

# JOURNAL

OF THE

## AMERICAN ORIENTAL SOCIETY

EDITOR

ERNEST BENDER  
University of Pennsylvania

ASSOCIATE EDITORS

WILLIAM W. HALLO  
Yale University

GEORGE F. HOURANI  
University of Michigan

EDWARD H. SCHAFER  
University of California

VOLUME 85

NUMBER 1  
March 15, 1965

JANUARY-MARCH, 1965

---

### CONTENTS

E. ADELAIDE HAHN, Franklin Edgerton: Personal Reminiscences . . . . .	3	GEORGE S. LANE, The Tocharian Verbal Stems in <i>-tk-</i> . . . . .	66
SAMUEL D. ATKINS, The Meaning of Vedic <i>pājas</i> . . . . .	9	V. RAGHAVAN, The Name Pāñcarātra: with an analysis of the Sanatku- māra-Saṃhitā in manuscript . . . . .	73
W. NORMAN BROWN, Theories of Crea- tion in the Rig Veda . . . . .	23	LOUIS RENOU, Sur Quelques Mots Du R̥gveda . . . . .	79
KUN CHANG and BETTY SHEFTS, A Morphophonemic Problem in the Spoken Tibetan of Lhasa . . . . .	34	P. TEDESCO, Again, Sanskrit <i>āścarya-</i> 'wondrous' . . . . .	86
MURRAY B. EMENEAU, Toda Dream Songs . . . . .	40	P. THIEME, Īsopaniṣad (= Vājasaneyi- Saṃhitā 40) 1-14 . . . . .	89
MURRAY FOWLER, How Ordered Are Pāṇini's Rules? . . . . .	44	J. A. B. VAN BUITENEN, A Contribution to the Critical Edition of the Bha- gavadgītā. . . . .	99
E. ADELAIDE HAHN, On Alleged Anaco- lutha in Old Persian . . . . .	48	H. D. VELANKAR: A New Translation of Kālidāsa's Meghadūta . . . . .	109
HENRY M. HOENIGSWALD, A Property of "Grassmann's Law" in Indic . . . . .	59	ALEX WAYMAN: The Buddhism and the Sanskrit of Buddhist Hybrid San- skrit . . . . .	111
DANIEL H. H. INGALLS, The Kṛṣṇacarita of Samudragupta: A Modern For- gery . . . . .	60		

## THEORIES OF CREATION IN THE RIG VEDA

W. NORMAN BROWN

UNIVERSITY OF PENNSYLVANIA

THE BEGINNINGS OF SPECULATIVE THOUGHT in India, as in Greece, lie in notions of cosmogony. How did everything begin? The earliest recorded Indian notions are preserved in well known hymns of the Rig Veda and the Atharva Veda, which have been studied by many scholars. The present paper is an attempt to deal with those cosmogonic ideas, especially those appearing in the Rig Veda, in an ordered and, as far as possible, related sequence; if successful, this should add to our understanding of Indian philosophic origins.

The ideas of creation which are to be mentioned here have their bases in various intellectual attitudes or assumptions, namely, myth, theology, ritual, magic, evolution of a self-contained impersonal entity, and the existence of an all-enveloping mechanism or shell. The theories derived from these various bases are not mutually reconciled in the Rig Veda, nor is there any intimation, for the most part, that they are considered or even suspected to be incompatible.

The most conspicuous theories are those expressed in myth, and of these there are several. The oldest, and at the same time the least prominent and shortest-lived in Indo-Aryan speculation, is an Indo-European myth, guaranteed as such by the wider general Indo-European character of the proper names and the ideas which are employed. This is the myth that Father Sky (*dyaus pitṛ*) and Mother Earth (*prthivī mātṛ*) have as their children the gods (*deva*), namely Dawn (*uṣas*) and the two heavenly Horseman (*āśvinau, divo napātā*).

With this bit of mythology about Sky and Earth come to be associated other bits of mythology. One concerns Tvaṣṭṛ, the artificer of the gods, who is called the one born at the beginning (*agriya*) or the first-going (*puroyāvan*). At the beginning he was the counterpart of the cosmic waters (AV 9.4.2) or, as is stated elsewhere, combined in himself both male and female qualities (AV 9.4.3-6). He it was who created Sky and Earth and all creatures (RV 3.55.19; 10.110.9; 1.160.4), though how he did so and out of what material is not made clear. The myth of Tvaṣṭṛ is not Indo-European in origin but seems to have been acquired

by the Aryans after leaving their Indo-European homeland. Another bit of mythology concerns the twins Yama and Yamī (RV 10.10),<sup>1</sup> who are the progenitors of the human race. This myth is at least Indo-Iranian, possibly Indo-European.

None of these myths, whether separately or in combination, is the prevailing creation myth of the Rig Veda. That place belongs to the myth of the god Indra and the demon Vṛtra. This I have discussed elsewhere<sup>2</sup> and I shall only summarize it here.

The Indra myth opens with the state of precreation. The material constituents of the universe seem already to have been in existence then, but there was no warmth in the universe, no moisture, nor any organization of the material elements, that is, no order or system. There was only chaos, without the principles of cosmic truth or order or ordered movement (*ṛta*) to regulate all. There existed, however, powerful beings with life who were called Asura,<sup>3</sup> apparently living in a house consisting of Sky and Earth, which at that time were not separated but were joined together. Presumably Sky and Earth had been fashioned by Tvaṣṭṛ. The Asuras were of two kinds, the Ādityas, led by Varuṇa, and the Dānavas or the Dānava, led by Vṛtra, who in some passages appears alone, while in others he seems to have allies or supporters. The Ādityas and the Dānavas were in a state of mortal enmity, engaged in a struggle with each other; we might call it war. The Asuras have mothers but no fathers, because the mothers are personifications of feminine abstractions.<sup>4</sup> The Ādityas are the sons of Aditi (*adīteḥ putrāḥ*), whose name means "non-restraint" (*a-diti*, derived with the suffix *-ti* from the root *dā* "bind") or "expansion, release, progressivism, development,

<sup>1</sup> The most recent discussion I have seen of this well known myth is in a paper by Stella Kramrisch, "Two: Its Significance in the Rgveda," in *Indological Studies in Honor of W. Norman Brown*, edited by Ernest Bender, American Oriental Series, vol. 47, see pp. 118-123.

<sup>2</sup> *Journal of the American Oriental Society*, Vol. 62, 1942, pp. 85-98.

<sup>3</sup> *JAOS* 62.88-89; cf. Neisser, *Zum Wörterbuch des Rgveda*, *AKM* 16.139-146; 18.29-32.

