

Sentence Meaning as Dynamic Gestalts: Semantic Archetypes and the *Kāraka* Theory

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I begin by arguing against the tendency (as in structural linguistics) to view meaning from the point of view of discrete sign units. I shall go on to examine two theories that view sentence-meaning in terms of holistic structures and constraints imposed on the structure of language by the essentially dynamic and constantly transforming nature of the world. The two approaches are the catastrophe theoretic semantics of René Thom based on the concept of morphogenesis, and the *kāraka* theory of the Sanskrit grammarians, particularly Bhartrhari. By highlighting these theories I am suggesting that the relation between language and 'reality' can be seen as a matter of reflection/revelation of the infinite dynamism of the world by means of a finite variety of basic sentence structures. I have emphasized the importance of the *gestalt* conceptions in the two theories. To the extent these are complemented by cognitive processes that pertain to the judgment-forming aspect of language, I propose to call them logogenesis, akin to Kant's notion of 'spontaneous positing.'

Discrete Signs?

In the structural linguistics conceptualized by Ferdinand de Saussure, the linguistic sign is understood as an inseparable bipartite entity consisting of the signifier and the signified. Saussure saw the language system *langue* as made up of discrete signifying units or signs, defined in terms of their relations and mutual differences, which enter into acceptable combinations in language use (*parole*). While the sound-form and the thought, mediated by language, are continuous and 'nebulous' in nature, language in itself is made up of discrete signs. Saussure excludes from the realm of language the undivided streams of both thought and sound form. Important to this conception of language is the discretization of both the signifiers and signifieds, and the modes of reconstitution of formal and semantic continuity by means of syntagmatic combinations. Syntagmatic and associative/paradigmatic relations 'are two forms of our mental activity, both (of

which) are indispensable to the life of our languages' (Saussure, 1916:123).

Saussure upholds the widely-held belief that language is a rule-based system of discrete symbolic units and their combinational behaviour. Thus, even while insisting on the complete autonomy of language, Saussure readily accepts the view that 'language, in a manner of speaking, is a type of algebra consisting solely of complex terms' (Saussure, 1916: 122).

As regards the nature of the combination of signs, Saussure appears to be far less committed. The temporal order of the spoken language imposes on it a character of linearity, and this necessitates the sign units to be 'linked together.' Syntagms are 'combinations supported by linearity' (Saussure, 1916: 123). Here, indeed there is a paradox that Saussure himself reveals to us: while syntagms are combinatorial constructs defined by reciprocal occurrence, 'the sentence is the ideal type of syntagm' (ibid.: 124). However, the latter belongs to speaking and not to the language system. Thus, at the level of combinatorics Saussure perceives a continuum of more or less constructional rigidity, the least rigid syntagmatic unit being the sentence, which indeed is not a unit of the language system but of speaking. Saussure's solution is as follows:

In the syntagm there is no clear-cut boundary between the language fact, which is a sign of the collective usage, and the fact that belongs to speaking and depends on individual freedom. In a number of instances it is hard to class a combination of units because both forces have combined in producing it, and have combined in indeterminable proportions (ibid.: 124).

Just as he has an excellent sense of the sign as the basic, independent unit of language, Saussure is also conscious of the coexistence of signs in a totality: 'Language is a system of interdependent terms in which the value of each term results solely from the simultaneous presence of the others' (Saussure, 1916: 114). A language totality is, thus, the sum of all its sign units and their relations, both syntagmatic and paradigmatic.

Perhaps, by overstating the autonomy of the language structure, Saussure remains insensitive to the specific structuring of the sentence, both at the syntactic and semantic levels. While concentrating on a description of the individual signs and the language totality, Saussure appears to have paid less attention to the syntactico-semantic constitution of the sentence. The notion of sentence, we know, has been central for linguistics of the classical period, both in European

and Indian traditions. In Europe – for those who insisted on its centrality – the sentence was seen as the *minimal unit of expression of a complete thought*, containing the subject and the predicate components. In India, there were profound and meaningful debates between scholars who held that the sentence conveyed undivided meaning (*akhanda pakshavāda*) and those who held that sentence-meaning is a result of the combinatorics of word-meanings (*padavāda*). Bhartrhari was a firm adherent of the former position.

