Culture and Semantics

FRANSON MANJALI
Jawaharlal Nehru University
New Delhi

Studies on human representational systems, linguistic or cognitive, though often caught up in universalist themes, have always ultimately opened up to the question of cultural specificities. Laying aside the classical perspectives, and viewing the problem primarily from the point of view of linguistics in the modern era, we can discern certain key stages where the interrelationship between language, culture, and cognition has been taken up for particular enquiry.

During the epoch of historical linguistics (inaugurated by William Jones in Calcutta in 1786), genealogical 'family' relationships were identified through comparative studies of the 'basic vocabulary' of languages or language groups that otherwise appeared to be disparate and discontinuous—such as those of the northern Indian and the European languages—linguistic contiguities were established, which were also, often falsely, thought to indicate contiguities of race-and culture. Several European scholars, on the basis of feeble evidence and a week methodology, spoke of an Indo-European 'culture'—as opposed for instance to the Semitic or the Chinese 'culture'—which united them with their newly colonized and hapless brethren in Asia. And this was surprisingly echoed by a section of their counterparts in colonies like India. It is important to note that historical linguistics, by and large, was only concerned with the relationships among the sound form of a limited vocabulary of the given languages, and was utterly devoid of an analysis of their semantic structures which in later periods became one of the sites for studying cultures.

Though historical semantics was introduced by Michel Bréal in France by 1900, it still remained largely within the formal paradigm of the 'Neogrammarians' who were directly influenced by Auguste Comte, the founder of the positivist philosophy. The main breakthrough came soon after in the form of Ferdinand de Saussure's proposal for a Semiology, or a 'science that studies the life of signs in society'. De Saussure's posthumous publication (1916) characterized language as one among various systems of signs, and being undeniably the most important one, as the semiotic model for studying other social and cultural institutions. His seminal idea of a semantic part of the sign, or

the signified, on par with the formal part, or the signifier, was indeed revolutionary for the period, though it was his distinction of the sign-system (*langue*) and the sign-use (*parole*), as well as his identification of two kinds of sign relations, viz., the syntagmatic and the paradigmatic that became part of the central tenet of linguistics and of the structuralist paradigm in the social sciences.

Even when the semiotic paradigm was gaining in prominence in the continental Europe—where culture and civilization were always a point of scholarly attention, for reasons noble or otherwise—the linguistics paradigm in the United States, already raised to a formidable fortress thanks to diligent studies on the Amerindian languages, continued to be mostly formalistic. Bloomfieldian structural linguistics retained the positivism of the Neogrammarians, minus their historicism. Worse, under the influence of the all-swaying Watsonian psychology, it unabashedly espoused linguistic behaviorism, later made famous by B.F. Skinner. For Leonard Bloomfield, 'meaning is the weakpoint of linguistic study' because the behavioral stimuli corresponding to most word-responses could not be identified. Even when anthropologists like Franz Boas were busy trying to unravel the cultural systems of the Amerindian communities, a majority of American structural linguists were preoccupied with enriching the techniques for identifying the distribution of phonemes, morphemes, and other linguistic units within the formal systems of particular languages. Among the few exceptions to this trend were, Edward Sapir and Benjamin Whorf, who after their pioneering investigations on the cultural and cognitive underpinnings of language, proposed in a truly Humboldtian fashion and on similar grand lines, the relativity of thought with respect to language, and hence of culture.

This linguistic relativism was even more short-lived than its source paradigm, the behaviorist structuralism. Both were swept away by the new current of transformational-generative formalism of Noam Chomsky. Chomsky initially shared Bloomfield's scepticism towards a linguistic study of meaning, perhaps in the same proportion. Chomskyan cognitivism which had appeared at first as a breath of fresh air dismantling the stimulus-response paradigm in the human sciences, however chose to remain a cognitivism of formal mental operations—essentially syntactic and hence universal—with 'semantic represen-tations' relegated to the periphery. A formal semantics which was later introduced will have nothing to do with the experiential or phenomenological aspects of meaning, but its elements and structures related to the world, according to the theory, in a purely 'projective' fashion. In other words, in this version of cognitivism made popular among others by Jerry Fodor, meaning does not derive from human

experience in the world, and thus is not 'embedded' in social or cultural contexts, but results from the projection of the referential world. The 'ghost' of meaning which was decisively excluded from the stimulus-response linguistic model of Bloomfield, still had to be exorcised by Chomsky, and could only be settled adventitiously within his input-output model of a universalist syntax.

