

ON SOME URAL-ALTAIC PLURAL SUFFIXES

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The term "Ural-Altai" is used in this article as a convenient designation for all Uralian (Finno-Ugrian, Samoyede) and Altaic (Turkish, Mongol, Tunguz) languages, and not as the name of a reconstructed primitive language. It follows that neither do the suffixes to be dealt with necessarily occur in all, or even the majority of the Ural-Altai languages, nor will any attempt be made to trace them back to so-called primitive forms. I shall content myself with assembling a certain number of them and nurse the hope that a simple juxtaposition of suffixes taken from different languages will allow some interesting conclusions to be drawn.

Thus this study does not claim to give an exhaustive list of all the plural suffixes which can be found in Ural-Altai languages.

If the present attempt, which is the first of its kind in the field of Ural-Altai studies, proves to be successful, it may set an example for further studies of a similar type and may ultimately lead to a reconsideration of the whole Ural-Altai hypothesis.

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Owing to the large number of languages I had to deal with, and the extreme variety of the phonetic transcriptions of my sources, I had to take drastic measures to simplify and unify them, so far as possible. Many phonetic subtleties fell victim to this procedure. I trust that their loss does not affect the gist of the matter.

This article could not have been written without the generous help of the Library of the École Nationale des Langues Orientales in Paris. I have pleasure in expressing my gratitude to the Librarian, Madame J. Meuvret.

Unless otherwise stated, my sources were as follows:—

For Mongol:

A. Mostaert, *Dictionnaire Ordos*, I-III (Monumenta Serica, Monograph V, Peking 1941-44), *Textes oraux ordos* (Monumenta Serica, Monograph I, Pei-p'ing 1937); A. de Smedt-A. Mostaert, *Dictionnaire monguor-français* (Pei-p'ing 1933).

N. N. Poppe, *Grammatika burjat-mongol'skogo jazyka* (Moskva-Leningrad 1938), *Praktičeskij učebnik mongol'skogo razgovornogo jazyka (Khalkhaskoe narečie)*, (Leningrad 1931).

G. J. Ramstedt, *Kalmückisches Wörterbuch* (Lexica Societatis Fenno-Ugricae III, Helsinki 1935); *Mogholica* (JSFOu. XXIII, 1906, 4).

A. R. Rinčine, *Kratkij mongol'sko-russkij slovar'* (Moskva 1947).

For Tunguz:

V. G. Bogoraz, *Materialy po lamutskomu jazyku* (Tungusskij Sbornik I, 1931, pp. 1-106).

M. A. Castrén, *Grundzüge einer tungusischen Sprachlehre* (St. Petersburg 1856).

V. I. Levin, *Samoučitel' évenskogo jazyka* (Moskva-Leningrad 1935); *Kratkij évensko-russkij slovar'* (Moskva-Leningrad 1936).

K. M. Myl'nikova-V. I. Cincius, *Materialy po issledovaniju negidal'skogo jazyka* (Tungusskij Sbornik I, 1931, pp. 107-218).

T. I. Petrova, *Kratkij nanajsko-russkij slovar'* (Moskva-Leningrad 1935).

P. Schmidt, *The Language of the Olchas* (Acta Universitatis Latviensis VIII, 1923, pp. 229-288).

E. R. Šnejder, *Kratkij udéjsko-russkij slovar'* (Moskva-Leningrad 1936).

S. M. Širokogoroff, *A Tungus Dictionary* (Tokyo 1944). Contains a Tungus-Russian and a Russian-Tungus part. Photogravured from the manuscripts (in Russian handwriting). As no list of abbreviations has been appended to this work we were often unable to trace the origin of the word quoted.

G. M. Vasilevič, *Učebnik évenkijskogo (tungusskogo) jazyka* (Moskva-Leningrad, 1934); *Évenkijsko-russkij (tungussko-russkij) dialektologičeskij slovar'* (Leningrad 1934); *Évenkijsko-russkij slovar'* (Moskva 1940).

For Samoyede:

M. A. Castrén, *Grammatik der Samojedischen Sprachen* (St. Petersburg 1854).

A. J. Joki, *Kai Donners Kamassisches Wörterbuch nebst Sprachproben und Hauptzügen der Grammatik bearbeitet und herausgegeben* (Lexica Societatis Fenno-Ugricae VIII, Helsinki 1944).

For Chuvash:

J. Benzing, *Kleine Einführung in die Tschuwaschische Sprache* (Berlin 1943).

H. Paasonen, *Csuvas szójegyzék* (Budapest 1908, supplement to Vois. XXXVII and XXXVIII of the NyK).

Turkish and Finno-Ugrian data are either too well known to need a bibliographical reference or else the source has been indicated separately in each case.

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The following abbreviations have been used:

For periodicals: AM.=*Asia Major*, FUF.=*Finnisch-Ugrische Forschungen*, JA.=*Journal Asiatique*, JSFOu.=*Journal de la Société*

Finno-Ougrienne, KCsA.=*Kőrösi Csoma Archivum*, KSz.=*Keleti Szemle*, MSFOu.=*Mémoires de la Société Finno-Ougrienne*, NyK.=*Nyelvtudományi Közlemények*, RO.=*Rocznik Orientalistyczny*, SO.=*Studia Orientalia*, ZIV.=*Zapiski Instituta Vostokovedenija*.

CT.=Common Turkish (Turkish languages except Chuvash).

SH.=Secret History of the Mongols.

And the usual abbreviations for Finno-Ugrian and Altaic languages.

A. SIMPLE SUFFIXES

In this first part I shall deal with suffixes which cannot be further analysed. It happens that all of them are phonetically simple, consisting of one single phoneme. As all the available evidence tends to show that this is not the result of any phonetic evolution, the likelihood of the morpheme's being originally simple is greatly enhanced. A single-phonemed suffix can hardly be considered a composite one.

I will put under the same heading those suffixes which phonetically belong together and will consider them identical until the reverse has been proved. In using the term "identity", I do not want to prejudice further research to establish the ways and means which lead to the simultaneous use, in different languages, of the same suffix. They have to be ascertained separately for each case, as the cause may lie as well in cognate relationship as in late or recent borrowings. The quantity of morphological and other correspondences, added to the historical certitude we have that most of the peoples speaking Ural-Altai languages have had long-lasting if not permanent contacts with one another, rules out the possibility of mere coincidence.

All this is rather self-evident, and would hardly need stressing, were it not that on the one hand Ural-Altai studies have been for too long the happy hunting-ground of linguistic dilettanti, and on the other, linguists trained in Indo-European have some difficulty in adapting themselves to the different character of Ural-Altai philology.

1. -N

FINNO-UGRIAN

The comparative study of Finno-Ugrian languages has long ago established¹ the existence of a plural suffix *-n*, the actual use of which is limited mainly to the personal endings.

Vogul. In connexion with the possessive suffixes *-n* denotes the plurality of the possession. In the Konda-Dialect for example, the possessive suffixes of the 1st pers. sing. and plur. are respectively: *-em* and *-ou* if they refer to one possession, *-änem* and *-enou* if they refer to several possessions. Thus:

¹ Cf. e.g., J. Szinnyei, *Finnisch-ugrische Sprachwissenschaft* (Berlin-Leipzig, 1922), p. 52.

küäl "house", *küäl-em*² "my house", *küäl-än-em* "my houses". In the Sosva-Dialect we find the same phenomenon: *χāp* "boat", *χāpuv* "our boat", *χāpanuv* "our boats".³

The *-n* appears in the Vogul objective conjugation, where it denotes the plurality of the object: (Konda) *voailem* "I see him", *vigänem* "I see them". The exact interpretation of these forms cannot, at present, be our aim. This work has already been done by Klemm⁴ who has clearly shown that the *-n* was the sign of the plurality of the object.

Mordvin. In the Erzä-Mordvin dialect of Egorov, described by Paasonen,⁵ the use of the *n*-plural has been maintained particularly well. Let us take as an example the possessive suffixes of the singular:

Person	One possession	Several possessions
1	-m	-n
2	-t	-nt
3	-zo	-nzo
E.g.,	<i>čoram</i> "my son"	<i>čoran</i> "my sons"
	<i>čorat</i> "thy son"	<i>čorant</i> "thy sons"
	<i>čorazo</i> "his son"	<i>čoranzo</i> "his sons"

Züryen. The *n* denotes the plurality of the possessor and, in the conjugation, the plurality of the subject. E.g., *völ* "horse", *völ-id* "thy horse", *vöv-n-id* "your horse".

The role of this suffix in the conjugation is too complicated to be dealt with here. It has been treated by Uotila.⁶

Finnish. Present-day Finnish has no grammatical sign to mark the plurality of the possession. A word like *talo-ni* may mean "my house" or "my houses", although in oblique cases a distinction is made by other grammatical means. This state of things is comparatively recent, and competent scholars agree that the primitive Finnish knew two complete series of possessive suffixes:⁷

Possessor	One possession	Several possessions
Sing. 1	*-mi	*-nni~(*-nmi)
2	*-ti~*di	*-nti
3	*-sen~*-zen	*-nsen
Plur. 1	*-mek~(*-mmek)	*-nnek~(*-mmek)
2	*-tek~*-dek	*-ndek
3	*-sek~*-zek	*-nsek

¹ Here, and in many other instances throughout the article, hyphens have been used to indicate the morphological structure of the word concerned.

