

# From motion to co-location: Source/goal ambiguity in Southeastern Pomo

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## 1 Motion and Locative Relations

- Motion and location are characterized by (at least) an image-schematic frame and temporal profiling.
- For motion-related events, the central schema is source-path-goal (SPG).
- Some static situations, such as those involving end-state focus, may evoke schemas normally related only to motion events.
- Sources, paths, and goals may themselves be characterized image-schematically (bounded regions may be sources, twisty roads may be paths)

Two schemas are central for this discussion: source-path-goal (SPG) and co-location. At issue is the linguistic differentiation between sources, goals, and locations.

Sources and goals are subtypes of locations—they simply are embedded in a larger scene of motion. One might expect various combinations of marking patterns across languages, including:

1. Separate markers for sources, goals, and (non-motion-related) locations
2. A marker for goals and locations, and a separate one for sources
3. A marker for sources and locations, and a separate one for goals
4. A marker for goals and sources, and a separate one for locations
5. A single marker for all sorts of locations.

Such characterizations may hold across a language or simply for a type of image schematic relation. In English, *from* and *to* mark sources and goals, respectively. *At* marks locations and (some types of) goals (*shoot at the target*), as do several other prepositions (*in*, *under*, *over*).<sup>1</sup>

Cross-linguistically, source/goal ambiguity (strategies 4 and 5) is rare. It has been described in detail for Wan (Southeastern Mande; Nikitina, to appear) and Lahu (Tibeto-Burman) Matisoff, 1973, and suggested for several other languages (see Nikitina, to appear and citations therein).

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<sup>1</sup>But consider the seeming goal-marking use of *from* in “barrier verb” constructions, as in *keep them from the gate*; see Phipps, 2005 for discussion.

I will discuss a locative system that uses strategy 5—but has seemingly only recently begun to do so.

## 2 A Profile of Southeastern Pomo

Southeastern Pomo (SEP) is a Pomoan language spoken in Northern California. It is severely endangered, with only a couple surviving native speakers.

The data here are primarily from a dialect of SEP, Elem Pomo, also called *Xai Tsnoo*. The primary sources are:<sup>2</sup>

- Field notes from a year and a half working with a consultant in elicitation sessions, and in “naturalistic” narrative contexts.
- Transcriptions of narratives from speakers of Elem and other Southeastern Pomo dialects, collected by Abraham Halpern in the 1930s and further processed by Julius Moshinsky in the 1960s (Crane, 2007).

SEP is a head-final, polysynthetic language. Unmarked word order is generally SOXV, (Moshinsky, 1974:94–7). Some typical sentences illustrating the basic syntax are given in (1).<sup>3</sup>

- (1) a. *?a mkayin kto nas kwal-ya*  
 1SG sweet bread also eat-PERF  
 ‘I ate cake too.’ [22feb07\_ LK3]
- b. *bxe Xle Xma q’wak-iya*  
 deer tree inside run-PERF  
 ‘A deer ran into the woods.’ [22feb07\_ LK6]
- c. *wi kwik with bwelts’t-q-ath*  
 1SG.POSS child 1SG.OBJ angry-CAUS-IMPF  
 ‘My kids made me angry.’ [1mar07\_ LK7]

The verbal morphology can be quite elaborate. In addition to a verbal root there are several prefix classes indicating direction, instruments, manner, etc., and several suffix classes, generally but not exclusively indicating tense/aspect/mood.

<sup>2</sup>Fieldwork data collected by the author and colleagues is cited as a date followed by “LK.” Data from Halpern’s texts is cited as H followed by a text number (Roman numeral), page number, and line number corresponding to the collection of Halpern’s texts typewritten by Moshinsky.

<sup>3</sup>In examples from published sources, the gloss is abbreviated but not significantly altered unless otherwise noted. Moshinsky’s (1974) suffixes are omitted (e.g., *q<sub>x</sub>* is simply *q*). Orthographical convention generally follows the IPA with the following changes: *X* = [χ], *th* = [θ], *ch* = [tʃ], *y* = [j], ‘ = glottalization/ejective. Inter-linear gloss abbreviations are as follows: CAUS = causative, FGR = figure, FOC = focus FPS = final position suffix, IMPF = imperfective, IMPR = imperative, OBJ = object (marker), POSS = possessive, PRT = particle, SUBJ = subject, SG/DU/PL = singular/dual/plural, 1/2/3 = first/second/third person.

For current purposes we will attend to locative satellites (Talmy, 2000a, 2000b). Locative satellites are adverbs, adpositions, and other extra-verbal material that marks participants in a motion event, supplementing or extending any information that may be present in the root. It is in the satellite system where the Pomo's typologically rare system emerges.

