

THE INTERCLAUSAL RELATIONS HIERARCHY IN Q'EQCHI' MAYA

PAUL KOCKELMAN

DARTMOUTH COLLEGE

The interclausal relations hierarchy describes the systematic correlations that exist between the semantic structure of complement-taking predicates and the morphosyntactic structure of their complements. In particular, the closer the semantic relation between the narrated events denoted by a predicate and its complement, the more the morphosyntactic encoding of the predicate–complement construction appears as a single clause. In this article, I describe the grammatical categories and complement types of verbal predicates in Q'eqchi'. I use these categories and complements to order predicate–complement constructions according to the degree to which their morphosyntactic expression looks like a single clause. I use this ordering to deduce a variety of covert semantic classes in Q'eqchi'. And I compare these Q'eqchi'-specific classes of complement-taking predicates to the cross-linguistic expression of the interclausal relations hierarchy as theorized by Role and Reference Grammar.

[KEYWORDS: interclausal relations hierarchy, Q'eqchi' Maya, iconicity, role and reference grammar, complementation, semantics]

1. Introduction. It is well known that across languages there exist relatively systematic correlations between the semantic structure of complement-taking predicates and the morphosyntactic structure of their complements (see Givón 1980, Silverstein 1976; 1993, Foley and Van Valin 1984, and Van Valin and LaPolla 1997). In particular, the closer the semantic relation between the narrated events denoted by a predicate and its complement, the more the morphosyntactic encoding of the predicate–complement construction appears as a single clause. This form–functional iconicity is known as the INTERCLAUSAL RELATIONS HIERARCHY.

In this article, I relate the Q'eqchi'-specific features of this hierarchy to its cross-linguistic expression. In **2**, I discuss the grammatical categories and complement types of verbal predicates in Q'eqchi' Maya. In **3**, I use these categories and complements to order predicate–complement constructions relative to their TIGHTNESS—that is, how much the morphosyntactic expression of such a construction looks like a single clause. In **4**, I use this ordering to deduce a variety of covert semantic classes in Q'eqchi'. And in **5**, I conclude by comparing these Q'eqchi'-specific classes of complement-taking

predicates to the cross-linguistic expression of the interclausal relations hierarchy as theorized by Role and Reference Grammar.¹

2. Verbal categories and complement types in Q'eqchi' Maya.

Q'eqchi' is a language in the Kichean branch of the Mayan family, spoken by some 360,000 speakers in Guatemala and Belize (Stewart 1980).² Typologically, Q'eqchi' is a morphologically ergative, head-marking language. In particular, obligatory affixes on transitive verbs cross-reference the verb's A-role and O-role arguments (thereby marking the arguments whose semantic roles are most likely to be (A)gent and (O)bject, or actor and undergoer, respectively); and obligatory affixes on intransitive verbs cross-reference the verb's S-role argument (thereby marking the (S)ubject, or single argument, of an intransitive verb, irrespective of its semantic role).³ Following Van Valin (1993:5), I refer to the obligatory arguments of intransitive and transitive verbs, cross-referenced by these affixes, as core arguments. In contrast to core arguments, which are part of the semantic representation of the verb, I refer to any additional arguments in a clause as non-core, or peripheral, arguments (which usually include NP adverbials and locative and temporal PPs, and which are often referred to as "adjuncts"). Full NPs and independent pronouns may optionally occur in the clause, along with their appropriate cross-referencing affixes. This system exhibits a classical ergative pattern in that the same set of affixes that marks O-role arguments on transitive verbs marks S-role arguments on intransitive verbs.

In Mayan linguistics, the ergative person-number affixes are known as "Set A" and the absolutive person-number affixes are known as "Set B" (see Du Bois 1987 and Stewart 1980).⁴ Set A is also used to mark the possessor on possessed-noun constructions. And Set B is also used to mark free-stand-

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² Data used in this article came from 14 months of fieldwork I carried out between 1998 and 2001 in the Q'eqchi'-speaking village of Ch'inahab, in the Department of Alta Verapaz, Guatemala. In particular, after transcribing local conversations (by villagers, usually at meals) and interviews about ethnographic topics (ranging from subsistence practices and eco-tourism to emotional life and illness cures, such that a wide range of predicate classes were used), I tabulated all the types of complements that various predicates took. For every predicate I list, then, I have at least one discourse token of it occurring with a given complement. I also elicited grammaticality judgments, from which nongrammatical examples are taken.

³ See Dixon (1979; 1994) and Van Valin and LaPolla (1997:139–54) for a discussion of these distinctions.

⁴ Set A affixes should not be confused with A-role arguments.

ing pronouns. Besides this affixal marking of person-number-case, the only other obligatory affixal marking on verbal predicates is a paradigm of inflectional prefixes, marking features belonging to the grammatical categories of mood, aspect, tense, and evidentiality. I refer to members of this paradigm as MATEs.⁵ In this way, transitive verbs have the following affixal order: MATE-Set B-Set A-Verb. And intransitive verbs have the following affixal order: MATE-Set B-Verb. Let me exemplify this verbal affixing of grammatical categories, before I discuss complementation.

- (1) *x-in-war*⁶
 Perf-Abs(1s)-sleep⁷
 'I have slept'
- (2) *t-in-x-q'unbesi*
 Fut-Abs(1s)-Erg(3s)-soothe
 'he will soothe me'
- (3) *ki-∅-kam li r-amiig*
 Inf-Abs(3s)-die the Erg(3s)-friend
 'his friend must have died'

In (1), the Set B affix *-in-* cross-references a first-person singular S-role argument, while in (2), *-in-* cross-references a first-person singular O-role argument. In (2), the Set A affix *-x-* cross-references a third-person nonplural A-role argument, while in (3), the Set B affix *-∅-* cross-references a third-person nonplural S-role argument.⁸ In (3), the Set A prefix *-r-* cross-references the third-person nonplural possessor argument of the noun *amiig* 'friend'. In addition, (3) shows the occurrence of a full NP, *li ramiig* 'his friend', along with the appropriate cross-referencing affix *-∅-* on the verb. Lastly, (1), (2), and (3) show MATEs marking perfective aspect, future tense, and inferred evidence, respectively.

