## Body, Space, and Metaphorical-Cultural Worlds

One of the more remarkable things that has happened in Linguistics and related Cognitive Science disciplines in the last two decades is the increasing emphasis on experiential and phenomenological dimensions which had been anathema for the positivism-backed western science for a very long time. Two relatively recent works, namely, Mark Johnson's The Body in the Mind — the Bodily Basis of Meaning, Imagination and Reason (1987) and Francisco Varela, Evan Thompson and Eleanor Rosch's The Embodied Mind – Cognitive Science and Human *Experience* (1991), lead us squarely into the tradition of Phenomenological philosophy. Of these the latter which develops an elegant and creative rapprochement of "enactive"(1) cognitive science (deriving from Humberto Maturana's concept of 'autopoiesis'), Merleau-Ponty's phenomenology of perception and the Madhyamaka (middle way) Buddhist philosophy of Nagarjuna will serve us as some sort of a background, but we shall be more directly concerned with Johnson's work which takes conceptual metaphor and the related notion of image-schema as its central themes.

We have tried to explain the spatial character of the conceptual metaphors and image-schemas, while fully retaining Lakoff and Johnson's 'embodiment' perspective. To this end, we depend on some relevant points of argument appearing in Maurice Merleau-Ponty's *Phenomenology of Perception* (1945). We note here that the problematics introduced by Merleau-Ponty, such as the embodiment of mind, the embeddedness of thought and language in social and cultural context, and the enactive nature of cognition have gained respectability in Cognitive Science discussions in recent years (2). They have been highlighted and assiduously developed in the above-mentioned work of Varela et al., though the authors go on to emphasize that Merleau-Ponty's settling for an entre deux that discards universalism — absolutism on the one hand, and relativism-nihilism on the other, parallels a similar, and perhaps more radical 'middle way' set forth by Nagarjuna in the 2nd century A.D.

We have also briefly dealt with a supplementary problem which has opened up interesting avenues for future research. By means of a small number of sentence-examples from English, French, Hindi, and Malayalam, we have tried to show that individual languages, as well as semantically-related groups of languages encapsulate certain cultural worlds which are primarily articulated through the historical development and the use of networks of metaphorical systems. This is what we have proposed to call the 'metaphorical-cultural' worlds.

Metaphor(3), at least the way in which it is understood in Cognitive Semantics, was discovered towards the end of the 1970's. Though Michael Reddy's article, "The Conduit metaphor" (1979) could be regarded as the path-breaking predecessor, (4) it was George Lakoff and Mark Johnson's celebrated work, *Metaphors We Live By* (1980) which unveiled an enormous field of metaphorical activity present in the ordinary use of human language. Lakoff and Johnson drew our attention to the fact that apart from the conscious and creative use of metaphors in poetic discourse, people use another kind of metaphors conventionally and rather unconsciously — and yet creatively, as part of their routine use of language. These metaphors, though not necessarily forming the 'core' of the language 'system', are part of the conventional codes of language use, and are demonstrably, very pervasive. Lakoff and Johnson went on to claim that such metaphors are at the very basis of our thought because, with them, whole domains of our experience are systematically conceptualized in terms of other domains of experience. And since they are often seen to

involve systematic cognitive mappings of one domain of experience, the source domain, onto another domain of experience, the target domain, these metaphors are also referred to as 'conceptual metaphors.' Moreover, a large majority of these conventional / conceptual metaphors consists in the systematic mapping from the concrete to the abstract domain, the mapping from the spatial to the temporal domain being probably the most common case.

An earlier reference to 'metaphor' as a fundamental semiotic unit appears, though in a different context, in the writings of Charles Sanders Peirce. Inventing a series of ternary divisions, Peirce had identified three kinds of signs, viz., the icon, the index, and the symbol. These are defined by relations of similarity, contiguity, and arbitrariness between the signifier and the signified (or, the representamen and the object, in Peircean terminology). But more important for us is Peirce's further division of icons into images, diagrams, and metaphors. As per his definitions, images are icons "which partake of simple qualities..."; diagrams are "those which represent relations, mainly dyadic, or so regarded, of the parts of one thing by analogous relations"; and metaphors are "those which represent the representative character of a representamen by representing a parallelism in something else" (See Hiraga 1994, for a brief, but useful discussion). Thus, the specific characteristics of the three subtypes of icons are qualitative imitation, structural analogy, and imputed parallelism, respectively. The images and the diagrams will show some objective correspondence between the representamen and the object, while in the case of the metaphor-icons, the correspondence may be mostly experientially constituted on the basis of a perceived parallelism. Peircean units form a regressive continuum from those which have a maximum objective correspondence between the object and the spatial/temporal form of the representamen as in the case of the image, to the 'arbitrary' symbol where there is no such correspondence at all. Along this continuum, the

