## THE FOURTH SOURCE OF DATA Amerindian Oral Literatures and the Peopling of Central and South America

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The paper is based on the author's catalogue of Central and South American Indians mythology that includes at the moment more than 500 themes and about 15000 texts. Data combined into 59 traditions were processed by computer. East Brazilian and Mexican mythologies proved to be most distant one from another. Mexican, Central American and Andean ones form the Pacific Belt that continues further towards Patagonia. Most of the themes widely known in East Asia reach to Western and Northern areas of South America. Two complex plots, widely represented in the New World and in particular characteristic for Eastern South America, have parallels from the Mediterranean till Central Asia. South American-Australian parallels are restricted to short plots and episodes.

Debe ponerse en relieve que, en el campo de la etnología comparativa, la confrontación de textos y temas mitológicos desempeña un importante papel, como lo mostró para América Ehrenreich (1905) en su clásico estudio. Por desgracia, estas investigaciones han sido descuidadas en América, sea por seguir modas más llamativas y, ocasionalmente, más prestigiosas, sea por el afán, perfectamente lícito y justificado, de bucear en otros aspectos de la creación mítica. O, en fin, porque el análisis comparativo requiere, como condición sine qua non, un manejo de datos en abundancia tal que lo convierten en tarea especialmente trabajosa, aunque su utilidad, para los fines a los que está destinado, no deba ser puesta en tela de juicio (Blixen 1990:13).

# MAIN SOURCES ON THE PROBLEM OF AMERINDIAN ORIGINS

Despite the impressive recent progress of both traditional and genetic physical anthropology in unraveling the problem of peopling of the Americas (e.g. Horai *et al.* 1996; Rotthaimer and Silva 1989; Salzano 1985; Szathmary 1993a, 1993b, 1994, 1996; Soto-Heim 1994), important questions remain to be yet unanswered. It is not clear if 1) have been the Amerindians – at least other than Na-Dene – the descendants of one or more migrational waves from Asia?; 2) was the Asiatic group ancestor of the Amerindians – and of the Eskimo – homogeneous or had it incorporated people of different origin? Most of the anthropologists recognize the genetic diversity of the modern American aborigines, though its reason is an object of discussion.

The situation in linguistic studies is even more controversial. When J. H. Greenberg claimed common origin of all Indian languages besides Na-Dene and their remote connection with an hypothetical Eurasian (or Nostratic) stock (Greenberg 1987; Greenberg and Ruhlen 1992), he met with a severe and substantiated criticism. However, prominent linguists do not reject the possibility that J. H. Greenberg could be ultimately right; at least, Amerindian languages really seem to share common traits (Kaufman 1990; Payne 1990). Unfortunately, the affinity between languages separated earlier than 7000-8000 B.P. can yet be neither denied nor confirmed. For the present study it is important that most of the distant connections between language families to the South of Rio Grande are suggested for groups located either along the Western (Pacific) belt or inside Central and Eastern Brazil (Kaufman 1990:53; Urban and Sherzer 1988).

After excavations of Monte Verde in Chile, there was not much new progress in archaeological field research that would influence profoundly our understanding of the peopling of the Americas. We still do not know how the Amerindians migrated from Alaska to South before ice-free corridor was closed towards 18000 B.C., or how they did it much more late, when the corridor was reopened towards 11000 B.C. (Jackson and Duk-Rodkin 1996:223). All South American materials whose age was claimed to exceed 8000-9000 B.C. are rejected by T. Lynch (1990, 1994). Monte Verde is the only exception but its C14 age of about 11000-13000 B.C. is doubtful due to the coal deposits in the nearby area. However, the Meadowcrof rockshelter in Ohio still challanges the idea of Clovis big game hunters as the first migrants to the American

mainland. Meadowcroft had to be occupied in 12000–12500 B.C. and possibly as early as 15000 B.C. (Adovacio *et al.* 1990).

Just as in Latin American Indian linguistics, where separate families are tentatively grouped into larger stocks inside either Western or Eastern regions, two large areas probably show the earliest South American archaeological materials. Unlike North-Western and Southern parts of the continent, no fluted points have been found till now in Central and Eastern Brazil. All Final Pleistocene-Early Holocene sites in Eastern South America seem to belong to the same Itaparica tradition; it was left by unspecialized hunters-gatherers whose small mobile groups exploited landscapes of the Brazilian Highlands (Schmitz 1981:46–49; 1986: 187–191; 1987:57–71). Unfortunately, many vast areas of South America to the East of the Andes remain still unexplored by archaeologists.

