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Reconstructing Person and Voice in Kiowa-Tanoan: Pitfalls and Progress*

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1. Introduction. The historical source for passives and related constructions is not an unfamiliar problem in diachronic syntax (e.g. Chung 1978, Anderson 1980, Dixon 1994). Kiowa-Tanoan passives provide a case study in the benefits of traditional comparative reconstruction combined with reconsideration of synchronic analyses to produce a more satisfying understanding of diachronic processes. What complicates the Kiowa-Tanoan case is the complex agreement morphology in which fused combinations of person, number and role have resulted in large numbers of distinct clitics. Anticipating the conclusions, (1) the Kiowa-Tanoan pronominal clitics give evidence of a direction system (direct vs. inverse person), the outlines of which are preserved today in all four subgroups; (2) the so-called passive constructions described for two of the four subgroups are thinly disguised inverse constructions; (3) reinterpretation of ditransitive clitics as intransitive provided the model for extending reduced valency agreement to simple transitive clauses.

This study begins with an outline of the synchronic descriptions and a reconsideration of the analysis of passives. The evidence suggests that the KT languages bear unmistakable signs of a direct/inverse opposition in their morphosyntax. The paper then turns to the reconstruction of the agreement clitics, a comparison of agentive case marking and of verb morphology before exploring the diachronic processes by which some of the daughter languages appear to have developed passive constructions.

2. Background. The Kiowa-Tanoan family consists of four subgroups, spoken from Oklahoma to New Mexico and Arizona. The clear geographical and cultural division between the Kiowas of the southern Plains and the Tanoans of the pueblo Southwest has long been assumed to reflect a significant linguistic split as well. Hale and Harris (1979) suggests that the linguistic split is more apparent than real, a position this study supports.

- (1) Tiwa: (Northern) Taos, Picuris; (Southern) Sandia, Isleta
 Towa
 Tewa: Rio Grande (San Juan, Santa Clara, San Ildefonso, Nambe,
 Tesuque, (Pojoaque); Arizona Tewa
 Kiowa

Despite the dramatic cultural and environmental differences, the closely related KT family is characterized by an unusually elaborate set of argument indexing clitics numbering from as few as fifty-seven in Tewa to more than seventy-five in Taos and Kiowa. The pronominal clitics are traditionally described as falling into five functionally distinct paradigms: simple intransitive, simple transitive, reflexive, intransitive dative, and ditransitive. The intransitive, transitive, and reflexive sets are relatively uncontroversial. The other two sets, intransitive dative and ditransitive, are critical in understanding the historical development of the "passives" of Tiwa and Towa. In KT languages, intransitive predications involving two participants make use of the intransitive dative paradigm, which indexes a Dative (a possessor, recipient, or experiencer; see section 5) and a third person Patient. The intransitive

dative clitics, moreover, are those required in passive clauses corresponding to ditransitives. The examples in (2) illustrate both experiencer and possessor Datives.

(2) Intransitive dative: DAT and PAT

- | | | | |
|----|----|--|---|
| a. | Te | dîn-tè:
(1sgD:P-need)
nàví èʔnú dîn-hè:
(my boy 1sgD:P-be.sick) | I need it.
<u>My</u> boy is sick. |
| b. | To | té:dè kyā ì-vé:tā̃
(shirt perf 1sgD:sgP-fade.pf)
kyā ì-nóʔó
(perf 1sgD:sgP-finish.pf) | <u>My</u> shirt faded.
I have finished. |
| c. | Ki | yā-p ^h átkyā
((2,3sgA):1sgD:plP-finish.pf)
kút yā-dó:
(books (2,3sgA):1sgD:plP-be) | I have finished.
They are <u>my</u> books. |

Although the generalization does not hold for all combinations of person, number, and role, many ditransitive clitics are formally identical to intransitive dative clitics. For example, (2a) and (3a) show the same clitic for Tewa dîn “first person singular Dative plus Patient.” Kiowa examples (2c) and (3c) similarly share the clitic yā “first person singular Dative plus singular Patient”. Towa (2b) and (3b) illustrate the use of the clitic ì “first person singular Dative plus singular Patient” in intransitive dative clauses and the so-called passive of a ditransitive. We will return to this isomorphism across paradigms in section 6, where partial reconstruction of the clitics provides an explanation for the resemblances.