<sup>4</sup> *JAOS* 62.90.

growth," and the like. The Dānavas are the descendants of Dānu, whose name is another abstract primary derivative from the root *dā* "bind," this time with the suffix *-nu*, and means "bondage, restraint, conservatism, inertia," and the name of their leader Vṛtra means "covering, lid," from the root *vr*. The war between the Ādityas and the Dānavas had come to a standstill or possibly we should understand that the Ādityas were being worsted. They arranged, however, for a champion to be born, namely Indra, whose parents appear to be Sky and Earth,<sup>5</sup> the parents of the devas, as distinguished from the Asuras.<sup>6</sup> The name of Indra has no obvious or generally accepted etymology, but the god is often designated by terms which indicate that he too is a personification of an abstraction, namely power; thus he is called "son of might" (*sahasah putrah*) or "lord of power" (*śacipatiḥ*). Before agreeing to be the champion of the Ādityas, he was foresighted enough, though only just born, to extract a promise from them that he should be their king.

The battle between Indra and Vṛtra now takes place. Armed with a weapon (*vajra*) forged by Tvaṣṭṛ and fortified with three great draughts of soma, Indra attacked Vṛtra and after a fierce fight slew him, and, as the texts sometimes put it, burst his belly. Thereupon out flowed the cosmic waters (*āpaḥ*), called the seven streams (*sapta sindha-vah*). It was they whom Vṛtra and the Dānavas had been restraining and whose release the Ādityas had been seeking. When the Waters were released and came flowing out with sounds of satisfaction like the lowing of cattle, and made their way to the ocean in the sky, they were found to be jointly pregnant, and their embryo was the Sun. The universe now had the moisture, heat, and light it needed and creation could take place. The earth was spread out, the sky was supported above it; in short, as it is put in one passage (RV 6.24.5), Indra separated the Sat from the Asat. The Sat is the sky, the earth, and the intervening atmosphere, the regions where gods and men live and move. The Asat is a place of horror, darkness, and drought below the earth, reached by a fearful chasm, where the demons (*rakṣas*) dwell and breed.<sup>7</sup> In the Sat the body of truth, cosmic law (*ṛta*), was established and put under the direction

of Varuṇa; in the Asat there is no such truth and law, for it is without truth and law (*anṛta*).

This myth was doubtless viewed in two ways in Vedic times, depending upon the degree of intellectual sophistication of the viewers. To some it was an account to be taken at its face value, which was essentially theological. A great divine hero, an anthropomorphic demiurge, slew a fierce wicked theriomorphic demon in the form of a dragon. Thus he won the Waters and the Sun. He separated the Sat from the Asat, spread out the earth, propped up the sky, and organized and assigned duties to the gods.

But to the more sophisticated the myth was a symbolic representation of Potentiality striving with Inertia, and overcoming Inertia through the aid of the Power or Energy existing in the universe, especially in the atmosphere, where the mighty winds blow, the thunder rolls, and the lightning strikes. Truth has by nature its home in a free and lighted world, while Evil comes from darkness and bondage, and the two are engaged in a never-ceasing opposition in our universe. Constant alertness and strenuous unrelaxed effort is the price of freedom and justice, which can best be aided by cooperation between gods and men in the sacrifice. This understanding of the Indra-Vṛtra myth as an allegory, verified for us by the etymological significance of the terms Asura, Āditya, Dānava, and some of the epithets applied to Indra such as Son of Might and others, may be regarded as the first recorded philosophic speculation in India. But at the same time the origin of the material substance of the universe is not a subject of inquiry or is ascribed in some unspecified way to Tvaṣṭṛ; rather the elements of the problem posed are how the Sat came to be differentiated from the Asat; which of the two existed first; whence came the water, the light, and the warmth by which the Sat lives; and finally how it was all given the organization by which it operates.

Following the Indra-Vṛtra myth come the other, later, cosmogonic theories of the Rig Veda (in Books I and X) and the Atharva Veda. Some of these deal with or proceed from or deny theological or theistic items appearing in the myth, rectifying features of it which later theologues seem to have considered naive or untenable. They may even echo phraseology used in the myth.<sup>8</sup> Other theories seem related to the allegorical understanding of

<sup>5</sup> JAOS 62. 92 f.

<sup>6</sup> JAOS 62. 88.

<sup>7</sup> Cf. JAOS 61. 76 ff.

<sup>8</sup> RV 10. 121 and 10. 129.

the myth as describing a mechanistic process of conflict and these theories present new views of creation as an impersonal non-anthropomorphic process. Both kinds of speculation indicate dissatisfaction with the Indra-Vṛtra myth, whether it is taken literally or symbolically. Sometimes both views appear in the same hymn.

Let us look first at the hymns which emphasize the theistic approach. Here an attack is made directly upon Indra. We may suppose that skepticism about him was not infrequent, skepticism such as is indicated in RV 8.100.3, "Bring lovely praise to Indra, vying with one another, truthful praise, if he himself be true — even though one or the other says, 'Indra is not! Who ever saw him? Who is he that we should praise him?'" The adjectives *anindra* and *āsraddha*, employed to mean those who deny Indra or lack faith in him, also testify to the existence of such doubt. The most obvious illustration is RV 10.121, a riddle-type (*brahmodya*) hymn to the god Ka (Who), not otherwise named until the final stanza of the hymn, where the answer to the riddle is given and the god is called Prajāpati ("Lord of Creatures"). To the god are ascribed powers and feats which regularly are Indra's: the making firm of earth and sky, the rulership over the gods, the giving of victory to one of two rival armies, the release of the waters, the instituting of the sacrifice, the status of sole god (*eka deva*). If we accept the authenticity of the final stanza, in which Prajāpati is named as the supreme god, the hymn is a direct refutation of Indra's position and an assertion of a super-deity in his place and of course above him. If, on the other hand, we should accept the other view of the final stanza, namely, that it is spurious, and therefore consider that the hymn remains a riddle with no answer definitely and clearly given but with the unexpressed answer being that Indra is the supreme god, then the false and later addition of the final stanza still would be positive evidence that in someone's view (not the author of the hymn) Indra was to be supplanted by another deity. In the one case the two hymns RV 10.121 and RV 2.12 (the *sa janāsa indra* hymn), which latter is an unambiguous passionate assertion of Indra's preeminence, would be in harmony and would convey an identical rebuke of infidelity. By the other interpretation the two hymns would be vigorously polemical with each other. In either case we find proof that there was disbelief in Indra's supremacy and instead advocacy of some

other, superior, deity, whether Prajāpati or another.