To sum up, the commonly used methods of reconstruction of the early prehistory of the American Indians do not promise, for the present, any quick resolution of the problem of the peopling of the New World. It is only natural to seek new potential sources of information. One of them is Amerindian mythology. Dozens of thousands of folklore and mythological texts were recorded in the American continent. This source of data shows two advantages, it is independent from others and can reveal facts that cannot be reconstructed by methods of all the rest disciplines.

#### PRESENT STATUS OF STUDIES IN AMERINDIAN MYTHOLOGY

For most of the ethnologists who make field research among American Indians, mythology is not but a part of a living culture. The particular mythologemes are usually looked at as a product of cultural development in a given environment. Such an approach fails to explain why plots and images, recognized as characteristic for one locality, are not necessary recorded in the areas with similar conditions but known in other areas where cultural and environmental configurations are totally different. Among the modern American scholars who work with mythology, only P. Roe runs the risk to suggest deep historical reconstructions. According to him, Amazonian and Guianan 'metacosmology' was formed somewhere in the 1st millennium B.C. (Roe 1989:1; 1991:96).

P. Roe's main monograph is, however, structuralistic (Roe 1982). The structuralists readily suggest mental algorithms capable to produce any mythologeme and to transform given image or plot into something else, but they evade the question why a particular ethnic group prefers some *clichés* but ignores others that would be equally pertinent. The structural approach shows that mythological constructions and transformations are regular, but it does not explain why just these rules and not others were started in any particular case. The linguists know that because of the traits intrinsic in human articulation, some phonemic transformations occur easier than the others. This lets us to understand why, e.g., Latin *l* changed into French *ll* or proto Baltic-Finnish *y* (preserved in Estonian  $\tilde{o}$ ) into Finnish *e*. The knowledge of these regularities, however, says us little about why French is spoken in France and Finnish in Finland. The reasons for the latter are outside of linguistics just as the reasons for areal distribution of particular mythologemes are outside of structural mythological studies. Both linguistic and mythological data are, however, important sources for reconstruction of the ethnic and cultural history.

The cross-cultural distribution of mythologemes was already well known by F. Boas, who affirmed that 'The analysis of one definite mythology of North America shows that in it are embodied elements from all over the continent, the great number belonging to neighbouring districts, while many others belong to distant areas' (Boas 1896:9). However, F. Boas was inclined to attribute the dissemination of mythologemes to many different factors that were acting during a long time. Neither he nor most of the later scholars were fully aware of the pattern of the transcontinental distribution of mythologemes. The latter is not chaotic that would be to expect in case of both multiple independent emergence and random diffusion. As soon as we proceed from the mapping of few separate themes to the simultaneous study of areal distribution of hundreds of themes, we receive a regular picture that probably needs for its interpretation not indefinitely many but one or few major explanatory suggestions.

The works of J. Bierhorst and J. Wilbert (with K. Simoneau) are the highlights of the recent research on comparative Amerindian mythology.

J. Bierhorst (1985, 1988, 1990) was the first to provide a systematic description of the mythology of all parts of the American continent. Most of the previous attempts did not go much beyond retelling the chosen texts. Many characteristic traits of J. Bierhorst's work, both the strong and the weak ones, seem to come from his desire to make it understandable and attractive for the general reader. To structure his material, J. Bierhorst singles out folklore areas first and only after it describes the themes considered to be characteristic for each area. He prefers to ignore the well-known fact that mapping of themes breaks the provisional limits of the folklore areas because no two themes show identical territorial distribution. J. Bierhorst does not put much attention to the fact that mythological traditions do not consist of discrete plots but are rather variable combinations of episodes. As G. Weiss (1975: 482) has it noted, 'the various distinguishable parts of the myth cycle have independent distributions, so that it is not possible to determine whether the full cycle is the original form of the myth or only an accidental conjunction of the several parts'.

The most significant attempt towards introducing measure into the field of Amerindian mythology was made by J. Wilbert who used the Aarne-Thompson index of the folklore motifs for coding the South American texts (Wilbert and Simoneau 1992). The problem of the adequacy of this system for Amerindian (and other non-European) materials is too well known to discuss it here. It is totally possible that despite all its shortcomings, the Aarne-Thompson index will work and reveal the statistical differences in distribution of motifs. However, we need for this the coding of texts belonging to all Central and South American tribal and local traditions, and not only to those two dozens that were processed by J. Wilbert and K. Simoneau. This task is far beyond limits of the possibility in the nearest decades (4259 texts in their 22 volumes vs. 20000–30000 Latin American Indian texts published for the present).

