The following paper is the result of a preliminary investigation into the usage of hasta-mudra\(^1\) ('hand positions') in Bharata Natyam, an idiom of dance from Tamilnadu (Madras) in south India. Although the use of hasta-mudra constitutes only a part of Bharata Natyam, they are sufficiently codified, subject to established rules and conventions, that they can be analysed separately as an autonomous system. The rules and concepts that govern the hasta-mudra system are paradigmatic to the idiom, and there is reason to believe that they are also fundamental to the whole body language of south Indian society.\(^2\)

In this paper I discuss 'meaning' and its relation to the action signs of complex body languages, by referring to one of the action signs in a system. Through a detailed analysis of one hasta-mudra I will examine some of the ways one can relate a kinological (equivalent to phonological in linguistics) level of analysis to a semantic level.\(^3\)

The Hasta-mudra System of Bharata Natyam

Hasta-mudra are an intrinsic part not only of all forms of dance, theatre and mime but of all representations of the human body in the Hindu tradition, whether in temple sculpture, folk painting, woven textiles or any other expressive medium. In the latter forms the hasta-mudra are only seen as static positions, whereas in idioms of dance and theatre they are used to make movements that help to interpret the texts of songs that accompany the actor-dancer.\(^4\) There exist several written treatises, some of which date from the third century B.C., in which these hand positions are described and named, and codified as to their usage in dance and theatre.\(^5\) Although in these manuscripts the hand positions are described with reference to how the fingers are held, their usage is mainly codified in terms of the concepts they can be used to signify and we lack any clear description of where the hand is held or of how it moves. Consequently it is necessary to turn to current usage by Bharata Natyam performers in order to identify the movement aspect of each complete gesture. Since the set of hand positions presented in the Abhinaya Darpanam (Coomaraswamy, 1970) most closely resembles contemporary usage this standard reference is the basis of the nomenclature adhered to in this paper. (See Appendix I for a list of hasta-mudra in the Abhinava Darpanam.)

The hasta-mudra 'shikhara' is the following position of the right hand \(\text{\textbullet}\), or \(\text{\textbullet}\) for the left hand, and is one of a set of some thirty-two single hand positions.\(^6\) (See Appendix II for rough sketches included for those who do not read Labanotation.) Although it is among the hand positions that are used more frequently, this hasta-mudra is equivalent to the other thirty-one in important ways: (i) like the various letters of an alphabet there is no ordered
hierarchy of hasta-mudra, and (ii) each hasta has potentially the same value in the system as any other. These hasta-mudra belong to a closed set in that at any time during a performance of Bharata Natyam the actor-dancer's hands are in one of these positions. I will investigate their usage in passages that convey dramatic meaning.

A large portion of any Bharata Natyam recital is devoted to the interpretation through movement of the words of songs that accompany the performer. Although the use of particular movements or gestures is suggested by the lyrics, the movements themselves do not necessarily 'mean' exactly what the words of the song convey. Bharata Natyam performers are also able to provide a separate translation in simple spoken language terms of the central concept that each of these gestures signify. These informal spoken language glosses are the primary 'meanings' of these movements since they allow one to relate specific gestures to their immediate signification (or significations). Reference to these glosses allows one to identify units of movement at a kinological level, that are the equivalent of 'words' or 'lexemes', because they are the smallest units of body language that can convey referential meaning, or refer to objects and concepts in the 'real' world. It is then possible to investigate the relationship between the meanings conveyed by each of these units of movement, not unlike the manner in which semanticists investigate different word-meaning relationships in spoken language.

Polysemy and Homonymy

'Polysemy' and 'homonymy' are technical terms used in traditional linguistics generally and in the field of semantics in particular to refer to two types of word-meaning relationships. Polysemy or 'multiple meaning' is used to refer to the relationship between two words that have the same sound (or, strictly, the same name). An example frequently used by linguists to demonstrate polysemy is the word 'head' which can have the sense of the human head, the 'head' of a department, or a 'bridge-head'. Homonymy on the other hand refers to the similarity of sound between different words (one could also use the term 'homophony') such as exists in the usages of the word 'sea', which can refer to a body of water, the act of seeing, or 'see' as in a bishopric or a diocese.