⁵ There is an additional obligatorily marked affix on some intransitive verbs (and all stative predicates), which marks features belonging to the grammatical categories of mood and aspect (see Stewart 1980). On intransitive verbs, however, it is fully conditioned by choice of MATE and is therefore not diagnostic of any of the complement types discussed here.

⁶ In Q'eqchi', vowel length (signaled by doubling letters) is phonemic. /k/ and /q/ are velar and uvular plosives, respectively. /x/ and /j/ are palato-alveolar and velar fricatives, respectively.

⁷ I use the following notational conventions: Abs(1s) = Set B affix, first-person singular; Erg(3p) = Set A affix, third-person plural (and so on for other person-number combinations); Perf = perfective aspect; Pres = present-habitual, or unmarked, tense-aspect; Fut = future tense; Inf = inferred evidential; Nom = nominalizer; Neg = negative; Comp = complementizer.

⁸ Note that the absolutive 'third-person singular' infix is a zero morpheme (\emptyset), representing a noticeable absence from a paradigmatic position. Along with the Set A affix *-x-*, and unlike the other members of its paradigm, it is best analyzed as nonplural, because it can reference both plural and singular referents.

Unlike (8), however, the complement is cross-referenced by the Set B affix $-\emptyset$ on the main verb, as the third-person nonplural O-role argument. In this way, the complement is a core argument of the main verb; and the A-role argument of the main verb is shared with the complement verb as the latter's unexpressed S-role argument. (10) shows the transitive aspectual predicate *k'uyuk* 'to endure' occurring with a nonfinite complement and no complementizer. This construction is very similar to the one shown in (9), except that the determiner *li* 'the' appears with the complement, making it indistinguishable from an NP. The determiner is optional in (9), (10), and (12), in which the complement is cross-referenced on the main verb as the third-person nonplural S- or O-role argument. And it is ungrammatical in (8) and (11), in which the complement is not a core argument of the main verb. In other words, the optional presence of the determiner *li* is in complementary distribution with the complementizer *chi* and can only occur with complements that are embedded as core arguments of their main verbs. (11) shows the perception predicate *ilok* 'to see' occurring with a nonfinite complement and the complementizer *chi*. Again, the complement verb is not inflected with a MATE nor with a Set A or B affix.

Importantly, while the complement is not an argument of the main verb (hence the predictable presence of the complementizer *chi*), the O-role argument of the main verb (marked by the first-person nonplural Set B affix *-in-*) is shared with the complement verb as the latter's unexpressed S-role argument. And (12) shows the possessed-heart construction *naqk sa' ch'ool* 'to drop into one's heart, to remember' with a nonfinite complement, without a complementizer. Again, the complement verb is not inflected with a MATE nor with a Set A or B affix. The complement is, however, cross-referenced by the Set B affix $-\emptyset$ on the main verb, as the third-person nonplural S-role argument. The possessor of the heart is shared with the complement verb as the latter's unexpressed S-role argument.¹² So (8) is a case of S-role control; (9) and (10) are cases of A-role control (or "actor control"); (11) is a case of O-role control (or "undergoer control");

¹² Or, rather, the possessor of the heart. For in focus constructions, only an NP denoting the possessor (*laa'in* 'I') may be preposed—not the entire adjunct (*sa' inch'ool* 'inside my heart'), nor the possessed-heart (*inch'ool* 'my heart'). Thus, building on (6) above, (a) is grammatical, whereas (b) and (c) are not:

- (a) *laa'in* *x- \emptyset -sach* *sa'* *in-ch'ool*
Abs(1s) Perf-Abs(3s)-be.lost inside Erg(1s)-heart

'I am the one who forgot it' (or 'it is my heart it was lost in')

- (b) **sa'* *in-ch'ool* *x- \emptyset -sach*
inside my-heart Perf-Abs(3s)-be.lost

- (c) **in-ch'ool* *x- \emptyset -sach* *sa'*
Erg(1s)-heart Perf-Abs(3s)-be.lost inside

and (12) is a case of body-part-possessor control. In each of these examples, an argument of the main verb is shared with the complement verb as the latter's unexpressed S-role argument.

Nominalized complements contain nominalizations of transitive verbs. These nominalized verbs are not inflected with a MATE. They cannot be negated with either *ink'a'* or *moko . . . ta*. And they are necessarily possessed as a noun: formally, their possessor is cross-referenced by a Set A prefix on the complement verb (after the verb has been nominalized); and semantically, their possessor is the erstwhile O-role argument of the transitive verb from which they derive. Depending on the class of transitive verb in question, nominalizations are derived via the suffix *-bal* (e.g., *loq'ok* 'to buy' becomes *x-loq'-bal* 'its being bought') or the derivational suffix *-il* (e.g., *baanunk* 'to do' becomes *x-baanunk-il* 'its doing'). Just as with nonfinite complements, if nominalized complements are not cross-referenced by the Set B affix *-Ø-* on the main verb as the third-person nonplural O- or S-role argument, they occur with the complementizer *chi*. When they are cross-referenced by the Set B affix *-Ø-* on the main verb, they occur without a complementizer. For example:

