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A ‘Perfect’ Evidential: The Functions of *-shka* in Imbabura Quichua*

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1 Introduction

This paper investigates the functions of the verbal suffix *-shka* in Imbabura Quichua (IQ), a Quechua IIB language spoken in the northern highlands of Ecuador. Cole (1982:148) analyzes *-shka* as — among other functions — a perfect aspect inflection on main verbs, noting that it indicates in addition “a degree of surprise.” Cognate forms in other Quechua languages have been labelled ‘sudden discovery tense’ and translated as ‘it turned out that...’ even though they are reportedly not restricted to past tense (see Adelaar and Muysken 2004:223). These characterizations suggest that *-shka* is a perfect aspect marker, with additional semantics of mirativity. I will argue in this paper that, although *-shka* does mark perfect aspect in periphrastic constructions (where the verb in *-shka* combines with copula *ka-* ‘be’), as a verbal inflection it marks ‘non-eyewitness past tense,’ contrasting in this function with *-rka* ‘eyewitness past tense.’ In addition, I will argue that the constellation of functions modern-day IQ *-shka* fulfils — including deriving nominals and passive participles — is explicable by assuming a series of typologically common diachronic changes, starting from a ‘resultative nominalization’ function.

The findings in this paper are based on data obtained from two speakers of IQ: MC, a 50-year-old woman from the area of Mariano Acosta, and ACO, a man from Otavalo. Both consultants are native speakers of IQ, having learnt Spanish as a second language, and English as a third language. MC has been living in the United States for approximately 25 years, and ACO for 14 years. The data, collected by members of the 2009-2010 UC Berkeley Field Methods class, is of two main types: recorded monologues and dialogues, and targeted elicitation. The data presented in this paper is from targeted elicitation, unless labelled otherwise. Some data is also taken from Cole (1982).

The paper is structured as follows: §1.1 briefly describes the linguistic and social context of the Imbabura Quichua language; §1.2 outlines the analytic framework adopted for describing tense and aspect; §2 identifies the major categories of tense and aspect in IQ; §3 describes and exemplifies the inflectional and derivational functions of *-shka* in IQ, and considers the uses of *-shka* in personal and traditional narratives. §4 presents a diachronic proposal to account for the synchronic polyfunctionality of *-shka*; and §5 briefly summarizes the findings of this paper.

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1.1 The Imbabura Quichua Language and its Speakers

Imbabura Quichua (IQ) is a Quechua IIB language spoken by approximately 30,000–50,000 people in the northern highlands of Ecuador (Cole 1982:3). The Quechua languages have been in contact with Spanish for centuries, and the majority of IQ speakers are also fluent in Ecuadorean Spanish. The Quechua languages of Ecuador (and of Colombia) have lost much of the complex head-marking morphology exhibited in other Quechua languages. Subject marking on the verb is retained, but only the first person object marker remains, and possessive suffixes have been lost from nouns, possession now being marked on the possessor by genitive suffix *-pa*. As such, IQ is largely dependent-marking, especially compared to other varieties of Quechua (Adelaar and Muysken 2004:208). Argument alignment is nominative–accusative; case-markers attach to the NP phrase-finally, nominative being unmarked, and accusative marked by *-ta*. Constituent order is relatively free in main clauses, but SOV predominates, and is more strictly required in subordinate clauses. This correlates with general head-final order in constituents. Major word classes in the language are ‘noun’ and ‘verb,’ with small closed classes of demonstratives and quantifiers, plus a set of spatial terms that may be classed either as postpositions or relational nouns. No separate class of adjectives is apparent (although close analysis may reveal the need for a separate adjective class), and property-denoting terms essentially have the same distribution as referential nominals, being able to fill argument position and take case-marking, as well as functioning as modifiers and copula complements. A pervasive phenomenon in IQ discourse is the use of a set of so-called ‘validators’ — clitics that combine evidential, modal, and focus-marking functions. The main validators are *=mi* ‘direct evidential,’ *=shi* ‘indirect evidential~uncertainty,’ *=chu* ‘polar question~negative marker,’ and perhaps *=ta* ‘content question marker.’¹

The major previous work on IQ is Cole (1982), a grammatical description based on fieldwork undertaken with speakers of the Rinconada (including Mariano Acosta), Otavalo and San Roque dialects. Further references are listed therein.

1.2 A Neo-Reichenbachian Framework for Analyzing Tense and Aspect

Klein (1994), building on work by Reichenbach (1947), outlines a framework for describing and analyzing tense and aspectual distinctions cross-linguistically. The main elements of this approach are presented here in order to lay the groundwork for the analysis presented in §3.

1.2.1 The Building Blocks

The ‘lexical content’ (LC) of an utterance is the situation described in the clause, divorced from its finite temporal information. For instance, the LC of the English clause *John was studying Quichua* is {John study Quichua}. This is also the LC for the clauses *John will study Quichua*, *John has studied Quichua*, *John studies Quichua*, and so forth. In other words, the LC is atemporal. But it is “timeable,” that is, it can be linked to a temporal structure. This is done by means of tense and aspect marking. The temporal structure to which the LC is linked comprises three primary

¹ See Kwon (this volume) and Cleary-Kemp (2010) for a more precise characterization of these elements and their functions.

elements: ‘utterance time’ (TU), ‘topic time’ (TT), and ‘situation time’ (TSit). The first two of these are relatively simple to define, while the third is somewhat more complex.

TU (Reichenbach’s S) is the time of utterance. In conversations this is easy to calculate — it is the moment of speaking. In non-immediate communicative situations, such as letters, email, books, graffiti, voicemail messages, pre-recorded television or radio programs, etc., the TU is less fixed, and more open to interpretation. The calculation of TU can be complex, but it is not crucial to the thesis of this paper, so I will not discuss it further here. TT (Reichenbach’s R) is the time about which a claim is being made. This can be overtly specified, as in [*At 6:40 in the morning, on August 24, 2003*]_{TT}, *Max was born*, or it can be left to context. Occasionally, as in this example, TT is very precisely specified, but it is far more common for the exact span of the TT to be left open to be inferred from discourse context and world knowledge. Again, the details of how TT is determined are not vital to the arguments presented here, and so are set aside.

TSit (Reichenbach’s E) is the time for which the situation described by the LC holds. For instance, in the examples above, TSit is the temporal span during which it is the case that John is studying Quichua. {John study Quichua} is a one-state LC, because there is just one lexically-specified situation. In contrast, the LC {John leave the house} is two-state, since it encodes a lexically-specified change of state: from John’s being inside the house to John’s being outside. In such complex LCs, the initial state is referred to as the ‘source state’ (SS) and the final state as the ‘target state’ (TS). The TS in the case of {John leave the house} is clearly {John not be inside the house}, but the SS, in contrast, is not simply {John be inside the house}, rather it involves John’s being active in bringing about the TS. In other words, it is only felicitous to say *John is leaving the house* if John is in the process of bringing about the state of being out of the house, not, for example, if he is simply sitting inside the house reading a book. Klein (1994:105) notes that, for purposes of aspect marking, languages tend to choose one of the two states to treat as TSit. In English it is SS. This is evident when we consider how two-state LCs behave in the progressive construction, whose function is to indicate that TT is fully included in TSit (see Table 1). The sentence in (1) is felicitously uttered only if John is currently in the house, and is active in achieving the state of not being in the house.