It would be easier to get meaningful results not using the ready made index of the motifs or of the tale types, but creating it according to the analysis of available texts.

Returning to J. Bierhorst, it has to be emphasized that unlike J. Wilbert, he does not provide any clearcut definition of motifs, themes or whatever mythologemes that he singles out. Without a strict definition, however, it is impossible to decide if the given text contains a particular mythologeme or not. Really, sometimes it is difficult to define a complex theme because the sets of motifs change gradually from one text to another. As C. Lévi-Strauss coined (1968:9), mythology is a whole form, 'un système clos'. But does it means that every time when we begin the analysis, we have to follow C. Levi-Strauss always around the continental mythology and we cannot structure the continuity into operative units?

#### THE APPROACH

Any text potentially contains a tremendous number of elementary motifs and of their combinations. We cannot know beforehand which motif or combination will be significant, which is found in other texts to signal some kind of links between the traditions. The first step in research is to discover meaningful combinations. When the latter are ascertained, we can define them with different degree of precision and with more or less details. However, as soon as the relevant themes are defined, we have to follow strictly the chosen definition.

Here is an example. There are five different episodes included in many myths: A) A person ascends the tree or rock to get bird eggs or nestlings; B) somebody makes a person unable to descend or ascend destroying the ladder; C) the hero cannot descend from a tree because another person made the tree grow high; D) a person descends from the hight by rope made of body extractions (urine, tears, etc.); E) a person descends from the tree riding an animal or running down the chain of animals. Suppose, we have five texts that contain motifs A+B+D, C+D, B+E, A+E, and D, respectively. Though one easily feels that these texts have something in common, the existing definitions in no way permit us to include all five into one theme. To do so, we need to formulate theme F of a more general nature: hero remains in a small isolated place (tree top, bottom of precipice, small island, etc.) and can escape from it but with somebody's help or using his supernatural power. However, the new theme F does not absorb themes A, B and D which can exist in other contexts as well or be isolated like D in text 5.

The strictly defined themes are 'isomythemes' that reveal the relief of the mythological map.

For the present, more than 500 Central and South American Indian themes, distributed between 13 provisional thematic groups, are included into the catalogue (Berezkin 1996). Group 14 encompasses several themes of probable post-Columbian origin and is not relevant to the present study. The number of published texts checked is about 15000. They were recorded among almost 350 ethnic and local Indian groups of Latin America.

Some collections of Amerindian mythological texts remain unavailable to me. Inclusion of new data can produce changes in the present picture. The evidence suggests, however, that since the number of themes in the catalogue reached 300-400 and data on the mythology of all major areas were included, the system acquired stability and the new data does not influence significantly the alignment of well-represented traditions (the situation with the implicit traditions is shortly discussed below). For instance, the experimental exclusion of 24 agricultural themes has affected the picture but insignificantly - the myths explaining agricultural origins probably emerged by way of the reinterpretation and enrichment of the already existing structures and patterns and, consequently, their transcontinental distribution was in agreement with such patterns.

The data on local mythologies were grouped into 59 units. This number is determined by limitations of a non metric multidimentional scaling computer program that I posess. First, the program simply does not process simultaneously more than 59 units. Second, it was necessary to operate with the units of comparable thematic diversity; traditions represented by less than 40 themes of the sample list run too far away from all the rest, distorting the picture. Such poorly known traditions had to be combined into composite ones. As far as it was possible, only the traditions that basically share their sets of themes were included into one composite areal block. Of course, the position in coordinates of composite units (e.g. 'Highland and Northern Colombia' or 'other Eastern Bolivia') reflects, but in a general way, the real position of particular tribal traditions. The Antillean mythology, especially the Taino, taken as a whole prooved to be so peculiar that neither its inclusion into some other mythology, nor a separate treatment (it contains less than 30 themes) had sense.

Though tribal groups with similar mythology can share their linguistic affiliation as well, it is far from being a rule. During millennia, groups were splitting and merging, incorporating substratum populations, influenced by their neighbours, etc. During such processes, the patterns of transmittance of mythology and of language were different. So, the units enumerated below are selected taking in consideration first all mutual proximity of the respective oral literatures, then their territorial proximity and only after that the linguistic affiliation of tribal groups.