² Cf. Y. Wichmann, *August Ahlqvist's Wogulische Sprachtexte nebst Entwurf einer wogulischen Grammatik* (MSFOu. VII, 1894), p. 154.

³ *A vogul és osztyák tárgyas igeragazás* (NyK. XLVII, 1928-30, pp. 85-112), p. 103.

⁴ *Mordvinische Lautlehre* (MSFOu. XXII, 1903), pp. 120-3.

⁵ *Zwei Pluralcharaktere* (FUF. XXIX, 1946), pp. 23-31.

⁶ Cf. L. Hakulinen, *Suomen kielen rakenne ja kehitys*, I (Helsinki, 1941), p. 97.

These two series were later mingled with each other; they form the basis of the present single series of Finnish possessive suffixes. It may be that some of the *n*-forms should be explained in a different manner; even so, it would not alter our main point, and the existence of an old Finnish plural in *-n* would still have to be admitted.

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The *-n* plural suffix can be traced in all Finno-Ugrian languages, except in Ostiak, although its function does not appear so clearly in other languages as, for example, in Vogul and Mordvin.

SAMOYEDE

In Ostiak-Samoyede the plurality of the possession is expressed by placing the suffix *-ni* between the stem and the possessive suffix. E.g., *kanak* "dog", *kanag-m* "my dog", *kanag-ni-m* "my dogs"; *kanag-l* "thy dog", *kanag-ni-l* "thy dogs"; or in oblique cases like genitive *kanag-n* "of my dog", *kanag-ni-n* "of my dogs". The function of *ni* is clearly shown not only by the meanings of the forms concerned, but also by the fact that the ordinary plural suffix *la* can take its place: *kanag-la-u*, *kanag-la-l* "thy dogs".

In Ostiak-Samoyede, just as in most of the Ural-Altai languages, the plurality of the possessor is expressed by adding a plural suffix to the possessive forms of the singular. E.g., *loga-l* "thy fox", *loga-l-et* "your fox". In this second form the regular plural suffix *t* can be superseded by *n*: *loga-l-en* "your fox". Clearly, *n* and *t* are here equivalent formatives.

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There is no need to enlarge here on possible other uses of this *n*-plural in Uralian languages, as for example, the plural forms of the Finnish demonstrative pronouns *se* "that", *ne* "those", which may have another explanation.⁸ For our present purpose it is sufficient to know that the existence in the Uralian languages of a plural suffix *n* is solidly established and, so far as I know, has never been contested. The Samoyede and the Finno-Ugrian suffixes have been put side by side by Setälä.⁹

The few examples I have given of the uses of this formative were only intended to show the principal types, in order to facilitate comparison with other groups of languages. As the Finno-Ugrian side of the question is comparatively clear, I thought it wise to start here, and proceed from the well-known to the less-known.

TURKISH

So far as I can see, Grönbech was the first to demonstrate the existence

⁸ Important remarks on the *n*-plural can be found in J. Mark, *Die Possessivsuffixe in den uralischen Sprachen* (MSFOu. LIV, 1925).

⁹ *Zur Frage nach der Verwandtschaft der finnisch-ugrischen und samojedischen Sprachen* (MSFOu. XXX, 1913-18, 3), p. 25.

of a Turkish plural suffix *-n*.¹⁰ It is absent from the modern dialects and it is quite clear that even in Old-Turkish it was already obsolescent.

It occurs mainly with the two words *oγul* "boy, son" and *ār* "man", the plurals of which are respectively *oγlan* and *ārān*. This *-(a)n* is equivalent to the usual *-lar*, *-lār* plural suffix, as is shown by the example, among others, of *oγlan qızlar* "boys and girls". Nowhere in the Old Turkish texts can a plural **oγlar* be found.

Grönbech quotes the Karaim word *elan* "people, men", which he considers as a plural-form of *el* which has to-day in Karaim the same meaning.¹¹ It is difficult to form an opinion on such an isolated case.

Von Gabain seems to hesitate as to the real meaning of this suffix. On p. 85 of her *Alttürkische Grammatik* she appears to consider the *-n* as a sign of plurality, whereas on p. 61 of the same book she mentions the *-n* as a denominal suffix of derivation, or "perhaps an old plural?". She mentions three examples: *oγlan*, *ārān*, and *özān* "Innerstes". I think the last of these, whatever its explanation may be (von Gabain suggests *öz* "selbst"), must be separated from the other two.

On pp. 142-3 of the same work, speaking about "Konverba" in *-p* and *-pan*, von Gabain gives as examples, for the former suffix, *qop* "alle, ganz" which should come from a reconstructed verb **qo-* (root of the verb *qod-* "hinlegen"), and for the latter the word *qopan* "alle". I do not deny the existence of the suffixes concerned, but I cannot help feeling that we face here a further case of a plural in *-(a)n*. After all, the verbal root **qo-* is only hypothetical.

MONGOL

It is a well-known fact to-day that Mongol had a plural suffix in *-n*, not used in the classical language, but well preserved in Middle Mongol and in some dialects.

The cases where this suffix occurs have lately been investigated by Poppe,¹² Haenisch,¹³ and Lewicki.¹⁴ For the Middle Mongol they are chiefly:

1. The plural of the nomina actoris in *-čī*, *-kčī*, e.g., *jasaqčīn* "those who rule", *daqaqčīn* "those who follow".

¹⁰ *Der türkische Sprachbau* (Kopenhagen, 1936), pp. 58-9 and 66-8.

¹¹ Cf. T. Kowalski, *Karaimische Texte im Dialekt von Troki* (Mémoires de la Commission Orientaliste de l'Ac. Polonaise des Sc. et des Lettres, No. 11, Krakow, 1929), p. 183.

¹² *Die Sprache der mongolischen Quadratschrift und das Yüan-ch'ao pi-shi* (AM Neue Folge I, 1944, pp. 97-115), pp. 102-3.

¹³ *Grammatische Besonderheiten in der Sprache des Manghol un Niuca Tobca'an* (SO. XIV, 3, 1950), pp. 4-11.

¹⁴ *La langue mongole des transcriptions chinoises du XIVe siècle. Le Houa-yi yi-yu de 1389* (Travaux de la Société des Sciences et des lettres de Wrocław, Série A, No. 29, 1949), pp. 121-3.

2. The plural of the infinitive *-qu*, *-kü*, e.g., *yorčiqun yabuqun elčīn* "the messengers who go and come".

3. Generally speaking, words ending in *-i*. E.g., *čerik medegü čerbin* "the employees controlling the army" (SH. 233).

4. Plural of the suffix *-tu*, *-tü*, *-tai*, *-tei*, e.g., *moritan* "horsemen". It has been kept in several dialects:

Kalmuck. *-tn*, e.g., *nomto* "provided with a book", *nomtn* "scholars".¹⁵

Monguor. It appears to-day only in one word, *amut'iān* "living being", which has the meaning of a singular, but in which Father Mostaert rightly sees a primitive plural.

Ordos. *-t'an*, *-t'en*, *-t'on*, *-t'ön*, e.g., *arā't'an* "ceux qui ont des molaïres".

5. Several collective nouns kept it: *irgen* "people", *haran* "common people" (SH.).

6. In a few instances, in ordinary use: *mut qulaqan* "these robbers", *mayun qaračus* "bad subjects".

A plural suffix in *-n* is still alive in the Ordos-Dialect: *qaxā* "pig", plur. *qaxan*.

TUNGUZ

Even. The *-n* designates in the 1st and 2nd persons the plurality of the possessor:

<i>ju-w</i> "my house"	<i>ju-w-un</i> "our house"
<i>ju-s</i> "thy house"	<i>ju-s-un</i> "your house"
<i>ju-l-bu</i> "my houses"	<i>ju-l-bu-n</i> "our houses"
<i>ju-l-si</i> "thy houses"	<i>ju-l-sa-n</i> "your houses"

In the Even system of conjugation the possessive suffixes are used as personal endings. (Or vice-versa; I do not want to enlarge here on this question which would need a special study.) The *n* here denotes the plural e.g., in the past tense:

Sing. 1 <i>ha-ri-w</i>	Plur. 1 <i>ha-ri-w-un</i>
2 <i>ha-ri-s</i>	2 <i>ha-ri-s-an</i>

"I knew . . . etc."

Negidal. Plurality of the possessor:

<i>jō-w</i> "my house"	<i>jō-w-un</i> "our house"
<i>jō-s</i> "thy house"	<i>jō-s-un</i> "your house", etc.

In the conjugation, e.g., in the tense we might designate as present:

Sing. 1 <i>wā-m</i>	Plur. 1 <i>wā-ya-w-un</i>
2 <i>wā-s</i>	2 <i>wā-s-un</i>

"I kill (instantly)", etc.

¹⁵ Ramstedt's hinted connexion (*Kalm. Wbch.*, p. XVII) with Sino-Korean *ting* "class, group" is senseless.

Evenki. Plurality of the possessor:

purta-w "my knife" *purta-w-un* "our knife"
purta-s "thy knife" *purta-s-un* "your knife", etc.