Although these two terms distinguish two different kinds of relationships between words, in practice it is difficult to decide whether in any particular case we are faced with two different usages of the same word (polysemy) or with two different words that are homonyms. Frequently the decision depends upon the native speaker's intuition. When lexicographers give several meanings under one entry in a dictionary, they treat the word as if it exhibited polysemy, as if it were one word that had many meanings. When they make separate entries they treat each entry as a separate word that simply sounds like another. That this decision is often made on an arbitrary basis is accepted in general by semanticists (Leech, 1974, Lyons, 1968, Ullmann, 1962 and Palmer, 1976). It is also noted by them that the
native speaker's intuition may at times be at variance with the facts of etymology. Ullmann cites the example of 'ear' as in human ear, and 'ear' as in corn. Many present day English speakers think of 'ear' as one word the two senses of which are related in the same way as are the senses of the word 'head'. Etymologically it would appear that 'ear' as in 'part of the head' comes from the Latin auris, whereas 'ear' as in 'corn' comes from the word acus; so it can be shown that they are in fact two separate words that have converged in the modern English sound 'ear' to become homonyms.

There is no clear cut distinction between instances of polysemy or homonymy. Moreover, neither polysemy nor homonymy are in a word per se; the terms are used to distinguish between different kinds of relationships that can exist between words and their referents or meanings, and this relationship in turn depends on the context in which they are used. In spite of the problems with these terms, as also with the term 'synonym', our interest in borrowing this terminology from traditional linguistics is to allow us to make the following basic connections between different gestures. If with Williams (1979) and after Saussure (1966) we were to regard a gesture as an action sign that has two aspects, 'signifier' and 'signified', application of the above terminology allows one to distinguish between four basic types of relationship between two action signs in the same body language.

**EXAMPLES OF ACTION OR GESTURE - SIGNS**

![Diagram of signifiers and signifieds for signs A and B](image)
Figure 1: Examples of Action (or Gesture) Signs

1. If signified A looks the same as signifier B but the signifieds (or 'meanings') are different, then A & B can be said to be 'homonyms'. On the other hand one could also say that in this instance A & B are the same action sign but that the sign exhibits polysemy.

2. If a signifier A does not look the same as signifier B but the signifieds are the same then A & B are 'synonyms' in the looser sense of semantic equivalence.

3. If signifier A looks the same as signifier B and the signifieds are also equivalent then A & B can be called the same action sign.

4. If neither the signifiers nor signifieds are the same then A & B are two distinct action signs.

The purpose of making these distinctions is two-fold. First, to investigate by what criteria one can consider two action signs to be 'the same' or say that they have the same appearance in the way that two words can be said to sound alike. Second, to investigate the relationship between the meanings of a gesture or action sign if indeed that sign exhibits a multiplicity of meaning. In other words my first interest is at the level of kinological analysis, which then allows for my second and main interest which is with semantics.

Usages of Shikhara - the Kinological Level

The name 'shikhara' should be regarded as analogous to the name 'alpha' for the letter 'a'. Although the word shikhara in Sanskrit means 'spire' or 'peak', these meanings have little connection with the meanings conveyed by the gestures that this hasta is used to form. Shikhara is the name of a hand position or kineme. On its own it has no referential meaning and is similar to a phoneme in spoken language. The actual usage of this hand position involves other parts of the body, and spatial elements that in combination form what are often called 'gestures'. Williams' use of the term 'kineseme' is more useful since it forms part of a set, kineme, kineseme and action utterance, which can be seen to bear the same parts/whole relationship to each other as do the terms phoneme, morpheme and sentence. For the sake of clarity the work 'kineseme' is used to refer to the full gesture; 'kineme' simply refers to the static hand position or hasta, in this case shikhara. (In Figure 2, Nos I and IV, the whole represents a kineseme; the portion enclosed by a broken line represents the kineme.)

The eight usages in Figure 2 are each complete and separable as units that convey meanings. They are kinesemes that signify a concept in contrast to the kineme shikhara which by itself has no referential meaning as such. Analysis at the kinological level allows one to note
that the only distinction between signs I ('bow') and II ('man') is the difference between high and middle level since both are performed by the left hand. Even the degree of contraction in the arm is semantically irrelevant since regardless of the degree of contraction in the performance of each of these gestures the various versions of each kineseme are identified as the same signifier. In practice one version of 'bow' is also sometimes performed close to the shoulder and resembles a version of 'man'; thus it could be considered a partial homonym of II. The main distinction between actions I and II, and sign III ('lord') is between left and right; another is the fact that in 'lord' the hand is in front of and close to the chest while in the others the hand is held away from the torso. The reason the right/left distinction is considered to be the main one is that in some compound gestures that use two hands the left hand is placed in front of the chest where it symbolises 'bow' and could be called a version of I.
Sign IV ('place upon') is similar to sign III ('lord') except that the hasta is placed away from the body. Since one can use either or both hands there are again many variations of this gesture if they are looked at from the point of view of gross physical movement. It is not useful however to call these 'synonyms' of each other since they are identified by users as fully equivalent, and are considered the same gesture. Sign V ('questioning') is distinguished by an outward rotation of the forearm, by being held away from the body and by the arm at high level. This gesture too may be performed with either or both hands, and the variations in performance are more like differences in pronunciation. They are not synonyms.