Though the understanding of language structure in terms of syntagmatic and paradigmatic relations is extremely useful, it is also important to perceive the hierarchical organization of the language units, which the generative grammar of Chomsky can best capture. Language is a system where the multiple levels of organization of form and meaning are masked by a surface linearity. The sentence is not only the highest level of this hierarchy but also, in relation to thought, the bounding structural unit. (Beyond the sentence, of course, is the textual level, which may also have a hierarchical organization, for instance, of the narrative units.) Etymologically, a 'sentence' expresses what is felt or thought (*sentir*). In the Aristotelian conception, language is a mode of representing or imitating reality (*mimesis*), involving the use of a subject-predicate structure. Other modes of representation such as painting, music and drama do not have this particular structure, and hence cannot be evaluated in relation to the truth or falsity of the representation.

The Actantial Paradigm

While this unit-to-unit correspondence between language and the world has been the main parameter of truth in the Greek tradition, we can also speak of a figure-like adequation of language in relation to reality. Thus, in addition to the logical/propositional value of the sentence implicit in the former, philosophers and linguists have considered the sentence as a mode of reflecting events in the world in a somewhat pictorial manner. Lucien Tesnière (1959), for instance, has proposed such a view. The so-called 'dependency' grammar of Tesnière is based on an implicit notion of 'action', which was well known to the Indian grammarians. For Tesnière, the meaningfulness of a sentence was due to the central organizing role of the predicate verb which represented an action, and functioned as the highest syntactic node of the sentence. The verb is the complete and independent term of a sentence. Dependent on the verb are the 'actants', which are the participants in the action. (This dependency

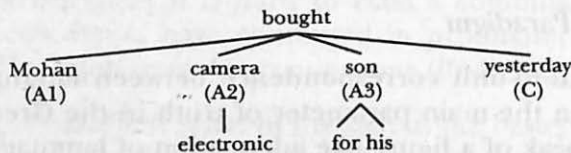
relation can be diagrammatically represented by means of a tree structure or stemma). Tesniere viewed the sentence as representing a 'little drama' (*une petite drame*), where the predicate represents an action (in the theatrical sense), or even a process, and the dependents of the predicate are the principal elements in the action. Since Tesniere is distancing himself from a logical conception of grammar he is eschewing the subject-verb-object-indirect object type of propositional structure. He opts for a theatrical conception, where the nominal elements are initially non-heterogeneous actants in participating in a process, but appear in their functionally specialized roles as subject, object and indirect object in the context of the sentence structure. Tesniere defines actants as 'beings or things which, in some capacity and in whatsoever manner, even in the capacity of mere onlookers and in the most passive manner participate in a process' (Tesniere, 1959:102).

While actants are one type of dependents of the predicate (they designate characters in an anthropomorphic sense), the other type (called circumstants) designate situations. According to Tesniere, there can be a maximum of only three actants in a sentence while the circumstants may be several. The following example is illustrative:

Sentence:

Mohan bought an electronic camera for his son yesterday.

Stemmatic representation:



Here A1 (Mohan) is the subject, A2 (camera) is the object of the transitive verb or the agent of the passive verb, A3 (son) is the beneficiary, and C (yesterday) is the circumstant.

Tesniere's dependency grammar is a kind of case grammar describing the semantic roles of sentence constituents. Tesniere also introduces the notion of 'valency' to denote the number of actants carried by a verb. Thus the valency could be zero (rain), one (cry), two (hit) or three (give).

Despite their apparent similarity, Tesniere's stemma is different in content from Chomsky's tree diagram. While, in the latter, the connections between the nodes have no theoretical value, in the

former these connections are perceived in an organic way, (that is, as the connections between the participants in an action). Stemmas are a diagrammatic representation of a holistic image of the meaning of sentence-meaning conceived as action. They are suggestive of sentence-meaning as a kind of dynamic *gestalt*.

Tesniere stresses the notion of a semantic continuum which is unknown to Saussure: 'Every word, which forms part of a sentence, ceases itself to be isolated as in a dictionary. Between it and its neighbours, the mind perceives connections whose ensemble forms the framework of the sentence.... These connections are indicated by nothing' (Tesniere, 1959: 11). For example, in the sentence 'Mohan speaks', there are three elements - 1 = Mohan, 2 = speaks, and 3 = the connection which unites the two elements, without which they would not form a sentence. Not to account for the connections 'is to ignore the essential, which is the syntactic link'. 'The connection is indispensable for the expression of thought. Without connection, we will not be able to express any thought, and we will only be uttering a succession of images and indices, isolated from each other, and without any link between them' (ibid.: 12). On the importance of connections for Tesniere, Jean Petitot remarks: 'a sentence is, above all, a system of connections, which being "incorporeal" [non-sensible] can only be grasped by the "mind". These structural connections, oriented and hierarchised, are not of logical essence, but constitute an "organic and vital" principle of organization' (Petitot, 1985:45). They constitute the 'vital' organic principle of linguistic 'energeia' in the sense of Humboldt (see Petitot, 1989: 182).

