

Notating Indigenous Conceptions of Action and Space in Plains Sign Language

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It is counterintuitive to many investigators of body movement to learn that understanding visible forms of expression does not depend upon detailed observation of what can be seen. It would be a mistake, however, to assume that the unobservable components of meaning must therefore be located in internal mental states or processes—a move typical of what Harré and Gillett have called the “first cognitive revolution” in psychology (1994: 8). It would also be a mistake to think that such cognitivism is the only alternative to ‘behavior’ of the behaviorist variety.

From a historical perspective, it has become clear that such pendulum swings between mentalism and behaviorism are the products of a problematic Cartesian metaphysics of person (Harré and Gillett 1994). Both mentalist and behaviorist approaches have been shown to divide our concept of persons in ways that compromise our understanding of dynamically embodied action as a resource for meaning-making in cultural contexts. To summarize briefly; cognitivism mislocates human agency in a hypothetical mental ‘black box’ by producing talk about “mental imagery” or “mental states” located somewhere *between* the neuro-physiology of the brain and the person. In contrast, behaviorism reduces the agentic person to a stimulus-response mechanism absent of mind, so that body movement becomes nothing more than “physical behavior” or “motor activity.”

In the 1970s, an alternative metaphysics of person began to emerge that was grounded in the influential writings of the later Wittgenstein (1958) and a new theory of causal power known as “new realism” (Harré and Madden 1974). In this post-Cartesian move, people are taken to be dynamically embodied active beings causally empowered to use rules and other normative socio-cultural constraints in jointly constructing their social relations through multiple kinds of semiotic (i.e. meaning-making) practices. This new-realist theory of causal powers relocates human agency in the powers and capacities of embodied persons for all kinds of action, rather than in a scientifically implausible Cartesian non-material realm (see Farnell 2000, Varela 1999, Varela & Harré 1996). Wittgenstein’s anti-Cartesian position that “it is our acting that lies at the bottom of our practices” (1958: #204) was thereby scientifically grounded. Accordingly, “having a concept” means knowing how to use the semiotic resources at hand rather than making reference to a reified mental state/entity. Likewise, to give an account of the meaning of action is to describe how it is used, which is to describe the social discourses into which it enters.

This paradigmatic shift to ‘action’ instead of ‘behavior’ (see Ardener 1973; Williams 1991: 244-276) provided the theoretical ground for a new agent-centered perspective on human movement, conceived as the dynamically embodied action of persons who are meaning-making, language users. This

theoretical move is encapsulated in the concept of the 'action sign' in Williams's semasiological theory (Williams 1975, 1982, forthcoming). Under this theoretical rubric, body movement is defined as "culturally and semantically laden actions couched in indigenous models of organization and meaning" (Williams 1982: 15).

Such dynamically embodied signifying acts generate an enormous variety of forms of embodied knowledge, systematized in various ways and to varying degrees, involving cultural conventions as well as creative performativity. This encompasses action sign systems such as the mundane habits and skills (techniques) noted by Marcel Mauss in his seminal essay *Les Technique du Corps* (1935); including ways of dressing, eating, walking, talking, sitting, digging, cleaning, fishing and so on, all of which vary according to cultural and local conventions. People also frequently learn and practice additional specialized bodily techniques according to age, gender, ethnicity, class, family tradition, sexual orientation, talent, skill, circumstance and choice. For example, craftsmanship involves highly skilled human subjects in intelligent activities that engage the material world, involving elaborate tool use and the shaping of things (Ingold 1993: 434, Keller and Keller 1996). Equally skilled are choreographed action sign systems such as those found in sacred and secular rituals, ceremonies, sports, military action, martial arts, and the expressive complexities of myriad danced, theatrical and other performance traditions. In all cases, such action sign systems are constitutive of human subjectivity and inter-subjective domains (Farnell 1999: 343).

From an anthropological perspective, those of us working with human movement find it imperative to theorize from this wide variety rather than a small subset of signifying acts such as actions of the arms, hands and face commonly called 'gestures.' As illustrated in Figure 1, gestural systems utilize only a few body parts and engage approximately one quarter of the potential space of the kinesphere that immediately surrounds the body (Farnell 1995: 228). In our view, to theorize from this subset would be to repeat the mistake made by 19th century philologists, whose concepts of spoken language turned out to be incorrect because based solely upon the Indo-European language family. Just as contemporary theories in linguistics and linguistic anthropology apply to all the known spoken languages of the world, theories in the anthropology of human movement seek to embrace the entire range of human movement systems in the world, taking into account their varied relationships with speech and other semiotic practices in their cultural contexts.