Sign VI ('drinking') is distinguished from sign V ('questioning') not only by the rotation of the forearm but by an inclination of the head and the fact that the thumb addresses the mouth. Signs VII and VIII ('brahman's thread' and 'kshatriya's thread') are distinguished by the different directions traced by the thumb. This distinction is crucial to the contrast in meaning between the two signs; they are therefore neither synonyms nor homonyms. The preceding analysis demonstrates that homonymy is rare in the usage of hasta-mudra even if in actual performance there may be instances when a gesture is performed in such a manner that it looks the same as one way of performing another gesture. The constituent elements of each gesture are not the same.

If one were to look outside the hasta-mudra system it might be possible to identify homonyms. A similar hand position to shikhara is found in several cultures, as for instance the position used to signify 'thumbs up' in America, or to count 'one' in Eastern Europe. This hand position is also used by European and American hitch-hikers to make a gesture that signifies a request for a lift, and among the Ashanti of Ghana one of the variations of this gesture is an insult. The Ghanaian gesture is similar to sign V but the element of pointing backwards with the thumb that is constituent to the Ashanti gesture is not a part of sign V. Hence this element, as also the implied insult, would be ignored by a Madrasi observer to whom it would still signify 'questioning'. The identification of isolated homonyms in body languages from cultures as disparate as those of America, India and Ghana is not useful since it depends on superficial similarities that do not take into account all the elements involved in the two action signs. When one makes such connections one essentially treats gestures as autonomous pieces of gross physical movement to which meanings are somehow attached, rather than as units of action sign systems in which the elements of movement are syntactically structured in accordance with a semantic role that is system specific. If on the other hand one wished to pursue a particular diffusionist theory based on historical facts, one could trace the 'etymology' of a gesture with reference to body languages that are closely related, such as ballet and modern dance, or Bharata Natyam and one of the many idioms like Kathakali and Odissi that share the same basic notion of a hasta-mudra system.
Kinological Analysis

A kinological analysis of action signs also points to a difference between the way in which phonemes or letters in an alphabet operate and the way in which hasta-mudra are used. Words or lexemes in spoken language are made up of a series of phonemes joined together sequentially; gestures or kinesemes have for their elements one or more hasta-mudra plus a series of elements that refer to (i) a relative position in displacement space, (ii) a body reference, (iii) laterality, and so on. Williams refers to these elements as the deictic categories of direction, location, orientation and reference (1976:179). Whereas a spoken language description of these deictic categories is arduous and sometimes confusing, a Labanotated version of these movements clearly represents these elements and allows one to distinguish at a glance the differences between the various signifiers of action signs. In contrast to phonemes which appear before or after each other, the elements of a gesture can be (and most often are) manifested simultaneously. This potential multi-dimensionality of the medium of movement makes analysis more difficult particularly if one is restricted to the use of spoken language. Even movement notation cannot solve the problem in itself because the writing of a score involves a prior understanding of what is constituent to the movements and what contingent, or even extraneous.

With the attempt to notate movement we are in a position similar to that of linguists faced with a non-literate spoken language. Phonetic analysis might distinguish differences in spoken sounds that are not considered to be different by speakers of that language. For example in the difference between the American and British pronunciations of 'bath', the two phonetically distinct sounds /a/ and /æ/ represent the same phoneme in the case of that word. Once a notation system like Labanotation becomes more widely used to notate a specific body language like Bharata Natyam one will be able to adapt usage of the script so that a score would only show the meaningful differences. The variations between performances of sign I ('bow') or the use of left or right hand in signs IV and V are like variations in pronunciation between the sounds /daans/ and /daens/. I propose that in notating a stretch of Bharata Natyam or any other action sign system we use the same Laban symbols to stand for each of these variations (see Figure 2) in the same way that in writing English we use the same letters to spell the word 'd-a-n-c-e' regardless of whether it be pronounced /daans/ or /daens/.