(1) *John is leaving the house*

In other words, this utterance denotes the structure in (2).

(2) { —[—]_{TT}— }_{SS++++++TS}

The sentence in (1) is not true if John is in the TS, having already left the house and being halfway down the street.² Given that the construction in (1) locates TT within SS, and not within TS, this example clearly shows that English treats the SS of two-state predicates as TSit. With respect to this parameter, IQ behaves the same as English.

² Of course there is some leeway in the interpretation of this utterance, as with all natural language. If John has just stepped outside the house and is still on the front steps, perhaps the utterance in (1) will still be felicitous. But this flexibility does not detract from the overall point of the example.

1.2.2 Defining Tenses and Aspects

Utilizing the concepts outlined above, it is possible to precisely formulate the functions of the major categories of tense and aspect in the world’s languages, in terms of how they situate the temporal elements with respect to each other. This is shown in Table 1. Prior to Klein (1994), definitions of tense and aspect had tended to be impressionistic, and therefore analytically inadequate. For instance, Comrie (1976:3) defines ‘aspects’ as “different ways of viewing the internal temporal constituency of a situation,” but later adds that “the perfect is rather different [...] since it tells us nothing about the situation in itself, but rather relates some state to a preceding situation” (52). He defines perfect aspect as referring to “a past situation which has present relevance” (12). This definition captures an important intuition about uses of the perfect cross-linguistically, but it fails to provide diagnostics for identifying perfect constructions across languages. In contrast, Klein’s framework allows one to devise tests that categorically differentiate between the major categories ‘tense’ and ‘aspect,’ and between different tenses and aspects in a language. The distinction between tense and aspect under Klein’s approach is that tense locates TT in relation to TU, while aspect relates TT to TSit. For instance, as noted above, an imperfective aspect, such as the English progressive, locates TT *within* TSit. The utterance, *When I walked into the room, John was reading a book* indicates that the TSit of {John read a book} extends either side of the TT (which is here overtly specified with the adverbial clause *when I walked into the room*). In contrast, the use of past tense in this utterance indicates only that the TT precedes the TU, and says nothing directly about the TSit. This is demonstrated by the fact that it is perfectly felicitous to say *When I walked into the room, John was reading a book, and he is still reading it now*. If past tense situated TSit prior to TU, then it should not be possible to use past tense when the TSit is still ongoing, as in this example.

Aspect: situates TT with respect to TSit		
PERFECTIVE	TT (partially) includes TSit	{——[——]} _{TSit}] _{TT} or [{——} _{TSit}] _{TT}
IMPERFECTIVE	TT is fully included in TSit	{ ——[—] _{TT} —— } _{TSit}
PERFECT	TT is after TSit	{——} _{TSit} [] _{TT}
PROSPECTIVE	TT is before TSit	[] _{TT} {——} _{TSit}
Tense: situates TT with respect to TU		
PAST	TT is before TU	[] _{TT} () _{TU}
PRESENT	TT includes TU	[() _{TU}] _{TT}
FUTURE	TT is after TU	() _{TU} [] _{TT}

Table 1: Characterization of the major categories of tense and aspect (after Klein 1994)

2 Major Categories of Tense and Aspect in Imbabura Quichua

As background to the analysis of *-shka*, I briefly outline here the major tense and aspect distinctions in IQ. The description here should by no means be viewed as exhaustive; numerous other aspectual nuances, such as durative, habitual, and pluractional, can be expressed by verbal morphology in IQ, but these are not yet well-understood, and their analysis is beyond the scope of this paper (see

Cole 1982 for an overview).

2.1 Present Tense

Present tense in IQ is not marked by an overt morpheme. As shown in (3), it is indicated by the absence of overt past or future tense marking.³

- (3) *Nyuka ri-xu-∅-ni yachachi-k wasi-man*
 1SG go-IMPV-PRES-1SG.SBJ teach-NMLZ house-ALL
 ‘I am going to school’

The subject agreement markers used in present tense are given in Table 2. They distinguish three persons, and two numbers in first and second person.

	SG	PL
1	-ni	-nchi
2	-ngi	-ngichi
3		-n

Table 2: IQ subject agreement suffixes in present tense

2.2 Past Tense: -rka

The suffix *-rka* indicates simple past tense. It is compatible with imperfective and (null) perfective aspect marking.

- (4) *Kayna nyuka ri-xu-rka-ni yachachi-k wasi-man*
 yesterday 1SG go-IMPV-PAST-1SG.SBJ teach-NMLZ house-ALL
 ‘Yesterday I was going to school’
- (5) *Kayna nyuka ri-∅-rka-ni yachachi-k wasi-man*
 yesterday 1SG go-PFV-PAST-1SG.SBJ teach-NMLZ house-ALL
 ‘Yesterday I went to school’

³ Abbreviations:

ABL	ablative	FUT	future	PERF	perfect
ACC	accusative	GEN	genitive	PFV	perfective
AG	agent	HAB	habitual	PL	plural
ALL	allative	IMPV	imperfective	PLUR	pluractional
CAUS	causative	INDEF	indefinite	PRES	present
CL	clitic	INDIR	indirect evidential	PROX	proximal
COM/INSTR	comitative/instrumental	INF	infinitive	PURP	purposive
DIM	diminutive	LIM	limitative	SBJ	subject
DIST	distal	LOC	locative	SG	singular
DS	different subject subordinator	NMLZ	nominalizer	SS	same subject subordinator
EYE	eyewitness	NONEYE	non-eyewitness	TOP	topic

As shown in Table 3, person marking in the past tense is the same as in present tense, except that third person subject agreement is null. This is illustrated in (6).

- (6) *Pay ri-xu-rka-∅ yachachi-k wasi-man*
 3SG go-IMPV-PAST-3SBJ teach-NMLZ house-ALL
 ‘S/he was going to school’

The past tense suffix *-rka* is described by Cole (1982:144) as a simple past tense, but I will argue in §3.5 that it in fact has an additional entailment of ‘eyewitness’ evidentiality.

	SG	PL
1	<i>-ni</i>	<i>-nchi</i>
2	<i>-ngi</i>	<i>-ngichi</i>
3		<i>-∅</i>

Table 3: IQ subject agreement suffixes in past tense

2.3 Two Future Tenses

There are two ways of indicating future tense in IQ. The synthetic future suffix *-gri*, exemplified in (7), is homophonous with, and probably derived from, an analytic construction involving a nominalized verb in *-k* followed by an inflected form of the verb root *ri-* ‘go.’ This suffix attaches to the verb stem, and takes the agreement suffixes in Table 2.

