

## On the semiotics of mythological conceptions about, mushrooms\*

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### 1. Mushrooms as a universal semiotic classifier

Three aspects of the study of mushrooms have led in recent years to the creation of a special discipline: ethnomycology. First, the place occupied by mushrooms in the different culinary-food and chemical codes and in the corresponding dietary regimens, with the motivations supporting it, has been determined (C. 1\_6vi-Strauss).<sup>1</sup> Second, the relation of mushrooms to other hallucinogens has been clarified (R. Heim).<sup>2</sup> Finally, the role of mushrooms in ritual-mythological systems, the extreme case being that of the mushroom cult, has been ascertained (R. G. Wasson).<sup>3</sup> The first steps in the new field of ethno-mycology have been taken by R. G. Wasson on the basis of material drawn from different cultural traditions. His discovery of the exceptionally important role which mushrooms play (or played) in many cultural traditions throughout history is a sensational one indeed.

In this essay I should like to emphasize the fact that mythological conceptions about mushrooms and the practice of live mushroom cults reveal the exceptional role that mushrooms play in the semiotic system of the corresponding traditions, a fact to which little significance is usually attached. To anticipate my argument, it may be said that in many traditions essential semiotic oppositions are formulated with particular clarity through the use of mushrooms as a classifier, such oppositions as, for example, *nature-culture*, *foreign* (or *collective*)-*native* (or *one's own*), *the profane-the sacred*, *feminine-masculine*, *the here and now* (terrestrial)-*the not-here* (*celestial* or *subterranean*), *water-fire*, etc. Certain of these pairs form a definite hierarchy, which may be represented by constructing a branching scheme, as, for example, given in Figure 1.

Owing to the fact that they participate in such essential oppositions, in many cultural-historical traditions mushrooms have the status of a universal classifier. Their universality is determined, in particular, by the connection of mushrooms with all three elements of the fundamental

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linguistic data proper. The author of this monograph had occasion to observe the atmosphere of mystery and taboo which surrounded the topic of mushrooms even in the villages around Moscow in the pre-war period. In answer to innocent questions about mushrooms one had to hear out the rebukes of old women (sometimes even of relatively young women) who viewed this interest in mushrooms as a display of depravity or shamelessness. One would hear again and again such remarks as 'you're still little, when you grow up you'll find out' (*mal efee, vyrasteg' -uznaeg*) or 'only girls know this; boys have no reason to' (& *tol'ko devki znajut, a rebjatam nezašem*). One also encountered more particular interdictions (for example, there are certain types of mushrooms for pregnant women or for maidens), as well as certain identifications of mushrooms or proscriptions relating to them' (at least among juvenile boys), sayings, superstitions, etc. One could not help but have the impression that behind these deeply differentiated taboos, that were relaxed only when one was in the woods or in the company of other boys, there lay something possessing an extremely rich semantics and having a direct relation to the sphere of the 'indecent'.

Today it has become obvious that in many 'lower' cultural traditions, in particular among the Russians, there exist different attitudes toward mushrooms and their evaluation that indicate the social stratification of the given collective, even if only in the most general terms. To define in detail the features according to which such subcollectives are formed is a rather difficult task. Nevertheless, one can state that such features as *masculine-feminine, adult-child, married-unmarried*, etc., are quite relevant. No less important is the feature *native-foreign (one's own-alien)*, that is realized in oppositions of the sort *in our village or neighborhood-ill that (other) village or neighborhood*. This feature reproduces in miniature the picture of the grouping and alternation of large, extensive cultures that are either mycophobic or mycophilic in orientation, to use the terms coined by Wasson and his wife. It is hardly surprising that in cultures which are traditionally mycophobic the materials relating to mushrooms are quite meager, even on the linguistic level. In cultures that appear for the most part to be traditionally mycophilic, but that have different (usually contradictory) attitudes toward mushrooms, the system of taboos is strongly developed as a rule, which likewise hinders the preservation of information about mushrooms. Only in those cultural traditions where the cult of mushrooms received official recognition is the circle of sources significantly more extensive (cf. the ancient Central American and Chinese traditions, as well as other less significant ones). Incidentally, important information can be extracted from a diachronic analysis of those mycophobic traditions that have preserved the memory

#### *Mythological conceptions about mushrooms 299*

of an earlier period when a different attitude toward mushrooms was dominant. An extremely diverse (sometimes diametrically opposed) view of mushrooms as an

element of mythological conceptions in different cultures or even within the limits of the history of one and the same culture is usually linked to the presence of opposite views on mushrooms as an element of the culinary system. As a rule, the most negative attitude toward mushrooms is observed in those culinary-dietetic regimes that gravitate toward the right branch of Levi-Strauss' well-known scheme (1964; 1966: 29f.) (Figure 2).

Characteristic of such dietetic regimes (*regime diététique*) is the view of mushrooms as 'anti-food'. This view is testified to by legends about the fact that at one time, a time prior to the beginning of 'culture' and the emergence of the first culture hero, the ancestors of the given collective ate mushrooms (cf., for example, certain myths of the Mundurucu and Tucuna tribes cited and analyzed by Uvi-Strauss, or Russian *lo6,,Al* nicknames of the type *griboedy* 'mushroom-eaters'). Often the refusal to use mushrooms in cooking is connected with one of the first and most important acts of the culture hero of the given tradition and is equated to the transition from the state of 'nature' to that of 'culture'. Mushrooms as food are usually identified with the mold or fungus that, in many versions of such myths, appears on the hero's corpse.' Such myths go back to a period prior to agriculture or cuisine, the introduction of which resulted in the formation of the oppositions *raw-cooked, rotten-fermented* (cf. the opposition *honey-beer*). From the point of view of the 'culture' as a whole, mushrooms begin to be viewed as something related to death and hunger (as is the case among many South American Indians), as the food of the dead (the Ojibwa Indians), as excrement, often that of celestial objects (e.g. of *thunder* among the Siciatl or SeecheIt Indians, of the *rainbow* among the Toba Indians and so on).' Yet many cultural traditions with such a negative attitude toward mushrooms, once they have made the transition from 'nature' to 'culture', turn to mushrooms with more particular needs. (Cf. the burning of mushrooms for the

304 V. N. Toporov

### Mythological conceptions about mushrooms 305

archetypal conception, a function of sorts, that may be embodied in a whole series of concrete signs, mushrooms being only one of them. If one is attempting to define this function and the conceptions, legends, myths, etc. corresponding to it, then, naturally, one must turn to the whole class of objects which are synonymous (isofunctional) in the given relation. In general, we can state that the objects are chosen in such a way that the opposition of active, penetrating and passive, penetrated (receptive) principles is particularly underscored. Such a structure permits one to define the function and pragmatics of this entire relation as the overcoming of disconnectedness, the achievement of a state of unity, of primeval fullness and self-sufficiency." Leaving aside for the moment an examination of these two principles, it is sufficient to limit ourselves here to three remarks.

The first of them has the aim of establishing a certain temporal reference point in the development of these forms (convex: concave, round: pointed, and the like). This has to do with the fact that the ancient megalithic culture reflected by monuments extending in space

from the Mediterranean to India, Tibet, China and Indochina, used objects which embody these oppositions. The evolution of these objects led to the appearance of such structures as the stupa, the pagoda, and so on, on the one hand, and the pillar, the pole, the scepter, the Vajra, and so on, on the other hand. (It should be emphasized that both types of objects have a direct relation to funerals and weddings.) Moreover, in several traditions the semantics of these objects was preserved with extreme clarity; cf. the distinctly expressed phallic meaning of the pole Ma-ni or its diachronic variant, the arrow, the spear, and so on, in Tibet." (Incidentally, one or another of such forms may have entered as well into a set of other identifications.)"

The second remark relates to the umbrella or parasol as the isofunctional object which is most clearly linked with mushrooms. Inasmuch as the identification of these two objects assumes, in many cases, a sufficiently direct character (cf. the names of mushrooms, '6 riddles,' "symbolism," and so on), the complementary data relating to the image of the parasol and its unconscious reflections in mythology and symbolism may be used, albeit with care, in a semiotic analysis of the image of mushrooms as well.

The third and last remark is aimed at directing attention toward the purely hypothetical, but in principle quite important, assumption that visual images for the convex and concave, which are constructed by identical forms conversely positioned to form an opposition, may correspond to linguistic expressions built precisely according to the same principle and used correspondingly as names of mushrooms. Moreover,

some cases, it is quite probable that such 'converse' linguistic expressions were used precisely for the differentiation of 'masculine' and 'feminine' types of mushrooms. We have in mind the successors in various languages of two nostratic roots which are in a relation of metathesis one to the other, namely \*b/p-N-g/k-: \*g/k-N-b/p- (where N is a nasal irchophoneme) or, on the Indo-European level, \*bhoNg-: \*goNbh-. Cf., on the one hand, Uralic \*paqg-1\*poqg- (cf. Mordvin [Mordva] payga,

o, Cheremis [Mari] poyge, pagge, Hanty Ostyak [Khanty] poyx, payx,

29

yga, Vogul [Mansi] paqx, pi,7ka), Paleosiberian \*poy (cf. Ket haYgo, Yukagir [Odu], Chukchi, Koryak, Kamchadal [Itelman], and others, all extinct)," Indo-European - Ancient Greek u7r6yyoq, u7r6yyq, o-(p6yyoq, Latinfungus, and so on, 31 and, on the other hand, Slavic gpba (Old Indic gabhd-), Hungarian gomba (cf. bolondgomba 'mad mushroom', similarly German Narrenschwamm, Serbo-Croatian ljula g1jiva, and so on), Lithuanian guthb(r)as, Old Icelandic kumbr, and others. In the capacity of io

paUg pa

semantically marked members, cf. Ket haygo in connection with the igend mentioned above and Slavic gpba in its two meanings. If this hypothesis is correct, it opens the way toward the explanation of a series of other words which, until now, have also remained etymologically unclear. 12 Finally, it is not to be excluded that words of this root may

33

occur in other languages as well.

### 3. Lightning, thunder-bolt and mushroom

Another group of motifs that is reflected in language, superstitions, omens, as well as in myths, links mushrooms with lightning and thunder, and storm, often in their divine embodiment.<sup>3</sup> This is attested to by innumerable materials from ancient cultural traditions,

some of which have been collected and analyzed by R. G. Wasson. One should note in particular a saying widespread among the Greeks and Romans according to which thunder, not rain, causes mushrooms to grow, a saying supported by the comments of naturalists and poets.<sup>3</sup> Analogous beliefs can be found in India, Kashmir, and Iran - reflected already in Kdliddsa's poem<sup>S,36</sup> - among the Bedouin<sup>'31</sup> in the Far East, in Oceania, among the Mexican Indian<sup>S,3</sup> and others. Among all these data two categories of instances should be distinguished: in the first, the link between mushrooms and thunder, lightning and rain is reflected in the nomenclature for mushrooms (or similar words designate both certain types of mushrooms and thunder or lightning); whereas in the second, extant rituals involving mushrooms attest to the tie.

The first category of instances, in which mushrooms are identified with

omens: cf. the typical example 'when many boys are born, there will be war'-'when there is a large harvest of mushrooms, there will be a war', i which boys and mushrooms enter into a class of objects fulfilling identical functions.'" The various interdictions or approbations for the collecting eating, or even viewing of mushrooms are different for the masculine and feminine parts of the collective. In myths, etiological legends, folk tales the difference between the two mentioned types of mushrooms are correlated in the plot with an opposition of men to women and correspondingly, of their attributes; cf. certain Northern legends about mushrooms in connection with the vagina dentata (it is interesting that this motif often incorporates an explanation of the origin of mushrooms)." Of particular interest in connection with our further discussion is the folkloric motif Aarne 365, 3,2 (see Thompson 1955-58; Thompson and Balys 1958): A boy announces that his wife will be she who eats mushroom; the boy's sister eats the mushroom, and he runs away from her in terror (the theme of the threat of incest). Moreover, there are motifs which, although they are only distantly related to the initial motif nevertheless allow one to uncover at least traces of the old scheme.'8

The connection of mushrooms with the opposition masculine-feminine in particular the coding of the members of this opposition through the use of the myco-classifier, may be observed in numerous examples of 'low humor and symbolism censored by the 'official' culture. It also occurs in the symbolism of ornamentation, where, according to at least one interpretation, masculine and feminine signs on one level are understood on another level as signs for the two types of mushrooms. This may

be observed in cases of such diachronic sequences as given in Figure 3.

Masculine signs

I

II

III

Figure 3.

T

Feminine signs

Y

Naturally, it is impossible to maintain in each concrete case that sign of the first form (I) have images of mushrooms as their exact source, and not solar or lunar images, for example. Nevertheless, there are several arguments which make the interpretation of such elements of ornamentation

Mythological conceptions about mushrooms 303

signs for mushrooms appear probable, even if only for a part of such examples:

First, the linguistic identification of masculine and feminine attributes precisely with mushrooms, discussed above.

Second, the use of these signs in cartouches surrounding universal schemes of the type of the world tree, where images for the sun and the moon are already depicted. Moreover, according to the evidence of the members of the given traditions, cartouches made up of such signs serve as magical devices aimed at evoking and augmenting fertility, which is analogous to at least one major function of mushrooms (cf. below).

Third, the presence in a number of cultural traditions of examples of a representation containing a doubled image of the world tree in the proximity of mushrooms. The best example is a three-membered mushroom depicted horizontally and vertically on a textile from the Mongolian omb at Noin Ula now in the Hermitage, Leningrad (first century B.C.-first century A.D.). Along the sides of the mushroom two birds are depicted above, and the mushroom is surrounded to the right and left by a representation of the world tree. The entire

composition is repeated several times, thus acquiring the function of an ornament."

Fourth, the extremely close similarity between masculine and feminine signs of the type mentioned and the shape of figures for the game of draughts in a number of traditions (cf. ancient Ket checkers, checkers from Mohenjo-Daro, and others). Moreover, members of the given traditions clearly differentiate masculine and feminine checkers, have particular names for them," and view the game as a sort of model of the social structure of the collective - as a type of duel between the masculine and feminine halves. In this connection one should recall the motif of a war between masculine and feminine mushrooms, with an emphasis on their relation to human attributes, in folk tales of the type 297B

21

Aarne), in songs and various sorts of riddles, as well as in children's games, counting-out rhymes (Russian *sjitalki*, French *compagnes*), and various story formulae. A consideration of all these cultural phenomena reflecting archaic layers of mythological conceptions is essential for the reconstruction of mythological conceptions about mushrooms. Nor should one be embarrassed by the fact that the most significant mythological and cosmological motifs are preserved especially

21

jocular children's verses and games.

What we have said above, particularly in connection with the interpretation of certain forms of ornament, should not be understood to imply at all such cases need be explained as reflections of images for mushrooms. What is essential is that the given correlation of forms undoubtedly reflects a certain rather elementary and, to all appearances,

thunder and lightning linguistically, is quite common. In Russian, for example, one finds such typical names for mushrooms as *gromovik* (from *grom* 'thunder') and *do1devik* (from *dofd* 'rain'), etc., and the Russian term for 'sunshower' is *gribnoj do1d* lit. 'mushroom rain'. Among the Maoris *whatitiri* signifies 'thunder' and 'mushroom', and the name of the mythical ancestress is *Whatitiri*, her grandchild *Tawhaki* being furthermore linked with lightning by the fact that lightning-bolts are emitted from his armpits." The Pampango name for mushroom contains the element *kulog* 'thunder', as do certain Chinese names transmitted in *The History of Mushrooms*, a Japanese work written in 1811, such as *Lei-ching T'an* 'Thunder-aroused mushroom', *Lei-sheng Chiin* 'Thunder-peal mushroom', etc. In a series of Altaic cultures the mushroom is correlated through its name with the sky: cf. Mongolian *tengriinku*, which is related to *tengriin* 'celestial', *tengri* 'sky' (see Potanin 1883: 132-138), and so on.

The second category of instances, involving mushroom rituals proper, is best attested to by the description of a Zapotec ritual cited by Wasson (1956: 609) and reported to him by a shaman. Four days after the last gathering of the sacred (entheogenic) mushrooms the shaman addresses to the 'Powers' a petition meant to insure a good harvest in the coming year. He appeals first to the Earth; second, to God the Father; third, to the Trinity; fourth, to the Great Lightning-Bolt that breeds the mushrooms-, and fifth, to the Great Lightning-Bolt that injects blood into the mushrooms. (Here the numerical constant four is characteristic: the element of four days is relevant, and the number of powers addressed actually amounts to four; cf. in this respect the Russian expression *posle do;!dijka v jetverg* lit. 'some Thursday after a rainfall', the equivalent of 'when hell freezes over' in American English [*Russian eetverg* 'Thursday' is derived from *jetyre Tour*], and several other analogies, of which see below.)

In the most diverse cultures utterances linking mushrooms with celestial phenomena, with the sky itself or with celestial inhabitants and, correspondingly, with the world of the spirits, are marked. Here are some examples. Let us mention first of all the well-known motif according to which mushrooms originated from the spittle of a deity (see *Th A 2613.1*, *A 2686. 1*; *A Th 774 L*), which is a parallel to one of the motifs about the origin of vegetables (*Th 2686*); cf. below on mushrooms as divine excrement and on the linking of mushrooms with celestial urine. Among the hunter tribes of the Somang race on the Malay Peninsula there exists a belief according to which mushrooms or fungi contain the souls of animals which have been scattered on the earth like seeds by *Kari*, the Thunder-god (see Skeat and Bladgen 1906: 4ff.). Poisonous mushrooms contain the souls of animals which are dangerous to men, chiefly tigers (cf.

#### Mythological conceptions about mushrooms 307

*susu harimau* 'tigress'-milk fungus). Human souls are supposed to grow up in a soul-tree in the other world, whence they are fetched by a bird that is killed and eaten by the expectant mother before birth, and in an analogous manner, the souls of animals are brought to earth by the parent's eating of the appropriate fungus containing the corresponding animal soul placed there by *Kari*. One should mention in passing that what is established in this myth is not merely the equivalence of the given sort of plant or fungus and the given sort of animal (and their relation to man), but also the sequence of their appearance, which is essential for the question under analysis here." A motif somewhat similar to the preceding one is reflected in the beliefs of the inhabitants of the Yaghnob Valley southeast of Samarkand (see Andreev 1925: 172f.). According to these beliefs, thunder arises when a sky-borne divinity known as *Mama*, the Great Mother, shakes lice out of her bloomers which tumble down to earth and are transformed into mushrooms, and when there are peals of thunder children cry out '*Puri, puri, xor6*' (where *puri* is the name of a plant, and *xori* - 'mushroom')."