In the preceding section we analysed eight common usages of the hasta 'shikhara' and demonstrated that none of them can be considered proper homonyms since the full gesture-word or action sign is made up of distinctive constituent elements that are not shared in common. Indeed, the incidence of homonymy is rare in the hasta-mudra system. Before I discuss the various signifieds of these gestures I make one last point at the level of kinological analysis. The kinesemes or action signs of the hasta-mudra system only make use of a portion of the space in which the limbs can move. If with Williams we call this the 'transformation and orientation' space of the human body instrument (1976:164) it will be noted that the hasta-mudra system 'functions' as it were in the upper front quarter of the cube that expresses the full orientation space of the body (see Figure 3). Movements of the lower
half of the body are not constituent to this system; most of the kinesemes may be performed while the actor is seated and can be communicated even if the lower half of the body is hidden. This creates an interesting problem with the dimension front/back. Whereas the right/left and up/down axes follow regular orientation with regard to the body as center, front/back is often expressed along the front part of that axis, or forward/centre. 'Towards front' is shown with a movement away from the centre of the torso, 'towards back' is shown with a movement towards the centre of the torso, which means that there is a sense in which 'centre' also signifies 'back'. The semantic implications of this await another occasion when one can also investigate how the notion of 'time' is expressed in this system.

![Figure 3](https://via.placeholder.com/150)

(The large cube refers to the space used by the body instrument, which in turn displaces itself in a larger cube that represents Euclidean space (see Williams, 1975:163). The front quarter of the cube delineated by broken lines represents the space in which the hasta-mudra system operates.)

'Meanings' of the Gesture-words; the Signifieds

To talk of 'meaning' is a complex undertaking even within the same spoken language. Many words elude definition. For example, most English speakers understand what is meant by the word 'green' but would be hard pressed to explain what it means. One ploy is to point to a series of objects identified as 'green' and leave the hearer to grasp the concept signified by the sound in English. This is an example of what philosophers call an 'ostensive definition'. Such a ploy is not always possible with action signs since the ostensive definition of an action sign is often the action sign itself. Faced with the necessity of translating action signs into spoken language terms the problem of definition becomes even more acute when we try to translate gestures or actions into a spoken language that is different from the one spoken by the users of a body language. Users of Bharata Natyam can often provide a spoken language gloss for many of these gestures for which purpose they resort to Sanskrit,
Telegu or Tamil words. In the following section I shall deal with the concepts signified by the eight kinesemes under consideration by using English words that most closely signify those concepts.

The common gloss for the first kineseme is 'bow' (as in 'bow and arrow'). Sign II signifies 'man' (+male, +human, +adult); on its own it is unmarked for any kin relationship or social role, whereas sign III signifies 'lord' or swami (Tamil and Sanskrit) which complex term shall be dealt with later. Sign IV signifies 'sit', 'place upon' or 'establish'; sign V is interrogative, suggesting a question; and sign VI signifies 'drink' or 'pouring liquid into the mouth'. Sign VII refers to the thread worn by brahman and sign VIII to the thread worn by a kshatriya or member of the warrior varna (one of the four major categories of the caste-system). Although these signs are conventional they contain elements that lead one to see an iconic similarity between the signifier and the signified, which sometimes leads the observer to regard the connection between action image and concept as 'natural' or 'obvious'.

It is our belief that this problem arises with gesture language because many of the signifiers are iconic in the sense of 'visually representative' of certain aspects of the actions or objects that they signify. Of the eight signs analysed above, four make use of movements in which, once one is provided with the gloss, a less than totally arbitrary connection between signifier and signified can be made. One in particular is a gesture that many students of gesture consider to be 'universal' in significance, which is the sign glossed as 'drinking'.

It has been said that most humans can communicate that they are thirsty by the use of gesture (Morris, Collett et al., 1979, and Adler, 1979). The problem with this statement is that if one were to perform the action sign VI in south India, it is unlikely that one would be offered liquid refreshment. Today it might even be taken as an insult since to the native observer the sign could communicate a suggestion that the person addressed were drunk on hard liquor. Certainly there is an overlap of meaning; the action sign does have something to do with the concept of drinking. Only in reference to the fact that Tamils, like all other humans, drink with their mouths could one say that the significance of the gesture was 'universal'. One cannot however interpret a part of a meaning as the whole. Williams makes this point with reference to the mimika gesture of greeting which includes a 'beckoning' movement. The 'beckoning' simply establishes some relationship between the person addressed and the actor; one is not being asked to approach the gesturer at all (Pouwer, 1973 in Williams, 1980:5). Proper understanding of the action sign requires an understanding of the concept of IPU. Similarly, with the drinking gesture in south India, proper understanding and usage of the gesture depend on knowledge of some basic concepts that underly south Indian society. South Indians do not touch their mouths to glasses or bottles but drink by pouring liquid from a distance.