- (7) *Kaya pay ri-gri-n yachachi-k wasi-man*
 tomorrow 3SG go-FUT-3SBJ teach-NMLZ house-ALL
 ‘Tomorrow, s/he is going to go to school’

The fusional future, in contrast, involves a separate set of agreement suffixes, shown in Table 4.

	SG	PL
1	<i>-sha</i>	<i>-shun</i>
2	<i>-ngi</i>	<i>-ngichi</i>
3		<i>-nga</i>

Table 4: IQ fusional future subject agreement suffixes

The second person forms are identical in present and fusional future. Clauses with these forms and no other tense marking are therefore ambiguous between present and future interpretations, as shown in (8).

- (8) *Kan ri-xu-ngi yachachi-k wasi-man*
 2SG go-IMPV-2SBJ teach-NMLZ house-MAN
 a. ‘You are going to school’
 b. ‘You will be going to school’

The fusional future and the synthetic future have different modal overtones in terms of the speaker's certainty about the future event. For example, the construction in (9) would be used if the speaker thinks that the ground will probably be dry tomorrow (for instance, because it has stopped raining and the sun has now come out), while the construction in (10) is appropriate if the speaker is certain that the ground will be dry tomorrow, for instance if he is taking action to dry it.

(9) *Kaya-pa alpa chaki-shka ka-nga*
 tomorrow-GEN ground dry-PERF be-FUT:3SBJ
 'By tomorrow, the ground will / should be dry' (speaker is not certain)

(10) *Kaya-pa alpa chaki-shka ka-gri-n*
 tomorrow-GEN ground dry-PERF be-FUT-3SBJ
 'By tomorrow, the ground is going to be dry' (speaker is certain)

In line with this, the first person plural form of the fusional future also has a hortative usage, while the synthetic future does not:

(11) *Ri-shun yachachi-k wasi-man*
 go-FUT:1PL.SBJ teach-NMLZ house-ALL
 a. 'We will go to school'
 b. 'Let's go to school'

(12) *Ri-gri-nchi yachachi-k wasi-man*
 go-FUT-1PL.SBJ teach-NMLZ house-ALL
 a. 'We are going to go to school'
 b. *'Let's go to school'

2.4 Imperfective Aspect: *-xu*

The suffix *-xu* is a marker of imperfective aspect (TT included in TSit). It co-occurs with all tenses, and is compatible with verbs of all Aktionsarten, including stative (though it seems not to co-occur with the copula *ka-*). This suggests that it denotes a very general imperfective aspect (and not, for example, a progressive aspect like English *be X-ing*, which is generally incompatible with stative verbs). There is no overt perfective marker in IQ. The absence of imperfective *-xu* is interpreted as perfective.

(13) *Kayna nyuka chaya-kpi=ka, kan zhukshi-∅-rka-ngi*
 yesterday 1SG arrive-DS=TOP 2SG leave-PFV-PAST-2SG.SBJ
 'Yesterday when I arrived, you left'

(14) *Kayna nyuka chaya-kpi=ka, kan zhukshi-xu-rka-ngi*
 yesterday 1SG arrive-DS=TOP 2SG leave-IMPV-PAST-2SG.SBJ
 'Yesterday when I arrived, you were leaving'

3 Analysis of *-shka* in Imbabura Quichua

Having outlined the general system of tense and aspect in IQ, we are now in a position to examine in detail the uses of the verbal suffix *-shka*. There are at least five distinct functions of *-shka* in IQ (several of which are structurally isomorphic): four nonfinite derivations and one finite verbal inflection. I will discuss these in turn, then in §4, I will propose a diachronic path of development that unites these functions.

3.1 Perfect Participle

The use of *-shka* to derive a perfect participle in IQ is illustrated in (15). The periphrastic perfect is created by attaching *-shka* to the verb stem, and combining this with the copula *ka-*, inflected for subject person and number, and tense. As shown, the copula can occur in past, present or future tense.

- (15) a. *Kayna nyuka shina-shka ka-rka-ni tanda-ta*
 yesterday 1SG make-PERF be-PAST-1SG.SBJ bread-ACC
 ‘Yesterday I had made a cake’
- b. *Kunan nyuka shina-shka ka-∅-ni tanda-ta*
 today 1SG make-PERF be-PRES-1SG.SBJ bread-ACC
 ‘Today I have made a cake’
- c. *Kaya nyuka shina-shka ka-sha tanda-ta*
 tomorrow 1SG make-PERF be-FUT:1SG.SBJ bread-ACC
 ‘Tomorrow I will have made a cake’

As defined in Table 1 above, tense locates TT with respect to TU. Since each simple clause has just one TT and one TU, the compatibility of *-shka* in the above constructions with overt past and future marking on the copula indicates that here *-shka* indeed encodes an aspect and not a tense. This is corroborated by the fact, illustrated in (16), that when the copula does not have past tense marking, the clause is ungrammatical with a past time adverbial, such as *kayna* ‘yesterday.’ A temporal adverb such as ‘yesterday’ restricts the TT of an utterance. Since ‘yesterday’ is deictic, and necessarily refers to a TT prior to TU, it is felicitous only if TT precedes TU. This is the case with past tense (defined as TT before TU), but not with present perfect aspect (where TT is after TSit, but includes TU). Hence the behavior of *-shka* in this periphrastic construction is fully compatible with an aspect marker.

- (16) **Kayna nyuka shina-shka ka-∅-ni tanda-ta*
 yesterday 1SG make-PERF be-PRES-1SG.SBJ bread-ACC

That it marks ‘perfect’ aspect in particular is evident from the fact that it locates TT after TSit. For instance, the utterance in (17) is only true if it is the case that Maria arrived after Pepe left.

- (17) *Maria chaya-kpi=ka, Pepe zhukshi-shka ka-rka-∅*
 Maria arrive-DS=TOP Pepe leave-PERF be-PAST-3SG.SBJ

- a. ‘When Maria arrived, Pepe had left’
- b. *‘When Maria arrived, Pepe left’

If Maria’s arrival coincides with, or precedes, Pepe’s departure, the simple past must be used in the main clause:

- (18) *Maria chaya-kpi=ka, Pepe zhukshi-0-rka-0*
 Maria arrive-DS=TOP Pepe leave-PFV-PAST-3SG.SBJ
- a. *‘When Maria arrived, Pepe had left’
 - b. ‘When Maria arrived, Pepe left’

The temporal structures of the two situations are illustrated below. The TT is Maria’s arrival, which is overtly set by the adverbial clause *Maria chayakpika*. IQ *zhukshi-* ‘leave’ is a two-state verb, therefore the TSit involves two elements: the SS, when Pepe is present and active in becoming absent, and the TS, when Pepe is absent. The structures in (19) correspond to the main clause in (17), while those in (20) correspond to the main clause in (18).