In the conjugation, e.g., in the past tense:

Sing. 1 *gun-cā-w* Plur. 1 *gun-cā-w-un*
 2 *gun-cā-s* 2 *gun-cā-s-un*
 "I said, etc."

Ude. The ordinary plural suffix is *-jiga*, *-jigo*, *-jigə*. The plurality of the possession can be expressed in two ways:

(a) By joining an auxiliary suffix *-ngi*, *-ngu* to the plural suffix: *giusa-jigə-ngi-wə-ni* "his stags (acc.)", i.e., stem + plural + auxiliary suffix + accusative + 3rd pers. sing. poss. suff.

(b) By joining *-na*, *-no*, *-nə* (or *-nta*, *-nto*, *-ntə*) to the stem: *əxi-nə-wə-ni* "his elder sisters (acc.)", i.e., stem + plural + accusative + 3rd pers. plur. poss. suff.

I cannot explain the *-nta* suffix.

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I think that the plural *-n* can be traced with a probability bordering upon certainty in at least one of the Chinese transcriptions of a Turkish folk-name.

The name of the Kirghiz appears in the Chinese sources, if we disregard variants, in the following forms:

1. 黠夏斯 Hsia chia ssu
2. 結骨 Chieh ku
3. 堅昆 Chien k'un (or hun).

The first form and its variants are trisyllabic transcriptions of the word *qirqiz*, but could equally well be read as **qirqis*.

The second form indicates original *qirgut*. Forms of this type actually occur in Mongol, *kerqūd*, *kirgit*, and can be met in Manchu: *kiragut*, *keragut*.

As for the third form, Pelliot is right¹⁶ in saying that it cannot possibly be the transcription of **qirqiz* or **qirqud*, but only of a "singular" **qirqun*, which is likely to be a form of Mongol type.

I think it must be considered as a plural in *-n*.

The name of the Kirghiz had for a very long time been connected with Turkish *qirq* "40", but the final explanation has only been given by Ligeti¹⁷ who sees in *qirqiz* the word *qirq* provided with a *z* plural suffix. This explanation is corroborated by the plural forms in *-d* and fits my theory concerning the form *qirqun*.

The name of the Kirghiz, "the forties", could bear several plural

¹⁶ JA. 1927, I, p. 137.

¹⁷ *Die Herkunft des Volksnamens Kirgis* (KCsA. I, 5, 1926, pp. 369-383).

suffixes (*-z*, *?-s*, *-t*, *-n*), just as other folk-names mentioned by Ligeti, e.g., *teleut*~*teleus*.

2. -T

FINNO-UGRIAN

Finnish. Ordinary, nominal, plural in *-t*, e.g., *kala* "fish", plur. *kalat*.
Vogul. Plural in *-t*, e.g., *lū* "horse", plur. *lūt*.

Ostiak. Plural in *-t*, e.g., *lau* "horse", plur. *lauət*.

The *-t* appears in the Ostiak objective conjugation where it denotes the plurality of the object.¹⁸ In the Dialect of Sberkal, used as a literary language, the objective personal suffixes of a stem ending in a vowel are, e.g., for the singular:

One object: 1st pers. *-em*, 2nd pers. *-en*, 3rd pers. *-te*;

Several objects: 1st pers. *-tam*, 2nd pers. *-tan*, 3rd pers. *-te*.

E.g., *mas-em* "I gave it", *mas-t-am* "I gave them (acc.)".

Mordvin. Plural in *-t*, e.g., *tolga* "feather", plur. *tolgat*.

Cheremis. In most tenses of the conjugation *-t* is the distinctive sign of the 3rd pers. plural as opposed to the singular. E.g., *kaja* "he goes", *kaja-t* "they go".¹⁹

In the system of possessive suffixes, *-t* is used to mark the plurality of the 3rd person possessor: *iša* "elder brother", *išaže* "his elder brother", *išašt* "their elder brother". In the singular a former voiceless *š* passed into *z*.²⁰

SAMOYEDE

Plural forms in *-t* can be found in a number of Samoyede languages:

Ostiak-Samoyede: *loga* "fox", plur. *logat*.

Tawgy: *kula* "raven", plur. *kula'*.

Jenissei-Samoyede: *libe* "eagle", plur. *libe'*.

Samoyede conjugation makes an extensive use of this morpheme. The question cannot, however, be followed up here.

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I think it unnecessary to expatiate on this well-known Uralian plural suffix.

MONGOL

One of the most common Mongol plural suffixes is *-t* or *-d*. The Mongol script does not distinguish between final *-t* and *-d*, but the traditional spelling of the Classical Mongol is *-d*, and not *-t* as has been wrongly stated by Hambis.²¹ E.g., *morin* "horse", plur. *morid*, *elči* "ambassador", plur. *elčid*.

¹⁸ Cf. Klemm, *op. cit.*, p. 110, and W. Steinitz, *Ostjakische Grammatik und Chrestomathie* (Leipzig, 1950), pp. 76-7.

¹⁹ Cf. Beke, NyK. XLI, pp. 73.

²⁰ Cf. Beke, NyK. XL, pp. 250-3.

²¹ *Grammaire de la langue mongole écrite* (Paris 1945), pp. 3-4.

The evidence of some dialect forms points to a voiced explosive:

Mod. Lit. Mongol: *gišüün* "member, limb", plur. *gišüüd*.

Buryat: *yamāng* "goat", plur. *yamād*; *nüxer* "comrade", plur. *nüxəd*.

Kalmuck: *noyn* "prince", plur. *noyon*.

On the other hand the oldest documents of Mongol mainly show plural forms in *-t*. So does the *Secret History*, e.g., *qan* "king", plur. *qat*; *χoninči* "shepherd", plur. *χoninčit*; or the *Hua-yi yi-yü*, e.g., *hon* "year", plur. *hot*.²²

Several dialects, too, show a voiceless explosive:

Ordos: *ejin* "lord", plur. *ejit*, but also *k'ü* "son", plur. *k'üd*.

Mogol: *morin* "horse", plur. *morit*.

Khalkha: *mori* "horse", plur. *morit*, but also: *χang* "prince", plur. *χād*.

In the present state of our knowledge we cannot decide on internal Mongol evidence, which of the two forms, the voiced or the voiceless one, has to be considered as the original. The evidence of the related languages is in favour of an original *-t*.

TURKISH

In Old Turkish we have some traces of a plural in *-t*, considered by von Gabain as "altermülich und fremd"²³ and for that reason classified by her as a denominal derivation suffix. Elsewhere she expresses the view that this is "the Mongol *-t*".²⁴

The termination usually occurs in titles: *tigit*, *tarqat* from the singulars *tigin*, *tarqan*, but we also have *süt* "milk" which can hardly be separated from Mong. *sün*.

The suffix appears also in some folk-names, amongst which the name of the Turks is particularly important. Their Chinese designation 突厥 *T'u chüeh* has been interpreted by Pelliot as the transcription of a form *türküt*, supposed to be a Mongol plural-form, the Juan-juan denomination of the Turks. Ever since this interpretation was advanced, there was a general consensus of opinion on its validity. Some ten years ago I pointed out²⁵ what I considered then, and still consider to-day, as a paralogism in this theory. One of the arguments I advanced does not hold true. My *amende honorable*²⁶ came too late to become known to Pelliot.²⁷ More recently, the late Kotwicz made a few remarks on this suffix.²⁸ He seems to favour my theory as he does not mention anything on a Mongol origin of this suffix.

²² Lewicki, *op. cit.*, p. 121.

²³ *Op. cit.*, p. 63.

²⁴ *Ibid.*, p. 85.

²⁵ JA. 1939, II, pp. 548-9.

²⁶ JA. 1946-47, p. 62.

²⁷ Cf. his posthumous *Notes sur l'histoire de la Horde d'Or* (Paris, 1950), p. 232.

²⁸ *Contributions à l'histoire de l'Asie Centrale* (RO. XV, 1948, pp. 159-195), p. 189.

I still regard my former conclusions as valid, even if part of the proof I gave must be abandoned. The suffix *-t* is, from a *synchronic standpoint*, a Turkish morpheme. It occurs, as I have shown, in folk-names which for obvious historical reasons cannot be considered as belonging to a Mongol nomenclature. It seems clear that even in the earliest stage of Turkish known to us, its use was very limited, and that it was hardly felt any longer as a plural suffix. The reasons for that may partly lie in the general structure of Turkish which is rather hostile to the plural, or also in the fact that, after all, this suffix was borrowed from another language. It may also be that these two reasons acted simultaneously. In our conclusions we shall have to deal with this problem; for the time being it may suffice to underline again, that a *-t* plural does occur in Turkish.

TUNGUZ

Nowhere does *-t* appear as an active suffix, but in a number of instances it can be disclosed through the analysis of grammatical forms. For example:

Ude. In the personal pronouns:

1st pers. sing. *bi* plur. (inclusive form) *minti*.

3rd pers. sing. *nua* plur. *nuati*.

