

theories (such as Paul Wexler's Sorbian hypothesis)? Such radical hypotheses sometimes lead to interesting new questions and answers, sometimes they lead a generation of linguists down a false path. Can we determine when we have the former case, when the latter?

Such are the questions that reflections on the origins of Yiddish lead us to. I do not think that they are all that different from questions that linguists who work on Nostratic are required to pose and try to answer.



## BEFORE INDO-EUROPEAN AND URALIC

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The establishment of the period of existence of the Indo-European proto-language rests to a considerable extent on one's conception on the formation and succeeding development of proto-languages. Basically we have two choices:

a. Separation (subgrouping) along the rules of the well-known *family tree model* when the 'daughter' languages of a former Nostratic language protofamily (Altaic, Uralic, Dravidian, Kartvelian, Afro-Asiatic and Indo-European) as constituents of the protofamily show a great number of common archaisms and partly common innovations unknown elsewhere, and at the same time they keep the shared retentions of a core vocabulary (more rarely morphology, phonology or perhaps syntax) that was common to the whole protofamily or to other branch/branches of its groups.

b. The other suggested way of the evolution of a parent language (for instance the Uralic, Indo-European or any other protolanguage), i.e. the recently preferred *convergence theory* (model of language league or language alliance) must be ruled out in this case. According to this theory several protolanguages did not come about from a common ancestral superfamily but developed integrating small tribal language units by complicated (and hitherto totally unknown) convergence processes. The basic idea of the Nostratic protofamily ought to be the widely accepted principle that related language families diverge with the passage of time isolating from each other. To apply the convergence model to the members/protodialects of the Nostratic protofamily would push time limits of the formation of the Nostratic protofamily back to times beyond unanalysable depths in the Middle and even Lower Palaeolithic (see the maps on Fig. 5). On the other hand, I consider the 'Sprachbund or language league-theory' an artificial and forced creation and as such untenable. The theories of language league and the idea of a Nostratic protofamily are incompatible with each other.

As a result of these short considerations three important points emerge:

a. The relatedness of these six protolanguages i.e. the question whether the genetic relationship of these languages can be eminently proved by the relevant linguistic criteria. This apparently is not my duty and topic.

b. Another important point is to determine and describe the period underlying the formation, existence and split of the Nostratic protofamily, i.e. the chronologies of these related events which, on the other hand, are dispersed over a very wide area and also a very long way of development in time. As a result, their closer archaeological study would strongly need cooperation of several experts of the Palaeolithic and Mesolithic which is apparently not the case at the moment. Professional archaeologists – unfortunately – rarely dwell on such and similar questions. An important part of this point is to calculate the duration of the formation (etc.) periods of the protofamily, since its succeeding phases can fall on different developing phases as for example the Upper Palaeolithic and Mesolithic of a given area (selected as a possible homeland of the

Nostratic processes on linguistic grounds<sup>57</sup>). As a matter of fact, several elements of continuity can be observed between the Final Palaeolithic and the Mesolithic of the Levant and bordering parts of Syria and Turkey (for more details see below), and in turn also between their Mesolithic and Early Neolithic cultures. I think that a suggested population continuity of the Final Palaeolithic and the Lower Mesolithic of a given area of the Near East remains the most favourable opportunity for the Nostratic hypothesis.



Fig. 1: Location of the Nostratic homeland as suggested by Allan Bomhard. After Mallory and Adams 1997, p. 292. The shaded area indicates the generalized distribution of the Nostratic language family. The darker shaded area indicates the Nostratic homeland c. 15,000 according to Allan Bomhard.

The *terminus ante quem* of the existence of an assumed Nostratic phase can be given very simply: before independent Indo-European, i.e. once before the separation of the Indo-European speech community. *Once* means here the time length of the independent existence of IE. This assumed length here rather depends on educated guesses, balanced judgments and informed speculations than observable facts. I consider the time depth around 5000 BC as a punctuation point when the final differentiation processes of the IE speech dialect continuum had started. This suggestion gives enough time for structural processes and internal developments of the IE family toward separations of its earliest daughter languages i.e. dialectal groups (especially Anatolian and Indo-Iranian), and also for transitional developments from Nostratic bases toward its own daughter languages before 5000 BC. If Bomhard's suggested location of his Nostratic homeland (into Southern Turkey, Northern Syria and Irak), and its chronology

<sup>57</sup> One very important point is that the selected area should guarantee common linguistic development and territorial closeness of protodialects of the superfamily (i.e. continuity of their material culture) during a long period of time.

from around 15,000 (between 15 and 10 thousand) BC is realistic (Fig. 1), cca. five thousand years remain accurate for internal and diverging processes of the Nostratic protfamily. The exclusion principle [the homeland should not be set in an area where there is evidence of prior existence of different tongues; Mallory – Adams 1997, 295] does not play a role in this case.

c. Finally comes the material background of the whole process, i.e. some archaeological facts or theories which can be related to linguistic processes by some means.<sup>58</sup> Bomhard's mentioned dating around c. 15,000 BC determines the archaeological character of this period: according to the recent stand of Near Eastern prehistoric archaeology (which should be taken into consideration) this datum corresponds well to the earliest emergence and succeeding floruit of the Mesolithic way of life in the Near East and Anatolia, and can be correlated with the end of the Upper Palaeolithic in territories of Europe lying south of the Ice Cap.

My short contribution will concentrate on reconstructable events of these periods, mostly of the Mesolithic at the end and after the Ice Age.

If my views on the Nostratic theory are correct, there is a simple way to characterize the relationship between the protolanguage groups and the superfamily, and it is the extension of the family tree model backward in time, into time-depths well before the period of existence of the daughter proto-languages. The basic principle of this approach is that if the cognate stocks of a language family (Indo-European, Uralic, etc.) may be more or less similar or only somewhat related (and presumably once geographically proximate) to one another, so also someone may argue that similar relationships exist between different language families<sup>59</sup> bordering each other. If we take such a backward step, it does not change the general rules of linguistic reconstruction but causes them to go back a stage and gives (or may give) them a specific (or different) temporal, spatial and cultural perspective. The temporal category will be, of course, the chronology of the whole process depending on two factors:

a. First, the dating of the existence of the still undifferentiated, original speech parent – Nostratic – community of the daughter languages i.e. before Nostratic began to diverge into dialectal groups, i.e. the Nostratic daughter protolanguages. It can be argued that this systematic dating approach will much be facilitated if the parent speech communities (both of the assumed Nostratic superfamily and its descendants, or only a part of them) can be identified with archaeologically attested/attestable facts and suggestions. From this point of view the parent speech groups of the Uralic protolanguage have a definite advantage: *spatially*, it can be taken as resolved that their speakers had always lived on the northern periphery of one (Indo-European), two (Elamite and/or Kartvelien) or more (?) daughter-languages (west or northwest of different, mostly undefined Palaeosibirian and other Asiatic – Altaic? – groups). *Temporally* a great part of the Uralic protohabitat had once been covered by the Ice-Cap.