In certain instances the relation between mushrooms and celestial objects is rather obscure, though present. Thus, the African Pangwe (Fan) tribe believe that their supreme deity, Nsambe, created only living creatures. The earth arose earlier from the lower half of a wooden mushroom, and the sky - from its upper half, similar to the way in which they arise from an egg in many cosmogonies. (Incidentally, further on in the myth the halves of the mushroom are equated to two eggs.) Thus was created the entire visible world: the sun, stars, trees, mountains, rivers and the progenetrix who, like the wooden mushroom, is called Alonkok. Lightning was hidden in the egg, and with its help the progenetrix received

. She then gave birth to the Twins, Nkombodo 'marsh hill' and Odangemeko 'big mountain', who brought into the world Mabige and his sister, from whom in turn came the highest god and father of all, iNsambe." Nsambe lives in heaven ('Lord Sky'), is in charge of thunder and lightning, and in time of drought is offered the sacrifice of a black bull, divided into parts." The much more complex beliefs of the Dogon will not be discussed here in detail, though we should mention some features of their cosmogony (see Griaule and Dieterlen 1965). Certain motifs are relevant: the connection between the Creator God Amma and fire

the four-part egg of the world ('the mother of the stars'), from which arose the two twin placentas. Amma created the seed of the tree seng na from dirt and spittle; through its rotation there arose all plants, including mushrooms Qd boy, lit. 'hyena drum'), and then - insects. Amma created the four elements (also from his own spittle) - earth, water, fire and wind (air) - in order to create seng na (his four elements are called the 'four

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nails' or 'four fingers' of Amma). Within the twin placenta Amma created the first animate creature *npmmV anagl?nno*, " which was divided into four parts. Of the four *npmp* one should note in particular here the first, *n9mp dig*'The Great Nommo', who remained with his father in heaven, where he took charge of thunder, lightning, rain and the rainbow (*nvmnip dig* is represented in a manner which is quite similar to a mushroom), and the last, *pgLg npmp*, the first creature, who, having risen up against his creator, introduced into the universe disorder, psychological variety - if you like, accidentality in the form of chance. With *qgp* are linked the motifs of the descent to earth, the measuring of the universe, and the transformation into the Pale Fox; extremely significant are his relations to water and fire. More indirect evidence can be extracted from Aztec myths reflected in folklore. According to one of them, the rain-god Tlalokan lives in the heavens in a house made up of four chambers, each of which contains a tank filled with water: the first contains good water, with which he waters the ripening maize; the second - bad water, which engenders fungal mould;" the third - water which causes the ears of corn to freeze to death; the fourth - water which causes them to dry up and wither (see Krickeberg 1928: 3417.).

Finally, the link between mushrooms and celestial objects is also observed in data from the European 'lower' or 'unofficial' cultural tradition. First and foremost one should note the so-called 'mushroom circles' or 'fairy rings' (in the Tyrol they are termed 'Albert's rings')," circles of correct form in the center of which - according to folk belief -

#### Mythological conceptions about mushrooms 309

tioned in this connection (see Kondrat'eva [1970] which contains valuable data used here in part). As is well known, August 25th is St. Titus' Day, a Christian festival celebrated at the very height of threshing. St. Titus' Day is characterized by abundance, while St. Karp's Day (March 26th), on the contrary, is associated with a shortage of bread." It is thus extremely characteristic that one finds a proverb which links St. Titus precisely with mushrooms: *Svjatoj Tit griby rastit. Griby gribami, a molotba za pleemi* 'St. Titus grows mushrooms. Mushrooms are a fine thing, but what awaits us is work'. There is no need to prove here that in a great many traditions mushrooms are a symbol of fertility, abundance, and plentiful progeny. Besides what we have said above, it is enough to refer to the cult of mushrooms in China (*ling chih*) and its reflection in art (see Sullivan 1962). One may therefore suggest the existence in pagan mythology of a certain personage, likewise in charge of abundance, who preceded the Christian Saint Titus (the 'Esteemed'). If this is so, then for the reconstruction of the basic mythologern about mushrooms (on which see below) the fact that in later tradition the paternity of Titus, his abundance of children, is underscored in every respect may prove to be essential as well. And even though 'Titus' children' as a cliché in the polemic of fathers and sons in the last century goes back to a children's song of Wordsworth translated by Ja. K. Grot," whereas Titus the paternal father goes back to the neo-classical reception of the image of the Roman emperor," nevertheless, it is not to be excluded that the same characterizations were inherent already in the diachronic predecessor of Titus. nothing grows except mushrooms. Legend connects the origin of these Moreover, in connection with the myth of mushrooms, one should n,13t ,mushroom circles' with the fact that on St. Martin's Day, and particularly during the period of falling stars (usually around St. Lawrence's Day, August 23rd), the fiery-tailed serpent Alber, flying over the meadows, sets the grass on fire. In Germany it was believed that witches fly out of such 'mushroom circles' to the Brocken on Walpurgis Night; in Holland, that butter is whipped up by the devil in such circles. In Switzerland and Russia people persistently linked 'mushroom circles' with buried treasure. In the scientific literature various opinions have been expressed as to the origin of these circles, one of which holds that bolts of lightning cause their appearance. If this is so, then scientific

tradition is in agreement on this point with mythopoetic and contemporary 'lower' cultural traditions, which maintain that lightning bolts and the growth of mushrooms are linked. (More recent scientific evidence, it should be noted, disputes this theory; cf. Ainsworth 1976: 77f.)

In connection with the just-mentioned coincidence of the motif of fire or lightning striking and an increased growth of mushrooms toward the end of August, one should note another set of data usually not men-

pass over such late texts as the Siberian bylina 'Daniluško Ignat'i6 and Titus':

Podymalas' tuia, grJaz' velikaja ...

Podo mnoju, pod Thorn 40 korolej, 40 korolevffen, Ešje toj melkoj sofki i s&tu net, No vse na jetyre dal'ni storony ... Ešje sam ja Tit, Tita brata zver' ...

'There rose up a cloud (fig. 'a host of people'), the filth was great ... / Under me, under Titus, / there are forty kings and forty queens, / As to commoners, they are innumerable, / Stretching in all four directions

And besides everyone, there am I, Titus, the beast of Titus' brother

(see Astaxova 1938-1951), cited by Kondrat'eva 1970). It is characteristic that Titus is defeated by his son Danila, with whom he enters into a duel.

Finally, one can go even further. In the riddle Mors~einistyj Tit vsju derevnju veselit 'Wrinkled Titus gladdens the whole village', the answer to

A

308 V. N. Toporov

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Mythological conceptions about mushrooms 309

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Podymalas' Wa, grjaz' velikaja ...

Podo mnoju, pod Thom 40 korolej, 40 korolevilen, EY& 1q/ melkoj solki i seetu net, No vse na jelyre dal'ni storony ... ERe sam ja Tit, Tito brata zver'...

There rose up a cloud (fig. 'a host of people'), the filth was great ... / Under me, under Titus, / there are forty kings and forty queens, / As to

numbers, they are innumerable, / Stretching in all four directions ...

and besides everyone, there am I, Titus, the beast of Titus' brother ...' e Astaxova 1938-1951), cited by Kondrat'čva 1970). It is characteristic

that Titus is defeated by his son Danila, with whom he enters into a duel.

Finally, one can go even further. In the riddle Moržjinstyj Tit vsju revnju veselit 'Wrinkled Titus gladdens the whole village', the answer to

which is garmon 'accordion', it is quite legitimate to suppose an allusion to mushrooms - either through morgeinistyj Tit 'wrinkled Titus' (the features 'wrinkled', 'folded', 'stratified', etc., are among the most frequent words used to describe mushrooms: cf. Russian dialectal gribit'sja 'to make like a mushroom' for normative mor2it'sja 'to make a wry face, wince', justified by some linguists by the connection between \*grib'' ,mushroom' and \*g-rb "'wrinkle' orTold'; cf. above aboutg9nno among the Dogon)," or through the identification accordion =mushroom. This sort of identification is rather widespread. It is based primarily on external similarity, although other explanations are not to be excluded." Direct identifications of the Shamanistic tambourine and the mushroom are well known. It is quite curious that in the Selkup language 'drum' and certain other musical instruments are designated by words containing the root \*po,y, \*pay 'mushroom': cf. Selkup p6Uer, paygar. Among the Dogon mushrooms, which play an important role in the cosmological myth, are designated as td boy 'hyena drurn'; cf. above on the connection between mushrooms and the bugle in the Burmese riddle (footnote 34), and so on. 54 In any event, one is led to the conclusion that in a series of traditions two mutually active elements of the myth - thunder and mushroom - are unified by a common feature, the ability to produce an acoustic effect."

#### 4. Mushrooms in pictorial art

Above we mentioned certain beliefs, current in the Yagnob Valley, according to which lice are transformed into mushrooms and their appearance on earth is caused by thunder. This motif is widespread, mushrooms being linked, moreover, not just to lice, but to worms, flies mosquitoes, mice, frogs, snakes and so on." Linguistic evidence clearly speaks in support of this link: cf. names of the type of Russian muxom

German Fliegenpilz, Fliegelschwamm, French lue-mouche or Englis toadstool as designations for nonedible mushrooms, French crapaudin, o the names for the fly-agaric, Slovak Zabaci huby, had6ci huby, had ' n1

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huby, Chinese ha-ma chfin, and so on. This link is apparent, as ell, - mythopoetic conceptions of transformation and equivalence (cf. abo I about the transformation of mushrooms into animals and so on). It i,

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present in myths, whether it be a matter of encountering similar objects o both classes in one and the same text or of encountering them separately in different variants of one and the same text. Finally, it appears i archaic works of representational art based on the corresponding myth as well as in the art of more recent times that reveals strong archetype li

#### Mythological conceptions about mushrooms 311

tendencies. Before speaking in detail about the myth proper, a few words about the reflection of this motif in representational art are in order.

Among pictorial works of this sort the famous triptych by Hieronymous Bosch entitled The Haywain (circa 1480-1485, Madrid, The Prado), which the Wassons were the first to discuss, is exceptional. The content of he triptych is the history of evil, from its origin (the rebellion of the angels, the expulsion from the Garden of Eden) through its flowering (human life), right up to its death and posthumous punishment in hell. In Bosch's picture this completely orthodox scheme reveals such compositional peculiarities and such an abundance of symbols belonging to an entirely different tradition, that the triptych as a whole should be viewed as an exact and in-depth depiction of the structure of a myth in L6viStrauss' understanding of the term: it can be read or told (by following the sequence of symbols from left to right and from top to

bottom) and can be analyzed (by isolating the bundles of repeated symbols). The triptych is unique precisely because the myth set forth in it is presented on both the paradigmatic and syntagmatic axes.

The left wing of the triptych depicts how the Almighty cast down the angels who rebelled against him, transforming them into insects, scorpions, salamanders and the like. They fall into a lake and onto the earth round cliffs (petra genatrix) which resemble at once a human profile and a mushroom (concave-convex forms). Further there unfolds the story of the consequences of this original evil: the creation of Eve, the fall into sin, and the expulsion from the earthly paradise. The central panel of the triptych depicts a haywain (hay is a symbol of wealth, envy and vanity - cf. the Flemish proverb 'All is hay', or Russian tryn-trava 'it's all the same', h. 'weed-grass'), which is being drawn towards hell by monstrous animals, driven on by a man in the shape of a tree. Above the haywain is the tree of life, on which hangs a vase (a symbol of feminine voluptuousness), and the entire scene is crowned by God surrounded by clouds. The haywain draws close to a hill, on the top of which is a large mushroom<sup>57</sup> here also is the motif, so characteristic for Bosch, of the egg). The bottom part of the central panel depicts various scenes of alchemy and witchcraft.

The right part of the triptych is a depiction of the underworld, replete

with fantastic constructions and an abundance of symbols (cups, vessels, an egg, chthonic creatures, and so on) which are even more fully presented in the later triptychs of the same artist ('The Last Judgment', 'The Garden of Delights'), which are essentially versions of the same myth.<sup>58</sup> In

connection with what follows special attention should be paid to the punishment by the deity of his offspring (the angels), their transformation to insects<sup>51</sup> (with the further motifs of the mushroom, the tree of life, one), and also to the alchemical aspect of the myth as a whole.

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Certain other representations which contain the basic element, the mushroom or its substitute (often preserving a mushroom-like form) and the other two elements we have noted, signified in one way or another, the celestial and the chthonic, may be regarded as fragments of the same myth. One example is a bark drawing made by Australian aborigines from the Northern part of Arnhem Land, island of Goulburn (see Moun1ford 1964a: 23, pl. 15). In it one finds a mushroom-like plant, the snake-shaped roots of which extend into the earth and the upper parts or which extend into the sky. These upper branchings are covered with little arrow-shaped forms which are sometimes interpreted as leaves but which may easily be viewed as representations of arrows. (There is a whole series of representations in the same tradition in which similar signs are interpreted precisely as arrows or as bird tracks," and certain rituals, in which mushrooms do not enter directly, support the plausibility of this reading.)" The symbolism of certain representations on funeral stiles in Lithuania and Latvia - crosses in the shape of mushrooms or flattened frogs accompanied by two birds above and below - can be explained as a reflection or further transformation of the image of the mushroom as part of the cosmological scheme." These types of representations are repeated in a more generalized form in the carved decorations covering the fronts of wooden houses (particularly in Western Lithuania) and in West Latvian ornament (in particular, on shelves, trunks, and other depositories of riches)."

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Depictions of mushrooms are particularly numerous in Chinese art.

Besides the most elementary compositions, in which the mushroom o IS61

longevity (ling chih) appears in the proximity of heraldic anima or Taoistic deities, sitting in state on hills,<sup>66</sup> or in which a wise-man is shown contemplating the mushroom, <sup>67</sup> one should note in particular two more complex and substantive representations which go back to the period of the Han Dynasty. The first of them is a stone bas-relief on the tomb of Wan Te-yuan' (Suit-te, circa 100 A.D.): its upper part contains a depiction of a tall mountain on which two men sit in state, immersed in a game; behind them rises the mythic ling chih; to the side of the mountain is a deer, a symbol of longevity, accompanied by some sort of fantastic creatures; beneath the mountain is a dragon; still lower - wild grasses, a ploughing scene, and so on (see Sullivan 1962: pl. 84). The second

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representation is a carving on stone from Szechwan (1962: pl. 86). At a board for the game of liu-po sit two witches; next to them are two cups (it is possible that snakes are also depicted here); above the board is a fantastic bird; to the right - an enormous ling chih .<sup>61</sup> We have noted above the connection of mushrooms with games of the type of draughts. Chinese representational art provides supplementary evidence in support

Mythological conceptions about mushrooms 313

f this association. Moreover, it allows one to bring the game into the der cosmological scheme (the world mountain, the snake, the dragon, e bird, etc.). Certain Siberian traditions reveal a still more interesting picture: elements of the cosmic scheme not only form the frame for the

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~rvoj among the Khants of the Kazym Valley or topis' among the Khants )f the Vasyugan Valley; the figures for the game depict a deer, a cow, a horse; an otter; birds, including the fantastic eorys-kony-voj; sun and moon, and so on (see Suxov 1915; Ivanov 1970: 1 Iff.). These same lements appear separately in the forms of decorations (harness ornaments, pendants), toys, utensils and dishes."



**i. The myth of the Thunder-god and mushrooms**

One of the most important conclusions to be drawn from a comparison of the motifs discussed above is that in the mythology being analyzed mushrooms are linked in the closest way to certain animals - worms,

mice, frogs, snakes and the like. This connection is realized usually by two direct means: first, the transformation of these animals into mushrooms (cf. the belief current in the Yaghnob Valley), and second, the fact that they are jointly encountered in certain texts (cf. the analogous motif in Bosch or the scheme of wooden sculptural groups of Chinese origin depicting mushrooms and mice). To these may be added a less direct means: in some variants mushrooms figure, in others - the animals have mentioned. There are enough data to allow us to postulate the equivalence of these objects in the limits of the scheme under examination at the very least) and to permit us to classify them as chthonic objects. In his case we are justified in proposing an analogy with the reconstruction, proposed elsewhere, of the myth of the casting down from the heavens by the Thunder-god of his sons and their transformation into chthonic beings of the type of worms, snakes, toads, and so on." In this myth the storm is viewed as a moment of quarrel and punishment, and thunder and lightning serve as the instruments of punishment. Certain other features of this myth should be stated here: the role of the destroyer is assumed by a deity; his instruments are thunder, lightning, fire, stone, and oak; the a ~ce

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number of objects struck is usually fixed (most often the number is nine or seven); and, finally, the entire drama is saturated with the notion of increasing fertility and wealth. All of these features occur in incantations which figure in the various cultural traditions where this myth is operative (cf. incantations against worms, snakes, etc.), as well as in myths, folktales, epics, and so on, which tell the tale of the Thunder god (see

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Ivanov and Toporov 1969). Their constancy and antiquity justify our confidence in the reconstructed myth. There is no doubt that this mythologem was rather widespread and claimed universality to a large extent. We should like to underscore here one aspect of the myth to which too little attention has been paid thus far, namely, the fact that mushrooms play a significant role in it. Besides the data we have already adduced above, the role of mushrooms is attested to by other evidence, some of which is quite amazing. For instance, the Ancient Greek name for one of the types of underground fungi, Κ1;Pa6V10V lit. 'bolt of lightning',<sup>2</sup> reveals a certain closeness to the Indo-European name for the god of thunder (cf. Slavic Perun", Lithuanian Perkanas, Latvian Pirkdms, Old Prussian percunis, and so on). This designation of mushrooms is correlatable, naturally, not only with KEPaVV6(; 'thunder-bolt', 'lightning', Kcna6viog 'of thunder', 'striking with thunder', KEPaVV6CO 'to strike with lightning', etc., but also with ZF,6(; KEpa6viog 'Zeus the Thunderer' (it is interesting that the same adjective is used by Sophocles in connection with Semele [feyUq], who was struck by the thunder of Zeus).<sup>13</sup> one could also add here another designation of mushrooms, 'devil's fingers', which coincides with the name for belemnite," often interpreted as remnants of the weapons with which the Thunder-god defeated his enemies, particularly the Serpent ('devil's arrows')."<sup>14</sup> Inasmuch as the very names for certain types of mushrooms point to thunder, lightning and their sovereign, one should not overlook the linguistic form of such utterances as Lithuanian Po perkanijos gerai grybai dygsta, mat, lemq sutranko 'After a storm mushrooms grow well, it means, the earth has been shaken 76 or such indications of a substantive character as the assignment of the fourth day (Thursday) to the Thunder-god and to mushrooms. Cf. the name for Thursday - Donnerstag in German or Perdunedtin among the Polabian Slavs, indications to the effect that the fourth day is that of Perkunas, the numerous facts of the Thunder-god's quaternary nature or hypothesis in four, on the one hand, and the markedness of the fourth day for mushrooms - Russian posle doldi~ka v jetverg lit. 'some Thursday after a rainfall', the petition of the Zapotec shaman for a future abundant crop of mushrooms four days after their gathering, his addressing the fourth divinity with the name 'Great Lightning-Bolt, who grew the mushrooms', etc., on the other hand (cf. Section 3 above). The materials relating to the myth in question contain other significant hints that help to explain its entire point of departure. Particularly important is the fact that Thursday 77

is linked with the motif of the wedding of the Thunder-god, that this wedding was unsuccessful (according to some evidence the Thunder-god's adversary abducted his bride)," that the Thunder-god punished his adversary by striking him with lightning, transforming him into a

#### Mythological conceptions about mushrooms 315

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chthonic object, and so on. Moreover, it is rather easy to reconstruct the last link in the general scheme of the myth - the motif of the increase of fertility and wealth,<sup>79</sup> the accent on the ambivalent complex death-life (in particular, through the preparation of a drink of immortality, which marks the beginning of a new culinary-food regimen in the given tradition), which partly is mirrored in the opposition water-fire.