Another theistic figure is Viśvakarman, who is celebrated in two hymns (RV 10.81; 10.82). His name meaning "All-maker" (*Artifex Maximus*) is elsewhere an epithet of Indra (RV 8.98.2), and possibly of the Sun (RV 10.170), but he is not credited in his two hymns with many of Indra's specific deeds and qualities. Rather, he is conceived in loftier, more monotheistic terms. As our father he celebrated or instructed the sages (*ṛṣis*) how to celebrate the first sacrifice, which was that of creation (and where, by the way, did these *ṛṣis* come from — there is no answer in the text). Thus he created heaven and earth, though where he stood when doing so and what the material was which he used is a question posed for answer. He is supreme, and where he is, there the pious dead enjoy the fruit of their sacrifices. He seems to have created the gods, for he gave them their names (RV 10.82.3). Where all the gods were assembled the waters set down the primeval germ (*garbham prathamam*), which was beyond (that is, above) heaven and earth, beyond the asuras and the devas, and this germ the gods sacrificed in the sacrificial fire (*ajasya nābhau*). The primeval germ contained all the material of the universe (like the *puruṣa* in RV 10.90), and this is the answer to part of the question asked above; but the material was all inanimate and had to be organized by the gods in the sacrifice which Viśvakarman taught them. This hymn further brings up the epistemological question, asserting that all creatures go to Viśvakarman to question him, that is, he is the ultimate source of knowledge. Nowadays, says the final stanza of RV 10.82, priests do not know who created all things; something other than such knowledge exists within them; covered with mist and muttering and addicted to creature comforts (*asutṛp*), do the chanters of hymns spend their time. This latter notion is similar to the contempt expressed in RV 10.71 for priests who mechanically perform the ceremony but have no true insight. For knowledge let men of mystic insight inquire with their own minds (RV 10.81.4). The epistemological question recurs in other speculative hymns (RV 10.72.1 and 10.129.4), where again the answer is that sages perceive the truth by looking in their own hearts, that is, by introspection. The figure and name of Viśvakarman do not endure, as do those of Prajāpati, but the ideas contained in the two

hymns to him are frequently echoed in other speculative hymns of the Rig Veda.

A less direct displacement of Indra takes place through Brahmanaspati or Bṛhaspati. The first name means "Lord of the Brahman," which is the mystic power that pervades the universe. The other name, Bṛhaspati, means "Lord of the Bṛh," which is the prayer by means of which that power is evoked. This deity is an innovation of the priests, and he is credited with some of Indra's feats. He and Indra are represented as cooperating to perform some of the greatest of these: winning the light for the universe, spreading out the earth, and others. The hieratic point of view leading to the creation of Brahmanaspati seems to be that the great deeds which Indra was said to have performed could not have been performed through mere physical might but were really made possible through the mystic power in the universe which was put into application through the sacrifice. Hence Indra and Brahmanaspati are viewed as operating jointly (RV 2.24). The next step was to ascribe the action to Brahmanaspati alone with Indra ignored (RV 10.68). Then comes the ascription of all to Brahmanaspati, and in terms that transcend the Indra-Vṛtra range of achievement.

Brahmanaspati is depicted as Creator in RV 10.72. Here also the question is at last raised concerning the origin not only of sentient beings, gods and men, but also of the insentient material of which the universe is constructed. The material part, we are told, was made by Brahmanaspati, lord of prayer, high priest of the sacrifice, as though blown up by a smith at his forge. First came the Asat (uncreated and unordered chaos), as in the Indra-Vṛtra myth. The Asat in 10.72 is also called Uttānapad (she with legs outspread as in parturition). From the Asat was born the Sat, the ordered universe of Earth, Atmosphere, and Sky. The hymn also says Tat or Bhū (Earth) was born from Uttānapad. From the Sat were born the Directions (*āśāḥ*). Parallel to the origin of the material substance of the world was the origin of animate beings. These came from Dakṣa (male potentiality) and Aditi (female creative power). Each of this pair was produced from the other, which seems to be a way of saying that the two are interdependent. Where Dakṣa and Aditi came from is not made clear. Possibly we are to understand that Brahmanaspati created them, or possibly they were self-existent forces which acted upon, or

in concert with, each other. From Aditi were born the gods, who fashioned the worlds out of the insentient material. The gods labored in unison with joined hands in the primordial chaos (*salila*), where they found the sun which had been concealed in the ocean. These gods, the hymn says, were the Adityas and they were seven. They had a brother, Aditi's eighth son, called Mārtāṇḍa, the one sprung from the egg of mortals. He was subject to birth followed by death; as the hymn puts it Aditi bore him "to be born and then to die again." It was Mārtāṇḍa who was concealed in the ocean as the Sun and was found there by the gods (cf. the epic story of the churning of the ocean by the devas and the Asuras, to produce the sun, moon, and many other things). Mārtāṇḍa thus brought death into the universe. At the beginning of this hymn the epistemological question was raised, as we have seen above. The answer to it is that sages can gain knowledge by introspection. Another important point in this hymn is that Brahmanaspati, as master of the sacrifice, is the ultimate origin of all. From him, we must surely understand, came the knowledge of the sacrifice by which the gods put order into the universe and produced the sun.

The hymn RV 10.72 lays emphasis on the sacrifice, which has already appeared less conspicuously in the Indra myth, where the slaying of Vṛtra is sometimes spoken of as a sacrifice, and in the Viśvakarman hymns. In one of these latter (RV 10.81) Viśvakarman's activity is almost entirely expressed in terms of the sacrifice, and Viśvakarman is besought to teach its ritual to his friends, that is, to the priests addressing him. Another hymn, the Puruṣa-sūkta (RV 10.90),<sup>9</sup> puts even greater emphasis upon the ritual used by the gods in effecting creation by sacrificing Puruṣa and speaks only briefly (stanza 5) about the origin of Puruṣa. Puruṣa, Male, appears to be a collective term for all the material elements of the universe (cf. 10.81 above), designated here, perhaps metaphorically, as a sacrificial offering. Puruṣa, says the hymn, is the cosmos with all its contents and is more besides. It includes not only the inanimate world, but also all mortal creatures. Even Virāj was born of Puruṣa, though Puruṣa is also

<sup>9</sup> This hymn has recently received a long, thoughtful, and most illuminating study by Professor Paul Mus, "Du nouveau sur Ṛgveda 10.90?" in *Indological Studies in Honor of W. Norman Brown*, edited by Ernest Bender, American Oriental Series, vol. 47, pp. 165-185.

born of Virāj, a paradoxical statement which is possibly a way of saying that space and its contents are interdependent in origin. Only the gods seem to be external to Puruṣa, but where they came from is not indicated in the hymn. Two-thirds of the hymn is given to an account of the sacrifice and an enumeration of all its constituents (including the Brāhmaṇa as Puruṣa's mouth, the Rājanya as the arms, the Vaiśya as the thighs) and an enumeration of all that was produced from it, mentioning not only the Śūdras and the animals; earth, sky, and atmosphere; the moon and the sun; but also the hymns, the chants, the metres, and the prose formulae, and even the gods Indra, Agni, and Vāyu. Who the gods were who performed the sacrifice (stanza 6) we cannot say with certainty for they are not named in the hymn. The point of view of the hymn is hieratic and ritualistic; the hymn is an exaltation of the sacrifice, which is more important and powerful than the beings who celebrated it. This is the notion which later dominates the Brāhmaṇas. In this hymn, more explicitly than in any other of the cosmogonic hymns, creation is a product of the ritual.