metaphor occupies a somewhat middle position, the objective correspondence here being a parallelism that is subjectively perceived. Its iconicity is thus part-objective, part-subjective.

From a related perspective (though lacking in a typology of signs la Peirce) Mark Johnson has sought to explain the conceptual metaphors roughly in terms of the Kantian schemata. According to Kant, the phenomena are properly cognized by the mind not in terms of conceptual units nor images, but in terms of more general and abstract structures, or the schemata. The schemata "lie at the foundation of our sensuous concepts" (Kant 1988 edn.:119). They are different from images, and in fact the schemata are responsible for the production of images. As per his definition, the "formal and pure condition of sensibility, to which the conception of the understanding is restricted in its employment, we shall name the schema of the conception of understanding, and the procedure of the understanding with these schemata we shall call the Schematism of understanding" (ibid., p. 118). The schemata are structures of imagination that connect sense perception with the concepts of understanding, and thus provides significance to the phenomena. In saying that the schemata are imaginatively produced. Kant was suggesting that they are mentally constituted in response to an external thing or situation. In any case, the schemata are necessary to make sense of what gets empirically represented and intellectually ordered in the mind.

Johnson emphasizes the cognitively central role of the "image-schemas", which like the Kantian schemata, are abstract structures situated mid-way between the logical-propositional structures and the more sensible mental images. (They are thus 'basic level' categories, in the sense of Eleanor Rosch, situated between the 'superordinate' propositional structures and the 'subordinate' images.) The former are regarded as too objective because they employ arbitrary symbols whose signifier-signified relation is constituted independent of the thinking/speaking subject, and which lacks in any spatio-temporal extension that comes from a direct imitation of perceptual experience; whereas the images are too subjective, being rich in details which may not be available for all perceivers alike. The imageschemas are derived from recurrent bodily activities of sense perception and movement, which are available to man from his infancy. They can also be derived from perceptual modalities other than the visual, such as the tactile, though the visual schemata are felt to be dominant. Further, the image-schemas are susceptible to mental operations analogous to spatial operations such as rotation, and to more specific "image-schema transformations"(5). They are imaginatively constituted, preconceptual structures upon which later conceptual processes and development take place. Because of the involvement of the body in the constitution of these schemas, they are also referred to as "embodied" or "kinaesthetic" schemas. In Johnson's definition, "an image schema is a recurring, dynamic pattern of our perceptual interactions and motor programmes that gives coherence and structure to our experience" (Johnson, 1987: xiv).

While Kant was concerned with cognitive schemas of a general and deep nature(6), Johnson's focus is primarily on the structural or topological schemas of forms and forces derived from the bodily experiences of perception and motor activity, and which are intersubjectively shared within a socially or culturally definable community. Among the various kinaesthetic image-schemas proposed are the container schema (consisting of an interior and exterior separated by a boundary), the part-whole schema (consisting of a whole, parts, and a configuration), the link schema (consisting of two entities connected by a link), the centre-periphery schema (consisting of a entity with an area, a centre and a periphery) the source-path-goal schema (consisting of a source, a destination, a path and a direction), etc. These schemas are derived respectively from our experience of our body as a container, our body as consisting of connected

