P leg]_F I'm going [on foot.]_F

(40) *Context*: When are you going? K-in-b'ee [chuwe'q.]_F $V[X]_F$ INC-B1S-go [tomorrow]_F I'm going [tomorrow.]_F (41)*Context:* Who are you going with? K-in-b'ee [r-uk' le w-atz. $V[X]_F$ INC-B1S-go [A3S-with DA1S-brother] I'm going [with my brother.]_F When an adjunct is focused in situ, the particle =wih is never required — even in cases like 37 where *moving* the focused constituent *would* require the use of =wih (see §2.2.5.1). Finally, S and O arguments may be focused in situ. (42)Context: What do the people here eat? Nima k-onojel, ka-ki-tij A, V [O]_F [le lej. mostly A3p-all INC-A3p-eat [D tortilla]_F Basically everyone eats tortillas. (43) Context: What does María want to eat? [le ichaj $]_{\mathsf{F}}$ le al V [O]_F A *Aree k-u-tij* Mari'y. FOC INC-A3s-eat:TR [D vegetable] D miss María What María will eat is [the vegetables.]_F Context: Which of them is going to eat? (44)Aree ka-wa' [le al Mari'y.]_F $V[S]_F$ FOC INC-eat:INTR [D miss María]_F

[María]_F will eat.

Textual examples of S and O focus in situ are given below. Argument wH-questions with direct, full-sentence answers are rare in the texts which I have access to; one example was found in example 3, repeated below.

(3) "Jas u-wach rajawaxik pa le qa-tinamit?" — what GEN3s-face necessary PREP the GEN3s-town

```
"Aree ka-qa-b'an-a [ jun sin qa-tyoox," ]_{\rm F} k-e-cha'. V [O]_{\rm F} FOC OPT-ERG1p-make-ss [ a little GEN1p-church ]_{\rm F} INC-ABS3p-say
```

"What sort of thing do we need in our town?" — "We should make ourselves [a little church,"] $_{\rm F}$ they said.

Guarchaj

The remaining textual examples which I give here involve contrastive focus. In the examples below, the presence of contrastive focus in situ is signalled by the use of the contrastive particle *aree* immediately before the verb, and by the presence of an overt contrasting sentence nearby.

(45) Choq wemna aree x-el = lo [le kumatz,]_F $V[S]_F$ and unless FOC CPL-exit = hither [D snake]_F $k-el = lo \quad [jun \ nim-alaj \quad xukuq'ab'.]_F \qquad V[S]_F$ INC-exit = hither [a big-INTENS frog]_F

And if [the snake]_F didn't come out, [a big frog]_F would come out. Guarchaj

(46) *Context:* Tecun Uman was trying to kill Alvarado, but he missed with his spear and hit Alvarado's horse, and so...

Aree x-u-riq k'ax aree x-kam
$$[ri keej.]_F$$
 $V_1 O_1 V_2 [S]_F^9$ Foc CPL-A3s-find harm Foc CPL-die $[D]_F$ horse $]_F$ It was $[the horse]_F$ who suffered, who died. Ajpacajá

9. The syntax of this clause is interesting. Ri keej "the horse" is the subject of two conjoined verb phrases;

(47) *Context:* For making pilars, they sought out *ikuy*, because it didn't rot. But for making roofs...

```
Aree k-k-tzuku-j [ le k'isiis. ]_F V [O]_F FOC INC-A3p-seek-ss [ D cypress ]_F It's [cypress]_F that they sought out. Ajpacajá
```

(48) *Context*: In those days, there was no town of Nahualá....¹⁰

```
Aree k'oo la' [ le Ixtahuacán. ]_F V[S]_F FOC EXS DEM [ D Ixtahuacán ]_F It's [Ixtahuacán]_F that was there. Guarchaj
```

Examples can also be found in edited writing, suggesting that speakers of K'ichee' do not regard this as a mistake to be eliminated or avoided.

(49) na xaq ta [apachke si']
$$_{\rm F}$$
 k-w-aj, [O] $_{\rm F}$ V t NEG1 just =NEG2 [whatever wood] $_{\rm F}$ Inc-A1s-want are k-a-tzukuj ri [uk'a'.] $_{\rm F}$ V [O] $_{\rm F}$ Foc INc-A2s-fetch the [madroño] $_{\rm F}$ I don't want just [any] $_{\rm F}$ wood, find [madroño] $_{\rm F}$ wood. Xan Kata'l, p.31

```
(50) Jewa' pa Wuqub' Che'
here P seven tree

pa Wuqub' Siwan re we Xib'alba
P seven canyon 3sg.of the Hell
```

one is pseudotransitive (xuriq k'ax, lit. "found harm") and the other is intransitive (xkam(ik) "died"). Both pseudotransitive and intransitive subjects can bear focus in situ, and so it is unsurprising that a constituent which is the subject of both kinds of clause at once can also do so.

10. The town of Santa Catarina Ixtahuacán dates back to the early days of New Spain. Nahualá was founded at a later date, very close by, by a group of settlers who split off from Ixtahuacán.

```
le e+rapinel
                      awaj
     the PL+flapping creatures
     ka-ki-b'an
                    k-ub'en
                                 r-uk'
                                           r-onojel rija'l kotz'i'j
     INC-A3p-make A3p-tayuyo A3s-with A3s-all seed flower
     je r-uk'
                  r-onojel u-woch Q'utu'm [re
                                                                           VX [Poss]<sub>F</sub>
                                                        Q'ij.]<sub>F</sub>
     so A3s-with A3s-every A3s-kind chirmol [3sg.of sun]<sub>F</sub>
                   che ri uj
¿Jas r-umal
what A3s-because that the 1pl
     are tajin ka-qa-tij le Q'utu'm [re
                                                   Q'eq-a
                                                               Ik'? ]_F VO [Poss]_F
     FOC PROGR INC-A1p-eat the chirmol [3sg.of black-ATTR moon]
Here in the Seven Trees.
in the Seven Canyons of Hell,
the birds make their tayuyos with every kind of flower
and with all the Chirmoles [of the Sun.]<sub>F</sub>
Why is it that we
are instead eating the Chirmol [of the Black Moon?]<sub>F</sub>
                                                                    B'ixonik Tzij, p. 33
```

Because given or predictable expressions can generally be dropped in K'ichee', it is not terribly common to find examples of in-situ argument or adjunct foci coexisting with insitu unfocused material. But in marked contexts, this can occur — for instance, if there is material outside the focus that is still not given (51) or that is being echoed from the question for rhetorical effect (52).¹¹

- (51) *Context*: B has been shopping five different places, but has only brought back a small bag.
- 11. Thanks to Telma Can Pixabaj for suggesting these examples.

- A. Jas x-a-loq' =loq? what CPL-A3s-buy =hither What did you buy?
- B. X-in-loq' =lo [$jun\ alanxax$]_F $pa\ k'ayib'al$. $V[O]_F X$ CPL-A1s-buy =hither [$an\ orange$]_F $pn\ market$ I bought [$an\ orange$]_F in the market.
- (52) *Context:* B was supposed to go to the market, and she claims she did but A thinks she's lying. Hoping to catch her in a lie, A says "Oh yeah? Then..."
 - A. Jas x-a-loq' = lo pa k'ayib'al? what CPL-A3s-buy = hither P market What did you buy in the market?
 - B. (Dramatically pulling the orange out of her bag to show it to A) $X-in-loq' = lo \quad pa \ k'ayib'al \ [wa' \ we \ alanxax.]_F \qquad V \ X \ [O]_F$ $CPL-A1s-buy = hither \ P \quad market \ [DEM \ D \quad orange \]_F$ $I \ bought \ in \ the \ market \ [this \ orange.]_F$

Note that in 51 the focused object is in its canonical position, and in 52 it has extraposed over an unfocused adjunct. These examples will be important later, as they will help show that K'ichee' does not have a designated post-verbal focus position (*cf.* §4.2.2).

In many languages, it has been noted that ex situ focus has a different semantic or pragmatic effect than in situ focus does. For instance, Kiss (1998) notes that clefting in English and focus movement in Hungarian introduces an exhaustive meaning not introduced by focus in situ in these languages, and that focus movement in Finnish introduces a contrastive meaning. This makes it natural to wonder whether such a semantic or pragmatic difference exists in K'ichee'. As far as I am able to determine, the answer is no. Yasavul (2013b) notes that in Playa Grande K'ichee', focus movement does not necessarily trigger an exhaustive or

contrastive interpretation. Rather, exhaustivity and contrastivity are triggered by the presence of the particle *aree*. The same appears to be true of in situ focus in CNK. In most cases of contrastive focus in situ, *aree* appears immediately before the predicate. In cases of answering focus in situ, *aree* is generally not used. In elicitation, I have found that adding *aree* in cases of answering focus is felicitous only if there is some specific salient alternative that the given answer contrasts with. For instance, in 53, with no specific salient alternative to *chi aq'an'* by foot, *aree* is infelicitous.

(53) *Context:* A meeting has just ended, and the participants are headed home. Speaker A asks speaker B "How will you get home?" Speaker B replies...

```
(*Aree) k-in-b'ee [ chi aq'an.]<sub>F</sub>
FOC INC-B1S-g0 [ P foot ]<sub>F</sub>
I'll go [by foot.]<sub>F</sub>
```

But in 54, in which the alternative 'by bus' is salient, *aree* becomes felicitous.

(54) *Context:* A meeting has just ended, and the participants are headed home. A bus has just pulled up, and everyone is getting on board, but B does not move to get on the bus. Speaker A says "But then how will you get home?" Speaker B replies...

```
Aree k-in-b'ee [ chi aq'an. ]<sub>F</sub>

FOC INC-B1S-go [ P foot ]<sub>F</sub>

I'll go [by foot.]<sub>F</sub>
```

This may be overstating the facts somewhat, since there are naturally occurring examples of answering focus in which *aree* is used despite the lack of an overt contrasting alternative — for instance, in example 3, discussed at the beginning of this chapter. More work will be required to determine what exact effect *aree* has on the interpretation of a clause. Still, the point remains that in situ focus is compatible both with contrastive and with non-contrastive interpretations, just as Yasavul found ex situ focus to be.

4.2.2 The particle aree is not a focused pronoun

So we have seen that *aree* occurs as a marker of something like contrast in a number of in situ focus clauses. At this point, I want to stop and address a possible concern involving the proper analysis of *aree* in these clauses.¹²

Here's the concern. As we've already seen, the contrastive particle *aree* is very close in form to the third person pronoun *are*' (and indeed, Larsen (1988) points out that there is a productive phonological rule which turns word-final vowel-plus-glottal-stop sequences into long vowels in certain contexts); and this raises the possibility that *aree* is merely a positional variant of *are*'. What's more, in §3.2.2.1 and §3.2.2.3 of the previous chapter, we saw a small number of examples in which immediately pre-predicate *aree* could plausibly be analyzed as a focused pronoun. Suppose we were to go farther and treat all instances of immediately pre-predicate *aree* as focused pronouns. Then in many cases, what I have analyzed as in situ focus clauses would be reanalyzed as clauses with ex situ focus.

(55) Reanalysis of 44 — to be rejected

Context: Which of them is going to eat?

$$[Aree_i]_F$$
 ka-wa': le al Mari'y_i.

[3sg]_F INC-eat:INTR D miss María

[She]_F will eat: namely, María.

 $[S]_F V t: X$

On this reanalysis, 55 is no longer an example of in situ focus, since the real focus of the clause is the pronoun *aree*, and this focus *has* moved. The postverbal constituent *le al Mari'y* would then be treated as an appositive, clarifying the reference of the pronoun but not otherwise playing any important grammatical or information-structural role.

So in order to shore up my claims about in-situ focus, I must show that the focused-pronoun analysis of *aree*, as exemplified in 55, is not the right one. I will do this by demon-

12. I am greatly indebted to Perry Wong for discussion on these points.

strating that *aree* can occur immediately before the predicate in sentences where it could not possibly be interpreted as a pronoun. Consider, for instance, the sentence below.

```
(56) Context: Where are you going?

Aree k-in-b'ee [pa chaak.]<sub>F</sub> V[X]<sub>F</sub>

FOC INC-B1s-go [P work]<sub>F</sub>

I'm going [to work.]<sub>F</sub>
```

Reanalyzed with aree as a focused pronoun, it would look like this:

(57) Reanalysis of 56, to be rejected

Context: Where are you going?

[Aree_i]_F k-in-b'ee: pa chaak_i.

[3sg]_F INC-B1s-go P work

I'm going [there_i]_F: namely, to work_i.