Important to an understanding of this way of drinking and so to an understanding of this gesture are the notions of purity and impurity that underly the caste system (Bouglé, 1971; Dumont, 1970). To ask a Hindu to share a glass or cup is tantamount to a suggestion that he (or she) make himself (or herself) impure. If used by a foreigner as a request for water sign VI would either not be understood, or be mis-understood. To reiterate Williams' statement: "No code, no message" (1980:5). In terms of the action sign system, the shikhara
hasta in this gesture simply signifies 'pouring' and could be used to make gestures that signify pouring liquid into a vessel or on to the ground, or into the mouth. To someone who knows the code this gesture has the added qualification of referring to the first person singular as in the phrase 'I drink'. When used in reference to a third person it could be translated as 'he or she does what I do when I drink', an awkward phrase, but one that does capture the nuances of meaning. It also demonstrates why the sign cannot be used unconditionally to signify thirst.

Categorical Structures and Systems of Classification

The first sign 'bow' exhibits an iconic nature since the mudra shikhara represents the bow in a visual representation of the action of holding a large bow. However, if this gesture is made without qualification by any other gesture it is usually understood to signify Rama, the deity considered by Hindus to be an incarnation of Vishnu. This meaning is due to the fact that the bow is Rama's most distinct symbol. The gesture belongs to the set of gestures that represent weapons of other Hindu deities, as for example the discus, the sword, the mace, the battle-axe, the trident and the thunder-bolt, which respectively signify Vishnu, Kalki, Vayu, Parasurama, Shiva and Indra. The connections between these deities and the weapons with which they are associated are not regarded as 'natural' or 'given', but are based on a complex symbolism that has reference to a large body of Hindu myth.

Synonyms (action signs that share the same signifieds) for the meaning 'Rama' of this kineseme are complex two-hand gestures that can be broken up and glossed literally as 'Dasharatha's son', 'Lakshmi's husband', 'destroyer of Ravana'. These are members of an open set and signify the various attributes and epithets of Rama. Part of the Bharata Natyam performer's craft is to coin new action signs for a single signified. We call them synonyms since one way of deciding whether two spoken utterances are synonyms is if they can replace each other in a sentence without changing the overall meaning. The above-mentioned kinesemes make reference to shared knowledge about Rama's life in much the same way that the epithets 'the Nazarene', or 'son of the carpenter' or 'king of the Jews' refer to Jesus. Regarded outside the context of the respective myths, scriptures and belief systems to which they belong the phrases are only partially intelligible and do not even appear to be synonymous. Meanings are made with reference to categories and classifications that are culture specific. To propose that these meanings are 'universal' is equivalent to the proposition that the concept 'son' is universal since in every society people have male children; a proposition unacceptable to most experts on kinship.

In the case of signs VII and VIII although reference to the sacred threads is graphic, the meanings of these signs are based on the notion of 'twice-born' related to the two higher varna, brahman and kshatriya, and make reference to the initiation ceremony undergone by adolescent males of these varna during which this thread is tied. These signs also signify brahman and kshatriya respectively, and are almost never used to refer to women directly. Other meanings for these gestures are
'holy', 'pure' and 'learned' in the one case, and 'powerful', 'brave', 'majestic' and 'skilled in the use of arms' in the other. In practice one can use both gestures to refer to the same person, if he were a brahman and also brave and kingly.

Semantic Transference

A gesture that refers to the kshatriya thread can by semantic transference signify 'kshatriya', 'heroic', 'powerful', 'proud' or 'skilled in the use of arms'. The transference of meaning could be called metaphoric; a gesture that signifies a member of a social category is used to signify a quality attributed to members of that group. The gesture exhibits polysemy since it has many meanings; on the other hand a single usage of the gesture can convey all the above meanings. Whereas in spoken language a word that is polysemic usually conveys only one of its meanings at a time, except where the speaker intends a pun or wishes to invoke ambiguity, in a body language like Bharata Natyam each of these meanings can be conveyed simultaneously. This is what we understand by Ardener's concept of 'simultaneity' (1973:7). Spoken language makes possible a resolution of the simultaneity into linear chains and demonstrates that polysemy is a major characteristic of body language since each sign is intended to convey a series of related concepts that in spoken language would be signified by different acoustic symbols.

