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On the Methodological Principles of Reconstruction with Special Reference to Place-names of South Siberia

In many centuries of use all languages have changed greatly; place-names often preserved old forms and meanings although they have suffered natural contractions and odd distortions which can easily mislead a student. But considerable progress has been made in recent years in submitting a large corpus of Siberian place-name data to an exhaustive and systematic analysis and some of what is now known is relevant to the subject-matter of this paper.

In order to restore the original forms of many place-names that cannot be explained on the basis of the language being spoken in the area one must resort to reconstruction as a theory and a research technique. It is also possible that a modern place-name might sometimes appear to be explicable from the language actually spoken but historically the explanation will be wrong because the name has been altered through folk etymology. So reconstruction needs to be done even for names that look straightforwardly interpretable and not just obscure ones. An English example is a village called *Upper Slaughter*. This looks like the modern word *slaughter* 'killing', but in fact the name has been altered from old words meaning 'muddy place'.

Just a few words on the precise significance of language reconstruction and its role in place-name study. Reconstruction as a linguistic procedure is an integral part of comparative studies in linguistics. Language reconstruction in its strict sense aims at historical interpretation of particular forms and meanings in each member of a family of related languages, the result being hypothetically constructed proto-forms. Actually internal reconstruction is a part of historical linguistics beside comparative reconstruction.

Having used the language reconstruction as a background, the onomastics advances its own methodology, principles and procedures. In outlining an onomastic theory of reconstruction it is more convenient to do it in two stages: first, to

represent onomastic reconstruction in general; second, to represent the practical application of the theory. The objective of a reconstruction theory in onomastics is to describe the reconstruction and interrelations of place-name phenomena. The theory must also define what these reconstruction properties and interrelations are. Furthermore, since the scope of a reconstruction theory in onomastics is infinite (there being an unlimited number of obscure place-names on the earth), the theory itself will have to make use of the structure and categories of the language. The aims guiding theory and research into unrecorded place-names (where early written records do not exist) and reconstruction of their early appearance should be primarily linguistic rather than historical, geographical, etc. Reconstruction in onomastics involves the use of techniques and theoretical concepts to justify its claim to be called a discipline. The concepts of onomastic reconstruction are formed by notions and procedures with systematic and hierarchic relations between them. Internal reconstruction serves to investigate trends in phonetic, morphological, semantic adaptation the place-names have undergone in a receiving language.

External reconstruction of place-names is in its turn built up on identical forms of place-names existing somewhere else. The transference of place-names from the old homeland to the new one has been so widely practised by all people wherever they have gone that it seems a natural and obvious method of naming. There has been a strong and natural tendency to name the area in which newcomers have settled after the place-names of their homeland and to leave behind place-names of their language with the part of the population which has not migrated. Since the same elements, meanings, forms are repeated right across both areas and many of the place-names are common to both, this tendency can be used to test etymologies so as to confirm or discard the chosen ones by means of their replicas from the former homelands. The significance of this procedure being used for place-name verification has not been as widely appreciated as it ought to be.

Ethnic contacts on the place-name level can be assessed in terms of quality (whether they take place between related or distant languages) and also in terms of quantity, judging from the direction (epicentric or peripheral) of the place-name migration, availability of dense and vast areas, clusters, chains, lacunas, etc.

Charts are an indispensable part of the investigation, a sort of transfer from fragmental justifications of separate links in the reconstruction of the original form of a name to a complete picture of ethnic interaction over many years.

As a final step we are to resort on the historical interpretation on the basis of all restored place-names and charts of their distribution in the region under study. Place-names of the Mountain Altai territory (at present the Altai Republic as a part of the Russian Federation in Siberia) have been the subject of our investigation for at least 30 years. Out of 7,400 place-names of the Mountain Altai territory we have at our disposal at present slightly more than 4,500 correlate with the lexemes of the Altai (the language of the Altai people) and Russian

languages and their dialects. Both languages spoken in the region have absorbed into themselves place-names of the former inhabitants thus becoming receiving ones. At present, the Altai and Russian place-names constitute the top stratum in the place-name continuum.

The problem is that no place-name in South Siberia was written down before the sixteenth century and the earliest complete written records of geographical names were made by the Russians at least three centuries after this. As many names in Siberia have existed for centuries in oral tradition, common practice of place-name investigation is out of the question here. With respect to European names a scholar must first make a collection of the early forms of each name as wide as possible and only then deal with the specific problems confronting him in the light of a thorough knowledge of all languages involved in the formation of place-names in the region, from the earliest times to the present day. To penetrate the often misleading appearances and to do a careful analysis of changes which have taken place in the development of a place-name, scholars also need a profound knowledge of history, geography and archeology. No place-name scholar would deny the importance of testing his etymologies on the spot, and if the interpretation proposed does not fit the topography, the explanation must be found or the etymology must be rejected.

The point to be made here is that many places of the Altai land were known to the Russian cartographers in the form of their aboriginal pronunciation, that is why place-names are often found in a bewildering variety of spellings, some undoubtedly erroneous but all of them attempting to express the Altai people's pronunciation. The spelling variations of place-names on geographical maps and in historical and other documents, is often a sign of ignorance of the Altai language and mispronunciation of native names on the part of the Russians. The better the ear of a Russian in charge of writing down the Altai names was, the closer were these place-names to the original forms. Variation in the spelling in the same document is sometimes due to an error on the part of the transcriber. Philologists must work on such material, they have to interpret such spellings, eliminate errors and determine the original form of the name and then, and only then, they can attempt an explanation. The older the forms are and the greater their number is, the more hope there is of success.

Besides, there are many pre-Altai place-names in the territory. The ancient names were remodelled by the Altai people who had inherited them from their predecessors. In default of early written records on Siberian place-names the etymology of the pre-Altai place-names is a difficult and complicated problem. Many of them are mysterious and unintelligible, difficult to be identified. Thus, the establishment of the pedigree of a place-name does not necessarily solve the problem of its etymology.

As we have found, place-names in Altai have originated from different sources, the main ones in geographical nomenclature being respectively Russian, Mon-

golian, Altai, Samoyedic, Finno-Ugric and possibly Yeniseic. Although the first evidence of its earliest settlers goes back hundreds and thousands of years (the age of the Ulala stone tools is over 300,000 years), the problem of the depth in place-name reconstruction and chronology of the strata, is one of the blurred gaps in our knowledge and it requires the support of special techniques for its study. Also the necessity of tracing the history of Siberian place-names, and Mountain Altai ones in particular, is now generally recognized.

The essential principles upon which the study of place-names with no written records from the past should be based were laid down over 40 years ago by Prof. Dulson. All ardent disciples of his have followed them and, in course of time, other principles and techniques have been added. Siberian place-name scholars adhered to these principles seeing in them a possibility to solve their own problems. Our particular case was to formulate the five criteria of the reliability of place-name reconstruction.¹

What characterizes the Dulson School of place-name studies is a great concern about names of indigenous and other linguistic origin on the vast expanses of Siberia and their investigation by employing specific charts. Their purpose is to give as complete a picture of the distribution of an onomastic phenomenon as possible. The basis of all the charts are card-indexes arranged both in direct and in inverse alphabetical order. The card-indexes have been compiled from different sources primarily from geographical maps of West and East Siberia and the adjacent regions in a scale of 1:1,000,000. There is a place-name, an object it refers to, various spellings of the place-name and coordinates on each card. It is natural for Siberian place-name scholars by virtue of their bent of mind, training and special interests, to adopt a particular viewpoint on the charts and consider their readings one of the most convincing proofs in onomastics. A simple principle of isogloss counts, behind which lie years of close study and research, helped Prof. Dulson to open up new prospects for the history of Siberia. None of the more recent theories have been worked out to the point where it could be evaluated as having done as much as isogloss counts, which exerted a profound influence upon the development of onomastic evidence. Isogloss counts came to be accepted by many prominent scholars as the very basis not only of the onomastic method, but of the whole discipline of historical onomastics.