The opposition of fire and water in the myth about mushrooms and in myths isofunctional to it defines the spatial and elemental boundaries of the myth (active, dynamic, celestial, fiery-passive, inert, subterranean, watery). At the point where these features intersect there arises something which becomes a symbol of conception, birth and fertility. In the most diverse traditions mushrooms are linked with celestial fire (and later with earthly fire as well; cf. the use of amadou or fungal tinder) and with celestial and subterranean waters. The connection of mushrooms with lightning explains the constant motifs which unite mushrooms with fire, steel

(used formerly for striking fire from a flint) and flint both in legends and in the evidence of material culture. This is not the first time that attention has been directed to the fact that in the excavations at Maglemose in Denmark, which date back to ca. 6000 B.C., remnants of the *fungi fornes fromentarius* were found together with implements for making fire," which takes us back again to the themes of copulation and birth linked with both fire and mushrooms. The appearance of fire and mushrooms is believed to be the result of the sexual act, and this belief is reflected in one way or another both in archaic cultures" and in certain quite contemporary associations." Here again it is essential to stress that what is important is not so much the fact of the appearance of mushrooms in the given part of the scheme as much as the markedness of this very part, which in various cultural traditions may be coded by different classifiers, 83 or even the markedness of the complex as a whole (as in Richard Wagner).

Above we spoke about the fact that, depending on the evaluation made of the motif for the cause of the separation of the Thunder-god and his children, who are turned, in the final account, into mushrooms, the latter are designated in one of two ways: they are either the 'food of the gods' or the 'food of the devil'. A similar situation is reflected in myths, where the children of the Thunder-god or of some other celestial personage may be transformed not only into chthonic beings, but into celestial phenomena, such as stars, the Milky Way, rainbows, and so on, as well. (This transformation into stars, incidentally, is often depicted as a punishment also.) There is a rather large number of motifs in which stars figure in approximately the same function as do chthonic beings in the mythologem under analysis. Particularly interesting in this regard are those

instances where both stars and chthonic objects appear within the limits of one and the same text. First and foremost one should mention the variants of the motif A 14 (Thompson) in which a worm figures as the creator of the world. Cf. the myth of the Guarayu-Guarani Indians of Bolivia about the primordial worm Mbir which, having been turned into a man, created the world. People began to call the worm Miracucha, i.e., the same name used for the Sun and Moon; the first ancestor (the Grandfather), who sprang from them, taught people to plant seeds, to harvest the crops, to make chicha, an Indian beer brewed from maize and manichotte; he gave people bows and arrows, taught them how to shoot and how to obtain fire. He turned his wife and child into stone and then went off into the West. When the spirits of evil people arrive in the West, the Grandfather breaks them up into pieces. Even now people pray to him for food and riches, and he never deceives them. It is interesting that many people consider the Grandfather and Miracucha to be one and the same god." Comparable here is the belief of the Mosekene Indians (Bolivia) that the Milky Way is an enormous worm (see M6traux 1946-1959, vol. 3: 503ff.). No less interesting for the interrelation of stars and chthonic beings are certain Altaic myths and legends. The great worm Urker (Mongolian Xorxo) was defeated by his divine adversaries, but was nevertheless saved by ascending into the sky, where he was transformed into the six stars of the Pleiades. In the summer months Urker (=the Pleiades) invisibly descends to earth. If he lands on the water, a bad winter and famine are expected; if he lands on dry land - a good winter and abundance." Such is the legend among the Turkish population of the Altai and Tarbagatai (see Potanin 1881, vol. 2: 124f.). A Northern Mongolian legend relevant here involves a clever archer who dreamt of ruining life on earth and shot at the Pleiades, striking one of the stars. But, since God had imperceptibly replaced the star which had been struck with a target, the archer had to admit himself defeated. He cut off his thumb (erky6k)," buried it in the earth, put on an animal hide and turned into a marmot. In other transcriptions the archer is named Y6rxyj (Y6rkyb)-M'y6rgy6n (where my6rgy6n is 'archer'. cf. the Buriat legend about Irxii-Nomon-xan). Similar beliefs of the Soyot (Tuva) are connected with Yerlyen-Nomon-Xan (a variant of Erlik); cf. yerlyen 'rat', nomon, mole'. The plausible supposition that the figure of Erlik is concealed beneath that of Y6rxyo-My6rgy6n was voiced long ago by Potanin (1916: 7). Thus Erlik too, opposed to the Heavenly God, is linked with rats and other animals of the rodent type (for example, with the flying squirrel, enemy of the Son of Heaven, who defeats it by lightning, as well as with the chipmunk or ferret)." Another legend (Potanin 1881: 148ff.) contains the important motivation for the punishment, although the

#### Mythological conceptions about mushrooms 317

theme of stars is left out. The older sister proposes that her brother copulate with her. In response to his refusal she puts out his eyes and buries them in the ground. They turn into a bat (kdri-tygkan), which also lives underground. The father curses his daughter, and God turns her into a cat (myalin) which is inedible (only Torguts eat it). Attention should also be paid to a tradition which derives the Tarbagatai nobility from Kfz\*il-gurt (the Red Worm), and the Chinese emperor - from stone. Such details as the punishment of the Great Bear or Big Dipper (cf. Mongolian I)ooloon 6vg6n lit. 'Seven Elders' or Doloon Burxan lit. 'Seven Gods'; Kirgiz D;!effkarak6i [karakfil lit. 'Seven Thiefs' and so on), 88 on the one hand, and the motif of the seven (or nine) sons of the God of Heaven who are imprisoned in corresponding levels of the subterranean kingdom (see, e.g., Karunovskaja 1935: 160-183), on the other hand, should obviously be viewed as fragments of a single mythological scheme. One finds in them the spatial boundaries of the Universe and opposite variants of the fate of the children of the master of heaven." The numbers seven or nine in this scheme are constant, but they relate not only to the number of the opponents of the divine hero, although this is most often the case, but

also to the number of divine personages who defeat the opponent, or even to both sides in the struggle. Examples of the first type include: Australian legends about Mea-mei, the Seven Sisters who, in saving themselves from the culture hero Wurrannah, are transformed into the seven sisters of the Pleiades (see, e.g., Parker 1897: 401Y.; 1898: 73ff.), or analogous myths about the seven Emu sisters;9' Maori legends about Tane's striking a star and breaking it up into seven pieces which then made up the constellatibq Hatariki 'Little Eyes';9' American myths about the transformation o f seven women guilty of homosexual love into the stars of the Pleiades (see Gayton and Newman 1960: 26ff.), or of the marriage of a woman to a star and the birth of her sidereal son;9' the Chinese legend about the nine suns defeated by the Great Archer;9' Indo-European incantations containing the motif of the destruction of nine worms or snakes by a divine personage (see Toporov 1969a: 24ff.), and so on. An example of the second type is the Ancient Egyptian mythologcm about the Great Ennead of Gods who defeat the Serpent or about the nine bows of Horus (cf. the Pyramid Tests, utterance 385; Erman 1900: 19ff.). The most convincing example of the third type is one of the versions of the Ancient Chinese cosmogonic myth about P'an-ku, who nine times in the course of a day became now god of earth, now god of the sky." The archetypal nature of these motifs is so obvious and influential that one should not be surprised at the numerous echoes of them in more recent fiction and poetry, which have absorbed and reworked the heritage of the mythopoeic epoch.9-5 One could go on to cite further examples proving the isofunctionality of

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mushrooms, chthonic animals, stars and fingers. However here we must limit ourselves to just one more. Above we spoke of the Altaic 'finger incantations' involving counting from one to ten and the reverse. The same occurs constantly in incantations against worms," and a similar counting is practiced during the gathering of mushrooms." Finally, one can trace certain analogies with the art of star-counting. 98

#### 6. Further observations on the basic mythologem

As the data cited above indicate, the reason for the conflict in the family of the Thunder-god is linked most often with the violation of some tabu, above all, the tabu against marriages between persons of the same blood. Accordingly, the conflict should ideally be resolved by the establishment of a new system of marital relations, with those opposing it being punished (cf. Henning 1966: 356f.; Stephens 1962). But, at the same time, in many traditions where different norms hold, incest continues for a long time to be viewed as one of the most effective means of increasing fertility. It is enough to refer here, to descriptions of different types of incestuous relations in the ~?gVeda: the Father-Sky and his daughter U~as; Kisan the god of fertility and his sister U~as; Tvaṣṭar the creator and his daughter; Agni, the god of fire, and his sister U~as; Agni as the instigator of incest; Yama, the primeval man, and his sister Yarri, and so on." Thus it is hardly surprising that the theme of incest and the subsequent punishment (death by means of dismemberment, etc.) is interwoven in the closest way with motifs of fertility, the origin of cultured plants, and the transition to a new culinary-food regimen (in particular, the acquisition of the drink of immortality)." Indicative of this are a series of folktale motifs, though one should stipulate here that it is necessary to turn to the whole totality of variants of the given motif for a complete judgment of it. We already spoke above about the motif 365.3.2 of the sister who has eaten a mushroom and becomes the wife of her brother. 'O' In India, parallel to the motif of the origin of mushrooms (Thompson and Balys 1958: A 2686.1), and likewise of edible roots (A 2686.4), narcotic plants (A 2691.0), tobacco (A 2691.2), there exists a large number of motifs relating to chthonic objects: cf. A 2006, the origin of insects as a result of brother-sister incest (cf. likewise A 2000-2985, in particular: A 2011, ants; A 2031, flies; A 2034, mosquitoes; A 2051, lice); A 2001, the origin of insects from the body of a slain monster, and so on. Sometimes the two series of motifs are united: cf. A 2601, the origin of plants - the Creator sends insects down to earth who plant the plants; A 2611, plants from the body of a slain person or animal (cf. likewise A 2611.0.3 and 0.4), among others.' 02

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#### Mythological conceptions about mushrooms 319

Motifs involving the transformation of brother and sister into flowers as punishment for the crime of incest are rather widespread. Next to the theme we cited above of the sister's gathering of miraculous flowers while the brother is engaged in his quests, cf. the reconstruction of a similar myth on the basis of Slavic material, that of the flowers Ivan-da-Marya (*Melampyrum nemorosum* or *Viola tricolor*), bratki, and the like.' 'O' Traces of similar motifs are often found in the extensive cycle of legends about

the creation of the Universe and its separate parts: cf. Thompson A 642, the origin of the Universe from the body of a slain giant; A 614, from the parts of the creator's body; A 617, from ~ clam-shell; 114 A 1246, from a

cliff, A 1236, from a tree; A 1241, from clay or earth; A 1245, from stones, and so on. In particular, the sequence of the creation first of stone, then of plants (or animals, or people) is observed quite often. 'O'

Here one should mention certain standard myths and legends about the origin of cultured plants, which once again are related to the mythological scheme for the origin of mushrooms and their cultural role. Thus, for example, the typical Mesoamerican legend (Krickeberg 1928:

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no. 4a) about the origin of man and cultured plants, among other things, contains the following motifs: the descent of Quetzalcoatl into the

underworld to the god of the dead; worms and bees; masculine and feminine bones (cf. the Oceanic motif according to which the stars are the bones of dead spirits); the mountain of life; the four gods of rain; the transformation of Quetzalcoatl into ants of various colors; the lightning bolt which causes the appearance of plants, in particular, of maize. Another legend (Krickeberg 1928: 12f., no. 4) contains other motifs alin to those found in the basic mythological scheme for mushrooms: the arrow of the Sun God strikes the earth and gives rise to the first pair - a man and a woman - who have seven children (six sons and one daughter); the use of fire and raw-cooked food; the birth in the underworld of the God of Maize and the origin - from his various bodily parts, in particular, his fingers and nails - of edible fruits; the descent of the God of Wind Quetzalcoatl and of the divine girl Maiauel to the earth, their transformation into a tree with two branches, the death of the branch of Maiauel; the origin from her of the plant Med (agave) and the prep-

aration from it of wine which causes dancing, singing, and ecstasy, and so o I n.

In view of the importance of the number four in connection with the Thunder-god in the scheme under analysis here, particular attention should be paid to myths in which this number is constantly being played

up (four gods, sons, rains' - waters, jaguars, world periods, seasons, cardinal points, colors, and so on) in connection with the basic theme of the origin of fire, cultured plants, and drinks made from them (Krickeberg

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320 V. N. Toporov

1928: 3f., etc.). No less interesting is the use of the number nine in these same myths: cf. the preparation of Xticane from nine magical drinks that, when mixed with maize, gave man strength and fat; the birth to the pair of the first gods' 06 - on a cliff amidst the waters - of two sons with the names 'Wind of the nine snakes' and 'Wind of the nine underworlds', who were turned into the Eagle and the Snake (cf. here the theme of tobacco as well). 107

Myths with this basic content are repeatedly reflected in ancient Mesoamerican art (see Scler 1902-1923; 1903-1909; Krickeberg 1949). Another peculiarity of the American tradition is also characteristic, namely, the use of mushrooms in preparing a drink which causes visions. Furthermore, there is a wide diffusion of fetishes, certain of which (e.g., the holy cap with four arrows among the Cheyenne) look like direct representations of the most important motif of the myth of the origin o mushrooms. 108

Data relating to the African traditions about the origin of life on earth and, in particular, of cultured plants, have been analyzed in detail in a series of works (cf. Baumann 1936: 191ff.). We need not dwell on them here, especially as they are merely variants of the same motifs we have mentioned repeatedly. One should, however, note the ancient Japanese version of the origin of cultured plants, inasmuch as it proves to have been recorded as early as the beginning of the thirteenth century (cf. the oldest historical composition, the Kojiki and the Nihonshoki annals) and contains several interesting details, for example, the accent on the dismemberment of the murdered goddess,"9 the focus on the motif of nails, and finally, the connection with the myth of Idzanagi and Idzanami, which permits one to establish other, less direct echoes of the scheme under analysis here (see, in more detail, Karow 1964).

Ancient Chinese myths are particularly rich in data reflecting an affinity with the mythological scheme for the origin of mushrooms. First and foremost one should mention the cycle of myths connected with P'an-ku, one of the basic demiurges in Chinese mythology. It was precisely P'an-ku who separated heaven and earth, his body growing according to their distance from one another, and it was from the parts of his body that the different elements of the Cosmos arose. The third son of P'an-ku bore the name Lei'Thunder'; moreover, of P'an-ku himself it was said that when he inhaled, the wind rose and rain began to pour, and when he exhaled, the thunder pealed and lightning flashed. In times of drought prayers were addressed to him petitioning for rain. According to one legend, the human race arose from the parasites swarming on the body of the dying P'an-ku. "' It is interesting that P'an-ku himself had the body of a snake and the head of a dragon.

Mythological conceptions about mushrooms 321

No less curious are another group of Chinese legends about the origin of the human race. The girl Hua-siui-shi found herself in the thunder wamp (Lei-lze), became pregnant by the god of thunder, Lei-shen, and ave birth to a son, Fu-si, who married his sister, Njuj-va. It was they who egot the human race. (In several representations Fu-si is shown holding he sun in his hands, while Njuj-va holds the moon with an image of a oad, which links the two of them on the cosmological level with the heme of the primordial marriage.) Another cycle of legends narrates the story of the flood, caused by the god of thunder Lei-gun, and the destruction of everything living with the exception of a brother and sister aved in a bottle-shaped gourd which grew from the tooth of Lei-gun, uried in the earth. The sole survivors of the flood, the brother and sister, recalled Fu-si (cf. Pao-si 'bottle-shaped gourd'); the boy is called brother-gourd', and the girl - 'sister-gourd'. It was through their marriage, with a further set of various transformations, that the human race arose again (cf. Yuan Ke 1965: 40ff.).