The exclusive form of the 1st pers. plur. *bu*, is the "regular" parallel to *bi*, as it is formed simply by a vocalic change, whereas the inclusive form consists of the singular with a superadded plural suffix. For a complete understanding it has to be remembered that the stem of the 1st pers. sing. is **min-*, the form in which it appears in all oblique cases, e.g., dative *min-du*.

Even. It can be detected in the 1st pers. plur. (inclusive) pronoun *mut*, as opposed to the singular *bi* (stem **min-*) and the exclusive plural form *bu* (stem **mun-*).

I am also inclined to see a *-t* plural in the possessive suffix of the 3rd pers. plur. *-tan*, e.g., *ju-tan* "their house". As we have seen above (p. 209), for the 1st and 2nd persons, the plurality of the possessor is indicated by the plural *-n*. As the possessive suffix of the 3rd pers. sing. is *-n* (e.g., *ju-n* "his house"), a phonetically different sign has been used to show the plurality of the 3rd person possessor.

Evenki. The situation is very similar in this Dialect.

The 1st pers. plur. inclusive pronoun is *mit*, opposed to the sing. *bi* (stem **min-*), the possessive suffix of the 3rd pers. plur. is *-tin*. E.g., *purta-n* "his knife", *purta-t-in* "their knife".

* * *

The impression one gets from these facts is that the *-t* plural is not genuinely Tunguz. Pronouns are usually conservative, and tend to keep morphemes which are no longer in use elsewhere. This general consideration is, however, not operative in our case for the following reasons. Altaic

languages lack a 3rd person pronoun, which is made up nearly always by a demonstrative pronoun. Now the *-t* appears in the 3rd pers. pronoun as a late addition to distinguish it from the singular, which, being a demonstrative pronoun, was probably used originally both for the singular and the plural.

The formation of the 1st pers. plur. inclusive pronoun was subject to the same principle. Most likely it came later to double the already existing pronouns. It is probable that the semantic distinction developed later as a consequence of the coexistence of the two (incl. and excl.) forms.

If this theory proves to be correct, and I do not feel very strongly on the subject, it shows that the presence of the *-t* in the system of personal pronouns does not necessarily mean that it is an archaic feature of the language; it may equally well be a loan-suffix. In any case it must be admitted that its use in Tunguz is very limited.

3. *-L*

TUNGUZ

Evenki. Plural in *-l*, e.g., *ju* "house", plur. *jul*.

Even. Plural in *-l*, e.g., *del* "head", plur. *delal*.

Nanaj. The *-l* appears not as a nominal plural suffix but only in the 3rd pers. plural of some verbal forms. In these cases it is used to differentiate the plural form from the singular. For example:

In the subjunctive (the term is inexact): *bumca* "he would give", *bumcal* "they would give".

In the indefinite present: *huri* "he gives", *huril* "they give".

In the so-called "Future I": *bujara* "he shall give" (approx.), *bujaral* "they shall give" (approx.).

(See p. 216, the similar use of the plural *-r* in Even.)

MONGOL

In Middle Mongol a plural in *-l* is to be found, which is unknown in Classical Mongol, and so far as I know in the modern dialects.

This suffix has been brought to notice by Lewicki²⁹ who gives the following examples among others: *kimul* as a plural of Class. Mong. *kimusun* "nail", *dabayal* as a plural of *dabaya* "mountain pass".³⁰

Lewicki suggests that this plural suffix may well be hidden in the final *-l* of the folk-names *Sartayul* and *Mongyol*. His hypothesis is very attractive. *Sartayul* could be the plural of *Sartaq*, the usual denomination in Central Asia of Muslims. *Sartayul* appears already on the "Stone of Chingis", so far the oldest monument of Mongol.

²⁹ *Op. cit.*, p. 123.

³⁰ This second example occurs in the 56th paragraph of the SH. In Pelliot's posthumous edition (p. 12) this word is transcribed *daba'at*, but this is simply a misprint.

As for the name *mongyol*, it would certainly be worth while to enter deeper into the matter. For the present we shall limit ourselves to a few points. During the T'ang period the name *mongyol* appears for the first time in Chinese sources. It is transcribed: 蒙兀 *Méng-wu* or 蒙瓦 *Méng-wa*. The second, if not simply a graphic alteration of the first, could represent a "singular" **mongyo* or **mongyu*. The first, according to Pelliot,³¹ "représente, avec son ancien *-δ* final, soit *Monyol*, soit un pluriel spirant ou sifflant de *Monyol* . . .". It is difficult to see whether Pelliot had in mind a **mongyos*~*mongyus* form or something else. However, it is for us only of secondary importance, as later Chinese sources transcribe the name either in the singular, as e.g., 蒙古 *Méng-ku*, or with a final spirant, e.g., 蒙骨斯 *Méng-ku-ssu*. In transcriptions of this latter type I see a plural-form in *-s*, just as in Manchu the name of the Mongols is *monggoso*, composed of a singular *monggo*+plural suffix *-so*. Their name in Evenki is still a singular *mongo*. But if the final *-l* of the name is not etymological (and both Chinese and Tunguz forms tend to show this), that is to say, if the original form of the name was *mongyo*, then there is great likelihood that the form *mongyol* was a plural, identical in its construction with, e.g., Manchu *monggoso*.

SAMOYEDE

Ostiak-Samoyede. Plural in *-la*, e.g., *loga* "fox", plur. *logala*; *kule* "raven", plur. *kulela*.

It also serves in the possessive system to mark the plurality of possession, e.g., *loga-t* "his fox", *loga-la-t* "his foxes".

Since Castrén's³² time it has generally been held that this suffix is borrowed from the Turkish *-lar*, – an unfounded opinion. On the other hand Castrén hints at a possible connexion with the Tunguz *-l* plural and the Cheremis plural suffix *-βilä*.

FINNO-UGRIAN

With some hesitation I should like to mention a suffix which may have some connexions with the above-mentioned forms.

In the Uržum-Dialect of Cheremis, Wichmann noted a denominal collective suffix *-la*, used as a plural. E.g., *kož* "fir-tree, pine", *kožla* "pine-forest"; *kornä* "road", plur. *kornala*.

Wichmann quotes also some curious Finnish and Carelian forms as *taloloissa* instead of *taloissa* "in the houses", where *-lo-* could be a plural³³ suffix.

* * *

³¹ JA. 1920, I, p. 146.

³² *Samojedische Grammatik*, pp. 109 and 141.

³³ *Beiträge zur tscheremissischen Nominalbildungslehre* (JSFOu. XXX, 6), p. 16.

Both Finno-Ugrian and Samoyede forms may, following Lehtisalo,³⁴ be traced back to an Uralian collective-suffix *-la*, *-l*, a view which met with Ravila's approval.³⁵

I am not quite sure whether all these Uralian suffixes are cognate with one another in the usual meaning of this term. They are much too sporadic to allow the reconstruction of a Uralian suffix; we may well be compelled to go further back to a Ural-Altai stage. The suffix may originally have been a Tunguz plural, which primarily spread into the Mongol and Samoyede fields and of which the quoted Turkish and Finno-Ugrian forms are the furthest extensions. All this is, naturally, purely hypothetical, and a matter of interpretation, whereas the presence of an *-l* plural-element in the Tunguz, Mongol and Samoyede languages is an undeniable fact.

4. -R Tunguz

Manchu. Plural in *-ri*. This is a rather rare but well-attested plural suffix. *E.g.*, *mafa* "grand-mother", plur. *mafari*.

Manchu, normally, does not allow the presence of an *-r* at the end of a word.

Nanaj. A *-ri* suffix appears in connexion with the reflexive (emphatic) pronoun, and the reflexive possessive suffixes. *E.g.*, *mapi* "acc. sing. of the reflexive pronoun (for all persons)", plur. *māpāri*.

Evenki. Words ending in *-n* may form their plural by replacing this sound with an *-r*, or in less precise terms, words ending in *-n* may have a plural in *-r*. *E.g.*, *oron* "deer", plur. *oror*; *murin* "horse", plur. *murir*.

In the emphatic forms of the possessive suffixes, the *-r* denotes the plurality of the possessor. The suffixes for the singular and the plural are respectively *-wi*, *-mi* and *-war*, *-mar*, *-wār*, *-mār*, etc. *E.g.*, *ju-wi* "my (thy, his) own house", *ju-w-ar* "our (your, their) own house".

Even. Plural in *-r*, *e.g.*, *oron* "deer", plur. *oror*; *herkan* "knife", plur. *herkar*.

It can also be traced in the emphatic forms of the possessive suffixes, *e.g.*, *herka-mi* "my (thy, his) own knife", *herka-m-ur* "our (your, their) own knife".

With some hesitation, I am inclined to see this plural suffix in the 3rd person plural personal ending *-r* of the future tense. The 3rd person singular is formed by the addition of an *-n* to the thematic *-ji-* sign of the tense; whereas in the plural this *-n* changes, just as in the case of the nouns, into *-r*, which otherwise is not used as a personal ending. *E.g.*, *ha-ji-n* "he will know", *ha-ji-r* "they will know".

A similar phenomenon can be observed in Nanaj, but the plural suffix involved is *-l* (see above, p. 214). This may support my supposition.