On the basis of all available data and by applying the techniques elaborated and formulated by Prof. Dulson and his disciples it seems possible to reconstruct, with a fair degree of confidence, a great deal of early place-names in Siberia. Under Prof. Dulson's guidance place-names of various Siberian languages have been investigated by his disciples: Kalinina (the Khant place-names), Becker

¹ O. T. Molchanova. *Metod vnutrennej rekonstruktsii v toponimičeskoj etimologii*. – V sb.: *Materialy Vsesojuznoj konferentsii "Teoriya lingvističeskoj rekonstruktsii"* (Moskva, 11–13 janvarja 1988 g.), M., 1987, pp. 50–51.

(the Selkup place-names), Popova (the Kazakh place-names), Gritsenko (the Yakut place-names), Bonjukhov (the Shor place-names), Zhevlov (the Khakass place-names), Vorob'ova (the Russian place-names), Koptelov (the Nganasan place-names), Jurgin (the Evenk place-names), Molchanova (the Altai place-names), etc. They did not only study place-names as linguistic phenomena but tried to use them for the interpretation of historical events and place-name inheritance. There is currently a good deal of research being carried out into the Siberian prehistoric place-names (Maloletko), a problem that fascinated the human mind from at least the middle of the 19th century.

Scholars credit the Dulson School with a number of salutary effects on place-name investigation in general and Siberian place-names in particular. And still there is a vast accumulation of material to be studied.

It is in the tradition of the school not only to collect a large enough corpus of naturally occurring data, but also to cover an enormous amount of literature with such care that takes a huge investment of time. The onomastics is a recognizably distinct and expanding discipline, which draws upon linguistics, history, geography, archeology, sociopsychology but cannot be classified under any of them. It has its own principles, methodology, approaches. It is generally accepted that each name needs consideration in the light of all available evidence provided by history, geography, linguistics, even botany, etc. Linguists studying place-names are no longer as assertive as they used to be about the scientific status of their own discipline in the field. The necessity of a historical basis for philological speculations about place-names is generally recognized though, for some reasons, the historical evidence in Altai is scanty and disappointing. It cannot help a place-name scholar a lot both in ancient and in medieval history as far as some particular facts or places are concerned. In most cases general observations are all that can be found in books and journals on the history of a small Siberian place. Sometimes historians use place-names to illustrate particular events and even try to build up etymologies of their own. If they take the view that the only kind of a valid explanation in onomastics is the kind of explanation that a historian might give, they begin to flounder badly once they enter on the dangerous path of etymology. Fanciful etymologies, numerous in Siberia, are due to self-assurance, obsession with preconceived ideas about how a place-name study should be done.

Archaeology in the Altai region has provided abundant material bearing on the age of the Ulala burial mounds, ancient irrigation canals representing agriculture unknown to the present inhabitants (in some places of the Middle and South Altai), the Pazyryk findings of Scythian burial mounds, etc. It is expected to throw new light on ancient place-names of the Altai region and yet it can only point to main lines of inquiry.

In recent years work done by linguists, geographers, historians, archeologists and others has thrown considerable light on the origin of Siberian place-names and much was dismissed as myth and fiction.

The present paper is concerned mostly with linguistic criteria for etymological reliability and techniques of historical reconstruction by means of the comparative method. First and foremost one needs to take into account the laws of phonetic, lexical, grammatical adaptation by means of a receiving language. We illustrate it by the Mongolian-Altai place-name situation.

It is supposed by many scholars that the Altai language, as one of the Turkic languages, and the Mongolian languages are genetically, historically and geographically related. They have a great variety of common words especially among those denoting natural objects such as earth, rocks and rivers. These feature words might show, as some scholars claim, that the Altai and Mongolian languages, among a number of others, are divergent variations, descendants of a common ancestral language, and hence the existence of the same basic words in other Altaic languages is a conclusive proof of their distant relationship. Thus, the common bulk of vocabulary in the Altai and Mongolian languages is due both to borrowings from each other and to the fact that many Altai and Mongolian words are descended from the same prehistoric progenitor. The latter factor accounts for parallel forms and meanings found in other Altai languages. Besides, there are cases when a common word has dropped out of use in the Altai language and had been retained in place-names.

One of the language universals is that a place-name thesaurus (= a corpus of all lexemes constituting a place-name nomenclature in a given region) contains words primarily relating to agricultural and pastoral occupations, geographical habitat, social and religious institutions and also those denoting flora and fauna, climatic conditions, etc. Just these words, revealing close relation and likeness between the Altai and Mongolian languages, are taken for place-name formation. That is the reason that many place-names such as *Arjan/Arshan*; *Altın-Qadasun/Altan γadasu aγula*; *Bay-Kool/Bayan γool*; *Boro/Boro*; *Kara/Qara*; *Kara-Kool/Qara γool*, etc. are so similar that they may be felt as belonging to either language.

There is little doubt that for a long time Altai and Mongol tribes have lived side by side and that this intercourse has resulted in the adoption of a numbers of Mongol names by the Altai people. The Altai and Mongol nomads would have explored their wide domains and found it desirable to give names to the valleys, pastures, grasslands, where their flocks or herds could graze, to the springs, rivers, lakes, which supplied them with water, to the woods on slopes of mountains, ridges, gullies, where they could get timber or firewood or where they knew they would find deer or wildboars for food, to the plateaus, passes, crevasses, scree, cols, through which they would wander in search of pasture-land for their flocks or herds. Nomads, as they are, would give names gradually and spontaneously as need arose. Charts show the spread of both languages over a large area implying great movement of peoples. Mongolian tribes were numerous. A glance at the number of the Mongolian place-name elements on charts enables to judge how

thickly the vast steppes of Asia were settled by the Mongols. They far exceeded the Altai tribes in number.

With explicit partial relatedness and strong typological affinity between the Turkic and Mongolian languages one might expect a better phonetic conservation of the Mongolian place-names in the Altai language and more transformations in semantics.

We should pay particular attention to the words used by the Altai and Mongol forefathers to determine the main features of their countries. They are numerous and varied and still having the same bases due to many affinities between the Mongol and the Turkic languages. Since many scholars were persuaded that these two language groups belong to the Altaic language family, the feature terms have long been used to account for the genetic relationship of two or more attested languages. A study of these words can bring us closer to the boundaries of the steppe they inhabited and enable us to take glimpse of the area they saw and used.

Among the Altai place-names the element *mukor* (*mukhur*, *mukur*) is rather common. Native speakers have trouble in explaining its meaning and consider place-names with this element as foreign and vague. Sometimes they explain *mukor/mukur* as 'the distance between the thumb and bent index finger, i.e. the measure of 1 3/4 inches', *mokor*- 'to get blunt'. An Oirot-Russian and Russian-Altai dictionaries have only *moko* 'blunt'. Verbitski's dictionary includes *moko*- 'to become blunt; to be exhausted; to lose strength'; *moku* 'a blockhead'; *mokur* (Telengit) 'blunt (about a tip)'. In a Kyrgyz-Russian dictionary one might find *mukur* 'squab' and in a Touvinian-Russian dictionary — *mugur* 'blunt'. Konkapajev² finds the word among the Kazakhs and explains its meaning in the following way: "*Mukyr* (*muukhyr*; in literature and on maps — *mukhor*, *mukur*) is a small shallow steppe river that seldom brings its waters to a waterbody or bigger river and often ends blindly in the steppe, breaking up into separate pools or becoming completely dry The term is common in proper names of above mentioned rivers both in Kazakhstan and in Mongolia". There is a good reason to think that the presented correlation will expand considerably if we add examples from Mongolian and Manchu Tungus languages: Evenk *muku*-, *mukurge*- '1) to become blunt; 2) to break (about a knife)'; Solon *mohoo* 'blunt (about a knife)', *mohor* 'hornless; pollard'; Even *muk*- 'to cut, chop'; Manchu *mokholo* 'hornless, pollard (about a bull)', *mokhoto*- 'dock-tailed', *moqto/moqtu* '1) blunt, being cut, broken (about a top), 2) dock-tailed, tailless, 3) hornless, pollard'; Wr.-Mong. *mogutur/muxur* 'blunt, hornless', *moru*- 'to get blunt', *moruga* 'blunt'; Mong. *mogotor*; *mukhar* '1) blunt, 2) hornless', *mokho*- 'to get blunt', *mokhoo* 'blunt', *mukhar* '1) hornless, 2) dock-tailed, 3) short'; Kalm. *mokho* 'blunt'; Yakut *mongotokh/monotokh/mungatakh/munutakh* 'blunt, inert'.