Another aspect of the mythologern is stressed in the Australian legend



(Parker 1897) of the sisters who were turned into frogs as a punishment for betraying their mother to her husband (cf. the transformation of the Mea-mei sisters into the Pleiades), namely the opposition food-non-food (stone). This same legend contains the motif of rain caused by stone, a motif displayed in more detail in the legend of Verinun the rain-god, who by setting up a great coniferous forest causes abundance and assures the transition of boys into men.' ' %

In many traditions the motif of the origin of food and of a drink which makes one merry is linked with an abduction or theft committed by the 'culture' hero (usually from the sky), rather than with incest: cf. the Polynesian legend of Lafanoga, who steals an intoxicating ritual drink from the spirit world; American and Oceanic legends about the origin of fresh water; the story of Odin, who steals honey; certain motifs connected with Loki (cf., incidentally, his ability to turn himself into various insects [cf. *locke* as the word for spider in various Scandinavian dialects] and the fact that he gave birth to chthonic monsters),<sup>12</sup> and so on. The motif of an ecstatic drink, the elixir of immortality, of a divine (or diabolical) liquid, takes us back once again to the theme of mushrooms, since as the investigations of Wasson, Levi-Strauss, Heim and other specialists have shown, it is precisely certain types of mushrooms which serve as the best (and sometimes as the only available) material for preparing an hallucinogenic drink that facilitates communication with the other world. In any case, in the vast expanses of Eurasia and Amerindia a great deal of evidence has been found to indicate that mushrooms (above all - the fly-agaric)<sup>13</sup> are used for such purposes at the very least in esoteric groups

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within the given traditions and that such a use of mushrooms is a remnant of archaic culture. In the corpus of myths as a whole the triad life-death fertility noted above is duplicated in one way or other in a spatial displacement of the basic object of the myth, whatever its concrete transformations may be: sky (the children of god before the fall into sin) - earth (mushrooms, insects, and so on after the punishment for the fall) - sky (man, tasting of the drink of immortality).'' This duality of mushrooms and objects isofunctional to them in the myth, which is manifested in the contamination of the heavenly (divine) and chthonic (diabolic) principles, reflects that element of risk with which the entire evolution of human culture is necessarily bound.'' The turning to the dark forces of nature, forces fraught with danger, to the remnants of the chthonic, and the experiencing (and incorporation) of them by means of the heavenly and the cosmic introduced into life the element of dynamism and increased the role that chance, choice, and initiative played in human culture. This is the double blessing that determined, initially, man's progress from chaos to cosmos and, later on, his progress from cosmos to history: '... who will bless you with blessings of heaven above, blessings of the deep that crouches beneath, blessings of the breasts and of the womb.''' But an imprudent contact with anything connected with the deep, with the abyss, is deadly. Any product of that realm can be used only if certain essential limitations are observed - spatial, temporal, and social: thus the necessity of a sacred place (center), a sacred time (holiday, sacrifice), a sacred group (shamans, priests, etc.). Only in these conditions can the turning to death for the sake of life be safely realized.' 17

#### 7. The Soma-mushroom hypothesis from a mythological point of view

In conclusion\*we would like to turn to the unexpected, but interesting and promising hypothesis of Wasson according to which Old Indian soma (Avestan haoma-, Indo-Iranian \*sauma-) originally designated one of the varieties of agaric mushrooms, namely Amanita muscaria (English fly agaric, German Fliegenpilz, Frenchfausse orange, tue mouche, crapaudin, etc.). Without touching here upon the question of the identify of Soma and Amanita muscaria, '' let us limit ourselves to a brief indication of the motifs that, when taken together, leave no doubt that Soma (god, plant, and drink) was included in the same mythological scheme in which in other traditions, as was demonstrated above, mushrooms play a role.

Among the data that Wasson used only in part or did not touch upon at all, there are several points that should be stressed. Soma is the child of Parjanya, the god of rain, '' the carrier of thunder and lightning

#### Mythological conceptions about mushrooms 323

(parjiinyah pitd. RV IX, 82, 3), 12' and Pajrd, Earth (p6jrdyd garbha. RV IX, 82, 4). '' The name Parjanya reflects the various designations for the Indo-European god of thunder (PerkFanas, Perun, etc.). Moreover, it is known that Parjanya produces cattle, plants, -seeds, '' and food; 12 ' he is connected with frogs, 12' and with milk and honey; 12 ' he is the son of the sky (parj4nydya div6s ... putrdya ... RV VII, 102, 1), the support of the world (gV VII, 101, 4), the irrigator of both worlds ( ... prd vidy6td r6dast uksamdna. RV V, 42, 14). It is interesting that the names of the divine spouses are constructed according to the principle of metathesis: Parj:Pujr-. Thus Soma is a child resulting from the union of the deity connected with thunder, lightning, rain, and the Earth, the wife of this deity. 121 Moreover, there are hundreds of passages in the RgVeda where the link between Soma and the Thunder-god himself, Indra, is indicated. Soma is named the 'drink of Indra' (cf. indrapdna. RV IX, 96, 3) 127 and shares a whole series of motifs common to Indra, not to mention the frequent indications of the fact that Soma enters into Indra (RV IX, 2, 1: indram indo vt~d viga. '0 Indu, (thou) the male par excellence (lit. bull), enter into Indra!').'' Nor is the connection between Soma and rain fortuitous: Soma's currents are the heavenly rain (prh te dhdrd asasceito div6 nd yanti

vr~lbyah. RV IX, 57, 1); Soma is addressed with a prayer to pour out the heavenly rain (vr~fim divdh pdri srava. RV IX, 39, 2); he is the

I - 129

possessor of thunder (pavamano ajyanad ... fanyat6m. RV IX, 61, 16).

The role of Soma as a mediator is described in particular detail: he is the link between Heaven and Earth who was born in Heaven (cf. aru~alm,,... diveih Sigum. RV IV, 15, 6 'red child of the Sky'); he grows on the earth (6f. RV IX, 61, 10: uccd tejdf6m Lindhaso divi &idbhdmy 4 dade' in the heights is the birth of your drink; I take on earth what was in the heavens', or RV IX, 79, 4: divi te ndbhd param6 yd ddad6 prthivytis te ruruhuh sdnavi k~lpah 'Your highest navel [origin] is attached in heaven; your fingers grow on the spine of the earth'); he is between the two worlds, symbolized by the two parts of the press (6bh6 antJ r6dasT. RV IX, 70, 5); he is the navel of

1 130

the earth (cf. ndbhd prthivy4 dhar~no maho div6. RV IX, 72, 7) and the mainstay of the sky (cf. div6 ... skambh6. RV IX, 74, 2; cf. IX 86, 35, 46). 131 In view of these data about Soma and the abundant typological parallels (cf. if only the combination of the three-membered mushroom with two birds on top of it in proximity to the world-tree in the already mentioned Noin Ula textile), there can be little doubt at this point that Soma is isofunctional to the world-tree. 131 With this fact in mind it is easy to explain the passages in the.FgVeda that state that Soma is the child of the seasons (rtz~rjdnitr. RV 11, 13, 1), that he is connected both with water (t&y d aphs phri makp~ jdid Jvigad yJsu vtirdhate. RV 11, 13, 1 'born from her, he immediately penetrated into the water, in which he grows'; cf.

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opposition of good and bad veirna: bhadrđm wirnam - pdp6m vdrnam). If one speaks of the cosmic level, day and night are differentiated with the aid of varna- (cf. KS VIII.3; KKS IV.8, and so on; cf. u~Jsd - ndkid); on the divine level two classes are differentiated through this concept - deva and assura, 160 as are two classes on the social level - Aryan and Ddsa. 16 ' Thus Soma figures also as an element serving to classify social structure, as was also the case with chessmen and mushrooms (see above). Still more interesting is the fact that here too a color opposition is used for the social differentiation (of which there are examples in more recent times as well).

All these examples convincingly demonstrate the way in which one and the same archetypal scheme is realized in different cultural-historical traditions, on the one hand, and the purposes for which this scheme is used, on the other. Despite all the differences in the actual realizations of the scheme and in the general evaluation given it by members of different cultures, one cannot deny the enormous role which it has played and continues to play in the cultural development of mankind.

#### Notes

##### Mythological conceptions about mushrooms 329

The present essay, translated by Stephen Rudy, is an outgrowth of our collective work (Elizarenkova and Toporov 1970), initiated by Elizarenkova's attempts to verify Wasson's hypothesis about Soma, which will be published separately.

1. Cf. Levi-Strauss 1966: 45, 60, 151-152, 313, 330; 1968: 219-224, 325; 1958; 1970.

2. It is a matter not only of the world-renowned works of this author (among the most recent of which see the series of articles in *Revue de Mycologie* under the general title 'Un Problème i &Iaircir: celui de la Tue-mouche', especially Heim 1966), but also of the reflections of this theme in fiction and journalism (cf. Aldous Huxley's novel *Island* and his essay on psychedelic substances). Among the more specialized literature on this question see Efron et al. (1967, especially the essay by Eugster and Waser and their bibliography) and Catalforno and Eugster (1970).

3. Besides Wasson's and Heim's famous work on the mushroom cult in Mexico, which set ethnomycological research into motion, see Wasson (1956; 1969 [referred to throughout as Soma]; 1970a and b) and Wasson and Wasson (1956). Among the reactions to Wasson's Soma, see Ingalls (1971) and Brough (1971). There recently appeared an extremely interesting monograph by R. G. Wasson, C. A. P. Ruck, and A. Hoffmann, *The Road to Eleusis: Unveiling the Mysteries* (1978). It offers one of the most astounding discoveries in the field of ethnomycology, that of the role played by the fungus *Claviceps purpurea* in the Eleusinian mysteries. Unfortunately, the many valuable insights of this work could not be taken into account in the present article. We should mention, however, that the materials the authors cite clearly explain the role of mushrooms in the marriage ceremony and their insistent phallic associations. It is indicative that the name Mycenae (M6Kqvat), one of the main centers of the CretoMycenaean civilization, is formed from the name for mushrooms (P6K19). (Cf. also Allegro 1970.)

4. The actuality of these features is confirmed by the data from the cultural traditions in question (cf. Uvi-Strauss 1962 and Roux 1966, among others).

In 1953 the Wassons observed a secret nocturnal ritual conducted by an old woman shaman in a distant mountain region of southern Mexico (in the country of the Mazatec Indians). The central episode of the ritual is the consumption of dried mushrooms (interpreted by some as divine and by others as satanic) and the experiencing of visions that follow. Of interest is the fact that one of the basic motifs of the hallucinations is akin to colored ornamentation of the ancient Mexican type. These data about a live mushroom cult are confirmed by historical

evidence as well. It is well known that around the threshold of our era there appeared in Mesoamerica mushroom-shaped sculptures with depictions of a mythical spirit on the base of the mushroom (cf. images from Kaminaljuy6). Several centuries later there appeared mushroom-idols, sculpted by masters from the Maya-Kichu tribe. In central America there existed at this time, it would seem, the cult of mushrooms that the Spanish encountered much later. Cf. the statement in Bernardino de Saaguna's Chronicle of the sixteenth century about the Indians' use of a hallucinogenic magic mushroom (teo-nanicatl) in their religious festivals. See, among others, Durin (1964: 180, 189, 225-226, 350-351). On traces of a mushroom cult in Scandinavia, see Kaplan (1975).

6. For example, urinating on certain mushrooms, using obscene language, and the like.

7. Further branchings are possible, for example, cannibal meat-noncannibal meat.

8. Cf. Tucun myths about the mad hunter (M210) or the family who were changed into jaguars (M301)' In the latter what is significant is the motif of the old woman who has killed her son and tries to feed his liver to her grandchildren, claiming that it is a tree fungus. The correlation of mushrooms and mold is attested on the linguistic level by such forms as French mousseron 'a type of edible mushroom', from Old French moisseron, mousheron (whence Middle English muscheron, English mushroom), alongside French moisi, moisissure 'mold', moisir 'to cover with mold'.

9. See L6vi-Strauss (1970: 15). Incidentally, the view of mushrooms as feces (particularly that of divine beings) does not so much indicate a negative attitude toward them as much as it underlines the particular role of mushrooms on the path from nature to culture, taking into consideration the distinctions between the divine and human aspects of this problem (cf. the motifs of digestion and its results, and of vomiting in connection with this motif). It should be recalled that the Greeks termed mushrooms the 'food of the gods' (cibus deorum in Seutonius' transmission [Nero 331; cf. 066v flp@pa [Dio Cassius 61, 35J]; the Aztecs, teo-nandcatl 'god's flesh'; cf. also Old Flemish dyvelshrood 'devil's bread'. (Cf. also the Ojibwa belief that mushrooms are the food of the dead.)

10. Cf. 'Quid porro insanius dici aut cogitari potest, hominem boletus, orizurn, tubera, placentas, caroenum, piper, laser, distento ventre cum gratulatione ructantern, et quotidie talia requirentern non inveniri quemadmodum a tribus signaculis, id est a regula sanctitatis excidisse videatur'- (De Moribus Manichaeorum, Cap. 13, §30; cf. Wasson, Soma: 71-72).

11. L6vi-Strauss (1962: 139) has shown that 'incest' and 'cannibalism', as the exaggerated forms of sexual union and the consumption of food, are designated in several languages by one and the same word (cf. kuta kuta in the language of the Koko Yao of Cape York Peninsula). Russian est' in the meanings 'eat' and 'Tutufte' is, of course, the result of convergence, but it is also conditioned by more general conceptions about the connection between these two spheres and others correlatable with them (for example, vomiting=giving birth). Nothing need be said about the similar symbolism of these two acts. Similarly, the Ponapy equate the eating of the

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totem with incest, and among the Mashona and Matabele of Africa the word for totem also signifies 'sororis vulva'. Such data affirm the equal antiquity of nutritional prohibitions and rules of exogamy. This same situation is reflected obliquely in the Tantric ritual *pafica-makdra*, which unites the use of meat, fish, cooked grain, wine, and copulation.

12. The vagina deniata may be depicted as an aggressive principle threatening the male with castration or as a passive principle receiving the male life force. Thus one finds, in the first instance, utterances of the type 'She, the sharp-clawed one, is scratching, biting, like one poisoned, for food (6ttave) or 'Do not be a husband-killer'(tipatighny edhi) in the Old Indic nuptial hymn (gV X, 85, 34, 44) and, in the second instance, the cultivation (particularly in the Far East and Southeast Asia) on the part of the man of a particular type of intercourse guaranteeing the preservation of the life force by not communicating it to the woman (see Van Gulik 1961, 1951; cf. Malinowski 1927; Gessain 1957: 247-295). Analogies between a gaping mouth and a wide-open lap, and between genders and food, are analyzed by Baxtin (1965: 240, 303).

13. Just as mushrooms may be conveyed by two words ('mushrooms' and 'lips'), lips may be conveyed by the same two words ('lips' and 'mushrooms'); cf. Serbo-Croatian *vargan* 'mushroom', alongside Polish *warga* 'lip'.

14. Associations of this sort have been noted repeatedly, in particular among the American Indians; cf. likewise Russian *pupyr*, designating both the membrum virile and a particular type of mushroom; Lithuanian *budj* (and *Inide*) 'mushroom' and 'touchstone'. Finally, scientific mycological terminology is also drawn to such associations; cf. such names as *Amanita phalloides*. Cf. characteristic Russian indecent expressions (used, incidentally, by Dostoevsky repeatedly) such as *s'ef'grib lit.* 'you'll eat a mushroom', *fig.* 'you'll have nothing, you'll be unsuccessful' ('Mr. Proxar6in'); *iygrib, a on knjaz* 'you're a mushroom, but he's a prince' (The Brothers Karamazov); *eto iy, ogribel ito-li* 'what's the matter, have you turned into a stump [lit. mushroom] or something?' (Dostoevsky's notebooks); where *grib* = 'penis', which is used in the more explicit colloquial variants of such expressions. Also relevant here is the nickname *griboedy lit.* 'mushroom eaters' or the almost formulaic expression *Kuda mne, staromu gribu, s molodoj fenoj vozit'sja!* 'What use is there in me, an old mushroom, fiddling around with a young wife!' (Mel'nikov-Pe6erskij, *V lesax* [In the woods], Book 1, part 2, ch. 4). No less indicative are other contexts in Mel'nikov-Pe6erskij's novel, as for example the description of the gathering of the first mushrooms of the year: 'The young girls rejoice over the first mushrooms ... stuffing themselves on them and feeding the lads who come to the maidens' mushroom hunts. And if only greenhorns would show up! ... Then the girls could make fun of them to their hearts' content, could pull at the rascals' ears till they drew blood for the first mushroom [author's note: a well-known ancient custom - boxing behind the ears anyone who eats the first mushroom of the year]. It's for this that the large mushroom hunts of the maidens are organized ... Since Easter came late that year, the mushrooms were ripe before all the holy holidays. ... The lads went along too. ... Their business was not to gather mushrooms, but to help the fresh girls. The minute they're in the woods, there's laughter and screams. The girls are faithful to the old rule: whoever they were with in the winter when they did their spinning is the one they go with in summer to hunt mushrooms. ... They started cooking the mushrooms.... The girls each fed their own lad with their own little spoon. And towards evening each of the lads is off into the bushes with his sweetheart. Oh, mushrooms, dear little mushrooms! Oh, dark, dear woods!' (V lesax, Book 1, part 111, ch. 6, with the further story of the girl Malane [a name related to *molnya* 'lightning'], who 'went into

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Mythological conceptions about mushrooms 331

the woods after mushrooms, and found instead irreparable maidenly misfortune ..' [a precedent which becomes an example]). The reference to a similar image in Leskov's 'Soborjane' [The Cathedral Folk] has a somewhat different character: Ty ne sniolri na menja, jloja lakojgrib lafertovskij: griby-to i v lesu livul, a i po gorodam pro nix znajut 'Don't look at me as if I were such an infernal mushroom: mushrooms live in the woods, but they know about them in the towns too'. Finally, the 'mushroom' theme unfolds along similar lines in Thomas Mann's *The Magic Mountain*, in Doctor Krokowski's lecture 'On love and death': 'And thus it was, in this connection, that the learned gentleman ... came upon the subject of botany, that is to say, upon the subject of mushrooms. These creatures of the shade, luxuriant and anomalous forms of organic life, are fleshy by nature, and closely related to the animal kingdom. ... Dr. Krokowski went on to speak of a mushroom, famous in classical antiquity and since, on account of its form and the powers ascribed to it - a fungus in whose Latin epithet *impudicus* occurred; and which in its form was suggestive of love, in its odor of death. For it was a striking fact that the odor of the *Impudicus* was that of animal decay: it gave out that odor when the viscous, greenish, spore-bearing fluid dripped from its bell-shaped top. Yet even today, among the ignorant, the mushroom passed for an aphrodisiac'. (Ch. 6, 'Changes', cited according to the Lowe-Porter translation.)