### 3 SEP Locative Postpositions

We are interested primarily in three locative postpositions:<sup>4</sup>

1. *wa* 'from, off of'
2. *Xma* 'inside'
3. *q'an* 'at, to'

#### 3.1 *wa*

*wa* marks sources of motion. Unlike the other postpositions to be discussed, it cannot be used predicatively. It is the only postposition that Moshinsky (1974) glosses with a 'source' meaning.

- (2) a. *?uyi math wa ?q'oym-ath*  
 3SG.M ground from pick.up-IMPF  
 'he picked it off the earth' [JM, 19650716, p83]
- b. *qat ke k?ol wayit xya Xma wa*  
 and bees come.out head inside from  
 And bees come out from inside his head.
- c. *mi balinkwi ke hayu kno win wa chlak-ith*  
 this boy and dog mountain on from fall-IMPF  
 'The boy and dog fell from the mountain.' [Frog2, 15mar07\_ LK3]

From (2b-2c) we see that *wa* can take as its argument not just noun phrases but (locative) PPs as well. In this it patterns with English *from*.

It is clear that *wa* has a much more limited distribution than it had several generations ago. Our current consultant rejects *wa* appearing with any postposition other than *win*, and its appearances with a bare NP are rare. *\*kno wa* 'from the hill', *\*xlemo Xma wa* 'from out of the tree-hole', and *\*q'an wa* 'from' have been rejected, though similar phrases are attested in texts collected half a century ago. Whether the modern pattern is due to syntactic, semantic, or other constraints has yet to be determined.

<sup>4</sup>For a fuller list, consult Moshinsky, 1974:98

### 3.2 *Xma*

*Xma*, used predicatively, means roughly ‘inside of’. When used as a locative satellite, it can mark the source argument of verbs of motion.

- (3) a. *fut’ol mo Xma*  
 ball hole inside  
 ‘The ball is in the hole.’ [12oct06\_ LK5]  
 b. *?ui baaktsa Xma kuh-o-ya*  
 3SG.M bathroom inside exit-go-PERF  
 ‘He came out of the bathroom.’ [30nov06\_ LK]

The verb prefix *ku(h)-* specifically selects for a source argument (it is one of Nikitina’s “source verbs”), but *Xma* can mark sources when not specifically selected by a source verb.

- (4) a. *kikt’a xle xma chlak-ith*  
 leaf tree inside fall-IMPF  
 ‘A leaf fell from [inside] the tree.’ [10may07\_ LK7]<sup>5</sup>  
 b. *?apal teak shokdam xma chlak-ith*  
 apple 2SG.POSS basket inside fall-IMPF  
 ‘An apple landed in your basket.’ [10may07\_ LK7]

*Xma* seems to have a rather general meaning. This general meaning gives rise to a source/goal ambiguity. With appropriate verbs, what Nikitina has termed “flexible-role” verbs (*fall, exit, take, come, place*), *Xma* may mark either the source or goal of motion, with extralinguistic context helping determine the ultimate interpretation.

Flexible role verbs—and only such verbs—tolerate source/goal ambiguity in Wan. They also show a systematic asymmetry between plausible sources and goals: for instance, likely sources of falling and taking are unlikely goals. For a verb like *chlak-* ‘fall’, our world knowledge tells us what reasonable sources and goals are, so the ambiguity in (4a-4b) is expected given Wan.

But, in SEP—but not in Wan—even manner-of-motion verbs (*run, walk, swim, etc.*) are flexible role assigners (5a-5b).<sup>6</sup>

- (5) a. *?omet xle Xma k’wak-ya*  
 3SG.F tree inside run-PERF  
 ‘She ran out of the forest.’ [11nov06\_ LK2]  
 b. *bxe Xle Xma k’wak-ya*  
 deer tree inside run-PERF  
 ‘The deer ran into the forest.’ [22feb06\_ LK6]

<sup>5</sup>In most contexts [x] and [χ] are in free variation.

<sup>6</sup>Note that this ambiguity does not arise in sentences like (3a), which cannot mean ‘the ball is out from being in the hole’.

Taking a step back and looking in general at ways in which containment is expressed, we can also note the pattern in Table 1.

	co-location	source	goal
1930–60s	<i>Xma</i> + verb	<i>Xma wa</i>	<i>Xma</i>
Now	<i>Xma</i>	<i>Xma</i>	<i>Xma</i>

Table 1: Expressing containment then and now

Co-location and source meanings are attested for *Xma* in the earlier period, but with qualifications. The co-locational meaning is always governed by a static location verb (*float*, *live*, etc.) The source meaning could also be expressed with the (now impossible) combination *xma wa*.