² G. K. Konkapajev. *Kazakhskije narodnyje geografičeskiye terminy*, Izv. AN Kazakh. SSR. Vyp. 3, N 99, ser. geogr., Alma-Aty 1951, p. 29.

It is a fairly safe assumption that in Altai the form *mukur* is known to a part of the inhabitants not only in the meaning given above but also in the meaning cited for other Turkic and Mongolian languages as well. Perhaps one can also concede that in a number of place-names *mukur* has been taken over by the Altai people from the Mongol or Kalmyk speakers (cf. Mongol own place-names with the element in question — *Muqur bulaγ*, *Muqur bulaγ-un oboγ-a*, *Muqur deresü*, *Muqur ergiyin adaγ*, *Muqur γool*, *Muqur oboγ-a*, *Muqur tegeli*, *Muqur uliyasutu*, *Muqur-un-γool*, *Muqur-yin ayil*, *Muqurbulaγ-yin jegün kir-a-yin oboγ-a*, etc.). Unlike in Kazakhstan, *mukur* has not acquired any additional (geographical) meaning in the Altai region, and it is used in its general sense ('blunt, short'). The Altai own form *moko* is very rare in place-names — *Moko-Kaya*, whereas the forms with *mukur* are numerous — *Mukur* (2 rivers, 2 ravines, settlement), *Mukur-Açık* (ravine, river), *Mukur-Açık-Oroy* (ravine), *Mukur-Kara-Kem* (river), *Mukur-Kobi* (ravine), *Mukur-Oyık* (river), *Mukur-Oozı* (river), *Mukur-Sal-T'ok* (ravine, river), *Mukur-Tabatı* (pass), *Mukur-Tarkattı* (valley), *Mukur-Tuu* (ravine, river), *Mukur-Çargy* (settlement), *Mukur-Şibilik* (ravine, river).

In place-name reconstruction another point should also be borne in mind viz, the correlation between place-name systems of both languages, "since all place-names have come to us through a known living language, a researcher has to deal with the problem of coordination of their sound form and morphological structure in former times. It puts in the forefront the need to study structural typology and semantic models in place-name nomenclature in all those living languages that have participated in forming or remodelling in the place-names the territory under study. If that particular language served only as transmitter of a place-name taken from a predecessor speaking another language, then a study of it would make it possible to restore hypothetically the original appearance of the word".³

We tacitly accept the viewpoint according to which there is a manifold typological convergence between the Turkic and Mongolian languages. First, both languages form most place-names on a similar pattern, in which a noun is preceded by a defining adjective or a dependent noun. Second, in approximately 70% of cases a place-name is marked by a topographical term denoting either a positive or negative form of relief. Third, it is common knowledge that in all languages metaphors occupy an important place in topographical terminology, and the readiest source for them has always been the human body, since "theoretically anthropomorphism of ancient thinking tallies with the immanent metaphoricality of human language as a whole".⁴ In the Turkic and Mongolian world the universality in applying many names of the human body parts to natural features has been strengthened.

³ A. P. Dulson, *Dorusskoe naselenie Zapadnoj Sibiri*. — V kn.: *Voprosy istorii Sibiri i Daln'ego Vostoka*. Novosibirsk, 1961, p. 362.

⁴ O. N. Trubačov. *Slavističeskij kommentarij k rekonstruktsii indoevropskoj jazykovej i kulturnoj drevnosti*. — in: *Materialy Vsesojuznoj konferentsii "Teoriya lingvističeskoj rekonstruktsii"* (Moskva, 11–13 janvarja 1988 g.), Moskva 1987, p. 62.

Words denoting head and its top, back, bald spot; eye, eyebrow, forehead, nose, mouth, ear, neck, cheek, temple, throat, shoulder, back, chest, armpit, waist, elbow, foot, calf, shin, loins, heart, gut, entrails, body itself, sole, etc. fall within the scope of topographical terminology. Among Turks and Mongols associations connected with other human body parts are also rooted in place-naming. They choose these associations as the most suitable indication of proper naming. They are hair, tongue, tooth, leg, buttock, finger, palm, ring finger, jaw, shoulder blade, rib, forearm, man's plait, navel, lungs, beard, artery, knee-cap, breast, etc. Some parts of the animal body can be added to them: horn, tail, a hair from a horse's mane or tail, pastern, mane, rennet bag, a camel hump, ventricle, hoof, wither, etc. It is customary to assume that giving a name to a particular natural feature is accomplished either by reflection, attachment, repetition of some isolated properties of the feature in the name (mimetism — *T'albak-T'aya* 'plane, wide rock', *Kayalu-Çoku* 'mountain with pointed summit and rocks', *Orto-Kır* 'middle mountain', *Sarı-Suu* 'yellow river', etc.) or by describing features from the realm of nature with the help of words from a different realm on the basis of some perceived similarity in form, size, configuration (associatism — *Koltuk* 'armpit', *Uy-Tag* 'cow-mountain', *Til* 'tongue'). The latter is present both in topographical terminology and in a great many descriptive parts of compound names (anthropomorphic metaphor), serving to indicate what is really being referred to. Fourth, approximately 30% lexemes with high and medium frequencies occurring in the Turkic and Mongolian place-name thesauruses (especially in the lexical-semantic groups (LSG) "Colour", "Quantity", "Spatial distribution", "Size", "Shape") are Turkic and Mongolian common words. In the Turkic world these items are genetically common, close in content, with high frequency occurrence. Fifth, in any case, ethnopsychology plays a key role in the choice of an onomasiological determinant. It dictates the Turkic and Mongolian peoples the preference for giving in the first element of a compound place-name the words denoting the surface of the earth (first place), colour (second), shape (third), quantity (fourth), size (fifth), items of spiritual culture (sixth), etc. as distinguishing, characterizing, isolating features of natural objects with a topographical term as the last element. With the forms not marked by a topographical term the following designations have served as the first element: quantity (first place), colour (second), shape (third), names of tribes (fourth), size (fifth), general physical state (sixth), etc. in Turkic and Mongolian compound place-names.

Furthermore, the reliability of place-name reconstruction is supported by quantitative indices: a great accumulation of similar place-names makes the evidence upon which they are brought more convincing whereas scanty (or even single) place-names need further proofs in most cases and just the same they remain dubious and questionable.

As an example let us take the river Katun', a left tributary of the Ob (in the Altai language *Kadın/Qadın*). On one of the Chinese maps it has been noted as

Şağun as recorded by G e l m e r s e n in 1840. The Katun' is the main river in the Mountain Altai territory, it flows from the cirque on the southern slope of the peak Belukha. The Katun' rounds the Katunski range and directs its course to the North, where it flows together with the Bija. Its length is about 680 kms. There are several explanations for the name. The Altai people associate it with *kadın* 'a tsarina, khansha, lady'. P o k r o v s k a j a,⁵ having traced the historical development of the word in the Turkic languages, points out that "*kadın/khatun* is known to the majority of modern Turkic languages. It also occurs in many manuscripts: *qatun* 'lady (princess)'; *x̣atun* 'a wife of the noble man'. Thus, in old Turkic manuscripts two phonetic variations of the word (*qatun* and *x̣atun*) have been recorded [...]. The word *kadın/khatun* is differentiated little in its meaning throughout all Turkic languages — 'woman, wife'. True enough, in the Yakut language the word *khotun*, apart from the range of focal meanings — 'mistress, wife, lady', etc. — is added to the name of a place (town, river) that is held in high esteem and also to the names of female deities."

C l a u s o n⁶ considers *xa:tun* as borrowed from Sogdian *xwat'yn* (*xwateen*), in Sogdian *xwat'y* 'landlord, sovereign' and *xwat'yn* 'a landlord's or a sovereign's wife'; it is the precise meaning of *xat:un* in the early period; cf. Pers. *khatun* with the same meaning and the Wr.-Mong. *khatun* 'lady, noble woman, princess'; Bur. *khatan* 'lady, princess, tsarina'. On the Mongolian maps of the 18th century the following place-names are recorded: *Qatun aγula* (mountain), *Qatun bulaγ* (river), *Qatun čaγan* (mountain), *Qatun olom* (ford), *Qatun γool* (river), *Qatun qoroγan*, *Qatun tayiga*.