The close relation between ritual and magic leads to what is essentially an ascription of creative action to the power of words or sound. That is, the potency of words is considered to be the effective creative force. When the gods utter the names of things, at the time of the first sacrifice, these things come into existence (RV 10.71.1; 10.82.3). In the self-praise hymn to Vāc (RV 10.125), who is a deification of the sounds of the sacrifice, she claims control of the universe for herself, and tells us her birthplace was in the waters, the ocean (stanza 7), as is elsewhere that of *hiranyagarbha* (RV 10.121.1), whence she spread out on all sides over the world and reached the sky. She says she surpasses all the universe (stanza 8), using words that recall the description of Puruṣa (RV 10.90.3). We may possibly be justified in thinking that Vāc is conceived as being the creative force of the universe, though there is no explicit statement to that effect. If this is meant, then we have the apotheosis of the spell, the final exaltation of the magic sound.

Up to this point none of the hymns discussed has contained any explicit statement or even hint that our universe, both the psychical and the material, has its origin in some single principle or is an evolution from some primeval germ or is the expression of the will of some absolute deity as an

emanation of himself. Nothing monistic has appeared. Rather, each hymn merely tries to identify a more remote active agent than any assumed in other theories. Also the hymns either explicitly say or else imply that before creation the universe contained two kinds of constituents, or principles. One was animate, psychical, and having the power of will; it consisted of the gods or an overgod. The other was inanimate, material, insentient, non-psychical, without the power of will, being the object upon which the first acts as subject. Thus creation took place. In the hymn RV 10.129, however, both the will of a deity and the power of the sacrifice are ignored, tacitly rejected, and instead there appears the idea of a single principle from which our entire universe is evolved. The idea is perhaps implied, though not explicitly stated, in the well known stanza RV 1.164.46, "They call it Indra, Mitra, Varuṇa, and Agni, or the heavenly bird Garutmant. The sages speak of the One Existent in many ways; they call it Agni, Yama, Mātariśvan." The Vedic term for the One Existent is *ekam sat*, which is neuter. In RV 10.129, the idea of a single neuter principle from which all evolves is explicitly expressed under the term *tad ekam*, That One. This existed before the Sat and the Asat, when there was only darkness, an unilluminated flood, chaos. That One came to life spontaneously, though uninspired by breath, through its own potentiality. It was born out of its shell through the power of its own inner creative incubating heat, not needing any warmth from outside. Once born and animate, it experienced desire, says the hymn, and this desire became the first seed of mind. Our knowledge that this was the origin of things, the manner of creation, the nature of the cosmogonic process, has not come by a line of transmission starting from the beginning. Nor has it come to man by a communication from the gods, who are all this side of creation, that is, they were themselves created and are ignorant of origins. Possibly, the hymn says, the highest overseer of our universe, who resides in heaven, knows the facts about creation, but perhaps—meaning more likely—he does not. Rather, knowledge of the beginnings was acquired by the sages who discovered it by pious insight into their own hearts, that is, by introspection. Knowledge, we see, is won through this mystical means, and epistemology is frankly an expression of mysticism.

Here then is our first clear presentation of the monistic idea, which is later elaborated in the

Upanishads. So far has the evolution of thought brought us from the Indra-Vṛtra myth! There is still something lacking, which is the conception of the soul, or self, the *ātman*. This has not been mentioned in the hymns, though possibly hinted at in 10.129, while later in the monistic Upanishads it is to be identified with *brahman*. Brahman is indeed mentioned in the Rig Veda as the power pervading the universe, to be reached or utilized by means of the sacrifice or by true, that is mystical suprasensual, perception (cf. RV 10.71.6), the sages' pious insight of RV 10.129. By the time of the Upanishads the idea of brahman had attained a new quality, including the properties it had in the Rig Veda but with the added feature of being the one reality, the Absolute. But this is merely to say that Hindu speculative thought had only passed through its early stages by the end of the Rig Veda, a point about which there can be little argument.

The effort to find some single unifying principle of the universe also appears in the idea of Time and the idea of Skambha (the Frame) in the Atharva Veda. Time (*kāla*) is celebrated as the primordial power in AV 19.53 and 19.54.<sup>10</sup> In it lie the worlds and the sun. By it was the universe urged forth. It is brahman. In it are the waters; from it arose brahman, the hymns, the prose formulae. Time contains and conquers all, and still continues onward.

The idea of a framework (*skambha*) containing within it all that is in the universe is the subject of the two long hymns to Skambha (AV 10.7 and 10.8), a notion somewhat analogous to the *puruṣa* idea of RV 10.90, but even more inclusive, for nothing is considered to exist outside it.

Neither the idea of all-containing Time nor that of an all-enveloping Frame stood up in later competition with the Sole Existent (*tad ekam*) concept of RV 10.129. The notion of Time as all-container, which may have been considered by its authors to answer the antinomy of temporal infinity, did not deal with the antinomies of space and of cause and effect. So, too, the idea of an all-enveloping Frame, which may have been meant to answer the antinomy of spatial infinity, did not deal with the antinomies of the infinity of time and of cause and effect. The Sole Existent con-

cept, however, seems to have been regarded as coping not only with the antinomy of the infinity of cause and effect but also with the two other antinomies as well, viewing them all from the viewpoint of a realistic monism.

Thus, the personal anthropomorphic demiurge of the Indra-Vṛtra myth was replaced in various ways by a definitely specified supreme deity operating with a dualistic universe, that is, on the basis of a superdeity (*adhidaiva*) approach to the problem of cosmogony. This was succeeded, ideologically speaking, by a view of the sacrifice as supreme, again in a dualistic universe. This might be designated a supersacrifice (*adhiyajña*) concept. Finally, so far as the Rig and Atharva Vedas carry us, there developed the notion of a monistic (*advaita*) basis for the universe, impersonal in character, neuter, mechanistic in operation, which might also have had an oversoul (*adhyātma*) component. At this point speculation in the Rig and Atharva Vedas reached its culmination. It remained for the Upanishads to proceed further.