- (19) PAST PERFECT
 $\{ \text{---} \}_{SS+++} [\text{---}]_{TT+++} \text{TS} ()_{TU}$ or $\{ \text{---} \}_{SS++++++\text{TS}} []_{TT} ()_{TU}$
- (20) SIMPLE PAST (PERFECTIVE)
 $[\{ \text{---} \}_{SS+++}]_{TT+++} \text{TS} ()_{TU}$ or $\{ \text{---} [\text{---}]_{SS+++}]_{TT+++} \text{TS} ()_{TU}$

It is clear, therefore, that the analytic construction with *-shka* expresses perfect aspect. However, due to a general tendency in IQ (and in many other Quechua languages) for copula *ka-* ‘be’ to be elided in present tense third person contexts, the present perfect in third person most commonly surfaces as in (21).

- (21) *Pay ri-shka*
 3SG go-PERF
 ‘S/he has gone’

In such cases it is isomorphic with the inflectional *-shka* construction discussed in §3.5 below. This fact is crucial for the diachronic account presented in §4 below, and will be discussed further there.

3.2 Anterior Aspect Subordinator

In subordinate clauses — including reason clauses, complement clauses, and relative clauses — the use of *-shka* indicates that the TSit of the subordinate clause is prior to the TT of the main clause. For instance, the *-manda* reason clause in (22) can only refer to a situation prior to the situation of the main clause.

- (22) *Mishki tanda-ta miku-shka-manda, nyuka kushi=zha ka-0-ni*
 sweet bread-ACC eat-PERF-ABL 1SG happy=LIM be-PRES-1SG.SBJ
- a. ‘Because I have eaten cake, I am happy’
 - b. *‘Because I am eating / will eat cake, I am happy’

The verb form in *-shka* here is clearly nonfinite, as it does not take person marking (although the same construction can also occur with person marking; in that case I assume the verb in the *-manda* clause is finite).

A further example of anterior aspect *-shka* is in (23), where it attaches to the verb in a complement clause (which is marked with accusative case).

- (23) *Kayna chusku pacha-pi riku-0-rka-ni pichari kaspi-ta*
 yesterday four time-LOC see-PFV-PAST-1SG.SBJ somebody stick-ACC
faki-shka-ta
 break-PERF-ACC
 ‘Yesterday at four o’clock, I saw that somebody had broken the stick’

3.3 Passive Participle

According to Cole (1982:133), IQ has two periphrastic passive constructions, in addition to at least one morphological passive.⁴ The first involves a non-finite verb in *-y* plus the auxiliary *tuku-* ‘become, finish.’ This construction implies a change of state, and is restricted to occurring with animate passive subjects. The *-shka ka-* passive, in contrast, does not necessarily imply change of state, and has no restrictions on its subject. These differences are illustrated in (24-25).

- (24) a. *Maria=ka Jose xuya-y tuku-rka-0*
 Maria=TOP Jose love-INF become-PAST-3SG.SBJ
 ‘Maria came to be loved by Jose’
 b. *Maria=ka Jose xuya-shka ka-rka-0*
 Maria=TOP Jose love-PERF be-PAST-3SG.SBJ
 ‘Maria was loved by Jose’
- (25) a. **Aycha=ka (misi) miku-y tuku-rka-0*
 meat=TOP cat eat-INF become-PAST-3SG.SBJ
 b. *Aycha=ka (misi) miku-shka ka-rka-0*
 meat=TOP cat eat-PERF be-PAST-3SG.SBJ
 ‘The meat was eaten (by the cat)’

3.4 Resultative Nominalizer

In all three of the above constructions, *-shka* attaches to a verb root or stem, and derives a non-finite form. But the derived form nonetheless has verbal properties, such as being able to assign accusative case to an object. *-shka* has a fourth derivational function, in which it derives an element that is clearly nominal, rather than verbal. Cole (1982:148) refers to this construction as

⁴ We have only been able to elicit the *-y tuku-* periphrastic passive, and have had difficulty getting consultants to accept or produce the *-shka ka-* passive. Nonetheless, it does occasionally appear in texts. It is likely that the very high functional load of *-shka ka-* forms, and the existence of several alternative passive constructions, makes the use of this passive dispreferred. Data in this section is adapted from Cole (1982).

the ‘resultive.’ He notes that it emphasizes “the present result of a past situation,” in contrast to the perfect, which “focusses on the past action.” The deverbal *-shka* form, like other nominals in the language, can inflect for case (26), can modify other nominals (27), and can appear as copula complement (28).

- (26) [*Chinga-chi-shka-ta*]_{NP} *maska-xu-θ-ni*
 get.lost-CAUS-PERF-ACC search.for-IMPV-PRES-1SG.SBJ
 ‘I am looking for my lost (thing)’
- (27) *Kay* [*maki-pi awa-shka findu-ta*]_{NP} *riku-xu-θ-ni*
 PROX hand-LOC make-PERF textile-ACC see-IMPV-PRES-1SG.SBJ
 ‘I see this hand-made fabric’
- (28) *Kaya-pa alpa* [*chaki-shka*]_{COP.COMP} *ka-nga*
 tomorrow-GEN ground dry-PERF be-FUT:3SG
 ‘By tomorrow the ground will be dry’

Although Klein’s framework was designed to analyze only the verbal domain, it can be extended to characterize the function of the IQ resultative nominal. The resultative can be described as situating TT within TS of the LC, in contrast to the perfect participle, which specifies only that TT is after SS, and is agnostic about whether TT falls within or after TS. These two respective temporal structures are diagrammed in (29) and (30) below.

- (29) RESULTATIVE
 {——} _{SS++} [++] _{TT++TS}
- (30) PERFECT
 {——} _{SS++} [++] _{TT++TS} or {——} _{SS++++++} [] _{TT}

This formulation reflects Cole’s intuitive characterization of the perfect as focussing on the past action, and the resultative as focussing on the resulting state. That *-shka* is indeed a resultative, and not simply a nominalizer, is evidenced by the fact that the utterance in (28) above is felicitous only if the ground has at some point been wet; that is, *chakishka* does not simply denote the state of being dry, rather it refers to the TS of the verb ‘to dry.’

A further distinction between perfect and resultative forms is their argument structure. While the perfect form maintains the argument structure of the verb — whether transitive or intransitive — resultative forms are necessarily intransitive, and therefore can retain only one of the arguments of a transitive verb. The retained argument, predictably, is the more affected participant, typically the object. Hence resultative nominalizations follow an absolutive pattern, denoting the subject of intransitive verbs and the object of transitive verbs. For example, the verb root *shita-* ‘throw’ takes an agent subject and a patient object. In (31), the resultative modifier *shitashka* refers (metaphorically) not to the ‘throwers,’ but to the ‘thrown.’ In contrast, the verb root *kazara-* ‘marry’ (presumably from Spanish *casarse*) is intransitive, and the resultative nominalization refers to the erstwhile subject.