While introducing the actantial perspective and the notion of structural connections, Tesniere seems to be arguing for the semantic continuum. Indeed, he explicitly supports an organicist and holist conception of the sentence. The advantage of such a position is that it permits us to think of a structural space where the actants are related to each other via the activity referred to by the verb. Another scholar who has maintained a similar view is the Russian linguist, S. Katznelson. While noting the fragmentary nature of words compared to the holistic character of the sentence, Katznelson observes that it is the 'grammatical elements ... [that] re-establish the living links which full words tend to lose when they are withdrawn from the images of coherent events' (Katznelson, 1975: 102).

Tesniere's fundamental ideas of actant and valency as well as the organicist perspective have greatly influenced the semiotic/semantic thinking of the mathematician René Thom, known for his catastrophe theory. The central role assigned to the verb is also a

common factor in the ideas of Tesniere and Thom.

Catastrophe Theoretic Semantics

Thom's natural/realist philosophy is governed by the two central principles of structural stability and morphogenesis. The importance of catastrophe theory to linguistics and semiotics stems from the fact that it is directly concerned with structures. The theory has essentially to do with the effect of local (quantitative, micro) variations on the global (qualitative, macro) structure. Catastrophe theory involves a description of the (sudden, abrupt) discontinuities induced by the continuous local perturbations of a system. As per Thom's theorem:

The number of qualitatively different configurations of discontinuities that can occur depends not on the number of state variables, which is generally very large, but on the control variables, which is generally very small. In particular, if the number of control variables is not greater than four, then there are only seven types of catastrophes, and in none of these more than two state variables are involved (Saunders, 1980: 3).

The seven elementary catastrophes are: fold, cusp, swallowtail, butterfly, elliptic umbilic, hyperbolic umbilic and parabolic umbilic, all of which have their corresponding topologies.

It is, indeed, possible to note the striking parallel between the seven elementary catastrophes and the seven cases found in the classical languages. The evolution of sentence structure (that is, its morphogenesis) may, thus be conceived as being parallel to and part of the morphogenesis of natural forms.

For Thom, the universe is characterized by constant and incessant interactional dynamism in the physical and biological domains. However, this infinite Heraclitean flux is not to be taken as universal chaos. The process can be grasped in terms of structures that are at least momentarily stable. These stable structures are the interactionally dynamic morphologies that come to be and disappear. Thus the universe does not consist of things, but of the constant creation and destruction of stable forms – in other words, it is in a continuous process of morphogenesis. 'Morphogenesis denotes this appearance of organic forms during the course of evolution; in more general terms, it denotes all processes of creation and destruction of forms' (Thom, 1980: 9-10). However, these forms are not of an infinite variety. Since their possible variety is drastically constrained by factors like space and time, a restricted set of morphologies arising

from the basic physical and biological interactional dynamics can be identified. These are the archetypal morphologies assumed to be of universal validity, and extending across the physical, biological, cognitive and linguistic domains.

Related to the understanding of the universe as consisting of forms that are continuous, dynamic, irreducible and defined by stability of structure, Thom's notion of meaning integrates the physical and cognitive aspects without setting up an exclusively linguistic level. The central problem that Thomian semantics is addressing is the gap that arises between physical reality and its phenomenological presentation. This gap, or what is referred to as the 'scission between phenomenology and physics' is related to the fact that though the physical world is perceived in its essential continuum, (i.e., as a totality of things and their relations), its description in language involves some sort of a fracturing, or an inevitable discretization by means of apparently disjoined lexical elements. For Thom, the syntax (which is primarily a means of recapturing this continuum), is generated from a semantic level, which is also the deep conceptual syntax. His approach, based on a study of 'interactional morphologies', is intended to develop an appropriate formalization of the semantic syntax of natural languages.

