A contrastive analysis of the morphological structure of words in the mongolian and english languages[*]

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The present dissertation has the aim of giving the characteristics of the morphological structure of Mongolian words comparing them with those in English.

The discussion of the thesis is mainly based on Mongolian materials and we have also described English materials only where relevant, to point out the similarities and differences of the two languages. The facts related to the structure of the English language in this thesis have generally reflected the point of view expressed by Germanics who elaborated the matter published in their works and articles.

The Mongolian language has been little studied in comparison with many other languages. There are few works devoted to the study of Mongolian word structure, therefore this work touches upon one of the actual problems in the investigation of the Mongolian language. The examples, words and expressions cited in the present dissertation are taken from Kahoka Mongolian, the main dialect in the Mongolian Peoples' Republic, which is easily understood by all Mongols. It is the official language of the nation, and the modern literary language in use in the country.

For analysis I have chosen a Mongolian passage of 100 words, from modern literary essays which expresses the spoken Mongolian language which reflects the main characteristic of Mongolian morphology.

The dissertation has an introduction, three chapters and a conclusion.

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[*] Synopsis of the dissertation written for the degree of doctor in philology (Institute of Linguistics, USSR Academy of Sciences, Moscow,1971). Уг эхэд олонтаа тохиолдож байгаа зарим эргэлзээтэй үгийг хэвээр нь бичсэн болно.

INTRODUCTION

Many linguists have focused their interest on typological studies. Typological investigation of structural features of various languages is of major importance for the establishment of general theory of linguistics. The aim of linguistic research work is to disclose the complex, yet systematic structure of language and the laws governing it.[1]

A contrastie structure study is defined as a systematic comparison of selected linguistic features of two or more languages[2]. To contrast non-cognate languages is theoretically a very fascinating problem.

Morphological structure of words, in more narrow sense, may be understood as structure of morphemes of words.[3] It is necessary to find out the general features in the morphological structure of words in any language. In this thesis we have tried to discover not only techniques of the combination of morphemes, but also quantitative distributions of morphemes in Mongolian.

In a grammatical study the linguist is mainly concerned with morphemes and their arrangements, but he is also obliged to pay attention to the way these morphemes are put together[4]. Our notion of the morphological structure of words follows the statement of M.M.Guhman, who wrote that; "The description of the morphological structure of words involves; 1) isolation of the classes of morphological units (root and affixed morphemes, stem of words and endings) and analysis of their behavior in words; 2) determination of the models types of the morpheme structure of words (monomorphemic and polymorphism morphemes models);3) analysis of the correspondence of the various morphological units within words; 4) description of the combining rules of the morphological units in a word[5].

Mongolian comparative studies, of Mongolian languages and dialects, were started by G.J.Ramstedt, half a century ago. After that many works, papers and articles on the Mongolian language have been written. Traditional grammers supplied much valuable data and observations.

The Mongolian language, from the structural linguistic point of view, was first studied by C.J. Street[6]. In 1968, Sh.Lubsangvangdan[7], a professor of Ulan Bator University, investigated the Mongolian language in detail and published his work *Modern Mongolian Structure* in two volumes.

In 1969, a monograph titled "Morphological Structure of Words in Mongolian Languages" was published by T.A.Bertagaev.[8] In his work the author made a systematic contribution to the study of the word structure of

[1] В.Н. Ярцева. *Типологическое исследование морфологических структур в родственных языках.* - "Структурно-типологическое описание современных германских языков". М., 1966, p.21.

[2] John H.Hammer and F.A. Rice, *A Bibliography of Contrastive Linguistics,* Washington, D.C.1965.

[3] В.Г. Адмони. *Морфологическое структура слова в немецком языке.* - Морфологическое структура слова в индоевропейских якыках. М., 1970, p.182.

[4] V.N.Yarceva, *Meaning and Form in Grammer,* - "Zeichen und System der Spreche", Bd III , Berlin, 1966, p. 274.

[5] М.М. Гухман. *Морфологическая структура слова в древних германских языках* - "Сравнительная грамматика германских языков" Том 3. М., 1963, p.7.

[6] J.C. Street. *Khalkha Structure* -"Uralic and Altaic Series". Indiana University Press, v. 24, 1963.

[7] Ш.Лувсанвандан. *Орчин цагийн монгол хэлний бүтэц.* Улаанбаатар, 1968.

[8] Т.А. Бертагаев. *Морфологическая структура слова в монгольских языках.* М., 1969.

Mongolian languages, particularly to the alternational system in word structure.

Although the author has relied greatly upon the structural and functional approaches which have been used by several Mongolists such as J.C.Street (USA), acad. Sh. Lubsangvangdan (MPR), T.A.Bertagaev (USSR), Shirô Hattori (Japan), L.Bese (Hungary), I have departed from them on points where this seemed inevitable.

Languages are exceedingly complex structures and have their own frame or reference, therefore a language should not be approached and described in terms of another language. Up to now, many Mongolists to describe the morphological structure of it is necessary, first of all, to determine the composition and principle of construction of certain linguistic units, relying on the morpheme and various classes of morphemes.[9] It is important to classify the morths by morthemes; to define the possible boundaries of variations within the limit of one morpheme, i. e. the question on the principle of pertaining to one, or on the contrary, to various morphemes.[10] Like the phoneme which exists in a language, having only a definite number of allophones, or like the word which exists in a language only within a definite complex of this own word form, the morpheme we presents the definite unity of forms.[11]

E.A. Makaev wrote: "The morphological structure of a language consists of a) morphemics, which is made up the morphemic structure and isolation, alternations of morphemes (morphs and allomorphs)..., and b) paradigmatics, which is made up structural formations of paradigms...[12].

Owing to limitation of the subject the author has to leave out many ideas or principles that the author should have liked to touch upon. The author has avoided most of the phonological and syntactical problems.

I do not consider it necessary to enumerate all my sources, but I may mention that I have used, in the first place, for the English part of my thesis, *Historical Morphology of English language*[13], and many other works and articles on contrastive and typological studies by V.N.Yarseva, and works and articles by many Soviet Germanics and Descriptive linguists as E.A.Makaev[14], M.M.Guhman, O.S.Akhmanova, V.M.Solntsev, E.S.Kubryakova, V.N.Toporov, Vyach.Bs. Ivanov, as well as the main works by the authors of the American and Western European countries as L.Bloomfield, O. Tespekson, H.A.Glasson, E.Nida, Hockett.Ch, H.Marchand, Z.Harris, B.Bloch, G.Trager and many others; for the Mongolian part, mostly all works of Mongolists, simultaneously, taking into consideration the works of Turculogists as W.Radloff, S.E.Malov, N.A.Baskakov, W.K.Dimitriev, K.H.Menges, E.R.Tenishev, A.A.Kononov, E.V.Sevortyan, A.A.Yuldashev, and others have studied the language in the light of the Indo-European language system.

[9] Е.С. Кубрякова. *Морфологическая структура слова в.современных германских языках.* "Морфологическая структура слова в индоевропейских языках". М., 1970. p. 109.

[10] Е.С. Кубрякова. Id. P. 109.

[11] Е.С. Кубрякова. Id. P. 109.

[12] Э.А.Макаев.*Морфологический строй общегерманского языка.* - "Проблемы морфологического строя германских". М., 1963. p. 54.

[13] В.Н.Ярцева. *Историческая морфология английского языка.* 1960. М.,-Л.,

[14] Э.А. Макаев. *Структура слова в индоевропейских и германских языках.* М., 1970.

An effort has been made to deal with the salient features of Mongolian word structure. Disagreement among Mongolists over what should be included and omitted, is contained in this work. A full description of the complexities of the living Mongolian language, can never be fully described.

Although the study of Mongolian language has made good progress in past decades, still to this day no adequate contrastive study of Mongolian and English employing the techniques of modern linguistics has been made.

The task of compiling a detailed contrastive structural grammar of English and Mongolian still rests with the future. The aim of the thesis is only to give outline of the contrastive study on word structures in Mongolian and English. So we have chosen the title *"The Contrastive Analysis of the Morphological Structure of Words in Mongolian and English"*. The author has set himself the task of finding out the types, sizes and allomorphs of Mongolian morphemes, distributions of morphemes and morphemic structure of words in connecting their form classes, and finding out the most typical models of combining morphemes and morphemic structure of words in the language. Furthermore, the task was set to compare all of the above mentioned with those of present-day English, consequently; to manifest and establish the structural similarities and dissimilarities of words in the two languages; the aim of the thesis is to determine the general features and characteristics models of the morphological structure of words in Mongolian in Comparison with English. We have tried to discover not only the techniques of morpheme combinations, but also the quantitative distributions and the positional arrangements of morphemes. Thereby, we can typologically define the affiliation of the Mongolian language, and can give a more objective assessment of the morphological peculiarities of the language.

The following common characteristic general features of the Mongolian language; 1) opposition of long vowels versus short vowels with the semantic distinctiveness; 2) constant or fixed stress and pitch which are non-phonemic; 3) vowel and consonant harmony which is phonologically conditioned and is the basis of the suffix allomorphs; 4) lack of preposition, post position and prefix; 5) strict word order of the type of <<attributive + attributed>>[15]; 6) absence of subclasses of noun and verb from the morphological point of view; 7) existence of a highly regular paradigmatic system, almost without any exception; 8) existence of long chains of successive derivation.

The Mongolian language is agglutinative in structure. As generally accepted, agglutinative which means that inflection and word formation take place by adding of suffixes to roots or stems. In the agglutinative Mongolian language no sets of forms such as *sink – sank – sunk*, or *sing – sang- sung* occur. To this one more detail should be added: the suffixes are usually monofunctional (with a very few exception) contrary to the polyfunctional endings of the inflectional Indo-European languages. In other words, the agglutinative character of the Mongolian word inflection manifests itself by adding suffixes, each one has only one function. When a suffix is added, the stem does not undergo any internal changes except for a few morphonemic alternations, i.e. the vowel of the stem does not disappear   and is not replaced by another vowel as it   happens in other languages. One could say

[15] Б.А.Серебренников. *Причины устойчивости аглютинативного строя и вопрос о морфологическом типе языка.* - "Морфологическая типология и проблема классификации языков". М.-Л., 1965. p.7.

that the suffixes are added mechanically, if one is to disregard assimilation or dissimilation of the stem final and suffix initial consonant.

The morphological structure of words in Mongolian, first of all, should be studied from the point of view of morphemic content; it should not be limited by stems or dictionary forms, i.e. it is necessary to revise the old traditional scheme of the morphological division of Mongolian words. Mongolian words are mostly characterized according to the structural constituents in it by strict binarydistribution; on the left, so-called root morpheme, on the right, suffix (or affix) morphemes, and only in successive order. All Mongolian morphemes are either roots or suffixes or structural elements and they are readily divided into constituent parts and have more concrete meaning than these in English.

The definite phonological structure of roots typically differ from those of affixes.

Roots always consist of CV and V patterns, suffixes mainly of CV and VC patterns; and there are some suffix combinations in the shape of VC and CVC, there are also nine C type of suffixes.

English root morphemes are always longer than those in Mongolian. The overwhelming majority of root morphemes in Mongolian are bound, while most of the roots are free or free words in English. Therefore, in most cases, the Mongolian equivalents of English free roots are, respectively, derived words. It should be noted that all roots of numerals, some roots of pronouns are bound in Mongolian, like other verbs and noun roots.

The overwhelming majority of Mongolian words are polymorphemic; the number of morphemes in a word is, on the average, more than in English, e.g. 100 words: 143 morphemes (Eng.)[16]; 100 words: 391 morphemes (Mong.), all statistical data is illustrated on page 36.

It is very important for further description to bring out the following points related to the division of words into grammatical classes.

The paradigmatic class consists of nouns and verbs in Mongolian, and of nouns, verbs, adjectives and pronouns in English. There are no special inflectional patterns which indicate the morphologically separated class of adjectives in Mongolian. Those Mongolian words, which are semantic equivalents of English adjectives, or which are traditionally classified as a separate part of speech – adjective in Mongolian (in fact, I consider it does not), have a common paradigmatic system with the noun, from the structural point of view.

English nouns are inflected in two categories: number (Z_1) and possessive (Z_2) as opposed to three in Mongolian: number (Z_1), relational number (Z_2) and definity (Z_3). English nouns can be singular and plural whereas generic and partial in Mongolian.

In Mongolian there is neither replacive like in English V-V$_1$ as in *foot–feet, tooth–teeth,* not a covert formal difference, i.e. zero structural difference like *sheep–sheep, deer–deer.*

In English the definity of nouns is expressed by the definite article (the) and by the personal and demonstrative pronouns; in Mongolian it is also expressed by the demonstrative and personal pronouns, in addition, there is a suffix of definity $-a^4n$ which operates functions to manifest the definiteness of the object of verbs.