In many cases, the degree of correlation between linguistic and mythological boundaries seems to be in inverse proportion to the period during which the ethnic groups have been living inside the same area. The Karijona Caribs preserve still their Guiana mythology in the Northwest Amazon (fig. 2). Jivaro and Western Tucano of Eastern Ecuador and Northeastern Peru have many myths in common but differences between two respective sets of themes are clearly recognizable. It is very difficult, however, to catch any systematic difference in mythology between Caribs and Arawaks of Guiana or between tribes of some different linguistic stocks in Chaco-the difference exists but tribes whose languages are more distant one from another can possess more common traits in mythology than groups with closely related languages.

Here is the list of the areal and ethnic mythologies that were put in comparison, their enumeration goes from North to South (fig.1).

1. NW Mexico: Yuman (Yuma, Seri), Sonoran Uto-Aztecan (as was classified in Miller 1984: Pima, Papago, South Tepehuan; Tarahumara, Yaqui, Huichol, Cora, Tepecano). 2. Other Mesoamerica (i.e. groups not included into 1, 3-6): Aztec and other Central Mexican Nahua, Tarascan, Chiapas Zoque, Pipil, most of the Guatemalan Maya. 3. Gulf Coast: Tepehua, Totonac, Gulf Nahuatl, Popoluca, Veracruz Zoque. 4. Oaxaca: Chinantec, Zapotec, Mixtec, Chatino, Trique, Tequistlatec, Mazatec, Cuicatec, Oaxaca Mixe. 5. Tzotzil (with Tzeltal, Chol). 6. Yucatán: Yucatec (with Mopan, Itza), Lacandon; Kekchi. 7. Honduras-Western Panama: Jicaque, Rama, Bribri, Cabecar, Guaymi; few information on Misquito, Sumu, Boruca, Guatuso. 8. Cuna (with data on XVII century Eastern Panama). 9. Choco: Embera, Nonama. 10. Highland and Northern (Caribbean) Colombia with adjacent areas of Venezuela: Kogi, Ika, Chimila, Yupa, Bari, Muisca, Páez, Guambía, Tunebo. 11. Goajiro. 12. Llanos: Yaruro, Guayabero, Sicuani, Cuiva; insufficient data on Puinave, Piapoco, Saliva, Achagua. 13. South Venezuela: Piaroa, Yabarana, Makiritare; insufficient data on Panare. 14. Yanoama: Sanema, Yanomam, Yanomami. 15. Warao. 16. Other Guiana (i.e. all groups not included into 17-21): Orinoco Kariña, Yaruri, Tamanak, Akawai, Waiwai, Trio, Akuriyo, Hixkaryãna, Arikena, Kaxuyana of Caribbean affiliation; Wapishana (including Ataroi), Mapidian, Taruma of Arawak or other affiliation. 17. Pemon: Kamarakoto, Arekuna, Taulipang. 18. Guiana coastal Arawaks: Locono; insufficient data on Palikur. 19. Kariña: Guiana Kariña, Kaliña, Galibi. 20. Wayana (and Aparai). 21. Wayapi (and Emerillon). 22. Ecuador: Coast (Cayapa, Colorado) and Highlands (XVI century Cañari and Kechuaspeaking contemporary groups. 23. Upper Putumayo: Kamsa, Ingano, Western Tucano (Mai Huna, Siona, Secoya, Coreguaje); insufficient data on Kofan. 24. Jungle Kechua: Napo, Canelo. 25. Jivaro: Shuar, Aguaruna and a group, probably Huambiza, whose mythology was described by M.W. Stirling in the 30th; insufficient data on Achuar; Urarina; Chavahuita; groups of Zaparo-Kandoshi affiliation; few data on Waorani. 26. Karijona. 27. Vaupes cultural area: Cubeo, Eastern Tucano (Bara, Barasana, Desana, Siriano, Letuama, Macuna, Tatuyo, Tucano proper, Uanana, Yahuna); Arawaks of Izana and Vaupes basins (Baniwa, Bare, Kabiyari, Tariana, Yucuna); insignificant data on Macu. 28. Witoto, Bora, Ocaina, Andoque. 29. Yagua; Tucuna; few data on Iquito. 30. Central Amazon: Manao, Mura, Maue; XIX century data on groups localized on Teffe lake, on Rio Jamunda and in some other areas; insignificant data on Omagua. 31. Eastern Amazon: Shipaya, Juruna, Asurini, Parakanã; some XIX century data recorded somewhere on Lower Amazon. 32. Atlantic Tupi: Tenetehara, Urubu, Tupinamba. 33. Northern and Central Peru: Coast; Northern and Central Highlands till Ayacucho including. 34. Cuzco area (South Highland Peru) and Altiplano (Highland Bolivia). 35. Montaña and Upper Purus Arawaks: Amuesha; Asháninca, Machiguenga; Piro; Mashco; Ipurina, Culina, Cuniba. 36. Montaña and Upper Purus Pano: Amahuaca, Cashibo, Cashinahua, Conibo, Marubo, Mayoruna, Sharanahua, Shipibo. 37. Tacana. 38. Bolivian Guarani: different local groups of Chiriguano (including assimilated Arawakspeaking Chane), Tapieté, Pauserna, Guarayu. 39. Other from Eastern Bolivia: Ese'ejja, Chacobo, Siriono, Moseten, Yuracare; insufficient data on Mojo, Baure, Itonama, Manasi. 40. Guapore: Tupari, Maku-rap, Yabuti, Amniapä, Arua, Zoro and other groups of Rondonia of different linguistic affiliation. 41. Mundurucu and Parintintin. 42. Upper Xingu: Xinguano (Kamaiura, Kuikuru, Mehinacu, Waura, Kalapalo, Trumai); XIX century data on Bakairi. 43. Other South Amazon (i.e. not included into 41-42, 44-46): Kayabi, Rikbaktsa, Nambikwara. 44. Iránxe. 45. Paresi. 46. Umutina, Bororo. 47. Araguaia: Tapirape, Karaja. 48. Cayapo. 49. Other Northern and Central Gê (Suya, Txukarramae, Craho, Crenye, Apanaye, Ramkokamekra, Apanyekra, Shavante, Sherente); Cariri; insignificant data on Gamella. 50. South Atlantic Brazil (non-Tupian groups): Kaingang, Botocudo, Kamakan; insignificant data on Kutasho. 51. Other Chacoan (i.e. not included into 52-56): Angaite, Makka, Sanapana, Lengua, Mocovi, Vilela; Kechua of Santiago del Estero with probable Chacoan substratum. 52. Zamuco: Ayoreo, Chamacoco. 53. Mataco. 54. Chorote, Nivakle. 55. Toba. 56. Caduveo, Tereno; Ofaié. 57. Guarani (different groups of Paraguay and Brazil); Ache; Sheta. 58. Mapuche; Tehuelche; few data on Puelche. 59. Fuegians: Selknam, Yamana; few data on Alakaluf.