parts in a whole, the umbilical link between the mother and the infant at birth, and our perception / experience of movement from a starting point to a goal along a path. Another important image-schema is the verticality schema which "emerges from our tendency to employ an up-down orientation in picking out meaningful structures of our experience... The verticality schema is the abstract structure of these verticality experiences, images and perceptions" (ibid., p. xiv). The bodily experience here is, presumably, man's erect posture, unique in the animal world. A closely related schema is the balance schema, which is derived from the "balancing activity we learn with our bodies" (ibid., p. 74). In addition to these rather static schemas, Johnson has proposed, on the basis of Len Talmy's influential work (1988), a set of 'force dynamics' (FD) schemas which are derived from our body's recurrent experience of exertion of force, resistance to force, overcoming of resistance, blockage of force, removal of blockage, etc. These FD schemas are that of Compulsion, Blockage, Counterforce, Diversion, Removal of Blockage, Removal of restraint, Enablement, and Attraction. These schemas are represented by means of appropriate figures, permitting us to appreciate their spatial quality. (See Lecture 4)

The importance of these schemas, as argued by Lakoff (1987) and Johnson (1987), lies in the fact that they are cognitively more primitive than both the conceptual and propositional structures. They are 'gestalt' structures which interpret and frame our experiences, expressions, and comprehension before any logico-combinatory operation can take place upon the conceptual/categorial units. That is, they are preconceptual, and prelogical, in the sense of being prior to the elements of a propositional logic. At this level, each new experience is "figured" in terms of the topology of the embodied schema. In other words, new experiences, situations, etc., are metaphorically grasped and expressed in terms of the already available embodied schemas. Thus, the body imposes its own experiential and perceptual structures on any incoming input of perceptual or other experience which are of a non-body kind. Of course, this is a historically accretive process, and does not happen all in a person's life-time. Almost invariably, the embodied schemas of concrete objects and situations are employed to make sense of more abstract entities and events. We can easily visualize how the schemata mentioned above are metaphorically projected onto abstract domains of experience. For example, the Container schema allows us to conceptualize interiority, exteriority, or the boundary of any abstract entity, e.g., philosophy. The balance schema is the source of the metaphorical elaborations of an abstract kind such as systemic/ structural balance, artistic balance, psychological balance, rational argument balance, legal balance (or, justice), and mathematical equality. And, the FD schema of Compulsion appears in the basic ('deontic') or the epistemic meaning of the English modal element, 'must'. One of the more familiar metaphors mentioned by Lakoff and Johnson is the MORE IS UP metaphor, where quantity is expressed in terms of the verticality schema. Similarly, TIME IS SPACE is perhaps the most pervasive of all conventional metaphors, as attested by the common prepositions of space and time, and other spatial expressions for representing time, in almost all languages. (For more detailed examples and explanations, see Lakoff and Johnson, 1980; Lakoff, 1987; and Johnson, 1987).

In presenting our own perspective on these matters we shall adopt here the non-objectivist line that there is no 'out-there' world independent of the subject, nor a pre-given world in its fullness, ever ready to be represented by a cognizing mind, but that cognition is all about 'having a world' that is enacted by a constantly changing subject or community situated in a particular spatial and cultural context. The subject and the world are 'codependent' in the sense that the one constitutes the other along a constant and continuous chain of interactive events. We shall also favourably view the argument of Ernst Cassirer (not unlike that of Johnson

and Lakoff) that metaphor, far from being a mere poetic phenomenon, is at the root of both language and narrative ('myth' for Cassirer). And if this argument is essentially correct, then we have to admit that all descriptions of the world, beginning with that of the initial spatio-temporal world, being caught in a web of metaphors, are essentially nothing but linguistic conventions, and that all our 'truths' are only "conventional truths" (samvrti, for the Buddhists). The ultimate truth (paramartha) of the world, as Nagarjuna had argued, is of the nature of emptiness, or sunyata.(7)

Such a non-representational understanding of cognition is best formulated by neurobiologists H. Maturana and F. Varela in their Autopoiesis and Cognition (1972). These authors start from the question of the 'organization of the living'. By defining living systems as cognitive systems, they seek radically new approach to both biology and cognition.

Unlike in the traditional epistemologies which start by privileging either the subjective (rationalist) or the objective (empiricist) end of the knowledge process, Maturana and Varela see cognition in terms of its evolutionary effect on the living systems themselves. Instead of viewing cognition as central to an abstract 'mind' (as in 'classical' cognitive science), or as a process that is merely concerned with the organ of brain (as in 'connectionism'), they see it as the central process that determines the living process. What they eschew is the conception of a mind that can be potentially or really equated with a universal mind, as well as that is forever awed by and ever-expanding matter of universe. It is possible to eschew such false conceptions as soon as we begin to accept that body and mind can only remain proportionate to each other, even if such a proposition contains an ethical ideal. 'Autopoiesis' refers to this essential coevolution of the body and mind, a continuous 'self-creation' of the body-mind couple.