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[16] The reference data of the morphemic number in a word in English are taken from: E.C. Кубрякова. id. 181.

Both languages have their own gender suffixes, they are not inflected because they are derivational suffixes. Male persons are masculine, female persons are feminine. But in English, especially in pronouns, some animals are included in this gender system.

The pronoun in English is regarded as a special lexical and grammatical class, whereas it may be a subclass of a noun, because the inflectional system of it is rather different from the noun. Mongolian pronouns are likely demonstrative nouns only used in the first and second person; there is no third person pronoun in subject form. There are no lexical equivalents to English *he*, *she* and *it*, to the Russian *OH*, *OHA*, and *OHO* which are expressed in Mongolian sometimes by syntactic ways, sometimes by means of suffixes, sometimes by indicating the item overtly, i.e. the name of the person mentioned; in other words, the above stated English and Russian pronouns are expressed as lexical equivalents in syntactic ways, used only once, when mentioned first time in certain utterance, rarely occur again in the rest of sentences or phrases[17].

Conversion in English is always represented by roots as *work* (N), *work* (V), in Mongolian always systems as *xele*-(V)'to say', *xele* (N) 'language, tongue'.

The Mongolian verb system has no infinitive form, as in English. In Mongolian the verbs have the finite forms. A verbal base is used in Mongolian without any inflectional suffix. There is nothing in the system of Mongolian verbs which can be compared with the English verb classification by the irregular verb classes. In the Mongolian verb inflection, there is no such type of phenomenon as in English: *leave-left, take-took, put-put-put, build-built* etc. All types of Mongolian verb inflections are formally similar to the English past tense; verbs are derived from infinitive verbs, as *moved* from *move*. Even the paradigms of the verbs which are considered auxiliary verbs by some Mongolists are identical with regular verbs.

The Mongolian transcription used in this dissertation is that found in most scientific works dealing with the Mongolian language. It should be noted that the Mongolian consonant phoneme b, has two allomorphs: *b~w*. In this paper we have not used the weakening sign, because all the short vowels occurirng in the syllables except for the first syllable are always more or less pronounced weaker, but never drop out, e.g. *-a̋sa*[18] as in *nomóso* 'from the book'.

Chapter One

THE DIFFERENT CLASSES OF MORPHEMES IN MONGOLIAN AND ENGLISH

In this chapter we discuss the different classes of morphemes: root and affixal morphemes and their sizes and shapes, types, positions, models from the quantitative, structural and functional point of view.

Morphemes in any language differ in types of phonemes which comprise them, the relationship of the parts of morphemes to each other, and

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[17] Choi Lubsangjab. *Teach Yourself English. For Mongolian readers*, ed. By Damdin. Ulan Bator, 1969, p. 203.
[18] J.C. Street. Id. p.65.

the manner in which morphemes are formally and functionally connected with each other.

In general, morphemes are divided into two types, segmental and supersegmental morphemes.

Segmental morphemes: consist of vowel and/or consonants in normal transition; zero allomorphs are included here. Segmental morphemes are the basis of the morphological structure.

Supersegmental morphemes consisting of patterns of stress, and juncture, are also called superfixes.

The most important condition for any fruitful, constractive investigation is the good choice of the "Unit of Measurement", minimal unit by means of which, the facts under consideration are treated. For morphology, such "unit of measurement" is a morpheme[1].

Object of Morphology is the morphems and the models of morphemic structure of words. There are a limited number of typical models of word structure[2].

Mongolian root Morphemes
Phonological Contents of Mongolian Root Morphemes

Every word must have at least one root morpheme and numerous words in many languages have more than one. Thus one morpheme word is necessarliy a root.

According to the opinions of many Mongolists, there are V, VC,CV,VCV,CV$\acute{V}$,V$\acute{V}$,Vd, CVC and CVCV types of root morphemes in Mongolian[3]. (V-stands for vowel, C- for consonant and $\acute{V}$- for long vowel, Vd-stands for diphtongs), according to the opinions of most Mongolists e.g. a- 'to be'; W.Kotwich maintains there are mainly CV and CVC types of roots in Altaic languages; he also includes Mongolian root types[4].

Beginning with the fourties of this century more attention was paid to the structure of the words in Mongolian by B.Rinchen who divides Mongolian words, first of all, into roots and root words; he has elaborated in his work "Written Mongolian Grammar" that there are V types of root words as a-, e-, i; CV type of root words: ɣu-, dö-, te-, bö-, xe-, dze-, xi-, ci-, dzu-; CVC type of root words: dob-, doɣ-, deg-, deb-, dang-, dong-, xang-; xeng-, xong-, xyng-, nab-, neb-, nil-, bis-, bil-, bel-, etc.; Vd type of root words oe-, ui-, etc.; CVCV type of root words: oli-, saɣa- > sá-, bege- > bé-, tšixi-, VC type of root words: ab-, ol-, ög-.

Further B.Rinchen explained that it is functionally possible to divide the Mongolian root words into verb root words, noun root words and simultaneously verb and noun root words[5].

[1] В.Н.Ярцева. id. p. 3.

[2] В.Н.Ярцева. id. p.4.

[3] G.J.Ramstedt. Eenfuhrung in die Altaische Spracbwiissenschaft. Helsinki, 1952.p. He said there are stems in the Altaic languages - C, CV, VC, CVC, VCC, CVCC, but it is not completely characteristic for the root, because he said stems.

[4] W.Kotwich. Studia nad Jezykami Altajskimi, - "Rocznik Orientalistyczny", Tom XVI (1950), Krakov 1953, p.14.

[5] Б. Ринчен. Монгол бичгийн хэлний зуй. Улаанбаатар. 1966. pp. 13-63.

Sh.Lubsangvangdan has systematically studied in detail Mongolian roots and accordingly to his viewpoint there two kinds of roots; stem-root or free root and non-stem root or bound root according to their distribution, no matter whether they serve as a stem without derivational suffixes or with derivational suffixes. He has listed the bound roots as CV type of bound roots: *de-, do-, xo-, a-, dö-, te-,ja-, xe-, bi-, tši-, ta-, ne-, xo-, γu-, do-, dö-, na-, je-, xa-, xi-, tsa-, ce-, na-, tša, na-, xö-;* VC type of bound roots: *ob-, ul-, öng-;* CVC type of of bound roots: *ged-, γod-, dob-, döb-, dob-, tob-, töb-, nits-, but-, mux-, jör-, xul-;* CVCV type of bound roots: *xuγa-, xaγa-, suγa-;* VCC type of bound roots: *ardž-, oγt-, aγd-,* CVCC type of bound roots: *bardž-,* etc[6].

Actually there are such constructions in Mongolian as V, Vv́, or V, Vd (d-reads as diphtongs, e.g. *ae-, ei-, oe-,* etc.) VCV, CVC, CVCV, CVv́ or Cv́ which occur in the initial position of words e.g. *ol-,* 'to find'; *ja-,* 'rosy-colour'; *ide-,* 'to eat'; *bos-,* 'to get up'; *xolo* 'far, in the distance' etc.

All Mongolists are of the same opinion on the absence of the C-type of root morpheme in Mongolian.

Little attention so far has been paid to investigating root morphemes, boundary lines between root and primary stem-forming suffixes which are key problems of word structure in the language. Many Mongolists have offered very confused definitions of roots, stems, primary stems etc. Therefore, the main difficulty for determining the structure of root morpheme is that up till now, there have been no special studies which touched upon theoretical problems of Mongolian root morphemes, determinatives and primary suffixes, either from the diachronical or synchronical point of view.

We cannot accept the various estimations as to the sizes and phonemic shapes of roots VC, CVC, CVCV, VC, CVv́, Vv́ in Mongolian, for the simple reason that the boundaries and meanings of the root morphemes in Mongolian have not yet been thoroughly studied.

Isolation of the definite phonetic sequence of root morphemes is closely related to the segmentation of the meaningful constituents of words i.e. the isolation itself directly depends upon the part of a word which is to be the constituent of certain morphemes.

The reason for examining the two types of constructions together, is that the nine consonants which occur in the final position of VC and constructions. *b~w, g~γ:-m, -l, -r, -s,-d, -n(ñ), -ng,* are not only the some syllable-closing consonants for both types, but also because they are very constant, systematic productive and active noun stem forming suffixes which play an extremely important part in the whole system of word structure in Mongolian.

The nine consonant stem-forming suffixes also occur after the initial V- and CV-. We easily find that they exhibit the same structural distribution and meaning in the middle and final positions of words or in all other orders of stems of nouns, e.g. *dzuruγ (dzu-ru-γ)* CV+CV+C^9 (C^9 –stands for one of the nine mentioned constonants) painting *dzigde (dzi-g-de)* CV+ C^9 +CV 'even, evenly', *džirbil-dzexe (dži-r-bi-l-dze-xe)* CV- C^9- CV-C-CV-CV 'to ripple'...etc.

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" Sh.Lubsangvangdan. id. pp. 96-120.

We may take thousands of such examples illustrating the exact distribution of the consonants. We have added many examples of these suffixes in the second chapter dealing with "Derivation".

The nine suffixes have the same distribution and the same grammatical meaning in all occurrences of the derivational positions is stated above, and even in the onomatopoeia as e.g. *xang* 'sharp thinkling', *šap* 'sound of whipping', *par* 'crackling', *bar* 'crackling', *jar* 'barking or cracling sad sound of breaking a solid object', *to* 'sound of dropping solid object or knooking'...etc.

There are many V type of root morphemes which are accepted by many Mongolists.

Here is *a*- root morpheme in VC or VCV type of sequences. First, let us take several words in which the morpheme with the same meaning occurs, e.g. *a*- in *ang* 'crack' according to our consideration this will be *a*-in *ama* (cf.Manchu: *angγa*) 'mouth', in *alxam* 'step', *almae* ;to be careless', *amsar* 'opening', *amta* 'taste', *amdži* 'to have time', *anggi* 'class' group', *atsa* 'bifurcated',*arsaγar* 'swarming,uneven, bristling', *alγasa* 'to be absent-minded', *al* 'crotch between the legs', *alxam* 'step, pace', *alxa*- 'to step', *alγana* 'perineum', (anat), *almae* 'carelessness', *altsa* 'crotch', *altsang* 'thickset, squat', *angγae*- 'to open mouth (cf. Manchu: *angγa* 'mouth')'.

We isolated and identified the root morpheme *a*- which occurs before stem-forming consonant suffixes and has the meaning 'opening'.

From the above stated examples we can also observe that there are stem-forming consonant suffixes which occur immadiately after the root morpheme *a*- e.g. *a-ng, a-l, a-m, a-r*. We can now say that the linguistic environments of roots *a*- are: *-ng, -l, -m,* and *–r*, of course it is lexically not obligatory that every stem-forming suffix occurs after every root or stem (vide chart 5.)

Another bound root morpheme *a*- occurs with the sequences: *ab*- 'to take', *ali* 'give me', *atsa* 'give me', bring me (cf. turc. *al*- to take). On the basis of the free occurences we can make an adequate definition of the root morpheme *a*- which occurs before the verb stem-forming suffix *–b, -li* and *tsa*, and has the common meaning 'to take'.

The root morpheme *e*- occurs in the sequences of VC type as *emning (e-m-ni-g)* 'not broken in', *emgeg (e-m-ge-g)* 'illness', *ebed- (e-be-d)* 'to break', *emtere*- 'to be chipped'. The examples show that the root occurs before stem-forming suffixes *–be* and *–m*, meaning 'to break'.

The root morpheme *u*- occurs in the words: *una- (u-na)* 'to fall, fall down, to drop'. It is not difficult to isolate the derivational suffix *-na* in *una*- which is a very productive and active verb stem-forming suffix (vide p. 46), here the suffix in *una*- 'to fall', is not the C type but CV type. We are interested in the meaning of the root *u*- in *una*-, and now we can take other examples in which the C type suffixes occur after the same root *u*- verb stem-forming suffix, V *undži- (=u-n-dži-)* 'to hang down', *undžilγa (u-n-dži-l-γa)* 'pendant', *urú <uruγú (=u-ru-γu)* 'downward', *ulbae- <ulbayi- (=u-l-ba-yi)* 'to become soft' etc.

Another root morpheme *u*- which is semantically related with above *u*- occurs in the words: *ulam (=u-la-m)* 'further, still more', *udurida*- 'to lead, to guide,to direct'; *uγ* 'the origin, beginning, initial', *ulari*- 'to continue', *ulabá* 'trace, way', *udum* 'genealogy, pedegree', *ulamdžila*- 'to transfer, to transmit,

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hand down', all occurrence of *u-* in the examples are identical from the semantical point of view. The suffixes as: *-la* (in *ulam*), *-γ* (in *uγ*), ...etc. which occur immediately after it are all derivational since they occur regularly in other utterrences of the language.