15. In the light of nostratic perspectives it is possible that related words include Turkic *g6mba* 'mushroom' (cf. Bashkir, Tatar *kdb - k6m -g6m* 'to puff up', 'to swell'+ *ba*, towards the semantics of which cf. Slavic *grib''*: *grebq*) and even Japanese *kobu* 'lump', 'protuberance': *kubo* 'depression', 'hollow' (cf. in particular, Japanese *kabu* 'stump', 'turnip', Tagal *kabuti* 'mushroom') and numerous examples of a similar type, all connected with the complex *glk-(m)-blp*. Cf. in part Syromjatnikov (1970: 563-564).

For the identification *boy*= mushroom, cf. Russian riddles about mushrooms of the type: *Mal'Wk s pal'jik, belenkij balaxonjik, krasna/a Sapoeka* 'A boy with a stick, white overalls, a red hat'; *Mal'6ik udalenskij skvoz'zemplju proš& - krasnufapockm. na.MI* 'A little far-way boy went through the ground - a red cap he found'; *Mal maly.fok po podzemelyufN. Pered soIncem stal, kolpaeffko sn/al'* 'A little boy walked along underground. He got up before the sun, took off his little cap'; *V lesu na prigorke stoit Egorka v krasnojfapke* 'In the woods on a little knoll stands Egor'ka in a red cap'; *Stoit An1oJka (Trofka) no odnoj no;!ke 'Anto9ka (Troška) stands on one little leg'*. (Cf. likewise *Stoj stariJok - krasnyj kolpa6ok* 'Stand little old man - red little cap'; *No boru, najuru stoil slarijok, krasnyj kolpa6ok* 'In the coniferous forest, in a high, exposed place stands the little old man, the red little cap'.) The opposite identification occurs but rarely; cf. *No lesnoj po1janke krasuetsja Tatyanka - alyj sarafan, belyj krapinki* 'In a glade in the woods little Tatyana stands, showing off - a scarlet sarafan, white spots' (referring to the fly-agaric mushroom). See Mitrofanova (1968: 69).

17. Most interesting is the Ket variant: Women (who arose from earth scattered by the sky-god Es with his left hand to the right) and men (created similarly, but by Es's right hand scattering earth to the left) originally lived apart. Phalluses grew in the woods, where women went to them out of necessity. One of them got tired of going into the woods, plucked out a phallus and carried it into the tent. Later on, as the result of a certain adventure, a man became its possessor, and the phalluses in the woods shrivelled up and turned into mushrooms; Russians are said to eat them, but they cause Kets to vomit. See Anu6kin (1914: 9).

18. Cf. J.1813.1: some mushrooms shrivelled up in water; a stupid husband, thinking that

332 V. N. Toporov

his wife had eaten part of them, kills her. See Thompson (1955-1958), Smith and Dale (1920). 19. On this representation see Trever (1932: plate 15), Kozlov (1925: fig. 12), Yetts (1926: 176, pl. 4H), Sullivan (1962: 52ff.), Willetts (1958: 290ff.), Wasson (Soma, 89, pl. XVI-XVII). Considering the Noin Ula representation, one is tempted to interpret in a somewhat new way the famous Hopi pattern:

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namely as a depiction of clouds, lightning, and rain. See Boas (1927: 120, Figure 117). cf. likewise the Pueblo drawing, Figure 118: three triangles, above which are three birds, which may be interpreted as rain coming out of the clouds and fertility. In any case, these two representations, taken together, are quite close both to the composition of the Noin Ula textile and to the favorite Chinese depictions of ling chih mushrooms (thunder mushrooms) surrounding the world tree, and to the scheme of the myth (the origin of mushrooms as a sign of fertility resulting from a lightning-bolt and rain). Cf. also the new interpretation of drawings on the spine of the statues on Easter Island as representing the elements of life (Sun, Moon, Lightning): see Maziire (1965).

20. Taking checkers as the basic form of the game, chess should be regarded as a later and more complex stage of development. In chess the opposition of masculine-feminine is replaced by the more abstract opposition of white-black, with the masculine-feminine pair (king-queen) being integrated into the set of players available to each side. One should recall that at one point the relation between these two elements was differentiated, masculine being associated with white and feminine with black; cf. the distinction, in ancient Mongolian chessmen, between men belonging to the red side and those belonging to the yellow side (see Montell 1939); cf., in part, Murray (1913). Orbeli and Trever (1936). The interpretation proposed here for the pieces of the two sides leads one to the conclusion that the original scheme for games like draughts or chess (Old Indic caturatiga, lit. 'four corners'; cf. below on the significance of the number four, four directions, and the fourth day in connection with mushrooms) was a universal composition of the type of the world tree, with a particular accent on social relations. The characteristic terminology of the game - to 'hit', 'strike', 'eat up', 'take' - indirectly reproduces the basic predicates in the myth of the origin of mushrooms or, more generally, of cultured plants (on which see below). Finally, one should note that to 'hit', 'strike', 'take', 'eat up' (as well as 'stick', 'cue' and the like) are words used in a distinctly erotic sense. Moreover, in certain situations of the carnival type it is precisely the erotic sense that comes to the fore (cf. baston de mariage, baston 6 un bout and the like in the works of Rabelais and his contemporaries): see M. Baxtin (1965: 222-223), where there is also a discussion of the ambivalence of meanings in this group of words (murder, destruction, the end of the old as opposed to the gift of life, birth, and the beginning of the new). Taking all of the above into consideration, one cannot help but view games like draughts (at least.

a certain period) as, if not a ritual, then at least as an imitation of ritual in minialu and thus as comparable to other archaic rituals in which the ambivalence of concepts of life and death, and the neutralization of their opposition, is played u On the role of play in the works of Rabelais and in the carnival tradition see Bax (1965: 254ff.). It is interesting that American Indian tribes of the Salish group rep

Mythological conceptions about mushrooms 333

fungus as a talisman which is obligatory for victory in games. Incidentally, it is precisely the Salish group and certain of its neighbors who are the only mycophiles among the American Indians (cf. their use of mushrooms in food, in medicine, their rubbing of their bodies with mushrooms to acquire strength, their use of mushrooms to designate clans and so on). See Uvi-Strauss (1970: 14ff.).



21. In Russian culture this motif has been preserved only in degenerated, humoristic variants such as folktales of the type Afanas'ev No. 90 (Andreev 1929: 297) and songs connected with them (cf. Griby ..., 1916), or in utterances like *k1o byto pri care Goroxe, kogda griby voevali* 'This was in the days of yore [lit. 'during the reign of Tsar Pea'], when the mushrooms were at war'. It is interesting that the folktale in question contains (even if in a transformed guise) such archaic themes as, for example, the enumeration of mushrooms (*borovik, belianki, ry;liki, volnuSki, openki, gruzdi*); indications of social position (the pany 'lords' are 'white mushrooms' [*be1jank*, and 'mythical warriors or giants living in the villages and enimical toward the population' [see Mel'ni6enko, 1961: 1411; the *boletus* [*borovik*] is the 'lieutenant of all the mushrooms: *borovik, vsem gribam polkov(n)ik ... ; / olkazalisja belianki. / 'My gribovye dvorjanki...*', / *otkazalis'ryliki: / 'My bogalye mu;Fiki*' and so on. 'the *boletus*, lieutenant of all the mushrooms ... ; the white mushrooms refused [to go off to war]: "we're the aristocracy of the mushrooms" ...; the saffron milk-cap mushrooms refused [to go off to war]: "we're rich folks" ...' [cf. likewise the image of Car *gribov* 'Tsar of the mushrooms' in folktales or the *Cezarsk~grib* 'Caesar mushroom' esteemed by the Romans]; the opposition of masculine mushrooms to feminine ones (the *gruzdi* 'milk-agarics') - all the mushrooms refused to go to war, with the exception of the milk-agarics, who cried: 'My *gruzdi, rebjalufki dru;fny, pojdfm na vojnyP* 'We milk-agarics, friendly fellows, we'll go off to war!' In this respect the Russian folktale in its original form may be juxtaposed to the scheme for games like draughts or chess, as well as to the scheme for the basic myth about mushrooms, on which see below. There also exist literary reworkings and continuations of the motif 297B: see Marcinkevi6ius (1958); the same motifs appear in a somewhat different form in Isokas (1970) or in the book *Griby ...* (1837). In Isokas' book several significant motifs connected with mushrooms and based on folk tradition are underscored. In the olden days all the mushrooms were the same and were distinguished only by name. However, one autumn a mushroom carnival was arranged to pick the mushroom king. All the mushrooms dressed up in clothes differing in color, divided up into brothers and sisters and stood up by fours (cf. 0 *mes-trimiteliai, pumpo1auks-haL\*, \_d/ - I \* iris, vovertdkos, kazlekai... -fauke ~\_UcR, musm*

*grybai ir stojo po keturiV..- 1p. 81*). The *-qi4rrel* which arose did not result in the choice of a king, and each mushroom remained forever in the clothing it wore for the occasion and was chosen as food by an animal corresponding to its costume (e.g. *briedis* 'deer' was the costume of the *musmird* 'fly-agaric'); on *trimiteliai* and the correspondences between the mushroom and animal codes see below. Cf., in part, Isokas (1960).

Cf. the myth of the world egg and the fairytale of the moor-hen; the abduction of a maiden by a dragon and the Russian children's game 'Ispeklimy karavaj'; the myth of the beginnings of fertility and the folktale of the war of the mushrooms, and so on. We hope to return in a future article to the question of archaisms in children's games and fairytales.

See, for the mythological aspect of this question, Eliade (1962), and, for its psychoanalytical aspect, Fromm (1965) and other works of the same author; cf. likewise Hunt (1959: 34ff.). Cf. also the androgynous myth in Plato's Symposium.

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24. See Hummel (1953) and the other numerous works of this author; Schröder (1953: 21 Off.). Cf. the investigations of J. N. Roerich, G. Tucci, R. Heine-Geldern, O. Gut. and E. Russell. Cf. the scheme for correspondences of this sort in Kundalini Yoga: triangle-red-fire; circle-white-water; square-yellow-earth. Cf. also ancient Mexican symbolism, on which see Krickeberg (1949: 63).

26. Cf. names for mushrooms like Russian *zonlik* 'pestryj lit. 'variegated umbrella' for *Collybia aluminosa* or Pampango (central Luzon, Philippines) *payungpayungan kulog*, the first element of which is lit. 'parasol-like' and the second - 'thunder\*': see Wasson (1956: 607).

Cf. Russian riddles like Est' i korejok, est'ifliapka, a ne grib 'it has a stem, it has a hat, but it's not a mushroom', with the answer Zont 'Umbrella' (see Zagadki ... p. 124) or 'A white umbrella stands in a field', with the answer 'Mushroom' (see Taylor 1951: 470), or the Burmese riddle 'He appears after a fanfare, opens his big umbrella, because he's proud of his royal origin' (see Than-Sein and Dundes 1964: 69, 74). On the parasol as a symbol of royal power see Hahn (1904: 30-42); on the connection of the parasol with the sky (see below on that of the mushroom with the sky), cf. ancient Greek ὀψαῖον 'vaulted awning', 'canopy' (9V T(D flaalAIK41 9p6vq), Plutarch). For the identification of mushrooms with the umbrella cf. the well-known English joke built on the fact that one and the same representation is taken by some to be a mushroom and by others to be an umbrella. One of the most famous megaliths of Kerala (India) is the so-called 'parasol-stone' (*lopi-kals, kuflalkals*), which is in the form of an enormous mushroom: see the reproduction in *Archaeological Remains ... 1964: Plate IX, 37, 40*. Cf. the famous 'Sacred Mushrooms', stone sculptures which were widespread in the art of the ancient Mayans of the pre-classical period (*Kaminaljuy6*). It is interesting that a human face peers out, from the foot of such stone mushrooms. This feature was apparently viewed as the, prophetic spirit living in mushrooms (used as a hallucinogenic substance) and transmitted into a person who drank a beverage compounded of mushrooms: see Durin (1964: 180, 189, 225-226, 350-351); Kinialov (1968: 24, 26).

28. Besides mushrooms, one also finds the umbrella, the cane, trees, etc., identified with the *membrum virile*, about which Erich Fromm wrote in the early 1950's. It is interesting that both of these symbols are interpreted similarly in dreams as representing happiness, fertility, riches, a long life, protection, and the like. See Jobes (1962: part 2, 1139), as well as the key to the interpretation of dreams in the Atharvaveda, where the parasol, lightning, and so on, are mentioned (Parisilla 68X see Esnoul (1959:217). This circle of questions was approached for the first time in Freud's *Die Traumdeutung*.

29. Cf. Tavgi (Gnanasang) *fa3k0am* 'to be inebriated', Zyrian (Komi) *pagaIny, pagan-ny* 'to lose consciousness', 'to be poisoned', etc. P. Skok is perhaps right in linking Serbo-Croatian *mfinjen* 'stultus' (cf. Slovenian *m6injav, m6lnjen* 'stunned', dialectal *m6lnjenost, munienost* 'recklessness', 'madness') with Slavic \*ml 'nii 'lightning'. But d BezIaj (1975: 182).

30. The data on the root \*pay, \*pog are collected in Wasson (Soma: 16411').

31. Several modern Indian languages have words designating 'mad', 'madness'. etc, which go back to the hypothetical Old Indian \*paggala, which is, incidentally, of non. Arian origin. See Turner (1962-1966: No. 7643). It is interesting that both of the nostratic schemes we have cited used to designate mushrooms also relate to cannabis (cf. Greek *K&Mp1q*, German *Hanf*, Russian *konoplih*, as opposed to Old Indic *bhangti-*, Avestan *baqha-*, *bangha-*, Persian *bang* and so on), which, like *certab*

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varieties of mushrooms, is used in preparing hallucinogenic means. The metathetic or 'inside-out' nature of the two indicated roots is sometimes correlated (iconically) with the 'topsy-turvey' nature of consciousness which is an effect of these substances (the fly-agaric and cannabis).

32. Cf. Vedic *ksonT* alongside Indo-European \**skou-*, \**sku-* (cf. Lithuanian *sk*;~*jti* 'needles [of conifer]; and its Slavic correspondences). For Old Indic *ks-*: Indo-European *sk-*: Slavic *x*, cf. *ksudh(d)*: *ski~sti* (*skudaj7*): *xud''*, and the like. Interesting in this respect is an analysis of Slavic *luna*, meaning 'moon', 'pit', 'hollow'.

33. R. G. Wasson (Soma, 170f.) raised this possibility in connection with Chinese *mo-ku*, which designates edible mushrooms (possibly from a Mongolian derivative of \**poq?*), and Maori *pange*, *pangT*'tinder, touchwood, made from spongy fungus'. Reflections of this root in other languages may exist. Cf. the Australian mythological term *ba*,<sup>7</sup> which has a wide circle of meanings from 'dead', 'spirit', 'apparition', 'shade' to 'man', '1', 'occult force'. 'On this word see Worms 1957.) It is characteristic that the soul of the deceased joined the realm of plant (or animal) life; cf. the interesting observation that among the natives of Vagi and Gwini (Northern Kimberley) the name of the deceased went over from the first class of names (designating people) to the second (designating animals); see Capell (1939: 385). It is noteworthy that *baq* is used to designate almost all of the basic objects which, in other traditions, are linked mythically with mushrooms.

34. This question was explored in detail in Wasson's trail-blazing 1956 article, 'Lightning Bolt and Mushroom: An Essay in Early Cultural Exploration.'

35. Cf. Pliny the Elder: *De tuberibus haec traduntur peculiariter: cum Juerint imbres aulunnales ac lonitrua crebra, tunc nasci, et maxime e tonitribus ...* 'Peculiarities reported about truffles are that they spring up when there have been spells of rain in autumn and repeated thunderstorms, and that thunderstorms bring them out particularly ...' (Hist. Nai. Bk. 19, 37) and Juvenal: *Post hunc tradentur tubera, si ver tunc erit et facient oplata tonitrua cenas maiores.* 'Then will come truffles, if it be spring-time and the longed-for thunder have enlarged our dinners' (Sat. V, 116-1,18). Another variant, that mushrooms become worm-ridden from thunder (cf. the identification mushrooms: worms) is to be found in the Vladimir Province, as M. B. Mejlax informed us.

Cf. Kalidasa's Sanskrit lyric *Meghaduta*, 'The Cloud Messenger', cited by Wasson, where the exiled yaksha or demigod addresses the raincloud drifting northward over India: 'When they eagerly hear thy sweet-sounding, fertilizing thunder, which can cover the earth with mushrooms ... P In local tradition, as Wasson notes, the

mushroom, *hilindhra-*, was linked with cow-dung (see above); the word's probable derivation is from *hili-*, perhaps meaning 'worm' or 'female toad', and *-dhra* 'carrying'. (On the connection between worms, toads, and mushrooms, see below.)

37. Cf. Wasson 1956: 607: 'In a personal letter to us, Colonel H. R. P. Dickson, author of *The Arab of the Desert*, tells us that the Bedouin are great lovers of *terfezia*, and that in the season of the *wasm* (October to early November) they look for heavy rains accompanied by thunder and lightning, and if the weather is propitious then, they know that some months later, in February and March, the *terfezia* will abound.'

38. Incidentally, such beliefs are known among the North American Indians as well. Thus, for example, certain tribes West of the Rockies think that mushrooms are born of thunder; in the upper reaches of the Missouri there is a belief which links mushrooms with stars (cf. the beliefs of the Toba about the connection between mushrooms and the rainbow).

39. In connection with what follows it is important to note that the generation of Tawhaki



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336 V. N. Toporov

descends from cannibals who came down from Heaven and her husband who lives on Earth; Tawhaki himself rises to the Heavens in search of a wife or descends to the Underworld along a string, rainbow, vine or the like. He avenges the death of his father, gaining victory in games or competitions. Finally, he gives manna to the rulers. The cycle of legends about Tawhaki is among the most widely-diffused in Polynesia although certain motifs are limited to separate islands.

40. Cf. also Thompson and Balys (1958), Elwin (1949 and 1953), Venkataswami, Dihnhardt (1910: 107). Italian, Hungarian, and Lithuanian variants of this motif have also been noted.