Maturana and Varela maintain that every organism including the human lives not in an absolute objectivity, but in a 'niche' that is specific for it. This is especially true of the organism that possess nervous systems which interact with the world only in ways that are evolutionarily acquired and specified for them. Thus in a frog's 'cognitive world' flies and mosquitoes have a place that these insects do not have in the human cognitive world. On the reverse, trains and motor vehicles a have cognitive reality for us, in way that frogs don't have it for them. Each organism, through action in the world becomes, 'structurally coupled' with definite aspects of the environment in the course of evolution and development. The history of such structural couplings between an organism's neural structure and specific aspects of the environment constitutes its 'cognitive domain'. Thus, cognition is defined neither in terms of what is in the 'head' nor in terms of what is in the world, but as an in-between phenomenon, as that which stabilizes the living organism in its environment. And the change that is effectuated in the process in not a change in a localized part of the body endowed with a representational function, i.e., the mind or the brain, but is a change that affects the whole living organism, its environment, and the relationship between the two.

Further, individual organisms possessing similar / comparable cognitive domains form interlocked systems. According to Maturana and Varela, these interlocked systems — the basis for a culture or community — belongs to the 'consensual domain'. The main process by which the consensual domain is constituted is that of language. Language, in this framework is viewed as 'mutual orienting behaviour'. The authors thus have a strongly 'dialogical' perspective on language, one that is strongly rooted in biological considerations. The basic function of language is not to communicate an intralinguistic 'sense' or an extralinguistic 'reference' (in the sense of G. Frege) that are concerned with denotative semantic elements independent of the speaking subjects. The chiefly connotative

function that is ascribed to language serves "to orient the orientee within his cognitive domain". Maturana insists that

...there is no transfer from the speaker to the interlocutor; the listener creates information by reducing his uncertainty through his interactions in his cognitive domain. Consensus arises only through cooperative interactions in which the resulting behaviour of each organism becomes subservient to the maintenance of both." (Maturana and Varela, 1972: 119-120)

The Buddhist philosopher Nagarjuna (with whom Varela claims affiliation for autopoiesis) had presented his conception of 'codependent arising' (pratitasamudtpada) by denying the independent existence of all three terms: the subject, the relation, and the object. For example, in the domain of visual perception, this is exemplified by the fact that: i. there is no seer without there being seeing / sight. ii. there is no sight without seeing /seer. iii. there is no seeing without seer / sight.

And additionally, a seer and sight cannot be the same, because then there'll be no seeing. b. seer and sight cannot be two separate and independent things, because then there'll be other relations.

On such a basis, Nagarjuna is able to arrive at the conclusion that there is no independent seer, sight, and seeing. However, all these have an acutely pragmatic significance since all three — the subject, the object and the relation — put together form a truly existent moment of consciousness that is the ultimate reality. (See Varela et al. 1992: 217-235)

Working more directly within the phenomenological tradition, Merleau-Ponty proceeded from an understanding of the subject-world relationship as an integrated and 'codependent' system governed by the orientedness of a 'situated' subject towards objects and situations in the world. There is a 'thrownness' of the subject in the world, and the subject projects herself onto the world which in turn is introjected on the subject in a continuous dialectic. It is claimed that at the base of this relationship is an even more primordial relation linking body and space. "Space and perception generally represent at the core of the subject, the fact of his birth, the perpetual contribution of his bodily being, a communication with the world more ancient than thought" (Merleau-Ponty, 1962 edn.: 254). The relation between body and space, is thus not to be seen as the relation between an objective body located in an objective space. Beneath objective space, there is a "spatiality... which merges with the body's very being. To be a body, is to be tied to a certain world; our body is not primarily in space: it is of it" (ibid., p. 148). Our body "inhabits" space (and time) (ibid., p. 139). This primitive spatiality of the body, in the form of the 'body image' plays a key role while we apprehend objects in space. "Body image is ... a way of stating that my body is in-the-world" (ibid., p. 101). Spatiality of the body is constituted "in action", through oriented movement (ibid., p. 102, 106). Neither the subject's body nor external objects can be seen in terms of a mere point-horizon or figure-background structure, independent of an orienting function of the bodily space. For, "as far as spatiality is concerned, ...one's own body is the third term, always tacitly understood, in the figurebackground structure, and every figure stands out against the double horizon of external and bodily space" (ibid., p. 101).