This characteristic of polysemy might explain why, given the potentially astronomical number of movements that can be created, a complex body language usually employs only a small subset of them in order to convey a seemingly endless variety of concepts. In this sense body languages resemble spoken languages which contrary to popular beliefs in 'meaning what one says, no more and no less' are also relatively open-ended with regard to meaning. The difference is that a body language like Bharata Natyam seems to be more intentionally open-ended. It would be extremely interesting to investigate if deaf-mute signing or north American Indian sign language is found to be similarly and consciously open-ended.

When a Bharata Natyam performer wishes to emphasize a specific meaning conveyed by an action sign he or she may perform a second gesture either immediately after the first gesture, or when the lyrics are repeated. In order to signify 'kingliness' in particular one might perform a gesture using another hasta, 'tripataka', held above the head, which refers to a crown or symbol of kingship. The sign 'crown' introduces a similar set of meanings but in a different order of association, from 'crowned' to 'kingly', 'powerful', 'brave', 'warrior', and 'kshatriya'. Both observer and user make reference to context in order to account for the dominant meaning. 'Context' here refers not only to the immediate environment of the sign, and the specific situation and person referred to in the dance, but also to an ultimate context that includes all knowledge of the world shared by users of these signs.
A minute and detailed study of each level of context is virtually impossible, although in practice users of a linguistic system do make reference to all of them. The analysis of meaning in such systems of movement does however require an understanding of certain key concepts that are fundamental to the whole social system to which that body language belongs. I end this paper with an example that demonstrates the way in which the full gamut of context comes into play in the understanding of one usage of a single kineseme. Conversely it is also shown how the analysis of one kineseme can lead to an understanding of the paradigmatic structures that underlie the body language system, the beliefs and even the 'knowledge' of the people who use that system.

A Single Gesture and the Total Social Context

Sign II signifies 'man' in the sense of 'male', 'adult', 'human'; and sign III signifies 'lord'. The first sign is unmarked as to social role unless one adds qualifying gestures, as for example:

which signifies 'man and woman', 'husband-wife pair', or 'a couple'. Followed or preceded by the sign for 'marriage necklace' sign II can mean 'husband'; preceded by the sign for 'birth' or 'child' it can mean 'father' (see Puri, 1980: Appendix I). When the dancer-actor speaks of her lord (Bharata Natyam is traditionally performed solo by a woman) she uses sign III. This sign signifies 'lord' or swami in Tamil (as well as Sanskrit), which can refer not only to her 'lover' or 'husband' but also the deity or even the king addressed in a particular dance, as for example Vishnu, Shiva or a specific Tamil ruler of the Chola period. The gesture may be qualified by the addition of 'my', using the hasta pataka at the chest, but in the absence of such qualification the first person reference is understood, and the gesture is taken to refer to the relationship in terms of 'ego', the dancer.

During a dance the performer can switch between the many meanings conveyed by the term 'swami'; at times she refers to an 'erotic' or 'romantic' relationship between a woman and a man; at others she refers to the relationship between devotee and deity. Whereas in other societies 'husband' and 'lover' may refer to different people, in Hindu society a woman's lover is usually her husband, and her husband is, ideally, her 'god'. For the devadasi (temple dancer, literally 'servant of god') who is the traditional performer of Bharata Natyam the terms 'husband', 'lover', 'king', and 'deity' may refer to the same person on any single occasion. Consequently the different usages of action sign III cannot be considered homonyms; rather the action sign is polysemic since its multiple meanings are related. The relationship between the different signifieds of this gesture is dependent on the concept that the romantic (or erotic) relationship between man and woman represents not only a conjugal relationship but also the relationship between subject and ruler as well as between devotee and deity. An understanding of the inter-connection between these sets of roles is crucial to an understanding of Bharata Natyam and is paradigmatic both to the body language and to the society.
Atomization of these simultaneously signified relationships can only lead to a partial understanding of the idiom. The complete meaning of a series of gestures that comprise a dance is more than a sum of their referential or 'literal' meanings and sign III is not fully translatable without reference to the whole spectrum of Hindu and Tamil thought.

Conclusion

Although it is true that the Bharata Natyam data allow for greater ease in tracing the connection between action signs and vocal, spoken language signs, it is our belief that all complex systems of action signs such as ballet, bullfighting or the gestures made by a referee during a hockey match are capable of similar treatment. At first glance it seems as if the Bharata Natyam hasta-mudra system is formally tied to spoken language; in fact the spoken language terms presented in this paper are informal and are only used in classes or among performers. For each body language there exists a similar informal dialect that is used by teachers, students, choreographers or savants conversant with the idiom of movement to refer to specific action signs. Apart from Williams who has investigated the terminology of ballet French (1981) little has been written about the correspondence between action signs and their spoken language signifieds although these are used daily in bull rings, ice rinks and dance studios all over the world. Since human beings are above all language users and language is a primary social fact, the concordance between the action signs of structured systems of body language and the spoken signs used by performers of these body languages can give us insights into the very linguistic faculty of human beings.

