A NOTE ON THE INTERACTION BETWEEN PREDICATE SEMANTICS AND LEXICAL SUFFIXES

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Introduction

In many Native American languages, body part terms have semantic extensions involving location. The semantic extensions addressed in this section rest on the back/front opposition characteristic of human and animal bodies. In Salishan languages the front/back opposition is expressed by two body part lexical suffixes that reconstruct to Proto-Salish *ikṅ/n BACK, and *əṅ/nk BELLY.

(1)	qsqs=ink-nt	"tickle somebody in the belly"	
	sratch=BELLY-TR	Okanagan	Mattina 1987-152
(2)	n-səp̓ə·əp̓=íkṅ	"Be hit on the back"	
	LOC-hit=BACK	Okanagan	Mattina 1987-182
(3)	n-c̓q̓=éneʔk	"get hit in the abdomen"	
	LOC-hit=BELLY	Thompson	Thompson 1996-70
(4)	n-c̓q̓=íkṅ	"get hit on the back"	
	LOC-hit=BACK	Thompson	Thompson 1996-70

The examples above come from Interior Salish and demonstrate the front/back opposition denoted by the suffixes. The suffixes in the above examples refer to the actual body parts and function as incorporated objects.

1.0   Locative extensions that develop from body part terms are determined in large part by the canonical orientation of the body parts in question. Orientation templates are defined by two well-known models described below.

1.1   In the anthropomorphic template, the most functional or most detailed side of an object is its "front" by analogy with the human body; its opposite side is its "back". (Vandeloise 1991:37) Such a model makes the following predictions:

BACK	>[BEHIND]
BELLY	>[FRONT]

(5)	ʔas=ank-s ta-apsuł-tx̌	"He was in front of the village."	
	LOC=BELLY-Poss DET- village	Bella Coola	Davis: 1980-218
(6)	kuł=ik-c ʔał ʔinu	"I am behind you."	
	surface=BACK-1sg.sb PP 2nd sg.	Bella Coola	Saunders: 1975-166

1.2   In the zoomorphic template, the horizontal plane defining an animal's back is the uppermost portion of its body. Thus the "top" of any object conceptualized within this template is referenced by the body part term

BACK. Its opposite side is denoted by BELLY, which in an animal represents that portion of the body that lies under or below the "back/top". The zoomorphic model makes the following predictions:

BACK	> [TOP]
BELLY	> [UNDER]

(7)	tsp=ik	"wipe the table, roof, top of piano"	
	wipe=BACK	Bella Coola	S. Newman: UNM archives
(8)	xci-c ʔux̌=nk	"I am going to push it down."	
	push-1Sg Sb go=BELLY	Bella Coola	Saunders: 1975-174
(9)	s-qʷe=ícən	"opening for a smoke hole" (i.e. on the roof)	
	LOC-hole=BACK	Musqueam	Suttles Dictionary (in prep.)
(10)	š-xʷ-qʷə=nəc	"hole in the bottom of anything"	
	LOC-hole=BELLY	Musqueam	Suttles Dictionary (in prep.)

Thus, depending on the orientation template selected, spatial extensions for the body part term BACK in Salish denote a location either on "top/surface" or "behind", and for BELLY a location either "in front" or "under".

2.0   However, the locative readings given to body part lexical suffixes are not exclusively determined by canonical orientation templates. We will argue in this section that the semantics of the predicates to which the lexical suffixes attach play an important role in determining the meaning of the suffixes. We will consider the following classes of predicates: those subcategorized for object shape, deictics, and motion predicates.

2.1   Predicates subcategorized for object shape generally involve activities transporting an inanimate object through space. With these predicates the lexical suffix refers to the end point of the object's motion, i.e. its final location.

Examples #13 and #14 below contain the predicates c "lay long objects" and cəq "set bulk". The difference in meaning exhibited by the suffix *əṅ/nk BELLY in these examples stems from the difference in canonical orientation of the body part. Conceptualization within the zoomorphic template yields "under", while conceptualization within an anthropomorphic frame yields "front".

(13)	n-c=éṅk-ṅ-s	"replace ties on railroad (lay pole under)"	
	LOC-lay long object=BELLY-3rd/3rd	Thompson	Thompson 1996-16
(14)	n-cq=éṅk-e-s	"set s.t. directly in front of s.o."	
	LOC-set bulk=BELLY-3rd/3rd	Thompson	Thompson 1996-16

In example #13 above, the end point referred to by the lexical suffix BELLY is the place underneath the railroad tracks, while in example #15 below, the end point is the flat surface that that impedes further movement.

(15)	n-cəq-p=íkṅ-ne	"I landed my boat (on a sandbar)"	
	LOC-set bulk-ASP=BACK-1sg/3rd.	Thompson	Thompson 1996-25

The following examples come from Spokane and extend the pattern already described. The predicates are respectively glossed as p̓n "set long objects lying", and pkʷ "pile round objects about". The shapes encoded in the predicates are translated as "logs" and "rocks" and have no overt morphological expression.

(16) č-ṗn=čṅ=élxʷ-n   "I placed logs in the yard"
SUF-set long ob. lying=BACK=HOUSE-1sg/3rd   Spokane Carlson: 1989-66

(17) č-pkʷ=čṅ=élxʷ-n   "I piled rocks all around the house"
SUF-pile rd. obj. about=BACK=HOUSE-1sg/3rd   Spokane Carlson: 1989-61

The combination BACK (=surface) plus HOUSE is probably lexicalized and means "space around the house". This space must be interpreted as a horizontal plane because these predicates require that the end point of the object's motion be a flat surface.