The root morpheme *ö-* occurs in the words *öndör* 'high, tall', *ölgö-* 'to hung', *ögsö-*' to group', *ödö<ögede* 'up, upper' has the general meaning 'high or up'. All other suffixes occuring after it recur in many other words e.g. *-á< -γa/-ge*, in the case, *-ő, -á* occurs in *de-é-de< de-ge-dü* 'upper'.

Another root morpheme *ö-* has identical meaning in the following words e.g. in *ömtši* inheritance *öwör (=ö-wö-r<ö-be-r)* 'own, one's own'[7], *ög-* 'to give' *(ö-g)*, *öb (ö-b)* 'share of property, private property', *öng* (fertility, richness').

There is no difficulty in observing that there is structurally only one *ö-* root and the subsequent suffixes are different which are of the C and CV types of suffixes. The meaning and distribution of them provides in this case the VC *(öb, öm, ög-)* type of structure which should be divided into roots V- and suffixes –C.

Thus, the conclusion can be made that each of the CVC and VC types of constructions (words) consist of two parts i.e. the initial CV- and V-elements are root morphemes and the final –C will be one of the noun stem forming suffixes as indicated above.

Various investigations conducted by Mongolists have proved that the initial V- roots, diachronically, were hV- or V type of construction, and later on the initial h and aspiration were dropped.

Therefore one has the right to conclude that the V type of root morphemes was passed down from the root morpheme of CV type; conversely, one may assume that in ancient Mongolian all roots were of the CV type.

VCV Type of Sequences

There are 19 VCV types of sequences in the 100 words passage given for analyses. Many of them can be very easily divided into V type root and CV type stem forming suffixes[8] even traditional grammarians agree with such a division as the structure and distribution, agree with such a division as a root morpheme e.g. *ene* 'this' consists of root morpheme of V type *e-*, and CV type of stem forming suffix *–ne, ele (e-le)* 'this', (cf. Turc. *idi* 'this' in this way, so', Barab. *llä, i-lä* 'after this').

In *aba, a-* is a root morpheme meaning 'elders' occurs in *aba~awa* 'father, dad', *axa* 'brother;, *abaγa* 'uncle', *adžiá* 'mother' thus – *ba~wa, -dži, - xa, -γa* are stem forming suffix *(ba~wa* see p.45, *-dži* p.45, and *–xa* see p.49, *-γa* p.45) in *yneg* 'fox', *yner~ynyr* 'smell', *ynyse~unese* 'to kiss', *ymexei* 'smelly', the initial *y-* is a root morpheme meaning 'smell or smelling', therefore morphologically *yneg* 'fox' is constructed a lexical sequence signifying 'who usually smells'; the English 'to kiss' and 'to smell' have one

[7] G.Kara (öwör 'sein) *Sur le dialecte üjümüčin*, - "Acta Orientalia", T. XVI, fasc. 2. Budapest, 1961,p. 170.

[8] Г.Д.Санжеев.*Примечания к переводу* "Введение в Алтайское языкознание Г.И..Рамстедта. М., 1957.

and the same root in Mongolian[9]. Thus, the first parts *yne-,yne-, uny-, yme-* of the words are the VCV type construction, i.e. R(v) + stem forming suffix (CV).

ama 'mouth, opening', *ami* 'life', *atši* 'to load', *exe* 'mother', *eme* 'woman', *ere* 'man', *ile* 'clear, obvious, visible', *yge* 'word'…etc. also belong to the VCV type of constructions.

Thus, we can conclude that all of the VCV type sequences should be regarded as R plus CV derivational suffix as described above, although the redical meaning of many V type of bound roots have not been thoroughly studied, so far, by Mongolists.

CVCV and CVC Types of Sequences

While examining the CVCV and VCV types of constructions, there are all grounds for examining simultaneously the CVC and CVCV constructions since, if we tend to segment the constructions as CV-C and CV-CV, then the initial CV in both cases will be a root and the remaining parts will be suffixes; with this aim in view, we can analyse a series of examples: root morpheme *xe-* in the construction *xele-* 'to say, to speak', occurs also in *xemé-* 'so-called, to tell', another altenaut form is *ge-* 'to say', the stem forming suffix, in this cases is the primary suffix, *-le (-la)* which recurs in many other words with the same meaning and function e.g. *sele-* 'to swim', *yle-* 'to remain' etc.

The bound root morpheme *xa-* occurs in the words as *xadaxa~xadxa-* 'to stab, to pierce, to prick, to pin', *xana-* 'to bleed, *xada-* 'to drive in, to knock in, to nail'. The remaining parts with the exception of the bound root *xa-*, are derivational suffixes which occur in many other words.

Bound root morpheme *ba-* occurs in *bari-* 'to hold, to seize, to catch', *badza-* 'to grasp', *ba-* 'group, bunch', *batšim* 'tight, narrow' (cf. Turc. *ba-*' to bound, to tie')[10].

The divisibility and the size of the CVCV,CVC and other types of construction can generally serve in all words regardless of the form class, like all other sequences.

In the example *tere* 'that', it is very clear and easy to prove that it consists of one root morpheme *te-* and one stem forming suffix *–re*, since the root morpheme *te-* and its allomorphs *ti-* occur in the following series of examples: *tende te+n(-ne)+de* 'there', *tiši<(te+i+ši)=ti+i+ši* 'to, there, time 'such that, like that'. Other examples are: *ama* 'mouth, opening', *ami* 'life', *atši* 'to load', *ere* 'man', *eme* 'woman', *exe* 'mother', *ÿ-<y+ÿ<e-gü* 'this', *ile* 'clear, obvious', *yge* 'word, speech, *ysy* 'hair'.

Analogically, all constructions as *xara* 'black', *boro* 'grey', *šara~šira* 'yellow', can be segmented into *xa-ra, bo-ro, sa-ra*.

T.A.Bertagaev was very correct in stating "…the elements-*ra*, *-ro*…etc. are the stem forming suffixes"[11].

CVC type of construction is one of the typical patterns of Mongolian word structure particularly in the CV roots. In analysing the 100 word

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[9] Originating from the Mongolian custom that when someone leaves on a journey, he is usually kissed goodby or sniffed softly on the right cheek.

[10] А.Е.Кононов. *О фузии в тюркских языках.* - "Структура и история тюркских языков". М., 1971. p. 120.

[11] Sh. Lubsanvandan. *Remarks on Some Roots and Stems in Modern Mongolian.* - "Studies in General and Oriental Linguistics", Tokyo, 1970, p. 423-425; L.Ligeti. Un vacabulaire mongol d'Istanboul. "Acta Orient." T. XIV, fasc. I, Budapest, 1960, p. 68.

passage, we found 6 CVC sequences. The initial C of CVC is always any Mongolian consonant phoneme. The only exception is that the *–ng* never occurs in initial position in Mongolian.

If we exclude the stem forming nine consonant suffixes from the stem in the CVC type form, the remaining part CV will be a root as in the CVCV construction which we examined above.

The CVC type of forms (stems) could be a free stem like *ɣal* 'fire', *mal* 'cattle', *baɣ* 'group', *töl* 'young'...etc., it could be still bound stems as *dab-* a sudden horizontal movement, *deb-* a sudden vertical (or up and down) movement, but the *dab-* and *deb-* may be considered as free stems, since though they are uninflected words, but their syntactic occurrence are relatively free. Now let us analyse some root morphemes of the CVC type.

The word *ɣal* 'fire' will be segmented *ɣa-l* after having checked the constituent parts, because the bound root *ɣa-* occurs in the words *ɣang* 'drought, dryness', *ɣanda-* 'to dry up from the sun' as well as in *ɣatae'* with spirit, fiery, splender'.

    ge- in gem 'defect', 'fault'

    The *ge-* occur in *gene* 'careless, less attention'

    genede- 'to make a mistake', *gelme-* 'to become frightened', it is clear to us that the bound root is mainly followed by the derivational suffixes *–na*.

xa[12]*-* in (CVC) *xam* 'together' meaning 'close, neighbour adjacent' the bound root occurs in the words *xala* (=*xa+la*) 'hardship, cruelty', *xabi* 'close, near', *xabida-* 'to come close', *xadza-* 'to bite', *xadžiu* 'on the side, side', *xaši-* 'to block, to shield', *xarši-* 'to oposed, or against', *xalda-* 'to touch', *xabsara-* 'to join', *xabtasa* 'block', *xabtsiár* 'welt, edging', *xaɣas* 'half', *xaɣara-* 'to be broken', *xani* 'partner, companion'. From the examples we have observed that the root *xa-* not only occur with *–C*, a stem final (syllable closing) consonant suffixes, but also with *–CV* type of suffixes, as stated above. It also proves that the CV in CVC type in Mongolian is isolatable.

Some roots of numerals are included in this type in Mongolian *ɣurba* 'three' may be symbolized as $C_1V_2C_3C_4V_5$; C_1V_2 also occurs in other linguistic environment without changing the meaning, thus *ɣuna* 'three-years old'.

The structure of *dörbö* 'four' belong to the same sequences and is segmented by the above patterns.

ge- in *gerel (ge-re-l)* 'light' beam'[13], also occurs in many other words as: *gegen* 'illumination, light', *gei-* 'to light'.

CVV̆ and VV̆ Type Sequences

The second constituent parts V̆ of the two type of sequences are stem-forming suffixes in origin V̆ <*ɣu*, so that the remaining initial parts CV and V are the roots which we have examined in the previous sections. The stem

[12] И.В.Кормушин. *Лексико-семантическое развитие корня qa в алтайских языках.* – "Тюркская лексикология и лексикография". М., 1971. pp. 9-29.

Т.А.Бертагаев. *О происхождение титула хаган хан.* - "Монголын судлал". Улаанбаатар. 1971; p. 13.

[13] L.Ligeti. id. ge-re-l; geyi- 'hell werden'. p. 239.

forming suffix *ú<γu* also belongs to the series of derivational suffixes, which have the same meaning and structural distributions, therefore CVV́- or CV́ and VV́- or V́- would not be a special type of root morphemes in Mongolian.

For example, the stems *sú-* or *su +-ú* 'to sit down', *sá-* or *sa-+-á* 'to milk', are formed by roots *su-* and *sa-* plus stem forming suffixes *-ú<-γu-* and *-á<-γá*. One finds that there are two allomorphs for *su-* in *sú-* 'to sit down', one is *sa-* which is the basic form occuring in *sandal* 'chair', so the root *su-* is an allomorph of *sa-* which occurs only before the derivational suffix *-ú* or *-ú*. therefore, *sú-* is a combination of *su-* and *-ú* or a stem.

Another example of the VV́ type is *ú* 'to drink' which is also a combination of the root *u-* and the stem forming suffix *-ú< γú*. The root *u-* occurs in other words, e.g. *umda* 'beverage, drink', *usu~usa* 'water'...etc.

There are four different initial diphthongs and seven initial long vowels (some of them have been mentioned in the previous sections) in Mongolian; as *ae-, oe-, ui-, yi-, á-, é-, í-, ó-, ú-, ő-, ý-*; all initial constituent parts of the diphthongs: *a-, e-, u-, y-* are bound in other utterances, with the same distribution and meaning respectively, for example, *a-* in *aemay* 'aimak', is identical with *a-* in *ae* 'category', *aeray* 'mare's milk', *ae tymyn* 'planty of...' etc. The second parts *i~-e <yi~i* in these words are also stem-forming morphemes which occurs in thousand of words as *oe* 'forest' *yae* 'misfortune', *soe-* 'to tie up'. In general, all initial diphthongs are readily divided into root morphemes and suffix morphemes, but it is necessary to isolate carefully the initial long vowels, since the short vowel root and immadiate stem forming short or long vowel suffix are usually overlapped.

Thus CVV type of sequences could belong to the CV root type; and the VV type of sequence to the V type.

After the above examination, we finally come to the conclusion that the roots in the Mongolian language are quite uniform in structure.

The structural types of modern Mongolian root morphemes are always monosyllabic as CV (CV stands for consonants plus short vowel) and V (V stands for short vowel) types, lacking two-syllable or polysyllablic root morphemes, thus there are no consonant cluster roots, but at the same time there is no initial cluster.

In Mongolian, there are two ways of occurrence of roots, one of them is that the root morpheme does not directly occur with inflectional suffixes, the other is when the root morpheme directly occurs before the inflectional suffixes or does not contain any intermediate suffix-like constituents e.g. verbs as *ge-* 'to say, to tell', *gelè* 'one has said'; *gewe* 'said'; *gewele* 'if one says...'; *xí-* 'to do'; *xílé* 'have done'; nouns like *tsa tsá* 'reindeer'; *tsá án* '(of) ones own reindeer' (cf. *tsá görés* 'renne')[14]. The examples reveal that only complete free or potentially free roots, in other words, free root words are immadiately followed by inflectional suffixes. Such free roots simultaneously are stems; in this case, we may say the inflectional suffixes occur with the stem root.