Owing to the pivotal role of the body in the subject-world system Merleau-Ponty insists that external objects cannot be defined, detached from the actual conditions under which they are presented to us. For example, a cube defined in terms of its distinctive properties or features, viz., the notion of the number six, the notion of 'side' and that of equality (for 'an object with six equal sides'), rather than presenting to thought the concept of the cube, introduces a spatial perspective on the entity. We are forced to "trace in thought that particular form which encloses a fragment of space between six equal faces. Now, if the words 'enclose' and 'between ' have a meaning for us, it is because they derive from our experience as embodied subjects. In space itself, independently of the presence of a psycho-physical subject, there is no inside and no outside. A space is 'enclosed' between the sides of a cube as we are enclosed between the four walls of our room." (ibid., p. 204)

In this perspective, spatial unity, and the unity of the objects in space are constituted on the basis of the bodily unity and spatiality formed enactively in space. The unified space of the external objects acquire body-like spatial unity as well as the bodily schemas. And since the motility of the body proceeds from the "expressive unity" of the body to its parts which perform particular expressive "jobs-at-hand" like typing, or painting, "the spatiality of the body must work from the whole to the parts…" (ibid., p. 99). Thus part-whole relation is also enactively comprehended. In sum, in our attempt to account for the spatial character of the image-schemas (which in turn underlie the conceptual metaphors) we have considered the primitive body-space relationship, bodily unity and spatiality onto objects in space, and a division of the bodily spatiality that proceeds from the whole to the parts. This seems to be the general cognitive trajectory that governs the body-based images schemas identified by Johnson.

We recall that Kant had proposed a spatial schema even for number (e.g., for five, five dots in space, ...). Unlike Merleau-Ponty who seems to regard space and time as a common system, Kant had spoken of them separately. Space, for Kant, is the pure intuition concerned with the 'external sense', and time is the pure intuition of 'internal sense'.

Such a distinction is helpful for it makes it possible to see the temporal dimension as "inhabited" by the external sense of body-in-space. This is how, in our view, the image-schematic properties of body and space gets further transferred onto the time dimension. And this could be the experiential source of the TIME IS SPACE metaphor. Besides the transfer of most of the spatial prepositions for temporal uses, we also notice a more general spatialization of time in thought and language. Time is conceptualized as a flowing continuum which 'comes' from the future and 'goes' into the past after touching the knife-edge of the 'present' subjective experience. Or, it is conceptualized as a static linear path along which the subject is marching, with the past behind and the future in front of the present experiential situation of the person. The former, the time-asflowing-continuum schema is often the basis for the grammatical tenses, which takes the speech event as the present point separating the past from future. In the time-as-path perspective, we leave the past behind and advance into the future. It appears that with regard to either schema, there is a tendency to regard past as obscure, and perhaps even harmful. In Sanskrit, the word for past time, bhutam, is polysemous, having the meaning of 'spirit' or 'ghost' also. Moreover, in many versions of "progress", classical, religious, or modern, the past is viewed with distrust, and the future, though apparently uncertain, is where the utopia (literally, 'the good place') of one or the other kind, is hoped to be found. These two perspectives on temporality have their not-too-surprising syntactic manifestations also. The perfective is expressed in Hindi and many other modern Indian languages by means of a compound verb construction involving 'go' as the second, or the auxiliary verb.

E.g., Hindi: mujhe chitti mil gayi I-dat. letter get go-past. I have got the letter Or,

Malayalam: avan mariccu poyi he die-past go-past He has died / He is dead

In these examples, it is as if the use of the primarily spatial 'go' verb indicates that the event of 'getting' or 'dying' has gone into the past, or has passed by in time, and hence the perfective meaning. On the other hand, we notice that the future meaning is often expressed in many languages by means of a construction similar to the English 'going to' or the French 'aller'.