Meanwhile, i.e., exactly when Chomskyan formalism was invading the 'mainstream' linguistics, Saussurean Semiotics prospered in quite unexpected ways. Having been endorsed by scholars as eminent as Maurice Merleau-Ponty in philosophy, Roman Jakobson in literary studies, and Claude Lévi-Strauss in the social sciences, it enjoyed enormous success in the 50's and 60's. Jacques Lacan rejuvenated psychoanalysis in France with the help of ideas derived from Saussure, Jakobson and Lévi-Strauss. Lévi-Strauss effectively made 'meaning' the central concern of his *'sciences de l'homme'*. Roland Barthes and Agirdas-Julien Greimas wanted large areas of the study of culture, such as literature, myth, folktale, fashion, media, etc., to be based on the 'science of signification', or semiotics. The hey-day of structural semiotics continued unchallenged till the political events of May 1968 which greatly changed the content and form of the French academia. Meaning henceforth had to be regarded as a variable entity, and not as permanently hinged to a static structure.

Undoubtedly, these two trends, namely the cognitive formalism of the Chomskyan kind and the semiotic approach of Lévi-Strauss also had their impact on an anthropology of culture. Roger Keesing (1974) has outlined three 'ideational' theories of culture that anthropologists came to adopt during the 60's and early 70's. These are:

a. *Cultures as cognitive systems* proposed in the work of Ward Goodenough, according to whom '(A) society's culture consists of whatever it is one has to know or believe in order to operate in a manner acceptable to its amembers';

b. *Cultures as structural systems* proposed by Levi-Strauss who 'views cultures as shared symbolic systems that are cumulative creations of mind; he seems to discover in the structuring of cultural domains—myth, art, kinship, language—the principles of mind that generate these cultural elaborations'; and

c. *Cultures as symbolic systems* proposed by Clifford Geertz who like Lévi-Strauss views cultures as semiotic, but wants to study them as shared codes of meaning underlying symbolic action. For Geertz, '(M)eanings are not in people's heads; symbols and meanings are shared by social actors—between them, not in them...' Adopting the post-structuralist idiom he also viewed culture as 'an assemblage of texts'.

Outside of linguistics and anthropology, it is Vygotskyan psychology which attempted to bring language, culture and cognition on a common focus. Rejecting both rationalist and behaviorist approaches to linguistic and cognitive development, Lev Vygotsky, working in a socialist Soviet milieu, began to view verbal thought and intellectual speech as resulting from the historical-cultural evolution of man, beginning with the institution of collective labour. Vygotsky claimed that from the time when human activity and speech come together, in the growing child or in human evolution, man leaves behind a purely biological course of development and enters the stage of cultural-historical development, aided and abetted by labouring social contexts. Inverting the rationalist faith that speech is a mere garb of thought, Vygotsky asserted that thought can only come into existence through speech.

In the context of the more contemporary cognitive sciences—the multidisciplinary field comprising linguistics, philosophy, psychology, neurosciences, anthropology and computer science—we obtain interesting proposals linking language, culture, and cognition. In opposition to the earlier 'classical' models, many workers in the cognitive sciences today regard that mental representations are not arbitrary, discrete propositional structures belonging to an ideal mental world, formed independently of the activities of the individual subject, while fully endorsing the position that these representations have a strict bearing on her experience of living with a human body in a natural and social world. Both, phenomenologically-oriented philosophers and workers in neurosciences have rejected the mind-body dualism of Descartes' rationalism, as well as the associated psychological 'functionalism' that advocates the study of a purely mental 'software' in disregard of the neural 'hardware'. They affirm that the mental properties 'emerge' as a result of the dynamical processes of neural excitation and inhibition during the sensory and motor interactions of an individual with her environment. These excitations (or inhibitions) take place at neural junctions known as synapses, owing to which connectivities and larger neural maps are formed inside the brain.

Some biologists have pointed out that organisms possessing nervous systems interact with the world in ways evolutionarily acquired and specified for those organisms. Thus, in a frog's 'cognitive' world, flies and mosquitoes have a place that these insects do not have in the human cognitive context. Each organism, through action in the world, becomes, according to the Chilean neuroscientist Humberto Maturana 'structurally coupled' with definite aspects of the environment in the

course of evolution and development. These 'couplings' between specific properties of the organism's neural structure and specific aspects of the environment constitute its 'cognitive domain'. Further, individuals possessing similar cognitive domains form 'interlocked systems' in the course of mutually orienting actions aimed at the preservation of the group or the species. These interlocked systems give rise to what Maturana calls the 'consensual domain'.