[14] G.Kara. *Notes sur les dialectes de la Mongolie Occidentale.* - "Acta Orientalid". T. VIII, Fasc. 2. Budapest, 1958. p.164.

The above mentioned verb root morpheme *gé-* 'to say' and *xí-* are quite different, because they are complete free root morphemes. They have all the peculiarities of the free verb root and stem. When roots occur independently in a phrase, the vowels in the roots become a little longer, according to the general rule that short vowels in open monosyllabic words are pronounced mostly as long vowels. We may assume that the vowel lengthening in the open syllable of the root is conductive to the creation of root isolation e.g. *sý-* 'milk', *ge-* 'to say'. Roots with short vowels on the contrary usually represent bound forms e.g. *gewe* 'said', *sytei* 'with milk'.

The other root morphemes of which there are an overwhelming majority in Mongolian, never occur in isolation and never occur before all kinds of inflectional suffixes, i.e. they always occur after one or more intermediate derivational suffixes, i.e. stem forming suffix (or something like determinatives). To make the bound roots become free stems, derivational suffixes should be added to the bound roots, as in the sequence of *sa-e-dži-ra-*, here *sa-* is bound root; *-e* is a bound stem forming suffix; *dži-* free verb stem forming suffix, in this case, which has a very weak ability of stem forming. *–ra* the sequence in Mongolian means 'to improve, to get better'.

In Mongolian, free roots may be distributionally defined as those roots which occur in isolation and can take inflectional suffixes immediately after it.

In Mongolian, free roots are not predominant, because their occurrences are extremely rare and in the analysing passage no free noun or verb root was to be found.

Bound roots in the Mongolian language may distributionally defined as roots which cannot occur in isolation and are not immediately followed by inflectional suffixes e.g. the bound root *ɣu-* 'three' in Mongolian never occurs before inflectional suffixes; if we say *ɣu-*, it is a bound root, when only after *ɣu+r+ba* (=R+S$_1$+S$_2$) or after forming S$_2$ the sequence becomes a free stem and can take the inflectional suffixes. This means that the structural sequence *ɣu+r* or S$_1$ is still bound, so it is represented as follows:

R   -   Sb   -   Sf
ɣu   +   r   +   ba (we)
Root
S$_1$ = (bound stem)

S$_2$ = stem two (free stem)

(b – reads *bound*, f – reads *free*)
all other examples have been listed in the chapt. 2 in detail.

In Mongolian, when a bound root is followed by the derivational suffix, the resulting stem may appear either in free form or still in bound, depending on the suffix.

The degrees of distinctiveness of meaning of some bound roots are very different. The meaning in many bound roots as in *xa-* in *xaɣara-* 'to be broken', *xaɣas* 'half', *xal-tsaraxae* etc, need more analysing and comparison for identification; whereas the meaning distinctiveness of many other bound roots are clear in many examples e.g. the bound root of noun *dö-* in *dörbö* 'four', *dötögör* 'fourth', *dörböldžin* 'square, rectangle', (cf. Turc. *dö-* in *dört*

'four'). Moreover there is no difficulty to isolate the bound root *xo-* in *xojor* 'two'; *xórondo* 'between'; *xolbo* 'tie'; *xos* 'double'; which has the concrete identical meaning as 'two, bi-, and di-' in English.

In conclusion, in Mongolian, the bound roots are the typical predominant roots, there are 100 bound roots in our 100 word passage. In general, the root morphemes, although bound, are usually constrasted against affix morphemes.

We can divide the Mongolian root morpheme into three types, bound roots, potentially free roots and completely free roots. The potentially free roots belong to the bound root, because they do not occur in isolation although they can take some inflectional suffixes. We can suppose that the potentially free roots exist in the transfering period between completely free and bound root types.

In my opinion, the predominance of the bound roots in the Mongolian language depends upon the nature of the agglutinative structure of the Mongolian language, i.e. the strictly restricted successive order of the base of the word (to the right) and without any prefiixes, infixes and replacives etc.

Allomorphs of Mongolian Root Morphemes

We may classify the Mongolian root morphemes on the basis of occurrence or non-occurrence of allomorphic alternation.

Although the Mongolian language has a large number of root morphemes which are always represented by a single phonetic shape, there are a few which are represented, according to their environment , by two or more phonetic shapes.

An examination of 100 roots in the analysing passage, for example, reveals that 2 per cent of the roots, namely –2, have four allomorphs; 5 per cent, namely –5, have two allomorphs; 93 per cent, namely –93 are represented by a single allomorph; therefore, it is obvious that the overwhelming majority of root morphemes indicate little variation in the phonetic shape in Mongolian.

Now let us examine the roots which have four allomorphs in the given analysing passage. There are two roots: *tere* 'that', and *iñ* 'in such way, in this way', so, first of all, if we elucidate the alternations of root *te-* in *tere* 'that', then the distribution of the allomorphs of root *í-* in *iñ* will be obvious.

The allomorphs of *te-* occur in the following words, e.g. *tende (te+ -n+ de)* 'there', *time (ti+-i+-me<te+yi+mü)* 'in that way', *tiši* 'in that direction, on this side' *(ti-+-i+-ši< te+yi+ši)* , *týni (ty-+-ý+-n+-í<te+gü+n+ü)*, 'of that', *tödyi (tö-+-dy+-i<te+dü+i)* 'so many as that, so much like this'. It is possible to describe the solution in the following ways: the alternative root morphemes *te-~ti-~tö-~ty-* have the following distribution: the allomorph *te-* occurs before noun stem-forming suffixes *–re* and *–n*; the allomorph *ti-* occurs before noun stem-forming suffix *–i*, the allomorph *tö-* occurs before noun stem-forming suffix *–dy,* allomorph *ty-* occurs before noun stem-forming suffix *–ý,* respectively. From the above mentioned the following chart can be made.

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chart 1

Root allomorphs	Determining suffix of the allomorphs
(t) e-	-ne, -n, -de
(t) i-	-i
(t) ö-	-dy
(t) y-	-y

It is evident from the mentioned fact, that all the allomorphemes e-, i-, y-, ö- and te-, ti-, tö-, ty- are a result of assimilation.

The t- in tere, time and týn etc., is an indicator of a something remote. If without the indicator t-, the object mentioned will be a demonstrative noun (pronoun from the Indo-European point of view) indicating something near.

We can now conclude that the roots of the Mongolian demonstrative pronouns are very variable and have very systematic alternations.

There are five roots which have two allomorphs each, e.g. xi- in xili 'boundary, limit', alternating with palatalized x̃i- in x̃idrayár 'border'. The other allomorphs are the result of assimilation.

It is not much of a problem in choosing a basic form among the alternant shapes of one root in Mongolian, from the point of view of the number of occurrences.

Vowel Modification in Root Morphemes in Mongolian

Modification of the root, with or without suffix–like determinatives, occurs in words of symbolic connotation, as xa- in xangxar, xo- in xongxor, xö- in xöngxör, xy- in xynxyr. If we take xa- in xangxar as the basic form of this root, we could list the following alternants xo- in xongxor, xö- in xöngxör, xy in xynxyr, formed by substitution of /o/, by substitution of /e/, by substitution of /ö/, but the series of modifications are not synchronic allomorphs, they are a result of historical internal alternation of vowels, and it is now impossible to change or alter the vowel phonemes, that is to say the modifications are not distributional.

All the latter series of root morphemes, and likewise, root Tsa in tsayáñ 'white', Tse in tsegéñ 'whitish'; ang in angyarxae 'crevise, cranny, gaping', ong in ongyorxoe 'aparture, orifice, hole', have the same shape and size, and the meaning of them are respectively correlated with each other, because historically they were formed by root vowel alternarnations or internal replacives as a~e, a~o, a~u, but synchronically it would be better that such kinds of alternated roots be treated as separate roots[15].

So the alternations of vowels in root morphemes sometimes differentiate the slight tone of the meaning, sometimes they do not. But there are no similar roots as in Egyptian Arabic /k-t-b/ 'write' and /katab/ 'he wrote'.

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[15] See Т.А.Бертагаев. id. pp. 91-93. Г.Ц.Пюрбеев. функциональное чередование звуков в монгольских языках. 1971. ВЯ. №3. pp. 89-93.

Although in the Mongolian construction such as *xongxor: xöngxör: xengxer: xungxur: xyngxyr: xangxar* there exist common constant sequences such as *x-ngx-r*, the construction is not a root but a derivative of the roots such as: *xa-: xe-: xo-: xö-: xu-: xy-*. The roots should be considered as separate root morphemes which have semantic correlations with each other.

Reduplication

In various languages, reduplications manifest themselves in different ways. Reduplications can be roots, prefixes, or suffixes.

It consists in the repetition of all or part of radical elements, i.e. a root or stem. If the entire stem is repeated, we generally treat such a structure as a repetitive compound or as a syntactic reduplication, especially in the Mongolian language, if it is stem (word).

The process is generally employed, with self-evident symbolism, to indicate such concepts as distribution, plurality, repetition, customary activity, increase of size, added intensity, continuance...[16].

Where only part of the root or stem is repeated, the repeated portion may be called a "reduplicative". Such reduplicatives may occur proposed, interposed or postposed to the root or stem, and they may consist of just the morphemes of the stem or they may be some added elements, e.g. the */ce, le, be, ge, de, te, ke, me/* reduplicative in the Greak Perfect Tense. In such case, except when stems begin with aspirated consonants, the initial consonant of stem is repeated with the vowel */e/*. Zeilig.S. Harris symbolised the reduplication as {ce[17]; Edward Sapir says: "The most characteristic examples of reduplication are such as repeat only part of the radical element...'.

There are four kinds of reduplications in Mongolian:
1) root reduplication, without any added elements, 2) root reduplication with added element – suffix –*b*, a derivative suffix; such repetition naturally serves to stress the semantic content of the sign in one way or another, 3) word reduplication.

In Mongolian, only the CV type of root morphemes are reduplicated from two kinds of root morphemes. The Mongolian vowel root morphemes are never reduplicated. One can presume that the reason for the absence of vowel root reduplication is, that there were no diachronical vowel clusters in Mongolian.

We way say that repetition in Mongolian can only be repeated in a single word twice, but there are no roots repeated three times as in San Blas, a language of Panama[18].

But in a sentence or phrase, it is quite another matter, e.g. one may say *deb deb xí-* or *deb deb deb xí- deb deb deb gé- deb deb deb alxa-*.

In Mongolian, complete syllable initial reduplication occurs in a single word which structurally can be compared with Turkish, that is to say root reduplication, e.g,

[16] Edward Sapir, *Language*, London, 1949, pp 77-78.
[17] Zeilig.S.Harris, *Stuctural Linguistics*, Chicago-London, 1969, p.209.
[18] N. Sayja, *Mongɣol üsüg-ün dürim-ün toli bičig*, "Dictionary of the Mongolian Spelling" Ulan Bator, 1937.
E.Nida, *"Morphology, the Descriptive Analysis of Words"*, p. 69.

in Mong.	*in Turk.*

tata- 'to pull'   zelzele- 'earthquake'

tšitši- 'to poke'   silsile-'mountain range'

tsatsa- 'to sprinkle.to make a libation of...'

γaγalda- 'to stutter'

In Turkish, the common type of reduplication appears to contain two identical syllables followed by a vowel, as in the above example -e.In Mongolian, two identical syllables are repeated; in the Turkish language, the two repeated syllables are always followed by a vowel. This does not happen in the Mongolian language.

We may mention some other examples, e.g. mainly verbs as: *data-* 'to practice', *bebetene-* 'to be clumsy, not skilful', *gege-* 'bright, light, daylight', *γáγaγla-~γáγla-* 'to quack, to croak', *γaγaγ* 'quacking', *γaγaldza-* ''to stutter', *xoxoe-* 'to show sorrow; to appear very high' , *xoxotono-* 'to show sorrow', *xuxüň* 'tart, biting', *xuxur* 'id', *tsetseg*[20] 'flower'.

A reduplicative root morpheme which consists of repatition of the phonemic shape and stress does not occur in the reduplicative.The reduplicated morphemes in most cases mean repeated action or rhythm.

The sequence of root plus reduplicative usually forms a free stem or may be followed by the derivational suffixes, as well as by inflectional suffixes, e.g. *tata-* 'to pull'; *tataba-* 'pulled'; *tatana-* 'will pull', etc. Some examples of derivational suffixes after a repeated root with the reduplicated *baba ar* (=*baba-γa-r* $R-R-NS_1-NS_2$), *babana-* (=*ba-ba-na* $R-R-VS_1$), *babae-* (=*ba-ba-e-* $R-R-VS_1$), *babatana-* (=*ba-ba-ta-na-* $R-R-VS_1-VS_2$), *tšitšire-(tši-tši-re-* = $R-R-VS_1$) *tšitšigene-* (*tši-tši-ge-ne-*$R-R-NS_1-NS_2$).