For the purposes of this paper, I will use a significant moment in my own ethnographic research with fluent speakers of (American) Plains Indian Sign language (also known as Plains Sign Talk) to explore exactly what it means to define body movement as "culturally and semantically laden actions couched in indigenous models of organization and meaning." The example also illustrates the methodological advantages of acquiring literacy in the medium of movement.

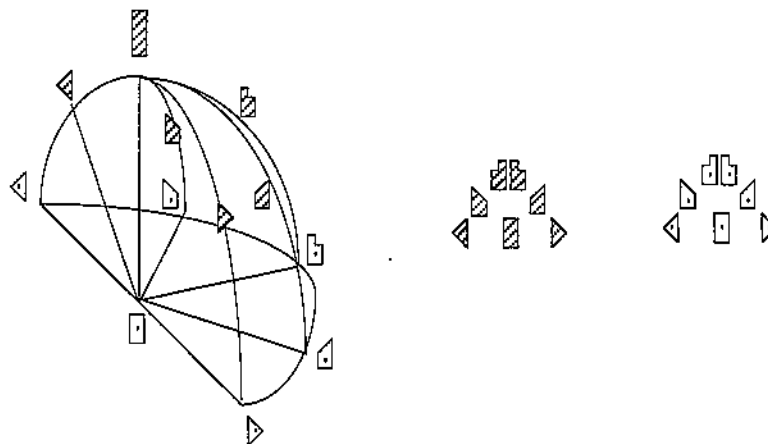


Figure 1. The signing space of Plains Sign Talk uses approximately a quarter of the potential space around the whole body (from Farnell 1995a: 228).

An Ethnographic Vignette

During the early stages of my fieldwork with the Nakota community at Fort Belknap Reservation, Montana (1987-89), I was engaged in the process of transcribing and translating traditional narratives told simultaneously in spoken Nakota and Plains Sign Talk. On this occasion, Mr. James Earthboy, a knowledgeable Nakota elder and fluent sign talker, was my teacher and consultant. After videotaping his performances, we would watch the recordings together while he assisted me to transcribe and translate accurately both the spoken and signed components. The transcription of the vocal signs of spoken Nakota was relatively straightforward, since I could follow the established orthographic conventions developed by Siouan linguists for writing the phonemes of the closely related Lakota and Dakota languages, whilst noting significant differences.

In transcribing the action signs of Plains Sign Talk [PST], however, I had no precedents to follow. Working with my consultants, I had to make decisions about the significant segmentary components of signs—their kinematic components—in order to select the graphic symbols from the Laban script that would best represent them on paper. As anyone who works with video knows, despite the illusion, the third spatial dimension (front-back) is particularly difficult to discern. This observational difficulty was compounded by a problem I had ascertaining the exact referents of several acts of pointing in the signed stories I was going to transcribe.

I asked for clarification at one point by asking the storyteller (in English), “Where does the hand movement in that sign go exactly?” The reply was not a vocal utterance, but an action utterance. Mr. Earthboy repeated the PST sign, moving his right hand through space away from his chest and forward. I probed further by asking “*Mínéks̄i* (uncle), when you make that sign, is your hand moving away from your chest? Or is it going forward? Or towards the

front? Or toward something?" These alternative descriptions *for what looked the same*, were, in fact, anything but arbitrary. They were resources that I had available to me as a result of knowing and using the Laban script. The answer Mr. Earthboy gave would determine how I would transcribe the action sign and would provide me with crucial insight into his spatial knowledge and orientation. Mr. Earthboy paused in thought for a few moments and then replied in his usual patient manner, "No ... it's going east." It is worth noting that *no amount of careful observation, or repeated experiences of performing the sign myself, could have revealed that crucial piece of information.*

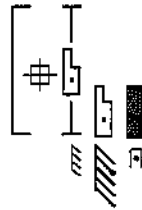
I invite and encourage readers to engage in a simple exercise before reading further. Perform the movement described above—a pointing index finger moving forward from in front of the chest—in each of these four different ways: as going forward, as going away from the chest, as going to the front, and towards the east (or whichever cardinal direction it happens to be moving towards, given your own geographical facing). Try to avoid the Cartesian habit of locating the conceptual component 'in your head', rather, connect it to the action as you perform it. This exercise highlights the subtle but crucial differences that make these movements four potentially different action signs—a signifier (the visible action) and the signified (the conceptual component that gives it distinctive meaning) *unite* to create the action sign.