The trouble is that the structure in 57 is not a possible one in K'ichee'. To be grammatical, it would require *aree* to be interpreted as a locative demonstrative. And this interpretation is not generally available. If it were, and the analysis in 57 were valid, we would predict 58 to be a grammatical sentence as well — and 58 is flat-out ungrammatical, for precisely the same reason as the gloss I've given it would be ungrammatical in English.

```
(58) * K-in-b'ee are'.

INC-B1S-g0 3Sg

* I'm going him.

Intended: I'm going there.
```

Now, there are perfectly good sentences in K'ichee' that would have the structure alleged to occur in 57. All one needs to do is replace *aree* with an expression that really can function as a locative demonstrative, such as *chla*', as in 59. The same change will rescue the

ungrammatical sentence in 58, as shown in 60. But the point remains that with *aree* rather than *chla*', the analysis given in 57 is implausible.

(59) *Context*: Where are you going?

[
$$Chla'_i$$
]_F k -in-b'ee: $pa\ chaak._i$

[DEM]_F INC-B1S-g0 P work

I'm going [there $_i$]_F: namely, to work. $_i$

(60) K-in-b'ee ch=la'.

INC-B1S-g0 P=DEM
I'm going there.

For an even more dramatic example of why the pronominal analysis fails, consider 61.

(61) *Context*: Is Arturo going to the store?

No', aree k-in-b'ee
$$[in]_F$$
 V $[S]_F$ no FOC INC-B1s-go $[isg]_F$ No, $[I'm]_F$ going.

If we wanted to reanalyze 61 with *aree* as a focused pronoun, we would be forced to interpret a third-person pronoun as the subject of a verb conjugated to agree with a first-person subject, and to interpret the same third-person pronoun as coreferential with a subsequent first-person pronoun, as shown in 62.¹³

(62) Reanalysis of 61, to be rejected

Context: Is Arturo going to the store?

13. Note that the English gloss in 62 doesn't capture the full weirdness of the analysis, since it demonstrates the clash in pronominal reference but not the clash in agreement.

```
No', [are']_F k-in-b'ee: in. [S]_F V t X no [3sg]_F INC-B1s-go 1sg

No, [he's]_F going: namely, me.
```

This is obviously problematic, and sure enough, the equivalent of 62 with a post-verbal pronoun is completely ungrammatical.

(63) * K-in-b'ee are'.

INC-B1S-go 1sg

* I'm going him.

In any case, note that even if these problems with the focused-pronoun analysis of *aree* could be patched over, it would not enable us to explain away *all* examples of in-situ focus — for there are plentiful examples of in-situ focus occurring without *aree*. For instance, the focused-pronoun analysis wouldn't let us analyze 64 as anything other than an instance of in-situ focus.

So even if the focused-pronoun analysis turned out to be correct, it wouldn't fully invalidate the claims made in this paper; at most, as I say above, it would lead to concerns about specific pieces of data which I have relied on.

4.2.3 When focus in situ is impossible

So we have seen that nonsubjects and intransitive subjects can be focused in situ, and that these cases of focus in situ cannot be explained away by treating the contrastive particle

aree as a focused pronoun.

Subjects of ordinary transitive clauses, on the other hand, cannot bear focus in situ. Natural examples of transitive subject focus in situ are unattested, and constructed examples are consistently rejected.

(65) *Context*: Who is going to eat the vegetables?

```
# ( Aree ) k-u-tij le ichaj [ le al Mari'y. ]_{\rm F} # V O [A]_{\rm F} FOC INC-A3s-eat:TR D vegetable [ D miss María ]_{\rm F} Intended: [María]_{\rm F} will eat the vegetables.
```

Note that aside from focus placement the infelicitous esentence in 65 and the felicitous one in 43 are identical.

(43) *Context:* What does María want to eat?

```
Aree k-u-tij [ le ichaj ]<sub>F</sub> le al Mari'y. V[O]_F A FOC INC-A3s-eat:TR [ D vegetable ]<sub>F</sub> D miss María What María will eat is [the vegetables.]<sub>F</sub>
```

So the problem with example 65 is not, for instance, one of ungrammaticality; it just that the sentence in 65 cannot be used *when the context requires focus on the constituent le al Mari'y*.

Now, there are several alternative hypotheses that would be consistent with the examples so far. First, one might wonder whether the lack of so-called "Agent Focus" morphology is the source of the problem with 65. Now, the AF suffix is triggered by syntactic movement, not information-structural focus — meaning that we should not expect it to be required, or even felicitous, in sentences like 65 where the focused constituent has not moved. But suppose that this was wrong; suppose that AF verbs were required any time an A was focused, whether it underwent movement or not. Under this hypothesis, we'd predict that example 65 could be rescued from infelicity by adding AF morphology to the verb.

As it turns out, adding AF morphology to the verb in 65 makes things worse and not better; the resulting sentence, below, is truly ungrammatical rather than just infelicitous in a particular context.¹⁴

A second possible hypothesis about example 65 would be that word order was the source of the problem. For instance, given that the basic word order in K'ichee' is voa, we might hope to explain the infelicity of in-situ focused A by positing a requirement for postverbal focused constituents to be *immediately* postverbal. (This could be done either by positing the immediately postverbal position as a syntactic focus position, or by assuming it to be more prosodically prominent than positions later in the clause.) But this will not work.

Why not? Here are three relevant pieces of evidence. First, if we drop the object — putting the subject immediately to the right of the verb in linear order — it does not repair the problem with example 65, as the infelicity of example 67 shows. Second, there are cases in K'ichee' where vao order is possible, one common such case being the one in which the subject is a pronoun. And even in these vao clauses, A cannot be focused (68) — even though it occurs immediately to the right of the verb.

(67) *Context*: Who is going to eat the vegetables?

(Aree) k-u-tij [le al Mari'y.]
$$_{\rm F}$$
 # V [A] $_{\rm F}$ FOC INC-A3s-eat:TR [D miss María] $_{\rm F}$ Intended: [María] $_{\rm F}$ will eat 'em.

^{14.} *Katijow(ik)* has an additional reading: as well as the AF form of the verb meaning "s/he eats," it can be taken as an intransitive verb with a middle-like meaning: "it is edible" or "it gets eaten." (Mondloch 1981 calls these middle-like forms "inactives.") But this does not affect the point made here; example 66 is ungrammatical on *any* reading of the verb — either as an AF form or as an inactive. Presumably on the inactive reading of the verb it is ungrammatical because it has two arguments, and the verb is only able to license one of them.

(68) *Context*: Who is going to eat the vegetables?

(Aree) k-in-tij [in]_F le ichaj. #
$$V[A]_F O$$
 FOC INC-A3s-eat:TR [1sg]_F D vegetable

Intended: [I]_F will eat the vegetables.

Third, recall that in §4.2.1 we saw that object focus in both vox clauses (e.g. example 51) and vxo clauses (e.g. example 52) was possible. If postverbal focused constituents were required to be immediately postverbal, this could not be the case.

More broadly, I will argue in §4.3.1 that on our current understanding of K'ichee' prosody, there are contexts in which A and O arguments are PROSODICALLY INDISTINGUISHABLE. For instance, there is no independently motivated prosodic difference between vs, va and vo clauses — and this means that there cannot be any prosodic rule governing focus realization that consistently treats A arguments differently from others.

So much for prosody and word order. Here is a third alternative hypothesis. One might hypothesize that the semantics of the focused noun phrase is the problem with examples 65 and 67–68. For instance, perhaps there is a prohibition against in situ focus of semantic agents. But this would falsely predict that the utterances in 69 — where the A arguments are non-agentive — should be felicitous.

(69) *Context*: Who wants ice cream?

- a. # Ka-r-a-j [ri a Xwaan] $_F$ jun r-elaad. # V [A] $_F$ O INC-A3s-want-ss [D youth Juan] $_F$ one A3s-ice.cream

 Intended: [Juan] $_F$ wants an ice cream.
- b. # Ka-r-a-j jun r-elaad $[ri a Xwaan.]_F$ # $V O [A]_F$ INC-A3s-want-ss one A3s-ice.cream $[D youth Juan]_F$ Intended: $[Juan]_F$ wants an ice cream.

And on the other hand, it would falsely predict the infelicity of the examples we saw earlier (such as example 44) with semantically agentive S arguments.

Finally, one might wonder whether the problem with example 65 had to do with the strong dispreference for non-given discourse referents in the A argument function. That is, perhaps the problem is that presented with a discourse like the one in 65 out of the blue, listeners interpret the A argument as having a discourse-new referent, and *this*, rather than focus, is why the sentence is rejected. But this hypothesis too can be ruled out; for when we supply a context which makes the A argument's referent given, it still cannot be focused in situ.¹⁵

(70) Context: María cooked a big pot of vegetables for all her relatives when they came to visit. But when they came over, they all said they weren't hungry. So in the end, do you know who ate all those vegetables?

How, then, *can* the question in 65 be answered? We've already seen one option: focus movement with an AF verb, as in (71).

^{15.} Another variant on this explanatory strategy is to claim that in-situ A arguments are treated as *topics*, and that this explains both their tendency to be given and their inability to bear focus. I will consider this strategy in more detail in §4.3.2.

^{16.} The directional enclitic =aq'an(oq) most commonly means "upwards." But it is also used as a reflexive intensifier.

(71) Aree [le al Mari'y]_F ka-tij-ow le ichaj. [A]_F V_{+AF} O
$$t$$
 FOC [D miss María]_F INC-eat-AF D vegetable [María]_F will eat the vegetables.

Another strategy which is sometimes used is *passivizing* the clause; the former A argument, now an oblique PP, can be focused in situ. An example of this strategy is seen in (72).

(72) Context: Is it a man or a woman who's hitting the man?

Ri achi, tajin k-ch'aay r-umal [ri ixoq.]_F S, V [X]_F

D man PROG INC-hit:PASS A3S-by [D woman]_F

The man, he's being hit by [the woman]_F

I assume that the choice of strategy has to do with discourse factors not immediately relevant to the current discussion. Nevertheless, this is a phenomenon which deserves more attention.

The results of the preceding tests are summarized in Table 4.2. In all cases, the felicity of focus in situ is found to depend on the grammatical function of the focused constituent and not on any of the other factors considered.

Now, in §3.4.2.2 of Chapter 3 we saw that there was a mismatch between the ergative patterns in K'ichee' morphology and syntax. There are certain clauses, which I labeled "pseudotransitive," whose subjects behave like A arguments for purposes of morphology, but like S and O arguments for purposes of syntax. That is, the subjects of pseudotransitive clauses control ergative agreement just like A arguments do, but unlike A arguments (and like S and O arguments) can be freely extracted. Because of this latter fact, I adopted the convention in Chapter 3 of labeling pseudotransitive subjects as S rather than A.

The constraint on focus in situ constitutes a third ergative pattern in K'ichee' grammar. So it is natural to ask which way pseudotranstive subjects behave with respect to focus in situ. The evidence suggests that they behave like S arguments rather than A arguments, and

	A	S	О	X
Animate	X	✓	√	/
Inanimate	×	✓	✓	✓
Agentive	X	✓	*	✓
Non-agentive	X	✓	✓	✓
Given	Х	1	/	/
New	X	✓	✓	✓
Immediately after verb	Х	/	✓	/
Later in clause	X	✓	✓	✓

TABLE 4.2: When is focus in situ possible? Columns represent grammatical function: A argument, S argument, O argument and adjunct. Rows represent other syntactic and semantic properties. An asterisk indicates combinations that are impossible for independent reasons.

are able to bear focus in situ. We have already seen one natural example of this: in example 46, repeated below, V_1 and O_1 form a pseudotransitive clause, and the subject of this clause bears focus in situ.

(46) *Context:* Tecun Uman was trying to kill Alvarado, but he missed with his spear and hit Alvarado's horse, and so...

Aree x-u-riq k'ax aree x-kam $[ri keej.]_F$ $V_1 O_1 V_2 [S]_F^{17}$ FOC CPL-A3s-find harm FOC CPL-die $[D horse]_F$ It was $[the horse]_F$ who suffered, who died.

Ajpacajá

To be fair, this example is somewhat complicated by the fact that two verb phrases are conjoined in 46. But example 73, in which the second conjunct is removed, is also judged felicitous in the same context.

(73) *Context:* Tecun Uman was trying to kill Alvarado, but he missed with his spear and hit Alvarado's horse, and so...

```
Aree x-u-riq k'ax [ri keej.]_F V O [S]_F FOC CPL-A3s-find harm [D]_F horse ]_F It was [the horse]_F who suffered.
```

Elicited judgments such as the following confirm that pseudotransitive subjects are able to bear focus in situ.

(74) Context: Who got scared?