- (13) *n-in-lub* *chi* *x-mesunk-il* *li* *kabl*
 Pres-Abs(1s)-tire Comp Erg(3s)-sweep-Nom the house
 'I'm tired of sweeping the house' (or 'the sweeping of the house')
- (14) *t-Ø-inw-aj* *x-loq'-bal* *li* *ch'op*
 Fut-Abs(3s)-Erg(1s)-want Erg(3s)-buy-Nom the pineapple
 'I want to buy the pineapple' (or 'the buying of the pineapple')

(13) shows the intransitive affectual predicate *lubk* 'to tire', occurring with a nominalized complement and the complementizer *chi*. While the nominalized complement verb is not inflected with a MATE, it is inflected with a Set A prefix *-x-* which cross-references the noun phrase *li kabl* 'the house', in the role of third-person nonplural possessor. Although the complement is not an argument of the main verb (hence the presence of the complementizer *chi*), the S-role argument of the main verb is shared by the nominalized complement verb as the latter's unexpressed A-role argument. (14) shows the psych-action predicate *ajok* 'to want', occurring with a nominalized complement and no complementizer. While the nominalized complement verb is not inflected with a MATE, it is inflected with the Set A prefix *-x-* which cross-references the noun phrase *li ch'op* 'the pineapple', in the role of third-person nonplural possessor. Unlike (13), the complement is cross-referenced by the Set B affix *-Ø-* on the main verb, as the third-person nonplural O-role argument. In this way, the complement is a core argument of the main verb; and the A-role argument of the main verb is shared with the nominalized complement verb as the latter's unexpressed A-role argu-

ment.¹³ As in (9)–(12) above, the determiner *li* may optionally occur with the complement in (14) but not in (13). (13) and (14), then, are cases of S-role and A-role control, respectively.

In sum, there are three types of complements in Q'eqchi'. Full-clause complements contain verbs that are inflected with a MATE and Set A and B affixes (depending on their valence). They are marked by the complementizer *naq*, unless their A-role or S-role argument is coreferential with the A-role argument of the main predicate, in which case they occur without a complementizer. While they inflectionally appear to be core arguments of their main verbs, restrictions on their position suggest that, syntactically, they are non-core arguments. Nonfinite complements contain verbs that are not inflected with a MATE nor with a Set A or B affix. Nominalized complements contain nominalized verbs that are not inflected with a MATE, but which are inflected with a Set A prefix and marked by a nominalizing suffix. When nonfinite and nominalized complements are not marked with a complementizer, they are core arguments of their main verb, and they are instances of either A-role or body-part-possessor control. When they are marked by the complementizer *chi*, they are not core arguments of their main verb, and they are instances of either S- or O-role control. These facts are summarized in table 1.

3. Morphosyntactic ordering of predicate–complement constructions. In tables 2–9, I have classified complement-taking predicates as a function of the types of complements they may take. In column one, I list nine relatively cohesive classes of complement-taking predicates, ranging from transitive aspectual predicates to speaking predicates. These classes are discussed further in 4 below. In column two, I list all the Q'eqchi' predicates that belong to each class (for which I have discourse tokens). In column three, I give a brief English gloss for each predicate. In columns four and five, the types of complements and complementizers each predicate may take are listed. As discussed in 2 above, the complementizer *chi* occurs with nonfinite and nominalized clauses (column four), and the complementizer *naq* occurs with full clauses (column five). A zero-form (\emptyset) in column four means that a predicate takes a nonfinite or nominalized complement without a complementizer. Lastly, in column four, I also list the types of control relation each predicate has with its nonfinite or nominalized complements: A-role control, S-role control, O-role control, or body-part-possessor control, shown as (A), (S), (O), and (BPP), respectively.

¹³ It should be emphasized that while nominalized complements are distinct from nonfinite complements in the ways just mentioned, any predicate that can occur with a nonfinite complement can also occur with a nominalized complement (and vice versa).

TABLE 1
SUMMARY OF COMPLEMENT TYPES

Complement Type	Argument Type	Share Core Argument	Control Relation	Complementizer	Complement Form
Full-Clause	Non-Core	No	n.a.	<i>naq</i>	MATE-Set B-(Set A)-Verb
Nonfinite	Non-Core	Yes	n.a.	\emptyset	MATE-Set B-(Set A)-Verb
	Non-Core	Yes	S-role, O-role	<i>chi</i>	Verb
Nominalized	Core	Yes	A-role, BPP-role	\emptyset	Verb
	Non-Core	Yes	S-role, O-role	<i>chi</i>	Set A-Verb-Nom
	Core	Yes	A-role, BPP-role	\emptyset	Set A-Verb-Nom

TABLE 2
COMPLEMENT-TAKING PREDICATES (TRANSITIVE ASPECTUAL)

Class	Q'eqchi' Predicate	Gloss	Nonfinite, Nominalized	Full-Clause
I. Transitive Aspectual	<i>choyok/raqok</i>	'to finish'	\emptyset (A)	
	<i>kuyuk</i>	'to endure'	\emptyset (A)	
	<i>baanunk</i>	'to do'	\emptyset (A)	
	<i>kanabank/chanabank</i>	'to desist from'	\emptyset (A)	
	<i>yoobank/tikibank</i>	'to begin'	\emptyset (A)	
	<i>tz'aqonk</i>	'to take a turn at'	\emptyset (A)	
	<i>yalok</i>	'to try'	\emptyset (A)	
	<i>yeech'ink</i>	'to offer'	\emptyset (A)	
	<i>tzolok</i>	'to study (how)'	\emptyset (A)	

TABLE 3
COMPLEMENT-TAKING PREDICATES (PSYCH-ACTION)