<sup>58</sup> The generally large distribution of Upper Palaeolithic archaeological entities taken into consideration, the application of the method of contiguous and large cultural territories would be useful here. For this method see Makkay 1992, 200-201.

<sup>59</sup> J. P. Mallory in Mallory – Adams 1997, 291-292.

The first settlers migrated to these territories after the final retreat of the Ice-Cap in a continuous flow after 12-8,000 BC, and if these time limits are granted, they confirm a sure *terminus post quem* for the arrival of Proto-Uralians to their prehistoric habitat. It surely means that around 8,000 BC at latest, speakers of Proto-Uralic had already diverged from the Nostratic protofamily. Or, what I would consider absurd, groups speaking a Late Nostratic tongue had been who migrated in the wake of the retreating ice toward the Northern Ice Cap. Considering the time around 8,000 or between 12 and 8 thousand BC as the phase of emergence of Proto-Uralic language family and the slow but progressive moving of its speakers to the North, a dating of around 15,000 BC for the existence of the still non-diverging Nostratic superfamily seems to be realistic.

b. Second, some significance should be attached to the length of the – hitherto mostly unknown – linguistic processes and also the speed of the human progress of that assumed period which led to the emergence of the six language groups. Fortunately, two eminent scholars of the field gave us estimates which I think are based on the available evidence. Vitaly Shevoroshkin calculated in 1989 that Nostratic was a language spoken some 14,000 years ago, i.e. 12 millennia BC. (Shevoroshkin 1989, 7). As mentioned before, A. Bomhard suggested a Nostratic homeland lying between the Levant and Turkish-Iranian Kurdistan, and dated it to around 15,000 BC.<sup>60</sup> The relatively early time taken into consideration, the difference between these two calculations is not very important, and it simply can be the result of the continuous (and continuing) backslip (or downslip) of the time-depth in the last two decades (for more details see Makkay 1992, 199).

The backslip is partly the result of the use of scientific dating methods in prehistoric archaeology (as for example the application of much higher calibrated and recalibrated radiocarbon data for the same development phase), and at the same time because of the discovery of increasingly earlier and earlier cultural horizons of the Neolithic. The third time factor can be called the stretching of the single periods. It was Gordon Childe who discovered this phenomenon when likening the prehistoric chronology “to flexible bellows which could be expanded or contracted at will: one end was fixed at 1500 B.C., the other earlier one was free to move, giving a longer or shorter chronology very much according to the wish of the archaeologist” (Makkay 1989, 177, with further reference).

Concerning recent results of radiocarbon-based chronology in Early Neolithic Near and Middle East, instead of flexible bellows I would use the analogy of an extendable rubber band: one end is fixed somewhere in the third quarter of the second mill. BC. The dating of cultures, phases or types before this date simply depends on their relative position in the relevant sequence, and also on the stretching of the band, i.e. the stretching of the relevant part of the band. The clustering and scatter of absolute dates remain in this case in good agreement with the broad outlines of the traditional relative chronology, i.e. the general sequential pattern is already clear. On the other hand, however, the deeper the position of Neolithic (Mesolithic, etc.) artefacts/phases in the

<sup>60</sup> J. P. Mallory in Mallory – Adams 997, Fig. on p. 292.

stratigraphic sequence, the higher their absolute – C14 – chronology (and the other way round) (Makkay 1996, 221).

A further aspect of chronological importance is when an earlier or *much earlier* archaeological entity (group, culture, etc.) is selected to stand for the material representation of the antecedents of a given protolanguage or superfamily. For more details see below.

The best example of these (especially the second) factors (discovery of increasingly earlier and earlier horizons) is the dating of the famous *Halaf culture* of Northern Mesopotamia, Southeastern Turkey and Northern Syria, which plays a special role in the search for, and identification of, the Indo-European homeland (as for example in theories of Diakonoff and Gamkrelidze–Ivanov). Before the excavation of its principal site, Tell Arpachiyah in 1933 (Mallowan and Rose 1933), the earliest known pottery phase of the post-Mesolithic developments of the Near East (and the whole world) – disregarding some earlier beginnings in Natufian times of the Levant – was the al’Ubaid culture (Burkitt and Childe 1932). After 1933, however, the extremely fine painted pottery of the Halaf culture was considered the type fossil of the earliest sedentary phase of the Near East, and was dated around 5000 BC using pre-radiocarbon high chronology, much more later if using traditional dating systems.<sup>61</sup> Now Arpachiyah dates to the period some time between 6000 and 5000 BC, and according to the presently established sequence it follows a series of Pre-Pottery Neolithic, Proto-Neolithic, Late Aceramic Neolithic and Hassuna phases from their beginning around 10,500 BC (Bienkowski and Milard 2000, 30, and the chronological map on p. vii; Charvát 2002, 42-71).<sup>62</sup>

One of the earliest Neolithic sites (excavated recently) is Hallan Çemi Tepesi in Eastern Anatolia, dating to the end of the 11<sup>th</sup> millennium BP (Fig. 4).<sup>63</sup> The site’s inhabitants were dependent primarily on hunting-gathering, but were already experimenting with animal domestication. They also possessed a rich and complex culture with affinities to both earlier (Zarzian, i.e. Mesolithic), contemporary, and later sites along the Taurus-Zagros flanks (Rosenberg 1999, 25).

<sup>61</sup> Childe 1939. – Makkay 1989, 177-181. – To be correct, Childe dated Arpachiyah after a hypothetical “Neolithic” and before the al’Ubaid sequence because of presence of copper. Copper, however, is also present in Early Neolithic deposits as for example Cayönü in Turkish Kurdistan: Özdoğan 1999, 58: copper beads was widely used during the Second and Third Stages of the PPNB and PPNC. In any case, as M. Mallowan writes, Arpachiyah’s excavations opened a new and enthralling chapter and will for ever stand as a milestone on the long road of prehistory: Mallowan 2001, 100.

<sup>62</sup> As for the phases of the Pre-Neolithic and Early Neolithic sequence see Özdoğan 1999, Text, 41-59.

<sup>63</sup> Hallan Çemi Tepesi, important and very early centre of Early Neolithic developments, is located in the foothills of the Taurus Mountains in Eastern Turkey, and it is about 500 kilometres northwest of Shanidar. Its culture was derived from the regional Epipalaeolithic Zarzian tradition and as such can testify to the succeeding continuity of Late Palaeolithic – Epipalaeolithic traditions (Solecki et al. 2004, 118).