Hence, linguistic theory should begin with a formalization of semantics on the basis of the archetypal morphologies which account for the deep syntax. The surface structures, defined in terms of the formal combinatorics of the syntactic categories (such as the noun and verb), do not capture the interactional dynamism that characterizes the semantic level. Meaning is the domain of real physical/biological occurrences that emerge as surface linguistic structures via the archetypal morphologies. This is what Jean Petitot (1985) has called the 'morphogenesis of meaning'.

Thom's basic claim is that there is a mediation between the physical, cognitive and linguistic domains, which can be understood in terms of the morphological organization or, rather the morphologies of interaction. These morphologies in turn, do not belong to any single domain, but are 'rooted in the *a priori* of physical objectivity'. The basic aim of the 'morphological' approach in linguistics is to develop an ontologically adequate formalization of the semantic syntax of natural language:

Strictly geometrico-topological analysis enables us to associate, with every spatio-temporal process, certain combinatorial invariants ... that can be thought to play an essential role, because

of their basic character, in the verbal process. We believe that such is the origin of the primordial schematism that governs the linguistic organization of our vision of the world (Thom, 1980: 24).

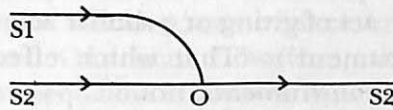
Following the German biologist, Jacop von Uexküll, Thom believes that basic concepts originate as a function of the biological self-regulation involving the prey, the predator and the (sexual) partner. The more complex concepts are built upon these: 'The logos of living beings has served as the universal model for the formation of concepts.' These biologically founded and linguistically valid concepts play the role of actants in the interactions represented by the verb. The verb is the organizing centre, i.e., the event that distributes the actantial places. Verbs are identified by their own structural stability as events. They have, as their source and model the simulation of elementary actantial interactions realizable in space-time. Perceptually, these interactions are constrained by the four dimensions of space-time. Thom has identified 18 such morphologies of interaction, which he refers to as 'archetypal morphologies', which Wildgen (1982) terms as 'semantic archetypes' (see Thom, 1980: 213 for a list of archetypal morphologies).

Thom's 'deep structure', as opposed to that of Chomsky, is devoid of definite syntactic categories and Chomsky's combinatorial character. This is because Thom conceives the semantic structure as consisting of continuous forms, rather than discrete entities. Thom explains this shift from entities to spatial morphologies:

One of the central problems posed to the human mind is the problem of succession of forms. Whatever be the ultimate nature of reality (if the expression makes any sense), it cannot be denied that our universe is not a chaos: we discern in it beings and objects, things that we denote by words. These beings or things are forms, owed with structures having a certain stability: they occupy a certain portion of space and last for a certain lapse of time. Further, though any given object can be observed in terms of its very different aspects, we do not hesitate to recognize it as such. The recognition of one and the same thing under an infinite variety of aspects poses one problem – the classical problem of the concept – which the Gestalt school of psychology posed in a geometric perspective, and made accessible to scientific interpretation. Let us suppose that this problem can be resolved by a naive intuition which accords external things an existence independent of our perception. We would have to admit that the

spectacle of the universe is an incessant movement of birth, development and destruction of forms. The object of all science is to predict this evolution of forms and, if possible, to explain it (Thom, 1972: 1).

It is possible to describe the morphogenesis of sentence structures by projecting the actant/s on a substratum space, and assuming their 'inflections' according to the increase in the number of actants and the evolution of interactions in time. A zero valent verb will occupy the entirety of perceptual space while a univalent verb evokes the possibility of an action continuous in time. A bivalent verb will involve interactions, and its graph will show a discontinuity (at a zone of interaction) between the earlier and later parts of the event described in time. Thom's example of such a verb is 'capture', whose actantial graph is:



where S1 and S2 are the actants and O the point of interaction.

Kāraka Theory

The actantial perspective, which was unknown to Saussure and which occupies a prominent position in the linguistic thinking of Tesnière and Thom, was of great importance to the Indian grammarians. The key Sanskrit term for a similar idea is *kāraka* (doer or actor), which has been part of the Indian grammatical vocabulary for centuries.

*Kāra*kas are recognized by most scholars as basic semantic notions that, in fact, pivot sentence constructions. They are similar to the case roles/relations proposed in case grammars. But *kāra*kas are much more than these, and their crucial role as a common substratum of ontology, cognition and grammar can be understood only if we regard them as a manner of classifying 'actions' in the real world.