We may conclude that the root reduplication expresses the descriptive meaning of motions and actions as the syntactical or word reduplication, and that the reduplicative or repeated portion, morphologically functions to make the primary bound root become a free stem with it through repetition, in other words, the reduplicative, at the same time can be a derivative, e.g. the bound root *ta-* in *tata-*, *tši* in *tšitši-*, *ta-* and *tši-* etc. never occur in isolation and never take inflectional suffixes, only when the reduplicatives are followed by the inflectional suffixes like other derivational suffixes. L.Bloomfield wrote: "Reduplication is an affix that consists of repeating part of an underlying for....."[21].

In Mongolian, it is difficult to consider the reduplicative as a suffix, since the reduplicated part is the immediate constituent of the root itself; but bearing in mind its function it resembles very much a derivation suffix.

We may symbolize the reduplication as $C_1V_2C_1V_2$, which is typical for the Mongolian language and is mainly applied in derivation, but is not productive; according to the statistical data of Shagdza's Mongolian Dictionary, only about fifty roots are reduplicated.

We may assume that all roots, in the reduplications, historically, were separate words, i.e. syntactic reduplications, which later on, developed into

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[20] A.Rona-Tas. *A Study on the Dariganga Phonology*, "Acta Orientalia Hung.", 1960, Budapest, T. fasc. p.13.

[21] L. Bloomfield, *Language*, London, 1969, p.218.

morphological reduplications like *tata-* 'to pull', *tsetseg-* 'flower'.....etc.; some root reduplications remained at the level of syntax.

There is reduplication in Mongolian, it occurs only in about fifty words, according to Shagdža Mongolian Dictionary which has 27000 words approx. In it, it means that the proportion of reduplicated words in Mongolian, in comparison with general entries, 27000:50 or 0.0018 per cent, i.e. reduplication is not widespread in Mongolian morphology. Reduplications in Mongolian are always postposed and complete.

In Mongolian, a reduplicable suffix is only a suffix combination of causative *-ül~ÿl* e.g. *jawaül* 'let them make the others go', *xelgÿi* 'let them (him, her) make the others say' *ydzÿl* 'let them (him,her) make the others show'. The suffix is added to all Mongolian verb stems without any exception.

Affixes may be defined as bound morphemes which combine with other more numerous morphemes (free or bound according to the habits of the language) to form closed sets of words with related meanings, such that the differences in meaning are parallel from set to set[22].

Any morpheme that is not a root is an affix.

Affixes may be added directly to roots, or to constructions consisting of a root plus one or more other morphemes.

It is useful to distinguish between two different kinds of affixes: *inflectional*[23] and *derivational*. The former are orimarily grammatical, the latter primarily lexical. That is, certain inflectional affixes are characteristic of certain word classes; they mark the grammatical categories:

The derivational suffixes, or word building suffixes, are of a different type. They often shift a stem from one word class to another and are applied only to a fraction of the stems in any class.

Suffixes in Mongolian are generally monomorphemic; in the analyzing passage, there are 283 suffix morphemes among which 256 are monomorphemic suffixes, and 27 polymorphemic suffixes which are, in fact, always combinations of suffixes (morphemes).

In Mongolian, like in all other agglutinative languages, suffix morphemes are only on one side and always bound.

Most of the Mongolian suffix morphemes have common semantic distinctiveness and identical phonological content in all their occurrences, except vowel harmony in all linguistic contexts.

Of course, all C type of derivational suffixes not only have no relation with the rule of vowel harmony, and has no allomorphs in every case.

All those suffixes, as well derivational as inflectional, in which the main vowel is only *i* will not be governed by the rule of vowel harmony e.g. the object relational suffix *-ig* in *malig* 'of calle or cattle', *emig* 'of the medicine' noun stem forming suffix *-ši* in *ideši* 'food'.

The selection of the allomorphs of Mongolian suffixes is determined by three factors: phonological, morphological, and both phonological and morphological at the same time.

There are two derivational systems, suffix morphemes used to form verb stems, and suffix morphemes to form noun stems.

Inflectional suffixes occur after almost all stems of their own classes.

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[22] B.Block, G.L.Trager, *Outline of Linguistic Analysis*, 1942. p.56.

[23] *inflectional suffixes* – the term is very conditional for the Mongolian language, in fact, so-called *inflectional suffixes* in Mongolian serve as a linking (relational) function between words in phrases and sentences, as in English-*of, no, for, in* ....etc.

There are two other types of morphemes which may be subdivisions of the suffix morphemes. One of them is the syncretic suffix morpheme; another is the stuctural suffix morpheme.

The former is like the suffix in English, one morpheme may have various grammatical meanings e.g. (*was having*. past tense I, III person...). Sometimes such a morpheme is called syncretic morpheme, and sometimes double functional morpheme (or suffix) term e.g. the suffix *-ja*[4] in *jabaja* 'let us (me) go', *ögöjö* 'let us (me) give', simultaneously expresses the meaning of first person, regardless of the generic and partial number which are differentiated by context, because of the nonpersonnal feature of Mongolian verb endings.

It is very important to analyze the syncretic morphemes.

(a) the quantity of syncretic morphemes compared with the morphemes with one meaning or nonsyncretic ones, may be determined and considered as a different group of morphemes;

(b) we may define the degree of the morpheme in the domain of morphology, particularly in the various form classes;

(c) establish general regularities, connected with definite morphological meanings, i.e. the general connection between grammatical and derivational meanings.

There are main types of syncretical suffixes which are listed as below: 1) the suffix combination *-úl/-ýl* in *aldaúl aldúl*, has simultaneously noun derivational and grammatical causative verb meaning. We can cite many examples, such as *bosoúl~bosúl*, 'deserter, to let them desert' *bariúl* 'handle'..etc. The grammatical and derivational meanings are always divided by the grammatical form classes; they belong to different structural series, that is the derivational meaning, always belongs to the noun class, and the grammatical meaning always to the verb class, 2) the suffix morphemes which constitute stem final elements of conversional stems in Mongolian are always syncretical one's. The element *-ya* in *atya* 'hand-full, to grip one's hand', and *-dži* in *šindži-* 'to judge by appearance (V)'; appearance (N)' are syncretic suffixes; 3) the suffix *-a*[4] *=ge*[4] *<ya~ge* in *utá-* 'to smoke, smoking, smoke' is a syncretic suffix which forms simultaneously noun and converb forms, here we can describe as follows; a derivational noun and converbum imperfect: meaning with the syncretic suffix morpheme *-a*[4]*<ga*[4] : *utá* (*=ta+a*) 'smoke' *utá* (*=uta+á*) 'smoking, having been smoking'.

The environment distinctions between them are: 1) when the morpheme functions have noun derivational meaning, it may be followed by a noun stem forming suffix *-n* whereas functions with converbial meaning never do so; 2) the morpheme usually occurs after a free root or stem and functions as converbial suffix in most cases, but it does not do so in every case, because of the lexical restriction, in other words, whether the morpheme acts as a noun derivational suffix or not is defined only by the occurrence of the derivational suffix *-n* immediately after it; 3) co-existence of the abstract meaning of derivational noun and the frequantive meaning of verb by a syncretic suffix morpheme *-i* e.g. *tsoxi-* 'to strike or to beat', *tsoxi* (noun) 'the place where should beat, or beating' *tsoxil* 'to beat frequently or repeatedly'; 4) the coexistence of meaning of derivational noun and the causative meaning of verb by the syncretic morpheme *-ga*[4], which is preceded by the

frequantive syncretic morpheme mentioned in the preceding item "4", thus the sequence will be, double <<frequantive + causative verb>> (VS + frequantive verb stem forming syncretic morpheme + causative verb stem forming (syncretic morpheme); 5) coexistence of derivational meaning of inflected verb stem with zero inflectional suffix, and inperative meaning like in English *to work* and *work*, in German *Lesen* and *das Lesen*, however, in Mongolian, the syncretical forms are in one form class; 6) coexistence of noun derivational and noun relational meaning with suffix –*ta⁴e²* as in *moritoe* 'with horse, to have a horse', which are differentiated only by syntactic environment.

The examples cited above justify the conclusion that both derivational and grammatical meaning in Mongolian coexist and exclude each other in derivational sequences; and the morpheme functions in synchronically different meanings and bears diachronically connected status. Any one from the derivational and grammatical meanings should usually be the leading one in the definite syncretic morphemes, because in many instances the form may not have the nominal meaning (or derivational meaning).

The other type of suffix morphemes is structure morphemes, which are neither derivational, nor inflectional (grammatical). The structural morphemes serve as connectives of various parts of word forms and compounds. We may say that the structural morphemes are structural particles without definite meaning except linguistic, classificational and distributional meaning.

In Mongolian, there are two types or structural morphemes: 1) so-called union vowels: -*a*-, -*e*-, -*o*-, -*ö*- which are always short, and 2) the union consonant with two allomorphs; *g* and *γ.* They usually appear between stem and suffix, the only reason of the appearance of union vowel is that according to the Mongolian word structure, there do not occur consonant cluster of CCC type in the middle of a word and of both CC and CCC type at the end of a word.

Diachronically, the union vowels were only –*u* and –*ü*; the former appear after the stems in which the influencing vowels are *a, o* and *u*, the latter after the stems in which the influencing vowels are *e, ö* and *i.* Synchronically, the number of union vowels is increased with *a, e, o, ö* according to vowel harmony.

The union consonant or consonant structural morphemes are developed below, because the Mongolian word structure refuges from the appearance of V + V or VV + VV type of construction, e.g. *temé+éñ* will be *temé+g+éñ=temégéñ* 'one's own came', *xý+ése* will be *xý+g+ése=xýgése* 'from son'.

According to our analysis of a 100 words passage we conclude that there are four major types of morphemes in Mongolian.

V *e-ne* 'this', e- is a bound root morpheme, the V type of morphemic are divided into two subtypes: short vowel morpheme and long vowel morpheme
VC *úd* is a partial suffix morpheme
CV *xo*- 'late, back, after', is a bound root morpheme
C -*i* noun stem-forming suffix.

A perusal of the following chart explains the proportion of the above four types of morphemes in the passage:

Chart 2

Morpheme types	Root morphemes	Derivational suffixes	Inflectional suffixes	Structural morpheme	Total number
V	41	30	8	7	86
VC	-	31	19	-	50
CV	59	94	18	-	165
C	-	84	5	1	90
	100	239	44	8	391

From the morphemic point of view, one can see from chart 2, that 1) the CV type of morphemes are predominant in Mongolian, either in roots or in suffixes, and that 2) the derivational morphemes are the largest in number, 3) the structural morphemes are mostly V-type, 4) the root morphemes are only of two types: V and CV types, 5) the C type of morphemes tends to be derivational morphemes.

From the above statement it is clear that there are no consonant clusters, except in those words which are composed of stem with derivational or inflectional suffixes. The latter begin with an initial consonant preceded by a stem final consonant, hence one finds only CC type of consonant clustrers in Mongolian, occuring in the middle of words.

There are one hundred words in our analysing passage. Here it must be noted that the words in the text which have common roots with some Altaic languages have been included in the native Mongolian words. In our 100 word passage, there are one hundred roots, which comprise 23.2% of all 391 morphemes in the passage and all are in the initial position.

So all words and texts analysed by us provide verification of the axiom that the position of occurrence of *meaningful* root morphemes in Mongolian is typologically very simple and always in initial position in any word or sentence.

In the Mongolian language, there are no compounds of root plus root. There is only one exception, that is the reduplication of one and the same root repeated immediately in one word as *tšitši-* 'to poke', *xöxö-* 'to suckle at the breast', etc.

In Mongolian, the compounds are very sparingly used. There are many compound – like words, but in our opinion, they should be the object of syntax, because they retain all the peculiarities of word combinations; there are many so-called word combinations in Mongolian which are considered to be something between word combinations and compoundings.

We maintain that those words, so-called compounds, according to some Mongolists, are not conpounds. Some Mongolists, under the influence of translation, erronously consider them compounds e.g. *ediň dzasa y* 'economics', *suryaň xömýdžiýlexe dzyi* 'pedagogy', *xalúň xyiteň* 'tempetature', because 1) their mutual relations purely belong to syntactic level, 2) the stress is still kept on the roots of each word which are the constituents of the phrase, 3) they are the constant combination of words, either with idiomatic or with terminological characteristics.

The conclusion can be made that there are no such types of root morphemes as VC, CVC, VCV, CVCV, CVV́, VV́ and Vd in the Mongolian language.