The Zarzian industry testifies to the continuity between Late Palaeolithic, Epipalaeolithic and Protoneolithic inhabitants of the Eastern fringes of the Fertile Crescent. In Shanidar cave, the Proto-Neolithic horizon lies above the Epipalaeolithic Zarzian horizon, but on the basis of radiocarbon-14 dates, there was a break of some two thousand years between the two occupations. The Zarzian lithic industry, however, has been viewed as "a direct development out of the underlying late (Palaeolithic) Baradostrian industry at Warwasi" The Zarzian may date as early as 22,000 BP, and may have lasted until 12,000 BP. After a time gap of some two thousand years "The Proto-Neolithic in the Zagros area was a time of much cultural change and a period that can be viewed as a transitional between the Epipalaeolithic and the later, Aceramic and fully developed Neolithic" dated into the time period from circa 10,900 to 10,500 BP (Solecki et al. 2004, 114-116). To make this territory of Zarzian cultural traditions consistent with the initial Nostratic distribution of A. Bomhard would need to expand his area.

The western area of Bomhard's candidate for the localization of the Nostratic homeland of relatively restricted distribution is the territory of the somewhat earlier Mesolithic and Proto-Neolithic cultures in the Levant and Syria.<sup>64</sup> Both seem to be very promising as the place of very early Indo-European and Palaeosemitic (Afroasiatic) contacts i.e. the scene of their final disintegration: their separation from their common superfamily. The exclusion principle, however, argues that the IE homeland should not be set in an area where there is evidence of prior non-IE occupation. This also relates to Hattic and Hurrian Anatolia, almost the entire Near East (Semitic, Sumerian) and Iran (Elamite).<sup>65</sup> This principle locates the earliest possible IE homeland quite far north of the dark shaded area of Bomhard (Fig. 1), at the present moment without a clear understanding of the great spatial gap of the suggested protohabitat of the ancestors of Early Indo-Europeans in a Nostratic phase and their calculated – mostly European – distribution in the Early Neolithic. As it is well known Renfrew's choice for an IE protohabitat (from a range of prehistoric cultural groups) in the closed area of Catal Hüyük (lying on an expanded territory of Bomhard's Nostratic) was equivocally refuted by linguists, prehistorians and cultural historians using a great number of arguments.<sup>66</sup> The only possibility to reconcile such apparently contradictory suggestions would be pushing back the dating of the dispersal of Proto-Indoeuropeans from a Nostratic protohabitat lying in territories of the Fertile Crescent (see below).

C. Renfrew's model was one of the first that placed the Nostratic homeland into the Near East and dated it to the millennia between 15,000 to 10,000 BC. According to him "the historical background to the Nostratic group would lie in the Near East and

<sup>64</sup> For a recent summary see Cauvin 2000, part I.

<sup>65</sup> J. P. Mallory in Mallory and Adams 1997, 295. – The inhabitants of Susa and Fars might already be considered Elamites c. 3000 BC: Potts 1999, 43. This argument is, of course, valid only from the point of view of the exclusion principle if the Elamite was not part of a hypothetical Elamite-Dravidian protolanguage (i.e. Nostratic) group. In general, Szemerényi 1989, passim.

<sup>66</sup> See Transactions of the Philological Society 87:2, 1989, 158-171, and also Current Anthropology 29:3, 1988, 441-463.

perhaps to the north-east, in the later part of the Pleistocene, over the time range from 15,000 to 10,000 B.C." (Renfrew 1989, 137): "What, then, if the Nostratic hypothesis were right? What if all these languages were indeed related by some familial affinity? What are the implications, if we should be thinking of an early, proto-Nostratic language, spoken perhaps around 15,000 BC in some area within Europe and western Asia, from which all these later languages would in some sense be descended?" (Renfrew 1990, 7.) The suggestion of a Nostratic homeland lying between Levantine and Kurdistan territories is beyond the realms of Pre-, Proto- and Early Neolithic archaeology of the area around and shortly before 10,000 BC. I fully agree with the view that "at a date around 10,000 BC these proto-languages may already have existed as distinct languages or dialects." (Renfrew 1991, 14.)

A totally different picture emerges, however, if we advance (backwards) beyond the 15<sup>th</sup> mill. BC, to Upper Palaeolithic periods.

If someone would incline to accept Bomhard's proposal for an original common Nostratic homeland in the Levantine-Kurdistan area, he/she should automatically subscribe to the theory of Renfrew. It identified East Anatolia as part, although not necessarily all, of the early "homeland" of people speaking a very early form of Indo-European, around 7000 BC (Renfrew 1987, 174). The reception, however, of his theory has not been a favourable one, especially its suggestions concerning Anatolian origins of the Indo-European stock. I fully agree with the wording of O. Szemerényi (without going into details of boring but astonishing archeological trivialities): "I must confess that the whole of [his] statement, obviously of the highest importance for Renfrew's theories, seems to me utterly without a rational basis".<sup>67</sup> Recently a well-informed expert on Levantine matters, the late J. Cauvin remarked on the sensational synthesis of Renfrew 1987 as follows:

In his view the neolithisation of Europe can be understood as a genuine colonisation that started in the seventh millennium from a source in Anatolia and involved the arrival in Europe of new population elements. He considers these as the carriers of the Indo-European proto-languages [language], moving forward in accordance with a "wave of advance" model. More recently, he has extended his theory beyond this family of languages by referring to the so-called 'Nostratic hypothesis' proposed by Russian linguists. At one level, comparative methodology has allowed the definition of families of languages (for example, the 'Indo-European' family) in terms of affinities of vocabulary, morphology of words and phonology, all the languages of a family being derived from a hypothetical common ancestor. Now it is further proposed that certain of the families themselves present affinities that allow them to be grouped in their turn into 'macro-families' that equally point back to a common source. Therefore a 'Nostratic' proto-language was the origin of the Indo-European, Hamito-Semitic, Elamite-Dravidian, Uralic and Altaic families, that is of the great majority of the languages spoken in Europe, Asia and North Africa. Colin Renfrew links his conclusion with a 'four-lobed' theory of the first Near Eastern Neolithic

<sup>67</sup> Szemerényi 1989, 158-164.

peoples,<sup>68</sup> which were, according to him, the Levant, Anatolia, the Zagros and perhaps Turkmenia. Based on an original community of 'Nostratic' language, each of these four lobes may have given rise to one of the four directions of simultaneous agropastoral expansion and linguistic differentiation: Anatolia gave rise to the westward direction (the Balkans and Europe) with Proto-Indo-European, the Levant to the South (Arabia and Africa) with Proto-Semitic, the Zagros towards the east with the Elamo-Dravidian languages, and finally Turkmenia towards central Asia with the dialects of the Uralic and Altaic families [Fig. 2]. It goes without saying that this very attractive theory may very well relate to reality, but, at the present stage of archaeological and linguistic research, it is Renfrew's opinion that it is not possible to consider it as anything more than a speculative hypothesis, only the European direction seeming for the present to be sufficiently supported (Cauvin 2000, 139).