41. For similar correspondences see Mooney (1900), Roth (1915), Nordenskiöld (1923). Nimuendaju (1939: 146), Pelikan (1950: 71Y.), Jensen (1951: 374ff.). One must assume that the names assigned to mushrooms in analogy to animals, which are observed in the most diverse traditions, indirectly reflect an archaic system of vegetative-animal correspondences.

42. Taking into account the onomatopoeic function of this little chant, one can explain in a similar way the Russian riddle (Zagadki, No. 2442) *V pole-to go-go-go, a v lesax-10 gi-gi-gi* 'If in the field - ho-ho-ho, but in the woods - hee-hee-hee', which has the answer *gorox i griby* 'peas and mushrooms'. It is interesting to note that in Russian riddles the relation of 'thunder' (*grom*) to 'mushroom' (*grib*) finds a curious echo in that of 'city' (*grad*) to 'peas' (*gorox*): cf. the riddle *Rassypalsja gorox na semdesial dorog* 'Peas scattered on seventy roads' which has as its answer *grad* 'city'. Moreover, in riddles 'peas' (*gorox*) are often defined by images similar to those used for mushrooms: cf. No. 2444-2445, ... *V syru zemiju afel, sinju Sapku nafel* 'Into the damp earth he went, a blue cap he found'.

43. One should not exclude the possibility that this opposition is a transformation of a more ancient one - concave (e.g. a hollow in a swamp): convex (a mountain). And in this legend, it is with this pair that birth by copulation begins.

44. His other names include Njambi, Ndjambi (-Karunga), Nyambi, (N)zambi and so on.

45. In more detail, see Tessmann (1913: 17ff.), Baumann (1936: 23ff., 191ff.), Irle (1916-1917: 343).

46. *Ana* means 'rain', as well as a man whose seed is like fructifying rain; *gQnno* - 'With sinuous edges', 'with folds'. Considering the inner form of the word and the external appearance of *anagqno*, one should not exclude the possibility that he is mushroom-like in nature.

This semantic field would suggest that *Yurak* (Nentsy) *piyg* 'root', 'stalk', 'stem', 'origin', as well as *pdqgd-pd(si)* 'to spin', 'braid', 'knit', 'wind' (cf. *pdugdlsi*) and so on, are likewise connected with \*pa,7, \*poy. It is interesting that in the Dogon *mylk* mushrooms are made of the same material as roots.

Other names for them include 'witches circles', 'magic circles', etc.

Cf. the Russian saying *Bylo Tito - bylo pito, a teper'Karpa - net ni kapli* 'Titus Was here - there was plenty to drink, now Karp is here - there's not a drop'.

Cf. *U Tita bylo semero delei, / Semero malenkix maijutok. / Oni ne pili i ne eli. / A JV na druga vse smotreli. / I detali vot tak ...* 'Titus had seven children, / Seven lit babies. / They neither drank nor ate. / But they all just looked at one another. / And

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went like this ...' (On Titus, cf., on the contrary: *Bylo Tha - bylo pito ...* 'Titus was here -

there was plenty to drink ...'; Tit, idi kissel'est'... 'Titus, go eat kissel...'; 771. idi pit' ... 'Titus, go drink ...'; Pyannyj Tit pod lavkoj lefit ...'Drunken Titus So under the bench ...' and so on. Cf. also Wordsworth's 'We Are Seven'. 1 1

51. Cf., for the Russian tradition, Knjainin's Titovo miloserdie 'Titus' Charity' (178\* Otebestva otca / Dra;fajfe narečene / Est' Tiiova venca / Verxovno ukrafene

Mythological conceptions about mushrooms 337

dearest name / Of the father of the fatherland / Is the supreme decoration / Of the wreath of Titus ...'

2. If this is indeed so, then the prototype of the riddle might prove to be the analogous Vogul (Mansi) way of designating a man in a state of intoxication, namely as 'bemushroomed' (whatever the means of intoxication); both 'mushroom' and 'intoxication' are expressed by the words payx, piqka. It is interesting that the Iranian name for hashish later became in many Asian traditions the name for an inebriating mushroom used by shamans.

53. Among the explanations offered, one is indisputable: the capability of certain fungi ('car-shaped', particularly those growing on trees) to absorb a sound and then immediately reproduce it. In the language of certain Indian tribes such mushrooms and 'echo' are designated by the same word: see Uvi-Strauss (1970: 14). Another explanation might be sought in the fact that in some places mushroom and tambourine are not only related to a class of seriotically equivalent objects of shamanistic culture (the drink made from mushrooms and the tambourine in the function of means making it possible to establish contact with other worlds), but are directly identified with each other, sometimes even on the linguistic level. On the motif of mushroom ear, cf. the following two Russian riddles: 1. Gibkoe, krugloe, no kortoekax pod vereskom - Uxo 'Flexible, round, squatting under the heather - An ear'; 2. Gladkaja pod mostom, ger.favaja pod vereskom, mjagkij pod sosnoj - Ryba, zemlja, grib 'Smooth under the bridge, rough under the heather, soft under the pine - fish, earth, mushroom' (see Trusman [1980: 5 1]). Similar imagery occurs in the novels of Andrej Belyj: Ja slyfalpro to, eto i steny imefut kakie-to uJi. - Kakie le?- Dumajuja: Malinovskoj! - Razvesit u nas svoi uji (suxie griby prinimal odno vremia za u9i ee) ... ; ... na kuxne Ufamipovisli suxie griby ... steny uIaly ... ; ili razvesjas' suximi ugami, kak sviazkoj gribov; ... kovyrjaet gribnoe. sufennoe uxo ... (Belyj 1928: 55, 81, 137, 160).

54. On the erotic symbolism of the wedding drum, tambourine, and so on, in the carnival tradition, see Baxtin (1968: 204-205).

35. Cf. such names for mushrooms as Russian skripun, skripica (from skrip 'squeak, creak, crunch').

56. For the connection between lightning and insects, cf. such names as lightning-bug or fire-fly (from the family Lampyridae). According to certain beliefs current in North America (Alabama, Ontario), a person who kills this insect will die the following year from lightning, and the appearance of lightning-bugs is linked with rain.

57. An extremely close analogy is a scene of Achilles and Troilus in a fresco from the Etruscan Tomb of the Bulls (sixth century B.C.). In this composition, which is quite comparable to the shamanistic representation, one finds the tree of life in the vicinity of a mushroom-shaped vase. Cf. Pallottino (1952), Bargellini (1960). Another, contemporary example of a combination of the motifs of the tree, an ear and a mushroom is Ponce's sculpture 'Arbre i oreilles' (Paris, Galerie Europe), which consists of a tree of mushroom-like form with ears, or Naurn Gabo's composition 'Mushroom Theme' (the motif of the ear). Cf. Read (1964: Nos. 109, 110).

31. See Wertheim-Aym6s (1957), Combe (1957), Baltrušaitis (1960), Toinay (1967), Bussagli (1968). Similar motifs, though on a smaller scale, are repeated in other works by Bosch, as well as in the works of several artists who were followers of Bosch to one degree or another. Among

these cf. Pieter Bruegel (particularly *Allegory of Anger*, *The Land of Idlers*, *Summer*, *Children's Games*, *Carnival*, *Blindmen* [cf. this same theme in the work of Bosch and Massys]), Jan Mandijn (e.g. *Landscape with the Legend of St. Christopher*), Jan Steen (e.g. *Marriage Contract*), Adrien van Ostade (*Village Holiday*, *Family Concert*, *The Fight*, *A Vision*, and so on). The hyper

V. N. Toporov

trophy of the motifs of hybridness, diabolical intercourse, concave-convex (an abundance of vessels, pails, barrels, baskets, hats, haystacks, eggs, long sharp objects, etc.), of food and drink, and fertility in the artistic works of this area from the end of the fifteenth through the seventeenth century is a riddle which remains to be solved. In connection with these themes Rabelais is frequently mentioned. Cf. also certain similar motifs in the work of Mir6 and Tyshler.

59. Cf. the belief we mentioned current in the Yaghnob Valley.

60. See Mountford (1965: 157ff., cf. Figures 5-7 and others). Quite interesting here are several representations of stylized human figures in the form of mushrooms (see Figure 39); cf. above on the peira genetrix in Bosch. 61. Cf. the rain-evoking ritual described by Clement (1904: 5ff.), in which in place of a mushroom a stone of particular form (connected with water and fire, ants, and the thunder-bird) is used. See Basanavi6ius (1912), Latvju Raksti (Volume 111, Plate IX, Figure 85-90), Gimbutas (1958).

63. One might also mention here the remarkable fresco in an old French church (Abbaye de Plaincourault) of the end of the thirteenth century that caused a sensation among mycologists. The fresco is a depiction of the temptation in the Garden of Eden: a huge mushroom-shaped tree the size of a man, around which a serpent is entwined. is shown; at the foot of the tree are four other mushroom-shaped trees of lesser size; along the sides are Adam and Eve. The trees have been interpreted by some as fly agarics, though the evidence from art historians support their interpretation as stylized trees, the so-called Pilzbaum of Gothic and Romanesque; cf. the discussion in Wasson's *Soma* (178ff.). While one cannot despite the evidence of art history, the ambiguity here points to our main thesis about much of the evidence presented in this article, namely that the class of objects fulfilling similar functions in the cosmological schemes under investigation should be viewed on an abstract level functionally: the actual identity of the realized symbol (tree, mushroom, or similarly-shaped objects) may be ambiguous, but its mythological function is not. Among other examples of this type, cf. the famous representation from Saint-Savin (c. 1100) depicting God making the moon fast in the sky; in the right corner there are 'mushrooms' and the tree, which again supports the isofunctionality of the motifs of the 'world-tree' and mushrooms.

64. On mushrooms in Chinese art, see Sullivan (1962: 49, 52-53, 66-68, 140, 178-180, 182). Valuable information about mushrooms in Ancient China is contained in the treatise *Pao-pu-tzu* by Ko Hung (253-333); see Feifel (1941, 1944, 1946). or particular interest is the classification of mushrooms (e.g. stone mushrooms, shih chih, which recall in form a stone elephant; wooden mushrooms, mu-chih; grass mushrooms, ts'ao chih, etc.) and their uses, not to mention their semiotic characteristics (cf. the mushroom of good omen).

65. Representations of this type often reveal traces of Iranian influence; cf. ling chili and two winged tigers, see Charleston (1948: 6311f., fig. 18), ling chih rising out of a ram, see Sullivan (1962: pl. 82), and so on.

66. Cf. depictions of the Han Dynasty from Szechwan Province, intended for export.

67. Cf. the picture by ChEn Hung-shou (1599-1652) or similar compositions like *Maid of Honor, attending the Heavenly Emperor* (the girl holds a vase with a ling chih in her left hand).

68. Also worthy of attention are depictions of chih and ling chih mushrooms on Chinese porcelain wares. Often they occur in strongly stylized form, for all practical purposes in the function of ornamentation (e.g., in semantically weakened or, in any case, non-



### Mythological conceptions about mushrooms 339

narrative parts of the vessel such as the neck or handle). Rather frequent as well as more indicative are cases in which depictions of mushrooms occur in the same context as depictions of a lion, tiger, deer, doe, or birds (in particular, cranes), butterflies, insects, fantastic animals, the lotus or trees (pine trees, the banana palm, and so on), cliffs, the divinity of longevity Shou, and so on (in similar contexts one also finds depictions of the meixua plum). Cf. Riederneister (1935), Pope (1956), Sullivan (1960), Arapova (1977: Nos. 5, 11, 14, 15, 21, 22, 24, 28, 30, 34, 41, 46, 48, 70, 101, 102, 120, 122, 123, 126, 127, 152 [with Bosch-like associations: three cartouches containing a cliff, insects, flowers, and a mushroom], 169, 173).

69. It is quite interesting that in this same tradition one finds peculiar wooden representations of the seven-headed *jux-i1jan'* (the heads are placed one on top of the other along a vertical axis), which are placed wherever one wants to secure success, good luck, or wealth (in this sense the *jux-djan'* is analogous to *ling chih* and to the world-tree). Of particular importance here is the seven-compound nature which makes it possible to connect this material object with the mythological motif. On *juxi1jan'* see Dudin-Gorkabi6 (1911: Plate 16.4), Ivanov (1970: 32).

70. Wasson has shown convincingly that the original semantics of such names as 'luxomor fit. 'fly-killer' for the fly-agaric is distorted by a folk-etymological reinterpretation of them. Originally what was central was that flies are an embodiment of the evil spirit, of possession, or of a particular state; cf. Russian *on pod muxoj* 'he's typsy', lit. 'he's with fly' or French *la mouche lui monle d la 1&e* for an angry man, lit. 'a fly is climbing up into his b,~d%' and many other examples of this sort. This correction is not irrelevant for an understanding of the myth in its entirety.

71. See Toporov (1969a). A definite argument in favor of this hypothesis is the interpretation of certain dreams in the sixty-eighth Parigista of the 4iharva Veda, e.g.: 'If someone in his dream kills a snake - white, yellow or red - or cuts off the head of a black snake, - his son will die'.

72. Cf. another meaning of *KEPCE61710V* 'tick' or 'checkmark', which is important for an understanding of symbolic representations of mushrooms that we spoke of above,

73. In connection with the name *Semele* one should mention Phrygian *CEUiAo* 'mothe~- 'earth' (cf. Russian *zemlia* 'earth' and the like). Moreover, the entire myth of the death of *Semele*, struck by her lover Zeus with a bolt of lightning, reproduces certain important motifs of the reconstructed myth we are dealing with here, including the complex, the death of *Semele* - the birth and miraculous salvation of her son *Dionysus*, connected with the notion of fertility, productive power, etc.

74. The identification of lightning and stone is also hinted at in the Hungarian word for lightning *mennyk6*, lit. 'stone of the sky'.

75. Worthy of attention in this regard is the combination of the motifs of the Thundergod (*Pirkiinas-Perun*), mushrooms (*agaricus necalor*) and the snake guarding them in *Prosper M6rim6e's 'Lokis'* (the scene in which the Count and the Professor encounter an old witch in the forest). See *Balys* (1937: 206, No. 947, and *Grybai auga kai po griausmo*). On *Perun-Perkfinas* and his wedding, see *Ivanov and Toporov* (1969, 1970, 1974).

Other variants presuppose different explanations - the Thunder-god's infidelity to his wife (or vice-versa), the incestuous relations of the Thunder-god's children and their mother, the theft by the children of a miraculous object from their father, or even the attempt at parricide, and so on. The motif of parricide in the last case may be correlated with an analogous ritual in the carnival tradition, 'mocoli', described by Goethe in his *Italian Travels*, in which the boy blows out his father's candle with the exclamation: 'Sia ammazzato il Signore Padre!'

79. As a distant reflection of this motif, cf. traditional money-boxes in the shape of mushroom.

80. See Sarauw (1907). Quite interesting in this regard is a Nardhan folktale from Patangarh (Mandla District): There are seven brothers, six of whom are married. The youngest brother wants to marry his sister. He brings from the forest a mushroom of unprecedented beauty and places it at the spot where the fire is usually lit. The sister is forbidden to eat the mushroom, since whoever eats it will become his wife, but ends up doing so. Her attempts at avoiding the marriage are described: she climbs up a tree to the heavens or falls into a stove, the flame of which transforms her into a beauty. The youngest brother, following her, perishes (see Elwin 1944: XVII, 8). A similar folktale is recorded among the Santal (see Bodding 1929: No. 92). Instead of a mushroom one finds here a flower which is planted near a stand holding pots of water, the ending is different in that both brother and sister perish. On the motif of incest in connection with similar schemes, see below.

81. Cf. the making of sacral fire in Ancient India by rubbing two sticks of wood together an act interpreted as copulation in which the upper stick is considered the masculine organ (prajanana), and the lower - the feminine (ara,7i): cf. 6gVeda 111, 29, 1-3. same notions are found among the Yana Indians: cf. Kroeber (1964: Part 1, ch. 9), cf. also the Aztec myth of the 'Nine Heavens', which mentions celestial masculin in

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feminine stones which produce on earth 'The Lord of Our Flesh' (Krickeberg 1929: 26). See below in the creation by the god of fire of fiery serpents and so on. On the combination in Australia and Oceania of the motifs of the freeing of the waters and the theft of fire, see Dixon (1916), Luomala (1949: 93). Cf. also the connection of among the Dogon with fire and water.

82. We hope to speak of this at length in a future article.

83. See Ivanov and Toporov (1970), where there is a discussion of Kupala in connection with fire and water; cf. the possibility of a double etymological explanation of the name- from kupat 'to bathe', and kupalo 'flame', kupec 'to rot', kipet 'to boil'. same relates to the explanation of Dionysus' epithet AvaAoq, about which see above see Toporov (1969a: 11-13).

84. See Métraux (1946-1959: vol. 3, 437ff.), Leach (1956: 119-120, 127). It should be noted that punishment by means of transformation into stone is among the most widespread motifs. One often finds it combined with the motif of a prior dismemberment of a dead and with the solution to the problem of food. Cf. the Australian myth of the lizard-man Linga, honey-ants, the killing of a snake-girl, and the transformation of dismembered parts of her body into rocks. See Mountford (1965: 114ff.).

85. Cf. Bosch's Haywain, where the insects are shown falling either into the water land.

86. The motif of a cut-off finger (cf. the corresponding interpretations) and its transformation into chthonic beings is among the plots widespread precisely in this group myths (see above on 'devil's fingers' as a name for mushrooms, for remnants of evil force struck by the Thunder-god, and for the Thunder-god's weapon). I marmot Tarbagan, see Potanin (1881: 151, 1916: 2-3, 16). Cf. also the devi (Araxi-jitkur), who is among those whom the Sky chases and who is the thief drink of immortality. Araxi teases the Sky and hides behind a tree; after that

lightning strikes he sticks his finger out from behind the tree. Finally God cuts him two (into the sun and moon). See Potanin (1883: 209-210, 1916: 16, 68-69). Geser's abduction from the sky of Erdeni; Geser is the son of the Sky, sent to earth to purge it of monsters but, according to certain versions of the myth, perishes on earth it is noteworthy that the legend of Geser was sung

at weddings.

90.

