DEEP STRUCTURES OF THE DANCE: A REPLY TO ZELLINGER'S 'DIRECTIONS FOR A SEMIOTICS OF DANCE'[1]

This reply to Zellinger's misunderstanding of semasiological theory provides an opportunity to place 'Deep Structures of the Dance' (Williams, 1976) in correct historical context in relation to later developments in semasiological theory. This paper was in fact written as early as 1972, although unpublished until 1976. Williams considers the terminology in the paper to have been outdated since 1974, but allowed publication as it stood because the structures to which it refers were, and still are, valid.

In the paper, use is made of two terms from transformational-generative linguistics; specifically the Chomskyan phrases 'deep' and 'surface' structures. These terms are no longer current in semasiological discourse. They were used to make a fundamental distinction between conceptual levels of comprehension and perceptual levels with reference to human action signs. The usages had great advantages at the time, for they served to illustrate the very necessary distinction between the empirical and non-empirical aspects of human movement systems. Unfortunately they bore such heavy associational weight to general Chomskyan theory that they were later abandoned.

In explanation of this decision to abandon use of the Chomskyan terms, Williams states:

> No writer can control the flow of associations which is triggered off in readers' minds ... but the results of the associational process are often less than desirable. The new categories will doubtless also trigger off associations, but it is hoped they will provide fewer barriers to understanding (1975:58).

It is unfortunately precisely such a 'less than desirable' result that has emerged from Zellinger's discussion of Williams' paper.

Her use of the Chomskyan terms could indeed be said to have triggered an associational process; one which leads Zellinger to a rather hasty dismissal of semasiological theory as being "...syntactics without semantics" (1979:9), and in his view, nothing more, it would seem, than an attempt to calque Chomskyan transformational grammar onto the medium of movement. In answer to his statement that Williams "...strays quite far from Chomsky's own theory and method" (p. 13), one need simply reply that this is only to be expected, for there was never any intention of adhering to it. The new terms that Williams refers to are 'transitive' and 'intransitive' structures and they denote the distinction between changing structures and invariant ones (See Williams, 1975 and 1979 for further explanation).

Zellinger has misunderstood entirely the structural level of the theory and the kinds of models presented in the paper. Williams did not set out to formulate a theory that described the semantics of social relations in empirically perceived events, but presents a formal

theory[2] for the study of structures of human movement systems from an anthropological viewpoint, be they dances, rites, ceremonies, martial arts or sign languages.

The paper in question was intended to demonstrate the mathematical core of the theory, primarily to those skeptical of the possibility of a formal theory emerging in this field. Zellinger's own vision is limited to a semiotics of dance that has "...a part to play in filling out dance theory" (p. 9 -- underline supplied). Semasiology is more bold than this. Its goals are ambitious and certainly surrounded by hazards, but the lack of a sound theoretical base is certainly not one of them. Neither is semasiology interested in merely contributing 'padding' to outdated or inadequate theories of the dance already in existence.[3] Surely Zellinger is putting the cart before the horse by deliberating "...on matters of method and classification" as if he believes that only the "...possibilities of a theory can be illustrated", and that the "terrain is relatively unexplored" (p. 9).

I propose to address the following conclusions about semasiology that Zellinger makes: (i) it is a purely scientific-mathematical analysis, (ii) semasiology ignores social and historical context, (iii) dance movement is reduced to anatomical constraints, and (iv) the enquiry offers little or no explanation of how dancing bodies signify.

The structural level of the theory and the kinds of models presented in 'Deep Structures', informed as they are by non-metric mathematics, linguistics, post-structural anthropology and philosophies of science, appear to have triggered off the naive, but all too familiar fear held by many artists and aestheticians, that somehow 'the meaning' is necessarily going to be abused and reduced to numbers if treated 'scientifically'. Nothing could be further from the truth, yet in spite of developments in quantum physics, Heisenberg, the 'leap' of the atom and all the rest, the lay view of what 'doing science' amounts to still rests firmly in a reductionist, determinist or behavioural frame-work. Or in the case of movement, on the physical level of explanation. Semasiology provides a more than adequate framework for dissolving such naive perpetuation of the 'science vs. art' dichotomy. Perhaps such a bold step is a source of skepticism in itself?