Kāraka notions are conceived as properties of the world corresponding to, but independent of their grammatical/morphological manifestations. Panini himself was probably merely projecting the *kāra*kas (literally, a factor of action) from morphological occurrences in the form of cases to a set of possible actions in the world. This point has been aptly made by a recent commentator;

If the notion of *kāra*kas was perhaps derived from an observation of Sanskrit cases, Panini had raised them above the level of case values and made them intermediaries between reality and the

grammatical categories. Their importance, often misunderstood, goes far beyond the syntax of cases; next to the roots, they are the prime moving factors of the whole grammar (Scharfe, 1977: 95).

Panini identifies six *kāraḥas* corresponding to six cases – the nominative, accusative, dative, instrumental, locative and ablative. The possessive and vocative are absent in Panini's grammar. This is how Panini defines the six *kāraḥas* (*Aṣṭhadhyāyī*, I.4.24-54):

1. *Apādāna* (literally 'take off'): '[That which is] firm when departure [takes place]'. This is the equivalent of the *ablative* notion which signifies a stationary object from which a movement proceeds.
2. *Sampradāna* ('bestowal'): 'He whom one aims at with the object.' This is equivalent to the *dative* notion, which signifies a recipient in the act of giving or a similar act.
3. *Karaṇa* ('instrument'): 'That which effects most'. This is equivalent to the *instrumental* notion.
4. *Adhikaraṇa* ('location') or 'substratum': This is equivalent to the *locative* notion.
5. *Karman* ('deed'/'object'): 'What the agent seeks most to attain'. This is equivalent to the *accusative* notion.
6. *Karta* ('agent'): 'He/that which is independent in action'. This is equivalent to the case of the subject or the *nominative* notion (based on Scharfe, 1977: 94).

In his *Mahābhāṣhya* Pātañjali defines *kāraḥa* in relation to the notion of *kriya* or action. Action is the 'distinctive mode of action of the accessories'. Pātañjali also states that: (a) the root can be defined as something which expresses *kriya*; (b) *kriya* is different from all the accessories which play a part, direct or indirect, in its accomplishment, and (c) action is not *pratyakṣha* (perceptible), but can only be inferred.

That verbs primarily convey 'action' is an idea that goes back to Yaska's etymological studies called the *Niruktas*. To quote: *bhāv-pradhānam ākhyātam*, 'an action or process is the main meaning of a verb' (see Subramania Iyer, 1969: 202).

Bhartṛhari discusses various possible definitions of action, but what he prefers is the following: 'whenever something, finished or unfinished is presented as something to be accomplished [i.e., *sādhyā*], then it is called "action" because of its having acquired the form of sequence' (III.8.1). In addition, he stands by Pātañjali's definition in which 'action is the distinctive mode of behaviour of the

accessories'. He appears to reject another view where 'action is that moment immediately after which the result is produced' (in 'cooking' there is a critical moment that separates the cooked state from the raw state of rice).

The fact that action is something which has the form of 'parts arranged in sequence' would entail that it cannot be directly perceived. It can only be *inferred* by the mind. The relevant statements in the *Vākyapadīya* are the following:

What is called action is a collection of parts produced in a sequence, mentally conceived as one and identical with the parts which are subordinated to it (i.e., the whole) (III.8.4).

The parts which occur in a sequence are partly existent and partly not, so they cannot enter into contact with the senses (like the eyes) whose objects are always the existent (III.8.6).

Thus, the action of 'cooking' can be seen to involve a number of subordinate actions. One may, however, ask whether 'cooking' consists of the entire sequence of parts of actions perceived as a whole or only the moment of transformation of raw rice into the cooked (soft) state. Bhartṛhari prefers the former position.

Chapter I of the *Vākyapadīya* (*Brahmakānda*) is a treatise on the metaphysics and ontology/physics of the form and meaning aspects of language. It dwells primarily on the following relations: (a) between word in the intellect and the spoken word; (b) between the sequenceless and the sequential in language; (c) between the universal and the particular; (d) between the word and the world (see Shah, 1990, for an excellent explanation of these issues).

In the philosophy of grammar that is presented in Bhartṛhari's *Vākyapadīyam*, there are important references to the nature of the word and meaning. The form of the word is the result of eternal transformations of the *śabdabrahma* or the primordial word/sound.

Meaning is the particular instantiation of the activation, through an explosion or 'bursting forth' (*sphōṭa*) in the intellect (*pratibha*) of the hearer. What is important in these views is the dynamic perspective attached to both meaning and form.