The Notion of Ethno-Graph

Figure 2 illustrates four potential alternative transcriptions of the spatial deictics involved in this PST sign. Example (i) describes movement "away from the chest," (ii) "forward" (iii) "to the front" and (iv) "towards the east." In the context of this Nakota story, and in light of Mr. Earthboy's statement, only (iv) correctly transcribes the spatial understanding from the point of view of a fluent Plains Sign Talker.



(i) I move my hand away from my chest (ii) I move my hand forward



(iii) I move my hand toward the front (iv) I move my hand toward East

Figure 2. Four different action signs that look identical to an observer. Only (iv) is correct for the narrative in Nakota/Plains Sign Talk.

Each transcription in Figure 2 shows the kinological components of the action signs. Note that there are four kinemes (parts) in each, three of which are identical and one that differs.¹ All four examples share the same *handshape* (index finger extended); *orientation* of the hand (palm down, finger extended forward), and *location* (center of the signing space—a 'default' location that is not written).

In addition, readers literate in the Laban script will see a fourth kinemic element—the *movement* or *movement path*. It is the possibility of these different movement paths through space that can turn these kinetic variations into kinemic ones and thus into four potential action signs. In Saussurean terms, the signifiers are identical—all four *look* the same—it is the signifieds that differ.

Going one step further with the analysis, in Figure 3 the four variations have been classified into two groups on the basis of the spatial frames of reference being employed. Variations (i) and (ii) involve spatial orientation judged according to a *body frame of reference*. That is, the body itself determines spatial direction. In (i) the hand moves through kinespheric space away from another body part (in this case the chest). In (ii) the hand moves forward into space judged from the front of the torso, whichever way the torso might be facing. In contrast, examples (iii) and (iv) involve a *constant or absolute frame of reference*, in which direction is determined by external features that remain constant independent of the moving body.

In this case, (iii) involves the concept of 'front'—for example, the front of a room or performance space, or the designated front side of a landmark. In contrast, (iv) refers to the constant feature of the four cardinal directions—north, south, east, and west. Example (iv) was the correct choice for the particular action sign under investigation here—glossed as "going over there" (*kak'i mnikte*).

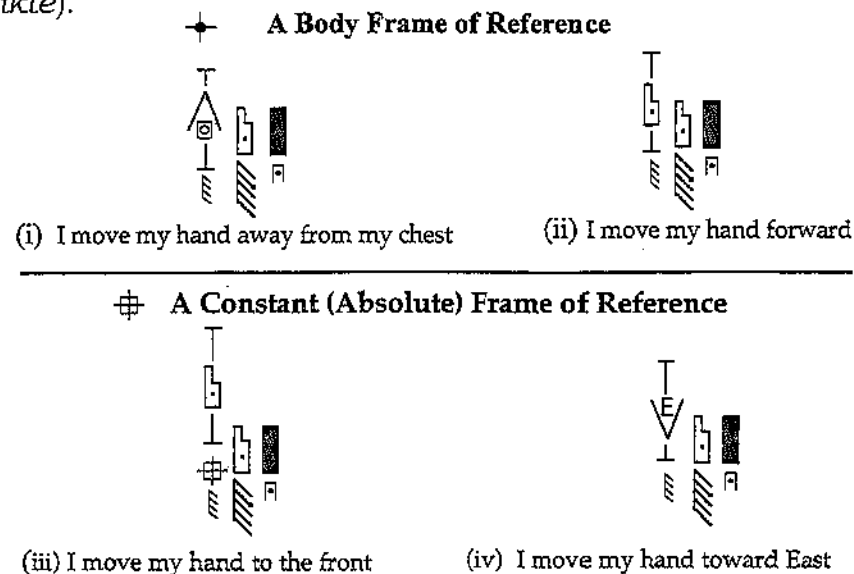


Figure 3. The four variations classified according to spatial frames of reference. (i) and (ii) utilize a body frame of reference, (iii) and (iv) a constant frame of reference.