There are other interpretations of the river-name, e.g. M u r z a e v,⁷ pointing to the widespread use of the word Katun' in Siberian place-names, comes to the conclusion that "the second, now-vanished, meaning of the old Turkic word *katyn-khatan* is 'a river'. It is in this sense that the word has been used in the Yenisei runic rock inscriptions. Therefore, the river Katun' has got its name from the old Turkic common noun denoting 'river'". V e r b i t s k i⁸ points out: "*Kadyn* is the river Katun'; the mountain Katun' near the river Kondoma. *Kadyn* is one of the foreign tribes settled along the banks of the Kondoma".

It is worth examining the first explanation since the custom to name a big river after a goddess or a woman has been extremely common among many peoples: the river *Dee* in Great Britain, which the Romans called *Deba*, a word signifying

⁵ L. A. P o k r o v s k a j a, *Terminy rodstva*. in: *Istoričeskoe razvitie leksiki tjurkskikh jazykov*. M. 1961, s. 58.

⁶ G. C l a u s o n, *An Etymological Dictionary of Pre-Thirteenth-Century Turkish*, Oxford. At the Clarendon Press, 1972, p. 602.

⁷ E. M. M u r z a j e v, *Tsentrālnoasiatskie toponimičeskie miniatjury*, in: *Toponimika Vostoka. Novye issledovanija*. M., 1964, s. 10.

⁸ V. I. V e r b i t s k i, *Slovar altajskogo i aladagskogo narečii tjurkskogo jazyka*. Kazan 1884, p. 113.

'goddess' which was almost the same in Latin and Britannic; the Volga river is called 'mother', etc. Meanwhile a number of other etymologies dealing with the river-name Katun' have been advanced. They may be either accepted or rejected but none can be considered sound by reason of the Katun' being single and unique in the area under investigation.

The next criterion of the reliability and correctness of the place-name reconstruction being carried out is the place that a given place-name occupies in the onomastic area which makes possible to speak about the existence of a particular stratum among local place-names, whereas single examples may appear to be migrating place-names transferred by some ethnic group into the area from its former homeland.

In order to investigate this question more closely we must go into several technical details. Once place-names of existing languages (Altai and Russian in our case) have been separated from the total number of the Mountain Altai topographical names, the Altai and Russian place-names in the form of different signs are plotted on a map. The chart thus made up shows dense, clearly delineated areas signifying Altai and Russian communities settled there. Altai and Russian topographical names are not equally distributed across the Mountain Altai. By far the greatest concentration of the Altai names is in central, eastern and south-eastern parts, while further south-west and north-west sprinklings of the Altai names situated in the region nearer the boundary show a much slighter degree of settlement. The greatest concentration of the Russian names in the region is found in the South-West (between the Koksa and Bukhtarma rivers, upper reaches of the Katun'), the North-West (spaces between the Anui and the Ob, middle and lower reaches of the Pesčanaja), they are also frequent in several parts of the North (spaces between middle and lower reaches of the Pesčanaja and the Katun', spaces between the Bija and the Katun'). Areal distributions of the Altai and Russian names have revealed historical migration routes and settlements of the Altai and Russian inhabitants of the region.

In the remaining large group of names one can easily distinguish lexemes with particular initial and final elements, e.g. *aiuti*, *askat*, *kaisın*, *kaitık*, *čagan-*, *nur/-nor*, *-usun/-uzun*, *-daba*, *-khangai*, *-uul*, *-shil*, etc. The comparison of the salient components with building elements of topographical names in Mongolia helped to identify the Mongol-Kalmyk stratum among the Mountain Altai names. The plotting of those names with the above mentioned lexemes on a map has revealed their clear-cut localization and thus immediately eliminated accidental mistakes confirming our hypothesis about their Mongolian (Kalmyk) origin. A number of other names without these lexemes appearing within the boundaries of shown areas and unexplainable from the Turkic and Russian languages may also be considered Mongolian.

When one deals with place-names that had no records in the past, one tries to recover their form or meaning by techniques of etymology with consequent

verification on the basis of additional evidence available to a place-name student. In our particular case this additional evidence may be charts which make etymology more reliable. Owing to them, it seems much more plausible that the exact languages the names belong to can be definitely determined. No less important is the procedure of relating attested or reconstructed place-names belonging to a certain language (e.g. Mongol) that at present is not spoken in the region to words or names of the same language spoken somewhere else (e.g. in Mongolia) or of some earlier state of it. Testing the chosen etymologies on the basis of all identical forms aims at finding areal epicentres. For Mongolian names in the Mountain Altai it is primarily Mongolia. As soon as the epicentre is found, it opens up the way to merge the two onomastic areas (Altai and Mongolia) into one.

We can demonstrate this with the Altai names ending in *-kool*. The lexeme *kool* is the tenth one according to the occurrence frequency with which all the lexemes occur in the Altai place-names, following *köl*₁₁₁, *kara*₁₀₈, *tuu*₁₀₇, *t'aan*₉₄, *ak*₈₇, *kob*₇₉, *üstigi*₇₆, *taş*₇₃, *baj*₇₀, *suu*₆₃, *kool*₆₃. There are several phonetic variations of the place-name component, e.g. *kool*, *kol*, *khöl*, *gol* (the nominative case), *golu* (the possessive case); it has diminutive affixes — *količak* and *koološ*, the plural form — *kooldor*. At present the majority of the Altai people do not perceive the element as having any geographical sense. Informants either have trouble in explaining names with the component or without thinking link it directly with the word *kol* 'arm'. An Oirot-Russian Dictionary does not contain the geographical meaning of the word, it defines *kol* as 'arm, hand; shank'. True enough, in the dictionary list of place-names there are cases when *kool* is present as a part of a place-name with its subsequent translation as 'channel, valley'.

In Verbitski's dictionary the following geographical meanings of the lexeme are given: in the Kondoma dialect *kol* is used with the meaning 'river', in the Matyr and Abakan dialects it is 'ravine, hollow'.

In Radloff's dictionary *kol* is cited with the meaning 'lowland, valley (without a river)' and the accompanying label 'the Sagai, Schor, Uigur dialects' and for the Schor dialect the additional meaning is also given: 'a very small river'.

The component is widely spread in place-names of the Turkic world but few dictionaries give its geographical meaning; cf. Azerb. *gol* 'tributary (of a river)', Bashkir *köl* (dial. *gol*) 'depression, hollow, ravine', Kazakh *köl* (not used on its own, met only in place-names) 'river'; Kyrg. *kol* (not used on its own, met only in place-names) 'river bed, valley'; Karakalp. *köl* 'small irrigation ditch, stream rising in the main canal and emptying into the plot'; Tatar dial. (in the Menzelin and Bir dialects) *kul*, *kol/qol* 'depression, ravine, valley', cf. *kölara* 'valley, hollow between hills, small ravine' in the Ural Tatar dialect, hence microtoponyms — Yamankul (ravine) ... Tarangol⁹; Touv. *khöl* 'a dry river-bed'; Turkm. *gol* 'depres-

⁹ G. F. Sattarov, *Antroponimija Tatarskoj ASSR*. Avtoref. doct. dis., Kazan 1975, p. 34.

sion, lowland (small); valley'; Khak. *khol* 'valley; dry river-bed; ravine'; OTurk. *gol* 'valley'. Clauson's¹⁰ opinion in the matter is of interest. He gives the following meanings for *kool* 'the upper part of an arm' in contrast to *eliq* 'the lower part of an arm', in several modern languages 'arm (in general) or only the lower part of an arm'. He points out that *kool* has developed a series of metaphorical meanings which he quotes from various sources and puts into the same entry: *kool* is 'that descends from the top of a mountain and ascends from the bottom of a valley', they say *oobrii koolii* 'the upper part of a valley'; *kool kaš* 'valley and mountain ridges'; *kool* 'small hills on sides of a mountain which are adjacent to valleys'.