Class	Q'eqchi' Predicate	Gloss	Nonfinite,	
			Nominalized	Full-Clause
2. Psych-Action				
2a. Desire, etc.	<i>ajok li ru</i>	'to need'	∅ (A)	<i>naq</i>
	<i>ajok</i>	'to want'	∅ (A)	<i>naq</i>
	<i>rahink</i>	'to love/desire'	∅ (A)	<i>naq</i>
	<i>atawank (li ru)</i>	'to desire'	∅ (A)	<i>naq</i>
2b. Transitive Affective	<i>sa/ra ilok</i>	'to like/hot like to'	∅ (A)	<i>naq</i>
	<i>sa/ra abink</i>	'to be glad/sorry to hear'	∅ (A)	<i>naq</i>
	<i>sa/ra eek ank</i>	'to feel good/bad about'	∅ (A)	<i>naq</i>
2c. Fear/Shame	<i>xiwank</i>	'to be scared'	∅ (A)	<i>naq</i>
	<i>xutaanank</i>	'to be ashamed'	∅ (A)	<i>naq</i>
2d. Heart Predicate	<i>naqk sa' ch'oolej</i>	'to remember'	∅ (BPP)	<i>naq</i>
	<i>sachk sa' ch'oolej</i>	'to forget'	∅ (BPP)	<i>naq</i>
	<i>alaak sa' ch'oolej</i>	'to decide'	∅ (BPP)	<i>naq</i>
	<i>chalk sa' ch'oolej</i>	'to agree'	∅ (BPP)	<i>naq</i>

TABLE 4
COMPLEMENT-TAKING PREDICATES (INTRANSITIVE ASPECTUAL)

Class	Q'eqchi' Predicate	Gloss	Nonfinite, Nominalized	Full-Clause
3. Intransitive Aspectual				
	<i>raqe'k</i>	'to be finished'	<i>chi</i> (S)	
	<i>ixtaak</i>	'to insist on'	<i>chi</i> (S)	
	<i>okenk</i>	'to assist in'	<i>chi</i> (S)	
	<i>ok</i>	'to begin'	<i>chi</i> (S)	
	<i>ruuk</i>	'to be able'	<i>chi</i> (S)	
	<i>yook</i>	'to be doing'	<i>chi</i> (S)	
	<i>bayk</i>	'to be delayed in'	<i>chi</i> (S)	
	<i>k'aayk</i>	'to be accustomed to'	<i>chi</i> (S)	

TABLE 5
COMPLEMENT-TAKING PREDICATES (PURPOSIVE)

Class	Q'eqchi' Predicate	Gloss	Nonfinite, Nominalized	Full-Clause
4. Purposive (Movement)				
	<i>xik</i>	'to go'	<i>chi</i> (S)	
	<i>chalk</i>	'to come'	<i>chi</i> (S)	
	<i>k'utunk</i>	'to arrive/come'	<i>chi</i> (S)	
	<i>hulak</i>	'to arrive'	<i>chi</i> (S)	
	<i>kanaak</i>	'to stay'	<i>chi</i> (S)	
	<i>elk</i>	'to leave'	<i>chi</i> (S)	
	<i>nume'k</i>	'to pass by'	<i>chi</i> (S)	
	<i>wank</i>	'to be (located)'	<i>chi</i> (S)	

TABLE 6
 COMPLEMENT-TAKING PREDICATES (INTRANSITIVE AFFECTUAL)

Class	Q'eqchi' Predicate	Gloss	Nominalized	Full-Clause
5. Intransitive Affectual				
5a. Bodily States				
	<i>lubbk</i>	'to tire of'	<i>chi</i> (S)	
	<i>tawaak</i>	'to tire of'	<i>chi</i> (S)	
	<i>tiiz'k</i>	'to get exasperated'	<i>chi</i> (S)	
	<i>jiq'e'k</i>	'to choke on'	<i>chi</i> (S)	
	<i>q'ixno'k</i>	'to grow angry/hot'	<i>chi</i> (S)	
	<i>tiqwo'k</i>	'to overhear/anger'	<i>chi</i> (S)	
	<i>josq'ok</i>	'to become angry'	<i>chi</i> (S)	
	<i>xutaanak</i>	'to be(come) ashamed'	<i>chi</i> (S)	
	<i>xiwak</i>	'to be(come) afraid'	<i>chi</i> (S)	
	<i>ch'inank ch'oolej</i>	'to become regretful'	<i>chi</i> (S)	
	<i>kiibank ch'oolej</i>	'to become conflicted'	<i>chi</i> (S)	
	<i>po'k ch'oolej</i>	'to become dissuaded'	<i>chi</i> (S)	
5b. Fear/Shame				
5c. Heart Predicate				

TABLE 7
 COMPLEMENT-TAKING PREDICATES (JUSSIVE AND PERCEPTION)

Class	Q'eqchi' Predicate	Gloss	Nonfinite, Nominalized	Full-Clause
6. Jussive				
	<i>minok ru</i>	'to force'	<i>chi</i> (O)	
	<i>tenq'ank</i>	'to help'	<i>chi</i> (O)	
	<i>sebesink</i>	'to scare someone'	<i>chi</i> (O)	
	<i>k'ehok</i>	'to put to'	<i>chi</i> (O)	
	<i>k'aytesink</i>	'to make accustomed'	<i>chi</i> (O)	
	<i>tenebank</i>	'to oblige'	<i>chi</i> (O)	
	<i>q'abank</i>	'to calumniate'	<i>chi</i> (O)	
	<i>seebank</i>	'to hurry/urge'	<i>chi</i> (O)	
	<i>taqlank</i>	'to send'	<i>chi</i> (O)	
	<i>boqok</i>	'to call/invite'	<i>chi</i> (O)	
	<i>ajok</i>	'to want'	<i>chi</i> (O)	
	<i>yehok</i>	'to tell to'	<i>chi</i> (O)	
	<i>chaqrabink</i>	'to order'	<i>chi</i> (O)	<i>naq</i>
7. Perception				
	<i>ilok</i>	'to see/look'	<i>chi</i> (O)	<i>naq</i>
	<i>abink</i>	'to hear/listen'	<i>chi</i> (O)	<i>naq</i>
	<i>eeq'ank</i>	'to sense/feel'	<i>chi</i> (O)	<i>naq</i>