#### Mythological conceptions about mushrooms 341

In the same tradition the so-called finger incantations are of exceptional significance. They consist of an enumeration of the fingers beginning with the thumb and ending with the little finger and the reverse, often in the framework of a question-answer construction. Here the very names for the fingers are rather characteristic: cf. the name for the thumb in Khalkha Mongolian, *irxe xuru* (the children's word is *erke mergen*), Altai, Kirghiz *erkyek*, and the like (next to Yakut *erbjax*, cf. Dorbot *erbeku*, Tungus *firbdkd* 'butterfly'); the little finger is as a rule designated as a small child; the ring-finger as a mother, and so on, see Potanin (1881: 2ff., 24). Cf. likewise the Russian game with children involving the counting of fingers: Soroka-vorona (*voro vka*) *ka.ʔu varda, delok kormila, eiomu* (sc. *palec = reboFnok*) *davala, elomu davala ... a iy, mal'eik-puzaneik, ... net tebe niβego* and so on (the fingers are bent one after the other; cf. *mal'6ik - s pal'&k*).

Among other traditions perhaps the most interesting as regards this motif is the Eskimo: the father of Sedna kills the her bird-husband and takes away his daughter by sea to his own place; during a storm he throws Sedna from the boat; she clings to the deck; the father cuts off her fingers, which change into fish. See Thompson (1919: 3, No. 1-2 JA2151, 1946: 305ff.). Cf. also the works of Bogoraz. Cf. the Papuas myth of the fiery finger Iku, his abduction and the transition from raw food to cooked. On the symbolic role of fingers (and nails) in archaic cultures (Strehlow 1947: 112f.).

17. On the ritual for killing flying squirrels, which consists of nailing them live to the ground with four nails, see ZSOIRGO (1915: vol. 37, 272). On the *gromovnik* see Potanin (1882), Harva (1938).

88. Cf. the motif of seven stars imprisoned for a crime until the end of the world, see Porfir'ev (1872-1873: 205).

19. Extremely interesting is the Altaic tale of 'Er-Nazvai' (see the text and translation in Baskakov 1958: 77-80), which combines the motifs of bealing, flattening-out of a boy on a stone ('When Del'begen beat the boy on a wide stone, the boy grew in width. When he beat him on a long stone, the boy grew in length. When he beat him on a sharp stone, the boy grew in height. Finally, he grew up to the height of Del'begerr,, and killed him. '), shooting from a bow and the destruction of six opponents, a game of droughts, rats, and marriage to the daughter of Erlik, who dwells in heaven. As a parallel to the first motif, cf. the beating of Geb and his ascent by tree to the moon (by growing) in a Western Irian myth; see *Skazki i mify Okeand* (1970: 52-53).

See Mountford (1966: 69ff.). Quite important is the legend cited here (p. 74) of the green frog Quork-Quork and her three children - Bumerali the Lightning-woman, Pakadringa the Thunder-man, and Tomituka the Woman of the Monsoon Rains, who in the dry season live high above the stars but in the wet season bring their activity to bear upon the earth.

91. See Reed (1946). For the theme of star-eyes, cf. Fet's lines: *I v zv&dnorn xore znakomye o6i / Gorjal v stepi nad zabytoj mogiloj ... / I tol'ko v nebe, kak veenaja durna, / Sverkajut zv6zd zolotye resnicy* 'And in the starry chorus familiar eyes / Burn in the steppes above the forgotten grave ... / And only in the sky, like an eternal thought, / Sparkle the golden eyelashes of the stars' or E. A. Poe's 'And the stars never rise, but I feel the bright eyes / Of the beautiful Annabel Lee'.

92. See Thompson (1919: 126, 128, (nos. 50, 51, 193; 1946: 345ff.; 1953), Dundes (1963). On the Micronesian tradition, see Lessa. (1966, cf. in particular, the counting of names up to nine). The motif of prohibition (especially of incest) is likewise characteristic for many American myths.

**Cf. Granet (1924: 377; also 1924: 238ff. on the fundamental role of nine). Quite curious is the connection of this scheme with a ritual dance which often figures in the**

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myth itself as a particular element (cf. the transformation into stars for ignoring a prohibition against dances in a series of American Indian texts). We should like to propose here, leaving the detailed proof aside for another occasion, that several dances in Central Europe and Mesoamerica (with an emphasis on the number seven - cf. the Slovenian Sedmorka - or nine), for example Joe de Calu~dri in Rumania, originate in a ritual which reflects the myth under analysis here. Cf. also Kurath (1956).

94. Cf. Kaltenmark (1959: 456). Characteristic in this respect is the well-known Japanese myth of the god Idzanagi and his wife Idzanami, who go off into the land of shadows and give birth to monsters. Cf. the eight thunderbolts of Idzanagi and the eight island offspring created by the pair. In ancient Mexican cosmogony one finds an emphasis on the nine-leveled composition of the sky and netherworld (nine cross-beams of the sky, nine underworlds, Chiconamictlan - the ninth place of the dead). Cf. the myth of the Sun, which at the ninth hour let loose an arrow that formed a pit from which the first men and women issued. See Leon-Portilla (1961: 199).

95. We have in mind not only the general arena in which the action occurs ('A meadow withflowers and the firmament filled with stars ... ; ... Above you the flock of starr,y splinters / While below you coals of the bonfire'), but also the more specific echoes around the motifs of stars, worms (insects), life and death. One can see such echoes in Goethe's 'Das Leben wohnt in jedem Sterne' or 'Strómt Lebenslust aus allen Dingen, / Dem kleinsten wie dem gró3ten Stern;' in Baudelaire's 'Serr6,fourmillant. comme un million d'helminihes, / Dans nos cerveaux ribote un peuple de D~moni ('Au lecteur'; cf. also the line 'C'est le Diable qui tient les fils qui nous remuent!'); and in Mandel'stam's 'Nel'zja dyfat' i iverd' kóit &rviami, / I ni odna zvezda ne govorit.' ('One can't breathe, and the firmament swarms with worms, / And not a single star can find its voice.' - 'Koncert no vokzale'). Sometimes this archaic symbolism determines important links in the chain of larger artistic conceptions (see Matlaw [1957], for the role of insect imagery in Dostoevsky's larger artistic scheme) or even the plot itself (cf. Yeats' 'Parnell's Funeral': 'a brighter star shoots down; I What shudders run through all that animal blood? / What is the sacrifice? ... / ... and where the branches sprang / A beautiful seated boy; a sacred bow; / A woman. and an arrow on a string; / A pierced boy, image of a star laid low. / That woman. the Great Mother imaging, / Cut out his heart ... / An age is the reversal of an age'). The typical Gogolian landscape (sultry midday or starry night), repeated continuously in, for example, Evenings on a Farm near Dikanka, almost to the point of monotony, occupies a particular place in this sense. As a model of this landscape one could cite the following passage from 'The Fair at Soro6incy' (part 1): 'How oppressively warm the hours when midday glitters in silence and sultry heat and the blue fathomless ocean, bowing over the earth like a voluptuous dome, seems to have fallen asleep, sunk in bliss, embracing and holding close the fair one in its airy embrace! ... Idle and thoughtless the oaks stand beneath the clouds, and dazz

blows of the sun's rays set on fire whole picturesque masses of leaves. ... emeralds, topazes and rubies of the ethereal insects scatter over the variegated ga patches. Gray haystacks and golden sheaves of wheat, like tents, are set about the field and wander in its immeasurability. Bending from the weight offruits the broad branches of cherries, plums, apples, and pears. ... How full of voluptuousness a bliss is the Little Russian summer!' (Or its nocturnal variant: 'The nocturnal v looked straight at them. They heard with their own ears the whole innume world of the insects ... the steppe appeared to him as sowed with the glisten sparks of luminous worms...' [Taras Bulba, 111, or the image of little stars compa

Mythological conceptions about mushrooms 343

to 'the angels of God, opening the windows of their bright dwellings in the sky and looking out at us ...' and the counting of them, 'one, two, three, four, five' in 'A May Night', in a context which is definitely cosmological in nature.) The opening landscape of 'The Fair at Sorobincy' is unexpectedly repeated in many of its motifs (of course, without any conscious intent) in the description of night at the end of the first volume of Dostoevsky's *The Brothers Karamazov*: 'Heaven's dome, full of quiet, shining stars, stretched vast and boundless above him. The Milky Way, still unclear, doubled from the zenith to the horizon. The fresh night, silent to the point of motionlessness, covered the earth. The white towers and golden domes of the cathedral gleamed out against the sapphire sky. The luxurious autumn flowers, in the beds around the house, fell asleep till morning. The silence of the earth merged with that of the sky, the mystery of the earth became one with that of the stars. AlEga stood, gazed, and suddenly, like one struck down, threw himself on the earth. ... It was as if threads from all those innumerable worlds of God came together at once in his soul, and he trembled all over, having come into contact with other worlds. ... It was as though some idea had seized sovereignty over his mind - and it was for all his life and for ever and ever. He had fallen on the earth a weak boy, but he rose up a resolute champion for his whole life'. (*The Brothers Karamazov*, Part 11, end of Book V11. There can be no doubt about the uniqueness of this passage in Dostoevsky's entire work.)

Cf. Belorussian *Coren voron, ci mnoho w cjabe earvej? - Dzevjac', a z dzevjaci vosem, a z vosmi sem ... a s odnoho nih6dhogo* 'Black raven, how many worms do you have? - Nine, and from nine eight, and from eight seven, ... and from one a worthless one'.

97. Cf. Russian *Ja fel - nafen grib, ja jel - nafen dva griba, ja fel - nafen tri griba ...* 'I walked along, found a mushroom, walked along, found two mushrooms, walked along - found three', etc., or *Byl grib - stalo dva, bylo dva - stalo tri*: 'There was a mushroom - then there were two, there were two - then there were three etc.

In view of this link between mushrooms and counting, it is hardly surprising that the folk motif 'Fools, unable to count themselves' (Aarne 1287: cf. J. 2031) has a variant dealing with mushrooms ('How to determine if mushrooms are poisonous' -%-, 1287\*). See Laport (1932: 1207.1): a peasant is told that a poisonous mushroom will turn black from contact with a ten-sous silver-piece; since all he has is nine sous, he cuts off a tenth of the mushroom and tests the other nine-tenths of the mushroom on his money. Certain other phenomena are also undoubtedly connected with the counting of mushrooms: 'mushroom' counting-out rhymes used by children in their round-dances (cf. the type: *U! ty grib molodoj, / Ne nalityj vodoj ... / gifel vyfel, / Von po.fel.%* jocular divinations before the gathering of mushrooms (by tossing baskets), accompanied by a chant playing on the names of mushrooms and their physical characteristics (cf. *Stavlik, hureik, / Sam kavureik, / Stogom, rogom, / Svinja pod porogom.*); cf. *gejn* (1898: nos. 220-221, 265). Extremely interesting in this regard are certain Lithuanian jocular counting-out rhymes (*Uokavimai*) that contain valuable mythological evidence. Cf. *Kiek dievy? - Devyni. Kur anys? - Eglyni. - K9 veikia? - Kepures siuva. - Kam? - Kunigam. - Kokias? - Raudonas. 'How many gods are there? - Nine. Where are they? - In the fir-grove. What do they do? - They sow caps. For whom? - For the Roman Catholic priest. - What sort? - Red ones.'*; there is no doubt that mushrooms are the subject here. (For the image of the 'Roman Catholic priest', cf. the parasol as the regalia of Caesar in a series of cultural traditions; for the image of 'red caps', cf. the riddle about mushrooms, *Malutis gralutis ejo per lemr ir atrado raudong kepures*, or one about a shock of corn, *Devyni broliai vieng kepurg divi.*) Cf. also: *Kiek dievy? - Devyni. - Kur gyvena? - Eglyni. - K9 daro? - Vyfaspina. - Kam? - Kunigam.* (a parallel to the Russian counting-out

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rhyme. Zajac belyj, kuda begal ... / lyki dral ... ). These counting-out rhymes are directly linked, in turn, with 'numerical' counting-out rhymes containing an abundance of sound-figures: cf. Pirmas vinj kala, / Antrasantrg gaig, / Treeias freinj tryni, I Ket virtas kekr pyne ... Devintas dievq malde 'The first ..., second..., third..., fourth ... ninth pray to God' (sometimes this sort of text is preceded by an explanation of the type 'The Nine Deadly Sins' or 'The Nine [Ten] Commandments of God'), cf. Kiek dievy? - Devyni. (For the Lithuanian examples, see Lietuvių tautosaka, vol. 5, nos. 8602-8606). Other data are equally of interest. Cf. a game boys and girls play, in which they form two rows and exchange places, singing a song analogous to the Russian Grib-borovik mentioned above: Grybs, grybs, baravyks, / Visy pulkauniks.... with the additional lines 0 fils, bobos, nelingekit, / Virkii grybus ir maifykit ... 'But you, old women, don't be lazy, / Cook the mushrooms, mix them up ...' Still more indicative for the marriage symbolism involved is a game played by pairs of men and women in which they line up in a row, change places and so on, singing: Gryby rauti. grybli rauti, / 0 ne baravyky ... / Ko;!nas savo rad-cs radIrs, / U! rankeles ved,4s, vedes ... / Oijus, bobos, neirfikinkit, / Virkit grybus ir maifykit 'To pick mushrooms, to pick mushrooms, but not boletus ... Each finds, finds his own, takes, takes it by the hand'. (For these examples, see Lieluvių tautosaka, vol. 5, nos. 9686, 9688.)

98. Noteworthy in Hoffmann's fairytale 'The King's Bride' is the motif of the transformation of the astrologer Dapsul von Zabelthau into a toadstool as the result of his fight with the gnome king Daucus Carota.

99. See Figer (1966: 46ff.). Interesting materials on this scheme are contained in contemporary Indian traditions, as well: cf. Elwin (1958: 40, 60-61): incest and punishment by thunder and lightning.

100. Sometimes, incidentally, all these acquisitions are motivated by the initiation of sexual relations between men and women (as opposed to prior relations with animals. e.g., turtles and so on): see Skazki i mify Okeanii (pp. 99-102), with the legend of the Melanesian tribe Papatav, where the beginning of sexual relations is linked with the acquisition of fire and the establishment of new norms prohibiting incest. See also Zograf (1971: 237, No. 56).

101. Cf. the following variations: an old woman who has become pregnant wants to eat mushrooms; the huge cobra Basuk Nag gives them to her on the condition that the daughter born of their union will become his wife; from a flower (cf. the Santal folktale, cited above) which sprang up in the spot where the placenta was buried (after the birth of the daughter) there emerges a boy; having grown up he lives with his sister. killing Basuk Nag and cutting him up into pieces. See Elwin (1944: XXII, 2). In a similar tale sparrows appear from the burned parts of the body of the leader of the cobras Nang Kuar (cf. the motif A 2000).

103. Cf. also Jobs (1962: 828ff.). In a future article we hope to show that several folktales involving a sister and a family with nine or twelve brothers are linked in orion with this set of ideas. Cf. Aarne (1928: 451): a maiden searches for her brothers. collects miraculous flowers; the brothers are transformed into ravens, and so on. In the motif of the coming of the dead brother one can see a reflection of the earthly history of the punished children of the Thunder-god (the sister and nine brothers, the theme of marrying-off the sister away from her brothers, their death, etc.). For m

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details, see Seeman (1960) and Civjan (1973).

103. See Ivanov and Toporov (1970); as regards other traditions, see Uvi-Strauss 09~1 360). It is likely that such motifs were reflected in representational art as well. Cf. for example, the knotted wool rug from the Pazyryk barrow (sixth century A.D.), in the center of which one finds a series of squares, each of which contains a yellow, floral



## Mythological conceptions about mushrooms 345

and a blue sepal (cf. the flower Ivan-da-Marya). The whole scene is rather indicative: note the griffons, does, horsemen (seven in each row), the depiction of a tree in the ornament, etc. For more details about this rug see Rudenko (1968: 41 ff.).

104. Cf. Aarne (1928: 1232.3): The raven finds a sea-shell, from which first the voices of people, then the people themselves, emerge (cf. above on the acoustic effects of certain mushrooms). See Swanton (1908), Barbeau (1944 and 1953; this same motif is reflected in the wood carvings of the Haida Indians). Cf. the motif of coitus in a seashell in the works of Bosch, above all in *The Garden of Earthly Delights* or the motif of the sea-shell in works of art from Botticelli's *Birth of Venus* to the compositions of Naum Gabo.

105. The Cubeo Indians believe that they originated from stones, emerging in pairs in the form of anacondas and then shedding their skins. The god Quwai gave them manioc and fruit, taught them to sow crops and to bury the dead; the same god created flies (Goodman 1940: 242-247). According to the beliefs of certain Melanesians of the Banks Island, the god Qat was born of a stone-mother (with no father) who split in two. He had eleven brothers, created mankind out of wood, and, so that the human race would not die of hunger, created plants (Codrington 1891: 156-158; Leach 1956: 178ff.)

106. Their usual names are Tonacatecutli and Tonacaciuatl (lit. 'Lord and Mistress of our flesh'; 'flesh' in the given instance should be understood as the 'maize' from which the human body was supposedly created). Quite important is the fact that they are typologically similar to other images of creative duality; cf. Idzanagi and Idzanami in Shintoism, Pangi and Papa in the Oceanic tradition, Prajapati in the Vedas, and so on.

107. Particularly interesting in this respect is the testimony of Pan Ku (32-92 A.D.), a chronicler of the Han Dynasty, about the appearance, in August, in the inner pavilion of the royal palace, of a mushroom with nine paired 'leaves'. The Emperor Wu identified it with the renowned chih and wrote a poem dedicated to it. (Cf. 'My secluded dwelling produces an herb, / Nine stems with twin leaves! ... this superb growth, / This chih, which unfolds its beauties most marvelously!') See Wasson (Soma: 85-86 and plates '~IV-XV; a ling chih mushroom with one stem and twin caps; cf. the twin parents and the nine children).