It is evident that in many Turkic languages the meaning of *kol* 'depression; dry river-bed; valley' is second and metaphorical. At the same time the first meaning of *kol* described above is maintained throughout the majority of Turkic languages. As mentioned above, this kind of meaning transfer in geographical nomenclature is not new. Thus, on the basis of exclusively Turkic data there are good grounds to say that *kol* 'arm, the upper part of an arm' has developed its second meaning of 'depression; ravine; dry river bed' in geographical nomenclature of several Turkic languages. In the course of time, the second (metaphorical) meaning might have dropped out of common use in several Turkic languages and retained in their place-names. However, in solving the problem of the lexeme it is impossible to restrict one's attention solely to the Turkic languages. Lessing¹¹ gives Mong. *zoul*, *zol* 'river, river-bed; valley; big lake (rare)'; Ramstedt¹² gives Kalm. *gol* 'river-bed, valley, river'; *goliin usgn* 'river'. In *Sravnitelnyj slovar' tunguso-man' čidzurskikh jazykov*¹³ one can find the following: Solon *golo* [<Mong.] '1) pivot, base; 2) river; 3) essence, basis'; Manch. *gšolo* 'pivot, river-bed, the course of a river; 2) valley; 3) a strip of land between two rivers; 4) road; 5) a land between two rivers; 6) ring; 7) seam; 8) region'; Bur. *gol* '1) river, valley; 2) middle, centre, core, pivot, axle; 3) backbone (animals)'; Kor. *kol* 'valley'; Imb. *kol'/gol'* 'bay, a dry river bed'.

From what has been cited above, it's clear that *kool* goes far beyond the scope of the Turkic and Mongolian languages representing the Altai family. To illustrate great affinities between Altai and Mongol place-names with the component in question we will give some examples: Alt. *Kool* (spring, settlement), *Ara-Kool* (river), *Üstigi-Ara-Kool* (ravine), *Kara-Kool* (6 rivers, lake, ravine, mountain, 3 settlements), *T'aan-Kara-Kool* (river), *Kiçü-Kara-Kool* (river), *Altıgı-Ara-Kool* (river, ravine), *T'adakai-Kool* (river), *Bai-Kool* (river, lake, valley), *Sai-Kool* (river), *Aq-Kool* (5 rivers, pass, valley, settlement), *Üstigi-Ak-Kool* (valley), *Kaan-Ak-Kool* (2 rivers), etc.; Mong. *Ača γool*, *Adam γool*, *Adar γool*, *Aγγool*, *Aγan*

¹⁰ Clauson, o.c., p. 614.

¹¹ F. Lessing, *Mongolian-English Dictionary*. University of California Press. Berkley and Los Angeles, 1960, p. 362.

¹² G. Ramstedt, *Kalmückisches Wörterbuch*, Helsinki 1934, p. 149.

¹³ *Sravnitelnyj slovar' tunguso-man'čdzurskikh jazykov*. Leningrad, "Nauka", 1975, p. 160.

uya γool, Aγču γool, Alaγ γool, Araši γool, Arbaγ γool, Arbaγool, Arbistai γool, Aru γool, Badas γool, Baraγun bayan γool.

A clear picture of the distribution of place-names in *-qool/-kool/-kol/-gol* can best be obtained from the chart made on the basis of data from The Card-index of Siberian place-names (Tomsk Pedagogical Institute). The chart reveals two distinct areas: Area I (place-names in *-gol*) and Area II (place-names in *-kool/-kol*). The great concentration of place-names in *-gol* is confined, on the whole, to Mongolia (Outer Mongolia), particularly north and north-west part of it. Area I also comprises a dense strip running approximately along the Chinese border in Sinkiang Uigur to the Yarkand, and thence a mere chain of them stretching along the border between Mongolia and China as far as the lake of Dalai-Nur, the river of Shara-Muren and the river of Kerulen where they are thicker. In the former USSR names in *-gol* were evenly spread throughout the Buryat republic and Chita region; they are more frequent on the east border between Tuva and Mongolia and thence then run along the borderland as far as Altai. As we see, Area I includes the Mountain Altai region with clusters of names in *-gol* in certain parts of the country.

Area II (place-names in *-kool/-kol*) stretches from south of Kyrgyzstan through the Almaty, Semipalatinsk and East-Kazakhstan regions up to the Altai region and thence north-east to Tuva. Area II agrees pretty well with that of the expansion of the Ĵunhar occupation in the second half of the seventeenth and the first half of the eighteenth century.¹⁴

Both areas are clear-cut on the chart, they do not overlap with each other. The chart is likely to reflect a certain phonetic regularity. Sanžejev¹⁵ writes that "in Oirat dialects there are two phonemes *x* and *k*". Poppe¹⁶ points out that in Wr.-Mong. the following consonants *g* (velar, weak, plosive), *k* (velar, strong, plosive), *q* (plosive in OMong. and now it is pronounced as a deep, back spirant), and *γ* (deep, back, plosive) existed.

It is tempting, too, and perhaps not too rash an assumption, to regard place-names in *-gol* from the chart as retaining the Mongol *γ*. It's worth mentioning that the Turkic people have always pronounced the Mongol initial *γ* as *q* [*k*]. The component *-kool/-kol* from the chart might have retained the Oirat (Kalmyk) *h*, *k* or might have been the OTurk. word *qol* in the meaning of 'valley'. The second assumption seems to be most unlikely.

The component *-say* is also widely spread in place-names of the Turkic and Mongolian world. It occurs in several place-names of the Mountain Altai region together with *-sayr*, *-čay*; cf. Azerb. *say* 'shoal, a sand bank in the river or sea; a

¹⁴ I. J. Zlatkin. *Istorija Dzungarskogo khanstva (1635–1758)*. Moskva 1964, p. 466.

¹⁵ G. D. Sanžejev, *Sravnitel'naja grammatika mongolskikh jazykov*. Moskva 1953, p. 89.

¹⁶ N. Poppe, *Introduction to Mongolian Comparative Studies*, Helsinki 1955, p. 129 and also N. Poppe, *Grammar of Written Mongolian*, Wiesbaden, 1964, p. 14.

projection at the sea-bottom', *čay* 'river, especially a mountain river flowing in a narrow valley, gorge' (*čay* is the first lexeme in frequency among all components of the Azerbajdzan place-name nomenclature); Alt. *say* 'small stones, pebbles; shoal'; Bashkir *hay* 'not deep, shallow'; Kazakh *say* 'gully, hollow; a dry bed of a small river; a shallow mountain river'; Karačay-Balk. *say* 'shallow'; Karakalp. *say* '1) a dry bed of a river; 2) gully'; Kyrg. *say* 'a river bed (it can be dry or dried up)'; Tatar *say* 'not deep' shallow', *say yelga* 'a shallow (with little water) river', *say zh'ir* 'a shallow place, place with little water'; Touv. *say* '1) pebbles; 2) a shallow place', *sajyr* '1) pebbles; 2) a dry river-bed covered with pebble'; Tur. *c'ay* 'a river'; Turkm. *say* 'shallow, not deep', *čay* 'a small river; a well'; Uzbek *soy* '1) say, a mountain small river, a mountain brook; 2) a river valley'; Khak. *say* '1) pebbles; 2) a shallow place; 3) gully'; Yakut *čay* 'pebbles, a shallow place'; OTurk. *say* '1) a stone place of volcanic origin; 2) a desert plain'; Mong. *sajr* 'pebbles'; Afghan *tsaa* 'a well'; Pers. *čah* 'well, hole'.

The place-name elements *-say* and *-čay* are of different origin: *-say* is likely to be of Turkic origin (it has already been found in Old Uigur and in Mahmud of Kashgar), whereas *-čay* is an obvious Iranian word. The Yakut *-čay* remains a mystery because of *č-* as the OTurk. consonant [tʃ] has given *s-* in the Yakut language. For the time being the identification of the Mongol *-sajr* with the Turkic *-say* is pure conjecture as the origin of the final consonant *-r* remains obscure.