TABLE 8
COMPLEMENT-TAKING PREDICATES (COGNITION AND PROPOSITIONAL ATTITUDE)

Class	Q'eqchi' Predicate	Gloss	Nonfinite, Nominalized	Full-Clause
8. Cognition and Propositional Attitude				
	<i>nawok</i>	'to know'	∅ (A)	<i>naq</i>
	<i>k'a'uxlank</i>	'to think'	∅ (A)	<i>naq</i>
	<i>kaqalink</i>	'to be envious'		<i>naq</i>
	<i>na'link</i>	'to know'		<i>naq</i>
	<i>tawok ru</i>	'to understand'		<i>naq</i>
	<i>paabank</i>	'to believe'		<i>naq</i>
	<i>oybenink</i>	'to expect'		<i>naq</i>

TABLE 9
COMPLEMENT-TAKING PREDICATES (SPEAKING)

Class	Q'eqchi' Predicate	Gloss	Nonfinite, Nominalized	Full-Clause
9. Speaking				
	<i>patz'ok</i>	'to ask'	∅ (A), <i>chi</i> (O)	<i>naq</i>
	<i>sumenk ru aatin</i>	'to promise'		<i>naq</i>
	<i>chaq'ok/chaq'benk</i>	'to reply'		<i>naq</i>
	<i>yehok</i>	'to say'		<i>naq</i>
	<i>yemank</i>	'it is said'		<i>naq</i>

In tables 2–9, I have also ordered the various classes of complement-taking predicates in terms of the morphosyntactic TIGHTNESS or their predicate–complement constructions, that is, the degree to which such constructions appear like a single clause. In particular, as one moves from the bottom of table 9 to the top of table 2, the predicate–complement constructions allowed by any particular group of complement-taking predicates become progressively TIGHTER. Before I explicate the notional domains carved out by these groupings, let me discuss in detail the Q'eqchi'-particular criteria used to determine the relative tightness of any construction: complement type, presence of complementizer, and relationship of control. As will be seen, the logic underlying this ordering is relatively simple: the more arguments and operators are shared (between the main verb and its complement verb), and/or the less marked of a complementizer there is (with the least marked complementizer being no complementizer), the more the predicate–complement construction appears like a single clause, and hence the tighter the construction is (see Foley and Van Valin 1984:268 and Van Valin and LaPolla 1997:467–77).

First, constructions involving full-clause complements, which contain verbs that are able to be independently specified for grammatical operators such as mood, aspect, tense and evidentiality, are less tight than constructions involving nonfinite and nominalized complements, which contain verbs that are not able to be independently specified for such operators. In Q'eqchi', this is marked by the presence of a MATE on verbs in full-clause complements and the absence of a MATE on verbs in nonfinite or nominalized complements. That is, in constructions involving nonfinite and nominalized complements, the main verb and complement verb share a MATE; whereas in constructions involving full-clause complements, the main verb and complement verb have separate MATES. Thus, the constructions in (4)–(6) above are less tight than the constructions in (8)–(14). And, in tables 2–9, predicate classes 7–9 are ordered below predicate classes 1–6, and predicate class 2 is ordered below predicate class 1.

Second, in the case of full-clause complements, those constructions in which the main verb and complement verb do NOT have coreferential A- or S-role arguments are less tight than those constructions in which such arguments are coreferential. In Q'eqchi', this is marked by the presence of the complementizer *naq* in constructions involving noncoreferential arguments, and the absence of this complementizer in constructions involving coreferential arguments. That is, constructions which involve *naq* (and have noncoreferential arguments) are less tight than constructions which do not involve *naq* (and have coreferential arguments). Thus, the constructions in (4) and (6) are less tight than the one in (5). This is not shown in tables 2–9, because it does not further differentiate classes of predicates, only types of constructions within these classes.

Third, in the case of nonfinite and nominalized complements, those constructions in which the complement is NOT a core argument of the main verb are less tight than those constructions in which the complement is a core argument of the main verb. In Q'eqchi', this is marked by the presence of the complementizer *chi* in constructions involving O- and S-role control (indicating that the complement is an adjunct of the main verb), and the absence of the complementizer *chi* in constructions involving A-role control (indicating that the complement is a core argument of the main verb). In addition, the optional presence of the determiner *li* with complements involving A-role control indicates that such complements are being treated as NPs, such that the entire construction appears as a single clause.¹⁴ In other words, predicate-complement constructions involving O-role and S-role control are less tight than constructions involving A-role control. Thus, the constructions in (8), (11), and (13) are less tight than those in (9), (10), and (14). And, in tables 2–9, predicate classes 3–7 are ordered below predicate classes 1 and 2.