* * *

The Dahur plural suffix *-r*, *e.g.*, *emgüng* "woman", plur. *emgür*, does not belong to this group. It goes back to *-d*, which passed into *-r* in this dialect, as shown, *e.g.*, by Class. Mong. *ongyud* Dahur *ongör*.

Poppe makes the supposition³⁶ that in the same manner the Tunguz plural in *-r* may be explained as a phonetic development of the Mongol plural in *-d*. Although it would be unwise to rule out altogether this possibility, I do not think there is much likelihood in it. Tunguz *-r*, as we shall see presently, has Turkish and Uralian connexions which make any recent derivation from another sound unacceptable.

URALIAN

Cheremis. A denominal collective suffix in *-r*, *e.g.*, *lülpa* "alder", *lülper* "alder-grove".

Jurak. A denominal collective suffix, as in *kārβ-rie* "larch-grove", from *kārβ* "larch".

According to Lehtisalo³⁷ the Jurak collective suffix comes from Uralian **-r* and is related to the above-mentioned Cheremis suffix.

TURKISH

B. Munkácsi ascertained as early as 1884 that it was possible to trace in the Turkish languages an old plural in *-z*, which is no longer alive in the modern idioms or even in Old Turkish. Its existence has since been confirmed on many occasions by other Turcologists and, so far as I can see, it has never been disputed. The following uses can be found:

1. It indicates the plurality of the possessor. Thus in every Common-Turkish language the 1st and 2nd person possessive suffixes of the plural are formed by adding *-z* to the corresponding suffixes of the singular. *E.g.*, Osmanli *el-im* "my hand", *el-im-iz* "our hand", *el-in* "thy hand", *el-in-iz* "your hand".

With the regular *z~r* correspondence we get in Chuvash: *kil-əm* "my house", *kil-əm-ər* "our house", *kil-ü* "thy house", *kil-ə-r* "your house".

2. In the personal endings of the conjugation it indicates the plurality of the subject. *E.g.*, Osmanli *sever-sin* "thou lovest", *sever-sin-iz* "you love"; Chuvash *kil-əp* "I shall come", *kil-əp-ər* "we shall come".

³⁴ *Über die primären ururalischen Ableitungssuffixe* (MSFOu. LXXII, 1936), pp. 150f.

³⁵ FUF. XXVII, 1941, p. 104.

³⁶ *Dagurskoe narečie*, p. 140, and AM. X, p. 211.

³⁷ MSFOu. LXXII, p. 184.

3. In the plural of the 1st and 2nd person personal pronouns, e.g., Old Turkish:

	Sing. 1	<i>bān</i>	Plur. 1	<i>biz</i>
		2 <i>sān</i>		2 <i>siz</i>
Chuvash:	Sing. 1	<i>epə</i>	Plur. 1	<i>epər</i>
		2 <i>esə</i>		2 <i>esər</i>

4. It appears at the end of some words designating, in most cases, those parts of the body which occur in couples, such as eyes, shoulders, legs, etc. E.g., *köküz* "breast", *köz* "eye", *omuz* "shoulder", *müngüz*, *müyüz* "horn", etc.

These forms, and a few others, are usually quoted, but I am very doubtful of their real value. *köz* could perhaps be explained as a deverbal noun of a root **kō-* (cf., *kör-* "to see"); *omuz* is, in spite of the alarm of some *homines unius linguae*, dangerously similar to Greek *ὤμος*.³⁸ I do not claim that these explanations are more reliable than the attribution of a plural *-z*. I merely want to hint at the tenuousness of that attribution, which by dint of repetition threatens to become a well-founded fact.

5. In Osmanli, as has been pointed out by Deny,³⁹ we find a suffix *-(i)z* which, added to numerals, indicates gemination: *ikiz* "twins" from *iki* "2". He also mentions the adjectival suffix *-(i)zli* formed from the preceding one by the addition of the adjectival *-li*. This suffix, added to cardinal numerals, transforms them into multiplicatives: *üçüzlü* "threefold, treble" from *üç* "3".

Kotwicz⁴⁰ was the first to put this form together with those mentioned above.

MONGOL

In Classical Mongol, the most common plural suffix after vowels is *-s*: *ayula* "mountain", plur. *ayulas*. It appears already in Middle Mongol, e.g., in the *Secret History*: *āmā* "woman", plur. *āmās*, *ākā* "mother", plur. *ākās*.

The suffix is not unknown in the dialects:

Kalmuck E.g., *emə* "woman", plur. *emas*.

Khalkha. E.g., *noχoi* "dog", plur. *noχos*.

Ordos. E.g., *eme* "woman", plur. *emes*.

Monguor. It appears only in connexion with the dative and locatives suffixes, e.g., *sGesdu*, plur. dative to *sGe* "great, aged".

* * *

Manchu. The plural suffix *-sa*, *-so*, *-se*, *-si*, is presumably a loan from Mongol. E.g., *haha* "man", plur. *hahasi*.

³⁸ Cf. W. Bang, *Beiträge zur türkischen Wortforschung* (Turán, 1918, pp. 289-310), p. 309.

³⁹ *Grammaire de la langue turque* (Paris, 1921), p. 318.

⁴⁰ *Les pronoms dans les langues altaïques* (Mémoires de la Commission Orientaliste No. 24, Krakow, 1936), p. 14.

The 1st person plural inclusive pronoun *muse* certainly includes the same plural⁴¹ although the presence of *u* in the stem cannot be easily explained.

* * *

Turkish. The simple *-s* plural cannot be found in Turkish languages or, at least, its existence is not clearly demonstrable.

Yakut has a plural in *-s* but this goes back to Common Turkish *-z*.

An interesting hypothesis has been put forward by Ramstedt.⁴² According to him, the *s* in the 3rd person possessive forms of Turkish: *-si*, *-si* is a plural sign. He supposes that the original 3rd pers. poss. suffix is the one still in use after consonants: *-i* (which would be the primitive Turco-Mongol 3rd pers. sing. pronoun **i*), and that *-si* was originally the suffix of the 3rd pers. plural, which, as often happens, later penetrated into the singular. His theory has been taken up by Kotwicz,⁴³ but it does not seem to me that the evidence brought forward can be considered conclusive. The difficulty lies, first of all, in the absence of other *-s* plurals. Those mentioned by Ramstedt are in fact plurals in *-z* which have gone through the phonetic change *z > s*.

Kotwicz professes to see this plural suffix in the final *-s* of the 3rd person plural personal endings of the Chuvash verb, e.g.:

Future, 3rd pers. sing. *-ə*, plur. *-əś*

Past perfect 3rd pers. sing. *-rə*, *-čə*, plur. *-rəś*, *-čəś*.

Confirmation of this theory depends on whether we can establish a correspondence: Common Turkish *-s* ~ Chuvash *-ś*.

The first difficulty we encounter is already a capital one: there is no final *-s* to be found in Common Turkish. Final *-s* does occur in some Turkish languages, the Altai-Dialects, Yakut, etc., but is usually considered the result of a change *-z > -s*, e.g., Yakut *küs* "autumn" < CT. *küz*. On the other hand the counterpart in Chuvash of CT. *-z* is *-r*: *kər* "autumn". I can quote only one case where CT. *-z* corresponds to Chuvash *-ś*: CT. *köz* "eye" ~ Chuvash *kuś*.

Otherwise the CT. parallels of Chuvash *-ś* are *-č*, or *-š*, e.g., CT. *baś* "head" ~ Chuvash *puś*, CT. *ač* "to open" ~ Chuvash *uś*.

But even if a correspondence Common Turkish *-z* ~ Chuvash *-ś* and with it an equation (let us say) Yakut *-s* ~ Chuvash *-ś* were well established, we should still have to explain the change: Common Turkish *-s* ~ Chuvash *-ś*. I do not see how we can possibly do so, since final *-s*, as already pointed out, does not exist in Common Turkish.

⁴¹ *Ibid.*, pp. 4 ff.

⁴² *Über mongolische Pronomina* (JSFOu. XXIII, 1906, 3), pp. 19-20.

⁴³ *Les pronoms* . . . pp. 23 ff.

In the present state of our knowledge we are not in a position to speak of an *s*-plural in Turkish languages.

• • •

As I have put suffixes of different phonetic shape under the same heading "4. -R", it remains to give an interpretation of them.

The correspondence Common-Turkish *-z* ~ Tunguz *-r* is well established. *E.g.*:

CT. *yüz* "face" (Käšyari, Osmanli, Coman, etc.), Bashkir *yez*, Altaic dial. *yüs*, etc.

~ Manchu *dere* "face", EvenkiVasil. *dərə*, NanajPetr. *dərog*, *dəral*, OlchaSchmidt *dörö*, Tung. Castr. *dārā*, SolonPoppe *dəral*, etc.

CT. *tuz* "salt" (Käšyari, Coman, etc.), Yakut *tūs*, etc.

~ EvenkiVasil., TungCzek. *turuha* "salt", cf. Amur (Goldi, Shirokogoroff, *turuha* "id".

CT. *tox* "dust" (Käšyari, Coman, etc.).

~ EvenLevin *tur* "earth, soil", LamutBogoraz *tur(ā)*, Shirokogoroff *tur*, Manchu *toron*.