Aree x-u-xi'-j r-iib' [le a Xwaan.]_F
$$V O [S]_F$$
 FOC CPL-A3s-scare-ss A3s-self [D youth Juan]_F [Juan]_F got scared (lit. "scared himself")

(75) *Context:* Who got paint on himself?

```
Aree x-u-tz'aj =aq'an r-iib' [ ri a Xwaan. ]<sub>F</sub> V O [S]_F Foc CPL-A3s-paint =up A3s-self [ D youth Juan ]<sub>F</sub> [Juan]<sub>F</sub> got paint on himself (lit. "painted himself up")
```

(76) Context: Who ran?

```
X-u-tij anim [ le a Xwaan. ]<sub>F</sub> V O [S]_F CPL-A3s-eat quick [ D youth Juan ]<sub>F</sub> [Juan]<sub>F</sub> ran (lit. "ate quickness")
```

(77) *Context*: Who hurt his leg?

```
X-u-sok r-aqan [ le a Xwaan. ]_F V O [S]_F CPL-A3s-wound A3s-led [ D youth Juan ]_F [Juan]_F hurt his leg.
```

In short, only the constituents which I have treated as A arguments in this dissertation — comprising ordinary transitive subjects but not pseudotransitive subjects — are barred from

bearing focus in situ. Since the prohibition on transitive subject extraction affects exactly that same set of constituents, another way to put the generalization would be as follows:

(78) *Information structural ergativity: implicational formulation* In K'ichee', all and only those constituents which can be freely extracted can bear focus in situ.

And in fact, in §4.4, we will see evidence that this phrasing of the generalization holds not just in K'ichee', but in a larger sample of Mayan languages.

4.3 Explanations for asymmetry considered

So we have seen that there is an ergative asymmetry when it comes to the realization of focused constituents in K'ichee': ordinary transitive subjects cannot bear focus in situ, while other arguments (including intransitive and pseudotransitive subjects) can. In this section, I consider two possible explanations for this asymmetry, both of which show advantages and disadvantages, and neither of which is entirely satisfactory.

As I discussed at the beginning of this chapter, there are a number of other languages in which accusative rather than ergative focus asymmetries have been observed. There are two major lines of explanation that have been considered for the accusative asymmetries in these languages, and both of these are plausible candidates for an explanation in K'ichee'. First, some have argued that these accusative focus asymmetries are due to a difference in prosodic prominence between subjects and objects. In §4.3.1, I consider the corresponding hypothesis in K'ichee': that the ergative focus asymmetry is due to a difference in prosodic prominence between ordinary transitive subjects and other constituents. Second, some have argued that these accusative focus asymmetries in other languages are due to grammaticalization of a general cross-linguistic tendency for subjects to be topics. In §4.3.2 I consider the corresponding hypothesis in K'ichee': that in this language, it is only ordinary transitive subjects that are treated by default as topics.

4.3.1 Prosodic approaches

4.3.1.1 Focus prominence and focus alignment

In a number of languages, focused constituents are marked by prosodic prominence of some sort. Indeed, the tendency for focused constituents to be prosodically prominent is so widespread that it has been hypothesized to be universal. For instance, Truckenbrodt (1995) and Selkirk (2002) have hypothesized that any effects of focus on the phonology of a sentence can be expressed in terms of a constraint requiring focused constituents to be prominent (plus various language-specific details about how prominence is implemented, where prominence can fall within a phrase, and so on).

(79) Focus Prominence

Focus needs to be maximally prominent. A prosodic category C that contains a focussed constituent is the head of the smallest prosodic unit containing C. Truckenbrodt 1995

And some, such as Büring (2008), have gone farther and argued that the effects of focus on *morphosyntax* can *also* all be attributed to this Focus Prominence constraint.

It is easy to see how phonological effects of focus can be due to Focus Prominence. It is perhaps less intuitive that its morphosyntactic effects can be explained in the same way, and so some examples here may be useful. One classic example of this is focus-related scrambling in Romance languages such as Italian and (some varieties of) Spanish. In these languages, prosodic structure is more rigid than it is in English; and in particular, prosodic prominence is almost always sentence-final. But like in English, in these Romance languages the principle of Focus Prominence is active. Lambrecht (1994) and Zubizarreta (1994) and Zubizarreta (1998) argue that this causes focused constituents be scrambled to the right, as in the following Spanish examples:

```
(80) a. Compró el diario [María.]<sub>F</sub>
bought the newspaper [María]<sub>F</sub>
[María]<sub>F</sub> bought the newspaper.
b. María le dió a su hermano [un diario.]<sub>F</sub>
María to.him gave to her brother [a newspaper]<sub>F</sub>
María gave [a newspaper]<sub>F</sub> to her brother.
```

Rather than posit an independent rule requiring foci to scramble to the right, these authors argue, we can derive the need for scrambling as a consequence of independently motivated facts about prosody plus the principle of Focus Prominence. The only way to make a constituent prosodically prominent in these languages is to place it at the right edge of the clause, and scrambling occurs in order to make this happen.

Similar prosodic explanations have been proposed for long-range focus movement in a number of languages. An early suggestion in this direction comes from Lambrecht (1994). He points out that French has *both* the rigid word order of English, with no possibility for rightward scrambling (81), and the rigid prosodic structure of Zubiarreta's variety of Spanish, with prosodic prominence fixed at the end of the clause (82).

```
(81) * Est en panne [ ma voiture. ]<sub>F</sub>
is broken [ my car ]<sub>F</sub>
Intended: [My car]<sub>F</sub> is broken.
(82) * [ Ma voiture ]<sub>F</sub> est en panne.
[ my car ]<sub>F</sub> is broken
Intended: [My car]<sub>F</sub> is broken.
FRENCH, Lambrecht 1994
```

Still, French requires focused constituents to be prosodically prominent.

```
(83) * [ Ma voiture ]<sub>F</sub> est en PANNE.
[ my car ]<sub>F</sub> is broken
Intended: [My car]<sub>F</sub> is broken.
```

FRENCH, Lambrecht 1994

In some cases, this means that the only way to make a focused constituent prosodically prominent is to cleft it; for clefts in French, being biclausal, are broken into two prosodic phrases, each with its own prominence; and the cleft pivot falls in one of the two prominent positions.

```
[84) J'ai [ma VOITURE]<sub>F</sub> qui est en PANNE.
I.have [my car]<sub>F</sub> that is broken
[My car]<sub>F</sub> is broken. (lit. "I have [my car]<sub>F</sub> that's broken.")
```

French, Lambrecht 1994

The Focus Prominence approach to focus-related word order changes gives one possible explanation for the focus-marking asymmetry found in colloquial spoken French (Hamlaoui, 2008; Destruel, 2013). Aside from dislocated constituents, French has svx word order in intransitive clauses and Avox word order in transitive ones. This means that non-subject constituents tend to fall quite naturally into the prosodically prominent sentence-final position; meaning in turn that there is no need to cleft them — though they *can* be clefted for additional stylistic or pragmatic effect. On the other hand, subjects fall naturally in a prosodically weak position, and so Focus Prominence cannot be satisfied with them in situ.

```
( * ) ( * ) ( * ) ( * )
( * ) ( * ) ( * )
( * ) ( * ) ( * )
(85) Marie a mangé [un biscuit.]<sub>F</sub>
(86) #[Marie]<sub>F</sub> a mangé un biscuit.
```

FRENCH

Clefting solves the problem, since it introduces a phrase boundary and permits the clefted constituent to bear prosodic prominence.

The explanatory strategy here is to reduce the information-structural asymmetry in colloquial French to a prosodic asymmetry. Subjects differ from non-subjects in their behavior when focused because they differ from non-subjects in prosodic prominence: subjects are prosodically weak in their default position, and so must move to bear focus; non-subjects are prosodically strong, and so can bear focus in situ.

A similar account has been offered of the asymmetry in Hausa (Lovestrand 2009, reanalyzing data from Zimmermann 2006b; Hartmann and Zimmermann 2007b) which is prosodically similar to French in crucial ways. Hausa aligns prosodic prominence with the right edge of the clause; it does not permit rightward scrambling; and it inserts a prosodic boundary after a constituent which has undergone focus movement, creating two prominent positions, one of which is occupied by the moved constituent.

For that matter, in many languages with a symmetrical focus movement pattern, that pattern can be explained in terms of prosodic prominence. This strategy, for instance, has been used in several analyses of Hungarian focus (Roberts, 1998; Szendrői, 2003). Hungarian has variable word order, following a pattern similar to K'ichee': it has a clause-initial topic position and an immediately preverbal focus position, and (with a few exceptions that need not concern us here) other constituents are found after the verb (Kiss, 2002). Prosodic prominence consistently falls at the beginning of the comment portion of the clause — that is, on the preverbal focus position if it is filled, and on the verb otherwise. Thus, focus movement in Hungarian can be treated as movement to a prosodically prominent position of a

constituent whose default position is prosodically weak.

In some cases, though, this sort of prominence-based explanation fails. One example of a langauge where this happens is Nlekepmxcin (a.k.a. Thompson River Salish). Nlekepmxcin is a verb-initial language with clefting of focused constituents¹⁸ to an immediately preverbal position (Koch, 2008).

(88) c'e xe? [e Flóra] f e s-łúm-s-t-Ø-emus e ?estíptept te nknpáxn. CLEFT DEM [D Flora] f C STAT-wear-CAUS-TR-30-SUBJ.EXTR D black OBL vest

It's [Flora] f who's wearing the black vest.

Nlekepmxcin, Koch 2008

But unlike French and Hungarian, Nlekepmxcin assigns prosodic prominence to the right-most constituent in a clause (Koch, 2008). This means that focus movement in Nlekepmxcin is actually movement *out* of a strong position and *into* a weak one.

One response to the existence of languages like Nlekepmxcin has been to move away from a reliance on the concept of prosodic *prominence*, and to rely instead on prosodic *alignment*. According to Féry (2013), interactions between information structure, prosody and syntax are mediated not by Focus Prominence, but by constraints requiring focused constituents to be aligned with certain prosodic boundaries. In some languages — such as English — these constraints are satisfied by inserting, deleting or moving prosodic boundaries. In others — such as Spanish and Italian — they are satisfied by scrambling; and in still others — including French, Hausa and Nlekepmxcin — they are satisfied by movement. In particular, in Nlekepmxcin the requirement is for a focused constituent to be left-aligned with a major phrase boundary; and movement is the only way to satisfy this requirement.

Finally, alignment-based prosodic accounts allow for a phenomenon sometimes described as PARTIAL ALIGNMENT. In this phenomenon, a focused constituent is brought *close* to a

^{18.} As we will see in §4.3.3.3, there is also at least some evidence that Nlekepmxcin allows focus in situ under certain circumstances. But that does not affect the point being made here.

prosodic boundary, but is not necessarily perfectly aligned with that boundary. This can be explained using an Optimality Theoretic approach, on which focus alignment constraints can assign multiple violations — say, one violation for every word or every stressed syllable between the focused constituent and the relevant prosodic boundary.

4.3.1.2 Assessing the prosodic approach for K'ichee'

The approaches outlined in the previous section are quite powerful and flexible — especially the alignment-based approaches, which do not require any sort of overt prominence on the focused constituent. It is likely that they can account for a number of facts about K'ichee' prosody. But I will argue in this section that they probably cannot fully explain the ergative/absolutive focus-marking asymmetry which K'ichee' exhibits, despite their successful use as explanations for nominative/accusative asymmetries in other languages.

First of all, it is quite clear that an approach based on Focus Prominence cannot explain the K'ichee' asymmetry. The problem in K'ichee' is similar to the one in Nlekepmxcin: those constituents which are required to move are generated in a prosodically strong position, and so their movement cannot be motivated by a need to become prosodically stronger. Prosodic constituents in K'ichee' are right-headed (Henderson, 2012). This means that in a canonical VOA transitive clause, the A argument is the most prominent constituent.

An account based on Focus Prominence would thus predict that focused A arguments could remain in situ. But they cannot.

(90) Context: Who saw a gopher?
X-r-il jun b'ah [le alah.]_F
CPL-A3s-see one gopher [D boy]_F
[The boy]_F saw a gopher.

Conversely, the O argument in a voa clause — which is less prosodically prominent — can bear focus in situ. This is unexpected if we assume that focused constituents must be prominent.

(91) Context: What did the boy see?

X-r-il [jun b'ah]_F le alah.