### 3.3 *q'an*

*q'an* (variants *kan* and *k'an*) exhibits perhaps the most “interesting” set of meanings. Below it is glossed ‘QAN’.

Predicatively, with a meaning of co-location:

- (6) *ula theaq qat q'an*  
 spider 2SG.POSS back QAN  
 ‘There’s a spider on your back.’ [15feb07\_ LK5]

As a marker of the goal of motion:

- (7) a. *?ui tsawi baaktsa q'an hwatho-th*  
 that man bathroom QAN enter-IMPF  
 ‘That man went into the bathroom.’ [2feb07\_ LK]  
 b. *?omet ?omet-baq m?e q'an haikam-ya*  
 3SG.F 3SG.F-POSS father QAN swim-PERF  
 ‘She swam to her father.’ [11nov06\_ LK2]  
 c. *?a kwik q'an t'aiki-ya*  
 1SG child QAN scold-PERF  
 ‘I scolded my kids.’ [LK]

As a marker of the goal of motion with end-state focus.

- (8) *?ui Charles q'an kma-th*  
 3SG.M C. QAN sit-PERF  
 ‘He is [sitting] next to Charles.’ [21nov06\_ LK7]

As a marker of the source of motion.

- (9) a. *papel lamisa q'an chlak-ya*  
 book table QAN fall-PERF  
 ‘The book fell from the table.’ [21nov06\_ LK]
- b. *wi xela wi qat q'an ?ula thiltsi-ya*  
 1SG.POSS friend 1SG.POSS back QAN spider take-PERF  
 ‘My friend took a spider off of my back.’ [15feb07\_ LK5, 08m06s]
- c. *kikt'a xle k'an chlak-ith*  
 leaf tree QAN fall-IMPF  
 ‘Leaves are falling from the trees.’ [12apr07\_ LK2]
- d. *?a x?ano Lower Lake qan S.F. he ?awda city qan wal-d-ith*  
 1SG tomorrow L.L. QAN S.F. or some city QAN walk-FUT-IMPF  
 ‘Tomorrow I will go from Lower Lake to San Francisco or some city.’ [LK]

As a marker of the ground in a “hanging” scene.

- (10) a. *kikt'a xle(-bu) k'an chim-ath*  
 leaf tree(-finger) QAN hang-IMPF  
 ‘The leaves are hanging on the branches.’ [12apr07\_ LK2]
- b. *huja t'o q'an chim-ath*  
 bead necklace QAN hang-IMPF  
 ‘There is a bead on the necklace.’ [5oct06\_ LK9]
- c. *ma ba q'a q'an ?awda sqeme ?ol wi Xle yowwal ?altaq-a*  
 2SG FOC foot QAN something hang it 1SG.POSS tree under toss-IMPR  
 ‘There is something hanging on your foot, toss it under my tree.’ [HVII, 61(15)]
- d. *?tan q'an ?lumando huyya, q'a q'an ?lumando huyya*  
 hand QAN put beads foot QAN put beads  
 ‘She put beads around her hands, she put beads on her foot/ankle.’ [HVII, 56(2)]
- e. *xman-k'an-chim*  
 foot-QAN-hang  
 ‘[thing that] hangs on a foot’, ‘shoe’ [28sep06\_ LK]

Though the data is currently sparse, the following pattern seems to hold.

	co-location	goal	end-state	source	hanging
1930–60s	various (not <i>q'an</i> )	<i>q'an</i>	?	biclausal	<i>q'an</i>
Now	<i>q'an</i>	<i>q'an</i>	<i>q'an</i>	<i>q'an</i>	<i>q'an</i>

Table 2: Expressing simple co-location and SPG meaning then and now

In the 1930s narratives, *q'an* had two clear uses: goal-marking, and location-marking for scenes of “hanging” (mostly beaded items strung around body parts, and sometimes beads

lined up on a string). Source-marking seems to have been done mostly biclausally, with the second clause beginning with *mila ke* ‘from there’.<sup>7</sup>

Two questions present themselves:

1. How did *q’an* at one point mark goals and locations, but the latter only for hanging scenes?
2. How did *q’an* come to have the wide distribution it does today?