It is argued by many practitioners of what is now referred to as non-Cartesian cognitive science that corresponding to the arrays or patterns of neural connectivity that are experientially formed in the brain, there exists certain mental 'schemas' which are activated when an individual experiences similar new situations or linguistic tasks. The notion of 'schema' was first technically introduced by Immanuel Kant to account for the mediation between logical concepts and sensory information, that gives 'significance' to our mental representations. It has been used more recently in a different but related sense in psychology, by F. Bartlett, U. Neisser, etc. In artificial intelligence literature, this term has been used often in parallel with terms like 'script', 'frame', 'model', etc.

Certainly, when we consider culture, it is not the individual schemas, but the intersubjective schemas pertaining to the 'consensual domain' that are relevant. Roy D'Andrade employs the term 'cultural models' to refer to these. According to D'Andrade, 'a cultural model is a cognitive schema that is intersubjectively shared by a social group. Such models typically consist of a small number of conceptual objects and their relations to each other.' Further, 'a schema is intersubjectively shared when everybody knows the schema, and everybody knows that everyone else knows the schema, and everybody knows that everyone knows that everyone knows the schema...'

It is tempting to think that these 'cultural models' or 'schemas' underlie culturally embedded actions and use of language that we are routinely engaged in. And moreover, there is evidence to think that these cultural-cognitive 'models' are at the root of our use of conventional metaphors, of the sort unearthed and analysed by George Lakoff, Mark Johnson and others. For example, the English metaphorical expressions for 'anger', involving reference to change of facial colour, rise in the temperature and pressure of the 'body-container', its eventual bursting, etc. may be based on experientially and inter-subjectively shared models of the emotion.

However, we have to be cautious not to yield to a static view of these 'models'. They come to be, and are forever reconstituted through series of 'conceptual blendings' of the sort proposed by G. Fauconnier and M. Turner. Though we adopt this term, the actual process may be

extremely complex, and needs deeper theoretical reflection and elaboration. Furthermore, the cognitive point of view that culture and all that surrounds it result from mutually orienting behaviour and that they are ultimately derived from 'sharing' of individuals' lived experiences presents us only with a micro perspective. Cultures, in fact, are constituted of a very large number of individuals, and it is difficult to observe the occurrence of biologically-based mutual orienting behaviour in real situations. Moreover, contestations are as much part of the cultural sphere as are agreements. Rather noise-free acculturation can perhaps be seen only in the limited context of cultural acquisition by children or foreigners. In such contexts, however, there exists a cultural differential between the donors of culture and its receivers, be it children or foreigners. Here, in the absence of similar 'cognitive domains' the possibility of sharing a common symbolic system or language is regarded as a prerequisite for cultural sharing.

Viewing culture in this manner, that is, as experientially and cognitively founded and linguistically abetted, may amount to a cognitive materialism of culture. Such a perspective could help us to do away with the rampant idealist notions of culture, and get a clearer perspective on the various kinds of cultural idealism. Culture is often spoken of as belonging to a transcendental realm of ideas and programmes of action, detached from its contexts of experiential creation. This is not entirely surprising since the cognitive parameters of culture are easily available for discursive purposes, while its experiential bases lie buried under thick crusts of apparently ideal constructions such as myths, folktales, etc. which squeeze out the rawness of experience in favour of the popularly evaluated and historically accumulated narrative forms. However, as some of the studies on metaphor seem to suggest, at least as far as the linguistic and narrative forms are concerned it is possible to trace their trajectory from a physical and experiential level to the level of their cultural / intersubjective constitution. Eve Sweetser's recent observation is relevant in this regard: 'linguistic structure is a part of culture, and linguistic metaphorical usages are based on broader cultural cognitive structures'. A related trajectory that we may like to trace is that which extends from 'signification' to 'schema'. It is perhaps tasks like these that a cognitive materialism of culture could set before itself, and thereby attempt to forge a new alliance between the cognitive and the social sciences.

REFERENCES

D'Andrade, R., 1985. 'A folk model of the mind', in, Holland, D. and N. Quinn, 1987. *Cultural Models in Language and Thought.* Cambridge: CUP. (112-148)

Gardner, H., 1985. *Mind's New Science. A History of the Cognitive Revolution*, New York: Basic Books.

Keesing, Roger, M. 1981. 'Theories of Culture', in, R.W. Casson (ed.), *Language, Culture and Cognition—Anthropological Perspectives*. New York: Macmillan, (42-65) (Reprinted from *Annual Review of Anthropology*, 3, 1974).

Maturana, H. and F. Varela, 1972. *Autopoiesis and Cognition*. Dordrecht: D. Reidel.

Sweetser, E., 1995. 'Metaphor, mythology, and everyday language', *Journal of Pragmatics*, 24: 585-593.

Turner, M. and G. Fauconnier, 1995. 'Conceptual Integration and Formal Expression', *Journal of Metaphor and Symbolic Activity*, 10, 3.