On the basis of data from The Card-index of Siberian place-names (Tomsk Pedagogical Institute) taken from the maps with a scale of 1:1,000,000 place-names in *-say* form several areas. Area I comprises all north-western and northern Kazakhstan (predominantly the Aktjubinsk and Severo-Kazakhstan regions). It is dense with clear-cut boundaries. In Area I names in *-say* are widely spread and frequent. Area II includes the central part of Kazakhstan, where it looks like two chains of continuous points running from the South (the Chimkent and Džambul regions), they meet in the Karaganda region. Area II is taken up again in the Tselinograd and Kustanai regions where both areas (I and II) converge. In Area II place-names in *-say* are sporadic. Area III includes the eastern part of Kazakhstan, where place-names in *-say* are rare. The same is true about the border territory of China adjoining Kazakhstan. Place-names in *-say* are also more frequent along the boundary between the Kokčetau and Omsk regions (Area IV). Area V includes Kyrgyzstan, here place-names in *-say* are not thick but equally distributed throughout the republic. Area VI includes Uzbekistan where the majority of place-names in *-say* is concentrated in the Tashkent and Namangan regions and the Leninabad region of Tadzhikistan adjoining them. Area VI is clear-cut and place names in *-say* are frequent. There is a quantity of them on the border territory of China adjoining Kyrgyzstan. According to the same chart in other places inhabited by the Turkic peoples of the former USSR place-names in *-say* are found in fairly small groups.

The total number of these names estimated on the basis of above mentioned maps (with a scale of 1:1,000,000) makes 406, 284 of them falling on Kazakhstan, 30 on Uzbekistan, 28 on Kyrgyzstan. If one uses materials from maps of other scales, it emerges that the same wide area of geographical names in *-say* appears within the same boundaries although names occur with greater frequency there. E.g. data employed from maps of Kyrgyzstan with a scale of 1:100,000 which can be found in A Place-name Dictionary of Kyrgyzstan (project) [1962] show that out of 6,000 geographical objects in the republic listed in the dictionary 318 have the element *-say* in their name composition.

We will enumerate all place-names with the element *-say* in Mountain Altai: Ak-Say (river), T'elbek-Say (ridge), Kır-Say (river, valley, river-bank), Kuru-Say (3 rivers, cirque), Kızıl-Çay (river), Kök-Sayrı (river, gorge). The form *sayr* occurs rarely in Altai. In Tuva both forms (*say*, *sayr*) are likely to coexist, although the latter is obviously predominant: Ak-Dag-Sayır (river), Bay-Sayır (river), Kadır-Art-Sayır (pass), Kara-Art-Sayır (river), Kara-Sayır (gorge), etc. It now seems plausible that the Touv. *sajyr* correlates with the Mongol *sajr* ('pebbles; a dry bed of a water stream, sometimes a shallow place in a river'). A collision of *saj* and *sajr* in Tuva proves to be remarkable. We exemplify it by Mongol place-names in *sayir*: *Sayir quddurγ*, *Sayir toloγai*, *Sayir-yin baraγun kötöl-un qoyitu kir-a-yin oboγ-a*, etc.

And now one more component of place-names which is also widely spread in the Oriental world. This is Azerb. *bulak* 'source; spring; small spring' (*bulak* is the third lexeme in frequency among all components of the Azerbaidzan place-name nomenclature, following *čaj* and *daγ*); Kazakh *bulaq* 'source, a forming brook with subsoil feeding'; Karakalp. *bulaq* 'source, spring; Kyrg. *bulak* '1) source (in marshland on the river bank); 2) small brook'; Nog. *bulak* 'source'; Tatar *bolak* 'obsolete, a small river, a small brook, brook'; Tuv. *bulak* '1) a mountain valley; 2) source; 3) a steppe brook; spring'; Tour. *bulak* 'source'; Turkm. *bulak* 'spring, source'; Uzbek *buloq* 'spring, a small spring, source'; Chuv. *pulykh* 'a valley between rivers'; OTurk. *bulaq* '1) source; 2) canal, aryk'; Mong. *bulag*; Bur. *bulag*; Kalm. *bulg*; Khalkha-Mong. *bulluk*, *bulug* 'source, a small spring'. In Mountain Altai they are Bulaga (river), Bulakky (ravine), Buluk (river, brook, mountain, ravine), Ak-Bulak (river), Kayıñdu-Bulak (river), Kış-Bulak (river), Kud'yurlu-Bulak (river), Muzdu-Bulak (lake), Sarı-Bulak (river), Tapçı-Bulak (river, gorge), Uzun-Bulak (river). In Mongolia they are Bayan bulaγ, Boro bulaγ, Bulaγ, Bulaγ aγula, Bulaγ eligen, Čaγan bulaγ, Muqur bulaγ, Naran bulaγ, etc.

The chart of place-names in *-bulak* shows it to be a common component of place-names among Turkic and Mongolian inhabitants. The names are especially frequent along the border of China with Kyrgyzstan and Kazakhstan and also along all the northern border of Mongolia and inland.

As was said above, the reliability of reconstruction is tested by the occurrence of a reconstructed (=substrate) form in the place-name formation of the giving

language (language-begetter): it is common knowledge that place-name vocabulary is characterized by its being predetermined and limited; not all words of a language can be used to form place-names. In the paper we are trying to restrict our attention to general tendencies of place-name reconstruction and that is why we will not discuss the latter point at great length but give only several illustrative examples. In Mountain Altai one can find the river of *Ajuta*, a left tributary of the Koksun. The Altai people call it also T'ügürük 'fleeting'. The ravine, the place, the pass bear this name, too (near the settlement of Mukhor-Tarkhata). The Altai inhabitants call the pass Ajutinnıj-Ajuzı and give only a very partial and often highly inexplicit account of the name. Nevertheless, the name occurs within the vast area clearly delineated by the above investigated topographical terms. This opens possibilities of searching its etymology in the Mongolian languages. The simplest explanation can be found in Kalm. *ayutā* 'a place where bears are found'. Any expert except the author would consider the etymology undisputable. For the author the question of consistency of the chosen etymology with the principles of name-giving has arisen immediately — whether the word is in keeping with the choice of onomasiological determinants existing among the Mongolian peoples or not. Halto d's book¹⁷ helps a great deal in this respect. It turns out that the list of 13,644 Mongol place-names given by Halto d does not contain the word *ayuu* 'bear'. At the same time it gives the form *ayuyita* 'having caves, grottoes, big and deep natural hollow places underground' and the following place-names: Aγuyita (mountain), Aγuyita aγula (mountain), etc. The loss of the intervocalic γ in the Altai language can easily be explained.

Another example is the stone of *Altın-Kadasun* on the right side of the Bija near its flow from Teletskoje Lake. The name correlates pretty well with numerous *Altan γadasu* (mountains) in Halto d's book: Wr.-Mong. *γadasu*, Kalm. *hasn*, Bur. *gadaha(n)* 'stake, a small stake; pole'; Alt. *altın*, Mong. *altan* 'gold', i.e. 'a gold stake' (cf. Kalm. *Altın hasn* 'the North Star').

Now we are passing on to the historical interpretation of above stated facts. Between the beginning of the XIII century and the middle of the XVIII century (Juči khan's incursions, the rule of Western Mongols or Oirats, the reign of Jungar khans right up to 1755) the place-name situation in Mountain Altai was specific. Mongolian tribes coming to Mountain Altai encountered an established Turkic (in general) system of place-names which was not absolutely unfamiliar to the Mongolian ear. A great many place-names in both language families are still self-explanatory. The Altai system of nomenclature seems to have been much the same as the Mongol, as it forms place-names on the same pattern demonstrating how place-name forms and meaning are interrelated in two languages. It has always been customary in both languages for the adjective to precede the noun, and thus in compound place-names the principle element is the last one and whatever goes

¹⁷ M. Halto d, *Mongolische Ortsnamen*, Wiesbaden 1966.

before gives qualifying detail. One part of the Altai names has been left by the Mongols unchanged, while another has undergone adaptation. But on the whole, in sparsely populated places where Mongolian tribes settled by large groups they had to name topographical features anew. They used to name places, in which they had been settling for five centuries, by names of their homeland, thus taking over their own habitual names and using them for themselves. This way of naming has been practised by people (bringing names with them) all over the world.

Owing to their confused early history, the number of languages involved, and the lack of early records, Siberian place-names, and Altai in particular, are the hardest to interpret, and many famous ones remain mysterious. No wonder therefore, that scholars differ and that we are often concerned with possibilities or probabilities rather than with certain etymologies. This is particularly unfortunate, as an agreed solution of many of these questions would be invaluable in solving the problem of the Altai population in ancient times.

We tried to consider some aspects of place-names reconstruction with special reference to the names which do not have any written records. As for the place-name reconstruction in general, it has its own methodological principles whose reliability depends upon the quality and quantity of the evidence upon which they are brought to bear as well as upon special techniques employed by scholars.