Where it was possible, pre- and post-Columbian iconography was used as an additional source of infor-



Fig.1. The schematic position of 59 areal units on Central and South American map. See text for the list of the ethnic groups included into the units. Areas that provide no data on Indian mythology are shaded.

mation. It was rather important for Coastal Peru, where Mochica vase paintings and reliefs contain about a dozen of clearly recognizable themes such as *Atlas*, *the frog/toad as a source of crops*, *celestial deity* – probably Moon or Sun – *carried by animals or riding a boat*, etc.

The composition of the above mentioned groups needs further explanation in some cases. For example,



Fig. 2. The mutual disposition of 59 mythological traditions of Central and South America in coordinates, after the computer processing of data by non metrical multidimensional scaling.

Highland and Coastal Ecuador were treated separately in one of the previous versions of classification, but proved to be very similar and are now merged in the same unit 22.

Insufficiently known traditions of Eastern and South Brazil could be grouped but provisionally. Ofaie had to be clustered together with some other group because are taken separately, this mythology does not contain necessary number of themes. The groups nearest to Ofaie geographically are Caduveo and Tereno. Tupinamba are included into unit 32 because of their 'twinmyth', that has more precise parallels with Tenetehara than with Guarani versions. However, Tupinamba share just with Guarani two themes (*sky jaguar attacks Moon* and *the father is recognized by his baby-son*) that were not recorded in Eastern Amazonia. According to J.P. Brochado (1984:figs. 12, 22), Tupinamba were moving down Brazilian coast from the mouth of Amazon and met Guarani somewhere in São Paulo area. The mixture of Eastern Amazonian and Guaranian mythological traits fits this picture well. The hypothesis of B.J. Meggers and C. Evans (1983:317, fig. 7.22), according to which Tupinamba were moving up the Atlantic coast from South to North, seems to be less plausible.