#### APPENDIX \*

**RV 2.12.** To Indra — in reply to those who doubt him (*anindrā, āsraddhā*). A reply to this hymn appears in RV 10.121.

1. He who, the moment he was born, possessing mystic insight, the god, enriched the gods with his mystical power, before whose fiery breath the two worlds shook in fear at the might of his valor — he, O folk, is Indra.

2. He who steadied the wavering earth, who stabilized the quaking mountains, who measured out the wide expanse of the atmosphere, who fixed a support for heaven — he, O folk, is Indra.

3. He who slew the serpent and set free the seven streams, who drove the cows forth from the cave (?) where Vala had hidden them, who produced the fire between the stones (the sun or the lightning between heaven and earth), the booty-winner (?) in the battles — he, O folk, is Indra.

*apadhā* (cave?) and *saṃvīk, saṃvīj* (booty-winner?) are ἀπαξ λεγ. of uncertain meaning.

4. He by whom all these [creations?] were made to tremble, who drove down into hiding the Dāsa

<sup>10</sup> For a vigorous translation see Maurice Bloomfield, *Hymns of the Atharva-Veda* (Sacred Books of the East, Vol. 42), pp. 224-225.

\* This Appendix contains translations of the hymns which have the greatest bearing upon the ideas discussed in this paper.

race, who like a winning gambler taking the stake, took his foe's wealth—he, O folk, is Indra.

5. The terrible one, concerning whom they ask "Where is he?" Or they say of him "He is not!" He who like a bird (?) snatches away his foe's wealth, put your faith in him—he, O folk, is Indra.

*vij* (bird?) occurs only twice in the RV and is of uncertain meaning.

6. He who incites the weary and emaciate, the priest and the singer who seeks his help, the fair-lipped one (good drinker) who gives his favor to the soma-presser when he has prepared the pressing stones—he, O folk, is Indra.

7. He in whose control are the horses, the cows, the villages, all the chariots, who produced the sun and the dawn, who led forth the waters—he, O folk, is Indra.

8. He whom two armies met in battle invoke in rivalry, the far and the near, who are enemies, (who call upon him) in both cases. Mounted upon a similar chariot (or, launched upon the same purpose), the two call to him—he, O folk, is Indra.

*krāṇḍasī*, "the Roarers," is also used of Heaven and Earth; cf. note to 10.121.6.

9. He without whom folk do not conquer; whom they invoke for aid when in the battle, who is a match for all the universe, who shakes the unshakeable—he, O folk, is Indra.

*yó viśvasya pratimānam*: "architect of the universe (heaven and earth" or "match for the universe"—which?

10. He who with his weapon slew all those lacking effective ritual spells who committed the great sin (of withholding the waters), who does not permit the presumptuous to practise presumption, who is the slayer of the Dasyu—he, O folk, is Indra.

*māhyenas*, the great sin.

*āmanyamānān*: cf. *āmanyamānāñ abhi manyamānair nīr brahmābhis*, 1.33.9.

11. He who in the fortieth autumn found Śambara dwelling in the mountains, who slew the serpent as it put forth its strength, Dānu lying there—he, O folk, is Indra.

*dānu*, cf. 1.32.8.

12. He who with seven guiding reins, the bull, the mighty, let loose the seven rivers so that they

could flow, who, bolt in hand, pushed down Rauhiṇa when scaling heaven—he, O folk, is Indra.

13. He before whom both sky and earth bow down, from whose hot breath the mountains fear, who is known as the soma-drinker, the one with the vajra as his arm, with the vajra in his hand—he, O folk, is Indra.

14. He who favors with help the soma-presser, the soma-brewer, his praiser, his devotee, he whose pious spell gives increase, whose is the soma, whose is this gift—he, O folk, is Indra.

*brāhma vārdhanam*, cf. 6.23.5.

15. You, who rend out booty for the soma-presser, the soma-brewer, O terrible one, you are of course true (to your function) in being so. May we, O Indra, ever being your friends, possessed of many hero sons, address the sacrificial session.

**RV 10.72.** The problem is the origin of the gods [and of the universe]. The method of solution is by mystic revelation in trance or by introspection.

1. Let us now with skill proclaim the origins of the gods so that in a later age someone may see them (origins) when the hymns are being chanted.

Mystic revelation or introspection also gives the exceptional priest special power in 10.71 (which seems to have affinities of authorship with 10.72).

2. These (creations, worlds) Brahmanaspati fanned up like a smith. In the first age of the gods the Sat was generated from the Asat.

Variantly, *etā* might be dual masc. referring to the two worlds (10.81.3 *sām bāhūbhyām dhāmatī sām pātatrair dyāvābhūmī janāyan devā ékaḥ*) or neut. pl. referring to *janā* in stanza 1.

3. In the first age of the gods, the Sat was born from the Asat. From that (Sat) were produced the directions. That (Sat) [was produced] from Uttānapad.

*uttānapad* (fem.) is one whose legs are stretched apart in parturition and refers to the Asat as the source from which all parts of the cosmos came.

4. The earth was born from Uttānapad; the directions were born from the earth. Dakṣa (male potentiality) was born from Aditi (female active power), and Aditi from Dakṣa (that is, the two are interdependent).

5. For Aditi was born, O Dakṣa, she who is your daughter. After (= from) her were born the



gods, the blessed (fortunate) ones, linked to immortality.

6. When, O gods, you took your places there [in a ring] in the salila (tumultuous chaos) with your hands firmly linked, a thick dust spread out as from dancers.

Cf. of Viṣṇu in 1.22.17, where all this world [*idam*] is held in the dust of his footstep.

7. When, O gods, like zealous priests, you caused the worlds to develop, you produced from there the sun which was concealed in the ocean.

8. Eight sons had been born from Aditi's body. With seven she went to the gods. [The eighth] Mārtāṇḍa she cast aside.

9. With seven sons Aditi went [where?] in the earliest age. But she bore Mārtāṇḍa to be born and then to die again. (Thus death was brought to the world, causing the existence of mortals.)