- (31) *Kay shuxa shita-shka xari-kuna warmi-kuna...*
 PROX INDEF throw-PERF man-PL woman-PL
 ‘Those homeless men and women...’
- (32) *Chayra=zha kazara-shka-kuna shamu-rka-nchi*
 DIST=LIM marry-PERF-PL come-PAST-1PL.SBJ
 ‘When we were first married we came’

This pattern of argument structure with transitive verbs offers a clear link between resultative and passive constructions, and this will be discussed further in §4 below.

3.5 Finite Verbal Inflection

In all of the functions outlined so far, *-shka* derives a nominal or a nonfinite verbal element. But *-shka* can also function as a verbal inflection, in which case it attaches to the verb stem and immediately takes person marking. The person markers are the same as those used with past tense suffix *-rka* (shown in Table 3 above). This is the function that Cole (1982) labels ‘perfect aspect,’ noting that a verb inflected with *-shka* can also take past or future tense marking. While our consultants readily accept and produce verbs in *-shka-rka*, they do not accept forms with *-shka* followed by any future marking.

- (33) a. *Pay shina-shka-rka-0 tanda-ta*
 3SG make-SHKA-PAST-3SBJ bread-ACC
 ‘S/he had baked a cake’
- b. *Pay shina-shka-0 tanda-ta*
 3SG make-SHKA-3SBJ bread-ACC
 ‘S/he baked a cake’
- c. **Pay shina-shka-nga tanda-ta*
 3SG make-SHKA-FUT:3SBJ bread-ACC

This does not, of course, invalidate Cole’s claim that *-shka* is a perfect aspect. It could be that *-shka* marks perfect aspect, but is restricted to occurrence in present and past tenses; and in fact, I argue in §4 that this is an important stage in the diachronic development of modern-day *-shka*. However, I will present data here that shows inflectional *-shka* in IQ is not in fact a perfect aspect; rather it is a past tense that is restricted to descriptions of situations which the speaker did not witness.

In Table 1 above are presented Klein’s cross-linguistic definitions of the major classes of tense and aspect. According to this typology, perfect aspect locates TT after TSit, as diagrammed in (34).

- (34) PERFECT ASPECT
 {———}TSit []TT

If inflectional *-shka* is a perfect aspect, therefore, its function should accord with the diagram in (34). This was shown to be the case for the periphrastic *-shka ka-* construction in (17–20) above.

In contrast, constructions with inflectional *-shka* do not conform to the temporal structure for perfects.⁵

- (35) *Maria chaya-kpi=ka, kan zhukshi-0-shka-ngi*
 Maria arrive-DS=TOP 2SG leave-PFV-SHKA-2SG.SBJ
 a. *‘When Maria arrived, you had left’
 b. ‘When Maria arrived, you left’

The utterance in (35) is not felicitous if TT (Maria’s arrival) follows TSit (the leaving event). In contrast, it *is* felicitous if TT overlaps with TSit; that is, if Maria’s arrival coincides with the addressee’s departure. Recall from Table 1 that this temporal structure constitutes ‘perfective’ aspect. That *-shka* itself is not a perfective marker, however, is shown by its ability to freely combine with imperfective *-xu*.⁶

- (36) *Maria chaya-kpi=ka, kan zhukshi-xu-shka-ngi*
 Maria arrive-DS=TOP 2SG leave-IMPFV-SHKA-2SG.SBJ
 ‘When Maria arrived, you were leaving’

The relation between TT and TSit expressed in (36) is diagrammed in (37), where TT is Maria’s arrival, and TSit corresponds to the SS of the two-state predicate {leave}.

- (37) {—[—]_{TT}—}_{TSit}+++++

It is clear, therefore, that inflectional *-shka* encodes neither perfect nor perfective aspect. The clue to its actual function is given in the translations of (36) and (37), both of which are past tense. This past tense is not provided by the subordinate clause *Maria chaya-kpi=ka*, which is nonfinite and therefore does not express tense. This adverbial clause is fully compatible with present and future marking in the main clause:

- (38) *Maria chaya-kpi=ka, kan zhukshi-ngi*
 Maria arrive-DS=TOP 2SG leave-2SG.SBJ
 ‘When / If Maria arrives, you leave / will leave’

It seems, therefore, that the past tense reference is expressed by *-shka*. We can test this by examining the co-occurrence of *-shka* with temporal adverbs. If *-shka* is a past tense marker, it should be compatible with past time adverbs, and incompatible with present and future time adverbs. The data in (39) show that this is indeed the case, confirming the status of inflectional *-shka* as past tense.

⁵ I present examples in second rather than third person here to avoid ambiguity. As noted above, in third person present tense contexts, the copula is often omitted from the periphrastic perfect (and from other constructions). Inflectional *-shka* in third person is identical to periphrastic *-shka* in third person present tense with the copula omitted, and therefore this surface form is ambiguous between the two interpretations. Inflecting for first or second person avoids this ambiguity.

⁶ Although (Comrie 1976:24) claims that “imperfectivity is not incompatible with perfectivity, and that both can be expressed if the language in question possesses the formal means to do so,” within the framework followed here, perfective and imperfective aspects are mutually exclusive.

- (39) a. *Kayna kan zhukshi-0-shka-ngi*
yesterday 2SG leave-PFV-SHKA-2SG.SBJ
‘Yesterday you left’
- b. **Kunawra kan zhukshi-0-shka-ngi*
right.now 2SG leave-PFV-SHKA-2SG.SBJ
- c. **Kaya kan zhukshi-0-shka-ngi*
tomorrow 2SG leave-PFV-SHKA-2SG.SBJ

Since, as shown in §2.2, *-rka* is also a past tense marker, the question remains how *-shka* and *-rka* differ from each other. Some Quechua languages (e.g., Ancash; Adelaar and Muysken 2004:224) have a distinction between recent and remote past and this is a plausible assumption for IQ, given that perfects are known to develop into recent past markers cross-linguistically. However, as Cole (1982:148) notes, *-shka* is especially frequent in traditional narratives, the events of which are temporally remote. This suggests that *-shka* is not a recent past marker. The data in (40) and (41) show that in fact the relevant parameter of variation between *-rka* and *-shka* is source of evidence (eyewitness — non-eyewitness). Verbs in *-rka* are felicitous only to report a situation which the speaker witnessed first-hand, while *-shka* must be used to describe a situation that was not witnessed first-hand.

- (40) a. *Maria chaya-kpi=ka, kan zhukshi-0-rka-ngi* (**ni-n*)
Maria arrive-DS=TOP 2SG leave-PFV-PAST.EYE-2SG.SBJ say-3SBJ
‘When Maria arrived, you left (*it is said)’
- b. *Maria chaya-kpi=ka, kan zhukshi-0-rka-ngi.* *Kan-ta*
Maria arrive-DS=TOP 2SG leave-PFV-PAST.EYE-2SG.SBJ 2SG-ACC
riku-0-rka-ni.
see-PFV-PAST.EYE-1SG.SBJ
‘When Maria arrived, you left. I saw you.’
- (41) a. *Maria chaya-kpi=ka, kan zhukshi-0-shka-ngi* *ni-n*
Maria arrive-DS=TOP 2SG leave-PFV-PAST.NONEYE-2SG.SBJ say-3SBJ
‘When Maria arrived, you left, it is said’
- b. *Maria chaya-kpi=ka, kan zhukshi-0-shka-ngi.* (**Kan-ta*)
Maria arrive-DS=TOP 2SG leave-PFV-PAST.NONEYE-2SG.SBJ 2SG-ACC
riku-0-shka-ni.
see-PFV-PAST.NONEYE-1SG.SBJ
‘When Maria arrived, you left. (*I saw you.)’