On the evidence of these correspondences (their number could be increased) I assume that the Turkish *z*-plural is etymologically identical with the Tunguz *r*-plural. We have seen that the Chuvash correspondence of the CT. suffix also is *-r*. We thus have proof that suffixes may be subject to the same phonetic changes as the roots. The identity in the use of the suffix in Turkish and Tunguz is almost complete.

If we admit that the Chuvash *-r* and the Common Turkish *-z* plural suffixes are identical – and nobody seems to have doubts on the equation – we can hardly reject the identification of Turkish *-z* with Tunguz *-r*.

We shall now examine the phonetic background of the Mongol plural in *-s*.

The "regular" correspondence of medial or final Turkish *-z* in Mongol is *-r*. There is no need to enlarge here on this well-known point. Nevertheless, in a number of instances we find in Mongol an *-s* instead of an *-r*. There is perhaps a tendency to forget this fact, although it has been clearly established by Gombocz.⁴⁴ A few examples:

CT. *tox* "dust" (see above).

~ Class. Mong. *toyusun*, BuryatPodg. *tōhon*, *tōson*, Kalm.Ramst. *tōsy*.

CT. *tuz* "salt" (see above).

~ Class. Mong. *dabusun* "salt", Kalm.Ramst. *dawson*, MonguorMost. *daβsɔ*, Mod.Litt.Mong.Rinčine *daw(s)an*, BBury.Poppe *dawuhu*.

⁴⁴ Zur Lautgeschichte der altaischen Sprachen (KSz. XIII, 1912–13, pp. 1–37), passim.

The word passed from Mongol into Tunguz, e.g., Manchu *dabsun*, NanajPetr. *daosun*, OlchaSchmidt *dausu*.⁴⁵

In a number of instances Mongol shows, in the same word, a twofold correspondence with Turkish:

CT. *öz* "itself, self".

~ Class.Mong. *öber* "self", but also in the SH. *ö'äsün*.

In the Classical Mongol declension of this reflexive pronoun we still have forms of the two types:

Nom. *öber*.

Sing. Acc. *öber-iyen* or *öbesü-ben*.

Plur. Acc. *öbersed-iyen* or *öbesüd-iyen*.

Plur. Gen. *öbersed-ün* or *öbesüd-ün*.

Plur. Dat. *öbersed-tegen* or *öbesüd-tegen*.

CT. *kāz-*, e.g., Käšyari *kāz-* "to cross a country", ComanGrönb. *kez-* "to walk around", Osm. *gez-* "to walk", Kirg.Judakhin *kez-* "to walk, to stroll", etc.

~ Class.Mong.Golst. *kerü-* "to prowl", Kalm.Ramst. *ker-* "to stroll", but also: Class.Mong.Kow. *kesü-* "to prowl", Ord.Most. *gesu-*, Kalm.Ramst. *kesül-* "jemanden umherschlendern lassen".

~ (Manchu *hergi-* "to prowl", NanajPetr. *hərka-* "to wind round", EvenLevin *hərka-*).

If a correspondence Turkish *-z* ~ Mongol *-s* can be admitted, and the above examples show that there can be no doubt on this point, then we are entitled to regard the plurals Turkish *-z*, Mongol *-s*, and Tunguz *-r* as different forms of the same suffix.

So far as one can see these suffixes are not cognate, but the Mongol suffix has simply been borrowed from the Turkish. The *z* ~ *r* correspondence belongs to an older stage of Turco-Mongol relations than *s* ~ *r*. We must admit either scheme:

Altaic **r* $\begin{cases} \rightarrow \text{Tunguz } r \\ \rightarrow \text{Turkish } z > \text{Mongol } s \end{cases}$

or a scheme

Altaic **r* > Tunguz *r* > Turkish *z* > Mongol *s*.

The question now arises how the Uralian collective *-r* can be fitted into this scheme. I think that can be done quite easily, for the following correspondences can be established between the languages concerned:

(a) Uralian *-r* ~ Turkish *-z*.

Jurak *yur* "100" ~ CT. *yüz* "100" is the classical and convincing example of that correspondence which appears in many other instances whose discussion would lead us away from our subject.

⁴⁵ An interesting case is: CT. *tāngiz* "sea" (?Chuvash > Hungarian *tenger* "sea"); Mong. *tenggis* "sea"; EvenkiVasil. *tungār* "lake".

(b) Uralian *-r* ~ Tunguz *-r*. *E.g.*:
 Vog.Ahlyv. *nar, n̄r* "marsh, fen", Ost.Karj. *n̄r̄om*, Votj.Munk., Zürj.
 Wied. *n̄r*, etc. Ostiak-Samoyede *nar*
 ~ Manchu *niyari* "a wet place", EvenkiVasil. *narut* "lake", Dialect of
 Erbogočensk *naru* "little lake"

(~ Class.Mong. *naγur* "lake", Kalm.Ramst. *n̄r* "id.", etc., *cf.* also
 verbs like Class.Mong.Kow. *noryu-* "to wet", *nor-* "to be wet", etc.).

These are only a few samples of a very wide-spread group.

Further Tunguz-Uralian equations could easily be given, but I should
 like to avoid any deviation from our subject. In any case, the weakness of
 the hypothesis lies not in the phonetic but in the morphological field: the
 existence of an *r*-plural in Uralian is hypothetical.

* * *

I should like now to summarize what has been set out in the preceding
 pages.

Four suffixes have been discussed: *-n*, *-t*, *-l*, and *-r*. The extent of their
 application can be defined as follows:

1. *-n*. Is extensively used by Uralian and Tunguz languages in con-
 nexion with the personal endings. I think that this limitation in use is not
 without significance for the investigation of the origin of that form. *-n*
 appears frequently in Middle Mongol. As this language has no possessive
 system similar to that of Uralian and Tunguz languages, the suffix has been
 used for different though still rather limited purposes. This morpheme is
 attested also in Turkish but only in a very few instances; clearly it never
 played an important role in that language.

2. *-t*. Is very well attested in the Uralian domain where it is used for
 various purposes. It is common in Mongol dialects. The scope of its em-
 ployment in Tunguz is limited to pronouns and personal suffixes. A *-t*
 plural appears in Turkish only incidentally.

3. *-l*. Is a typically "northern" suffix, limited to Samoyede and
 Tunguz. The few instances in which it appears in Mongol are either
 archaisms or sporadic loans from Tunguz.

4. *-r*. Is apparently a very ancient plural, common to Turkish and
 Tunguz. In Mongol it must be a comparatively recent borrowing from
 Turkish. If the few Uralian collective *-r* suffixes belong to the Altaic forms,
 they can hardly be considered recent borrowings. They are faint traces of
 very old Ural-Altai contacts or of cognate relationship.

B. COMPOUND SUFFIXES

We designate as "compound" those plural suffixes which have been
 formed by a combination of at least two suffixes. The components, in their
 turn, may be simple or compound suffixes.

The constituent elements of such a compound suffix may be separately
 in constant use in the language which puts them side by side. In that case
 we may speak of "living compounds". On the other hand one or several of
 the elements composing the actual plural suffix may no longer be in use as
 independent formatives, in which case we have to speak of "dead com-
 pounds".

Even a limited study shows that the use of compound plural suffixes
 is common practice; Mongol languages give us particularly convincing
 examples.

In Classical Mongol the living plural suffixes *-s*, *-d*, *-nar*, *-ud* are
 currently joined: *-s+ud*, *-d+ud*, *-nar+ud*. *E.g.*, *üile* "deed", plur. *üiles* or
üilesüd; *qayan* "prince", plur. *qayad* or *qayadud*; *lama* "priest", plur.
lamanar or *lamanarud*.

Compound plural suffixes are quoted by Father Mostaert in the Ordos
 dialect: *lamanarüt* "priests", *got'odüt* or *got'osüt* "towns". *-nar*, *-ut*, *-d*,
-s are, in this dialect all living plural suffixes which can be used separately.

In Khori-Buryat, *-nar* and *-nüd*, both active plural suffixes, are some-
 times joined together: *aγa* "elder brother", plur. *aγanarnüd*.

In Kalmuck, the plural suffixes *-dūd*, and *-sūd* (*e.g.*, *mōridūd*, *mōrisūd*
 "horses") are composed, as Ramstedt rightly pointed out, of the plurals in
-s, *-d*, *-ūd*, all of them living.

* * *

I shall give now a conspectus of the dead compound plural suffixes of
 the Altaic languages with reference to some Finno-Ugrian forms.

1. *N+R*

This combination is well attested in Mongol.

Classical Mongol, *aqa* "elder brother", plur. *aqanar*.

Khalkha, *aγa*, plur. *aγanar*.

Ordos, *aγa*, plur. *aγanar*.

Buryat, *aγa*, plur. *aγanar*.

Kalmuck, *aγa*, plur. *aγanar*.

It is customary to consider this suffix the Mongol variant of the
 Turkish plural *-lar*. No phonetic evidence can be adduced to back this
 opinion which, if I am not mistaken, goes back to Castrén. Ramstedt in one
 of his over-hasty statements⁴⁰ suggests a comparison not only with Turkish
-lar, but also with Yakut *nār* "together" and Kalmuck *narmā* "all".