Perhaps it is possible to work out a theoretical framework for such metaphorical uses of the auxiliary verbs. Traditional linguistic theories, such as those of F. de Saussure and N. Chomsky, because they were founded on discrete elements, primarily the word, have not been able to capture the holistic conceptual worlds that natural languages without fail encapsulate. A linguistic theory that is open to the semantics of the holistic structures of sentences would enable us to study what we choose to call 'metaphoricalcultural worlds'.

Our starting hypothesis in this regard is that the (sentential) case-structures code and classify basic actions and interactions occurring in the world, and which can be perceived by the speaking subjects. Since actions involve space, time, subjectivity, objectivity, etc., we should expect that these notions will figure as central semantic constituents of sentences. The language-specific conceptual worlds that we are talking of are the particular ways in which action, space, time, subjectivity are structured on the semantic plane.

By means of the case-structures, an infinite number of actions can be captured by a finite number of sentence-forms. We notice that an array of actions can be categorized in relation to a small number of prototypical actions. Thus for the accusative case, often a transfer of energy from the subject-entity to the object-entity seems to be the norm in many languages. Verbs like 'to kill', 'to kiss', etc., would be the prototypes here. However, a verb like 'to see' would be a peripheral member of the accusative case category. It should be noted that in many languages, such as Hindi and Malayalam, under the accusative category there are two different casemarkers that get associated with a verb like 'to see' corresponding to the distinction between animate and inanimate objects. In fact, differential semantic associations for 'animacy' is indeed a first indicator of different 'conceptual worlds'.

Now, the metaphorical semantics of auxiliary verbs that we have discussed in Lecture 6 render support to the notion of metaphorical-cultural worlds. In European languages like French and English, for example, the auxiliary verb 'go' can appear as the grammatical marker of futurity (e.g., I am going to speak, Je vais parler). Contrarily, in Hindi and Malayalam, the go auxiliary appears as the perfective marker, to indicate that an action has gone into the past.

e.g., Hindi: aadmi mar gaya man die go-past The man has died / the man is dead.

Mala.: avan mariccu poyi he die-past go-past He has died / He is dead What we have here are, contrary uses of the same auxiliary verb 'go', corresponding to different cultural-metaphorical construals of time, and perhaps of subjectivity. In these Indian languages, it is as if the action signified by the main verb disappears from the perceptual field of the speaking subject, and hence could be deemed as completed — and therefore the perfective meaning. While, in the European languages, where the 'go' auxiliary yields a future meaning, it is as if the grammatical subject is moving forward along an irrevocable temporal axis, and it is visualized as performing the action signified by the verb at a point of time, after the 'present' point of rest. In the former, it is as if the action unfolds from an undefined time-source, reach the speaking subject, and then disappears into the past. In the latter, the past, the present, and the future are apparently arranged on a linear continuum, and the grammatical subject seems to move forward into the future along a rather static time-axis.

Hindi and Malayalam appear to be, at least from a diachronic point of view, relatively more action-centred. Accordingly, action-time has a certain mobility on a perceptual space. In gestalt terms, it is thus the 'figure'; the static speaking subject is the 'ground'. These languages may thus be encapsulating a less teleological conception of the world. Contrarily, the picture that we get for English and French is that of the grammatical subject moving in a spatialized time, and which is therefore the 'figure'. Here, time is static, functioning as the 'ground'. These patterns prompt us to think that the metaphorical-cultural worlds implicit in the European languages perhaps mark the advent of modernity epitomized in the works of Descartes and Newton.

Metaphorical-cultural worlds can be more narrowly specified. Notice the three different semantic conceptions of the hunger-emotion implicit in the following sentences:

Eng.: I am hungry. Paraphrase: My state is that of being hungry, or 'I' is equal to the 'state of hunger'.