It is our belief that gestural signs are neither 'precursors of' nor 'substitutes for' spoken language, a position taken by many writers on gesture. They are elements of body language and belong to a parallel system of language that allows for the generation of different kinds of meaning. Multiple meaning is made possible by the multidimensionality of the medium of movement, that allows one to express simultaneously several sets of distinctions along the different structural axes that characterize this medium. A single gesture can be opposed to several others with reference to laterality, while at the same time one can express distinctions along the up/down, back/front and inside/outside axes.

Analysis of the systems of movement of a society bring to light structures that are homologous to structures that underly most aspects of human life, for human movement takes place in and uses the same four-dimensional space-time in which houses are built, rituals are performed and the cosmos is ordered. Spoken language on the other hand is not only a primary social fact but functions as a meta-language for other kinds of languages; it can also provide us with preliminary models for the analysis of body language systems that express the experience of a whole society.

Rajika Puri
1. In Sanskrit the plural of a noun is not formed by the addition of an 's'; 'hasta-mudra' and 'hasta' stand for both the plural and singular forms of the word.

2. The importance of the hasta-mudra system of Bharata Natyam to an understanding of the body language of south Indian society is the subject of doctoral work. There is enough evidence at present to make mention of such intuitions. See for example the analysis of the sign for 'drinking' below.

3. Kinology describes the movement aspect of action signs in a body language just as "the sounds of a given language are described by phonology" (Lyons, 1968:54). See also note 11.

4. The Sanskrit word natya implies both acting and dancing; we use the term 'actor-dancer' for want of any English word that combines the ideas of dancing and acting. See also Coomaraswamy (1970:5).

5. The two best known and most widely translated manuscripts are the Natya Shastra ascribed to Bharata (Ghosh, 1967) and the Abhinaya Darpanam by Nandikeswara (Coomaraswamy, 1970).

6. It is difficult to place a definite number on the set of hasta since the written descriptions are not always clear because (i) two kinetically distinct hand positions are often called by the same name and are regarded as two versions of the same gesture; (ii) two kinetically similar hand positions are given different names and are identified as two distinct gestures; (iii) some positions used to make two-hand gestures are excluded in the list of single-hand positions; and (iv) some of the positions described (like palli) do not resemble any hasta-mudra in current use.

7. Hasta-mudra do not always convey referential meaning; they are also used in non-narrative sequences of abstract movement (nritta).

8. The systematic study of body language is still in its infancy and as yet lacks an established meta-language in which to talk about movement. We prefer an initial dependence on the technical terminology of linguistics in order to investigate some of the characteristics of human action sign systems which are similar to those of spoken language.

9. The term that would better describe the relationship is 'homo-kine' which parallels the term 'homophone' in linguistics and more closely captures the analytic distinction. Rather than coin new words too soon, at present we prefer to adhere to normal usage, which favours the word 'homonym'.

10. Although in general linguists only deal with homonymy and polysemy within a single language, the terms could be used to describe relationships between words of different languages where there is evidence of a connection between those languages.
11. In semasiology the difference between a kinemic and a kinetic analysis of a body language is similar to the difference between a phonetic and a phonemic analysis of spoken language. Whereas one can do a phonetic analysis without direct reference to meanings or signifieds, phonemic analyses do require an understanding of the whole language. Similarly when one notates a body language one needs to know which movement elements are distinctive features of an action sign and which elements simply represent differences in individual performance or 'pronunciation'. In a semantic analysis of a body language one is more concerned at the kinological level with kinemic rather than kinetic units.

12. 'Iconic' is used here in the sense of 'visual likeness'. Many action images are related to the concepts they signify with reference to certain elements of visual similarity between the signifier and signified. Whereas in spoken language the connection between the sound image 'bow' or 'arc' (French) and an actual bow can be called 'arbitrary' (Saussure, 1966), in Bharata Natyam the action image for 'bow' refers to elements of the visual image of a man holding a bow; it is in this sense a visual representation or 'iconographic'. The issue is raised here because of the often stressed distinction between iconic and other signs, although with Goodman we would agree that this distinction is transient (1976:231).

13. Dumont notes this fact when he says that the smoking of a communal pipe "would be inconceivable in the south in view of the contact between the lips, and hence saliva" (1970:84).