Dakṣa is male potentiality, Aditi is female active power. The two are coordinate, of equal importance, interdependent. From Aditi, impregnated by Dakṣa, are born seven gods, who effect creation from the chaos of unorganized material, especially by causing the Sun to emerge. The Sun is their brother, whom Aditi had cast away. When the gods churned the salila they caused the Sun to appear, but the Sun goes through a continuous process of birth and death again. The Sun's name here is Mārtāṇḍa which means "born of a lifeless egg" (*mṛtāṇḍa*). From it are descended mortals.

The material part of the cosmos was blown up by Brahmanaspati "Lord of the mystical essence of the universe." The material part of the cosmos is given ordered form by the gods.

Creative Power		Material of the Cosmos (created by Brahmanaspati)			
Aditi/Dakṣa		Vs. 2	Vs. 3	Vs. 3	Vs. 4
Aditi		Asat = Asat	= Uttānapad = Uttānapad		
		Sat = Sat	= Tat (Sat) = Bhū		
Devāḥ Mārtāṇḍa		Āsāḥ =	Āsāḥ	=	Āsāḥ

Mārtāṇḍa was mortal. His mother Aditi cast him away. His immortal brothers the Devāḥ, looking for him, agitated (or churned) the unorganized chaos (salila) and found him. He is the Sun. The hymn does not continue an account of the process of creation beyond this point, but the implication is that, after causing the Sun to emerge, the Devāḥ continued the rest of creation.

For Aditi and Dakṣa, Sat and Asat, cf. 10.5.7 (note also BAU 1.4.3). The notion implicit in *etā* in stanza 2, if the word is dual, might be that Brahmanaspati, as first cause, created both the material cause of the universe (Sat and Asat) and the efficient cause (Aditi/Dakṣa).

**RV 10.81.** To Viśvakarman as creator. The name is used of "the All-fashioner" in RV 10.81 and 10.82; of the Sun (?) in 10.170; of Indra in 7.98.2. It means artifex, as the name Prajāpati means genitor.

1. He, our father, who as ṛṣi, as invoking priest, sat down to offer in sacrifice all creations [then in their unorganized state], he, seeking wealth through his wish, concealing all the primordial form, has entered into their later (or evolved) forms.

This stanza poses the problem: what was the beginning of things? The stanza says that Our Father did it all at the beginning by sacrifice. But he has covered over all the original form, has entered into the later evolved forms.

2. What now was his standing place (*ποῦ στῶ*)? What was his support? How was it? That from which Viśvakarman created the earth, and, looking far away, uncovered the sky by his power?

3. Eyes he had on all sides, mouths on all sides, arms on all sides, feet on all sides, when by using his two arms like fans he blew up heaven and earth (as a smith would) as he, the sole god, created them.

For this stanza cf. 10.90.1.

*sām bāhúbhyām dhāmati* . . . Cf. 10.72.1.

At base a Tvaṣṭṛ idea.

*viśvataścakṣus* . . . i. e., all parts of all bodies were in him.

*devā ékaḥ* is usually an epithet of Indra.

4. What was the wood, what was the tree from which they fashioned heaven and earth. O men of mystic insight, inquire with your mind (by introspection) about that on which he took his stand when establishing the worlds.

*kīm svid vānam* . . . same pādas (secondarily?) in 10.31.7.

*māniṣiṇo mānasā prchátéd u*; cf. 10.129.4; 10.72.1.

5. Your highest, lowest, middlemost sacrificial stations, O Viśvakarman, teach to your friends in their sacrifices, O you who are self-powerful (ob-

serve laws of your own devising). Do you yourself celebrate the sacrifice, increasing yourself.

*tanvām vṛdhānāḥ*, cf. 1.1.8 (of Agni).

6. O Viśvakarman, grown great through the offering, do you yourself celebrate the sacrifice to earth and heaven! Let other folk (priests) round about be deceived (about the right way to sacrifice)! Here let us have a generous patron!

7. Let us today [successfully] invoke for our aid in the [sacrificial] contest the lord of [sacrificial] utterance, Viśvakarman, who is as swift as thought. May he rejoice in all our offerings for our aid, he who gives all prosperity, he whose works are righteous.

*vācās pátim* = master of utterance, husband of Vāc.

**RV 10.82.** To Viśvakarman as creator.

1. The father of the eye (creator of the Sun), wise (in sacrificial performance), created these two (Heaven and Earth) [as though by churning] butter, all crumpled together. When their ends were firmly fastened together in the east, he spread out Sky and Earth.

*yadéd ántā ádadṛhanta pūrve*, cf. AV 5.6.1.

2. Viśvakarman is the all-wise, the all-mighty, the Creator, the Disposer, and indeed the loftiest Manifestation. Their (the pious dead's) offerings with the drink they have proffered (to the gods) rejoice them where they say he dwells as the One, beyond the seven ṛsis.

Allusion to the realm where the pious dead rejoice with Yama, cf. RV 10.14-18, and 1.154.5.

3. He who as our Father, our Progenitor, the Disposer, knows the foundations and all the worlds (or, all creations), who alone is the sole name-giver of the gods—to him go all the other creatures to question him [about origins].

4. They sacrificed wealth to him—the ṛsis of old in great number, like singers, they who when the illumined atmosphere (*rajas*) was still immersed in the unillumined (*Asat*?) set themselves down and made these things that have been created.

5. That which is beyond the heaven, beyond this earth, beyond the gods and the asuras—what primeval germ indeed did the waters set down where all the gods perceived it?

Cf. 10.129.1, etc. *gárbhaṃ prathamám*, cf. 10.121.7; 10.129.2-3.

6. The waters set down that first embryo where all the gods were assembled. In the navel of the unborn (Agni) was proffered the One, in which were all creatures.

*ajásya nābhau*, cf. 1.164.14.

7. You do not know him who created these things. Another thing [than true knowledge] has come to exist within you. Covered with mist and muttering, addicted to creature comforts (*asutṛp*), the chanters of hymns spend their time.

For the theme of incapable and unperceptive priests, see RV 10.71.

The subject matter of the separate stanzas is as follows: (1) Viśvakarman created Heaven and Earth and spread them out. (2) He is supreme; where he is the pious dead enjoy the fruit of their sacrifices. (3) All creatures have to go to him to learn ultimate truth. (4) In the beginning, the ṛsis performed the sacrifice to produce creations. (5) What was the original germ of the cosmos? (6) The waters set it down before the gods, The One in which were all creations. (7) The hymn-chanters of our time, an unworthy lot, do not know this.

**RV 10.90.** (On this hymn see Professor Paul Mus, *op. cit.*)

1. Puruṣa has a thousand heads, a thousand eyes, a thousand feet. Having covered the earth on all sides, he extended beyond it by ten fingers' length.

*sá bhūmim viśvato vṛtvā*; cf. RV 10.81.1, 10.129.1; AV 10.2.18.