Fr.: J'ai faim I have hunger 'I am hungry'

Hindi: mujhe bhukh hai I-dative hunger be-present, or to me hunger is 'I am hungry'

Here, the construals are different even between English and French. In English the grammatical subject can be predicated in an equative (A = B)manner for any kind of processes, including the body-internal ones. In French, the internal processes like hunger are viewed part of the subject's possession (A includes B). While in Hindi and other south Asian languages, emotions like hunger come to the subject naturally as if from the environing world (B comes/ happens to A). Similarly, in English, X goes mad, while in Malayalam, To X madness comes. Returning to the guestion of the possible sources of these conceptual metaphors, we shall again invoke the views of Ernst Cassirer. In a brief work, Language and Myth, which forms a kind of preamble to his major oeuvre, Philosophy of Symbolic Forms (1922 -1929), Cassirer (8) proposed that metaphorical thinking can be identified as the "common root from which both language and myth spring" (Cassirer, 1953 edn.: 84). Rejecting the Romanticist view of Johann Gottfried Herder that language is "faded mythology," as well as the contrary view of the 19th century Comparatist, Max Mueller, that myth is the result of a basically metaphorical character of language, Cassirer argues that language and myth are reciprocally determined. At the base of the two phenomena, he

observes, there is a "radical metaphor" which is not just a matter of transference from one domain to the other. Both language and myth originate in the transformation or a transmutation of a basic sense experience into the realm of "significance", verbal or mythico-religious. Both have their source in "the same basic mental activity, a concentration and heightening... or intensification... of simple sensory experience" (ibid., p. 88-89). However, the linguistic and mythical significance, does not bear itself upon the whole of the sense data (as is the case with logical significance), but only upon a "particular essence". Because of this local concentration of significance, Cassirer notes that categorization in language and myth is different from logical categorization:

"Two logical concepts, subsumed under the next higher category, as their genus proximum, retain their distinctive characters despite the relationship into which they have been brought. In mythico-linguistic thought, however, exactly the opposite tendency prevails. Here we find in operation a law which might actually be called the law of leveling and extinction of differences. Every part of a whole is the whole itself; every specimen is equivalent to the entire species... Here one is reminded ... of the basic principle of verbal or mythic "metaphor" — the principle of pars pro toto." (ibid., p. 92-93)

Cassirer has provided several examples to illustrate how this part-whole dialectical cognitive movement works in the case of the mythic metaphor. The verbal metaphor, he says, results from "verbal conceiving" which consists in a similar process of "compression" and "concentration" of distinct and disparate sense experiences, wherein "two different perceptual complexes might yield the same sort of 'essence' as their inner significance, which give them their meaning…" (ibid., p. 95). In this process, dissimilar things come to bear the same name, and "whatever things bear the same appellation appear absolutely similar. The similarity of

the aspect fixed by the word causes all other heterogeneity among the perceptions in question to become more and more obscured, and finally vanish altogether. Here again, a part usurps the place of the whole — indeed, it becomes and is the whole. By virtue of the 'equivalence' principle, entities which appear diverse in direct perception or from the standpoint of logical classification may be treated as similars in language, so that every statement made about one of them may be transferred and applied to the other" (ibid., p. 95-96).

The theme of the 'radical metaphor' enables us to see that whenever we step into language to describe our ever-new experiences, and whenever we set out to think, we are also stepping into narrative, owing to the inevitable metaphoricity of the discursive realm. Johnson has noted that the imaginative dimension of human language and rationality, responsible for the conceptual metaphors, operates in consonance with what he refers to as the "narrative unity". As he puts it, "not only are we born into complex narratives, we also experience, understand, and order our lives as stories that we are living out." (Johnson, 1987: 171-72).

To show the close relationship existing between spatiality, metaphor, and narrative we shall briefly refer to one of the emotion metaphors, that of 'happiness', along the lines suggested by Lakoff (1987) and Kovecses (1990) in their studies on 'anger', etc. While anger is understood and expressed in terms of a continuous range of metaphors indicating change of colour (be red / purple with anger), rise in body temperature ('boil with anger'), rise in internal pressure ('flip one's lid'), loss of rational balance ('to be mad with anger'), beastliness ('to roar with anger'), etc., one of the usual metaphors of happiness has to do with the verticality schema. HAPPINESS IS UP, and its contrary, SADNESS IS DOWN. And that is why clearly, one can be 'elated' or 'depressed'. Now, student-informants have remarked that there exists a popular narrative schema that closely parallels this up-down

schema, that of 'heaven' and 'hell', which are 'up there' and 'down below'. (Though as we saw above, in Sanskrit, the ghosts seem to dwell in the past.) As far as we know, nobody has ever come back from either of these places, to tell us where they actually were! Perhaps, the cultural models involving hell, heaven, happiness and sadness are constructed on the basis of our psycho-physical feelings of the gravitationally significant 'lightness' and 'heaviness' of the body, and therefore they employ the verticality schema.