Bhartṛhari's philosophy of grammar is accompanied by a corresponding ontology describing the universe in terms of objects, forces or powers (*shakti*) and the interactions between the objects. The essence of the universe is understood as comprising infinite powers distributed in an infinite number of objects. Due to the powers, the objects are constantly changing and are in mutual interaction with other objects, resulting in their eternal mutation. The universe is, thus, in a constant and perpetual state of change. Yaska

had identified six basic types of transformations, namely birth, existence, change, increase, decrease, and death. Actions and processes in the world result from the changes and interactions of objects. Moreover, objects themselves are the (temporarily stable) state (*siddha*) produced by actions and processes (*sādhyā*). The objects which are distributed in space (*dik*) are themselves participants in further actions and processes. In addition to spatial location, the objects have other powers resting in them, which may be the result of past actions and which are involved in subsequent actions. *Sādhana* is Bhartṛhari's term for these powers.

Sentences are the linguistic mode of capturing certain particularized actions abstracted from the eternal play of forces in the universe. A sentence represents a 'complex meaning (one may say a dynamic *gestalt*) in which some action or process is the central element and concrete objects which cooperate in accomplishing the process are the elements associated with it' (Subramania Iyer, 1969: 285).

Though the powers vested in the objects may be of an infinite variety, from the linguistic point of view (that is, in language) they are classified into six different kinds of capacities in which an object can participate in an action represented by the sentences. These are called *kāraḥas*. The six *kāraḥas* identified in the Sanskrit grammar are *karma*, *kāraṇa*, *karta*, *adhikaraṇa*, *apādāna*, and *sampradāna*. In addition, there is another *kāraḥa* category called the *sesa*.

The central feature of Bhartṛhari's ideas is the constancy and omnipresence of transformations in the universe. Both the word and the world are the result of manifest transformations and/or apparent differentiations of a cosmic unity which takes the name of *śabdabrahma* (*brahman*, or the Ultimate reality, is of the nature of the word, i.e., *śabdatattva*.) From an eternal point of view, these transformations/differentiations are unreal and illusory. Time, as one of the properties of the unchanging cosmic unity, is the material force which produces these transformations, which are in turn perceived and cognized as activities of particular things. The *śabdabrahma* is initially differentiated into its mental and material media, both of which are affected by the time-force (*kālashakti*).

It is difficult to say whether Bhartṛhari's notion of *sphōṭa* coincides with the word in the intellect, or with the spontaneous 'bursting forth' of recognition of meaning. Probably both have a role in meaning grasping. If this hypothesis is correct then we can think of the word-in-the-intellect aspect of *sphōṭa* as a kind of mental (transcendental) schema though, as Kant would say, 'hidden deep

within our soul' was the flash-like understanding akin to the 'spontaneous synthesis' supposed by him. The latter connection has, in fact, been proposed by Murti (see the relevant citation in Coward, 1980: 67).

Comparing Bhartṛhari's and Wittgenstein's theories of meaning and understanding, the contemporary philosopher K.J. Shah makes a relevant observation that their difference lies in the fact that the former stresses 'understanding in a flash' and the latter 'understanding as the mastery of a technique'. The 'technique' will probably go well with most analytical (philosophical) tendencies as well as the 'generative' trends in linguistics. In this case, as Shah rightly points out, 'in the explanation of the meaning of a word the internal component is irrelevant'. The absence of an innate semantic component may not be in the best interest of generative grammar and its various offshoots.

Bhartṛhari insists that a new-born child possesses innate knowledge. However, he does not see this knowledge in terms of semantic or other universals that can be listed (but as) 'action schemas'. The idea seems to be that just as the infant has the ability to breathe and to make the simplest of movements (which it has not been taught), similarly it possesses a thread of (eternal) knowledge (cf. Subramania Iyer, 1969:103).

The relation between the word in the intellect and the spoken word is not construed as one between the internal and the external, but one between the fixed and static on the one side and the mobile and dynamic on the other. A comparison is made with the apparent movement of a static thing when reflected in moving water. There is another, a more telling, comparison with the structure of sensation (i.e., sense-perceiving organs) and perceived objects: 'Just as the form of the self [i.e., the senses] is involved in the perception/cognition of objects, so the meaning form is involved in the recognition of the word (partially improvised translation; *Vākyapadīya*, I. 50).