2. Puruṣa alone is this entire world, both past and future; he is also the lord of immortality when he mounts above (to heaven) through (sacrificial) food.

3. As great as is his greatness (as described in stanza 2), yet greater than that is Puruṣa. One-fourth of him is all creatures; three-fourths of him are immortality in heaven.

Vāc, like Puruṣa, has four parts, three being concealed, the fourth being known to humans (RV 1.164.45). Brahmans with real insight know this (cf. RV 10.72.1 and 10.129.4; cf. 10.82.7).

4. With three-fourths Puruṣa rose upwards; one-fourth of him was reborn here. Thence he strode across in all directions above earth and heaven (or, by day and night?).

*sāśanāśanē* "the eater and the noneater"

cf. 1.164.20). This might refer to Agni and Sūrya, Agni being "the eater" par excellence and Sūrya "the observer."

5. From him was born Virāj, and from Virāj was born Puruṣa. When born he overpassed the earth both in the west and in the east.

For children begetting their parents or for two primordial entities begetting each other, cf. Indra and his parents (RV 10.54.3), earth and sky and their sons (RV 1.159.2,3), Dakṣa and Aditi (RV 10.72.4,5), Agni and his mothers (RV 1.95.4, cf. 6.16.35).

6. When the gods performed the sacrifice with Puruṣa as oblation, the spring was its melted butter, the summer its fuel, the autumn its oblation.

"Oblation" in its first usage here is a set and solemn act, the type of oblation, not "any old" oblation, but at the end of the stanza the word is denuded of its pointedness and means only an ordinary oblation.

7. Him, Puruṣa, born at the beginning, they besprinkled on the straw; the gods (Ādityas?) sacrificed with him, and the Sādhyas and the Ṛṣis.

*sādhyā ṛṣayaś ca yé* might mean "full of power and being ṛṣis."

8. From that sacrifice, when it was fully offered, the speckled (clotted) butter was collected; it constituted the birds and the wild and domestic animals.

9. From that sacrifice, when it was fully offered, the hymns were born, and the chants; the metres were born from it, and from it the prose formula was born.

10. From that were born horses and whatever (other) animals have (incisor) teeth in both (upper and lower) jaws. Cows were born from it; from it were born goats and sheep.

The reference is to the sacrificial animals (see JAOS 51.117).

11. When they divided Puruṣa, into how many parts did they separate him? What was his mouth? What were his arms? What were the thighs and feet called?

12. The Brāhmaṇa was his mouth; the Rājanya was made into his arms; as for his thighs, that was what the Vaiśya became; from his feet the Śūdra was born.

13. The moon was born from his mind; from

his eye was born the sun; from his mouth Indra and Agni; from his breath Vāyu was born.

14. From his navel the atmosphere, from his head the sky was evolved, from his feet the earth, the directions from his ear. Thus they fashioned the regions.

15. Seven were the enclosing-sticks of it; thrice seven were the sticks of firewood, when the gods conducting the sacrifice bound Puruṣa as the animal (victim).

16. With the sacrifice the gods produced the sacrifice; these were the first ordinances. These powers (arising from the sacrifice) reach the sky, where are the Sādhyas and the gods.

**RV 10.121.** To Ka, Prajāpati. The background is disbelief in Indra as Creator and Sole God; as the hymn stands, and assuming that the final stanza is original, it could be a polemic against RV 2.12, with the purpose of establishing Prajāpati as the Sole God, i.e., it is monotheistic. In form it is a Brahmodya with the answer in st. 10. AV 4.2 is a version of this hymn.

1. Hiraṇyagarbha came into existence in the beginning born as the sole lord of all that has come into existence. He made firm (fixed) the earth and sky as well—to what god shall we give worship with oblation?

*hiraṇyagarbhā*: cf. 10.129.3 (though in 10.121.1 without specific mention or implication of egg).

*sām avarṭata*: cf. 10.129.2, 4, 6; 10.121.7.

*pātir ékaḥ* is in contrast to Indra as *devā ékaḥ*. Later the neuter *tād ékam* is in contrast to both, as is also *ékam sāt* (1.164.46). Cf. also in stanza 2 (*éka id rājā jágato babhúva*) of this hymn.

2. He who gives breath and strength, whose command all the gods observe, whose shadow is immortality and death—to what god etc.?

*yásya chāyámṛtaṃ yásya mṛtyúḥ*; cf. 10.129.2.

3. He who by his greatness has become the sole ruler of this breathing, winking world, who is the ruler of this world consisting of bipeds and quadrupeds—to what god, etc.?

4. He who, by his power, they say, has these snowy mountains, whose is the ocean with Rasā, whose are the directions as his arms—to what god, etc.?

*yásyemāḥ pradīśo yásya bāhú*; cf. 6.47.8.

5. He by whom the sky was made strong and the earth made firm, by whom the heaven and the celestial vault were set in place, who measured out the regions in the atmosphere—to what god, etc.?

6. He whom the two roaring [armies], who have sought support with his help, look upon trembling in mind when the risen sun is shining—to what god, etc.?

*krāndasī*: cf. 6.25.4; 2.12.8. The two roaring (armies?) could conceivably be the armies of the Ādityas and the Dānavas or they might be any pair of armies in array against each other. Or the two Roarers might be Heaven and Earth, since the verb *krand* is used of Dyaus and Parjanya, and in that case the dual would mean the Sky and the Other One (= Earth). The mythic allusion could then be to Indra's forceful separation of Heaven and Earth after he had drunk the soma before going to battle with Vṛtra. But this stanza seems to be a contradiction of 2.12.8, where a translation of *krāndasī* as "Heaven and Earth" seems impossible.

7. When the mighty waters came bearing the embryo (Sun) and giving birth to Agni, then the life spirit of the gods came into existence—to what god, etc.?

8. He who in his might looked upon the waters which bore ritual skill (*dakṣa*) and created the sacrifice, he who was the sole god over the gods—to what god, etc.?

9. May not he harm us, he who is the progenitor of the earth, he who with truth as his function created heaven and caused the bright and mighty waters to be born—to what god, etc.?

10. Prajāpati, other than you no one has encompassed all these creations. Whatever we desire when we invoke you, let that be ours! May we be lords of wealth!

**RV 10.125.** To Vāc as a hymn of self-praise (*ātmastuti*), a glorification of the Sacred Utterance. For Vāc cf. 10.71.

1. I travel with the Rudras and the Vasus, the Ādityas and the Viśve Devāḥ. Both Varuṇa and Mitra do I support, Indra and Agni, and the Āsvins.