Fourth, in the case of nonfinite and nominalized complements in which the complement is not a core argument of the main verb, those constructions in which the unexpressed A- or S-role argument of the complement verb is shared with the O-role argument of the main verb are less tight than those constructions in which the unexpressed A- or S-role argument of the complement verb is shared with the S-role argument of the main verb. In other words, I am treating constructions involving O-role control as less tight than constructions involving S-role control. This is because in S-role control, the privileged syntactic argument of the main verb is shared by the complement verb; whereas in O-role control, the privileged syntactic argument of the main verb is not shared by the complement verb (see Van Valin and LaPolla 1997:460).¹⁵ Thus, the construction in (11) is less tight than the constructions in (8) and (13). And, in tables 2–9, predicate classes 6 and 7 are ordered below predicate classes 3–5.

Fifth, while exactly the same set of complement-taking predicates may take both nonfinite and nominalized complements, nominalized complements are derivationally and inflectionally closer to the class of nouns than

¹⁴ In addition, the complement can be preposed into focus position, showing that such complements truly behave as arguments of their predicates. For instance, (14) above may be rendered as:

x-loq'-bal *t-∅-inw-aj*
 Erg(3s)-buy-Nom Fut-Abs(3s)-Erg(1s)-want

'I want to buy it'

¹⁵ Or, to phrase this in terms of discourse salience rather than argument sharing, in constructions involving O-role control, the focal narrated participant of the main verb is distinct from the focal narrated participant of the complement verb; whereas in constructions involving S-role control, they are identical.

to the class of verbs. This means that nonfinite complements are less tight than nominalized complements.¹⁶ This distinction is not shown in tables 2–9, because it does not further differentiate classes of predicates, only types of constructions within these classes.

Sixth, in cases where a class of predicates may take more than one type of complement, the class is ordered relative to the tightest complement that it may take. Thus, even though predicates in class 2 may take full-clause complements just like predicates in classes 7–9, predicates in class 2 may also take nominalized and nonfinite complements without the complementizer *chi*. For this reason class 2 is ordered directly below class 1, whereas classes 7–9 are ordered at the very bottom of the hierarchy. In cases where the types of complements taken by two classes of predicates overlap, the classes are ordered relative to the least tight complement taken by one of them. Thus, even though predicates in class 1 may take nominalized and nonfinite complements without the complementizer *chi*, just like predicates in class 2, predicates in class 2 may also take full-clause complements. For this reason, class 2 is ordered below class 1. In cases where one class of predicates may take exactly the same set of complements as another class of predicates, with respect to the morphosyntactic criteria for tightness given above, they should be ordered equally.¹⁷ Where they are classified separately in tables 2–9—for example, classes 8 and 9, and 3 and 4—the classification is based on the semantic and morphosyntactic features of the predicates themselves, rather than the morphosyntactic features of their complements.

In Role and Reference Grammar (see Van Valin 1993:100–118), there are a number of interclausal relations that should be reviewed. SUBORDINATION is that interclausal relation in which the complement is embedded as an argument of the main verb. Depending on whether the complement is a core or non-core argument of the main verb, the interclausal relation is either core- or clausal-subordinate. COSUBORDINATION is that nonembedded interclausal relation in which both the main verb and the complement verb are dependent upon the main verb for expression of one or more operators. Depending on whether such operators are nuclear (having scope only over the predicate, e.g., aspect, internal negation, directionals), core (having scope

¹⁶ Notice that whereas most of my tightness arguments are based on the sharing of arguments and operators by the main verb and the complement verb, this tightness argument is based on the form class of the complement.

¹⁷ This is just the implicational principle used by scholars like Givón (1980), Silverstein (1976; 1993), and Van Valin and LaPolla (1997): “the tightest syntactic linkage realizing a particular semantic relation should be higher than or as high on the Interclausal Relations Hierarchy as the tightest syntactic linkage realizing semantic relations lower on the Interclausal Relations Hierarchy” (Van Valin and LaPolla 1997:483).

over the predicate and its core arguments, e.g., root modality, external negation), or clausal (having scope over the predicate and its core and non-core arguments, e.g., status, tense, evidentials), one has an interclausal relation that is either nuclear-, core-, or clausal-cosubordinate. And COORDINATION is that nonembedded interclausal relation in which both the main verb and the complement verb are independent of each other with respect to their expression of one or more operators. Depending on whether such independently specified operators are nuclear, core, or clausal, one has an interclausal relation that is either nuclear-, core-, or clausal-coordinate.

To summarize, using the terminology of Role and Reference Grammar: classes 1 and 2 involve core subordination; the complement is a core argument of the main verb; and the main verb and complement verb share core arguments. Classes 2 and 7–10 involve clausal subordination or complementation; a full-clause is a non-core argument of the main verb, and the main verb and complement verb may or may not have coreferential core arguments. Classes 3–7 PROBABLY involve core coordination; the complement is not a core argument of the main verb; the main verb and complement verb share core arguments; and the complement verb is dependent on the main verb for the expression of one or more clausal operators (such as tense, status or evidentiality) and should be independent of the main verb for the expression of its core operators (such as root modality).¹⁸ This is summarized in table 10.

4. Semantic features of complement-taking predicates. As mentioned in **1** above, the interclausal relations hierarchy may be understood as a form–functional iconicity, whereby the more the events denoted by a predicate and

¹⁸ If, on the other hand, the complement verb is DEPENDENT on the main verb for the expression of one or more of its core operators, these constructions would be examples of core-cosubordination. I classify them as “probably core-coordination” because there is a general indeterminacy regarding the standard grammatical tests that would decide between coordination and cosubordination. In particular, Q'eqchi' does not have affixal core operators whose presence or absence (or neutralization) on the complement verb would indicate that the complement verb was dependent on the main verb for their expression. Another test, the possible presence of the modal auxiliary verb *ruuk* (or some other core operator) in both the predicate and the complement (see Van Valin and LaPolla 1997:459–60), is hindered by the fact that I have no discourse tokens of such constructions, only grammaticality judgments: and given that *ruuk* is a complement-taking predicate itself (class 3), speakers are uncertain about the grammaticality of such multiply junctured examples. Notwithstanding this indeterminacy, I tentatively classify these constructions as involving core-coordination, because if they were core-cosubordination, they should be tighter than core-subordinate constructions. However, this is belied by their grammatical encoding: as discussed in this section, in constructions involving core-subordination, such as classes 1 and 2, complements appear as the morphosyntactic arguments of their main verbs; whereas in constructions tentatively involving core-coordination, such as classes 5–7, complements appear as the morphosyntactic adjuncts of their complements.