All of them are stems, we can now model the constructions as follows:

VC	consists of R (V)	+ Sf (C stem forming suffix)
CVC	consists of R (CV)	+ Sf (C stem forming suffix)
VCV	consists of R (V)	+ Sf (CV stem forming suffix)
CVCV	consists of R (CV)	+ Sf (CV stem forming suffix)
CVV́	consists of R (CV)	+ Sf (-V́ stem forming suffix)
VV́	consists of R (V)	+ Sf (-V́ stem forming suffix)
Vd	consists of R (V)	+ Sf (-d or semivowel –stem forming suffix)

CV	ø	without suffix, or with zero.	ge- 'to say'
V	ø	suffix examples:	e- 'this'
			a- 'to be'
CV	CV	stem forming suffix, examples:	xoli- 'to mix'
V	CV		ama 'mouth'
CV	C	stem forming suffix, examples:	baɣ 'group, part'
V	C		uɣ 'origin'

The scheme shows that in Mongolian, roots are either CV or V, and that the remaining parts are stem forming suffixes.

Contrastive Summary

1. There is two types of morphemes in both Mongolian and English: segmental and supersegmental morphemes; Mongolian supersegmental morphemes do not function like those in English, i.e. in Mongolian, the stress is not phonemic, neither the Mongolian stress has no significant distinguishing meaning. There are no consonant clusters, in the initial and final position of words in Mongolian, which is the case in English.

2. According to our analysis of the 100 word passage, we found that there are mainly four types of morphemes in Mongolian on the basis of their shapes and sizes, that is V, VC, CV and C in Mongolian, and V, VC, CV, CVC, CVCV, CVCVC and C in English. The CV type of morphemes are predominant in Mongolian roots or suffixes; the derivational morphemes are the most numerous.

3. The Mongolian root morphemes alway occur in the initial position except in some compoundings, because there is no prefix in Mongolian, whereas the root morphemes can occur both in the initial and in the middle position.

4. In Mongolian, bound roots are predominant, whereas free roots are predominant in English; in Mongolian no root morpheme sets of forms, such as sink-sank-sunk occur. Although the Mongolian language has a large number of root morphemes which are always represented by a single phonetic shape, yet at the same time there are a few which are represented, according to their environment, by two or four phonetic shapes.

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5. In English, reduplication is very rare except in reduplicative compounds which are mostly restricted to expressive sound words, while in Mongolian all words may be reduplicated, but only at the syntactic level. There are a very few compoundings in Mongolian.

6. There is extremely rare repetition of root morphemes in English, whereas in Mongolian, about fifty root morphemes can be reduplicated. Another type of reduplication is used in the Mongolian language, quite distinct from the above mentioned type, which belong to syntax.

7. In Mongolian, only one causative suffix combination $-úl{\sim}yl$ is repeated with semantic meaningfulness having double causative, whereas there are no reduplicated suffixes, neither derivational, nor inflectional in English.

8. Affixes are always suffixes in Mongolian, whereas in English, they can be either prefix or suffix; both in English and Mongolian, suffixes (and prefixes in English) are normally unstressed and bound.

9. In Mongolian, only suffixes appear, sometimes without alternants, and sometimes in several alternants; but the alternants are mainly conditioned by the vocalic harmony. It is mainly realised in accordance with the stressed vowel or influencing vowel in the reproducing form. The alternants do not occur, because of phonetic modification i.e. not determined by the last phoneme of the accompanying stem which is called regular alternation or automatic alternation[1] as in English, *dresses /-iz/, gans /-z/, books /s/.*

10. In Mongolian, there are two kinds of inflectional suffixes: noun inflectional suffixes, and verb inflectional suffixes which are contrasted with derivational ones. Derivational affixes only cover derivational suffixes in Mongolian, because there is absolutely no prefixation in Mongolian, whereas the term of derivational affixes covers all suffixes and all prefixes, except for inflectional ones in English.

In both Mongolian and English, the derivational suffixes serve to form stems which can function in various paradigms (mainly of noun and verb), in other words, they form words in other classes.

11. There are many more syncretical morphemes in Mongolian than in English.

12. Mongolian structural morphemes are, in fact, union vowels and consonants and are more active, while there are no structural morphemes in English, i.e. there are no union vowels and consonants.

13. In conclusion, here are two charts demonstrating the occurrence of various morphemes in the 100 word passage in Mongolian and English respectively.

Chart 3

Morpheme	Mongolian	English
number	391	143

Chart 4

morpheme type		English	Mongolian
Prefixs	derivational	4	-
	inflectional	-	-
	total	4	-

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suffix	derivational	19	232
	inflectional	18	51
	structural	-	8
	total	37	291

Chapter Two

DERIVATION AND ARRANGEMENT

In this chapter, the another has analysed formation of stems and works in Mongolian and contrasted them with those of English formations.

It is very important to give a strict definition of the morphological stem for studying derivation.

V.Yartseva wrote rightly: "The essence of derivation is stem forming"[1].

Two basic methods of derivation are recognized: affixation and compound.

In some languages, there are both the prefixation and suffixation, in others predominantly suffixation, but the prefixation is secondary in some languages which is just the opposite in Navaho[2], where prefixation is predominant.

In some complex stems those two methods may overlap or be mixed together in a complicated way.

In those languages, as in the Slavonic language the affixation is predominant in the derivational system; one finds suffixation, prefixation, convertion and backderivation in English.

It is generally known that the basic concept of phonology is a concept of phoneme, and the basic concept of morphology is a concept of morpheme. In derivation, first of all, let us examine the derived words formed by suffixation. We consider that all other constructions such as compounds, abbreviations etc. are secondary derivatives, so the basic unit of the derivational system is a derived word.

The various types of derived words must be differentiated when we analyse them; we have different ways for investigating composition derivatives which are formed by compounding, suffixation and conversion; there are no universal methods in studying all of them.

Having studied all the information it is possible to imagine the models of the general derivational system of language studied... The essential indication of the models are: its general meaning or purpose, its consistence and principles, its arrangement. Only after having studied these qualities of the derivatives, it will be possible to comprehend their essence[3].

In principle, stem is mostly a concept on a morphological level. It is part of a word, which is unchangeable through inflection.

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[1] В.Н.Ярцева. id. p. 36.
[2] E. Sapir, H. Hoijer, *The Phonology and Morphology of the Navaho language*, University of California Publications, 1967, pp 13-42.
[3] Е.С. Кубрякова, *Что такое словообразование*. М.1965. Р. 36.

The fixed order of morphemes in certain constructions, and the definable degree of freedom, are fundamentals of the language. They are expressions of the systematic structure and the real essence of speech, on which the systematic and characteristic feature of a language depends.

Most Mongolists focused attention on free stems or the dictionary forms in the Mongolian language, and particularly not on the bound roots and stems. Therefore up till now, there has been no special study of the Mongolian root morpheme and on its isolation and identification. Academician B.Rinchen[4] and Sh. Lubsangvangdan[5] investigated Mongolian roots in their recent works.

A single root or a sequence of roots (here it means compounds and reduplicated roots if in Mongolian) plus other derivational morphemes which may occur with inflectional affixes is a stem.

There is no difficulty with Mongolian free roots, whether they are recognized as verbs or nouns, since they are directly followed by noun or verb paradigmatic suffixes. To determine bound roots is more difficult, since they are not followed by the above mentioned paradigmatic suffixes, so there is only one way for detarmining them --by detarmining exactly the derivational suffixes which occur immediately after bound roots.

Derivational suffixes occur with roots or stems to form other stems.

The words *füxer* 'ox', *hara* 'ordinary people' are the subject of diachronical study of modern Mongolian: *yxer~yxyr* and *aran arad*; here are some more examples in pairs:

Historical forms	*modern forms*
saɣa- 'to milk'	sá - 'to milk'
niɣu- 'to conceal'	nú- 'to conceal'
baɣu- 'to settle'	bú- 'to settle'

There are primary stems and secondary (even tertiary...etc.) stems.

The secondary (tertiary, etc.) stems are formed by adding derivational suffixes to the primary stem, and so on, up to S_{13}.

Derivation of secondary stems from primary stems, or tertiary stems from secondary stems, etc., is carried out by adding derivational suffixes to the stems concerned. In this manner, nouns are derived from verbs or nouns or verbs and verbs are likewise derived from verbs or nouns.

Derivational suffixes are attached to the stem, and no changes take place in the latter.

Mongolian derivation by means of suffixes is the usual and main way of forming words from other words, but this is not the only way of forming words, since words can also be formed, in some cases, by compounding, compounds are less productive, from the derivational point of view.

We consider that certain compounds which are regarded by a majority of Mongolists as compounds, are not compounds, as *xalún*, *xyiteñ*, 'temperature', *öndör nam* 'length', *ediñ dzasay* 'economics'.

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[4] Б.Ринчен. id. p. 13.
[5] Ш.Лувсанвандан. id. pp. 99-122.

Mongolian free stems are divided into two classes based on the different period of occurrence of the morphemes which comprise derived stems. Thus, some suffixes occur only with verb roots or verb stems, others occur only with nouns, with other words.

There are two stem classes[6]: verb stems and noun stems depending on the stem occurrence with the inflectional systems.

In Mongolian, there are relatively simple morphological arrangements, i.e. constructions of successive derivations, comparable with secondary derivations which are to be had in English.

B.A.Serebrennikov's suggestion on the combinations of the morphemes in agglutinative languages, is that theoretically, his suggestion is very important for solving the morphemic problem in Mongolian. He wrote, "Combination of morphemes by means of agglutination is not so complicated..., the reasons for the stability of the agglutinative structure of languages are, first of all, that there are two important factors: 1) absence of the subdivision of form class within nominals, in the agglutinative languages, 2) strict word order <<attributive + attributed>>"[7].

So, in Mongolian, the main problem in describing the recurring morpheme arrangement is to determine the morpheme classes and its sequences. The morphological model in Mongolian will mainly be certain chains of elements in which the strict attributive and successive order, and sequences are kept to.

Sequences of morphemes are strictly established e.g. every root occurs with certain and fixed derivational suffixes and not with any other; the sequences between the derivational suffixes are also permanent. So the aim of this chapter is to describe comprehensively 1) the sequences of root morpheme with derivational suffixes and 2) the sequences between derivational suffixes, which are extremely of great significance in the word structure system of the Mongolian language.

The stems in Mongolian, are classified as some functioning only as nouns, and others as verbs; both are determined by the suffix which forms the underlying stem.

We may say that the last order in derivational sequences in the underlying stem, the derivational suffix, e.g. In the underlying stem *bae-* 'to be, to exist', the stem forming suffixes is *-e<yi~i~y* the underlying stem is a verb, since the *e <yi~y~i* is a verb stem forming suffix, which occurs in many other words e.g. *oe-* 'forest', *soe-* 'to hang up', *ulae-* 'to appeared', *tsae-* 'to appear white', the words are governed by the verb paradigmatic system. If we attach to *bae-* the noun stem forming suffix *-ri* meaning 'place', the resulting new underlying stem will be *baeri* 'the existing place', which is a noun, it has all the characteristic features of a noun paradigm and syntagm. In such a way, the now underlying stem chains continue, if the stems are not closed by the stem closing suffixes, e.g. verb or noun inflectional suffixes.

The deriving stem is very important , for instance, take the word *baeɣülmal* (=*ba-e-ɣü-l-ma-l*) 'constructed' $R-S_1-S_2-S_3-S_4-S_5$, the segmental divisibility of the derivational process in the word is the underlying stem of the derivational word, such as the word *baeɣülma* (S_4) 'constructable' for which *baeɣül* (S_3) is the underlying stem; for *baeɣül* (S_3), *baeɣü* is the underlying

[6] Н.А. Баскаков. *Порядок и иерархия аффиксов в основе слова в тюркских языках.* –
"Морфологическая типология и проблема классификации языков" М.-Л., 1965. p.121.
[7] В.А.Серебренников. id. pp. 7-9.

stem; for *bae γú*, *bae-* is the underlying stem, for *bae-*, bound root *ba-* is the underlying stem.

The word *bae ulamal* is a chain of five links, every one of them an example of a different derivational model.

In fact, the last suffix morpheme is attached to the 'ready-made' underlying stem which can be either only a root or S_1 or S_2 or S_3 ...according to above analysis.

The stem forming suffixes can be internal and external, from the point if view of form class.

Underlying stems may be of different sizes. In the following series the underlying stem occuring with the stem forming suffix *-tši* varies in morphemic size:

1. *dzamtši* 'guide'
2. *jawaúlúlaγtši* 'the one who let them make the other go'
3. *maltši* 'herdsman'

In describing the distribution of *-tši* one must know the pertinant environment; one could, of course, state that in №.1 *-tši* follows the noun stem *dzam* or suffix *-m*; in №.2 it follows a noun stem forming suffix *-γ*, and in №.3 it follows a noun stem forming suffix *-l*. But these environments are not particularly pertinent ones. What is important is, that all the underlying stems with which the suffix *-tši* occurs are nouns. The suffix *-tši* combines structurally with the entire underlying stem and not with just a preceding morpheme.