This evidential division of labor between *-rka* and *-shka* neatly elucidates why *-shka* is prevalent in narrative discourse. We need no longer posit, as Cole (1982:148) must, that traditional narratives are somehow of greater ‘present relevance’ than other types of discourse referring to the past. In §3.6, I show that the distribution of *-rka* and *-shka* in different discourse types neatly follows from their functions as ‘eyewitness’ and ‘non-eyewitness’ past tenses respectively.

One puzzle remains: if inflectional *-shka* is a past tense, how can it combine with past tense *-rka* in verb forms such as *shinashkarka* in (33a) above? The answer is simply that in this construction, *-shka* is not a past tense, but rather retains its ‘perfect’ meaning. That is, *-shkarka* is a ‘past perfect’ inflectional suffix which locates TT before TU and after TSit. This is further illustrated in (42), which can only mean that TSit (the departure) occurred *before* TT (Maria’s arrival); it is infelicitous to describe a situation where TT and TSit overlap. Likewise, it cannot express a temporal relation where TT includes or follows TU; it explicitly situates TT *before* TU. The temporal structure denoted by a verb in *-shkarka* is diagrammed in (43).

- (42) *Maria chaya-kpi=ka, kan zhukshi-0-shkarka-ngi*
 Maria arrive-DS=TOP 2SG leave-PFV-PAST.PERF-2SG.SBJ
 a. ‘When Maria arrived, you had left’
 b. *‘When Maria arrived, you left’
 c. *‘When / If Maria arrives, you leave / will leave’

(43) { — — - }_{TSit} []_{TT} ()_{TU}

Table 5 summarizes the IQ system of past tense and perfect aspect marking, as described and exemplified in this paper.

Form	Gloss	Meaning
<i>-rka</i>	‘simple past eyewitness’	TT before TU speaker witnessed TSit
<i>-shka</i>	‘simple past non-eyewitness’	TT before TU speaker did not witness TSit
<i>-shkarka</i>	‘past perfect’	TT before TU TT after TSit
<i>-shka (ka-)</i>	‘perfect aspect’	TT after TSit

Table 5: IQ past tense and perfect aspect constructions

3.6 The distribution of *-rka* and *-shka* in discourse

The IQ text corpus we compiled comprises a variety of discourse types, including traditional narratives, personal narratives, procedural texts, and conversations. On close examination of these texts, it is clear that Cole is correct in noting a preponderance of *-shka* constructions in traditional narratives. But I argue that it is not the discourse type itself that determines which verb form will be used; rather the discourse type tends to determine whether or not the events related were directly witnessed by the speaker, and this is what determines whether *-shka* or *-rka* is used. Supporting this hypothesis is the fact that the ‘non-eyewitness’ meaning of *-shka* is almost obligatorily reinforced in discourse by the reportative marker *nin* (<‘say-3SBJ’), or the indirect validator =*shi*. This is illustrated in the following passage from a traditional text told by MC.

- (44) *Chay uchila wambra-ta michi-dor ri-ka-shka=shi kay xatun*
 DIST small boy-ACC herd-NMLZ:AG go-HAB-PAST.NONEYE=INDIR PROX big
sacha xaka-man urku-man. Tya-shka ni-n ka-shka pongu
 hill cliff-ALL hill-ALL exist-PAST.NONEYE say-3SBJ be-PAST.NONEYE door
kuynta. Chay=ka yayku-k ri-ka-shka=shi. Uku-pi=ka xatun
 thingy DIST=TOP enter-NMLZ go-HAB-PAST.NONEYE=INDIR in-LOC=TOP big
xatun pamba xunda kay wagra-kuna=shi
 big valley full.of PROX cow-PL=INDIR
 ‘The little boy shepherd used to go to the cliffs, to this big mountain, it is said. There was a kind of a door which he would enter, it is said. Inside was a great valley full of cow-like creatures, it is said.’

In contrast, *-rka* forms do not occur with either *nin* or *=shi*, as shown in (45), from a personal narrative by the same speaker.

- (45) *Bini-0-rka-nchi wagra-kuna-wan zhama-kuna-wan*
 grow.up-PFV-PAST.EYE-1PL.SBJ cow-PL-COM/INSTR sheep-PL-COM/INSTR
atalpa-kuna-wan misi-kuna-wan. Bini-0-rka-ni
 chicken-PL-COM/INSTR cat-PL-COM/INSTR grow.up-PFV-PAST.EYE-1SG.SBJ
sara-ta tarpu-shpa, papa-ta tarpu-shpa. Ri-ka-rka-ni nyuka
 corn-ACC plant-SS potato-ACC plant-SS go-HAB-PAST.EYE-1SG.SBJ 1SG
yaku-man taksha-ngapa nyuka zhachapa-ta maki-wan larka-pi
 water-ALL laundry-SS:PURP 1SG clothes-ACC hand-COM/INSTR river-LOC
taksha-k ri-ka-rka-ni.
 laundry-NMLZ go-HAB-PAST.EYE-1SG.SBJ
 ‘We grew up with cows, with sheep, with chickens, with cats. I grew up planting corn, planting potatoes. I used to go to the water to wash my clothes, I would go to wash them by hand in the river.’

When *-shka* is used in its perfect function, rather than its non-eyewitness past function, it does not collocate with *nin* or *=shi*, but rather tends to collocate with *nya* ‘already, still.’ This is illustrated in the following passage, from a conversation between MC and ACO (the speaker here is MC). The analysis of *-shka* here as ‘present perfect’ and not ‘past non-eyewitness’ is supported by the fact that the surrounding discourse is in present tense, and that the events related were experienced first-hand by the speaker.

- (46) *Nyuka ushi-gu-kuna-ta nya na kawsa-xu-0-n=chu*
 1SG daughter-DIM-PL-ACC already NEG live-IMPV-PRES-3SBJ=NEG.CL
nyuka-wan, nya pay-kuna=ka mutari-shka, shuk ladu-pi=mi
 1SG-COM/INSTR already 3-PL=TOP move.house-PERF INDEF place-LOC=DIR
kawsa-naxu-n. Pay-kuna nya eskula-ta tuku-chi-shka nya.
 live-PLUR-3SBJ 3-PL already school-ACC finish-CAUS-PERF already
Pay-kuna-pa shuk rura-y-wan kawsa-naxu-n.
 3-PL-GEN INDEF do-NMLZ-COM/INSTR live-PLUR-3SBJ

‘My daughters don’t live with me anymore, they have already moved out, they live in other places. They have already finished school. They have jobs.’