CPL-A3s-see [one gopher]_F D boy

The boy saw [a gopher.]_F

And finally, according to Henderson, constituents in immediately preverbal position are at phrased as part of the same ιP as the rest of the clause. This makes immediately preverbal position extremely prosodically weak, since it is as far as you can get from the prominent right edge. And yet focus movement targets that position. This is unexpected on a prominence-based approach.

```
( * ) ( * ) ( * )
( * ) ( * ) ( * )
(92) Aree jun b'ah x-r-il-oh
FOC one gopher CPL-A3s-see-SS
```

Henderson 2012

19. It is not clear that this is always what happens, and indeed there may be dialect variation. Yasavul (2013a) finds that immediately preverbal constituents are sometimes phrased together with the rest of the clause and sometimes separated from it by an ιP boundary. But even if they are only sometimes phrased together with the rest of the clause, this fact is a problem for the Focus Prominence approach, for it means that focus movement at least sometimes targets a prosodically weak position — which on this approach it should never do.

An alignment-based approach does not fare much better. On the one hand, if we assume that focused constituents must be aligned right within an ιP , we run into the same problems that we did on a prominence-based account: A arguments are clearly right-aligned within their ιP , but they cannot bear focus in situ; whereas O arguments in a VOA clause are not right-aligned, but can bear focus in situ.

Suppose, then, that focused constituents must be left-aligned within an ιP . This seems initially more promising. In a canonical voa clause, the O argument is closer to the left phrase boundary than the A argument. An account based on the phenomenon of partial alignment — as seen in the Italian example above — could capitalize on this fact to explain why O argument focus in situ is more acceptable than A argument focus in situ. Focus movement, too, can be motivated on such an account, for it brings the focused constituent to the left edge of an ιP — and crucially, does so whether or not the moved constituent is followed by an ιP boundary, making the variation noted in footnote 19 irrelevant. This would appear to explain why focused A arguments must move: because this movement brings them into closer alignment with a phrase boundary than they would otherwise have.

Still, there are a few problems here. The first is that extraposed O arguments can bear focus in situ.

(93) Context: What did you buy in the market?

X-in-loq' = lo pa le k'ayib'al [wa' we alanxax.]_F

CPL-A1s-buy = hither P D market [DEM D orange]_F

I bought [this orange]_F in the market.

We might attempt to explain this by positing that extraposition creates an ιP boundary, leaving the extraposed O argument leftmost in its ιP . But then we have no explanation for the fact that extraposed A arguments cannot bear focus in situ — for these too would be leftmost in their ιP .

Another problem is that K'ichee' is a pro-drop language. In addition to VOA clauses we find VO and VA clauses. If the O in a VO clause is close enough to the left edge of its major phrase to bear focus in situ, then so too should the A in a VA clause. But the A in a VA clause cannot bear focus in situ.

Now, there are still many more possible combinations of alignment constraints we could consider. But at this point I would like to leave off assessing specific combinations of constraints, and consider a more general question. In order for any prosodic approach to the K'ichee' focus asymmetry to succeed, it will need to be the case that A arguments and S/O arguments are Prosodically distinguishable. After all, if a prosodically motivated phenomenon is going to affect A arguments differently from S/O arguments, then there must be some prosodic property which A arguments consistently have and S/O arguments consistently lack, or vice versa. What I would like to argue here, then, is that there is at least one environment which A and S/O arguments appear to be prosodically indistinguishable.

I believe the best candidate for such an environment is in canonical-order clauses with one overt argument. As far as I am able to determine, there is no consistent prosodic difference between VA clauses, VS clauses and VO clauses. In each case, there is no iP boundary between the verb and its argument; we

can tell this because enclitics hosted on the verb take their phrase-medial forms.

- (94) X-u-loq' =lo(*q) jun alanxax. CPL-A3s-buy =hither one orange She bought an orange.
- (95) X-u-loq' =lo(*q) le nu-naan. CPL-A3s-buy =hither D A1s-mother

 My mother bought it.

Nor, as far as I can tell, is there a φP boundary in either case. The argument here is somewhat tricker, however. There are two properties that can be used to diagnose φP boundaries. The first is vowel shortening: most CV:C syllables shorten to CVC except when they are the final syllable in a φP . But there are several difficulties with using this diagnostic here, because vowel length in verbs is in fact rather less predictable. Certain long vowels — mostly those in historical *CVhC syllables — are Persistently long, and remain long even in φP -medial syllables. As far as I know, the long vowels in CV:C stems are all persistently long vowels, and so these cannot be used to diagnose φP boundaries. On the other hand, those verb suffixes I am aware of which contain long vowels are status suffixes, and these participate in an independent form of allomoprhy, triggered by ιP and not φP boundaries: those status suffixes which contain long vowels all shortened ιP -medially. This makes these, too, useless for diagnosing φP boundaries.

The second diagnostic, though, shows more promise. Underlying /CV:/ syllables are realized as [CV:] in the middle of a ϕP , but as [CVh] ϕP -finally; and there are several verb roots which end in a long vowel: the intransitive roots *-pee-* "come" and *-b'ee-* "go" and the transitive root *-taa-* "hear, ask." What's more, there are inflected forms from these roots which do not take an overt status suffix ιP -internally. This means we can use the presence or absence of [h] on these verbs to diagnose ϕP boundaries. And in each case, [h] is absent, indicating the lack of a ϕP boundary.

20. In most cases, CV:C stems are passive forms of CVC roots, for which the passive forms are derived by lengthening the vowel. Historically CV:C passives were *CVhC — in Tz'utujiil, where preconsonantal *h has been retained as modern j, these passives are CVjC rather than CV:C, pointing to a historical *h — and thus they are persistently long. Some CV:C stems do not appear to be derived in this way, such as -b'iin- 'walk' but these too have persistently long vowels.

- (96) X-pee le alah.

 CPL-come D boy

 The boy came.
- (97) X-b'ee le alah.

 CPL-go D boy

 The boy left.

(98) X-in-taa le alah.

CPL-A1s-hear D boy

I heard the boy.

(99) *X-in-u-taa* le alah.

CPL-B1S-A3S-hear D boy

The boy heard me.

If this is correct, then the prosodic structures of the four clauses above are identical. And yet three of the clauses can have their overt argument focused in situ; and the fourth, 99, cannot. This seems to me to indicate that the focus asymmetry cannot have any prosodic explanation, since there is no prosodic difference between the four clauses to which this information-structural difference could be attributed.

This is not a conclusive argument by any means. But I hope that it at least suggests some points on which future research can concentrate. If a consistent prosodic difference between 99 and the three other clauses above can be discovered, then this will offer a starting point for a prosodic account. And if no such difference can be discovered, then this is a clear indication that no prosodic account will be able to succeed.

4.3.1.3 Typological problems with the prosodic approach

There is another problem with the prosodic approach: it over-generates, predicting the existence of focus asymmetries that have not (so far) been observed in any language. In particular, it predicts that in addition to the French and K'ichee' asymmetries, there ought to exist "anti-French" and "anti-K'ichee' asymmetries, as shown in Table 4.3.

The Anti-French asymmetry is the easiest prediction to derive. Consider a language with rigid sv/Avo word order and no scrambling, but with fixed prominence on the first word of a clause rather than the last. In such a language, subject focus would be compatible with

	A	S	О
English, Spanish, Japanese	optional	optional	optional
K'ichee'	mandatory	optional	optional
Hausa, Spoken French	mandatory	mandatory	optional
* Anti-K'ichee'	optional	mandatory	mandatory
* Anti-French	optional	optional	mandatory

TABLE 4.3: Attested and unattested patterns.

Focus Prominence in a canonical clause, but non-subject focus would not.

```
( * )
( * )
( * )
( * )
( * ) ( * )
(100) [Marie]<sub>F</sub> a mangé un biscuit.
(101) # Marie a mangé [un biscuit.]<sub>F</sub> Anti-French
```

As a result, non-subject foci would need to be clefted in order to become prosodically prominent, while subject foci could remain in situ.

Of course, it is possible that a language following the Anti-French pattern will at some point be discovered, in which case, this feature of the prosodic approach would be an advantageous one. But such a discovery would be a surprising one — more so, I think, than the discovery of the ergative focus asymmetry in K'ichee'. The reason I say this is that there is a crosslinguistic tendency for subjects (and especially transitive subjects) to present old

information rather than new. The French and K'ichee' asymmetries are both consistent with this crosslinguistic tendency, while the Anti-French and Anti-K'ichee' asymmetries would be dramatic deviations from it. The second of the approaches that I want to discuss here takes this crosslinguistic tendency as its jumping-off point.

4.3.2 **Topicality-based approaches**

In the introduction to §4.3 I mentioned that there are two major approaches that have been taken to the sort of accusative focus-marking asymmetry found in French and Hausa. One is the prosodic approach discussed above. The other is based, not on prosody, but on topicality.

It is quite common to find a connection between the notions of "subject" and "topic." This connection is evidently stronger in some languages than in others. One set of languages within which linguists have drawn an especially strong and persistent connection between subjecthood and topicality are the Bantu languages (Givón, 1976; Hartford and Demuth, 1999). And in at least one Bantu language, Shona, this connection has been used to explain an accusative focus-marking asymmetry.

In Shona, as in French and the Chadic languages discussed above, focused objects can appear in situ, while focused subjects must be clefted.

]F

```
(103)
        Context: What did Shingi fall on?
        Shingi a-ka-don-er-a
                                        [ pasi.
        Shingi AGR-PAST-fall-APPL-FV [ground]<sub>F</sub>
```

(104)*Context*: Who cooked the pumpkins?

Shingi fell on [the ground.]_F

```
Ndiye [ Shingi ]<sub>F</sub> a-ka-bik-a
                                       ma-nhanga.
it.was [ Shingi ] F AGR-PAST-cook-FV CL6-pumpkins
```

It was [Shingi]_F who cooked the pumpkins.

Bliss and Storoshenko 2008

Based on this fact, Bliss and Storoshenko (2008) propose that

...topicalization is grammaticized in Shona. Unlike languages like English, where the connection between subjecthood and topicality is a violable pragmatic effect, topicalization in Shona appears to be a mandatory process, hardwired into the syntax.

Zimmermann (2011) makes a similar suggestion in discussing the accusative focus asymmetries found in West Chadic languages.

I contend that the special status of focused subjects in West Chadic follows from the fact that these Svo-languages exhibit a robust topic-comment split in their grammatical systems. In the default case, the sentence structure in [105a], which contains a canonical preverbal subject and a VP, is mapped onto the information-structural topic-comment partition in [105b]:

(105) a.
$$[_{TP} S [_{VP} V O XP]]$$

b.
$$[T_{Opic} S][T_{Omment} V O XP]$$

As indicated in [105], subjects in the canonical sentence-initial position receive a default interpretation as topic, modulo the restriction [that nonreferring sentence-initial subjects are permitted, and are not treated as topics]; see *e.g.* Jackendoff (1972), Chafe (1976), Givón (1976), Lambrecht (2001), and Zerbian (2007) for discussion of this point. It follows that, if a nonsubject is to constitute the topic of a clause, it must be explicitly marked as such, for instance, by left dislocation, or by a morphological topic marker, or both.

Conversely, if the grammatical subject of an utterance is to be interpreted not as topic, but as focus, this has to be indicated by a noncanonical grammatical realization...
p. 1189

Could a similar approach to the ergative focus asymmetry in K'ichee' succeed? There is one tantalizing fact that suggests that it could. Recall from §4.1.3.2 that in K'ichee' it is ungrammatical, or at least strongly dispreferred, to introduce new discourse referents as in situ A arguments. This fact could be taken as independent evidence for a rule in K'ichee' grammar which makes it mandatory for in situ A arguments to be topics. If we assume that topichood and focus are mutually exclusive, this would then prevent in situ A arguments from bearing focus.

Additional credibility is lent to the idea of such a rule by the existence of a plausible grammaticalization path by which it could have arisen. Du Bois (1987) noted a tendency across languages for A arguments to have several properties which are characteristic of topics: they are more likely than other types of argument to be given, and to persist in the discourse. It is easy to imagine that this tendency could have been grammaticalized in K'ichee', and that a rule requiring in situ A arguments to be topics would be the result.²¹

What's more, this approach offers a promising explanation for the typological patterns found in Table 4.3. All we must do, to explain why the "anti-French" and "anti-K'ichee" patterns are unattested, is to assume that there is a functional hierarchy according to which A arguments are more likely to be inherently topical than S arguments, and S arguments in turns are more likely to be inherently topical than O arguments. This assumption is in keeping with work by Du Bois (1987) and others.