TABLE 10
CLASSES OF PREDICATE–COMPLEMENT CONSTRUCTIONS

Class	Nonfinite, Nominalized	Full-Clause	Construction Type
1. Transitive Aspectual	\emptyset (A)		Core-Subordination
2. Psych-Action	\emptyset (A), \emptyset (BPP)		Core-Subordination
		<i>naq</i>	Clausal-Subordination
3. Intransitive Aspectual	<i>chi</i> (S)		Core-Coordination (probably)
4. Purposive (Movement)	<i>chi</i> (S)		Core-Coordination (probably)
5. Intransitive Affectual	<i>chi</i> (S)		Core-Coordination (probably)
6. Jussive	<i>chi</i> (O)		Core-Coordination (probably)
7. Perception	<i>chi</i> (O)		Core-Coordination (probably)
		<i>naq</i>	Clausal-Subordination
8. Cognition		<i>naq</i>	Clausal-Subordination
9. Speaking		<i>naq</i>	Clausal-Subordination

its complement are semantically like a single event, the more the predicate–complement construction is morphosyntactically like a single clause. Having classified and ordered complement-taking predicates in Q’eqchi’ as a function of the morphosyntactic tightness of the predicate–complement constructions they allow, I now discuss the semantic features underlying the predicate classes themselves.

As shown in column one of tables 2–9, I have grouped complement-taking predicates into nine basic semantic classes. Class 9 consists of speaking predicates: to say, to promise, to ask, to reply. These take full-clause complements, where the complement is a token of direct or indirect reported speech. Notice that *patz’ok* ‘to ask’ may also take nonfinite and nominalized complements, either without a complementizer or marked by the complementizer *chi*. It could rightfully be put in class 2 or 7. Note that *yehok* ‘to say’ is also listed as a jussive predicate in class 6, where it is best glossed as ‘to tell [to do]’, as in ‘to order’.

Class 8 consists of cognition predicates (to know, to think) and propositional attitude predicates (to believe, to understand, to expect). As shown in table 8, the predicates *na’ok* ‘to know’ and *k’a’uxlank* ‘to think’ may also take nonfinite and nominalized complements, without a complementizer. In both of these cases, the meaning of the predicate changes. In particular, *na’ok* is best glossed as ‘to know how’ and *k’a’uxlank* is best glossed as ‘to intend’ or ‘to think about (doing)’ when used with a nonfinite or nominalized complement. These predicates could rightfully be put in class 2.

Class 7 consists of perception predicates: to see, to hear, to feel. Each of these is also used as a transitive affectual predicate (see discussion of class 3*b* below).

Class 6 consists of jussive, or manipulative, predicates: to force, to urge, to send. The predicate *ajok* 'to want' is listed both here and in class 2*a*. In this way, *ajok* may take three distinct types of complements: full-clause complements, A-role controlled nonfinite and nominalized complements, and O-role controlled nonfinite and nominalized complements. *Patz'ok* 'to ask' is the only other predicate that may take such a wide range of complements. The predicate *chaqrabink* 'to order' may also take full-clause complements, marked by the complementizer *naq*. Other predicates in this class are not so "jussive" or "manipulative" in their semantics. For example, the negative implicature predicate *q'abank* may be glossed as 'to calumniate' or 'to falsely accuse [someone] of [the action denoted by the complement]', while the positive implicature predicate *sebesink* may be glossed as 'to frighten someone while (they are engaged in the action denoted by the complement)'.

Class 5 consists of intransitive affectual predicates: to become scared, to become tired, to become dissuaded. These predicates mark the feeling or desire of the narrated participant relative to the action denoted by their complement. I have broken this class into three subclasses—bodily states (5*a*), fear and shame (5*b*), and possessed-heart constructions (5*c*). As mentioned above, the two predicates in class (5*b*)—*xutaanak* 'to be or become ashamed' and *xiwak* 'to be or become scared'—have transitive versions that are listed in class 2*c*. And class 5*c* has the following possessed-heart predicates: to change one's mind or regret¹⁹ (*ch'inank ch'oolej* 'for one's heart to become small'), to become conflicted—that is, to gain a conflicting desire (*kiibank ch'oolej* 'for one's heart to become two'), and to become dissuaded—that is, to lose one's previous desire (*po'k ch'oolej* 'for one's heart to break down').

Class 4 consists of purposive, or movement, predicates: to go, to arrive, to pass by. All mark the movement or position of a narrated participant as the means to achieve an end (the state of affairs denoted by the complement). These are the most frequently used complement-taking predicates in my data. There is another way to mark purposive constructions in Q'eqchi', using the full-clause complementizer *re naq* 'in order to'. Unlike purposive constructions built out of the nonfinite and nominalized complementizer *chi*, which only occur with movement predicates, the full-clause complementizer *re naq* can occur with any relatively agentive predicate.