We can add: important parts of his hypothesis (as for example that concerning the origins of the Proto-Greek language from the East, from a Proto-Indo-European developing around Catal Hüyük) must be – and has been – considered false (Makkay 2003a, 9).

No matter how attractive Renfrew's theory of a Turkmenian seat of Proto-Uralic is, it is in the strongest opposition to a variety of suggested Uralic proto-homelands lying on a wide belt between the Altai Mountains and the Baltic (with the exception of unfounded claims for an Uralic homeland in Southern Central Asia in the Mesolithic-Neolithic (Makkay 2003, 240). On the other hand, speculative hypotheses based on informed guesses are the only available method for approaching to linguistic matters of Upper Palaeolithic times. It is interesting to note from this respect that the Hungarian linguist János Harmatta was the first who asserted that the earliest post-glacial habitats of Indo-European people [around ca. 15-10,000 BC] were in the Near East in the neighbourhood of Proto-Semitic peoples (Harmatta 1989, 162 and 173).<sup>69</sup>

<sup>68</sup> Renfrew 1991, 6-7. The theory was first suggested by A. Sherratt and S. Sherratt in 1988: Transactions of the Philological Society 87:2, 1989, Fig. 7 on p. 135, seen here as Fig. 2. According to the recent interpretation of Renfrew, "the current distributions of languages comprising the constituent language families of the hypothetical Nostratic macrofamily (including the Indo-European languages) could plausibly be explained by the wider application of the farming/language dispersal model". Renfrew 2000, 9.

<sup>69</sup> For further comments see Szemerényi 1989, 162 and Renfrew 1989, 173.

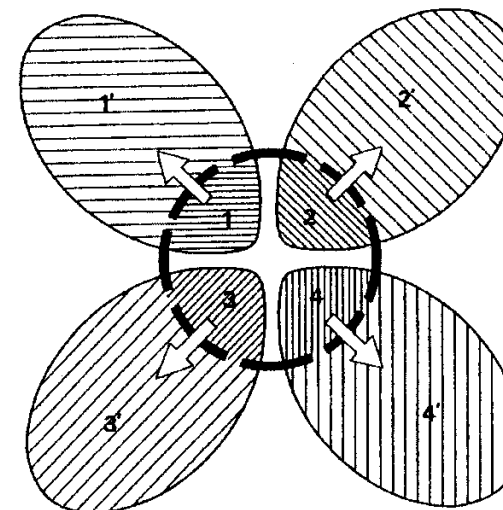


Fig. 2: Schematic representation of farming origins and language dispersal from a nuclear area in Anatolia and around. When a transition to primary farming occurs in a nuclear area with some linguistic diversity (shown within the broken circle), the consequence of the ensuing agricultural dispersal is likely to be linguistic replacement in adjoining areas. The lobes represent the areas of the subsequent language families derived from the corresponding proto-languages. Originally published by Sherratt and Sherratt 1988, Fig. 1A, with comments of Renfrew 1990, Fig. 4 on page 12.

There is an undeniable fact which cannot escape our attention: the Nostratic homeland suggested by Bomhard is identical with both of the mentioned Early Neolithic focuses, and at the same time it is a confined – or if one wishes differently, a relatively confined area as compared to the supposed distribution of our daughter languages in the final Neolithic: two-thirds of Eurasia. Here again a reference should be made to a supplementary note of O. Szemerényi: experts in possession of the relevant evidence should re-examine the question whether the area now selected for the homeland can in fact be proved to have been inhabited at the time required, and that in sufficient numbers to appear as a likely candidate for being the cradle of an enterprising go-ahead race.<sup>70</sup>

Another important factor is that the relatively confined homeland of Bomhard – the Levantine–Cappadocian–Kurdistan belt – is exactly the area where archaeological investigations into the Neolithic have accelerated to an astonishingly swift pace within the last twenty-three years. The century-old tendency continues: such relatively small geographic areas used to be claimed as homelands where spectacular archaeological researches had taken place.

<sup>70</sup> Transactions of the Philological Society 87:2, 1989, 164.

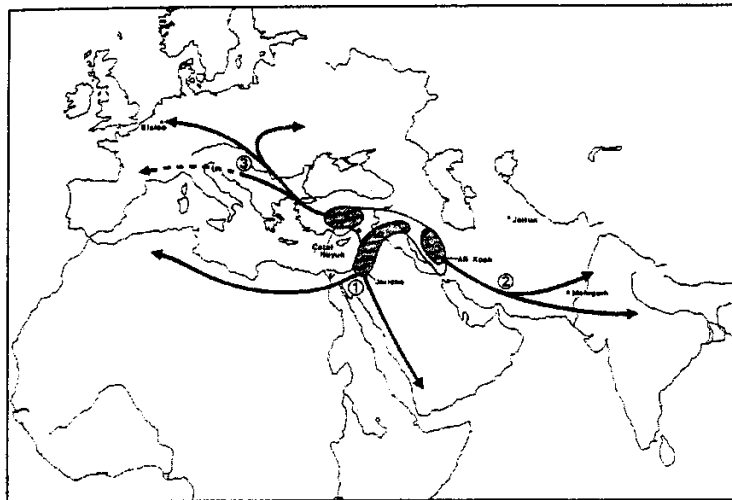


Fig. 3: Hypothetical application of the model seen in Fig. 2 to the Neolithic Near East. It is postulated that around 10,000 BC, Proto-Afro-Asiatic (1), Proto-Elamo-Dravidian (2), and Proto-Indo-European (3) languages were spoken in the Near East within the hatched areas, possibly by 4000 BC. After Renfrew 1990, Fig. 5, page 13.

During the first decades of research in the last third of the 19. century, this was an entirely common view both in investigations about Indo-European and Uralic protohabitats. New and intensive discoveries and excavations took place commonly in a relatively large region of some country, and researchers established a chronology and catalogue of especially funerary remains but also recovered material from settlement sites. An enormous amount of previously unknown archaeological material surfaced, which spurred to create new theories. After some years, based on such new discoveries and knowledge, first archaeologists, and then historical linguists founding their theories on those of the archaeologists, enthusiastically present a certain area, which then becomes the new Indo-European, Uralic, or even Nostratic homeland.

This happened the first time in the middle of the 19<sup>th</sup> century in the case of the Swiss lake dwellings, Megalithic graves and later Bronze Age cultures of Southern Skandinavia, and the Late Neolithic/Early Bronze Age Corded ware culture of Central Germany. Each of these cultures and (mostly confined) regions were presented in turn as the ancestral culture and homeland of the Indo-European peoples. For the study of Finno-Ugric prehistory, this kind of idea of a geographically confined homeland area – the Kama-river region – has been facilitated by the studies of the Ananjino Bronze and Iron

Age graves at the end of the 19. century.<sup>71</sup> Without doubt, the mentioned Central Asiatic theory of the Finno-Ugrians was founded on S. P. Tolstov's thoughts, which leaned on excavations in Khorezm in Central Asia, especially on the so-called Kelteminar lithic technology and contemporary pottery, during World War II and afterwards (László 1961, 103-110).