I will suggest one possibility for the first question:

- We may first note that *q’an* (in its goal-marking sense) deals with simple translational motion, not involving any sort of boundary crossing. What is profiled is the motion from one location to another.
- In general, beads on strings or strings on the body are there due to a process, and so their existence may have been saliently the end-state of such a process. *q’an* then may have begun to denote existence at that location while metonymically evokes this entire motion scene. We would predict that *q’an* was first be used for bead/string-*placing* events, and only later bead-*existence* situations.
- Once such a static scene is describable with *q’an*, several possible extensions are possible, such as other end-states that did not involve translational motion, or even other simple co-locational relations without any need to evoke a large scene of motion.

As for the second question, we may consider the gradual narrowing distribution of *wa*. It is unclear why *wa* has such limited use in modern SEP, but given that it does, it may be that *q’an*, already rather bleached in meaning, was recruited to fill that gap. Whether this change was “ripe” to happen, or was perhaps edged on by the context of usage is an interesting question (see Appendix).

## 4 Wrapping up

A wider view: Does any similar situation hold in other Pomoan languages?

Unfortunately, not much attention has been given to postpositions in these languages. Northeastern and Eastern Pomo have comparable sets of postpositions, and have apparent cognates for *q’an* and *Xma*, and possibly the others, with meanings similar to those given in Moshinsky, 1974. Nothing resembling the current system seems to exist.

The dialectology of (Southeastern) Pomo is also not a fully understood—and it may be that the pattern discussed here is not in fact radically new.

Most questions remain unanswered. In particular:

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<sup>7</sup>Several variations exist, including just *mila* and also *meya ke*. It is unclear from context if these do not also have a temporal significance, e.g., ‘from then (on)’

1. How exactly did *q'an* come to be used for hanging descriptions, and why for those sorts of scenes and not others?
2. Why is *wa* now dispreferred?
3. If it is the case that *q'an* was recruited to fill the space vacated by *wa*, did it happen all at once or verb class by verb class. We might expect, given its now-bleached meaning, *q'an* might have been limited to marking sources of Nikitina's flexible-role verbs, which entail rather different properties for sources and goals.

Ultimately one hopes that the answers to these questions lead to a better understanding of types of locative satellite meanings, and how systems of such satellites arise.

## A Potential external sources

This paper argues that the meaning changes seen in SE Pomo locative postpositions is due to purely language-internal processes—end-point focus metonymy and a sort of pressure from a semantic “paradigm.” Could there be equally well-motivated language-external sources of change?

### A.1 Language attrition

Not only is Elem Pomo highly endangered, our language consultant spent a significant portion of her life not speaking the language in any regular way. Only after becoming active in linguistic revitalization did she resume more everyday use of the language. Might this a cause of these changes?

Among the attested changes that accompany first language attrition is reduction in grammatical distinctions such case marking, as well as a shift from native to contact-language syntactic structures (Campbell & Muntzel, 1992; Dorian, 1993). One must first determine how to fit locative satellites into the grammatical system (are they more like case markers or more like little verbs with their own argument structure?) before SE Pomo can be fit to the typology of contact-induced change. While language contact and attrition cannot be ignored as causes, they do not immediately present explanations for, e.g., semantic broadening of *q'an* and *Xma*, or narrowing of *wa*.

### A.2 Context of use

Some, but not all of the data for this paper is taken from elicitation sessions. Most of the crucial data is also replicated in more natural(istic) contexts, such as elicited story narratives, but this may still be a cause of concern. Nearly all of the modern language data is from contexts where the addressee is (or may be construed to be) is not a speaker of Pomo, but

of English. To the extent that such contexts result in more English-like language, one may doubt the possibility of purely language-internal forces driving these changes.

English, however, does not show the source/goal ambiguity phenomena exhibited by modern Elem Pomo. Though there are some verbs or constructions where a given English preposition is used to mark a source, and yet *other* verbs where that same preposition marks a goal, there are no verb-preposition combinations that show the sort of ambiguity seen in Pomo (or Wan, or any of the other cited languages).

One area where English, and the elicitation context, may have affected data collection is in the area of narrative syntax. English allows chains of preposition phrases expressing various points along the path of motion. In SE Pomo this is much less common—clause chaining seems to be more natural.<sup>8</sup>

It may be possible that a motion event with source expressed (*he ran from the forest*) is most naturally rendered in SE Pomo with a multi-clausal structure. This is congruent with the seeming lack of a dedicated source marker, and also with the recruitment of a non-source-marking postposition (*q'an*) into that role. It is unclear the extent to which it could explain the systemwide changes in the postpositional system.

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<sup>8</sup>Here there is a question of whether this is part of the narrative grammar of SE Pomo, or due to language attrition. Further examination of the historical data may shed light on this issue.

Talmy, L. (2000b). *Towards a Cognitive Semantics, Vol. II: Typology and Process in Concept Structuring*. Cambridge: MIT Press.