108. See also Hultkrantz (1963: 68ff., 50ff.). In connection with the mushroom, noteworthy are two bronze figures from Luristan (c. 1000 B.C.) which depict masculine and feminine deities of fertility wearing particular caps which have definite connotations (Godard 1931; 1964: Nos. 26-27). Cf. magical anatomy in Ancient Mexico (the parts of the human body, their relation to the calendar and so on). See Danzel (1937: 55ff.). On the anatomization, dismemberment, tearing-apart of the sacred body as one of the leading motifs of the carnival (Baxtin 1965: 210-211, 286-287).

In connection with this theme see Jochelson (1918: 201-204). In American traditions analogous motifs sometimes coincide with the theme of the origin of tobacco (Kell 1965: 99-114, and 1966: 590-599). Cf. the name used in Russian for the dried do;Fdevik, jortov tabak 'devil's tobacco'.

Cf. another variant, ritual coitus with the goal of causing rain and its reflection in certain episodes of the Mahdbhdrata (111, 110. 17-36; 111. 1-22; 112. 1-18; 113. 1-12) about the just R-yagrhga, whose chastity during an encounter with a prostitute caused Indra to take mercy and send to earth the long-awaited rain (Schroeder 1908: 166; O'Flaherty 1969: 315 and 1973).

12. See Meletinskij (1969: 345ff.; and the bibliography given there). Cf. also the motifs of

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346 V. N. Toporov

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wild apples, the apples of Idun, 'live' water and so on (A.Th. 551). Cf. also Meletinsk (1968: ch. 11).

113. See Wasson (Soma; 231ff.) cf. also Dunn (1973: 488-492).

114. It is characteristic that the preparation or use of such a drink is often the prerogative of shamans. Moreover, they are linked to lightning and control thunder, rain, and th like. Cf. Balikci (1963: 386), Vasilevi6 (1969: 211).

115. Cf. Prometheus' gift of fire to man and the gods' reaction.

116. Genesis 49, 25. Cf. the way in which the story of Joseph in Thomas Mann's novel revolves around the framework of these two blessings.

117. Cf. Fet's lines: 'Pokorny solneenym lueam, / Taksxodjat korni v glub'mogily / I lani smerti deut sily / Befat'navstre& vefnim dnjam'. ('Obedient to the sun's rays / Root descend to the depths of the grave / And there seek from death the strength / To ru back to face the vernal days'.

118. Serious doubts about the proposed identification of Soma as *Amanita muscaria* have been expressed recently by John Brough (1971; 1973), cf. Wasson's (1972) reply. The most significant objections involve general considerations (connected, in particular, with the differentiation in Indo-Iranian of two types of intoxicating drinks, soma, haoma - surd, hurd; cf. Mid Iranian, Pehlevi hwr, on which see Henning [1955: 6031] and the analysis of individual words and expressions (amiu. dhdman, megha andmill, hari, nirnij, sahasrabhrVi, and so on). Brough's basic point is that Wasson's argumentation is not sufficient enough to prove beyond doubt the identification of Soma as *A. muscaria*. Even if one agrees with Brough, one can still insist on the correlation of Soma with those mythologized products of the plant world which, when they become elements of culture, are isofunctional to mushrooms and drinks prepared from them. The fact that Soma and mushrooms belong to the same class determines the numerous similarities in descriptions of the two.

119. Cf. the use of the appellative parjbnyd~ in the meaning of 'storm clouds in RV I, 164, 51: b~dmim parjinydfinvand divamfinvanty agnbya~ 'storm clouds support (freshen) the earth, flames - the sky'; cf. also RV IX, 2, 9: parfiinyovr~limdfi 'rain-giving Parjanya', or IX, 22, 2: parjhnyasyeva vr\$1hyah, and so on.

Cf. gV V, 83, 2: yat paribnya stan6yan htinti du~kjitah 'when Parjanya roars, he kills evil-doers'; RV V, 83, 3: dardt si?ihdsya stan6thd tW irate y6t parjdnya~ kr u16 var~vam n6bhah 'From afar there rise up the lion's peals of thunder, when Parjanya creates the rain-cloud'; cf. also RV V, 83, 6 and 7; V, 83, 9; 1, 38, 14; Vill, 21, 18, i.a.

1. This identification is based on the fact that the wife of Parjanya (and consequently, one can assume, the mother of Soma) is the Earth (cf. RV V, 83,4; VII, 101, 3, etc.). It is interesting that in the hymn to the Earth (V, 84), which follows immediately after the hymn to Parjanya (V, 83), there are lines mentioning lightning from behind the clouds and rain from the sky (yht te abhr6sya vidyfito divb wirsanti vr\$jhyah~), while Earth firmly restrains the trees in the soil.

122. Cf. RV V, 83, 4: prd vdib v6nti pattiyanti vidy0a i~d osadhir jihate pivate svLih / ird vdasmai bhFivandya jdyate yai par/6nyat prihvitm retasAvati 'The winds howL lightning falls, the plants grow, the sun swells up. Every creature feels a freshening when Parjanya fortifies the earth with his seed (rain)'. As is shown in another passage. \*paj(r)d is literally

'fold', 'junction', 'space formed by two surfaces'; cf. in the sped sense (in Lucretius) Veniris compCigis'the embraces of Venus' (Latin pdg-- Old India pdf-). Of particular significance is the epithet of Soma saheisrapajas 'possessing thousand pdjas'.

123. Cf. 9V VI, 50, 12: parjiinyjvdtd pipyatdm ijaM nat 'let Parjanya and Vata make grow thickly for us'.

Mythological conceptions about mushrooms 347

24. Cf. the famous hymn to the frogs (VII, 103, 1).

25. Cf. RV IV, 57, 8: Sunam parjhnyo m6dhund phyobhah ... 'Parjanya brings happiness through honey and milk'.

26. Strictly speaking, this version of the birth of Soma - as well as, of course, that of fire - in no way contradicts indications that Soma was born of itself, similar to the way that Taniinap5t was born (cf. RV IX, 5, 2). It is quite noteworthy that in the most diverse traditions the motif of self-generation is connected precisely with mushrooms.

27. Cf. also RV IX, 85, 2; X, 22, 15; X, 24, 1, etc.

28. Cf. RV IX, 66, 5: soma ... ~ndrasyajalhdre viga 'O Soma ... enter Indra's belly!' Cf. also IX, 76, 3: indrasya soma ptivamdna ... jalhreh~v J vila / prei nah pinva vidy6d abhr~va r6dasPO Soma Pdvamiina, descend into Indra's belly, fecundate for us both worlds, as lightning does the cloud...' and so on.

29. For the connection between Soma and the vajra, cf. RV V, 48, 3; 1, 121, 12. It is interesting that the epithet sah6srabhrs' ti - 'possessing a thousand teeth (notches)' equally characterizes both the vajra and Soma (which in such cases may be understood as a mushroom; cf. Wasson's Soma); cf. RV IX, 83, 5; IX, 86, 4.

130. Cf. the navel in connection with mushrooms: Russian pupyr' (from pup 'navel'), Cambodian psat 'navel' and 'mushroom', among others. Soma is called the navel of immortality (amitasya ndbhah, RV TV, 58, 1); cf. the designation of Soma as the 'drink of immortality'.

131. Such descriptions also relate to Agni as well: cf., i.a., RV 1, 59, 2; 111, 5, 10; VI, 8, 3.

132. Cf. Lommel (1938: 244) despite the opinions of Time, Kuhn and others).

133. On the motif of 'Soma in the mountains' cf. RV 1, 10, 2; 1, 176,5; 111,48,2; V, 36,2; V,43, 4; V, 85,2; VIII,6,28; IX, 18, 1; IX,46, 1; IX,62,4,15; IX, 82,3; on the motif 'mushroom in the mountains' see above. Noteworthy too is the fact that Parjanya is likewise localized in the mountains in the midst of the Earth, that he is a bull, and that one of his attributes is his roar (gV IX, 82, 3: Parjhnya~ pitd mahipisya parVino nLlbhd prthivyJ gir4u k~ayarn dadhe; RV IX, 85, 10: div6 ndke ... duhanly uk~y?uzM giris. IhJm; on the roar cf. also RV V, 83; 1, 7, 9; VII, 10 1, 1). In this case the roaring bull in the mountains as an attribule~ of the storm-god Parjanya. corresponds completely to the Russian riddle about thundersi\*rms: Tur xodit po goram, Turica-to po dolam, Tur svistnet, Turica mignet 'The goat walks in the mountains, the she-goat in &c valleys; the goat gives a whistle, the she-goat blinks'. In another study we postulate the connection between the goat and Perun (cf. Perkl7no oielis 'Perkun's goat'). The theme of the roaring bull may be combined with a riddle based on counting (see above about mushrooms in this respect). Cf. RV TV, 58, 3: calvdri S~figd tr6yo asya phold d4 liryi sapt dhdstdso asya / tridhd baddh6 vrsabh6 roraviti mah6 devti mdrtydA J vivela 'He has four horns, three feet, he has two heads, seven hands; thrice the hobbled bull roars, the great god enters into mortals'. Cf. such riddles about bulls as Russian Cetyre eelyrki, dve rastopyrki, sedmoj vertun 'Four fours, two spreadout, the seventh - he who turns'.

134. Cf. 1. Annenskij's line about fingers: 'O sestry, a neinye desjat' 'Oh sisters, oh tender ten!'

135. Cf. also RV V, 43, 4; IX, 8, 4; IX, 38, 3; IX, 46, 6; IX, 56, 3; IX, 80, 4 and 5. An interesting example is IX, 15, 8: et6m u tyam diVa kfipo mljyhnti saph dhithyah...'He

himself (Soma) is cleansed by the ten fingers, the seven prayers'. The other motif connected with the ten fingers can be found in RV X, 90, 1 (the hymn to Puruga), cf. (line 4): 'whoever eats and does not eat'.

136. Cf. RV IX, 68, 4; IX, 72, 3.

137. Cf. Russian pan'lord' for the white mushroom *Boletus edulis* (cf. above, note 21: Ysem gribam polkovnik ... 'lieutenant of all the mushrooms').

348 V. N. Toporov

138. Cf. also 9V 1, 91, 23; VI, 44, 2; IX, 35, 2.

139. Cf. Maitokivi, 'milk-stone' (Tiir5nt6, the Finnish district Norrbotten in Sweden).

140. Cf. Pirun-p6ytd 'Devil's table', the name for stone in Kesilahti (Finland).

141. Cf. Hautala (1965). The inclusion of the motif of milk in the general scheme outlined is hardly fortuitous, as is demonstrated, for example, by Mongolian beliefs about thunder: a person killed by lightning is placed in a pit; nine taidzhi in white dress and on white horses take part in the ceremony; to avert thunder milk is sprinkled on a white strip of felt using a Isasyla, little spades with nine indentations, and so on (Potanin 1883: 140).

142. In certain Indian myths thunder's urine conceives in maidens a son, Boy-Thunder, who is distinguished by his miraculously swift growth (Jacobs 1959: 149 [No. 30a]).

143. Cf. such interpretations of dreams as: 'Si son urine s'6tend par devant son penis, sur le mur et se r6pand dans la rue: il aura des enfants. S'il urine dans un fleuve, sa moisson sera abondante. S'il urine dans un puit, il perdra ses biens ...' (Leibovici 1959: 70). Of interest is the fact that in the Babylonian tradition there are similar interpretations for dreams involving food: if one eats the flesh of one's hand, one's daughter shall die; if one eats the flesh of one's foot, one's eldest son shall die; if one eats the flesh of one's penis, one's son shall die, and so on (cf. Leibovici 1959: 68-69).

144. Cf. the symbolic ritual of drinking bull's urine among the Parsees of Bombay (Modi 1937: 93). Of interest is the fact that urine has such a role in places where the population has remained mycophilic (against the background of a general shift to mycophobia). On urine and Soma see Ingalls (1971: 189ff.).

145. See Wasson (Soma, p. 32); cf. also Kuiper (1970: 283). In Zaehner's translation:

'When wilt thou do away with this urine of drunkenness with which the priests evilly delude [the people] as do the wicked rulers of the provinces in [full] consciousness of what they do[T; cf. Old Indian matra- 'urine' (Wasson, Soma: 32-33).

146. Cf. Chavannes and Pelliot (1912: 292-340, especially 302-305, 310-314), Wasson (1970a: 292).

147. One wonders whether the connection between mushrooms and urine is not reflected in a degenerated form in the Russian children's saying: 'Kak u Vani na posteli griby. jagody pospeli, / Oteego oni pospeli? - Vanja ssytsja na posteli, 'How is it that Vanja has mushrooms in his bed, that berries have ripened there? / Why have they ripened? - Vanja pisses on his bed.'

148. Cf. RV IX, 74, 4: d1manwin n6bho duhyale ghrt6m p6ya rt&ya ndbhir dmrtalp ri jdyate / samTcTndh sudtinavah prTnanti t6m n6ro hittim 6va mehanti p&avah Soma, storm Cloud imbued with life, is milked of ghee, milk. Navel of the Way, Immortal Principle, he sprang into life in the far distance. Acting in concert, those charged with the Office, richly gifted, do full honor to Soma. The swollen men piss the flowing [Soma]. Cf. Louis Renou's translation: 'Les [Maruts] seigneurs i la vessie plcine compissent fle Soma] mis-en-branle'. Old Indian mehahi 'to piss' is apparently connected with Russian mizinec, mezenec and so on, designating not only the little finger but also the younger son, brother, and so on (cf. \*ml;fp 'I piss'). Cf. also such Russian names for mushrooms as ssyxa (related to ssyt'sja'to piss'), navoznyjgrib lit. 'dung mushroom', perdunok (related to perdet ''to fart'), and seruxa, serjak, serjanka. serugka (possibly related to the word for defecation) for the Lactariusflexiosus. Cf. Merkulova (1967: 191 ff.). On the images of urine and faeces in 'lower' culture, see Baxtin (1965: 362-363). Cf. the episode in the Brdhamanas when Indra drinks so much Soma that urine pou even out of his ears. References to the three filters of Soma (PV IX, 73, 8: Irtfd pavitra hrady drithr J dadhe

Mythological conceptions about mushrooms 349

'he carries three filters within his heart') may be interpreted in this sense. In Wasson's interpretation (Soma, p. 52117.), the first filter consists of the numerous white patches on the cap of the fly-agaric, the second - the lamb's wool through which the juice of Soma is forced, and the third - the organism of Indra (or Vdyu), who drinks the juice and gives it back in the form of urine. Cf. in this connection such Russian names for mushrooms as sitnik, sitovik, siluxa (from silo 'sieve') and regetnik (from refeto 'sieve'). Incidentally, the motif of the insect (especially the fly), which is widespread in beliefs about mushrooms (cf. the name for the fly-agaric in various languages), is also marked in application to Soma: cf. RV 1, 119, 9: uni syd vdm m6dhuman makyikdra pan made s6masyau.~ii6 huvanyali 'Even this fly proclaims sweetness to you, says Au9ija in the ecstasy of drinking Soma'. 1

151. Cf. the proposition that Soma was the plant (rhubarb?) that in the languages of the Kats, Prasuns and Khowars was designated by a word which originated in an epithet connected with Soma, 'svatra (cf. Turner [1962-1966: No. 127621 - G. Morgenstierne's discovery). As far as the mushroom itself is concerned, it is mentioned only

once in the & Veda (1, 84, 8), but in a characteristic context: kadd m6riam aradh6sam padd kp~mpam iva sphurat 'When will he trample upon the godless mortal as upon a mushroom? Incidentally, the meaning of kvumpam is not entirely clear. Cf. also andhas 'grass' and 'mushroom' (Amarakoga).

152. The question of 'ecstatic' alkaloid substances in contemporary India (like bhdlig in the North or siddhi, lit. 'occult force', in Bengal) is relevant. It is possible that bhdgg should be linked etymologically to the nostratic sound complex mentioned above (see p. 11). On such substances, cf. Ward (1959), Newland (1963), Bharati (1965: 285ff.).

153. See Kuiper (1970: 281). The ritual of buying the Soma plant reveals that Soma was identified at one time with Varuna (cf., i.a., MS 111, 7, 8; KS XXIV, 6; TS VI, 1, 11, 4-5).

154. Cf. the typologically similar symbolism in a series of Southern traditions. We have in mind, for example, the splitting in two of a coconut and letting out of the liquid (the coconut is thought to have a 'masculine' and 'feminine' end) in connection with the symbolism of unity and copulation (e.g., Shiva and Shakti). See Yalman (1967-:, 3.74).

155. Cf. the self-praises of the god who has drunk Soma (gV X, 119).

156. The pressing-out of Soma is viewed as a symbol of intercourse, and the two parts of the palms, functioning like a press, - as the two feminine labia (iaghanddhiYavaVyd. RV 1, 28, 2).

157. Cf. the role of Soma at weddings, riddles about Soma, and so on. On the divine bridegroom and his connection with the elements of the Cosmos see Dick (1966: 338-347). Cf. also AV XIV, 2, 71 (with the scheme for the identifications). One may assume that the ritual of the domum deductio (cf. German Brautlauf and the like) is originally based on cosmological images.

158. Cf. also RV IV, 26, 6; IV, 27, 4; IV, 26, 4 (for Manu); IX, 48, 3 and others. Sometimes a falcon appears instead of an eagle: cf. RV IX, 87, 6; 1, 80, 2; 1, 93, 6; IX, 86, 24, and so on.

159. See Schrbdcr (1967) de Vries (1950: 71), Meletinskij (1969: 346ff.). Of interest is the fact that sometimes the conflict in the family of the Thunder-god is said to be caused not by the theft of some miraculous object, but by the free gift of it to mankind against the wishes of the Thunder-god's children. Cf. the West-Irian legend about the weapons of the Thunder-god (Skazki i mify Okeanii: 58-59).

160. That Soma, like Agni, belonged at one time to the Asuras is attested to by a number of texts. Cf. JB 11. 155, 1, 7: tasmdd dhur agn4omdv asurydv iti, cf. KS XXX IV. 3. In another passage (KS IX. 11) we learn that Prajapati created the Devas and Asuras as

i



350 V. N. Toporov

representatives of the two component parts of the divine world; moreover, the parts named are correlated with day and night, as well as with the opposition of the two colors. For the two varnas cf. the last verse of RV 1, 179 (Agastya and Lopamudra): Agastya serves asceticism and the flourishing of the species.

161. Cf. the following correlations: daivyo vai vhrno brdmandh, asurytib ladrah (TB 1. 2, 6, 7).

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