Example (i) is almost a correct transcription for another action sign from standard PST vocabulary, glossed as TO THINK, THINKING, OR THOUGHTS (*wokčá*). Consistent with Nakota concepts of the body, one thinks from one's heart towards the space of social relationships. This additional variation presents a fifth possibility for ethno-graphic transcription—"away from the heart" rather than "away from the chest."² The semantic difference here lies in the fact that this PST action sign utilizes a *body frame of reference* (the heart) while (iv) utilizes a *constant frame of reference* (east). They are therefore homonyms, since they look the same but mean something different. This is directly parallel to homonyms in spoken languages, i.e., vocal signs which sound the same but have different referential meanings (e.g., seen and scene).³

Readers interested in metaphor and anaphora will be pleased to discover that the storyteller engages in a creative metaphorical elaboration of this sign in the trickster narrative to which I refer later. He presents a double metaphor by manipulating the kinemic contrasts of handshape, orientation, movement and location as follows:

1. *Handshape*. The name sign for the Nakota trickster character Inktomi consists of a handshape in which the index and second fingers of the right hand are extended and separated to create a forked shape. This name sign is synonymous with the PST sign LIAR, and is iconic of duplicitous thinking—the stereotypical Hollywood "he speaks with forked tongue." The sign contrasts with the metaphorical notion of truth being one unity, a concept shared by both Nakota and English speakers. The PST sign glossed as TRUTH thus entails a single pointing index finger. The contrast in handshape (forked shape versus single pointing finger) is thus iconic of the semantic difference between TRUTH and LIE.
2. *Orientation and Movement*. The orientation (i.e. facing of fingers) of the hand and the movement path of the sign INKTOMI/LIE go sideways, in contrast with the sign TRUTH in which the orientation and movement of the hand is forward, again evoking a metaphor shared by Nakota and English speakers. In English, a "straightforward" person is someone who speaks the truth. The contrast in orientation and movement path are therefore also iconic of the semantic difference between TRUTH and LIE.
3. *Location*. The canonical forms of both these signs share the same initial location—close to, and in front of, the mouth. In the narrative, however, the storyteller shifts the location to in front of the chest to refer to thinking instead.

In the narrative, when Mr. Earthboy says, "so he [Inktomi] was sitting and thinking" (*E'eč, wokčá yąka:ka*) he replaces the standard handshape of the sign THINKING/THOUGHTS (a forward pointing index finger) with the forked handshape from INKTOMI/LIE. Since Inktomi is doing the thinking here, the narrator creatively uses the forked handshape associated with Inktomi's name sign, synonymous with LIE/LIAR. The metaphor is thus polysemic: while the *location* of the action sign THINKING/THOUGHTS does not change and so

remains metaphoric of thinking “coming from the heart,” the forked handshape is now also metaphoric of Inktomi’s duplicitous thinking. Inktomi thus not only ‘speaks with a forked tongue’ (i.e. tells lies), but the change in initial location of the sign, (from mouth to heart) indicates that he obviously thinks with one too!

More than this metaphoric enrichment, however, the kinemic shift in handshape also provides the referent for the spoken anaphoric pronoun—the third person singular subject of the verb, which is unmarked in Nakota grammar (i.e. the sentence could refer to anyone—he, she or it). The change in handshape, simultaneously tells the audience that it is Inktomi who is “sitting and thinking” and not someone or something mentioned earlier.