List of abbreviations

Azerb.	Azerbaijani
Alt.	Altai
Bur.	Burjat
Chuv.	Chuvash
dial.	dialectal
Imb.	the Imbat dialect of the Ket language
Kalm.	Kalmyk
Karačay-Balk.	the Karačay-Balkar language
Karakalp.	Karakalpak
Khak.	Khakass
Khalkha-Mong.	Khalkha-Mongol
Kor.	Korean
Kyrg.	Kyrgyz
Manch.	Manchurian
Mong.	Mongol
Nog.	Nogai
OMong.	Old Mongol
OTurk.	Old Turkic
Pers.	Persian
Tur.	Turkish
Turkm.	Turkmen
Touv.	Touvinian
Wr.-Mong.	Written Mongol

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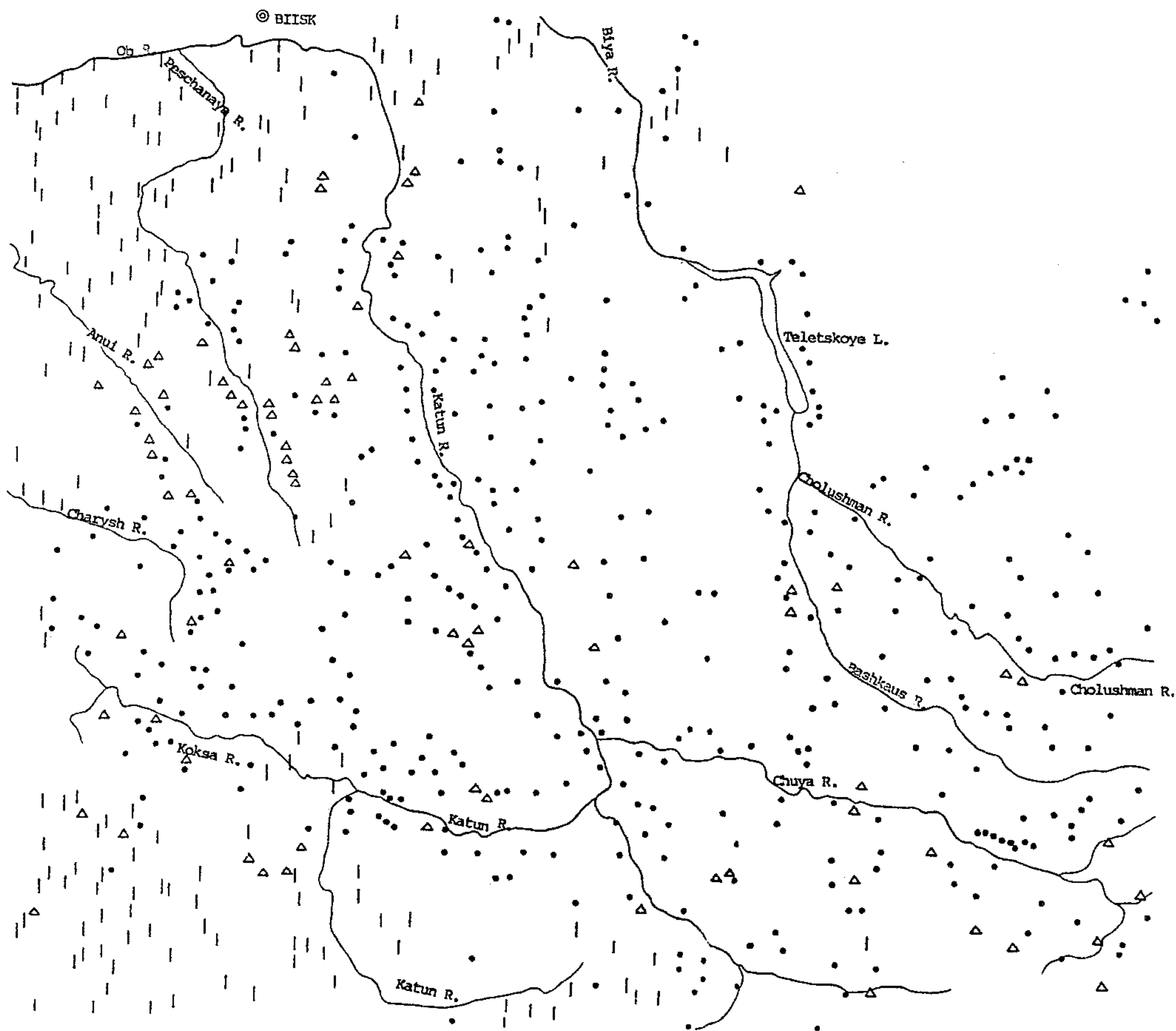


Plate 1. The distribution of Turkic •, Russian |, Mongol Δ, place-names in Mountain Altai