(3) Ditransitive: AGT, DAT, PAT

- | | | | |
|----|----|---|---------------------------|
| a. | Te | nàví tãʔnìn dîn-kéʔ
(my book 3sgA:1sgD:P) | He got <u>my</u> book. |
| b. | To | ní: nã̃:-tã̃ délí ì-téí̃ã̃
(I that-agt chicken 1sgD:sgP-eat.pass.pf) | He ate <u>my</u> chicken. |
| c. | Ki | kút yā-t ^h ón
(books (2,3sgA):1sgD:plP-find.pf) | He found <u>my</u> books. |

3. The passive analysis. Most published reports based on field work on the Tanoan languages (e.g., Allen and Gardiner 1981; Allen et al 1990, Zaharlick 1982, Kroskrity 1985) have identified syntactic constructions like (3b) above as passives. However, Kiowa (Watkins 1984) and Rio Grande Tewa (Speirs 1966) have not been identified as having any active-passive alternation and Kroskrity (1990) has reevaluated his earlier position on passives in Arizona Tewa. Watkins (1982, 1990) were early efforts to unravel the historical puzzle in KT voice studies, namely, the apparent existence in a closely related family of two strategies for mapping semantic roles onto the grammatical roles registered in the pronominal clitics. In Tiwa and Towa, (a) most transitive verbs have morphologically distinct active and passive stems; (b) pronominal clitics occurring on passive verbs normally also occur with non-derived intransitive verbs; and (c) the agentive NP in a passive clause is case-

marked. The S. Tiwa (4b) and Towa (4d) examples illustrate the morphosyntax of “passives” of simple transitives, in which agents are case-marked, verbs have passive morphology, and the clitics are simple intransitives. Simple active transitive clauses can be compared in (4a) and (4c). Each active and passive clause represents the only construction possible for the particular predication; the passives are thus “forced” in Rosen’s (1990) terms.

(4) S. Tiwa (Isleta)

- | | | |
|----------|--|----------------|
| a. act. | sian-ide ti-mu-ban
(man-sg 1sgA:basP-see-pst) | I saw the man |
| b. pass. | sian-ide-ba te-mu-če-ban
(man-sg-agt 1sg.intr-see-pass-pst) | the man saw me |

Towa

- | | | |
|----------|--|--------------------|
| c. act. | φǎlá tà-φôtè
(bear 1sgA:basP-chase.pf) | I chased the bear |
| d. pass. | ní: φǎlá-tǎ ì-φôtǎ
(me bear-agt 2sg.intr-chase.pass.pf) | the bear chased me |

Passives of ditransitive clauses in (5b) and (5d) show the same agent marking and verb morphology but draw their pronominal clitics from the intransitive dative set, which formally indexes a Dative and a Patient but no Agent (see section 5 for discussion of these labels in KT). Note that (5d), the Towa passive of a ditransitive, is identical to (3b) above. For a third person Agent and a first person Dative, there is no other option.

(5) S. Tiwa (Isleta)

- | | | |
|----------|---|-------------------------|
| a. act. | sian-ide ta-x ^w ian-wia-ban
(man-sg 1sgA:3sgD:sgP-dog-give-pst) | I gave the man the dog |
| b. pass. | in-x ^w ian-wia-če-ban sian-ide-ba
(1sgD:sgP-dog-give-pass-pst man-sg-agt) | the man gave me the dog |

Towa

- | | | |
|----------|---|-------------------|
| c. act. | ní: nǎ: délǐ tǎ-tǎlé
(I that.one chicken 1sgA:3sgD:basP-eat.pf) | I ate his chicken |
| d. pass. | ní: nǎ:-tǎ délǐ ì-tǎlé
(I that.one-agt chicken 1sgD:sgP-eat.pass.pf) | he ate my chicken |

Comparable expressions in the non-passivizing languages Tewa and Kiowa (6), are (a) consistently active and transitive and (b) do not substitute a set of pronominal clitics of reduced valency. On the case-marking of agent nominals, Kiowa differs from all Tanoan languages in having no marking. Tewa marks agents, but the distribution differs from that of Tiwa and Towa (see section 7). To be clear, for Tewa and Kiowa as for the passives in Tiwa and Towa, there is but one option.