The mathematical principles involved in semasiology are relatively simple; set theory, clock arithmetic, permutational analysis and so on. What is novel is their application to the analysis of movement data. A mathematical core does not mean ipso facto that the meaning can be stated numerically or that it can possibly be divorced from context. Some levels of analysis may indeed be on a level that is semantically 'null', or in semasiological terms, on a 'kinological level', but this would necessarily constitute only one step on a scale[4] that leads from, perhaps, the minutest unit on a Labanotated text, to a complete dance or movement event, or entire idiom; informed by the social and historical aspects of cultural context.

If one is interested in the level of la langue rather than la parole in Saussurian terms, then it is the structures of the systems that one is interested in and not only the manifestations of the phenomena themselves. The intransitive structures of semasiological theory are a

set of theoretical structures (called 'P-', and 'S-structures') which are models[5] that provide a way of eliciting and talking about the structures at a <u>transitive</u> level (called 'p/s' and 'p:s' structures).[6] Zellinger has failed to grasp the theoretical level at which these <u>intransitive</u> structures lie.

The 'semasiological body' and the 'structures of interacting dualisms' are not dealing with the phenomena themselves either at an empirical or a conceptual level, but are "...panchronic paradigmatic laws which govern the movements of any human body and the space in which it moves" (Williams, 1975:49). These intransitive structures consist of invariant laws that are not, and cannot be, the regularities that constitute their empirical grounds. The semasiological body, for example, is a 'model' that is accepted as a theoretical 'given' (like the concept of gravity) and is a structure for making finite all the possible moves a body can make. Like all theoretical structures, it is a way of making sense out of empirical data (See Farnell and Durr, 1981).

With reference to the assumed asocial and ahistorical nature of semasiology: as a theory so firmly rooted in social anthropology, semasiology is well-equipped to answer the charge. Although not dealt with explicitly in the 'Deep Structures' paper, such considerations are of course axiomatic to the theory as a whole. As previously stated, it was only the mathematical core of the theory that was being dealt with here. Nevertheless, Zellinger is hardly justified in his dismissal of it on the grounds that "it was limited before it began" because it "did not include the social aspects of linguistic theory". One wonders, too, just how much Zellinger expects to be packed into one paper?

Once again, Zellinger assumes that there is a different kind of 'link' to linguistic theory than actually exists. Semasiology does take seriously a linguistic approach, but its roots are in certain Saussurian notions; concepts of <u>la langue</u> and <u>la parole</u>, synchronic and diachronic analysis, relations between signifier and signified, and such. Semasiology recognises that in view of the multi-dimensional nature of movement, in contrast to the linear nature of spoken language, there are necessarily many differences to be taken into account. The differences do not, however, negate the usefulness of a linguistic approach to the study; that is, certain models from the discipline of linguistics provide very productive ways to think and talk about movement.

Semasiology posits that action sign systems employ the same capacity for ordering, the same linguistic reflexivity of the human mind, that vocal systems do. One is not, by saying that, stating that movement is <u>the same as</u> sound, or that body languages are the same as spoken languages.

Semasiological theory is constructed in such a way that it is capable of dealing with all human movement systems in the same sense that the discipline of linguistics is interested in investigating the structures of spoken language systems; that is, it has a worldwide data base. Emerging as it did, from British post-structural anthropology, semasiology is informed by the paradigm shift; the 'linguistic revolution' that has occurred in the thinking of this century. Such thinking has affected not only the disciplines of linguistics and social anthropology, but the philosophy of science (See Harré, 1970; Winch, 1958; Toulmin, 1960, for examples), and is evident, of course, in the work of linguistic philosophers such as Wittgenstein and Best (1978).