2. I uphold the swelling Soma, Tvaṣṭṛ, Pūṣan, and Bhaga. I bestow wealth on the zealous patron of the sacrifice, who makes the oblation and presses the soma.

3. I am the queen, the confluence of wealth, the one with penetrating perception, the first of those who should be worshipped. Me have the gods distributed manifoldly, me who dwell in many homes, who have caused [the chants] to enter many places. *tām mā devā vy ādadhuḥ purutrā*, cf. 10.71.3c.

*bhūry āveśāyantim*, cf. 10.81.1. Also note the expression *ā viś gīras*, which occurs frequently.

4. Through me that one eats his food who really sees, who breathes, who hears [me as] that which is spoken. Though knowing it not, they dwell with me. Hear, you man of renown, I tell you what you must believe!

*yā im śṛnóty uktām*, cf. 10.71.6c (note also 10.71.4).

5. Only I myself say this in which gods and men rejoice. Whomever I give my favor to, him I make powerful, a true knower of the mystical power, a ṛṣi, a successful sacrificer.

6. I stretch the bow for Rudra so that his arrow may reach the hater of religion and destroy him. I rouse the battle fury for the people. I have penetrated Heaven and Earth.

*ahām dyāvāprthivī ā viveśa*, cf. 10.81.1.

7. On the brow of this universe I give birth to the father. My birthplace is in the waters, in the ocean. Thence I spread out over the worlds on all sides. I touch yonder sky with the crown of my head.

*tāto vi tiṣṭhe bhūvanānu viśvataḥ*, cf. 10.90.1.

8. I breathe like the wind supporting all the worlds. Beyond the sky, beyond this earth so great have I become by my might.

*paró divā parā enā*, cf. 10.82.5; 10.129.6.

*etāvatī mahinā sām babhūva*, cf. 10.90.3a.

**RV 10.129.** To cosmogony.

1. There was not then either the Non-existent (*asat*) or the Existent (*sat*). There was no atmosphere nor heavenly vault beyond it. What covered all? Where? What was its protection? Was there a fathomless depth of the waters?

What covered all (*kim āvarivaḥ*)? In the old myth it was Vṛtra: . . . *néhā yó vo āvāvarit / ní śim vṛtrasya mārmaṇi vājram indro apīpatat*, "he (Vṛtra) who covered you (waters)—Indra has hurled his vajra into Vṛtra's vitals" (RV 8.100.7).

2. There was neither death nor immortality

then. There was the sheen neither of day nor night. That One breathed (came to life), though uninspired by breath, by its own potentiality. Besides it nothing existed.

"neither death nor immortality"; cf. RV 10.72.9; AV 10.7.15.

"by its own potentiality"; cf. RV 10.72.1.

3. There was darkness hidden by darkness at the beginning. This all was an unilluminated flood. The force (with power of evolution) which was enclosed in emptiness (a shell), That One, was born through the power of its own (creative incubating) heat.

cf. RV 10.190.1.

*tuchyéna . . . ápihitam*. Possibly there is implied here the idea of a universe contained in an egg-shaped container or shell (cf. ChU 3.19, Maitri U 6.36, and the later expression *brahmāṇḍa*). The developing power (*ābhú*) is to put in it the *sat* and the *asat*, and in the *sat* will put the *rájas* and the *vyóman* (st. 1).

4. In the beginning desire came over That [One], which became the first seed of mind. The

sages by their pious insight in their heart (i.e., by introspection) found the relation of the Existent with the Non-existent.

In RV 10.72.1 the ṛṣis mystically perceive the cosmogonic process.

5. A line of demarcation was extended horizontally for them (the sages). What was below it, what above it? There were seed-depositors, there were powers; there was potentiality here below; there was emanation above.

6. Who is there who knows, who here (*ihá*) can tell whence was the origin, and whence this creation? The gods are this side of the creation. Who knows, then, whence it came into being?

In RV 10.72.6 the gods, as secondary creators, stir up the dust, as though in dancing; cf. Indra in RV 1.56.4 and 10.124.9, perhaps also RV 4.17.13 and 4.42.5.

7. This creation, whence it came into being, whether spontaneously or not — he who is its highest overseer in heaven, he surely knows, or perhaps he knows not.

## A MORPHOPHONEMIC PROBLEM IN THE SPOKEN TIBETAN OF LHASA

KUN CHANG and BETTY SHEFTS

UNIVERSITY OF CALIFORNIA, BERKELEY

THERE ARE IN THE SPOKEN TIBETAN of Lhasa compounds in which the first member ends in a nasal vowel, *ŋ*, or *m*.<sup>1</sup> Other alternants of these

<sup>1</sup> We gathered the data we cite during the course of our work on the N. D. E. A. Spoken Tibetan project at the University of Washington, 1960-63. Our informants, Mr. Nawang Nornang and Mrs. Lhadon Karsip, were both from Lhasa.

The phonemes and phoneme sequences we use in our transcription are: *q, qh, ŋ, ŋh, h; k, kh; c, ch, ṇ, ṇh, ṣ; ṭ, ṭh, r, rh; t, th, n, l, lh, s; ts, tsh; p, ph, m, mh; y, w; i, e, é, e; ʌ, a; ü, ö; u, o, ô, and ɔ*. Vowels are either oral or nasal, single or geminate. Syllables with single vowels not followed by *ŋ* or *m* have either high or low tone; syllables with geminate vowels or single vowels followed by *ŋ* or *m* have high, high-falling, low, or low-falling tones. In our *Manual of Spoken Tibetan* (University of Washington Press, 1964) we indicated nasalized vowels by a tilde over the vowel sign, and tones by an overline for high tone, an underline for low tone, and a grave accent for falling tone. The exigencies of printing make it necessary for us to adopt a new system here.

components regularly end in an oral vowel, *q*, or *p*. The second member of such compounds, when it occurs independently or as the first member of other compounds, has no nasal initial. In every compound in which it is the second member, however, it is preceded by a nasal vowel, *ŋ*, or *m*, depending on the phonological makeup of the first member. We analyze these occurrences of nasal vowels, *ŋ*, or *m* as belonging to two morphs, the oral features to the prior morph, the nasal feature to the latter. This latter morph is thus made up of a sequence of phonemes preceded by a phonemic feature, nasality.

Whenever *ŋ* occurs in these compounds, we have

In this article we indicate nasalized vowels by *N* following the vowel sign. We indicate the tones for a whole form by raised capitals following the form, with a hyphen separating the tone of one syllable from that of the following one. Abbreviations for the tones are: H, high; L, low; F, falling; 0, zero (minimal stress).