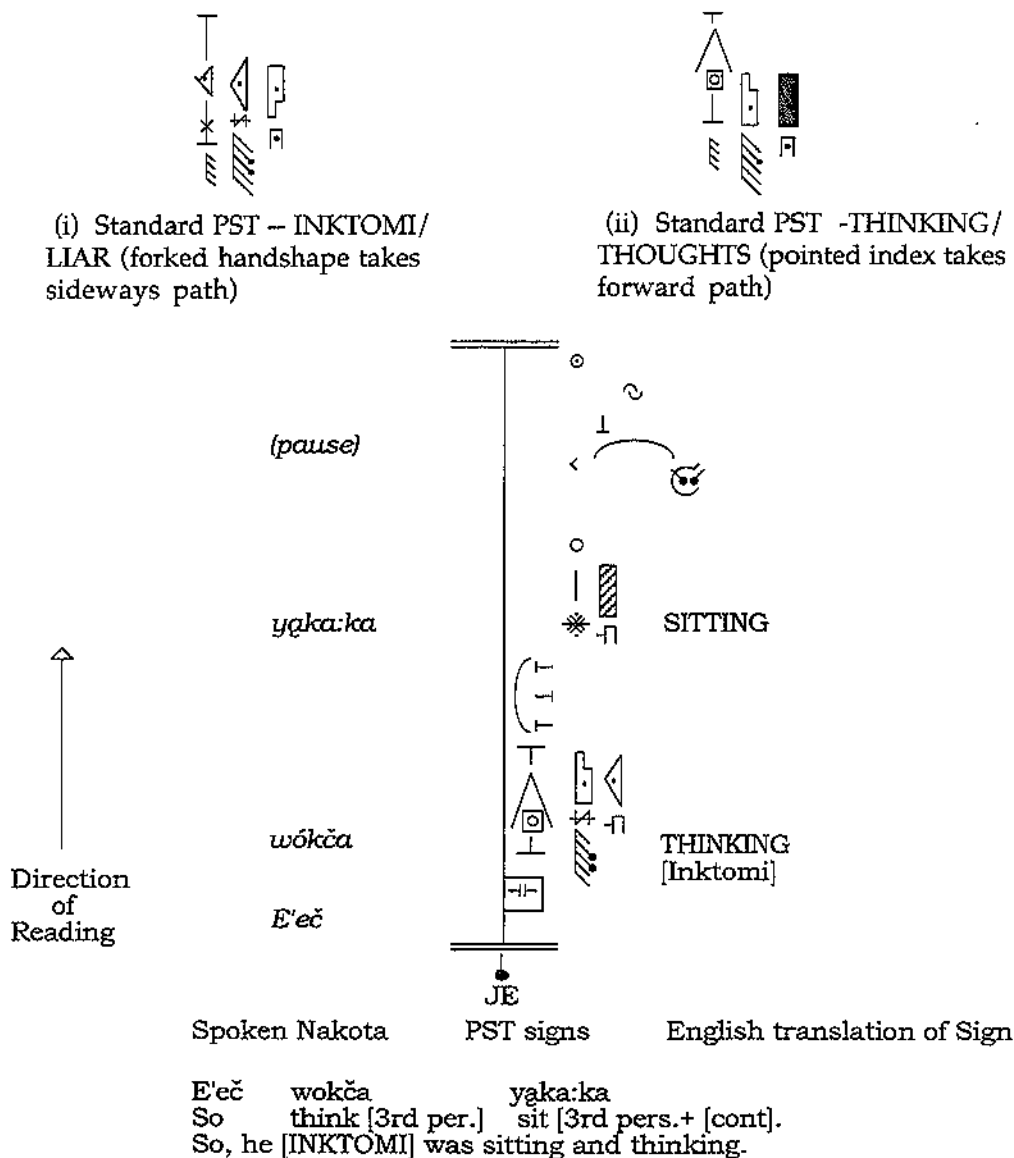




Fig. 4 - Metaphorical transformation of handshape kineme from  to  which identifies Inktomi as the subject. [From 'Inktomi and the Frog make the seasons', Sentence #5, Farnell 1995:181.]

The movement text produced here is thus a performable script that includes indigenous understandings of actions. It is not merely an observationist record of gross physical movement. I refer to this level of transcription as an "ethno-graph" (Farnell 1995a: 152). This means that anyone reading the Laban text will have access to *the semiotic resources employed by the actor*, rather than implicitly interpreting via their own conceptions, or those of an uninformed investigator. This method thus fulfils the anthropological goal of recording and presenting "the native point of view."

Indexicality and Embodied Performativity

Clearly then, understanding visible forms of expression cannot depend upon observation alone. It is, perhaps, equally disconcerting to learn that there is no such thing as space or time in a simple sense. Urciuoli states,

...if the treatment of space-time indexes is reduced to the utilitarian, as it usually is, then the actor is essentially disembodied, at best one-dimensional, with no real motive, in Weber's sense of motive and the social dimensions that could come into being remain invisible (1995:194).