All stems belong to the same major external distribution class, e.g. the agantive noun forming suffix *-tši* occurs only with noun stems, e.g.

mal 'herd'	*maltši* 'herdsman'
γal 'fire'	*γaltši* 'fireman'
tylé 'firewood'	*tylétši* 'firewood gatnerer'

In many cases, if a verb stem-forming suffix occurs immediately after another verb stem in a word, the first suffix will be semantically weakened and the second one becomes the main functional suffix, e.g. *saedžira-* 'to improve', in other words, it is structurally and semantically necessary to add another verb stem-forming suffix which can produce the base free verb or 'ready made' word, if the existing verbal suffix has lost its function and cannot produce the verb base free verb.

A.A.Reformatskii is right in stating: that because of the close bonds among elements forming underlying stems in fusion languages, these elements do not just ordinarily link up forming a straight chain; a new morphological quality makes its appearance —a unit which in general is ready to accept a new formative element ("formal belonging" Fortunatov). At the same time, the previous formative element of the underlying stem "weekens"property and closely fuses with the primary stem "root"[8].

In Mongolian, the voice suffixes and causative suffixes.. etc. do not prevent further derivation, so these suffixes are regarded as derivational

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ˣ Реформатский. *Аглютинация и фузия*. - Введение в языкознание. М., 1960. p. 83 p. 224.

suffixes, as the voices and causatives...can occur in either noun stem or in verb stem. So causative stems, in many cases, is stems with syncretic suffixes, serves as a noun and verb simultaneously, e.g. *orɣil* 'deserter' (noun), *orɣil* 'let one to desert; to flee', à propos, syncretic morphemes have been discussed in the paragraph on suffix morphemes.

Derivational suffixes occur in a fixed position, i.e. in Mongolian, the most derivational suffixes mainly occur in the S_1, S_2, S_3, S_4, and S_5 position; voice and mood suffixes mostly occur after S_2 (or in the third position counting from root).

There are some examples which illustrate the occurrence of the suffix *-xa* after some bound stems, *bajarxa-* (*ba+ja+r+xa*) 'to boast of one's wealth', *bajarxa* 'boasting of one's wealth', *omorxa-* 'to be proud, to be proud of one's clan'. In this word *omo-* is the bound stem to which the suffix *-r* is attached, from the structural point of view the *omor* is the same with the word as *bajar* 'festival', *xamar* 'nose', *ɣadar* 'earth, land'...etc. (see p 48-*xa*[4]).

There are some other denominal suffixes *-la*[4], *-na*[4], which are very similar with the suffix in question, according to their distributions, meanings and functions. We can cite here one suffix having Turkic equivalent, as A.A. Yuldashev has elucidated: "We can take another example which as a highly productive model of forming denominal verbs with the help of *et-* 'to do, to make (делать)', somehow, like the free combination....it is one of the grammatical ways of word-formations which resemblest very much the derivational suffix *-la*[9].

The suffixes to be attached to the same form (word) class, in the same position or replacing each other, have different meanings respectively, e.g. noun class,

selection of γ-~-r	*omog*	*omor*
selection of –ň-~-r	*bajaň*	*bajar*
selection of –ng~-g[2]	*bárang*	*bárɣ*
	séreng	*séreg*
selection of –na~-á	*ɣadana*	*ɣadá*

verb class:

selection of –ra~-mi	*xura-*	*xumi-*
selection of –ma~-ši	*xama-*	*xaši-*
selection of –ri~-dza	*bari-*	*badza-*

There are relative orders of suffixes which are closely bound in structure to the verb and noun stems.

From the point of view of phonological sequences, there are patterns of nine consonants which have a definitely restricted distribution of occuring as a stem forming suffix after V and CV root morphemes; in such position, it usually happens that the boundaries of such formations coincide with structurally pertinent groupings *ɣal, mal, sam, nam, eb, uɣ.*

Their occurrence are determined by the derivational environments e.g. The verb stem forming suffix *-s* (vide p.47) is an alternative of the suffix

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ᵛ А.А.Юлдашевв *К характеристике Тюркских сложных слов*, ВЯ, М., 1969, 1989, №5. p.73.

in question, the main semantic difference between them is, the suffix $-d$ expressing the meaning 'to be too...(long, narrow, etc.); the suffix $-s$ expresses the meaning 'to become... (long, narrow, etc.)'. The distributional occurrence of them are quite the same, e.g.

ixed- 'to be too big'	from the stem *ixe* 'big'
ixes- 'to become big (ger)'	
urtud- 'to be too long'	from the stem *urtu* 'long'
urtus- 'to become long (ger)'	
boɣonid- 'to be too short'	from the stem *boɣoni* 'short'
boɣonis- 'to become short'	

The two suffixes have become separate suffixes, although they have corresponding meaning, from the diachronical and synchronical point of view.

In addition, the symbolic roots play a very important role in Mongolian.

In Mongolian, we consider that all phonetic symbolism could be considered morphemes, or morpheme combinations, since (1) most of the Mongolian symbolic roots and combinative roots can be used freely, although they are included in the unchanged words, (2) they are syntactically used in word combinations: *sal pal gesal xi-, sal sal*; (3) used with forms occuring in other combinations.

We have listed in this investigation the most productive and active derivational suffixes which are arranged in aphabetical order and described their frequent positions which may commonly occur.

Chart 5

		orders of positions										
N	suffix function	S_1	S_2	S_3	S_4	S_5	S_6	S_7	S_8	S_9	S_{10}	S_{11}
1 $-a^4{}_1$	N-V			+	+	+						
2 $-a^4{}_2$	V-N			+	+							
3 $-a^4{}_3$	V-V			+								
4 $-b_1$	V-V		+									
5 $-b_2$	V-N		+									
6 $-ba^4$	N-N		+									
7 $-bi$	N-N		+	+								
8 $-btši$	N-N		+	+								
9 $-bxi$			+									
10 $-d_1$	N-N		+	+								
11 $-d_2$	N-V		+									
12 $-da^4{}_1$	N-V	+	+	+	+							
13 $-da^4{}_2$	N-N		+	+								
14 $-da^4{}_3$	N-N		+									
15 $-dza^4{}_1$	V-N	+	+									
16 $-dza^4{}_2$	N-V	+		+	+							
17 $-dži_1$	N-N			+	+							
18 $-dži_2$	N-V	+	+	+	+							
19 $-g^2{}_1$	V-N	+	+	+	+							
20 $-g^2{}_2$	N-N			+								
21 $-ga^4{}_1$	N-V		+	+	+							

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N	suffix function	S_1	S_2	S_3	S_4	S_5	S_6	S_7	S_8	S_9	S_{10}	S_{11}
71 -ta$^4_4$ N-N		+	+	+	+	+	+	+				
72 -tsa$^4_1$ N-V		+		+		+	+					
73 -tsa$^4_2$ N-N			+	+	+							
74 -tsa$^4_3$ N-N			+		+							
75 -tsa$^4_4$ V-N		+	+	+								
76 –tši$_1$ N-N		+	+	+	+	+	+					
77 –tši$_2$ N-V		+	+									
78 –tši$_3$ N-V		+										
79 -xa$^4_1$ V-N			+	+	+							
80 -xa$^4_2$ N-V		+		+								
81 -xa$^4_3$ V-V			+	+								
82 -xa$^4_4$ N-N		+										
83 -xi^4 N-V		+	+									
84 -u^2 V-N		+	+	+	+							

Only after such a kind of isolation and identification one has ground to discuss the arrangement and position of derivational suffixes in Mongolian; the wrong conception that is the derivational suffix combinations which consist of devisiole two or three suffixes were considered as a linguistic unit. The conception has already become the chief obstacle for deeply studying the Mongolian derivational system, for a long period.

In our consideration, the number of derivational suffixes are reduced by fourty six than the number of those which are traditionally counted as suffix. We have break down the following combinations into two or three constituents, chart 6,

1.	–áli	into -á	(N)	and –li (N)
2.	–átši	into -á	(N)	and –tši(N)
3.	–baldza	into –ba	(N), I (N)	and –dza (V)
4.	–dal	into -da	(V?)	and –l (N)
5.	–džira	into -dži	(V?)	and –ra (V)
6.	–γaldza	into -γa	(N), -I (N)	and –dza (V)
7.	–γana	into -γa	(N)	and –na (V)
8.	–gina	into -gi	(V?)	and –na (V)
9.	–γda	into -γ	(N)	and da (V)
10.	–γtae	into -γ	N). -ta (N)	and –e (N)
11.	–γtši	into -γ	(N)	and –tši(N)
12.	–γtšiň	into -γ	(N), -tši (N)	and –ň (N)
13.	–γui	into -γu	(N)	and –i (N)
14.	–laγ	into -la	(V?)	and –γ (N)
15.	–lang	into -la	(V?)	and –ng (N)
16.	–lda	into -l	(N)	and –da (V)
17.	–ldžiň	into -l	(N). -dži (N)	and –ň (N)
18.	–lγa	into -l	(N)	and –γa(N)
19.	–lta	into -l	(N)	and –ta (N)

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20. –ltsa	into -l	(N)	and –tsa(V)
21. –mad	into -ma	(N)	and –d (N)
22. –maɣ	into -ma	(N)	and –ɣ (N)
23. –mal	into -ma	(N)	and –l (N)
24. –mar	into -ma	(N)	and –r (N)
25. –mdži	into -m	(N)	and –dži (N)
26. –msar	into -m	(N),-sa (V)	and –r (N)
27. –msaɣ	into -m	(N), -sa (V)	and –ɣ (N)
28. –mšiɣ	into -m	(N), -si (N)[10]	and –ɣ (N)
29. –mta	into -m	(N)	and –ta (N)
30. –mxae	into -m	(N), -xa (N)	and –e (N)
31. –ngɣui	into -n(ng)	(N), -ɣu (N)	and –i (N)
32. –ntsar	into -n	(N), -tsa (N)	and –r (N)
33. –rxa	into -r	(N)	and –xa(V)
34. –rxaɣ	into -r	(N), -xa (V)	and –ɣ (N)
35. –saɣ	into -sa	(N)	and –ɣ (N)
36. –sar	into -sa	(N)	and –r (N)
37. –tae	into -ta	(N)	and –e (N)
38. –taň	into -ta	(N)	and –ň (N)
39. –tsa á	into –tsa	(N)	and – á (V)
40. –úl	into -ú	(N)	and –l (N)
41. –úli	into -ú	(N)	and –li (N)
42. –úr	into -ú	(N)	and –r (N)
43. –úri	into -ú	(N)	and –ri (N)
44. –xae	into -xa	(N)	and –e (N)
45. –xaň	into -xa	(N)	and –ň (N)
46. –xalang	into -xa	(V?), -la (V?)	and –ng (N)

The series (not complete), numbering 46, were and are traditionally considered as one suffix, but they are, according to their distribution and separatability, all of them a combination of suffixes. The aim of a linguistic analysis of any sequence is not only to examine the combination of morphemes, but, first of all, to study the constituent morphemes in combinations.

Now we may group and list the derivational suffixes into four groups according to their functions as cited in the Mongolian derivational model, and according to the number of the list on the page.

The suffixal derivation has various models according to the functional, structural and semantical point of view.

There are main derivational stem groups in Mongolian
a. Noun stems derived from verbs
b. Noun stems derived from nouns
c. Verb stems derived from verbs
d. Verb stems derived from nouns

From derivational suffixes according to the four types of stems we can consequently divide all stem forming suffixes as follows:

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[10] The ši- a root morpheme, in this case, may be considered as semi-suffix.

1. Verb stem-forming suffixes from noun stem:
1,11,12,16,18,21,23,26,27,30,32,36,44,54,56,62,64,65,68,72,77,78, 80,82,83.
2. Verb stem-forming suffixes from verb stem: 22,50,53,81.
3. Noun stem forming suffixes from noun stem:
5,6,7,8,9,10,13,14,17,20,24,28,29,31,33,35,38,39,46,48,49,51,55,58,59,61,
63,66, 69,70,71,73,74,76,82.
4.Noun stem-forming suffixes from verb stem:
2,15,19,25,34,40,41,42,43,45,52,57,60,67,75,79,84.

Semi-suffix

Although in the limit of one language there is the mutual transfer between root and affix morphemes, i.e. the root more or less has lost its meaningfulness, at the same time, the root sometimes occurs independently, sometimes serves as a relational element in the very language itself.

Such intermediate morphemes, on the one hand like suffix and on the other hand like root, are called semi-suffixes in the linguistic literature[11]. Semi-suffixes are derivational morphemes in Mongolian.

In Mongolian, there are a few, semi-suffixes (dzarimda da awari): *-rú~rý~lú~lý*, original meaning is 'down', *-ši (šig)* 'like similar', *-áda~éde~ódo~ódö<ö+ódö<ögede* 'up', *-ta⁴ (-ta~-te~-to~-tö)* 'you' (honorific), *-tši* 'thou'; *nar (=na+r)* 'a group', *xi-~xi-* 'to do'.