2.2 The predicates below are glossed variously as "upstream", "deictic", "opposite side", and "other, next"; however, we believe that this is a single morpheme meaning "away from the speaker". Here we will introduce a few other lexical suffixes in addition to BACK and BELLY. UPPER ARM and EAR have semantic extensions denoting a lateral end point, while FACE, like BELLY, denotes a space in front of the speaker. As adjuncts to this predicate, body-part lexical suffixes specify a direction with respect to the speaker.

(18) ti?yt=as   "facing up stream"
up stream= FACE   Musqueam   Suttles: Grammar Dictionary (in prep.)

(19) tə́?yt=əx̌ən   "upper end of a row of houses"
up stream= UPPER ARM   Musqueam   Suttles: Grammar #83

(20) s-taẏ=č-s ta lam?   "behind the house"
NOM-deictic=BACK Poss DET house   Squamish   Kuipers: 1967-285

(21) s-taẏ=č-s ta scəq   "behind the tree"
NOM-deictic=BACK Poss DET tree   Squamish   Kuipers: 1967-285

(22) s-te?-ci?=íkṅ   "the other side of a mountain"
NOM-other=BACK Thompson   Thompson: 1996-343

(23) s-te?-ci?=éni?   "on the other side of a mountain"
NOM-other=EAR   Thomson   Thompson: 1996-343

2.3 The Musqueam examples below contain the predicate "be there" and further illustrate this process. Example #24 is nominalized and refers to the back side of an entity. Example #25 has the middle suffix and is used as a motion verb. We should note at this point that the lexical suffix FACE, unlike the others we have discussed up to now, does not refer to an end point, but rather to an entire trajectory, which may be translated as "forward". In example #25 the motion is literal, while in example #26 the trajectory is the line of sight. Example #27 again involves literal motion, and the end point is denoted by the lexical suffix.

(24) s-nə?=ícən   "other side, that side"
NOM=be there = BACK   Musqueam   Suttles: Gr. #67

(25) na?=əs-əm   "go toward, head towards"
be there=FACE-MID   Musqueam   Suttles: Dictionary (in prep)

(26) na?=as   "look towards"
be there=FACE   Musqueam   Suttles: Dictionary (in prep)

(27) nə?=éx̌ən   "reach an end"
be there = UPPER ARM   Musqueam   Suttles: Grammar #84

2.4 As an adjunct to predicates describing physical descending motion, such as POUR, RAIN, SNOW, LIE, FALL, the lexical suffix BACK indicates a relational location, which is translated as "on".

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(28) ?u-k̉ʷ¹=íč-ed čəd   "I poured it on him."
ASP- pour=BACK TR suffix-1sg sb./ob.   Lushotseed   Hess:1976-376

(29) ?u-k̉ʷ¹=íč čəd   "It spilled on me."
ASP- spill=BACK 1sg sb./ob.   Lushotseed   Hess:1976-255

(30) ?u-qʷát=íč-čəd   "It snowed on me."
ASP-snow falling=BACK 1sg.sb/obj.   Lushootseed   Bates, Hess, Hilbert:1994-189

(31) ?u-qəlb=íč čəd   "I got caught in the rain." (It rained on me.)
ASP- rain=BACK 1sg sb./ob.   Lushootseed   Hess:1976-376

(32) ?u-dzáq̉=íč čəd   "A tree fell on me."
ASP-fall=BACK-1sg sb./ob.   Lushootseed   Bates, Hess, Hilbert:1994-189

2.5 The predicate *tx̌ʷ is a pan-Salish predicate whose meaning is rendered in translation by several English glosses. The most prevalent meaning seems to be "straight", in other words a trajectory.

(33) tux̌ʷ-adi?   "stretched, strung out"
(dir.?)=EAR   Lushotseed   Bates, Hess, Hilbert:1994-231

(34) tx̌ʷ=ús-əm   "to steer (a boat)"
straight=FACE-MID   Lillooet   van Eijk: 1987-63

In example #33 above, the lexical suffix EAR indicates the direction in which the stretching occurs, while in #34 FACE indicates the direction in which the boat is going.

With the lexical suffix BACK, which can have the meaning "middle" (as the spine is in the middle of the back) *tx̌ʷ seems to mean "precisely" or "exactly". This predicate lexical suffix combination denotes both "middle" and "center".

(36) n-təx̌ʷtx̌ʷ=ək   "be in the middle"
LOC-straight=BACK   Lillooet   van Eijk:1985-108

(37) n-təx̌ʷ=ikṅ-s e s-ṗaq̉-m   "center of flower"
LOC-straight=BACK Poss.   Thompson   Thompson:1996-363
Dir. Comp. NOM-flower

Conclusion

In this paper we have shown some ways in which the semantics of predicates contribute to the semantic extensions of lexical suffixes. In the case of predicates subcategorized for object shape, lexical suffixes are used to refer to the end point reached by the object at the end of its movement, so that BACK and BELLY are interpreted as "on top" and "underneath" respectively. In the case of predicates of horizontal motion, which in our case include deictics and predicates meaning to "be in a place", BACK is interpreted as an end point, while FACE refers to the forward trajectory of the motion. With predicates of physical decending motion, BACK also refers to the end point of the motion. Lexical suffixes such as BACK and BELLY have multiple semantic extensions, and it is the predicates that select the particular orientation templates.

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