The Yakut plural suffix *-nar*, *-ner*, *-nör*, etc., occurs in connexion with
 words ending in nasals (*n*, *m*, *ng*) and must thus be considered as a phonetic
 variant of *-lar*.

So far as our earliest records of this language go, Mongol never had a

⁴⁰ *Kalm. Wbch.*, p. XVI.

plural in *-r*, whereas *-n*, attested in the oldest documents, has more or less always remained in use. Therefore the easiest explanation of such compounds, according to which the first element was no longer felt as a plural suffix and a second plural was added, cannot be applied in this case. The addition of *-r* must have been due to the speakers of a language in which *-r* was a living and *-n* a dead, or at least a dying, suffix. The condition is easily fulfilled by Tunguz, in the form in which it is known to us.

The question now arises how a Tunguz suffix came into Mongol. I suppose that *-nar* is a Tunguz plural suffix, which, although no longer in use in the dialects known to us, was borrowed by Mongol. The speakers who introduced this suffix into Mongol must have been Mongol-speaking Tunguzes in process of giving up their own language. Such a supposition accounts also for the absence of *-nar* in the existing Tunguz dialects: the lending language has been absorbed by Mongol. It must be remembered that *-nar* in Mongol is a redundant suffix, the use of which is limited to forming the plural of nouns designating men or gods.⁴⁷ It occurs in the earliest written records; this fact, however, as these documents are comparatively recent, is not at variance with our theory.

The second possible explanation would be that Mongol-speaking Tunguzes transferred their own plural *-r* into their new language. The birth of *-nar* thus would have taken place in the Mongol domain.

In both alternatives foreign, presumably Tunguz, influence must be taken into account.

2. N+S

Ordos. Plural in *-nūs*, in connexion with personal pronouns, e.g., *biDanūs* "we".

Khori-Buryat. *-nūs*, limited to pronouns, e.g., *t'ānūs* "you".⁴⁸

Chuvash. This language shows instead of the usual plural *-lar* of Turkish, the plural suffix *-sem*, *-sam*, e.g., *kil* "house", plur. *kilsem*.

In several oblique cases this suffix appears in the form *-san*, *-sen*. E.g., in the dative we have *kil-e*, plur. *kil-sen-e*.

Chuvash final *-m* is the regular equivalent of Turkish *-n*. E.g., CT. *qarın* "belly" ~ Chuvash *hirəm*, CT. *yalın* "flame" ~ Chuvash *šolam*. It is a well-known fact that the Chuvash loan-words in Hungarian bear testimony to the antiquity of the change *n > m*. Hungarian *szám* (phonetically *sām*) ~ Chuvash *sum* ~ CT. *san* "number".⁴⁹

⁴⁷ Hambis (*Grammaire mongole*, p. 3) is unaware of the distinction in use between plurals in *-s* and in *-nar*. He copies Schmidt's *Grammatik der mongolischen Sprache*, pp. 25-6, without even altering the order of the examples given. He merely adds a mistake of his own by claiming that *tengri-ner* means "cieux" and *tengris* "les dieux". The reverse is correct.

⁴⁸ Cf. Rudneev, *Khori-burjatskij govor*, I, p. XLVII, quoted by Poppe, *Voprosy grammatiki mongol'skogo jazyka* (ZIV, II, 1933, pp. 51-68), p. 62.

⁴⁹ Cf. recently Räsänen, SO, XV, 1949, p. 205.

The Chuvash treatment of CT. *-n* thus allows us to derive the Chuvash plural suffix *-sam* from a former *-san*, which is not a starred form as it is still preserved in some of the oblique cases. This *-san* should then be a compound suffix uniting *s* and *n*.⁵⁰

Kamass-Samoyede uses a plural suffix whose main forms are: *-sang*, *-seng*, *-zang*, *-zäng*: *t'o* "reindeer", plur. *t'ozang*. The phonetic resemblance of this suffix to the above-mentioned Chuvash form was noticed already by Castrén.⁵¹ We cannot at present decide whether the forms concerned are in fact linked together or whether the resemblance is coincidental.

3. N+T

Among the living languages only Buryat shows this combination: *-nad*, *-nad*, e.g., *aḡanad* "elder brothers". In Khori-Buryat the suffix is super-added to the 2nd person plural personal pronoun: *t'ānat* "you".⁵²

Strangely enough we meet this suffix as early as in the *Secret History*, but only in connexion with the word *beri* "daughter-in-law", plur. *berinet*.⁵³

4. N+L

Mordvin collective suffix in *-nal*. E.g., *kuz* "fir-tree", *kuznal* "fir-wood (forest)"; *kev* "stone", *kevnal* "stony place".⁵⁴

5. S+L

Nanaj. Ordinary plural suffix *-sal*, *-säl*, e.g., *hoton* "town", plur. *hotonsal*.

This suffix has already been recognised by Kotwicz as⁵⁵ a compound of *-sa* and *-l*.

Evenki. Plural in *-sal*, *-säl*, e.g., *murin* "horse", plur. *murisal*.

I am inclined to see a double compound in the plural *-nasal*, *-näsäl*, etc., noted by Castrén in the dialect of Nerchinsk: *n+s+l*. This suffix is used in connexion with kinship terms, e.g., *baḡa* "brother-in-law", plur. *baḡanasal*.

Dahur. Plural in *-sal*, *-säl*, e.g., *bere* "daughter-in-law", plur. *beresäl*.

Poppe is right in considering this suffix as a compound (*-sa+l*) and a borrowing from Tunguz.⁵⁶

⁵⁰ A short survey of previous explanations has been given by Kotwicz, *Les pronoms* . . . pp. 25-6.

⁵¹ *Samojedische Grammatik*, p. 109.

⁵² Cf. p. 224, note 48.

⁵³ Cf. Haenisch, *Wörterbuch zu Manghol un Niuca Tobca'an* (Leipzig, 1939), s.v. *beri*.

⁵⁴ Lehtisalo, MSFOU, LXXII, p. 150.

⁵⁵ *Les pronoms* . . . p. 24.

⁵⁶ *Dagurskoe narečie*, pp. 150 f.

6. *L+R*

The plural suffix common to all Turkish languages except Chuvash, is *-lar*, *-lär*. As it is sufficiently well known I can dispense with examples of its use. This suffix is of common occurrence in both nominal and verbal forms.

Many explanations of the etymology of this suffix have been attempted. They have been particularly well reviewed by Kowalski,⁵⁷ so that it is not necessary to enlarge on the matter. I should like only to refer to two works, one by Kotwicz and one by Grönbech,⁵⁸ both dealing in detail with the question, and published simultaneously with Kowalski's work.

I do not think that any of the older explanations can stand on its own merit.

More recently Räsänen has dealt at some length with the origin of this suffix.⁵⁹ In his view, *-lar*, *-lär* is a compound formed by an element *-l* and the Turkish word *är* "man". As for the first of these components, its function in Turkish is not quite clear; the suffix in question is *-li*, used in constructions such as *ini-li äci-li* "younger and elder brothers". The use of a word meaning "man" for the formation of a plural cannot be rejected in principle, but it seems strange that this word should only have been used in connexion with an *-l* morpheme and not put directly after the stem, as happens in similar cases both in Turkish and in Finno-Ugrian.

Nevertheless I think that Räsänen, a most ingenious scholar, gave a more satisfactory explanation than any one before him. I trust that in the light of the evidence which the present article may have brought to the understanding of the Altaic system of plural suffixes, the explanation of *-lar*, *-lär* as a compound suffix composed of the simple plurals *l* and *r* will appear to him and others as self-evident as it does to me.

The formation of this suffix could not have taken place in Turkish proper, from which both of the formative elements are absent.

It is established on the strength of internal evidence that Turkish developed a plural very late.⁶⁰ In the Orkhon Inscriptions *-lar* appears only in a few instances limited to kinship terms. The suffix must have been an alien element introduced gradually by Turkish-speaking Mongols and Tunguzes, to provide for what they may have felt as a deficiency in Turkish. It may also be that the vacuum was filled by the Turks themselves who, through constant contacts with Mongols and Tunguzes developed a need for plural expression which their own language so far lacked.

⁵⁷ Zur semantischen Funktion des Pluralsuffixes *-lar*, *-lär* in den Türkisprachen (Mémoires de la Commission Orientaliste No. 25, Krakow, 1936), pp. 23-32.

⁵⁸ Les pronoms . . . and Der türkische Sprachbau, both mentioned above.

⁵⁹ Aus der türkischen Formenlehre (JSFOu. L, 1939, 7), pp. 1-6.

⁶⁰ Der türkische Sprachbau, pp. 57 ff.

7. *T+T* (*Č+T*)

A *t+t* plural can be found in Ordos, but its use is limited to one word: *Bere* "daughter-in-law", plur. *Bereüt*.

It seems probable that suffixes of the type *-čüt* result from a development, *-t+vowel > č+vowel*, which is by no means unusual in Mongol. Lack of space forbids me to enter into details about this phonetic change, which seems to be fairly recent; for *t ~ č* alternations are common throughout the Mongol Epoch.⁶¹ This suffix can be met in almost every Mongol dialect. Added to adjectives it indicates a class of individuals.