4. **Direction and inverse person.** The constraints enumerated in the preceding section conform strikingly to the empathy (or animacy) hierarchy characteristic of languages with a direct/inverse system for verb agreement or case marking. The direct/inverse type is well known in Algonquian languages, but DeLancey's (1981) explanations for split ergativity have made it clear that such systems are more widespread than previously recognized. Whistler (1985), in a detailed examination of inversion in Nootkan, was the first to suggest that the Tanoan languages could be analyzed in terms of direction rather than voice. More recently, reports in Givón (1994) have revealed hitherto unidentified direction systems, both in the Americas and elsewhere.

In a typical direction system, the person showing agreement on the verb depends on its position in the now well-established empathy hierarchy (SAP > 3rd pronouns > human > animate > natural force > inanimate). DeLancey (1981) argues that a principle fundamentally different from that of voice is involved in direction systems. Cast in cognitive terms, direction has to do with the match between the natural viewpoint, that is, the perspective from which the speaker represents an event, and natural attention flow, the starting point of the event, which is normally the agent in transitive clauses. When the two coincide, that is, when the agent (starting point) is also an SAP (viewpoint), agreement and case marking are direct. When the two do not coincide, e.g. when the agent (starting point) is a non-SAP (viewpoint), the construction is inverse.

In linguistic terms, direct is unmarked. Inverse, however, usually requires some special morphosyntax. In particular, agreement is with the participant ranking highest on the empathy hierarchy regardless of semantic role; case-marking is typically on the non-SAP transitive agent (or ergative). A further key distinction between passive voice and inverse is that inverse constructions remain formally transitive.

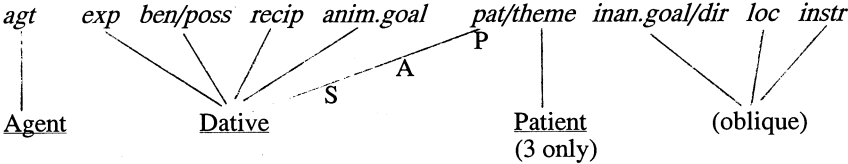
A reconsideration of KT passives as inverse constructions has important implications for earlier historical stages and for understanding how Tiwa and Towa appear to differ so dramatically from Tewa and Kiowa. In "passivizing" Tiwa and Towa, agreement quite consistently reflects the empathy hierarchy, registering 2 > 1 > 3 independent of case role (see examples in (14)). The cutoff for case marking falls at the most common cross-linguistic point setting off SAP from everything else. Where these languages diverge from the direct/inverse norm is in having intransitive verbs in clauses with inverse agreement.

The evidence for a direction system in the languages that do not exhibit the erstwhile passive, Tewa and Kiowa, is clear concerning agreement and transitive verb morphology but equivocal on case-marking.

5. **Agreement.** In order to establish whether agreement in the fused KT clitics reflect the principles of a direction system, we must be clear about what categories are relevant and how they can be identified (9). Formally, there are three grammatical roles which can be registered in KT pronominal clitics (in addition to the sole participant in an intransitive clause). (1) The Agent of transitive or ditransitive verbs is animate (or personified inanimate) and reflects the animate number categories singular, dual and plural. (2) The Dative is also a specifically animate category which subsumes all the non-agentive animate roles in clauses with at least two arguments (possessors, recipients, beneficiaries, and experiencers). When number is relevant, the Dative also reflects the animate number distinctions

singular, dual and plural. (3) The Patient is a strictly third person category which is indeterminate with respect to animacy and which distinguishes the classificatory number classes of KT (singular, dual, inanimate plural and inverse number [not person]).

(9) Mapping of semantic roles to agreement categories



The initial consonant in the clitic indexes one of the two animate categories, Agent or Dative, for person and number. The remaining elements encode in complex and less well understood ways the identity of the other animate argument and the number of the Patient. The most important point is that even though the English translation of a transitive clause might contain two animate participants which would normally be the semantic agent and patient, in KT the animate non-agent is formally a Dative. Failure to pay attention to this distinction results in all manner of unnecessary confusion.