But there are also serious problems with the topicality-based approach. One problem is syntactic. Bliss and Storoshenko's (2008) explanation of the accusative focus asymmetry in Shona depends crucially on the fact that Shona has an ex situ topic position to which subjects are required to move. This is how they formalize the requirement that subjects be topics: by requiring that subjects move to topic position. And we have already seen that K'ichee' has a similar ex situ topic position, which is targeted by left-dislocation. But there is

21. England (1989) makes a similar suggestion concerning grammaticalization.

no requirement in K'ichee' for A arguments to be left-dislocated, and no prohibition against other constituents being left-dislocated instead. This makes it hard to see how Bliss and Storoshenko's (2008) account of the Shona asymmetry could be extended to cover K'ichee'.

The second major problem is that, according to more recent research, it is not just A arguments that are crosslinguistically likely to be given, but rather *all agentive arguments* — including the subjects of agentive intransitive verbs. This has been demonstrated in at least one Mayan language, Tsotsil, by Martínez Álvarez (2012); and preliminary elicited data suggests that it is also true in K'ichee'. This raises the possibility that the No New A constraint in K'ichee' is too narrow: that the true constraint is against new semantic agents. If this is true, then the claim that A arguments in particular are required to be topics in K'ichee' loses much of its independent support, and begins to look stipulative and *ad hoc*.

4.3.2.1 No New A

Du Bois (1987) and Du Bois (2005), working on the K'icheean language Sakapulteko, noted a strong tendency for A arguments to be *given*, and to persist in the discourse. New discourse referents, on the other hand, were far more likely to be introduced as S or O arguments. Relatedly, overt lexical S and O were common, while overt lexical A was rare.

(106) No New A, DuBois's version

Avoid new A's

In DuBois's data, which did not distinguish between in-situ arguments and ones which had been moved or left-dislocated, the constraint against discourse-new A arguments was not an *absolute* constraint, but a violable one. England (1989), though, noted that an even stronger claim could be made if we restrict our attention to *in-situ* arguments. (England's claim is also framed in terms of morphosyntactic indefiniteness rather than discourse givenness.)

(107) No New A, England's version

An in-situ A is never indefinite.

(Or, equivalently: An in-situ indefinite is never interpreted as an A argument.)

According to her consultants — a group of native-speaker linguists from across the K'ichean family — sentences with indefinite in-situ A arguments were not just dispreferred but outright impossible. For her consultants, in a clause with one definite and one indefinite argument, the only possible interpretation was to treat the definite as the A argument — and this was true regardless of word order. The evidence for this, given earlier in this chapter in examples 25–26, is repeated below.

- (25) *X-u-q'aluj jun ala le achi.* CPL-A3s-hug a boy D man
 - a. The man hugged a boy.

 $V \; O_{[-def]} \; A_{[+def]}$

b. # A boy hugged the man.

$V A_{[-def]} O_{[+def]}$

(26) X-u-q'aluj le achi jun ala.

CPL-A3s-hug D man a boy

a. The man hugged a boy.

 $V \; A_{[+def]} \; O_{[-def]}$

b. # A boy hugged the man.

 $\# V O_{[+def]} A_{[-def]}$

Given a clause with *two* indefinite arguments, her consultants treated them as conjoined in order to avoid treating one as an A argument, as 27 (again repeated here) demonstrates.

(27) X-u-q'aluj jun ala jun achi.

CPL-A3s-hug a boy a man

c. S/he hugged a boy (and) a man.
$$V O_{[-def]} O_{[-def]}$$

Absolutely the only way her consultants would accept an indefinite A arguments was if it was left-dislocated.

a man CPL-ERG3s-hug a boy

A man hugged a boy.

$$A_{\lceil -def \rceil}$$
, $VO_{\lceil -def \rceil}$

The consultants I have worked with in Nahualá do not reject indefinite transitive subjects categorically. But I suspect that this is because they are willing to construct hypothetical discourse contexts for these examples in which the indefinite is not brand-new. For instance, in discussing the sentence in 107, one of my consultants was willing to accept a reading on which *jun alah* is the subject and *jun achih* the object; but when asked for a situation in which this reading could arise, he described the following context.

(109) Context for 107b: A group of men has come back from working overseas, and are seeing their sons for the first time in years. At first, the boys are timid, and refuse to interact with the men. But then one of the boys works up the nerve to hug one of the men.

This suggests that he was interpreting the indefinite noun phrase partitively, as singling out one referent from a given group rather than introducing a brand-new referent.

I carried out an additional test of England's hypothesis by searching my corpus of texts for indefinite noun phrases introduced by *jun* 'one' and for tokens of the indefinite pronoun

juun '(some)one'. The results support England's conclusions with only one caveat. Listed below are the only corpus examples I have found of indefinite A arguments.²² It is interesting to note that all four examples involve what Haspelmath calls *irrealis* or *conditional* uses of an indefinite; none introduces a specific new discourse referent. Instead, all four introduce a variable under universal or generic quantification: in each case, the indefinite could be replaced by *anyone* or *a typical person* without change in meaning. This suggests that DuBois was right to frame his generalization in terms of the introduction of new referents, rather than in terms of morphosyntactic indefiniteness.

(110) Wee xoq k'oo x-u-maku-j jun winaq, if too Exs CPL-ERG3s-sin-ss a person And if a person does something wrong...

Ajpacajá

(111) Entonces por lo menos k-u-kem juun so at.least INC-ERG3s-weave someone diez o quince o veinte yarda jun q'iij. ten or fifteen or twenty yard a day

So one can weave at least ten or fifteen or twenty yards a day.

B'atz

- 22. If we treat reflexive and extended-reflexive clauses as transitive, and treat their subjects as A arguments, the two examples below must also be included.
- (i) Xaa pa taq q'ayees k-u-tzuku-j u-b'ee juun. just prep distr grass inc-erg3s-find-ss gen3s-way someone One finds one's way through the bushes.

Guarchaj

(ii) Are taq k-u-wok r-o'ch juun... when INC-ERG3s-build GEN3s-house someone When someone builds his house...

Ajpacajá

(112) Xaq limitado jampa k-u-ch'ak sin juun.
just limited how.much INC-ERG3s-earn DIM someone

It's limited how much one can earn.

B'atz

if INC-ERG3s-want-ss someone INC-go-ss
If someone wants to go...

Ajpacajá

If we take these facts into account, we arrive at a generalization something like the following. Like DuBois's generalization, it is framed in terms of the given/new distinction. Like England's, it only covers *in-situ* A arguments, and is framed as an exceptionless categorical generalization rather than a statistical tendency.

(114) *No New A, penultimate version*An in-situ A argument is never used to introduce a discourse-new referent.

(115) Satisfying No New A

- a. When an in-situ A is formally indefinite, it cannot be taken to introduce a new reference to a real-world entity. It must instead receive an irrealis or hypothetical interpretation.
- b. When an A argument does introduce a discourse-new referent, it cannot be left in situ, but must be left-dislocated.

But as we will see, even this version of the generalization is incorrect. I will present evidence in the next section that the correct generalization requires *all agentive* arguments to be topical, including not only transitive subjects but also the subjects of agentive intransitive verbs.

4.3.2.2 Agentivity, not transitivity

DuBois's work on preferred argument structure has recently come under criticism for conflating two related but distinct notions: transitivity and agentivity. DuBois's No New A constraint states that transitive subjects are dispreferred locations introduce new discourse referents. But in many languages, the true generalization is that *agentive* subjects are dispreferred locations for new referents. In other words, the correct constraint is not "No New A" but rather "No New Agents."

Recent work by Martínez Álvarez (2012), on transitivity in Tsotsil, suggests that this criticism applies to at least some Mayan languages.²³ One chapter of Alvarez's thesis is dedicated to the discourse status of transitive and intransitive subjects. Unlike in previous work on the subject, Álvarez distinguishes agentive from non-agentive intransitive verbs in this study. And he finds that agentive intransitive subjects pattern together with transitive subjects when it comes to preferred argument structure:

La información nueva se coloca preferentemente en las posiciones de S2 (sujetos de predicados no agentivos) y O de verbos transitivos, mientras que se evita colocar información nueva en los S1 (sujeto de verbos agentivos) y los A de verbos transitivos. Por lo tanto, la estructura argumental preferida que presenta el tsotsil no se ha gramaticalizado en el sistema de alineamiento gramatical ya que la lengua es morfológicamente ergativa.

New information is preferentially located in S2 (subjects of non-agentive [intransitive] predicates) and O of transitive verbs, while one generally avoids locating new information in S1 (subjects of agentive [intransitive] verbs) and A of transitive verbs. As a result, the preferred argument structure which is found in Tsotsil has not been grammaticalized in an ergative pattern, even though the language is morphologically ergative.

p. 133

23. I am grateful to Judith Aissen (*p.c.*) for bringing this work to my attention.

And there is some reason to believe that this is the case in K'ichee' as well. England's work on preferred argument structure in K'ichee' did not take into account the distinction between agentive and non-agentive intransitives. I have only had the opportunity to carry out very preliminary work on the behavior of agentive intransitive verbs; but the results which I have obtained suggest that the subjects of agentive intransitives do indeed pattern like transitive subjects.

The test which I used here was similar to the one England used: I elicited judgments on intransitive sentences with an indefinite argument introduced by *jun*. To reduce the chance that my consultant would construct a context in which the indefinite could be given a partitive, irrealis or generic interpretation, I preceded these examples with *xuriq* = k'u *jun* q'iij, which is roughly similar in use to English 'and then one day' or 'then there came a day'²⁴ — it is used in narratives to introduce the beginning of a new episode. The consultant I worked with on this consistently accepted non-agentive intransitives in this frame:

- (116) X-u-riq = k'u jun q'iij, CPL-A3s-find = then one day And then one day
 - a. x-ul jun alah.
 cpl-arrive.here one boy
 a boy came.
 - c. x-ala-x jun alah.

 CPL-bear-PASS one boy
 a boy was born.
- b. *x-b'ee jun alah.*CPL-go one boy

 a boy went out.
- d. x-riq-itaj jun alah. cpl-find-cp one boy a boy was found.
- 24. Its literal meaning is 'then it found a day'

But he consistently rejected agentive intransitives. In some cases, he volunteered that the example would become felicitous if the DP in question were definite rather than indefinite.

```
(117) X-u-riq =k'u jun q'iij,

CPL-A3s-find =then one day

And then one day
```

- a. # x-b'iin jun alah.

 CPL-walk one boy

 a boy walked.

 b. # x-pixk'an jun alah.

 CPL-jump one boy

 a boy jumped.
- c. # x-chaku-n jun alah.

 CPL-work-AP one boy

 a boy worked.

 d. # x-war jun alah.

 CPL-sleep one boy

 a boy slept.

This suggests that in K'ichee', as in Tsotsil, it is agentivity rather than transitivity that determines where new referents can be introduced.

Another relevant piece of evidence concerns pseudotransitive subjects. These, as we have seen, do not count as A arguments for syntactic purposes; but they are nevertheless often agentive. My consultant rejects sentences in which these are used to introduce new discourse referents.

- (118) X-u-riq =k'u jun q'iij, CPL-A3s-find =then one day And then one day
 - a. # x-u-xi'j r-iib' jun alah. b. # x-u-sach u-k'u'x jun alah.

 CPL-A3s-scare A3s-self one boy CPL-A3s-lose A3s-heart one boy
 a boy got scared. a boy got discouraged.

	May be new?	Focus in situ?
Ordinary transitive subject (A)	×	Х
Pseudotransitive subject $(S_{[+agt]})$		
Subject of a reflexive	×	✓
Subject of an extended reflexive	×	✓
Subject of a pseudoincorporation clause	×	\checkmark
Agentive intransitive subject $(S_{[+agt]})$	×	\checkmark
Non-agentive intransitive subject $(S_{\lceil -agt \rceil})$		
Subject of a yesn-agentive root intransitive	✓	\checkmark
Subject of a passive verb	✓	\checkmark
Transitive object (O)	✓	✓

TABLE 4.4: The No New Agent constraint and the ergative focus asymmetry.

c. # x-u-sok r-aqan jun alah. d. # x-u-b'an sii' jun alah.

CPL-A3s-hurt A3s-leg one boy CPL-A3s-make firewood one boy
a boy hurt his leg. a boy cut firewood.

In other words, when we only considered prototypical cases — ordinary transitive subjects and objects, and the subjects of nonagentive intransitives — the facts about givenness and the facts about focus in situ appeared to line up. But now that we consider some less prototypical ones — pseudotransitive subjects and the subjects of agentive intransitives — we see that the facts do not line up so neatly (see Table 4.4). When it comes to givenness, the data supports a "No New Agents" constraint rather than a "No New A" constraint. When it comes to focus, on the other hand, it is specifically A arguments that cannot bear focus in situ.