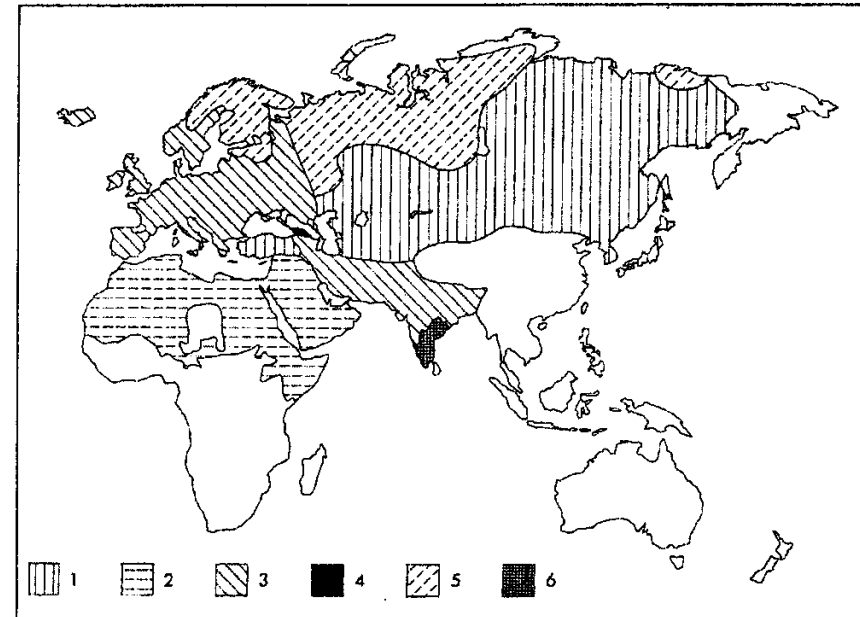


Fig. 4: The present-day distribution of the language groups which were classified by Illich-Svitych within the Nostratic macrofamily. 1: Altaic, 2: Afro-Asiatic, 3: Indo-European, 4: South-Caucasian, 5: Uralic, 6: Dravidian. After Renfrew 1990, Fig. 2 on p. 7.

In the last third of the last century the assumed Indo-European protohabitats were followed by two other regions. The Kurgan region of the South Russian steppe has become quite well (but not completely enough) known by Russian and Ukrainian research (more than 50 thousand excavated graves!). The homeland of the proto-Indo-Europeans became the favorite research topic of M. Gimbutas on the basis of thousands of these so-called Kurgan graves (the exclusive sequence of Copper Age Pit-graves, Bronze Age Catacomb and Timber graves, and pre-Scythian and Scythian tombs) – and on her inadequate knowledge of Soviet and Russian data.

<sup>71</sup> Fodor, 1973, 47-55. Makkay 2003, 242, note 22. In fact, most of the Ananjino graves contain archaeological material – especially of metal – which can be considered remains of Old Iranian (Scythian) groups.

One other, recently preferred area is Anatolia. J. Mellaart's significant discoveries in Hacilar and Çatal Höyük, as well as results of mostly former Halaf culture studies (together with spectacular excavations of the last three decades in the Levant) have given the exclusive basis for Renfrew's – and Gamkrelidze<sup>72</sup> and Ivanov's – previously mentioned location of the Indo-European (and also Nostratic) homelands.

Lying between the suggested homeland areas of the protolanguages proposed in the last two centuries, there were far larger territories than the homelands. Mostly stray finds have been recorded as a result of a nearly total lack of extensive excavations from these extensive territories between the small homelands. Shall we imagine that at the end of the 19<sup>th</sup> century an enormous area, 3,000 kilometer wide, was archaeologically entirely unknown or nearly unknown, and this area separated the Ananjino culture of the Kama region (the Uralic and/or Finno-Ugric homeland in many theories) from the Corded ware groups of Silesia and Czech region (which many had considered as the oldest region where the Indo-European protolanguage was once spoken)? Moreover, it was not even questioned how language contacts could have been possible between two such small culture areas – in this case between the Indo-European and the Uralic/Finno-Ugrian confined homelands – located so far apart. At the same time, there was a lot of discussion about the linguistic interrelations (or a primeval linguistic affinity, within the framework of a kind of Nostratic) between the Indo-European and Uralic protolanguages (the Indo-Uralic hypothesis) – but the question itself is clearly open to further discussion.

Thanks to intensive archaeological field researches of the last decades, the intermediary blank areas on the archaeological maps have disappeared: museums of not only Europe but also Turkey and the Near East are literally overpacked with excavated finds. Numerous other arguments can be also brought forward against the idea of small (confined) Indo-European, Uralic – and also Nostratic – homelands. Gyula László, an excellent Hungarian archaeologist, who once wrote a pioneering book on the archaeology of the earliest Uralians (László 1961), has expressed this the most accurately. He wrote that if we assume that the "proto-people" had really lived in – say – three centers (speaking three different tongues i.e. dialects of a – say – Nostratic superfamily), who had in this case lived in other regions from which there are finds providing proof of continuous settlement? If linguists' assumptions (about very small homelands) were right, then we should presuppose the existence of widely separated and internally homogeneous cultures with dense populations, and that there were extensive inhabited regions between these cultures not only with different material culture but also with languages belonging to totally alien protolanguages. We are then correct in asking the linguists how Uralians and Indo-Europeans, starting from their small homelands – lying on a definable part of the Nostratic protohabitat – could have suddenly spread over such an enormous area and assimilated more sizeable populations, who spoke different protolanguages, and who lived in geographically much larger areas than those from which the

<sup>72</sup> Curiously enough, during the formulation of their Anatolian homeland theory (Gamkrelidze and Ivanov 1995, the original Russian edition 1984) Gamkrelidze held to the old opinion that Indo-European groups penetrated into Anatolia from their Northern homeland across the Caucasus, not later than the end of the third millennium (Gamkrelidze 1970).

Indo-Europeans and Finno-Ugrians come (László 1961,71; László 1987, 37-38). Historical examples indicate, as we know from the Indo-European dialects that have spread to regions where other languages were spoken (for example, Greek and the Anatolian IE-languages), that these kinds of assimilation processes are very slow and a variety of different substrates is large.