The general template for the agreement clitics as well as the cognate status of at least the initial consonant is illustrated in (10) with a first person singular Agent and a third singular. The left-most element in the prefix is t in Tiwa and Towa, d in Tewa and Kiowa, tentatively reconstructed *d ‘first person singular.’ A comparison of the Towa and Kiowa clitics, where mergers have not eliminated some of the patient numbers, reveals the very close agreement in several features which can be found in other languages as well. These include nasal for dual number, a final dental (*l in Towa, *d in Kiowa, n in Tewa) for non-singular Patient, and vowels reflecting different numbers. The reconstructibility of the clitic system is not in doubt, even if many of the details remain tentative for the moment.

(10)		Is	Towa	RGT	Kiowa (*d)
1sgAgt:	sgP	ti	tà	dó	gyà
	duP		tj-l		nèn
	pIP	bi	tì-l		gyàt
	invP	te	tè		dé

In simple transitive clauses with two SAP’s, the the leftmost position in the clitic registers one of the SAP’s, but the languages differ as to which one, depending on the number of the Agent and Dative (patient). In (11), when the Dative is second person dual, all languages index the Dative, but when the Agent and Dative are both singular, Tiwa (Ta and Is) and Towa index the second person Dative (a labial), but Tewa and Kiowa index the first person Agent (Tewa d).

(11)	I/we saw you-du			you-sg saw me	
Ta	mòpén-	mù	mây-	mù	
Is	men-	mu-ban	bey-	mu-ban	
To	mà-	mí	bè-	mí	
Te	wân-	mû?	dí-	mû?	
Ki	mó-	bô:	é-	bô:	

Ditransitive clauses, illustrated in (12-13), again index the 2nd singular Dative (k/g) in the initial consonant. The third argument of the ditransitive clause is the obligatorily third person Patient.

(12)		Ta	Is	To	RGT	Ki
1Agt:2sgDat:sgP		kô	ka	kâ	wín	gyá
duP						nén
pIP		kôw	kow			yán
invP		kôm	kam			gó

- (13) To a. ní: íwá bélé kâ-há
(I you bread 1sgA:sgP:2sgD-bake.pf)
I baked some bread for you.
- Ki b. cê: gyá-ô:
(horse 1sgA:sgP:2sgD-give.pf)
I gave you a horse.

6. Partial reconstruction of pronominal clitics. Tentative reconstructions of the initial segment, *d 'first person', *g 'second person singular', *b 'second person non-singular' and *ø 'third person' are quite solid. There seems to be a preference for second person marking across the family, implying an expansion of the SAP portion of the empathy hierarchy as 2 > 1 > 3, especially when the participants are non-singular. Bulleted examples are those in which the initial consonant registers the Dative.

- (14) Reconstructed person (AGT or DAT) morphemes

*d 1st person singular

	Taos	Isleta	Towa	RGT	Kiowa
1sg.reflex	tô	te	tî-L	dé:	dè
1sgA:sgP	tî	ti	tâ	dó	gya <*d
1sgA:3sgD:P	tô	ta	tâ	dôn	
• 2,3sg:1D:P				dín	né

*g 2nd person singular

2sgD:P	kô	ka	kâ		gyá
• 1A:2sgD:P	kô	ka		gân	gyá <*g

*b 2nd person non-singular

2du.intr	mòn	mén	mà-L		mà
2pl.intr	mò	ma	bà		bà
2plA:P	mó	má	bà	bìn	bá
• 1A:2plD:P	mòpí	ma	bà	wê:	bó
2A:1D:P	môm	men	bàè		bâ:

*ø 3rd person

3sg.intr	ø	ø	ø	(nà)	ø
3sgA:sgP	ø	ø	ø	(ì)	ø
• 2,3sg:3sgD:P	ò	a	à	ó:	á
3du.intr	òn	in	ì-L		ẹ

The extremely close agreement in clitics and the reconstructibility of the initial consonant is evident from the preceding examples. The bulleted cases further support the hypothesis explored here that agreement was based on a direction system, in which the position of person on the empathy hierarchy predicts agreement independent of case role. Given such fundamental congruence in agreement, it should be possible to find the paths that lead to both the Tiwa/Towa and Tewa/Kiowa synchronic patterns. Two observations suggest a possible scenario for the divergence. First, in Kiowa there is no distinct intransitive dative paradigm; the clitics registering a Dative occur in both intransitive and ditransitive clauses. Examples with intransitive verbs (2c) and with a transitive verb (3c), both registering a first person Dative, are repeated here for comparison.