This does not bode well for the topicality-based approach to the ergative focus asymmetry. It may well be that all agentive arguments are treated as inherently topical by K'ichee'—this would be one possible explanation for the patterns of givenness that we have seen. But

this cannot explain the ergative focus asymmetry, in which not all agents are barred from bearing focus in situ, but only A arguments.

4.4 Questions for future research

Clearly, further work is still needed on the phenomenon of information-structural ergativity. First off, as the above discussion shows, more work is needed simply in order to arrive at an explanation for why it occurs in K'ichee'. (In particular, I suspect that there is a great deal more that could be said both about K'ichee' prosodic structure and about the distribution of given and new or topical and non-topical constituents in K'ichee'; and it is quite possible that future work on these issues will resolve the problems which I observed in the previous section.) But what's more, this phenomenon opens up prospects for research with implications that go beyond the study of K'ichee' itself.

In this section I want to examine two of these prospects. I will argue that information-structural ergativity is of interest as a typological parameter throughout the Mayan family, and that it exhibits interesting correlations with syntactic ergativity in several branches of that family. And I will suggest that information-structural ergativity is of potential interest to syntacticians interested in advancing theories of covert movement.

4.4.1 Information-structural ergativity as a pan-Mayan typological parameter

In §4.2.4 I offered a the following generalization about K'ichee':

(119) Information structural ergativity: implicational formulationAll and only those constituents which can be freely extracted can bear focus in situ.

I will show in this section that this generalization holds in the other three Mayan languages for which adequate data on focus in situ exists: Yucatec, Tseltal and Tsotsil. In Yucatec, as in K'ichee', transitive subjects cannot be freely extracted: a special form of the verb is required; and in Yucatec, focus in situ exhibits the same ergative asymmetry found in K'ichee'. In Tseltal and Tsotsil, on the other hand, there is no syntactic constraint on extraction, and nor is there a syntactic constraint on focus in situ.

This in turn will raise two questions. First, it raises the question of whether the generalization holds in the rest of the Mayan family — and perhaps even in non-Mayan languages. And second, if the generalization does hold, it raises the question of *why* it should hold.

Yucatec Yucatec is a syntactically ergative language (Bricker, 1979; Gutiérrez-Bravo, 2008; Tonhauser, 2005). Unlike K'ichee' and many other syntactically ergative Mayan languages, it does not have a dedicated AF suffix. Rather, extraction of a transitive subject triggers the use of a morphologically impoverished verb form from which agreement markers and most aspectual markers have been removed.

```
    [ Pèedróoh ]<sub>F</sub> hàant-ik oon.
    [ Pedro ]<sub>F</sub> eat-INC avocado
    [ Pedro]<sub>F</sub> is eating an avocado.
    YUCATEC, Skopeteas and Verhoeven 2014
```

Extraction of other arguments is accompanied by the full verb form.

```
(121) [ Pèedróoh ]<sub>F</sub> k=u hàan-al.

[ Pedro ]<sub>F</sub> IMPFV=A3 eat-INC

[Pedro]<sub>F</sub> is eating. YUCATEC, Skopeteas and Verhoeven 2014
```

In Yucatec, as in K'ichee', there has been a good deal of experimental work done on focus realization (Gussenhoven and Teeuw, 2008b; 2008; Kügler, Skopeteas, and Verhoeven, 2007; Skopeteas and Verhoeven, 2012). In two of these experiments — Kügler, Skopeteas, and Verhoeven 2007; Skopeteas and Verhoeven 2012 — a free production task was used which allowed participants to choose whether to realize a focused constituent in situ or to

move it. In both experiments it was found that focused constituents could be realized in situ. Gutiérrez-Bravo and Monforte (2011) have done non-experimental work on focus in Yucatec in which they draw the same conclusion: that in situ focus is possible.²⁵

What's more, the free production experiments by Kügler *et al.* and Skopeteas & Verhoeven demonstrate that Yucatec exhibits a focus asymmetry between A arguments and O arguments. In both sets of experiments, the production task involved only transitive clauses; and in both, it was found that O arguments can be realized in situ, while A arguments cannot. The question this leaves is whether the focus asymmetry is an ergative or an accusative one; and the answer to this question must come from evidence on focus in situ in intransitive clauses. The only relevant examples I have been able to find involve intransitive nonverbal predicates rather than intransitive verbs; but they show that intransitive subjects can indeed bear focus in situ.

(122) *Context*: What is there inside the house?

Yàan [hun-péel mèesáah]
$$_F$$
 = i'.NVP [S] $_F$ EXS [one-cls table] $_F$ = LocThere is [a table] $_F$ there.Skopeteas and Verhoeven 2014, p. 14

(123) *Context*: What is there inside the field?

```
Ichil le kool = o', yàan [ hun-túul kolnáal ]_{\rm F} = i'. X, NVP [S]_{\rm F} inside D field = CL EXS [ one-CLS farmer ]_{\rm F} = LOC Inside the field, there is [a farmer.]_{\rm F} Skopeteas and Verhoeven 2014, p. 15
```

^{25.} Gutierrez-Bravo and Monforte say that in situ focused constituents represent information focus (following the typology in Kiss 1998), while focus movement indicates contrastive focus. Unfortunately, they give no argument and no diagnostics in support of this claim. And indeed, Kügler, Skopeteas, and Verhoeven (2007) and Skopeteas and Verhoeven (2012) give some data which may contradict it. In designing their experiments, these researchers have used a different taxonomy of focus types than Kíss: they assume a two-way distinction between completive and corrective focus (Kügler, Skopeteas, and Verhoeven, 2007), or a four-way distinction between completion, correction, selection and confir- mation. In either case, though, the examples given for corrective focus are ones that should count as contrastive under Kíss's taxonomy. And both sets of experiments find that corrective foci can be realized in situ.

This suggests that the focus asymmetry in Yucatec is ergative.

In short, Yucatec appears to follow the same generalization as K'ichee' does: constituents which can be freely extracted can be focused in situ, while transitive subjects, which cannot be freely extracted, also cannot be focused in situ.

Tseltal Unlike K'ichee' and Yucatec, Tseltal is not syntactically ergative, and allows free extraction of any argument. Transitive clauses from which a direct argument has been extracted are ambiguous, since both subject and object extraction are possible (Polian, 2013)

Polian also describes Oxchuc Tseltal as having focus in situ, and gives numerous examples such as 124, but the examples do not provide a discourse context which would allow us to confirm this claim, and he does not mention any particular diagnostic for focus which he has used. (In Polian's Spanish translations, he uses clefting to indicate the location of focus. I have converted his translations to English, and added brackets marking the location of focus as usual, but I add his Spanish translations below my English ones for clarity.)

(124) Ja' la s-pas [sok Xun.]
$$_{\rm F}$$
 V [X] $_{\rm F}$ FOC CPL A3-do [A3.with Xun] $_{\rm F}$ It's [with Xun] $_{\rm F}$ that he did it.

Spanish: 'Es con Xun que lo hizo.' TSELTAL, (Polian, 2013, p. 774) 26

^{26.} Polian offers three Spanish translation for this example: Él (es quien) lo hizo con Xun, suggesting an interpretation in which ja' is a focused subject pronoun; Eso (es lo que) hizo con Xun, suggestion one in which ja' is a focused object pronoun; and Es con Xun que lo hizo, suggesting one on which sok Xun 'with Xun' is the focused constituent. My gloss and translation above reflect the third of these Spanish translations.

(126) Ja' =to laj aw-a'tel [te me k'alal ch'ay-at beel =e.]_F V₁ O₁ [V₂]_F FOC =PART finish A2-work [D if when get.lost-B2 away =CL]_F

It's [when you disappear]_F that your work ends.

Spanish: '(Es) hasta que desapareces (que) se termina tu trabajo.'

TSELTAL, (Polian, 2013, p. 780)

Polian further asserts that focus in situ is possible for constituents in any grammatical function, and that sentences containing the preverbal focus particle *ja* are thus ambiguous with respect to their information structure. One Tseltal example I have found published which does include a discourse context is given in 127. This confirms the possibility of in situ focus — and also confirms that, unlike in K'ichee' and Yucatec, transitive subjects are able to bear focus in situ in Tseltal.

(127) Context: Who might it be (who took it away)?

Ja'nix s-mak-oj-ik tz'i

EXCL PT A3-block-PERF-PL PT

[x-nich'an anima j-mamal j-tajun]_F ya-'w-il.

VT [A]_F

deceased ноn-old.man A1-uncle]_F INC-A2-see

It's [the son of my deceased elderly uncle] who has taken it, you see.

TSELTAL (Brown, 2010)

This means that Tseltal follows the same generalization as K'ichee' and Yucatec, albeit in a somewhat trivial way. Those constituents which can be freely extracted can bear focus in situ — because *any* constituent can be freely extracted, and *any* constituent can bear focus in situ.

Tsotsil The situation in Tsotsil with respect to in situ focus is similar to that in Tseltal, but the situation with respect to syntactic ergativity is considerably more complicated. While

Tseltal has no AF construction and no constraints on extraction, Tsotsil has some remnants of the AF construction, and restricts the extraction of certain transitive subjects depending on their prominence relative to other referents in the clause — a system which Aissen (1999) has described as a form of direct/inverse marking. Nevertheless, Tsotsil obeys the same generalization as the other languages we have discussed — constituents which can be freely extracted can bear focus in situ.

Among the Mayan-language sources I have been able to consult, Tsotsil is by far the language with the most examples of question-answer pairs that can be used to diagnose focus. Many come from published texts, which are plentiful in Tsotsil.

(128) Context: Hasn't someone received the cigarettes already?

Ja' xa no'ox s-k'an

Foc still only A3-want

Only [the spectators and the women]_F still need some. TSOTSIL (Bricker 1969b)

(129) Context: What do the captains wear?

'A li kapitan-etik=e, ja' ta s-s-lap-ik
TOP D captain-PL=CL FOC INC INC-A3-wear-PL

```
[ chak k'u cha'al s-lap-oj-ik paxyon-etik=e. ]_{\rm F} A, V [O]_{\rm F} [ like A3-wear-perf-pl pasión-pl=cl ]_{\rm F}
```

The captains wear [what the pasiones wear.]_F
TSOTSIL (Bricker, 1969a)

(130) Context: Where did you go?

TSOTSIL (Laughlin 1977, story 154, cited in Aissen 2012a)

And many more come from Haviland's grammar of the language, which is unusual in including numerous examples in the form of question-answer pairs even when illustrating grammatical points that have little or nothing to do with focus.

(131) A: They arrested old man Sebastián.

B: Which old man Sebastián?

A:
$$Ja'$$
 i -chuk [li mol Xap Foc cpl-arrest [$dots$ old.man Sebastián
$$ti \quad i$$
-chik'- $dots$ dot

They arrested [the old man Sebastián whose house burned down.]_F

TSOTSIL (Haviland 1981, p.351)

(132) Context: What did you eat?

$$I$$
- j - ve ' [$kaxlan\ vaj$.] $_F$ V [O] $_F$ CPL-A1-eat [$bread$] $_F$ I ate [$bread$.] $_F$ TSOTSIL (Haviland 1981, p.233)

(133) *Context*: Who came to bring the money?

$$Ja'$$
 i -tal $[li\ Petul=e.\]_F$ $V[S]_F$ FOC CPL-come $[D\ Pedro=CL\]_F$ $[Pedro]_F$ came. TSOTSIL (Haviland 1981, p.219)

(134) *Context*: Who fled to the forest?

(135) Context: Who do you cultivate (your milpa) with?

Ch-i-chabaj j-chi'uk [li j-bol=e.]_F
$$V[X]_F$$
 Inc-b1-cultivate A1-with [D A1-brother.in.law=CL]_F
$$I cultivate with [my brother-in-law.]_F TSOTSIL (Haviland 1981, p.160)$$

(136) *Context:* Who is capable of bringing the firewood?

'A li Maruch=e, ch-k'ot
$$[y-u'un]_F$$
 li si'=e. $X, V[X]_F$ S TOP D María=CL INC-come $[A3-by]_F$ D wood=CL María, $[she]_F$ can bring the wood (lit. "María, the wood will come $[by her]_F$ "). TSOTSIL (Haviland 1981, p.277)

There is also at least one example in Haviland's grammar in which what appears to be a focus-sensitive particle associates with an in situ focus — though, as in other languages, it would take more work on the behavior of this particle to confirm that it is indeed focus-

(137) Ja' no'ox ch-vabaj [li Xun=e.]_F $V[S]_F$ Foc only INC-play [D John=cl]_F

Only [John]_F is going to play (music). TSOTSIL (Haviland 1981, p.116)

And in 138 we have what appears to be an example of contrastive focus in situ, again from Haviland's grammar.