In addition, because of an anthropological focus, other kinds of relationships to spoken language demand consideration. A semasiologist is interested in the ways in which spoken language is used to classify and categorize movement, for let us not imagine that as dancers we only communicate non-vocally. Spoken language intrudes itself, and therefore lexicons of movement terms, taxonomies of the body (Williams, 1980), spatial and temporal terminologies (Farnell and Durr, 1981) and so on, are all of interest.

An investigator is required, following anthropological tradition, to be fluent in the spoken language of the group under investigation, as well as the body language, for the two are intimately connected. How a dance 'signifies' cannot be divorced from social context, and by this we mean not only the 'performance space', which seems to be Zellinger's interpretation of context, but in relation to the beliefs and values of the culture as a whole. Zellinger's concern with "...several aspects of 'dance culture'; production and performance" is in our view, a very limited and therefore impoverished view of a much larger and complex whole.

A foundation in anthropology demands a world-wide data base, in which case we find the term 'dance' itself limiting, for it is a category of western society, and designates certain kinds of symbolic systems only. Use of the term omits from consideration many religious rites, ceremonies, the martial arts, sign languages; events in which movement plays a vital role in the semiotic. The term 'dance' is therefore in itself insufficient for an anthropological approach, hence the usage of the term 'action sign system' and the title 'anthropology of human movement' rather than 'dance anthropology' or 'anthropology of the dance'.

With reference to point (iii) above: semasiology in no way reduces dance movements to anatomical constraints. Once again, the concept of the 'semasiological body' is misunderstood. The confusion Zellinger gets into arises, perhaps, because such a structure is necessarily based upon anatomical constraints -- after all, we are dealing with the human body -- but 'based upon' and being constrained by, or restricted to a certain mode of explanation, are very different things. Labanotation is 'based upon' anatomical considerations, but is not concerned with an anatomical mode of explanation either. As anthropologists of human movement we are concerned with the semantics of movement and there is no sense in which biologically based disciplines such as anatomy, physiology or kinesiology can enter the realm of semantics, although linguistically oriented anthropologists can write about 'the semantics of biology' (Hastrup, 1978). The other kind of thing would be analogous to attempts to explain meanings of spoken stretches of sound via the muscular action and structure of the throat and larynx. Such explanations are necessarily semantically void.

Zellinger's approach recognises contextual importance to a very limited degree, although he does at least manage to avoid certain commonly held misconceptions about where 'the meaning' in movement lies (See Best, 1978). He does, however, seem to be saying that Williams is under the misapprehension that only a close, microscopic pulling apart and minute examination of movement phrases can provide some kind of 'real' or 'ultimate truth' about it, apart from a knowledge of the structure of the dance idiom, the intention of the performer and the social context,

which is not the case. A close systematic investigation need not be concerned with a physical level of explanation to be 'scientific'. Neither is one compelled to follow the kind of phenomenological thinking that jumps to the opposite extreme, by denying that empirical methodology can explain anything that matters and assuming that closer attention to the movement will reveal some kind of 'essence'.

As Best points out, it is often thought that by locating some underlying 'essence'; by defining the concept which is common to all applications of a movement, we can find a legitimate candidate for the signifying and therefore the meaning. Yet, precisely the same physical movement may count as an indefinite number of 'actions' according to context (See Williams, 1982 in relation to the act of kneeling, and Puri, 1981 for examples of polysemy and homonymy in the Indian <u>hasta mudra</u> system).

"What is required is not to consider it (the movement) in isolation, nor to try to locate what lies behind it, but to consider what lies around it" (Best, 1978:81). It is the <u>context</u> which characterises the action and it is unintelligible to regard the context as somehow <u>external to</u> the action, since apart from the context, it could not be the action it is. Failure to recognise this contributes, as Best points out, to a seminal misconception often encountered in phenomenological discussions about movement. If there is no <u>physical</u> difference to be discovered, an assumption is made about something lying 'behind' the movement not available to normal senses and attributed to inner feeling or emotion -- or something.