She also tells us that the unfolding of time-space is linked to an unfolding of person (Urciuoli 1995:194). Williams puts it this way: "four-dimensional time/space is simultaneously physical, conceptual, moral, and ethical" (1988: 6).

Exactly what these authors refer to can be explored by examining further the indexical properties of this move "toward East" made by Mr. Earthboy. We find that "a different world unfolds from the deictic act" (Urciuoli 1995: 194) because Mr. Earthboy acts from a body ideally located in a circle of social space suffused with moral and ethical space. We can appreciate this by delineating (at least) three nested but overlapping semantic domains that unfold from his deictic act—(i) the world of the narrative itself, (ii) the social-political-moral world, and (iii) the cosmological-spiritual world.

At the level of the narratives, further analysis and long-term field research in the community revealed that entire stories were structured syntactically and semantically according to a constant (or absolute) frame of reference based upon the four cardinal directions. Understanding this principle allowed me, first of all, to make sense of deictic expressions (e.g. here/there, this/that) that indexically positioned various characters within the signing space. For example, in the narrative referred to above, which belongs to a genre called *ohúkaka* (night-time stories), Inktomi, the trickster character, calls all the animals and birds to a council to decide how many moons in the year should be cold and how many hot (see Farnell 1995a, c). In other words, this story accounts for the divisions of the year into winter and summer.

While telling the story, Mr. Earthboy inscribes a large circle in the signing space around which the animals assemble in council. Since the narrator is facing East, indexical (pointing) signs to his left refer to animals from the cold country (north)—*osní makoče úpi*—whereas indexical signs to his right refer to animals from the hot country (south)—*mašta makoče úpi*. Had he been facing a different direction when telling the story, these spatial arrangements

would have been altered accordingly. As I have described in detail elsewhere (Farnell 1995a: chapter 6), without knowledge of this spatial organization, one loses much of the semantic depth of the story, as well as the subtle interdependence between vocal and action signs.

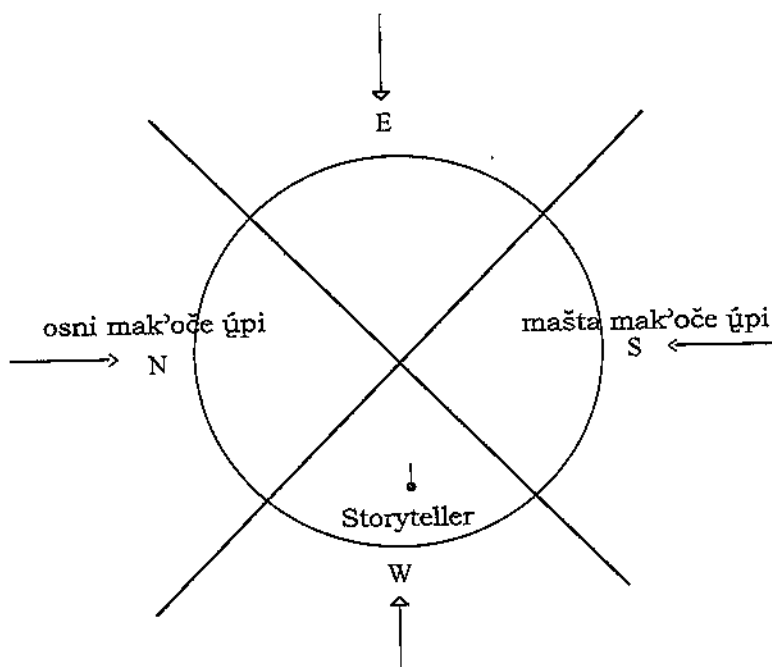


Figure 5. Spatial Orientation within the PST Signing Space and Nakota Cosmology.