(138) Context: Were you scared when your son fell?

sensitive.

$$\label{eq:muk'l-i-xi'} \begin{aligned} &\textit{Muk' l-i-xi'} & [\textit{ li vo'on }]_F \textit{ a'a} & & & & & & & & & \\ &\textit{NEG CPL-B1-fear }[\textit{ D 1sg }]_F \textit{ in.truth} & & & & & & \\ &\textit{\textit{Ja' i-xi'}} & [\textit{ li s-tuk=e. }]_F & & & & & & \\ &\textit{Foc CPL-fear }[\textit{ D A3-self=CL }]_F & & & & & & \\ \end{aligned}$$

Well, [I]_F wasn't scared. [He]_F was scared. TSOTSIL (Haviland 1981, p.158)

Aissen (2012a) argues that in Tsotsil, like in Tseltal, canonical order clauses are ambiguous with respect to information structure, and in particular that in transitive canonical clauses either argument may be treated as focused. This suggests that there is no ergative focus asymmetry in Tsotsil; and example 128 confirms this.

Tsotsil has sometimes been described as a syntactically ergative language (*e.g.* in Stiebels 2006). But Aissen (1999) challenges this view. In Mayan languages which are truly syntactically ergative, in transitive clauses whose subject has been extracted, an AF verb form must be used whenever an appropriate form exists. In Tsotsil, AF forms only exist for verbs with two third-person arguments (Haviland, 1981, p. 262). This fact alone could perhaps be seen as a stricter form of the person-based constraint for K'ichee' described by Mondloch (1981) and outlined in §3.3.2.1 of this dissertation, in which verbs with two local person arguments lack AF forms. But crucially, in Tsotsil, even those verbs which have two third-person arguments do not always take their AF form when their subject is extracted, as in the following examples cited in Aissen 1999.

(139) *Pero buch'u' s-tam?*but who A3-take
But who took it?

TSOTSIL, Laughlin (1977) story 353

(140) *Na'-tik buch'u y-elk'an-oj.*know-1pl who A3-steal-PERF
We know who stole it.

TSOTSIL, Laughlin (1977) story 215

Aissen argues that in fact, what Tsotsil has is not syntactic ergativity at all, but rather a system of direct/inverse marking on the verb. In clauses or larger spans of discourse with multiple third-person referents, Tsotsil grammar ranks these referents according to their prominence (Aissen, 1999). The highest ranked referent is known, following terminology from the Algonquian languages, as the PROXIMATE, and all lower referents are known as OBVIATIVES.

Transitive active verbs are required to have proximate subjects. And in cases where using a transitive active verb would lead to an obviative subject, some other verb form is used instead — either the passive or the AF; the passive is found in clauses whose agent has not been extracted, and the AF form is found in clauses where agent extraction has occurred.

I should acknowledge here that some of these facts about Tsotsil are quite similar to ones about K'ichee'. For instance, we have seen that K'ichee' often uses passivization to avoid a less prominent (*i.e.* non-topical) transitive subject. But this correspondence between argument prominence and verb form is not extended to the use of the AF verb in K'ichee', where the extraction of any transitive subject causes the AF form to be used if it exists. In Tsotsil, it is only *obviative* transitive subjects whose extraction leads to the use of an AF verb form. And this fact, combined with the facts about the passive, lead us to predict that all constituents should be able to bear focus in situ in Tsotsil — not only when they are proximate but also, perhaps surprisingly, when they are obviative.

Consider a two-participant event, with two semantic roles which for convenience I will call Agent and Patient. First, suppose that the Agent is proximate. In that case, its default in situ realization is as the subject of a transitive verb. But in that case, it can also be freely extracted without the use of an AF verb. This leads us to predict that it should be able to bear focus in situ. And this prediction is borne out — see example 128.

Second, suppose that the Agent is obviative. In this case, its default in situ realization is not as a transitive subject, but as an oblique introduced by the relational noun -u'un'by, with a passive verb. The crucial question now is whether obliques introduced by -u'un can be freely extracted. If they can, we predict that they should be able to bear focus in situ; if they cannot, we predict that they should not be able to. There are numerous examples in Haviland's grammar of obliques -u'un being freely extracted.

(141) *K'u y-u'un ch-a-bat ta Jobel?*what A3-by INC-A2-go P San.Cristóbal
Why are you going to San Cristóbal?

TSOTSIL, Haviland 1981, p. 147

(142) K'u y-u'un ti mu x-a-jak'-be li vo'ot =e?
what A3-by C NEG ?-A2-ask-BEN D you =CL
Why don't you ask her yourself?

Dialog 7²⁷

Thus we predict that these obliques should also be able to bear focus in situ; and this prediction is borne out by example 136, repeated below:

(136) *Context*: Who is capable of bringing the firewood?

'A li Maruch=e, ch-k'ot [y-u'un]_F li si'=e.

TOP D María=CL INC-come [A3-by]_F D wood=CL

 $X, V [X]_F S$

María, [she]_F can bring the wood (*lit*. "María, the wood will come [by her]_F").

TSOTSIL (Haviland 1981, p.277)

Thus in spite of the complexity of the syntax of extraction in Tsotsil, we find that it obeys the same basic generalization as K'ichee', Yucatec and Tseltal: in all four languages, constituents which are able to be freely extracted are also able to bear focus in situ.

4.4.2 Implications for theories of covert focus movement

4.4.2.1 Why believe in covert focus movement?

In generative syntax it is common (though by no means uncontroversial) to assume that movement can take place covertly as well as overtly. One common approach is to assume

27. From a collection of dialogs in Tsotsil currently available online in conjunction with Haviland's grammar at http://www.zapata.org/Tzotzil/Dialogs/index.html

that the syntactic derivation of a sentence branches at some point, with one branch leading to its Logical Form (LF) and the other leading to its Phonetic Form (PF). Movement which takes place prior to this branching will be reflected both in the syntactic interpretation of a sentence, which is based on LF, and in its overt pronunciation, which is based on PF. But movement which takes place after the two derivations branch off from one another will be reflected in only one of these two representations. This allows on the one hand for phonologically motivated movement which does not affect the logical form of a sentence (extraposition in K'ichee' could perhaps be an example of this), and on the other hand for *covert movement* which affects only the logical form of a sentence and not its pronunciation.

Chomsky (1976) proposed that in English, constituents which appear to bear focus in situ have actually undergone covert movement. This proposal was motivated by certain similarities between focus-in-situ sentences and sentences involving wh-movement in English. Overt wh-movement sentences exhibit what are known as weak crossover effects: the constituent which moves cannot be coindexed with a pronoun which it "crosses over" in moving. So the sentence in 143a, in which the subject moves, is grammatical because it does not cross over the coindexed pronoun; but the one in 143b, in which the object moves, is ungrammatical because its movement does cross over its coindexed pronoun.

(143) a. [Who_i [t likes his_i mother]] b. *[Who_i [does his_i mother like t]]
$$\uparrow$$

Chomsky noted that a similar effect is seen in focus in situ clauses: subject focus in situ is grammatical when the object contains a coindexed pronoun, but object focus in situ is ungrammatical when the subject contains a coindexed pronoun.

And he proposed that this could be explained if we assume that focused constituents in English undergo covert movement, so that the LFs of the sentences in 144 are as follows.

Another arguement for this proposal, advanced in Chomsky 1977, appeals to the notion of universal grammar. Chomsky suggests that forms of movement which occur overtly in one language ought to occur in all languages, albeit perhaps only covertly. If we adopt this principle, then the fact that languages such as Hungarian and K'ichee' have overt focus movement constitutes evidence (albeit only circumstantial evidence) that languages like English should have covert focus movement.

4.4.2.2 Problems with covert focus movement — and why K'ichee' is relevant

Now, the notion of covert movement has faced a number of objections, many of which have the same form as one another. Chomsky's initial argument for this notion was based on the observation of one constraint which both overt movement and focus in situ follow. But in these objections, some other constraint is pointed out which is followed by overt movement but *not* by focus in situ. Since it has been argued that (with few exceptions) overt and covert operations must obey the same constraints, any constraint which is obeyed by overt movement but not by focus in situ constitutes a problem for the idea that focus in situ is covert movement.

Here is one example of such an objection. Overt movement cannot occur from inside an island; examples of islands include embedded wH-questions, complex NPs, and coordinate structures.

- (146) * Which story do you wonder [who he'll tell t to?]
- (147) * How many highways did they announce [a plan to build t?]
- (148) * Who did John see [Mary and t ?]

This suggests that covert movement from inside an island should be impossible. So if focus in situ were covert movement, we would expect focus in situ to be blocked in these contexts. But it is not.

- (149) *Context*: He told THAT story to Mary.

 I wonder [who he'll tell [THIS]_F story to.]
- (150) This year they announced [a plan to build [Two]_F highways] (rather than one).
- (151) Today, he saw [Mary and [BILL]_F] (rather than Mary and Fred).

Here is another example. Overt movement in English cannot lead to a sentence in which *that* is immediately followed by a trace (the so-called *that*-trace effect).

If focus in situ involved covert movement, we would expect focus in situ to be infelicitous in the same context. But it is not.

(153) They think that JOHN will be hired (and not Mary).

These objections are not necessarily insurmountable, and in fact various solutions to them have been proposed. At this point, all I want to do is acknowledge that they have been raised — that a number of constraints have been found which seem to apply to overt

movement but not focus in situ, while relatively few have been found which obviously apply to both overt movement and focus in situ; and that this would appear to considerably weaken the covert movement proposal.

So it would be useful to proponents of this proposal to find additional examples of constraints which apply equally to overt movement and to focus in situ. Given that, I want to point out that the patterns of syntactic and information-structural ergativity found in K'ichee' represent a good candidate for such a constraint: if we were to analyze K'ichee' in situ focus as covert movement, then we would have a situation in which precisely the same set of constituents — ordinary transitive subjects — was barred from both overt and covert movement. What's more, if the typological speculations raised in the previous section are true — if the correlation I observed there between syntactic and information-structural ergativity in a subset of Mayan languages could be shown to hold in a larger sample — it would provide even stronger reason for proponents of covert focus movement to take interest in the phenomenon. For in that case, we would have a crosslinguistically valid relationship between the possibilities of overt and covert focus movement for transitive subjects.

Chapter 5

Conclusion

I began this dissertation by observing that word order and information structure are clearly linked in Mayan languages, and that in past work the study of information structure in these languages has often been motivated by questions about word order. In part because of that history, scholars have focused their attention on situations in which marked information structure leads to marked word order — and in particular, on situations in which narrow focus leads to movement. But I have shown here that this is not the whole story: the relationship between focus and movement is more complicated than previous work might lead us to believe. Two observations formed the basis for the investigations in this dissertation:

- 1. Not all movement is alike: there are situations in K'ichee' in which movement is triggered by something other than narrow focus.
- 2. Not all focus is alike: there are situations in which narrow focus does not lead to movement in which the focused constituent is realized in situ.

Most of the new contributions made here emerge from descriptive work taking one of these two observations as its starting point.

The first observation, that not all movement is alike, opened the door to an investigation of the syntax of movement and related constructions in K'ichee'. It was already known that wh-movement, which is not motivated by focus, occurs in bound and free relative clauses and in wh-questions. I showed that wh-movement also occurs in a type of unconditional

clause which I dubbed *ap*-clauses; that relative clauses and *ap*-clauses can occur in "crowded" configurations in which they are introduced by several overt function words rather than one or none; and that all wh-movement constructions share a common structure in which the wh-word moves to the specifier of CP.

What's more, I showed that free relative clauses give rise to several previously undescribed biclausal constructions:

- The clothed-coda construction, which may be analyzable as a specificational copular clause with an in situ free relative as its subject.
- A construction involving a specificational copular clause with a left-dislocated free relative as its subject. (Left-dislocation makes the biclausal structure here more obvious than it was in the clothed-coda construction; for matrix verbs cannot be leftdislocated.)
- A construction in which a predicational copular clause takes a free relative (in situ or left-dislocated) as its subject.
- The *masaat* construction, which may be analyzable as a copular clause with a free relative as its complement.