It is not easy for most of us to admit (as Johnson readily does) that we are all living out our stories, and that there is no real world 'out there'. But surprisingly, it seems far less difficult for us to speak of ourselves in such a way, that is, as not really and stably existing subjects. Lakoff has brought home this fact through some stunning examples from the English language, under the rubric of the "loss-of-self metaphor"(9). The self is often expressed as a possession of the subject. When the subject is in possession of the self she can be described variously as being in control of herself, as exercising self-control, or as someone who doesn't lose herself easily. Alternatively, a person can lose herself in two different ways: positively, when one loses oneself in some pleasant activity, such as reading or daydreaming, or negatively, when she loses herself in anger, fear, or some such strong emotion. The existence of the loss-of-self metaphor is sufficient indication that our phenomenal selves are conceptualized in language, as different from our 'real' selves.

Effectively then, we humans build layers and layers of conventionalmetaphorical worlds based on our own dispositions. From a mainly ethical perspective, the Madhyamaka philosophers have compared this structure to the trunk of a plantain tree, which can be peeled off layer by layer, through appropriate meditative practices, till emptiness, or sunyata is revealed. But then, that is indeed another story, which needs further attention.

## Notes

1. For Varela et al. (1991), the use of the term 'enactive' is meant "to emphasize the growing conviction that cognition is not the representation of a given world by a pre-given mind but is rather the enactment of a world and a mind on the basis of a history of the variety of actions that a being in the world performs" (p. 9). The original ideas in this direction, from a more strictly neurobiological point of view appeared in Humberto Maturana and Francisco Varela (1972).

2. For example, Terry Winograd (with F. Flores) is a strong proponent of Artificial Intelligence along these lines. Also, Hubert Dreyfus as a prominent critique of the 'classical' AI has often discussed these issues in works like *What the Computers Can't do* (1972). See stimulating review of his more recent work, *What the Computers still Can't Do* (1992), in *Artificial Intelligence* 80: 99-191 (1996).

3. Our use of the term 'metaphor' is, in many cases, intended to cover instances of metonymy also.

4. Reddy argued with the aid of several examples, that in English, the expressions for language or communication was governed by the 'conduit metaphor': a sender packages some idea or emotion in suitable words or expressions, and the package is transported along a channel to a receiver who unwraps the package to "get" the idea or the emotion.

5. See Johnson 1987: 25-26.

6. Kant had stated: "This schematism of our understanding in regard to phenomena and their mere form, is an art, hidden in the depths of the human soul, whose true modes of action we shall only with difficulty discover and unveil" (Kant, 1988 edn.: 119)

7. Nagarjuna, stanza, XXIV, 8 (Tr. Kalupahana): "The teaching of the doctrine by the Buddhas is based upon two truths: truth relating to worldly convention (samvrti) and truth in terms of ultimate truth (paramartha)." (Kalupahana, 1991 edn: 331). Nagarjuna's argumentation on sunyata, is as follows: since the subject and the object (e.g., the seer and the sight) can be shown to be codependently arising, neither the subject nor the world can be said to ultimately exist, independent of the 'conditions' that cause them to be. So, what really exists, is emptiness, or sunyata.

8. Though Cassirer is generally associated with Neo-Kantianism, referring to his *Philosophy of Knowledge (Philosophy of Symbolic Forms, Vol. III),* Merleau-Ponty says that Cassirer's book contains "phenomenological and existential analyses ... which we shall have occasion to use." (Footnote on p. 127, Merleau-Ponty, 1962 edn.)

9. Based on talks by G. Lakoff at the First International Summer Institute in Cognitive Science held at the SUNY, Buffalo, U.S., July, 1994, and in Paris (University of Paris-IV) May, 1995.

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