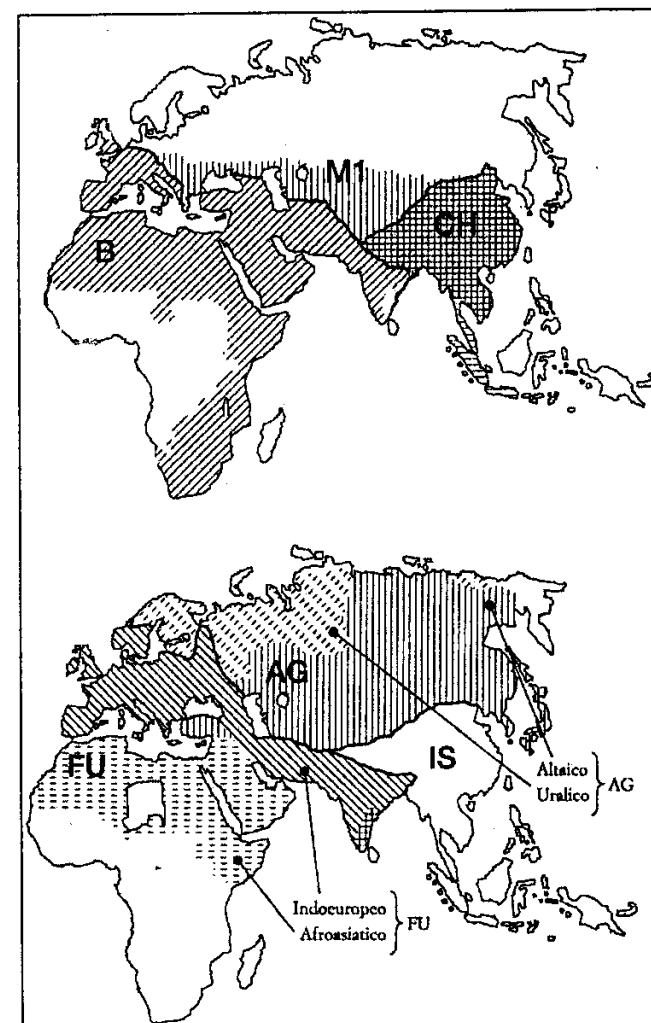


Fig. 5: Maps representing the alleged coincidence of the anthropological (A), archaeological (B) and linguistic (C) models of M. Alinei (1996, Vol. I, Figs. 14.3. and 5-6.) relating the Lower Palaeolithic (5. A-B) and the correlating tripartite division of large language groups (5. C): agglutinative languages (AG), synthetic (inflectional) languages (FU), and analytic (isolating or root) languages (IS).

If this kind of rapid assimilation happened when several dialects of a Nostratic superfamily spread from their relatively small homelands (as for example lobes from their initial distribution territory), then where are the substrate features – expected to be found especially in the peripheral regions – providing proof of this kind of expansion? As it is well known, Central European regions of Indo-European dialects did not show substratal remains (only on their northern peripheries where most part of words indicating substratal influence may belong to Uralic i.e. Lapponic protostratums<sup>73</sup>), while the existence of traces of assimilated local antecedents on territories of the Finno-Ugric languages is theoretically impossible. From this latter point of view, one of the most important and frequently neglected archaeological facts is *the Janistawice man* (Poland), the famous Mesolithic skeleton found in a Tardenoisien grave, attesting to the presence of exact Lapponic anthropological type on the North European Plain, lying far to the south of the suggested prehistoric protohabitat of Lapponic tribes (Makkay 2001, 327-328<sup>74</sup>).

*Small – culturally independent, loosely bounded, or related? – areas of small tribal languages and the convergence theory.*

To sum up, archaeology has developed a great deal since the first formulations of theories about the emergence of protolanguages and localizations of protohabitats, and the site number and complexity of archeological finds has increased in all regions of Eurasia. We can mention two factors for this. One is that there are no longer white spots in an archaeological sense within Europe and Anatolia, except in the most peripheral regions, the most northern areas, and high mountain territories. The regions between the arbitrarily selected centres (selected homelands) are no longer empty, but they are full of sites: burial grounds, settlements and hoards. If someone still maintains that the homeland of the Uralic (or only of the Finno-Ugric) languages should be the Kama-Bjelaya region or between the Pechora and Ob rivers, he must assume that there were other proto-language groups in the zone between the Uralic and Indo-European homelands (for example, between the Kama and Oder rivers). Similarly, if somebody would adhere to the orthodox belief that Central Germany or a part of the Kurgan area in Southern Russia can be considered the original homeland of the Indo-Europeans, he/she must speculate about the nature and linguistic identity of populations living in densely

<sup>73</sup> Makkay 2001, 327-328. On the other hand, there is absolutely no archaeological evidence to prove the presence of a Proto-Lapponic population in Western Siberia in the Palaeolithic, Mesolithic, Neolithic or any other later periods.

<sup>74</sup> For a more detailed analysis of the archaeological and prehistoric problems around the Janistawice man see my 2002 paper published only in Hungarian, pp. 119-129. J. Harmatta was the first who made a reflection about the role of the Janistawice man in questions of the Uralic (Proto-Lapponic) ethnogenesis, unfortunately he viewed it negatively. See his short comment in the *Archaeologiai Értesítő* 94:2, 1967, 215.

settled territories inbetween as for example the well-known Cucuteni-Tripolye culture living east and northeast of the Carpathian Range.

An assumption of contemporary tribal language groups living in geographically small regions does not help much. In this case, we come against many questions of principles. Why would a tribal group speaking the Proto-Uralic language emerge in a small area as a result of Sprachbund-like integration of previously isolated language groups representing different ethnicities when in its neighborhood there lived other groups that were also more or less independent from each other, and integrated themselves into another language group, in this case the Indo-European – or Altaic? – language family? Nor can one know why these dispersed tribal language groups would start suddenly to group themselves into a language family especially in the Kama river region and on the South Russian steppe (or Central Germany) but not elsewhere.

In addition, all of this would have occurred during the Mesolithic, which we know was not a period of cultural integration but rather a period of isolation and divergence into small technocomplexes and ethnic groups. According to different but reliable countings there would have been 10, 54, 90 or even 700 isolated tribal societies living in the ca. one million square kilometer area of the Central European forest zone, or in the later European Finno-Ugric territory of similar extent, and the same number of language units of different genetic origins when integration processes resulting in the formation of Sprachbunds would have started at the dawn of the Mesolithic. The start of the assumed integration processes ought to be dated to the time of the Mesolithic, because supporters and believers of the language league theory equally postulate the existence of parent speech communities, the disintegration of which began around the time of the turn between the Mesolithic and Neolithic periods.