However, I confirmed that ordinary ex situ focus clauses cannot be given a biclausal analysis, *contra* Larsen 1988 and Velleman 2011a. Rather, I argued, they should be analyzed following Aissen 1992 as having a monoclausal structure in which the focused constituent moves to a left-peripheral specifier position. (I also took up the question of whether this specifier position is the specifier of CP or of IP, and showed that the answer depends crucially on other details of our analysis — in particular, on how the clothed-coda construction is analysed.) This monoclausa structure which I attribute to ex situ focus clauses is similar to that of relative clauses and wh-questions, in that all three involve movement to a specifier

	Agentive?	Morphologically transitive?	Syntactically transitive?
Ordinary transitive active clause	✓	✓	✓
Ordinary transitive clause w/AF verb	\checkmark	×	✓
Pseudotransitive clause	\checkmark	\checkmark	×
Agentive intransitive clause	\checkmark	X	×
Non-agentive intransitive clause	×	×	×

TABLE 5.1: Types of clause, with their transitivity-related properties.

position. But the motivation for this movement is different: information-structural focus in ex situ focus clauses, a syntactic wh feature in relative clauses and wh-questions.

The second basic observation, that focus in situ is possible, also opened the door to a more detailed investigation, concerning the question of *when* it is possible. I showed that it follows an essentially ergative pattern: that it is possible for nonsubjects and intransitive subjects, but impossible for transitive subjects.

This finding highlights an important fact about the grammar of transitivity. Because K'ichee' is an ergative language, the transitive/intransitive distinction is crucial to its grammar. But we have seen evidence throughout this dissertation that transitivity is not monolithic. There are several different properties related to transitivity which different aspects of K'ichee' grammar are sensitive to: AGENTIVITY, MORPHOLOGICAL TRANSITIVITY and SYNTACTIC TRANSITIVITY. These three properties are independent of one another. Ordinary transitive clauses with an active verb have all three of these properties; and non-agentive intransitive clauses have none of the three. But in between these prototypical extremes are several liminal cases, as shown in Table 5.1: clauses with AF verbs, pseudotransitive clauses, and agentive intransitive clauses.

In clauses without an AF verb, each of these three transitivity-related properties controls a different aspect of argument behavior. In §4.3.2.2 we saw preliminary evidence that

	May be new?	Agreement	Movement	Focus in situ?
Ordinary transitive subject (A)				
With an active verb	X	Set A	Forbidden	×
Pseudotransitive subject (S)				
In a reflexive clause	×	Set A	Permitted	✓
In an extended reflexive clause	×	Set A	Permitted	✓
In a pseudoincorporation clause	×	Set A	Permitted	✓
Agentive intransitive subject (S)	X	Set B	Permitted	✓
Non-agentive intransitive subject (S	S)			
With a root intransitive verb	✓	Set B	Permitted	✓
With a passive verb	✓	Set B	Permitted	✓
Transitive object (O)				
With an active verb	✓	Set B	Permitted	✓

TABLE 5.2: Behavior of arguments in clauses with a non-AF verb, showing sensitivity to the properties shown in Table 5.1. Constraints on newness are determined by agentivity; agreement is determined by morphological transitivity; and constraints on movement and focus in situ are determined by syntactic transitivity.

	May be new?	Agreement	Movement	Focus in situ?
Ordinary transitive subject (A) With an AF verb	√	Set B or none	Required	N/A
Transitive object (O) With an AF verb	✓	Set B or none	Forbidden	?

TABLE 5.3: The same properties, for arguments in clauses with an AF verb, showing atypical behavior. They permit discourse-new subjects, exhibit unusual hierarchical agreement, and require their subjects to move (thereby making subject focus in situ impossible).

agentivity determines whether or not an argument can be discourse-new. Morphological transitivity determines which set of agreement markers an argument will control. Mondloch (1981) and Aissen (1992) showed that syntactic transitivity determines whether an argument can be freely extracted; and I showed in §4.2.3 that syntactic transitivity also determines whether an argument can bear focus in situ. These facts are summarized in Table 5.2.1

In clauses with an AF verb, these generalizations break down. As shown in Table 5.3, AF verbs give rise to:

- Atypical givenness: they are semantically agentive, but permit their subjects to be new.
- Atypical agreement: they are morphologically intransitive, but agree sometimes with their subject and sometimes with their object.
- Atypical movement: they head syntactically transitive clauses, but permit (and indeed require) their subjects to move.

These atypical behaviors are in keeping with a frequent observation about the function of AF verbs: that they exist as a way to circumvent restrictions that would otherwise be burdensome. They also provide a set of desiderata which a full formal account of the AF phenomenon will have to satisfy.

Though these investigations of movement on the one hand and focus in situ on the other hand began as separate lines of inquiry, they have converged in a somewhat unexpected way. For as Table 5.2 shows, outside of AF clauses the possibilities for movement and focus in situ

^{1.} This table also reveals some gaps in this investigation. In particular, there are many types of morphologically intransitive predicate for whose subjects I have not investigated the relevant properties. For instance, I have not investigated whether the subjects of antipassive verbs, "inactive" verbs (see footnote 14) or positional nonverbal predicates can bear focus in situ or be discourse-new.

parallel one another precisely. All and only those constituents which can freely move² are able to bear focus in situ. In fact, we saw that this connection holds not just in K'ichee', but in several other Mayan languages.

I argued that this suggests a deep connection between movement and focus in situ, and pointed out that one syntactic mechanism has been proposed which could account for this connection. If we analyze focus in situ as covert movement, as several syntacticians have already suggested for independent reasons, then the generalization is simply this: Whatever blocks overt movement of A arguments in syntactically ergative languages also blocks covert movement. This explains why in the syntactically ergative languages K'ichee' and Yucatec, A arguments cannot bear focus in situ, while in the non-syntactically-ergative languages Tseltal and Tsotsil, they can. Further work on focus in situ, both within the Mayan family and in unrelated languages, will be required to see whether this version of the generalization holds up.

In a way, this dissertation has come full circle. We began by noting that Mayanists have sometimes posited a simple and directly observable one-to-one relationship between focus and overt movement. We saw that this one-to-one relationship did not stand up to close scrutiny, and that the relationship between focus and overt movement is more complicated. Some unfocused constituents need to move overtly; and some focused constituents get their overt realization in situ. Still, when we looked more closely into the constraints on focus in situ, we found evidence relevant to the question of whether there is a deeper relationship between focus and *covert* movement.

I will admit I am not optimistic about the prospects for theories of covert focus movement. Still, it is my hope that the data provided in this dissertation will provide useful input to the debate surrounding those theories.

2. Where "free movement" is defined as movement without the use of an AF verb.

Finally, let me close by reiterating the possibilities for future descriptive fieldwork which this dissertation opens up.

Many of these possibilities are internal to the study of K'ichee', and involve loose ends which the present work has left hanging. In the course of this dissertation I have highlighted questions which remain open concerning the prosodic structure of the clause (see §4.3.1.2); the source of the DP effect in focus movement clauses (§3.2.1.1); the target of focus movement (§§2.3.2 and 3.3.1); the syntax of clause-initial adverbs (§3.3.1.2), of complement clauses (§3.4.3.2), and of various biclausal constructions involving relative clause arguments (§3.2.2); the dramatically reorganized determiner system found in a Cunenteco Gospel translation (§3.4.3.3); and the constraints which K'ichee' places on givenness (§§4.1.3.2 and 4.3.2).

But I believe that some of my conclusions here also open up possibilities for research across the Mayan family. I have suggested the generalization that all and only those constituents which can be freely extracted (without the use of a special verb form) can be focused in situ. Testing this generalization crosslinguistically — even if we restrict our attention to the Mayan languages — will require fieldworkers to attend to a diverse and exciting range of phenomena, and may well shed light in turn on how those phenomena should be analyzed.

For instance, across the Mayan languages are found a number of interesting variations on syntactic ergativity. As we saw in §3.4.2.3, different syntactically ergative Mayan languages allow for different types of pseudotransitive clause. In K'ichee', reflexives, extended reflexives and clauses with nonspecific bare-noun objects all permit free subject extraction; in Q'anjob'al (Ordóñez, 1995; Pascual, 1995; Coon, Mateo Pedro, and Preminger, 2011) and Tsotsil (Aissen, 1999), reflexives and extended reflexives do but clauses with nonspecific bare-noun objects do not; in Tz'utujiil, free extraction is blocked even in extended reflexives, and only sometimes occurs in true reflexives (Aissen, 2012b). And other Mayan languages which are not, strictly speaking, syntactically ergative still exhibit restrictions on extraction which appear closely related to syntactic ergativity. One example of this is found in Tsotsil

(Aissen, 1996) and Chol (Coon, 2010, p. 78), where all arguments may be freely extracted, but extraction *out of* transitive subjects (*e.g.* of transitive subjects' posessors) is prohibited while extraction *out of* other arguments is permitted. This is still perhaps a sort of ergative pattern: *subconstituents* of transitive subejets are treated differently than *subconstituents* of other arguments.

And in yet other Mayan languages we find patterns that are reminiscent of syntactic ergativity in that extraction of certain constituents requires a special verb form, but that are not organized along ergative lines. (Ayres 1983 uses "indexing" as a blanket term covering both syntactic ergativity and these other non-ergative patterns.) For instance, in many Mayan languages, there is a special verb form, resembling in some ways an applicative, which is used to license extraction of an instrumental adjunct; Dayley (1978) observes this pattern in Tz'utujiil, Ayres (1983) observes it some varieties of Ixil, and Mondloch (1981) describes it in some varieties of K'ichee'. On the other hand, other languages lack this pattern: the suffix in question has become nonproductive in CNK,³ and in Mam it has disappeared entirely (Nora England *p.c.*). Another pattern of this sort is found in some varieties of Ixil, where extraction of locative adjuncts requires a special suffixed verb form, rather than the use of an enclitic such as we observe in K'ichee' (Ayres, 1983).

Meanwhile, information structure in Mayan languages remains quite unevenly studied. In most Mayan languages there has been the same unbalanced emphasis that I described in Chapter 1 for K'ichee': ex situ focus is well-studied in those languages where something like syntactic ergativity is observed; and in some languages the pragmatics of left-dislocated topics has received attention as well; but information structure in canonical clauses has only rarely been discussed. This is a gap which I believe needs to be filled in future work — and I hope that the possible connection between syntactic ergativity (in all its rich diversity and complexity) and focus in situ will be sufficient incentive to begin filling it.

^{3.} In CNK the 'instrumental' suffix is only preserved in a small number of frozen forms, and no longer has any relationship with extraction.

I have taken this digression through the broad range of related phenomena in order to illustrate a fairly simple point: the variations on syntactic ergativity described above — as well as the other related restrictions on extraction and patterns of "indexing" — provide an excitingly diverse set of test cases for the generalization about focus in situ which I have advanced here. It is my hope that even if the generalization I propose proves to be false, it will provide a jumping-off point for further work on these syntactic patterns on the one hand, and an incentive to flesh out or understanding of Mayan language pragmatics and information structure on the other.

Sources for examples

Sources for textual examples are listed below. All authors and speakers represented here are from Nahualá or the neighboring town of Santa Catarina Ixtahuacán. All oral texts used are available at ailla.utexas.edu or will be made available there shortly. As of this writing, the written text *Xan Kata'l* is available online at http://74.52.178.178/~ebiguate/images/stories/pdf/origen_de_santa_catarina_ixtahuacan_kiche.pdf

Name	Mode	Author/Speaker	Recorder	Summary
Ajpacajá 1–4	Oral	Pedro Florentino Ajpacajá Tum	Matazar	A long taped monologue, probably containing material from many sessions spliced together, on the history, geography, toponymy and folklore of Santa Catarina Ixtahuacán and its aldeas. Each of the four parts is roughly an hour in length.
B'atz	Oral	Diego Ixmatá Ixmatá	Velleman	A procedural text: how to dye thread and set up the warp for a floor loom.
* B'ixonik Tziij	Written	Pablo García	N/A	A collection of poetry published as García 2007
Guarchaj 1–2	Oral	Miguel Guarchaj	Velleman	An interview, in two parts, on the traditional altars in the mountains around Nahualá, and the folklore sur- rounding them.
Ixoqiib'	Oral	Maria Victoria Guarchaj	Velleman	A short extemporaneous speech on the changing role of women in modern life.
K'ache'laaj	Oral	Maria Victoria Guarchaj	Velleman	A folktale about a man who angers the <i>nawal</i> of the forest.
Kiq'iij Santo	Oral	Diego Ixmatá Ixmatá	Velleman	A short recounting of traditions surrounding the Day of the Dead.
K'ulaneem	Oral	Diego Ixmatá Ixmatá	Velleman	An interview on traditional wedding practices.
Misal	Written	Pedro Florentino Ajpacajá Tum	N/A	A translation of the Catholic Missal into K'ichee', published as Ajpacajá Tum and Baronti 1995.
Xan Kata'l	Written	Various	N/A	A compilation, containing the work of many authors, of history, folklore and sayings from Santa Caterina Ixtahuacán and its aldeas.

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