14. "An open set is one of unrestricted, indeterminately large, membership; e.g. the class of nouns or verbs in language" (Lyons, 1968:436).

15. Although strictly speaking no two sets of words are perfect synonyms, one can speak of semantic equivalence in a looser sense.

16. The Ramayana ('life', 'way' of Rama) is known in one version or another to all Indians. See Puri (1980).

17. The sacrificial cord is usually suspended from one shoulder across the torso and falls over the opposite hip. See Das (1977:96pp.) for a detailed analysis of the right/left symbolism in the different kinds of rites prescribed for the householder in the Grihya Sutras, which include prescriptions as to how these cords should be tied for different kinds of ceremonies.


19. It is interesting to note that in the composite sign the values normally associated with left/right in terms of the woman/man opposition are reversed.
20. See Puri (1980:Appendix Ia) for a diagram that presents the kin terms in Bharata Natyam and their relation to ego, a woman.

21. A husband is often called pati-deva ('husband-god'); devi or 'goddess' is also an epithet for Hindu women.

22. In Sanskrit and Tamil there are separate words for 'lover', 'husband', 'king' and 'deity' which represent different relationships. Marglin (1980) investigates the connection between concepts of divinity, kingship and marriage through an analysis of the relationship between king, deva-dasi and temple brahman as expressed in the rituals of the Jagannath temple in Orissa.

23. The reference is to widely accepted theories on the gestural origin of spoken language such as are subscribed to by Adler (1979), Englefield (1977) et al.

24. Williams (1976) presents a detailed exegesis of the structural characteristics of the medium of movement which includes an analysis of the space in which all movement takes place.

REFERENCES CITED


Bharata Natya Shastra (see Ghosh, below).


Nandikesvara (circa 1250 A.D.) *Abhinaya Darpanam* (see Coomaraswamy).


**APPENDIX I**

Names of 32 hasta-mudra in Nandikevara's *Abhinaya Darpanam*. (Coomaraswamy, 1970; Gairola, 1967)

**Asamyutta Hasta** (One-hand positions)

<table>
<thead>
<tr>
<th>hasta-mudra</th>
<th>hasta-mudra</th>
<th>hasta-mudra</th>
<th>hasta-mudra</th>
</tr>
</thead>
<tbody>
<tr>
<td>patāka</td>
<td>tripatāka</td>
<td>ardha-patāka</td>
<td>kartari-mukha</td>
</tr>
<tr>
<td>mayūra</td>
<td>ardhā-chandra</td>
<td>arāla</td>
<td>sukhatunda</td>
</tr>
<tr>
<td>mushti</td>
<td>shikhara</td>
<td>kapittha</td>
<td>katakāmukha</td>
</tr>
<tr>
<td>sūchī</td>
<td>chandra-kala</td>
<td>padma-kosha</td>
<td>sarpashirha</td>
</tr>
<tr>
<td>mriga-shīrsha</td>
<td>simha-mukha</td>
<td>kāngula</td>
<td>alapadma</td>
</tr>
<tr>
<td>chatura</td>
<td>bhramara</td>
<td>hamsāśya</td>
<td>hamsa-paksha</td>
</tr>
<tr>
<td>samdamastra</td>
<td>mukula</td>
<td>tāmrachuda</td>
<td>trishūla</td>
</tr>
</tbody>
</table>

and also:

<table>
<thead>
<tr>
<th>hasta-mudra</th>
</tr>
</thead>
<tbody>
<tr>
<td>vyāghra</td>
</tr>
<tr>
<td>ardhā-sūchī</td>
</tr>
<tr>
<td>katakā</td>
</tr>
<tr>
<td>pali</td>
</tr>
</tbody>
</table>

**APPENDIX II**

Eight Usages of shikhara*

<table>
<thead>
<tr>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>I, 'bow'</td>
</tr>
<tr>
<td>II, 'man'</td>
</tr>
<tr>
<td>III, 'lord'</td>
</tr>
<tr>
<td>IV (left, right or both hands)</td>
</tr>
<tr>
<td>V (left, right, or both hands)</td>
</tr>
<tr>
<td>VI 'questioning', 'interrogative'</td>
</tr>
<tr>
<td>'drinking', 'pouring into mouth'</td>
</tr>
</tbody>
</table>

* Rough 'transliteration' of Labanotation in Figure 1 including match-stick figures to provide full body context.
left shoulder to right waist
'brahman's thread'

left waist to right shoulder
'kshatriya's thread'