(15) = (2c), (3c)

(2c)	Ki	yā-p ^h átkyá ((2,3sgA):1sgD:plP-finish.pf) kút yā-dó: (books (2,3sgA):1sgD:plP-be)	I have finished. They are <u>my</u> books.
(3c)	Ki	kút yā-t ^h ón (books (2,3sgA):1sgD:plP-find.pf)	He found <u>my</u> books.

The second observation is that in Tiwa and Towa a fair number of clitics in the ditransitive paradigm are identical to those in the intransitive dative paradigm. If we were to ignore case marking and so-called passive verb morphology in Towa, we find exactly the distribution occurring in Kiowa of clitics registering a first person Dative, repeating for comparison (2b) and (3b).

(16) = (2b), (3b)

(2b)	To	té:dè kyā ì-vé:tāè (shirt perf 1sgD:sgP-fade.pf) kyā ì-nóʔó (perf 1sgD:sgP-finish.pf)	<u>My</u> shirt faded. I have finished.
(3b)	To	ní: nāè:-tāè délī ì-t'él'āè (1 that-agt chicken 1sgD:sgP-eat.pass.pf)	He ate <u>my</u> chicken.

A sampling of these isomorphisms is shown in (17) with the multiple glosses listed together on the left. In other words, the Taos clitic *kó* (or *Is ka*, *To kà*, *Ki gyá*) occurs in a ditransitive clause with a first person Agent and second person Dative plus Patient (e.g., I gave you a dog) as well as in an intransitive clause with a second person Dative plus Patient (e.g., your dog is sick). Each set in (17) illustrates both the identity of clitics across paradigms and the cognate status of at least the initial consonant. The check indicates that within Tiwa only that language uses that clitic for an intransitive dative.

(17) Isomorphisms in ditransitive and dative intransitive SAP clitics

		Taos	Isleta	Towa	Kiowa
a.	1A:2sgD:(P) 2sgD:(P)	<i>kó</i>	<i>ka</i>	<i>kà</i>	<i>gyá</i>
b.	1A:2duD:(P) 2sg/duA:3duD: 2duD:(P)	<i>mòpén-</i>	<i>mim</i> ✓	<i>mà</i>	<i>mó</i>
c.	1A:2plD:(P) 2plA:3D:(P) 2plD:(P)	<i>mòpí-</i>	<i>mam</i> (<i>mim</i>) ✓	<i>bà</i>	<i>bó</i>
d.	2(pl)A:1sgD:(P) 2plD:(P)	<i>mò-</i> ✓	<i>ben/men</i>	<i>bæ</i>	
e.	2sgA:3sgD:(P) 3sgA:3sgD:(P) 3sgD:(P)	<i>ò</i>	<i>a</i>	<i>à</i>	<i>á</i>

By virtue of the hierarchy based principles of agreement in a direction system, whenever a SAP was a Dative in a ditransitive clause, there was a good likelihood that the resulting clitic would be identical to a corresponding Dative- indexing intransitive dative clitic. A plausible scenario is that this formal identity led speakers to interpret such a ditransitive clitic as one indexing only a Dative and a Patient. In that case, the clause was reanalyzed as intransitive. The subsequent recruiting of intransitive verb morphology and case-marked agents would then bring the surface syntax into line with the reanalyzed intransitivity. Of course, the assumption is that speakers “know” the meanings of initial b, d, and g, that these clitic elements have semantic value and are not just meaningless contrastive units.

7. Agentive Case. Comparison of the agentive (and instrumental) suffix reveals that it is not cognate across subgroups (18). Given differences in distribution as well as form, it is plausible to argue that these suffixes developed independently albeit along a universal trajectory, in which something like “initial cause” is the common thread, as discussed by DeLancey and others. Tiwa *-pa/-ba*, Towa *-tæ:*, and Tewa *-di* should probably be considered to have developed somewhat independently of each other.