This knowledge of narrative space-time pertains directly to an appreciation for the narrative complexity and skill of the performer. More than this, however, we find that such knowledge leads one beyond the space of the story itself into Nakota political and moral philosophy—to an unfolding of person and a world very different from our own. For example, the circle so clearly inscribed in the signing space during the narration of this Inktomi story creates an arena for face-to-face discussion among the characters as equals—a democratic process aimed at producing consensus in which everyone has their say. This arrangement mirrors the ideal political forum in pre-reservation Nakota society, when leaders had authority only insofar as they were good orators and able to persuade others to accept their point of view (a political arrangement common to many Plains tribes but one which the U.S. government consistently failed to understand as they sought to locate or appoint “chiefs” for treaty-making purposes). This consensual ideal persists today, as heard in Mr. Earthboy’s complaints about the behavior of members of the tribal council, for example. The social space of the narrative thus indirectly indexes multiple forms of ideal political and social interaction, infused with moral lessons about how to *be* Nakota (cf. Basso 1976).

The narrative also indexes foundational principles of Nakota cosmology in which all living creatures are considered worthy—in fact, certain animals enjoy superior status to that of humans as inhabitants of this world. In addition, since according to Nakota beliefs and practices the cardinal directions

are sources of spiritual power, the move toward East also indirectly indexes concepts of power, spirituality, and a balanced sense of being in a wider, ordered world.

These nested worlds of meaning are constructs of space/time/person that provide glimpses into socially constructed moral and ethical spaces of some complexity, and we can begin to see the dialogical, inter-subjective means by which persons, social institutions and cultural knowledge are socially constructed, historically transmitted and revised. We see a sense of personhood and worldview unfolding from such apparently simple dynamically embodied signifying acts in symbolically rich spaces. Urciuoli again succinctly captures the point,

Understandings of cosmological, metaphysical or dramatic space emerge performatively from the enactment of self, just as a promise or threat unfolds from the words, nuances, and intonations of the self in the moment of utterance, enclosing a world of action (Urciuoli 1995:195).

And the meaning of subsequent action flows from that moment.

Concluding remarks

I have illustrated two basic tenets of a semasiological approach to human movement: that "body movements are culturally and semantically laden actions couched in indigenous models of meaning" and the multi-dimensionality of space/time. I have also illustrated the methodological advantages of literacy in the Laban script for transcribing the simultaneities of kinemic structure and the sequential flow of action through time in ways that incorporate interpretations of semantic features related to indigenous concepts of the body itself and space/ time orientations.

These brief examples illustrate what Wittgenstein meant when he said, "it is our acting that lies at the bottom of our practices." They confirm his position that to give an account of the meaning of an action is to describe how it is used, which is to describe the social discourses into which it enters. In other words, the meanings of action are located inter-subjectively in social and cultural spaces.⁴ As Varela (1994) has argued, we are psychological because we are socio-cultural, not the reverse.

The analysis also illustrates how the social nature of human being afforded by the 'new realist' ontology reorients theories of person, self and agency away from an ethnocentric, individualist psychologism and towards socio-cultural dimensions of interaction and the enactment of indexical dynamics (Mühlhäusler and Harré 1990; Urciuoli 1995, 1996). Accordingly, the locus of meaning shifts from internal mental structures and the individual, towards the dialogic processes within which meanings are constructed and construed.⁵

Endnotes:

¹ 'Kinology', 'kinemic' and 'kinetic' are technical terms in semasiology that are analogous to the phonological level in spoken languages. Any action sign, like any vocal sign (a word) is made up of smaller parts. Semasiologists call this level of investigation "kinology." Linguists refer to this level of analysis as phonology. Any single action sign is composed of one or more kinemes or kinesemes (whole body action). A kineme is a variation in shape or movement that makes a difference in meaning. A kinetic variation is a minor difference in movement performance that does not affect the meaning of the action sign per se, although it may index other properties. This parallels the linguistic difference between phonetic and phonemic variation in vocal signs. These units are identified as meaningful components and variations by users of the system under investigation.

² See Farnell (1995b) for further discussion of Nakota mind/body concepts.

³ See Puri (1981) for discussion of polysemy and homonymy in the classical Asian Indian dance form, Bharata Natyam.

⁴ See also Vygotsky (1962) and Mead (1933) for supporting theories regarding the social nature of self.

⁵ See Farnell and Graham (1998) for further references to such 'discourse centered' approaches to culture, and Harré and Stearns (1995) and Harré and Gillett (1994) for applications to discursive psychology.

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