Classical Mongol. *-čüd*, *-čüd*, e.g., *bayan* "rich", *bayačüd* "the rich".⁶²

Kalmuck. *-čüd*, e.g., *bayačüd* "the rich".

Ordos. *-č'üt*, *-č'üt*, e.g., *bayač'üt* "the rich".

Khalkha. *-čüt*, *-čüt*, e.g., *baya* "little", *bayačüt* "the little ones".

Buryat. *-čüd*, or in the literary language *-šüd*, e.g., *bayašüd* "the little ones".

8. *T+L* (*Č+L*)

Khalkha. *-čül*, *-čül*, e.g., *bayačül* (= *bayačüt*).

Buryat. In the Congol and Sartul dialects *-čül*, in the literary language *-šүүл*, e.g., *bayašүүл* "the rich".

Lewicki explains⁶³ *-čül* and its "variant" *-čüd* as a compound, comprising the plural suffix *-l* and the particle *ču*.

* * *

If we survey the compound suffixes enumerated above, it becomes apparent that the majority of them are found in Mongol. We have been able to trace only one compound suffix in Tunguz (*s+l*), one in Common Turkish (*l+r*), one in Chuvash (*s+n*), and one rather doubtful one in Finno-Ugrian (*n+l*).

A few more compounds may be ascertained by further research but it seems unlikely that they will bring essential changes into the picture.

It will be noticed that not only are, in many cases, the constituent elements of the compound absent from the language concerned at the time when the compound made out of them is in use, but apparently languages use suffixes which are an amalgam including partly or even exclusively foreign elements. Such is the case, as we have seen, in Mongol *-nar*, and even to a higher degree in the Turkish plural *-lar*. Obviously they had to

⁶¹ Cf. recently, Pelliot, *Notes sur l'histoire . . .* p. 17 and pass.

⁶² Hambis is wrong in his *Grammaire mongole*, (p. 4):—(1) in quoting this suffix in the form *-čüt*, *-čüt*; (2) in saying that the suffix is used by "Un certain nombre de substantifs terminés par *-n* ou qui ont anciennement comporté un *-n* . . ." (among others one of his own examples, *baya* "little", never had a final *-n*); (3) in translating *bayan* and *baya* as "le riche" and "le petit", he makes the mistake of treating adjectives as nouns.

⁶³ *Op. cit.*, p. 123.

be borrowed from a language where, certainly at some stage, one or both of the constituent elements were alive.

CONCLUSIONS

I have not attempted in the present article to give a complete and detailed synthesis of the Ural-Altai plural suffixes. I have had to break new ground and have been unable in every case to obtain clear-cut results: even less could it be expected in this first attempt to get a comprehensive picture of all the problems involved. Nevertheless I think it well worth while to draw a few conclusions, not so much for their own sake as to bring out a few more results hidden in the facts, and also to give a kind of summary for scholars dealing with general linguistics.

As a first result we may register two new Ural-Altai correspondences: the plurals in *-n* and *-t*. Both cases are perfectly clear. The Finno-Ugrian and Tunguz facts observed in connexion with *-n* (the existence of which in Tunguz has hitherto been ignored) are as closely parallel as if they belonged to the same language. This may also be said, although less emphatically, about the *-t* plural. Both these suffixes are well represented in Mongol, with the obvious difference that the much simpler structure of that language did not offer sufficient scope for such minute distinctions as did the Uralian and Tunguz languages.

For some years I have been aware of Uralian-Tunguz contacts, have mentioned them occasionally,⁶⁴ and hope to publish soon some of the relevant material I have collected. The plural *-t*, common to Samoyede and Tunguz, with some traces in the other Ural-Altai languages, is a new fact in this connexion.

The study of Ural-Altai plural suffixes shows clearly that the crucial problem is that of the interrelation of these languages. One would think that the complexity of the question is even greater than in the Indo-European field. We cannot possibly tackle this problem here. The case of the *-r* plural is a convenient example of the difficulties one may expect to find.

The adoption of a suffix by one language from another is perhaps the most interesting feature we have been able to ascertain in this study. Similar cases are by no means uncommon in Indo-European languages but they appear in the Altai field with astonishing frequency. This presupposes something more than contacts between the languages involved; we actually have to reckon with the fusion of different languages.

The study of plural suffixes gives us important clues to the understanding of the formation of the personal endings, both nominal and verbal. It appears that Ural-Altai languages originally disposed of only two or

perhaps three personal endings used indiscriminately for singular and plural. Plurality was expressed by specialised suffixes added to the singular personal endings. Chuvash *kil-əm-ar* "our house" is, as we have shown, formed by *root + possessive suffix + plural suffix*. Even *ju-w-ar* "our own house" is its exact counterpart, whereas, e.g., in Ostiak-Samoyede the same pattern is used with various plural suffixes: *loga-u* or *loga-m* "my fox", *loga-u-t* or *loga-m-en* "our fox". *-m*, *-w*, *-u* are phonetic variants of the same possessive suffix, *-r*, *-t*, *-n* are various plural suffixes used in a similar rôle. The Samoyede forms are particularly interesting because they show the interchangeability of the tools serving the same semantic purpose within the framework of one and the same language. This circumstance presupposes some etymological consciousness on the part of the speaker.

The question now arises whether different languages using the same constructions composed from the same elements developed the forms separately or continued forms which were already present in a primitive, let us say Ural-Altai language. The answer is not easy and a separate view has to be taken for each case.

The striking identity between the above-mentioned Chuvash and Even forms is coincidental in so far as each of those languages may have chosen a different plural suffix out of the common stock or have put the suffixes in a different order. The non-emphatic possessive forms of Even use *-n* instead of *-r* as plural sign.

Even if some discrepancies are to be found in the use of an actual suffix, the similarities are certainly more numerous and decisive. At least as far as the use of plural suffixes is concerned, the close relation existing between the Ural-Altai languages cannot be denied.

We have just discussed suffixes as they occur in various Ural-Altai languages. We shall now change our viewpoint and glance at each of these languages as far as their plural suffixes are concerned.

Although all Common Turkish dialects know a plural in *-lar*, this suffix must be an innovation because it cannot be traced back to any primitive form and is unknown even in Chuvash. The available evidence shows that all Turkish plural suffixes with the exception of *-s* have been borrowed from other languages. As the latter suffix has only a very limited use (mainly personal endings) we must conclude that primitive Turkish (if such a language ever existed) had no plural and that its introduction was an innovation for which both the impulse and the material came from other, probably Tunguz, languages.

As for Mongol, I am quite prepared to consider it as a mixed language, in which it is not always possible to distinguish between the main stock and the borrowings. Some features of Mongol cannot be explained except on such an assumption, and even in the limited sphere of our subject we can find one or two pointers to it.

⁶⁴ *Az uráli - mandzsu-tungúz kapcsolatokhoz* (Magyar Nyelv, XLVI, 1950, pp. 164-5).

Classical Mongol had eight plural suffixes, *-s*, *-d*, *-nar*, *-nuγud*, *-sud*, *-dud*, *-narud*, all in common use, and we know that some other Mongol plurals, such as *-n* or *-l*, have been eliminated from the classical language. This abundance can, in my view, only be explained by the repeated or even steady symbiosis of different languages. I purposely avoid the expression "superposition" as I do not think we can speak of a dominant and a lower language, although that possibility cannot altogether be excluded, at least for the whole period of the mixing process. As Ural-Altai languages rarely have more than a few plural suffixes, Mongol must preserve the residue of several Altaic languages which either have disappeared or at least are unknown to us in the form they had when they influenced Mongol. The question whether there was a genuine "Mongol" substratum, related or not to Altaic languages, but deeply influenced by them, or whether we must consider Mongol purely as a conglomeration, must for the present be left unanswered.

Clearly the issues involved far outstrip the evidence brought forward by plural suffixes but, in my experience, many other facts are in accordance with this hypothesis.

Tunguz uses all the simple Altaic plural suffixes: *-n*, *-t*, *-l*, *-r*. In most of their applications they show noteworthy similarities with Uralian and they all seem to belong to the original stock of the language. The comparatively small number of composite forms suggests that the language has never needed new plurals, the existing ones providing expedients for each distinct use.

The morphological systems of the Tunguz, Uralian, and Turkish languages show considerable agreement, a point on which I cannot now enlarge. So far as the plural suffixes are concerned, the similarities are partly due to innovations. I have not been able to date the formation of the 3rd pers. plur. personal pronouns of the type *nua-ti* in Tunguz, but the similar Turkish construction *olar* is certainly recent. The common features of Uralian and Tunguz may be parallel formations, but they may also be regarded as evidence for the earlier unity of these languages. The first of these alternatives still presupposes a long and close association between the languages concerned. Only a fairly complete study of the morphology of the two groups can decide this question.

The morphological system of Mongol, particularly in its earliest stage known to us, differs from the Uralian, Turkish, or Tunguz type. Almost the same building material has here been used for a different structure.

In the Uralian field I have not dealt with suffixes to which I have been unable to find Altaic correspondences, so it would be rash to draw here definite and comprehensive conclusions on the Uralian plural system.

In spite of these and other obvious shortcomings I am confident that some positive results have been obtained in the present paper, which may thus contribute to our knowledge of the Ural-Altai languages.