(18)		T	I	W	A	T O W A	T E W A	K I O W A
		Ta	Pi		Is	To	Te	Ki
	agent	---	-pa		-ba	-tɛ̃:	-di	---
	instrum	-ba	-pa		-ba	-tɛ̃:	-di	-dò

Considered in light of the non-passive analysis developed here, the frequencies associated with the direct/inverse opposition in connected discourse are borne out in the Tanoan languages. A small sample count of the case-marked NP's in so-called "passive" clauses reveals that they do not correspond to the frequencies reported for passives in narrative material (e.g., Givón 1979:59 for English) where agentless passives are by far the most frequent. Instead, in two Picuris narrative texts (Harrington and Roberts 1928) with specific and referential participants, the case-marked Agent is in fact more frequently present. The total number of passive clauses is small (barely 3%), but of those clauses, fully 80% have an overt case-marked agent NP.

(19)		n clauses	n passives	n NP-agt	% NP-agt
	Cricket & Coyote	112	9	8	
	Wolf & Woman	40	6	4	
	Total:	512	15	12	80%

In Tewa, on the other hand, the distribution of -di is unlike that of -pa for Isleta or of -tɛ̃: for Towa. R. Speirs (n.d.) has described the distribution of NP-di in Rio Grande Tewa as obligatory for all persons, including first and second person independent pronouns (prohibited in Tiwa and Towa), whenever there is both an Agent and an animate Patient or Dative. In other words, agent marking cooccurs with pronominal clitics identified comparatively as those which in general register the Dative in the initial consonant of the clitic, a pattern that coincides in part with the distribution in Tiwa and Towa. Thus, (20a-b) illustrate NP-di agents with clitics indexing first person Agent or Dative. In addition, -di marks agents of simple transitive clauses with third person patients if the patient is animate (20c).

(20) Obligatory NP-di (RG Tewa)

- | | | |
|----|---|-----------------------|
| a. | nà:-di ì sèn dó-mû? | I saw the man. |
| | (I-agt def man 1sgA:P-see.pf) | |
| b. | ì sèn-di nà: dí-mû? | the man saw me |
| | (def man-agt I 2,3A:1D-see.pf) | |
| c. | ì sèn-di ì èʔnú ó:-mû? | 'the man saw the boy' |
| | (def man-agt def boy 3A:3sg.anP-see.pf) | |

The suffix -di is prohibited, however, when the patient of a simple transitive clause is inanimate (21a) or if a third person Agent and third person Patient are indexed by ì-, the simple transitive 3Agt:Pat clitic (21b-c). The picture is complex and shows some variability across speakers, but it is clearly dependent both on animacy and the role (Dative or Patient) of the person indexed in the prefix.

(21) Prohibited NP-di (RG Tewa)

- | | | |
|----|------------------------------------|----------------------|
| a. | nà: i k'ù: dó-mû? | I saw the rock |
| | (I def rock 1sgA:P-see.pf) | |
| b. | ì sèn ì è'nú ì-mû? | the man saw the boy |
| | (def man def boy 3sgA:sgP-see.pf) | |
| c. | ì sèn ì k'ù: ì-mû? | the man saw the rock |
| | (def man def rock 3sgA:sgP-see.pf) | |

8. Verb derivation. The existence of alternating active/transitive and passive/intransitive forms for nearly all transitive verbs in Tiwa and Towa would seem to be strong support for an earlier stage of passives in proto-KT. Most work on Tiwa has identified the passive form as stem plus CV suffix, allomorphs being only partially phonologically conditioned. Under this analysis, it is difficult to see any analogs to the passive suffix in the other subgroups. However, a comparison of all verbal forms reveals that (a) historically speaking, the suffix should be considered to consist of only the vowel and (b) the vocalic suffix appears to be cognate across the subgroups. Examples of cognate verbs (22) establish the comparability of the stem-internal C, those that have been treated as suffix-initial in Tiwa. The leftmost form is the perfective (active); following the slash, only the Isleta and Towa forms are passive.