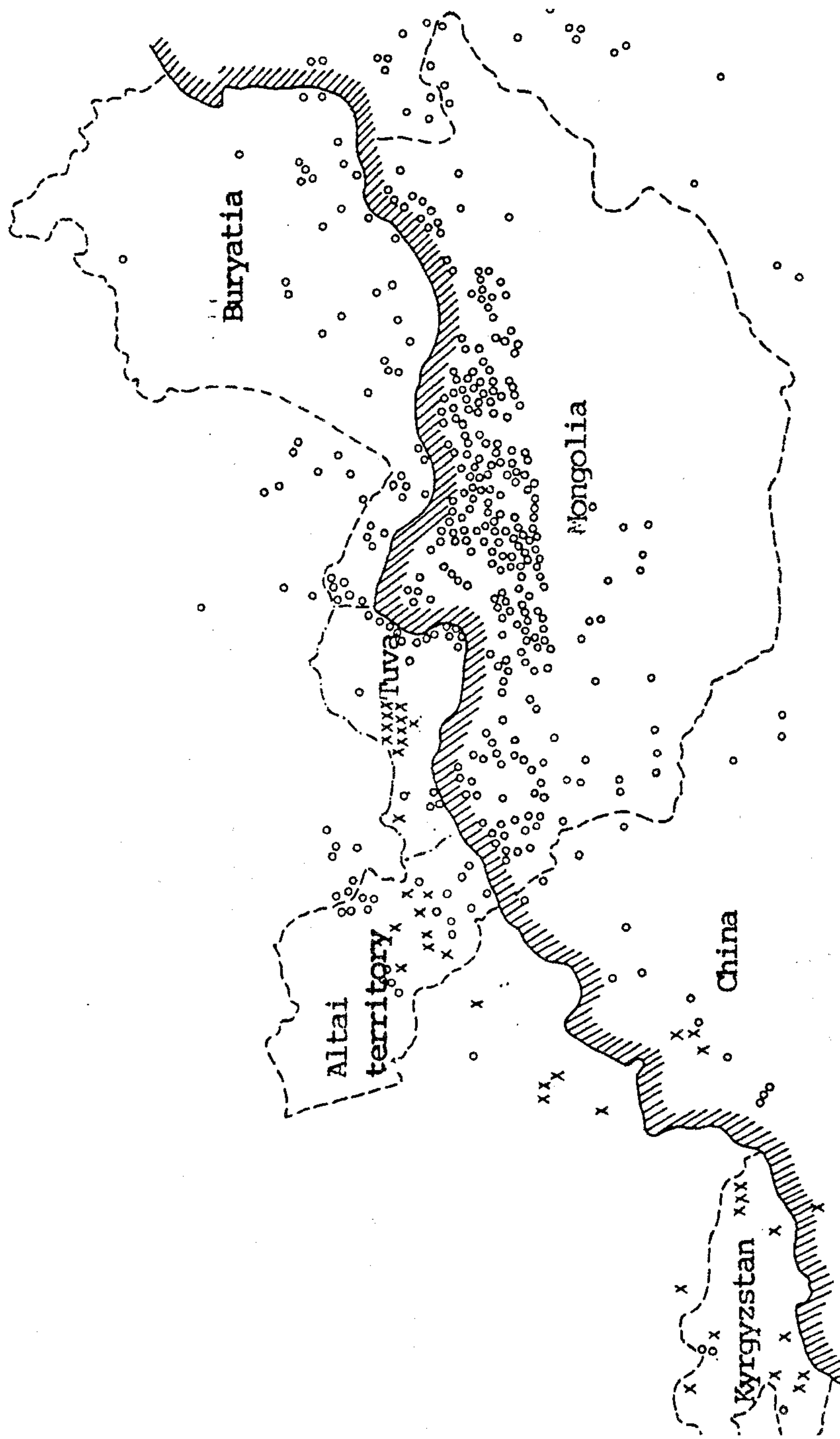


Plate 2. Place-names with the final element -golo, kol*

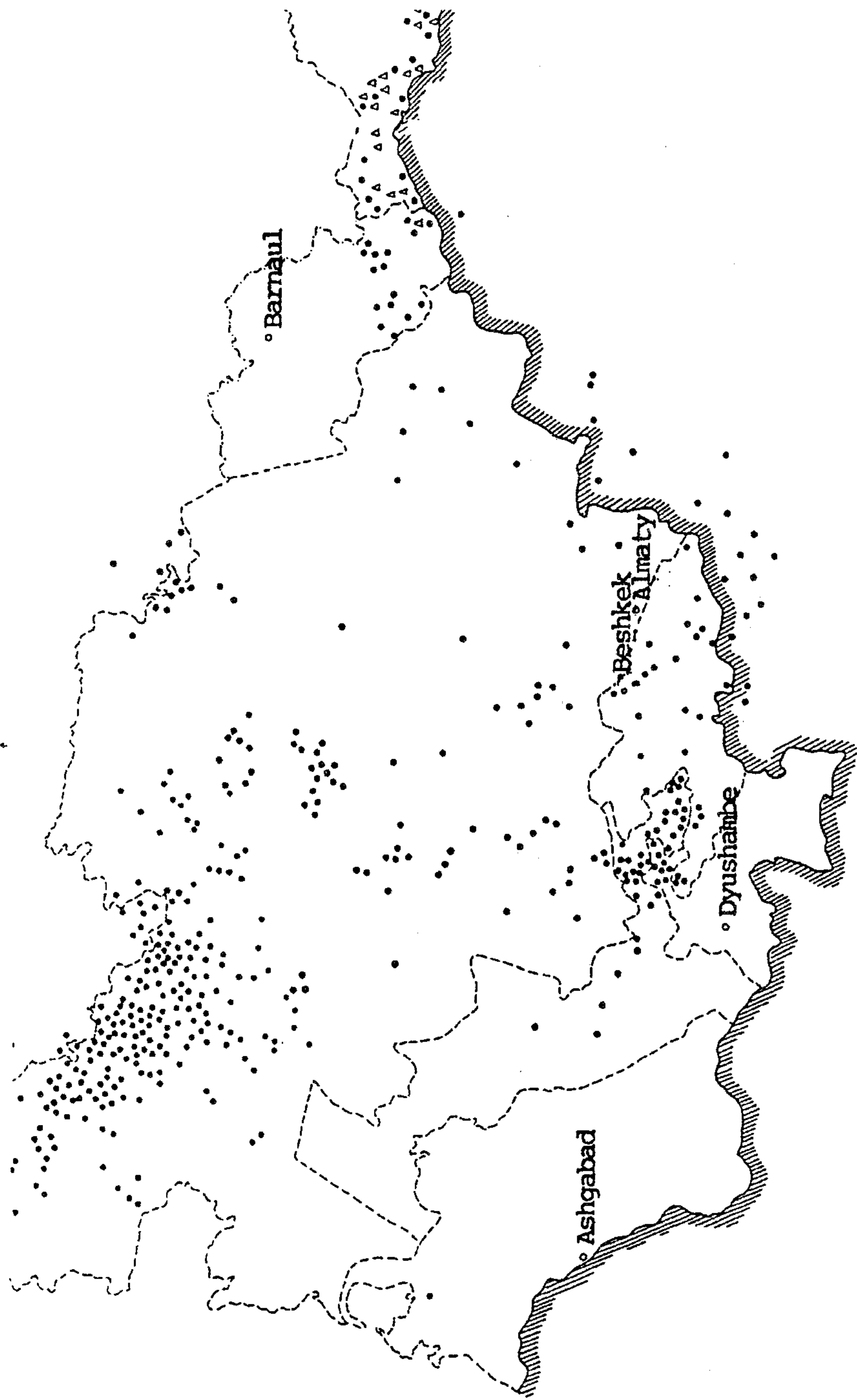


Plate 3. Place-names with the final element -sajo, sajraΔ in the former USSR territory

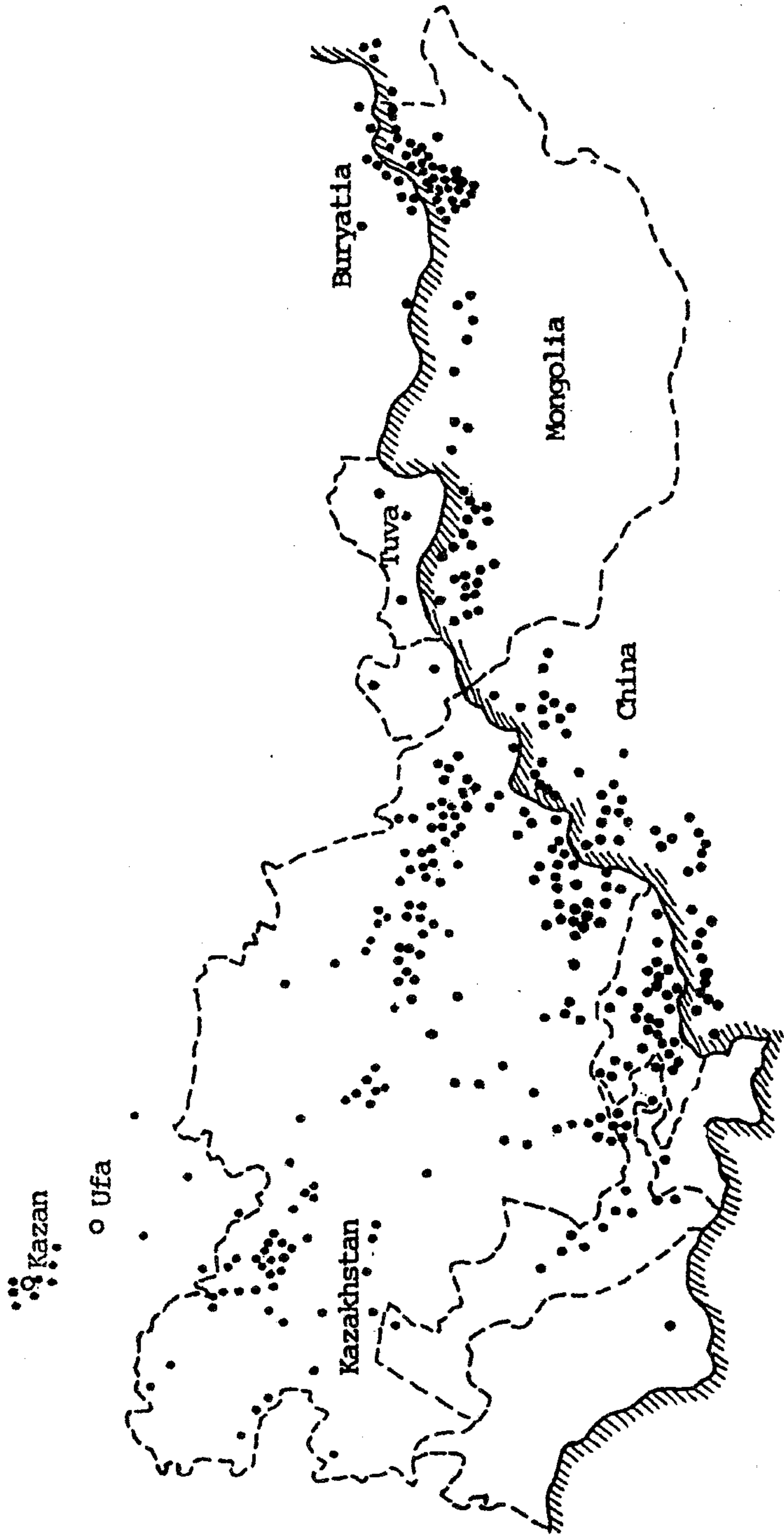


Plate 4. Place-names with the final element *bulak* in the former USSR territory