The word in the intellect (*pratibha*) that causes the *sphd-ṭa*, (or flash of insight) is similar to Kant's transcendental schema. The philosopher Murti has shown the relationship between *sphōṭa* theory and the Kantian schema in terms of 'our cognitive experience of whole meanings'.

'In linguistic apprehension, as in other cognitions, there is the interplay of two factors of different levels – the empirical manifold sense-data [the separate letters or words in this case] and the transcendental or *a priori* synthesis of the manifold which alone imparts a unity to those elements which would otherwise have

remained a mere manifold' (Murti quoted in Coward, 1980: 67). Coward adds that 'in this way of thinking the *sphōṭa* functions exactly like a transcendental category of the whole. It is through the *sphōṭa*, which is activated by the pronunciation or the hearing of the separate letters or words, that the meaning of the sentence is manifested as a whole' (ibid.: 67). It is this synthesizing process that I have called logogenesis.

In Bharṭṛhari's view, only the sentence can completely express 'reality', and not the word which may denote objects. Moreover, 'reality is expressible only in the form 'it exists', which means that a word, in order to express a reality, has to be compounded with a verb, namely 'exists'." Therefore, 'a verb has to be part of a sentence.... If the verb is mentioned as expressing an action to be conveyed, nouns are required to effect the action' (*Vākyapadīya*, 1971a: xxxiii). The verb constitutes the essential and minimal content of a sentence (ibid.: xxxiv).

Sentence-meanings, which are primarily in the nature of actions are also relative to the speaking subject: 'The grammarian ... makes a distinction between word-meanings which mention an object, and the meaning of the sentence which is primarily an action, effected by men through objects (ibid.: xxxiii).

For the grammarian, reality is understood only through speech (language) and it is understood only in the form it is presented by speech (word/language). But language cannot describe the intrinsic nature of things, although we know things only in the form in which words describe them (Ibid.: xxxiii).

Bharṭṛhari rejects the existence of meanings of individual words. Individual word-meaning is an illusion, according to him. Only the undifferentiated sentence-meaning is real. Sentence-meaning is not a concatenation of word-meanings, as argued by the Mimāṃsaka philosophers, but to be understood in terms of a complex cognition. Bharṭṛhari compares this complex cognition with that of the cognition of a picture (*citrajñāna*): 'A cognition which embraces many objects at the same time is a complex cognition. As a cognition, it is one but because of the many objects which figure in it, one sees plurality in it, though it is indivisible' (Subramania Iyer, 1969: 186, 187).

Bharṭṛhari's views on the sentence and its meaning can be summarized in the following manner. The sentence represents/ reveals at least a fragment of the eternal activity in the universe, presented from the point of view of the speaker. The verb highlights the specific character of this activity, expressed in terms of the

accessories/means and their qualities. When a thing is expressed as something to be accomplished, it is *sādhyā*, but when it is expressed as accomplished, it is *siddha*. The means involved in the accomplishment of an action are the *sādhana*s. The recognition of the sentence-meaning takes place by way of the *vākya sphōṭa* implying a somewhat *gestalt*-like comprehension.

In this context, Subramania Iyer points out that 'the complete meaning expressed by a sentence is a complex thing in which some process of action occupies the central position and is associated with its accessories and their qualifications, all amalgamated into an indivisible whole' (ibid.: 200). And, 'the indivisible sentence is the unit of communication, and its meaning is understood in a flash (*pratibha*). This meaning is also something indivisible, a complex cognition in which the central element is an action or process with its accessories closely associated with it' (ibid.: 201).

Following a top-down approach, Bhartṛhari considers the sentence-meaning to be primary, and word-meaning the result of rather artificial analysis. The relationship between sentence-meaning and word-meaning is compared to the relationship between a holistic picture and its component parts:

Just as a unified perception a of composite [picture]) can be analyzed [into the preoccupation of component parts] depending upon which part is required to be perceived, so likewise is the understanding of the meaning of the sentence.

And:

Just as a single homogeneous picture is described through various features as being blue [green, etc.] as a result of its being perceived in different ways, similarly the sentence which is single and does not possess expectancy is described in terms of words which possess mutual expectancy (*Vākya-padīyam*, tr. K.R. Pillai, 1971:38).

A more interesting comparison with the structure of fabric has been made by Mandana Mishra, a latter-day follower of Bhartṛhari. In discussing the holistic perception of meaning in terms of *sphōṭa*, Mishra points out that 'when we perceive a cloth our cognition is of the cloth as a whole and is quite distinct from the various threads and colours involved' (see Coward, 1980:13).