(22)	MAKE, FIX	LOOK, SEE	FEED, GIVE	BREAK
Ta	pà / pàyì (neg)	mù / mùmi (neg)	méki	t ^h î / t ^h îwò (neg)
Is	pe / peče	mu / muče	miki / mike	
To	pá: / pâyē	mí / míwē	mâ / mâsæ	šó / šówē
Te	pà:	mû? / pùwæ (abl)	máegi	θá:
K	---	bò: / bô:mô: (neg)	*má:gè	t ^h êm

Looking for plausible analogs to a vocalic suffix with derivational function, we find in Kiowa a large class of disyllabic stems which show (along with tonal changes) vowel alternations -ò 'perfective transitive' and -á 'perfective intransitive', illustrated in (23a). In Towa (23b), we also see non-derived intransitive verbs in which the vowels of the perfective are identical to the suffix of passive perfectives. The case is clinched when Frantz (1995) says that in S. Tiwa the inchoatives of some transitive stems are the same as the passive of those stems. (24) lists the intransitive suffixes, for which a low front vowel would be the plausible reconstruction.

(23) Verb derivation

Ki	a.	dé-hâ:pò	[trans]	I picked/raised it up
		è-há:pá	[intr]	it rose up
To	b.	ì-wòyē	[intr]	I climbed (cf. make.pass)
		è-vétæ	[intr]	it faded (cf. give.pass)

(24) Intransitive verbal suffix

Ta	Pi	Is	To	Ki
-a	-ia	-e	-æ	*-ia

Taken by itself, the diachronic development of the verb morphology could be interpreted in the way some would argue as passive originally and broadening function to intransitive. But taken together with the rest of the picture, especially the pronominal clitics, the evidence favors an original intransitive function which was recruited to mark the inverse constructions that were reinterpreted as having reduced valency.

9. Conclusion. First, to summarize the diachronic stages, there is ample evidence that proto-KT (or a slightly earlier stage) was a direction system, preferentially indexing participants constrained by an empathy hierarchy of the form $2 > 1 > 3$. Because of a relatively large number of isomorphisms across ditransitive and intransitive dative paradigms, possibly encouraged by the loss of some patient number distinctions, speakers reanalyzed transitive clauses with Dative indexing clitics as intransitive. Recruiting of intransitive verb morphology in Tiwa and Towa for these reanalyzed verbs created a more transparent relationship between the underlying semantics and the surface morphosyntax. Finally, once the apparent intransitive status of former constructions was reinforced (by verb morphology and case-marked agents), Tiwa and Towa extended the principle to simple transitive clauses as well, so that 3 on 1 and 3 on 2 were obligatorily encoded as intransitive too. The result synchronically is a morphosyntax that looks passive-like by European standards but which clearly retains the signs of its origin as a direction system.

The pitfalls in comparative morphosyntax are numerous and vexing (Campbell and Mithun 1980). Not the least of the dangers in studying less well described languages is the trap of existing synchronic analyses. Even when the research on which comparative reconstruction is based has been careful and thorough, a different theoretical lens may produce a quite different set of "facts" needing explanation. Two such cases characterize attempts to discern the Kiowa-Tanoan past. The more general one was a central focus of this paper, namely the reexamination of the traditional analysis of passives in light of more recent functionally and cognitively based treatments of split ergativity. The other is embedded in the analysis of the KT clitics. Only by recognizing the fundamental distinction in KT between third person Patient versus the strictly animate Dative is it possible to see the logic of the system. The reason for the gap in types of passives (raised in section 3) is now clear: there is no passive counterpart to "Calvin and Associates designed the building" because the English direct object (the building) is a Patient in KT terms but the origin of so-called passives lies in Dative agreement. Even those cases of (optional) 3 on 3 passives in Tiwa and Towa show third person Dative agreement.

Avoiding the pitfalls usually brings progress, but progress is also made when both formal and functional analysis are brought to bear on comparative questions. Whether this historical scenario proves correct in all details or not, it rests on the traditional comparative analysis of morphemes, with both phonological and semantic content, as much as it depends on understanding the distribution and

functions of the morphemes in linguistic contexts.

Notes

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