The patterns of use and collocation found across the different text types in the corpus reflect different meanings and usages of *-shka* and *-rka*. The data presented in this section, which are representative of the patterns found throughout the corpus, support the analysis of *-rka* as a past eyewitness marker, and *-shka* as variously ‘past tense non-eyewitness’ and ‘perfect.’

4 A Diachronic Explanation

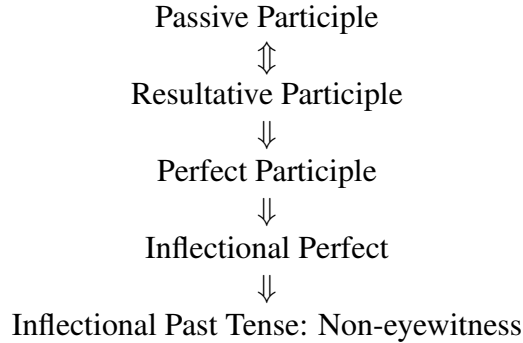
In this section, I will set forth a possible diachronic explanation for the range of functions fulfilled by *-shka* in IQ. A similar range of functions is described for other Quechua languages. For example, Weber (1989) reports that verbal inflection *-shka* (apparently truncated from **-shqa ka-*) in Huallaga Quechua (HQ) functions as a perfect aspect and as a past tense. He reports that it is displacing *-ra* (cognate to IQ *-rka*) as a marker of simple past. In addition he notes that periphrastic *-sha ka-* (also from **-shqa ka-*) functions as both a perfect and a passive. *-sha* is additionally reported to have a substantivizing function in HQ. Adelaar (1977) reports for Tarma Quechua (TQ) that the main function of *-sha* is to form stative participles, such as *wanusha* ‘dead’ (*wanu-* ‘die’), *punusha* ‘asleep’ (*punu-* ‘sleep’). It also is used in subordinate clauses, but not necessarily with an anterior meaning, and he notes a very occasional perfect use. Adelaar and Muysken (2004) note that the existence of a so-called ‘sudden discovery’ tense, commonly expressed with a cognate of IQ *-shka*, is an areal phenomenon, having even spread into Andean Spanish (though using native Spanish morphemes). They note that it is not restricted to past tense, which suggests they are describing a perfect aspect function. Likewise, Faller (2004:46) describes the function of Cuzco Quechua (CQ) *-sqa* as “a spatio-temporal deictic which specifies that the described eventuality *e* [Klein’s TSit – JCK] is not located within the speaker’s perceptual field at topic time.” This seems to accord with the function of IQ *-shka*, in that it is restricted to contexts where the TSit was not witnessed by the speaker. In South Conchucos Quechua (SCQ; Hintz 2008), the suffix *-sha* ‘past perfective’ is restricted to third person contexts, and a suppletive form *-ru* occurs with local subjects and objects. Although Hintz does not mention any evidential overtones to these perfective markers, their distribution suggests that an eyewitness — non-eyewitness distinction may be, or have previously been, part of their meaning. Both *-sha* and *-ru* are used to express situations that are relatively recent in time, while *-rqa* (cognate with IQ *-rka*) denotes more distant events (Hintz 2007).

Given the variety of functions of IQ *-shka*, and considering the functions of its cognates throughout the Quechua family, I propose that its diachronic development proceeded as shown in (47).⁷ The source of this chain of developments is claimed to be either the passive or the resultative construction. There is no evidence I am aware of to favor either direction of change between passive and resultative. The development from resultative to perfect, on the other hand, is well-attested cross-linguistically. For example, this pathway is explicitly documented for English and Romance (Bybee et al. 1994:68). In the absence of documentation, I assume that the same direc-

⁷ I thank Tom Recht for pointing out that the resultative may have been the source for the perfect, and not necessarily the converse; and I thank Andrew Garrett for directing me to the relevant literature.

tionality applies for IQ *-shka*. In the following sections, I discuss each stage of grammaticalization in turn.

(47) PROPOSED DIACHRONIC PATH FOR THE DEVELOPMENT OF IQ *-shka*



4.1 Passive and Resultative

As noted in §3.4, resultative nominalizations exhibit an absolutive alternation, where the denoted or modified argument is the object, rather than the subject, of a transitive verb. In addition, these nominalizations occur far more commonly with transitive verbs than with intransitive, presumably because the object of a transitive verb is typically more affected than the subject of an intransitive verb. Given this, the resultative nominalizations almost exclusively modify the erstwhile object of a transitive verb, and this, of course, is also the function of a passive. As shown in (48), a bridging context for the grammaticalization of passive to resultative (or vice versa) is therefore provided by predicative result nominalizations from transitive verbs.

- (48) *Aycha=ka yanu-shka ka-rka-Ø*
 meat=TOP cook-SHKA be-PAST-3SG.SBJ
 a. Passive reading: ‘The meat got cooked’
 [{——} _{SS++}] _{TT++++TS} () _{TU}
 b. Resultative nominalization reading: ‘The meat was cooked’
 {——} _{SS++} [++] _{TT++++TS} () _{TU}

The temporal structures of these two interpretations of the surface string *Aychaka yanushka karka* differ in whether the TT includes SS or not. For resultative interpretation it does not; for passive it does. All that is needed for one of these constructions to be reinterpreted as the other, therefore, is for the leftmost boundary of TT to shift. If *-shka* originally derived a passive participle, and the resultative function was innovated, predicative modifiers in *-shka* must have subsequently been extended, by analogy with other, non-derived modifiers, to the attributive (49) and substantive (50) contexts they occur in today.

- (49) *Yanu-shka aycha-ta miku-xu-Ø-ni*
 cook-SHKA meat-ACC eat-IMPV-PRES-1SG.SBJ
 ‘I am eating cooked meat’

- (50) *Taksha-shka-kuna-ta angu-pi warku-xu-0-ni*
 laundry-SHKA-PL-ACC line-LOC hang-IMPV-PRES-1SG.SBJ
 ‘I am hanging the laundered (clothes) on the line’

4.2 Resultative to Perfect

In contrast to the passive–resultative case just described, transitive constructions do not provide a bridging context between resultative and perfect interpretations. There are two reasons for this: first, adjectival predicates cannot be transitive; and second — as noted above — adjectives derived from transitive stems modify the object, not the subject, of the erstwhile verb, thus providing a bridging context with passive, but not perfect. Resultative–perfect bridging contexts instead arise in periphrastic perfect constructions with intransitive verbs. As shown in (51–52), such a construction is isomorphic with a predicative adjective construction. The two interpretations are differentiated only by the fact, as demonstrated in §3.4, that resultative adjectives place TT in TS, while perfects simply place it *after* SS. Since these potentially different temporal structures more often than not describe identical states of affairs, speakers may easily reanalyze one as the other.