Bimal Matilal has presented a useful study of Bhartṛhari's position on the interrelation between linguistic knowledge and general cogni-

tion: for Bhartṛhari, language, being eternal, all knowledge is interpenetrated by language. 'Thought anchors language, and language anchors thought. *Shabdanā*, 'languageing is thinking' (Matilal, 1990: 85). *Sphōṭa*, from this perspective, is the 'undifferentiated language principle' that links language and thought. Matilal correctly concludes that, according to Bhartṛhari, 'a sentence is a sequenceless, partless whole, a *sphōṭa*, that gets "expressed" or manifested in a sequential and temporary utterance' (ibid.: 85). 'The sentences and their meanings are indivisible units (ibid.: 96).

Bhartṛhari's conception of the case relations (*kāraḥ*) can be understood in the following terms:

A sentence represents/reveals the accomplishment of an action. 'Means'/accessory (*sādhana*) is the power (*śakti*) of a thing to accomplish actions (*Vākyapadīyam*, III. 7.1). The difference in the power of objects is relative to the form that speakers (subjectively) impose on them (III. 7.6). Each object that is involved in any action in any and at any time is seen as having a particular means or power for that time (III.7.12). The particular help rendered to the action is expressed by the case-markers. (III.7.13) *Kāraḥ* (literally 'doer', or even an 'actant' in the sense of Tesnière) is that which helps in the accomplishment of an action by assuming different forms (thus *kāraḥ* is different from both *hētu* [cause] and *lakṣhaṇa* [sign], which are relatively more world-based). It is said that, in any one object, there can be six different powers that lead to action. These powers are universal, and though they appear to be unlimited, can only be six in number (II. 7.35-38). These six powers correspond to the six *kāraḥ*.

Karta (agent) is the basis of all the varied activities (because power is one), but appears to be divided into six kinds according to the circumstances. These are six more *kāraḥ*, (including *śeṣa*, or the 'rest') – *karman*, *kāraṇa*, *adhikārṇa*, *sampradāna*, *apādāna* and *śeṣa* (which includes *sambōdhana*), (III.7.37-44).

The object (*karman*) – 'that which is most desired to be attained' – is of three kinds: product (*nirvartya*), (He made a jar out of mud); modification/conversion (*vikārya*), (He converted wood into ashes); and destination (*prāpya*), (He saw a tree – here the object does not change) (III.7.47-51).

Whenever the action is meant to be conveyed as accomplished after the activity of something after the activity of something, then that thing is said to be the instrument (*kāraṇa*), (III.7.90). Thus, the instrument is a more immediate participant in an action than the agent itself.

The factor in the act of which is sought to be reached by the thing

given is called *sampradāna* when he does not prohibit the giver, or request him, or gives his consent (III.7.129).

A starting point (*apādāna*) is of three kinds: that in relation to which a movement is mentioned; that in relation to which the verb expresses the movement only partly; and that in relation to which some movement is required (III.7.136).

That which helps in the accomplishment of the action by holding it indirectly through the agent is called *adhikaraṇa* (abode). The contact is the same whether the abode be sesame seed, the sky or a mat. But the service rendered differs according to as the objects are in contact through *samyōga* (conjunction) or *samvaya* (inherence) (III.7.148-49).

In addition to the six *kāraḥas* listed is the foregoing, there is a discussion on a possible set of cases under the name of *śeṣa* (the rest or the extras). *Śeṣa* does not represent a *kāraḥa* relation, but may involve or be preceded by one of the *kāraḥa* relations. Under this category Bharṭṛhari discusses the possessive case, where the relation of possession is supposed to be preceded by some sort of action, (e.g., 'king's man' implies an action on the part of the king which has led to the establishment of a master-servant relationship). Further, in expressions like 'branch of a tree' and 'father's son', the relations like the part and whole, and procreator and offspring are

the results of previous actions not mentioned in the sentences actions in which these objects were accessories. That previous status lingers somewhat in the present status, and that is why the present status is looked upon as a kind of *kāraḥa*, though its relation with the action expressed in the sentence is rather remote' (Subramania Iyer, 1969: 325).

Sambōdhan, or the vocative, is discussed separately: Merely turning the attention of somebody already there towards oneself has been declared to be the nature of the vocative case (*sambōdhana*). It is, indeed, one whose attention has been attracted that is employed in some action (III.7.163).

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