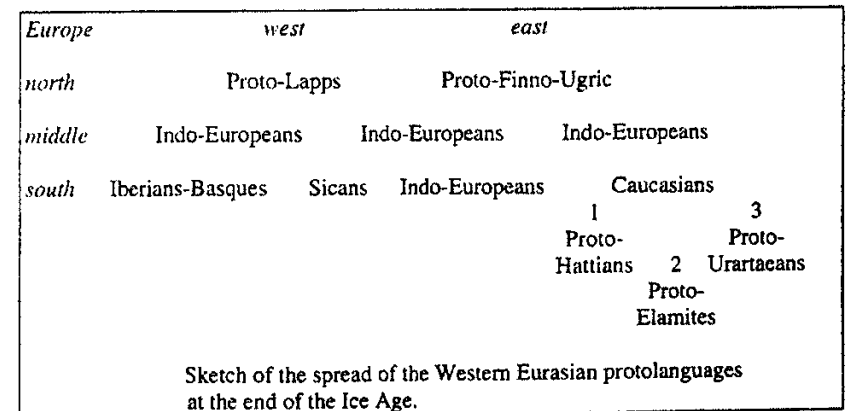


Fig. 6: Sketch of the spread of the Western Eurasian protolanguages at the end of the Ice Age as represented in the model of M. Gábori and J. Harmatta. After Makkay 2000, Fig. 1 on p. 73.



Of course, the existence of such vast territories between proposed homelands might offer some support for the Sprachbund theory, if one supposed that a number of tribal groups speaking independent (or only partly related) tribal tongues of unknown language types, lineages and stages lived in these territories. However, there is a general consideration that should be accounted for when we come to consider some specific aspects. Supporters of the Sprachbund theory usually assign the period of large-scale integration of tribal or even so-called group languages into larger – protolanguage or language family units to Pre-Neolithic i.e. Mesolithic times. On the other hand, the Eurasian Mesolithic is associated with a gradual adaptation to local resources and conditions in response to post-glacial environmental changes. Regional specialization and rationalization may be observed in the sphere of food-gathering and the various communities could follow various trajectories in space and time.<sup>75</sup>

This adaptation finally led to the diversification of the Mesolithic material and spiritual culture, and as a result the Mesolithic assemblages show great variation from region to region. This means that parallel with the assumed language *integration* there would be a cultural *disintegration* and *differentiation*. Moreover, correlating with the assumed language *integration processes during times of cultural disintegration* – the Sprachbund theory continues – there developed true language families, among others the IE and U/FU parent languages. But the supporters of the Sprachbund theory never indicate the causes and reasons for the apparently unwarranted and sudden change in the course of developments that then took place: after the postulated emergence of parent languages by a way of ethnocultural and language integration why did the process abruptly change direction without any apparent reason, and the final differentiation of parent languages begin? Nor is it possible to deny that these diverging processes (i.e. the final separation of IE or U/FU languages) actually took place, since the differentiation of the speech communities of the parent languages into separate daughter tongues has continued ever since the Neolithic, and it can be clearly documented as far back as the first occurrence of written IE (Hittite) linguistic sources from the early second millennium BC.

As a result of these and other considerations, suggested Mesolithic processes and their language outcomes cannot be reconstructed within the framework of a relatively confined and late Nostratic homeland in the Mesolithic.

The assumed area of A. Bomhard, however, gains credibility if we advance backwards into earlier phases of the Upper Palaeolithic. At such an early time (during the supposedly first arrival of relatively small groups of *Homo sapiens* from Northern Africa) a confined area is particularly advantageous to further (biological, material and linguistic) development as an original centre or starting area. Prospects and perspectives of Turkish prehistory in this part of the country will surely contribute to the success of discovery of solid proofs.<sup>76</sup>

<sup>75</sup> Charvát 2002, 6-12.

<sup>76</sup> See especially papers in Özdoğan et al. 2003. Recently see also Aurenche et al. 2004, esp. Papers about the transition from the Epipalaeolithic to the Neolithic.

Accordingly, it seems to me that a much better case could be made out for this decisive change at the much earlier time of the first appearance of *Homo sapiens fossilis* at the beginning of the Upper Palaeolithic well before 15,000 BC. It can be assumed that the spread of Modern Man from Africa can be equated with the initial dispersal of the genetic precursor of Nostratic languages. In this model *Homo sapiens* would displace the earlier Hominid populations of Asia and of Europe (*Homo erectus* and *Homo Neanderthalensis*) around 35-40,000 years ago or even much earlier.<sup>77</sup> According to recent researches the whole development in the direction of the presently existing human species, *Homo sapiens sapiens*, seems to have taken place in Africa, perhaps from as early as 100,000 years ago. From that continent our ancestors first crossed to South-West Asia and then continued to Europe (35,000 years ago?). On their way they might have integrated and completely assimilated the communities of classical Neanderthals of the Near East (Charvát 2002, 3). Such assimilating processes would have led to the sapientization of Neanderthals, and this can give us the possibility to make further suggestions about the origins of Uralic peoples (Makkay 2000, 78-79).

Integration and assimilation can be applied here with two reservations. The first is that a full integration and assimilation extended over territories of non-Nostratic languages which were occupied during the following development and distribution of Nostratic groups including their very late and large scale spread during modern colonizations, mostly at the expense of small tribal languages of Asia and Africa. State languages supported by established religions (China, Japan, India, the Moslim world) have mostly remained unaffected.

Secondly, integration and assimilation processes include ousting of groups of indigenous tribes from their native lands lying on periferies of expanding Nostratic languages as for example the Lapponic in Scandinavia and some Palaeoasiatic languages of Northern Asia. This process continues in these first years of the third Millennium.

Even this assumption – and also a suggested Nostratic homeland in Southern and Eastern Turkey – cannot solve complicated questions of the Uralic and Indo-European interrelations, whether they were genetically related (Nostratic) languages or of independent origin (including now also the convergence theory).

At this moment nothing more can be said about these questions in a responsible manner. My view briefly described here says that the time depth of the formation of the Indo-European groups must be pushed back at least to the final phases of the Upper (Late) Palaeolithic, but in the case of Proto-Uralic probably to even earlier times, to the Middle Palaeolithic age of *Homo sapiens presapiens*, archaic *Homo sapiens* or *Homo sapiens neanderthalensis*, or its equivalent: *the sapientized Neanderthal men*. The area of emergence of these (Indo-European and Uralic) peoples and their languages is a question to be decided: did both come to Europe from a common Near Eastern centre – from a Nostratic homeland – together with the dispersion of the first Upper Palaeolithic cultures, the Aurignacien and Gravettian, or the ancestors of the Proto-Uralic stem were the local pre-Aurignacien (Middle Palaeolithic) tribes living on the southern border of the Ice Cap

<sup>77</sup> Szemerényi 1989, 159.

surviving during the Gravettian period as an independent tundra occurrence.<sup>78</sup> Such a Near Eastern origin of the Indo-European branch during the beginning of the Upper Paleolithic suggested by Harmatta and Miklós Gábori had obviously preceded the Renfrew model that was considered a novelty at the time, by almost a decade.<sup>79</sup>