- (51) *Nyuka kushi ka-0-ni*
 1SG happy be-PRES-1SG.SBJ
 ‘I am happy’

- (52) *Nyuka zhukshi-shka ka-0-ni*
 1SG leave-SHKA be-PRES-1SG.SBJ
 a. Resultative adjective reading: ‘I am gone’
 {——}SS++[++]TT++TS
 b. Passive participle reading: ‘I have left’
 {——}SS++[++]TT++TS or {——}SS++++++TS []TT

Once semantic reanalysis had taken place, the construction could subsequently be extended from intransitive to transitive contexts, such as that in (53), via analogy.

- (53) *Tanda-ta miku-shka ka-0-ni*
 bread-ACC eat-SHKA be-PRES-1SG.SBJ
 ‘I have eaten the bread’

4.3 Derivation to Inflection

The first stage in the development of *-shka* from periphrastic perfect to non-eyewitness past tense is the grammatical reanalysis of *-shka* as an inflectional suffix. The optionality of the copula in third person present tense contexts is assumed to have been the catalyst for this reanalysis. Since third person agreement is null after past tense marker *-rka*, once the copula is elided from the perfect construction, as in (54a), it appears isomorphic with a third person past tense verb, as in (54b), (although in other persons and tenses it remains distinct).

- (54) a. *Punyu-shka*
 sleep-PERF
 ‘S/he has slept’
 b. *Punyu-rka-0*
 sleep-PAST-3SBJ
 ‘S/he slept’

On analogy with *-rka* forms, *-shka* was reanalyzed as a verbal inflection, and extended to all persons. At this stage, it is assumed that *-shka* was still an aspect marker, and therefore it could combine with other tenses. Since it developed from a present perfect construction, where TU follows TSit, it may have been restricted to present and past perfect, and been disallowed in future contexts, where TSit usually follows TU. Alternatively, this restriction may have developed later. A hypothesized partial paradigm for this stage is given in (55).

- (55) a. *Punyu-shka-0-0*
 sleep-PERF-PRES-3SBJ
 ‘S/he has slept’
 b. *Punyu-shka-0-ni*
 sleep-PERF-PRES-1SG.SBJ
 ‘I have slept’
 c. *Punyu-shka-rka-0*
 sleep-PERF-PAST-3SBJ
 ‘S/he had slept’
 d. *?Punyu-shka-nga*
 sleep-PERF-FUT:3SBJ
 ?‘S/he will have slept’

4.4 Aspect to Tense

The final stage in this grammaticalization trajectory is semantic reanalysis of the inflectional construction from perfect aspect to past tense, a development that is commonly attested cross-linguistically (see Bybee et al. 1994:81). The motivation for this is clear once we examine the temporal make-up of these constructions, diagrammed in (56–57).

- (56) PRESENT PERFECT
 {——}TSit [()TU]TT

- (57) PAST TENSE (PERFECTIVE)
 [{——}TSit]TT ()TU

It can be seen that both present perfect aspect and simple past tense situate TSit before TU, though they do this in different ways. A perfect aspect becomes a past tense when speakers reinterpret a construction denoting the relation in (56) as denoting that in (57); that is, they analyze the construction as situating TT before TU, and TSit within TT, rather than TSit before TT, and TU within

TT. Bybee et al. (1994:86) view this process as a generalization of meaning, whereby a construction denoting ‘past event with current relevance’ comes to denote simply ‘past event.’ Within the framework employed here, this path can likewise be characterized as semantic broadening. Since the source construction is ‘present perfect’ and the innovated construction ‘simple past,’ the construction goes from expressing a tense–aspect combination (situating TT, TSit, and TU in relation to each other), to simply expressing a tense relation (which only situates TT in relation to TU). However, a certain semantic narrowing accompanies this grammatical change in IQ, as the innovated past takes on a non-eyewitness entailment. Perfect constructions generally have a non-eyewitness implicature, which comes about because the post-time of the event is referred to, rather than the event itself. In IQ, this implicature was strengthened to an entailment in the new past tense form. Presumably this pragmatic strengthening was helped along by the fact that *-shka* is in competition with past tense suffix *-rka*, and there is pressure for different forms to have different functions. This leads to the division of labor between past tense eyewitness *-rka* and past tense non-eyewitness *-shka* in modern IQ.

5 Conclusion

Systems of tense and aspect in the Quechua language family seem to be particularly complex and challenging to analyze. As a result, their description has often been vague, and the meanings and functions of various constructions have been characterized only in the broadest terms.⁸ In this paper, I have attempted to fill in some of the gaps in our understanding of tense and aspect in Quechua, by providing a precise characterization of the functions of the IQ verbal suffix *-shka*. Five morpho-syntactically and/or semantically distinct functions of *-shka* are identified: (i) it forms perfect participles, which enter into a periphrastic perfect aspect construction with copula *ka-*; (ii) it expresses anterior aspect in subordinate clauses, including relative, adverbial, and complement clauses; (iii) it creates a passive participle, which, like the perfect participle, combines with copula *ka-* in a periphrastic construction; (iv) it derives resultative nominals, which, like other IQ nominals, can act as substantives, modifiers, or copula complements; and (v) it is a verbal inflection expressing non-eyewitness past tense. The first four of these uses function essentially as described by Cole (1982) (except that Cole characterizes the subordinate clause use as a tense). The main purpose of this paper has been to argue, using Klein’s framework for analyzing tense and aspect, that *-shka* as a verbal inflection is in fact a *tense* rather than an aspect as Cole (1982) claims. That this is the case is shown by the co-occurrence of *-shka* with past time adverbs such as *kayna* ‘yesterday,’ which should be incompatible with a present perfect aspect, and by the fact that *-shka* cannot be used to locate TT after TSit. A further aim of the paper is to show that inflectional *-shka* entails non-eyewitness evidentiality; that is, it can be used just in case the speaker did not witness the situation expressed in the predicate (TSit). The non-eyewitness past tense meaning of *-shka* neatly explains its distribution in discourse: verbs inflect in *-shka* in traditional narratives, the events of which were not witnessed by the speaker, and in eyewitness past *-rka* in personal narratives, which were experienced first-hand by the speaker.

Many of the functions fulfilled by *-shka* in IQ are likewise fulfilled by a single morpheme in numerous other languages. For instance, the English past participle in *-ed* or *-en* is a perfect, a

⁸ Faller (2004) stands out as a notable exception to this generalization.

resultative, and a passive, and in some non-standard varieties also a simple past. This suggests that the diachronic path of development that *-shka* has followed is typologically common. Bridging contexts for each stage of development are evident, but the directionality of some of the changes in Quechua is still open to investigation.

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The Functions of -shka in Imbabura Quichua

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REPORT 15

**SURVEY OF CALIFORNIA AND
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*Structure and Contact in
Languages of the Americas*

John Sylak-Glassman and Justin Spence, Editors

Andrew Garrett and Leanne Hinton, Series Editors

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