Both Botocudo and Kaingang possess common myth about the water owned by the hummingbird and splashed around the world. That was one of the reasons to put them together (this theme is rather specific having somewhat more distant parallels only among the Fuegians). The Cariri (another insufficiently known Atlantic 'Paleobrazilian' group) is united with Gê,



Fig. 3. The simplified and partly reconstructed distribution of mythologies according to their position on fig. 2. Every sector on fig. 2 corresponds to its own shading on the map; the shading patterns for adjacent sectors are the nearest one to another. The mythological traditions included into provisional Central Zone (fig. 2) are selected with the bald line. The reconstruction of the position of some unrecorded mythologies according to fig. 2 sectors is impossible, the relevant areas remain white.

because both have similar myths treating the origin of the women. Gê and Cariri are considered to be the members of the same Macro-Gê stock and that it is more important, belong to the same Aratu archaeological tradition, emerged after A.D. 700–900 (Brochado 1984:222–236). The Kamakan could be also included, perhaps, into the same group and are united with Botocudo mainly because of their areal proximity to the latter.

#### MAIN RESULTS OF COMPUTER PROCESSING OF DATA

The distribution of traditions in coordinates (fig. 2) corresponds well to their geographic position inside Central and South America. To explain some deviations, we have to take in consideration that for poorly represented traditions, the vector of a particular point in respect to the center is much more significant than the absolute distance from the center. As it has been told already, traditions with a small number of recorded themes – such as Cuzco and Altiplano, the South Cone,

Fuegians, Guapore, Araguaya – tend to run far away from all the rest. Addition or extraction of only one or two themes changes perceptibly the distance of the respective points from the center, but do not affect their vectors. In most cases, the thematic paucity is almost certainly a result of scarcity of the sources and/or of cultural impoverishment in post-Columbian times; the real differences between, e.g., Altiplano and Northern Peru or Araguaya and Guapore, from one side, and most of Eastern Brazilian mythologies, from another, are most probably, smaller than it seems at the first glance.

Because the solution is two- (and not three-) dimensional, some groups like Western Tucano and Vaupes, or Pemon and Yanoama, are disposed in a greater proximity one to another that they are really.

To present the picture in a more clear way, every one of the 16 sectors on fig. 2 was painted into its own colour according to the spectrum (here transmitted into a black-and-white version). The received map (fig. 3) gives an idea of the mutual connections between all Indian mythologies of Central and South America.

We can assume that the farthest from Mesoamerican mythologies are Eastern Brazilian and not Fuegian ones. There is a continuity of themes from Mesoamerica till the Fuegians that could be named the Pacific Belt. Both Ecuador and the Northern Andes, from one side, and the Central Andes, from another side, stand very near to Mesoamerica but their other connections are different, directed towards Amazonia and Guiana, in the first case, and towards South Cone, in the second case.

Eastern Amazonian, Guianan and Chacoan mythologies form the same block with the Eastern Brazilian ones. However, Guiana and Chaco are shifting a little towards Mesoamerica because both areas share a series of common themes with the Pacific Belt.

There is a cluster of well-represented mythologies forming the Central Zone that encompasses Western and Northern parts of South American Lowlands and parts of the Highlands. The borders of such a zone showed at figs. 2 and 3, are arbitrary, its territory can be either enlarged (e.g. to include Ecuador and Napo) or diminished (e.g. to exclude Paresi). In either version, however, the Central Zone mythologies show a vast amount of common themes and encompass the continuous area. The only exception is Upper Xingu: An island in the Eastern Brazilian sea, probably formed thanks to relatively recent intrusions from North and West (however, the Eastern Brazilian themes are widely known here as well). The Central Zone corresponds in a way to the 'Amazonian metacosmology' of P. Roe.

The Choco occupies a specific position displaying more links with Amazonia than any other group to the West of the Andes. Here one can remember J.H. Rowe's (1950) suggestion about intrusive position of Choco culture in its present area.

What historical meaning the revealed trends can have? First, we should underline the hypothetical na-

ture of all the suggestions exposed at present. We are making the first steps in the understanding of this extremely complex set of data. Also, we will not become here engaged into the problems of purely local scale and will not treat parallels in narratives that are a probable result of recent cultural interaction.

Two suggestions are plausible to explain the continental-scale picture of distribution of mythologemes: the drift of mythologemes thanks to multiple mutual influences and interchange; the role of the earliest substratum created by the first groups that entered the respective territories in time of their original peopling. These explanations are not mutually excluded, but I am inclined to consider that the slow drift has rather smoothed the areal differences responsible of their original appearance. The picture received answers well the predictions of a hypothesis of peopling of South America by two major populational streams that, after entering the continent from the Northwest, were moving in different directions.