Semasiology distinguishes very carefully between movement as 'behaviour' and movement as 'action' (See Williams, 1979 and Ardener, 1973). That is, an action presupposes the intention of an agent, an actor, and this is an important contextual consideration. To give an account of the meaning of a word is to describe how it is used; to describe how it is used is to describe the social interaction into which it enters. Movement is precisely the same in this regard. The point is that changes in meaning can occur at many levels, just as they do in spoken languages, at a phonemic and morphemic level, and at a level of discourse.

To illustrate briefly with an analogy to spoken language; the words 'nation' and 'nation<u>al</u>' are different because of two additional letters, but they are not different in meaning in the same way that 'nation' and 'notion' are. In the same manner, a '<u>tendu</u>' in classical ballet belongs to a set of movements practiced '<u>en croix</u>', just as 'nation' and 'national' or 'nationalistic' are of a family -- or set -- of words. It is only adequate knowledge of the specific idiom of body language and understanding of the rules regarding different forms of the 'same' movements that will tell us anything about the differences in meaning.

We expect body languages to be no less complex than spoken languages. As with the latter, two entirely different movement stretches could have the same semantic content; for example, the meaning of the following two sentences is the same:

(a) At what time shall we rendezvous?
(b) Tell me, at what hour shall we meet?

No amount of close attention here to words or letters will reveal why the meaning is the same. Many stretches of movement within a dance idiom are the same in character -- and as most choreographers would agree, it is (as with words and sentences) a matter of selection to suit the situation. This is to emphasize context.

The many levels of rules attached to specific movement idioms make the collection and comparison of data at an empirical level much easier. It is at the level of structure and rules that semasiology addresses the problems: at the level of la langue, not la parole. It is only when one understands the 'grammar', the structure of a language system, that one can make apparent how it is that the rules apply. No amount of changing letters and adding others will make sense of the variety of spoken words, neither will concentrating all our attention upon changing individual movements within dances lead to an understanding of the idiom of which a single dance is but one example. Vast amounts of collecting and comparing at a purely empirical level like this amount to little more than butterfly collections or unrelatable movement facts.

I used the word 'unfortunate' earlier with regard to Zellinger's arguments against Williams for two reasons: first, because it is painfully obvious that he has in fact misunderstood both the purpose of the paper and the level of sophistication that semasiological theory implies. Second, it is especially unfortunate in view of the fact that Zellinger's own concerns appear to be with research towards a semiotics of dance, and as such, could be much informed by a semasiological approach.[7]

This reviewer is led to wonder, however, whether in fact the second section of the 'Deep Structures' paper was in fact read at all, so keen is Zellinger to dismiss any connection between semasiology and context. The constant referral to semasiological theory in the past tense throughout Zellinger's article reveals an arrogance that is totally unacceptable, too, and unbecoming of scholarly debate in general.

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FOOTNOTES

1. See 'Directions for a Semiotics of Dance' in Dancing and Dance Theory. Ed. Preston-Dunlop. Laban Centre for Movement and Dance, London, 1979.

2. For a discussion of 'formal' and other kinds of social scientific theory, see Diesing (1971).

3. It is possible, by writing to the JASHM editors, to purchase a copy of a text used for one of the Master's degree courses, entitled 'Theories of the Dance: A social Anthropological View' written by Williams for students' use.

4. Zellinger appears to have ignored the structure outlined on p. 129 of the first half of Williams' paper, where it is obvious that, through concepts of paradigmatic-syntagmatic relations, she does not ignore 'context' at any level.

5. For an explanation of 'models' and their use in social scientific theories, see Diesing (1971 — especially chapter 7) and Harré and Secord (1972).

6. Briefly, 'p:s' refers to parts:whole relations and 'p/s' refers to code/message relations in the study of action sign systems. For an original discussion of p/s relations, see Ardener (1978).

7. One wonders, too, if the Glossary of Terms at the end of the 'Deep Structures' paper was noted, for in the definition of 'semasiology', given on p. 143 (after Part I) and p. 180 (given after Part II), Williams clearly states the connection, i.e. "Semasiology could certainly be considered to be a development of the Saussurian conception of semiological study, but a terminological distinction became necessary when the Swiss master's term was interpreted to include the behaviour of animals and the sign functions of machines..." (Williams, 1976).

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