Classes 1 and 3 consist of transitive and intransitive aspectual predicates, respectively: to stop, to begin, to continue. Most of these predicates describe the temporal profile of a state of affairs—beginning, ending, continuing, etc. Some intransitive predicates, however, mark deontic possibility (*ruuk* 'to be

¹⁹ The gloss depends on the truth- and temporal-status of the complement.

able'), assistance (*okenk* 'to assist in'), and habituation (*k'aayk* 'to be accustomed'), while some transitive predicates mark turn-taking (*tz'aqonk* 'to take a turn at') and attempting (*yalok* 'to try').

Lastly, class 2 consists of psych-action predicates: to want, to remember, etc. They describe a mental state underlying the possible action of a narrated participant. Class 2*a* predicates involve desire, need, and intention. Class 2*b* consists of transitive affectual predicates. Each of these predicates consists of a verb of perception from class 7, along with either the adverb *sa* 'pleasurable' or the adverb *ra* 'painful'. In effect, such constructions indicate a particular modality of knowing and a judgment on the positive or negative quality of what is known. Class 2*c* consists of the two transitive predicates involving fear and shame, which have intransitive analogues in class 5*b*, while class 2*d* consists of the following possessed-heart predicates: remember (*naqk sa' ch'oolej* 'to fall into one's heart'), forget (*sachk sa' ch'oolej* 'to become lost in one's heart'), decide (*alaak sa' ch'oolej* 'to be born in one's heart'), and agree (*chalk sa' ch'oolej* 'to come into one's heart').

Let me emphasize that on the basis of the morphosyntactic criteria provided in the previous section, classes 3–5, 8, and 9, and subclasses 2*a*–2*d* and 5*a*–5*c* cannot be ordered relative to each other with respect to the tightness of their predicate–complement constructions. Let me also emphasize that the classes themselves are often rather fuzzy, so that not all members are best captured semantically by the class name, and some semantically similar predicates would be better placed in another class on the basis of the complements they take. I have grouped and ordered them in this way for several reasons. First, the predicates that compose these classes are relatively easy to differentiate on semantic and morphosyntactic grounds (see discussion above). In addition, I have tried both to flag the most marginal or marked predicates in each class, to show where else these predicates might also fit. Second, as discussed in 5 below, these classes can now be semantically compared with the cross-linguistic ordering of complement-taking predicates as a function of the tightness of the complements they may take.

5. The cross-linguistic comparison of complement-taking predicates.

Role and Reference Grammar (Foley and Van Valin 1984, Van Valin 1993, and Van Valin and LaPolla 1997) assumes that there is an implicational hierarchy linking semantic classes of complement-taking predicates and the morphosyntactic tightness of predicate–complement constructions. In other words, there is a semantic continuum, a morphosyntactic continuum, and an implicational relationship that links them. I discuss each of these in turn.

First, on the semantic side of the hierarchy, in order of least tight to most tight, are the following classes of predicates: reported speech, cognition,

propositional attitude, perception, jussive, purposive, psych-action, aspectual, and causative (see Van Valin and LaPolla 1997:478–83).²⁰ Second, on the morphosyntactic side of the hierarchy, in order of least tight to most tight, are the following classes of predicate–complement constructions: clausal coordination, subordination, and cosubordination; core coordination, subordination, and cosubordination; and nuclear coordination and cosubordination (Van Valin and LaPolla 1997:478–83). Third, in regard to the implicational relationship that links these semantic and morphosyntactic continua, Role and Reference Grammar theorizes that the tightest syntactic linkage realizing a particular semantic class should be tighter than, or as tight as, the tightest syntactic linkage realizing a less-tight semantic class (Van Valin and LaPolla 1997:478–83).

As shown in table 10, both the semantic and morphosyntactic continua of predicate–complement constructions in Q'eqchi', as well as the implicational relations linking them, accord with predictions by Role and Reference Grammar. Nonetheless, the implicational mapping between continua is not isomorphic, for several reasons. First, not all the postulated semantic classes are represented in table 10: causative constructions, for example, are morphologically derived. Second, not all the postulated morphosyntactic classes are represented in table 10: Q'eqchi', for example, uses only three types of constructions to mark nine semantic classes. Third, there is no one-to-one mapping between semantic classes and morphosyntactic classes: classes 3–6, for example, while semantically distinct, nonetheless take exactly the same kinds of complements; whereas classes 1 and 3, while semantically similar (with regard to their valence), take distinct kinds of complements. Fourth, when distinct semantic subclasses are taken into account, the semantic continuum provided by Role and Reference Grammar is too coarse: affective or emotive states (represented in classes 2*b*, 2*c*, and 5) have no place in Role and Reference Grammar's semantic continuum. Fifth (as discussed above), most of the semantic classes listed in table 10 are rather fuzzy, including predicates that at best bear a family resemblance to more typical members of their class.

It should be emphasized that these are NOT arguments against Role and Reference Grammar. Different languages will utilize different juncture–nexus types, and no language need have all of them. Also, different languages may have different grammatical constructions belonging to the same juncture–nexus type, and different grammatical constructions within a single

²⁰ I leave out the least tight constructions overall—action-action (relation unspecified), interrelated actions (nonoverlapping, overlapping, simultaneous), conditionals, temporal adverbial—because they do not usually delimit particular classes of complement-taking predicates and because I have not discussed their expression in Q'eqchi'.

language may utilize the same juncture–nexus type. In other words, there is no isomorphism linking intra-language and/or inter-language grammatical constructions with unique juncture–nexus types (see Van Valin 1994:110–11). In conclusion, and as expected, the Q'eqchi'-specific relation between semantic classes and predicate–complement constructions is compatible with, but not identical to, the cross-linguistic expression of the interclausal relations hierarchy as theorized by Role and Reference Grammar.

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