One stream – the producers of fluted points and other bifacial tools? – was moved southward along the Andes till Patagonia, with the offshoots towards South Brazil, where the bifacial projectile points with some parallels in Southern and Northwest South America but not in the Itaparica tradition of the Goias, were found on the Alice Boer site (Conceição de Becker 1966; Hurt 1986; Moreira da Cunha 1994). Here one can seek a possible reason for links between mythologies of the South Cone and of South Atlantic Brazil – we have to be careful on the subject, however, because the mythologies of South Atlantic Brazil are too poorly known.

Another stream, stopped by the Northwest Amazonian rainforests, was moved from Northern Columbia towards Guiana and further into the savannahs of Eastern Brasil. Macro-Gê, Macro-Tupi and Caribs – all distantly related according to A.D. Rodrigues (1985: 417– 418) – descend from this branch; the sites of Itaparica tradition in Goiás are their earliest material remains whose age is not doubtful.

There are a lot of themes known in Mexico and Central America that do not reach neither Eastern Brazil nor Tierra del Fuego. These themes could be either brought no further than Western and Northern South America by some later migrants or be known already to the representatives of the first wave(s) who, however, had lost them before reaching the most distant parts of the continent. The provocative dance in front of the person who has hidden the sun, fire, etc., or the emergence of land from original small amount, are among such themes. The hypothesis of the 'lost heritage' is worth consideration for the Fuegians but it is more doubtful for the Eastern Brazil: the latter area not only lacks some themes recorded elsewhere but shows many others, not known neither in the Northwestern South America nor in the Southern parts of the continent.

The schemes of figs. 2 and 3 contain the average compressed data on many dozens of themes. These sets

of themes, however, differ according to their inner homogeneity or diversity and to their occurrence outside the respective areas.

The Eastern Brazil is probably the most homogeneous area. The themes that are typical for it are dispersed rather uniformly in the neighbouring areas of Guiana, Eastern Amazonia, Chaco, South Atlantic Brazil and – more rare – farther away. Some Eastern Brazilian themes, *like the man with the sharp leg or the birdnester – sensu stricto*, appear again in North America, mainly in its Northwestern part.

The Cuzco and Altiplano region is probably homogeneous in not a lesser degree than Eastern Brazil but this area is less adequately represented in my catalogue. It is noteworthy that Central Andes and Tierra del Fuego are the only bug cultural areas of Central in South America where the gender of the Moon is always the same, i.e. female. From the other side, tribes of Eastern Amazon, Upper Xingu as well as all Central and Northern Gê are the only groups of Latin American Indians who always consider the Moon as the man – though the Moon is female for Tapirape. The Sun is male for most of the Indians – few exceptions are distributed randomly.

The Chaco mythology is extremely diverse. For many themes (like the man with the sharp leg or the star-spouse) this area is but an extension of Eastern Brazil. For another set of themes, mainly connected with the adventures of the fox-trickster, all the connections are with the Central Andes or with the Lowlands adjacent to the Andes - Oriente Ecuatoriano, Eastern Bolivia. Neither set of themes goes across Chaco, that is to say Eastern Brazilian themes are never recorded to the Northwest of Chaco, nor Central Andean ones to the Northeast of it - the fox-trickster is unknown even to Caduveo and Tereno. The themes of Chacoan-Central Andean distribution also appear again in North America but mainly in the Great Southwest, where fox is substituted by coyote. At least one theme that is very specific for Chaco (thunder is in trouble on earth, man helps him to return to the sky) is widespread in Oaxaca and Chiapas - also known to the Cuna.

The Andean-Chacoan fox-trickster complex can be traced further to Patagonia but not to the Southern side of the Strait of Magellan. Tierra del Fuego and the South Cone show both the Pacific and the Eastern South American analogies at the same proportion. Unfortunately, almost all the texts recorded in this region come from only three tribal groups: South Tehuelche, Selknam and Yamana; Alakaluf, Northern Tehuelche, Puelche and Mapuche provide two dozens of themes of the sample list, and the data on Chono, Huarpe, Comechingon and Charrua, as well as on South Andean Atacama and Diaguita, lack completely.