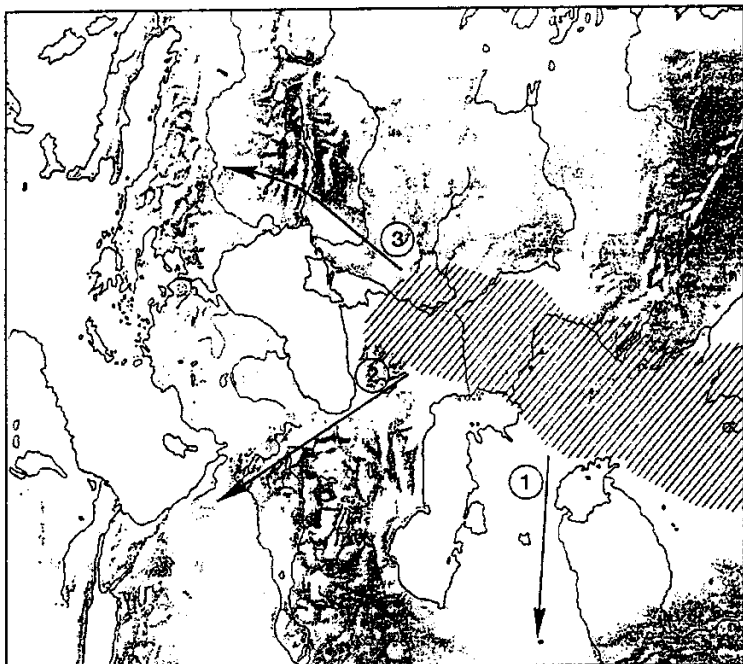


Fig. 7: the Nuclear Zone of the Eurasian steppes (east of the Don river) at the very beginning of the Upper Palaeolithic. After Otte 1997, Fig. 5.3. on p. 79.

A strongly opposing view was advanced by M. Otte in his short contribution on questions of changes at the end of the Lower and again the Middle Paleolithic in Eurasia (Otte 1997, 74-76). According to him, at the end of the Lower Palaeolithic multiple technological innovations appeared evoking recognizable distinct traditions maintained by autonomous ethnic groups. During the Middle Palaeolithic Mousterian times (between 100,000 and 50,000) these technical innovations multiply and the density of human sites increases. This phase is crucial in Europe, because it directly precedes the appearance of anatomically modern man and what is called the 'Upper Palaeolithic' way of life. Evolutionary steps happened slowly and on the outside probably in the steppes of Eurasia

where the environment is [was?] favourable (contrary to the curious theory of the African Eve). One of the consequences was that the demographic rate increased and led to further movements (Fig. 7). All these elements contributed to the evolution of thinking and of language. The time depth of these developments strongly need modification of the 'short' theory, i.e. the Kurgan theory which locates the early Indo-European distribution territory within the western half of the Eurasian steppe. Otte took the view that the Kurgan theory cannot long withstand criticism, and also the 'long' theory presented by Renfrew – based on the diffusion of agriculture – is not considered more convincing by him, 'despite of its evident charm' (Otte 1997, 76).

Otte has put forward his model based on his 'Eurasian Steppe Palaeolithic Revolution' which can be called the 'superlong' theory. To sum it up, it says that following to the transition to anatomically modern man on the Eurasian steppes diffusion occurred between 40 and 35,000 years ago, towards Northern India (arrow 1), the Levant (Aurignacian around 32,000; arrow 2) and the Balkans (around 40,000; arrow 3), then along the Mediterranean route. "This radical break in the archaeological evolution is the only one that can explain a profound ethnic modification equivalent to the appearance of the Indo-European peoples." Later processes during the European Upper Palaeolithic and especially the Magdalenian cultures probably led to the formation of the Indo-European language and cultures (Otte 1997, 80).

Such a synthesis of archaeological and linguistic processes is a strong contradiction of all what the Nostratic hypothesis and its archaeological interpretation says about a suggested Nostratic homeland in the area between the Levant and Western Iran, dated to (hitherto undetermined) periods of the Upper Palaeolithic. Any further progress to achieving a better understanding clearly depends on reconciling oppositely forwarded beliefs and opinions on the origins of modern man, its archaeological cultures and time depths.

<sup>78</sup> For more details see my 2000 paper, 72.

<sup>79</sup> Makkay 2000, 73-74, with further reference to 1976, 1977 and 1981 papers of the late Miklós Gábori.

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## VOWEL HARMONY AND OTHER FORMS OF VOCALIC ASSIMILATION IN MONGOLIC

Peter A. Michalove

1. It was in the 19<sup>th</sup> century that scholars, primarily native speakers of Indo-European languages, began to systematically investigate the Uralic and Altaic languages and discovered the apparently unusual feature of vowel harmony. They concluded, on the basis of the Uralic and Altaic languages, that vowel harmony was a form of [+back] agreement, both within the stem and between the stem and suffixes. (More recent work, however, has shown that vowel harmony in the Tungusic languages goes back to an ATR system. See Ard 1980.) Earlier researchers also concluded, on the basis of these languages, that vowel harmony is an exclusively progressive (rightward from an initial trigger) process.

Nowadays of course, we know that vowel harmony is not such an exotic feature; it occurs in numerous African, native American, and other languages. And despite the difficulty of defining vowel harmony cross-linguistically (see Anderson 1980), there is no doubt that it is a type of vocalic assimilation, a very common phenomenon. We also know that vowel harmony is not exclusively progressive. There are examples of vowel harmony spreading bidirectionally from a non-initial trigger syllable, such as the Bantu language Kálòŋ, spoken in Cameroon. There are also cases of dominant/recessive vowel harmony, such as Chukchi and Koryak, spoken in the Russian northeast. In these languages a dominant set of vowels is opposed to a recessive set: the phonological word contains vowels from the recessive set only if all of the vowels in the word are recessive. If the word contains a dominant vowel in any position, then the other vowels harmonize with it by shifting the relevant features to their dominant counterparts. Thus, a dominant vowel may trigger vowel harmony progressively (rightwards) and regressively (leftwards).

This paper will deal with the question of directionality in Mongolian vowel harmony and other forms of vocalic assimilation. While no one disputes that vowel harmony operates in an exclusively progressive direction in Mongolian, it is striking that almost all of the other cases of vowel assimilation in Mongolian are regressive. As the title of this paper indicates, we see vowel harmony simply as a particular form of vocalic assimilation. The question before us, then, is to find a consistent explanation of vowel assimilation that covers both the progressive vowel harmony, as well as the other, overwhelmingly regressive cases of vowel assimilation in Mongolian.

A further note about terminology is in order here. Classical Mongolian refers to the literary language of the 17<sup>th</sup> and 18<sup>th</sup> centuries, written in the Uyghur