The same Eastern Brazilian themes that are also known in Chaco (*the star-spouse, the emergence of the women from the flesh of original one*, etc.) in the Northern direction reach Guiana or the Orinoco Delta. At the same time, many themes that are either particularly characteristic for the Northern part of South America, from Ecuador till the Atlantic coast, are well represented in Central America and Mexico (e.g. *the creation of the first people/women from unstable materials like wax and clay or the restoration of the cut down forest*); they are also recorded in Guiana. We can suggest that the first set of themes be a trail of the populational stream moving via Guiana to Eastern Brazil, while the second set is the result of later arrival of new population from West and North.

The themes that form this hypothetical later complex, and that in South America are widespread till Guiana, Central and South Andes and Chaco (e.g. primeval ancestors die at the first sunrise; the dance in front of the hidden sun or fire; etc.), or only till Columbia and Ecuador (e.g. the game as a decisive battle between heroes and antagonists; heroes make the dummy of their killed enemy; the sun's relaxation at the midday; celestial bodies ascend to sky from the bonfire; the lost of superfertility because the magic wife/child is offended; etc.), constitute the greater part of the Mesoamerican mythology. However, there are several typically Eastern Brazilian (again with the Chaco) themes recorded in Mesoamerica too. These are some motifs connected with the story of the battle with the cannibal bird (the Northwest Mexico-Pueblo area contains even more precise parallels to Gê myths) and the story of the offended person waiting under the world tree and destroying this tree recorded in the purest form, among the Tzotzil, Tzeltal, Chol, from one side, and between the Chacoan and Cariri, from another side (Berezkin 1992:map 11).

Both Eastern Brazilian and Andean-Fuegian mythological complexes show parallels in North America. There, as far as it seems at the present stage of research, the areas of concentration of the themes of the first and of the second sets do not coincide as a rule. If the more thorough study of North American materials prove that this impression is true, we will be authorized to suggest that the carriers of the two mythological complexes have been split one from another already before them arrived to South America.

#### PARALLELS TO AMERINDIAN MYTHOLOGIES BEYOND THE AMERICAS

Several themes, that are characteristic for Mexico-Central America and that in South America do not penetrate deep into South and East, reveal mainly East Asian (several suns; the moon rabbit; dance for the hidden sun; woman gives birth to the Sun and dies being badly burnt) or Siberian (land grows out from the handful of solid substance put on the surface of the world ocean) parallels.

The Eastern Brazil and Eastern Amazonia (where East Asian parallels are few or completely absent) demostrate important West Eurasian parallels thanks, first of all, to two complex themes: The *Vengeful Heroes* and the *Bird Nester*. Though different variants of the both have practically panamerican distribution. The classical (Lévi-Strauss 1964; 1971:23-25) Bird Nester versions are most typical just for Highland Brazil, while the Vengeful Heroes is a 'master myth' (Carneiro 1989) of Amazonia and Guiana. The Bird Nester (Ivanov 1993) and the Vengeful Heroes are widely known from the Mediterranean till Kazakhstan, Mongolia and Tuva, but seem to be absent in the Black Africa, East and South-East Asia, Melanesia and Australia. Both in the Old World (Greek, Latin, Iranian, Indian, Turkish, Mongolian pseudohistoric traditions and epics, Egyptian Osyris cycle) and in America the Vengeful Heroes plot is used as a basis for the most important national and tribal traditions that describe origins and deeds of the main deities or epic kings. Our data strongly support the idea of a Western component adopted by Amerindian ancestors. The discovery of the probable admixture of Amerindian substratum on the Bronze Age Okunevo culture sculls in Upper Yenisei region though not on the skulls excavated to the East of the Baikal lake (Kozintsev et al. 1995) helps, perhaps, to define the area where Eastern and Western components could meet.

In Australia, parallels to South and Central American mythology are restricted to a series of motifs, such as no-anus creatures (Waterman 1987:37-38), exchange of female and male biology (ibid.:83), the water of life (ibid.:84), shed skins (ibid.:86), the spear bridge (ibid.:88), the invulnerability except in one spot (ibid.:97–99), an underground penis crawls to the women (ibid.:34, 127-128), the small boy who is crying refuses everything that mother suggests him before she names her vagina (ibid.:130), snake makes the river (*ibid*.: 47), the unlucky hunter suggests to his kinsmen strips of his own flesh cut from his legs (O. Artemova, pers. comm., 1996), etc. Unlike both Western and Eastern Eurasia, there are no complex plots in Australia that would find counterparts in America. It looks plausible, that there were no such plots 30000-50000 B.P. in time of peopling of Sahul (Allen and O'Connell 1995), but they had appeared already before 10000-15000 B.P. when the peopling of the Americas had taken place.

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