From the derivational point of view, we consider that to term semi-suffixes as relatively free (or bound morpheme) is correct, e.g. *yaexamšiy* 'wonderful', *súyáta* 'sit down, please'.

The various forms of semi-suffix, from the morphological point of view, may be divided into derivational and non-derivational variations, i.e. into functional variations.

The semi-suffixes can be divided into two parts: those which have relational (inflectional) function, e.f., *-a⁴da⁴ (=-áda~-éde~-ódo~-ödö)*, *-rú~rý~lú~lý*, *súyáta* '(you) sit down', *su atsi* '(thou) sit down', the remaining semi-suffixes: *xi-* and *ši-* (sig) are derivational semi-suffixes, Therefore *ynese šig* or *ynysy šig* are not semi-suffixes, they are syntactically only a postpositional noun, since; 1) the '*šig*' in such cases is always under stress, or it has a separate stress from the preceding word, 2) the syntactic use of the '*sig*' is completely independent and there does not produce any change of syntactic order, e.g. *jú šiy~jy šiy* 'like what', *xeñ šig* 'like whom', *darya šiy* 'like the chief'.

The form class and morphological position of the semi-suffix is identical with the co-existing word, e.g. *urú* 'down' is a noun, respectively a coexisting semi-suffix *-rú~rý~lú~lý*, is a nound suffix.

The only exceptions are semi-suffix *-ta* and *tši* which coexist with pronoun ta 'You' (honorific form), *tši* 'you or thou' (cf. Mongolian *tši* corresponds to German *du*). The two pronouns forms occur in honorific and ordinary,imperative after the converb imperpect.

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[11] H.Marchand. *The Categories and Types of Present-Day English Word Formation*, Otto Harrassowidz. Wiesbaden, 1960, p.290.

The semi-suffix is of a temporary nature which is extremely relative, hence the root morpheme can coexist with the semi-suffix status for centuries.[13?]

We should approach the isolation of the semi-suffixes -ši, -ödö, -tši,-ta etc. From the phonological, graphical, semantical, morphologcal and syntactical point of view.

From the phonological point of view, all Mongolian semi-suffixes as –ši/šig, -ódo etc. do not occur under stress, when they are used specifically as semi-suffixes. Some of them have lost their initial vowel or root morpheme, e.g. –rú/rỳ urú/yrỳ<uruyu.

Graphically, some of the semi-suffixes diachronically and synchronically used to be written together with the previous stem yaexamšiy<yayiqamšiy 'wonderful', but others are now written separately nom rú 'to the book'.

Morphologically, they are uninflected when they function as inflectional suffixes, in nature, e.g. amáda<ama ögede 'to the mouth', amarú<ama-rú<ama-urú<ama uruyu 'to the mouth, in the mouth'. N.Poppe has termed the semi-suffix as directive case[14].

When they are inflected, they function as derivational suffixes essentially, e.g. yayiqamšiy-iň 'of wonderful..'

It has been mentioned that the word ši~šig always became a derivational suffix when it was a semi-suffix, e.g., yutumšiy 'disgraceful'.

Here it should be noted that the suffix -btar is, diachronically the second part of a compound word, which was btur/btür<batür/betür<metür (a word) metü 'like, similar'+r. Here –r with the preceding word metʊ means 'the similar one, the one like'. At present it has distributionally become a suffix, the meaning of which in general has been preserved, i.e. 'the similar one or the one like...' but it has increased the additional nuance, that is, 'slight difference of...more or less...'. öndöröbtör 'more or less higher, little higher..., contains the stem öndör 'high,tall'.

The structure of the suffix is not governed by the general types and sizes of Mongolian suffix system, since it is more or less similar to the structure of compound word.

Constructive Summary

1. The Mongolian language is a highly synthetic and agglutinative language, which means that rather long words may be built up out of basic root morphemes plus more morphemes and of many other meanings...

2. In the English language which has many bound forms, one usually finds non-nuclear elements on more than one side the nucleus, e.g. disgraceful, condenser, etc. whereas all Mongolian non-nuclear constituents (either derivational or inflectional) are on one side of the nucleus only; the immediate constituents are always successive series with each morpheme being added to another layer of the morphological 'concretion'.

3. In English, the nuclear immediate constituent occurs in a discontinuous form. Although it is not common, for example, in the word

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[13] H.Marchand. id. p. 290.
[14] N.Poppe. *Introduction to Mongolian Comparative Studies*, Helsinki, 1955, p. 205.

sons-in-law, the nuclear immediate constituent is *son..in-law* and the peripheral immediate constituent is *–s*, while in Mongolian there is no such inclusion of peripheral immediate constituent within a nuclear constituent.

4. One of the derivational processes is compounding, in which two stems are used to form a new lexical item. The English language uses compoundings more extensively than the Mongolian language. We consider that many of the so-called compoundings in Mongolian are, in fact, object of syntax.

5. Both languages have derivational suffixes, but there is no initial system of prefixation in Mongolian, while there are derivational prefixes in English.

In English, the immediate constituents are usually not so involved, and there are fewer successive sets; in Mongolian, on the contrary, the IC-s are sometimes shorter *(γaltši)* and sometimes longer *(utširaŭlsanárán)* successive sets. In English, there is only S_1, S_2, S_3, S_4 whereas in Mongolian, stem derivation sequences have at least the stems from $S_1 - S_{13}$.

6. In Mongolian, the derivational morphemes are not closing morphemes. It is possible for the inflection suffixes to occur after the derivational suffixes, both in verbs and in nouns. On the other hand, it is impossible for the derivational suffixes to occur after the inflectional suffixes, both in verbs and nouns in Mongolian.

Internal changes such as vocalic consonantal change and accentual changes serve to characterize paradigms of derivation in English, whereas there are no such features of derivational paradigms in Mongolian.

7. Phonetic symbolism is common in many languages, especially in Turkic and Mongolian languages. Phonetic symbolism plays a highly important role in the derivational system of the Mongolian language, since there are thousands of expressive words of movement and sound which are formed on the basis of phonetic symbolism.

8. There are a few semi-suffixes in both English and Mongolian, which are intermediate morphemes, and derivational suffixes. The most characteristic feature of semi-suffixes is that it tends to close further derivation.

Chapter Three

THE GENERAL TYPES OF WORD STRUCTURE IN MONGOLIAN AND ENGLISH

In this chapter we discuss the classification of word structures, the paradigmatic system of the various lexico-grammatical classes; characteristics of derived and primary words, inflected and uninflected words, compound and simple words; morphemic structure of words and conversion in Mongolian and English languages.

Classification of Word Structure in Mongolian and English

Word structure is one of the leading typological characteristic of languages. All typological investigations in any language begin with the study of the structure of words of the given language.

Words, or minimum free forms, are not always the smallest unite to be meaningful, even in a language like English where words are relatively well marked[1].

The word is the unit par excellence of traditional grammatical theory. It is the basis of the distinction which is frequently drawn between Morphology and syntax and it is the principle unit of lexicography (or 'dictionary-making)[2].

Languages differ greatly in number and types of structural classes. We are accustomed to a great many major structural classes in the Indo-European languages, which we call "parts of speech". These parts of speech are sometimes formally distinguishable by their internal structure (this is particularly true of Greek and Latin), but in a language such as English, the parts of speech are distinguished largely by their external distributions.

In describing the morphology of a language we are concerned primarily with the morphological classes as determined by their internal composition. The most frequently distinguished morphological classes are nouns, verbs, particles, and pronouns. It is quite impossible to predict what will occur in any one language or the characteristic which any class will have.

Every language is a system within itself, and morphological classification must be based upon the language in question[3].

In Turkish, there is no such elaborate set of word classes. Voegelin and Ellinghausen have described Turkish on the basis of two principle word classes, nouns and verbs. There are also certain enclitic particles which syntactically are pertinent. Though, structurally, there are only two major classes, nouns and verbs, this does not mean that there is no possessive pronominaly relationship, such as 'my houses'. It is only that *my* is a suffix *–im* in such a form as *evlerim* 'my houses;. There are as well, forms equivalent to English prepositions...[4].

We can repeat the equivalent meaning in Mongolian, since there is no such elaborate set of word classes in the Mongolian language as in Indo-European languages including English. According to the inflectional paradigms, we can define two paradigmatic classes in Mongolian, while there are four in English. All the remaining parts of speech are syntactic classes.

Y.B.Rinchen, beginning with the fourties of this century proposed that there are only two principal word classes, nouns and verbs. There are also certain enclitic particles, which are syntactically pertinent and very specific in comparison to Indo-European including also Engliish particles in content and in structural features. Though, structurally, there are only two major classes, nouns and verbs, this does not mean that there are no possessive pronominal relationship such as *my country*; it is that *my* is expressed in two ways in Mongolian (1) *mini ulus*, there are, as well, form *ulus mini* which has in general the same meaning as the latter form, but expresses a close idea. The *mini~mini* 'my' and *–añ* 'the, self' mutually exclude each other in the structural position.

Such kind of phenomenon can also be observed in Turkish languages which is cognate with Mongolian, therefore John R. Krueger wrote: "The nature of the Chuvash substantive or noun is rather different from that of Western European languages". Although the class of Chuvash nominals may

[1] Barbara. M.N. Strang, *Modern English Structure*, London, 1962, p.67.
[2] T. Lyons. *Introduction to Theoretical Linguistics*, Cambridge, 1969, p.194.
[3] E.Nida. *Morphology, Descriptive Analysis of Words*, p. 150.
[4] E.Nida. *Morphology, the Descriptive Analysis of Words*, p. 150.

be divided by function into subclasses of nouns, adjectives, adverbs, pronouns, numerals,etc. there is little or no difference between them on formal grounds. That is, one cannot tell the difference between a nominal used as a noun and a nominal used as an adjective. For instance, words denoting attributive qualities (colour, size, shape, form, condition, state, and so on) may occur in Chuvash, either as nouns or as adjectives, e.g.... *čan* 'true, truth, that which is true, truly', *čan samax* 'a true word', *čan sutlare* 'he calculated truly, correctly'[5].

Our school grammars, define a part of speech as a word refering to a quality, like colour, measure...but whether a word is a noun or an adjective cannot be determined from by referring to a 'quaility".... In short, the traditional definitions of part of speech are largely unworkable[6].

The words which are classified by some Mongolists as adjectives in Mongolian, in fact, have a common structural function with those commonly considered as nouns in Mongolian. Structural relationships of the words are also identical with nouns. N.Poppe wrote rightly that 'It is difficult to draw a distinct line between the substantive and the adjectives"[7].

The same suffixes can be added to what we call substantives and adjectives. The words which are definitely identical with nouns in the structure of the Mongolian language, can now be classified as separate classes imposed by the presuppositions of traditional grammatical theory.

One of the specific subclasses of nouns in Mongolian is the verbal noun (nomen verbum). We normally expect indications of tense to be a part of the verb if they occur as bound forms, but in Mongolian, verbal noun tenses may be indicated by noun derivational suffixes which form verbal nouns.

The verbal nouns certainly belong to the noun because their paradigmatic system and syntactic distribution are quite identical with nouns.

To classify words into form classes (parts of speech), a complete description of the structure of the Mongolian language should be given.

Nouns make up the first class, all of these are inflected in eight patterns of noun paradigms. The inflection of a noun is achieved only by suffixation to the noun stem (rarely to the root).

Verbs make up the second word class. Verbs are inflected in 33 patterns of verb paradigms.

The important criteria for any word, determining to which class it belongs and what suffixes will occur after it, is specified only by the suffix in the final position in a given derivational sequence in Mongolian.

From the paradigmatic point of view, we can determine the verb and noun classes as following:

word

nouns   verbs

Inflected noun   Uninflected noun   Inflected verbs

nouns   Verbal nouns   pronouns

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[5] John R.Krueger. *"Chuvash Manual"*, Vol. 7 of the Uralic and Altaic Series, Mouton, 1961,p.91.
[6] H.A.Gleason. *An introduction to the Descriptive Linguistics*, New York, pp 92-96.
[7] N. Poppe. *Introduction to Altaic Linguistics*, Wiesbaden, 1965, p.195.

Here is a short description of the characteristic of each lexico-grammatical class.

Mongolian Nouns

The characteristic features of Mongolian noun classes inflected (free noun) are:

a. Possessable by pronominal words before and after them e.g. *mini* *xỹ* 'my son' *xỹ mini* 'my son (more close sense)'.

b. Number constrasts: generic and partial (not plural and singular as in Indo-European languages).

c. Followed by relational suffixes, e.g. *-in~-i, -i~-ig,-da⁴~ta⁴, -ása, -ár.*

d. Preceded or followed by each other without relational suffixes.

e. Certain tenses and moods...are involved in the noun stem, since they are formed within the framework of derivation, and noun stems may contain many other verb stems.

f. The personal pronouns differ less from the nouns, i.e. the nominative or basic form of pronouns are not different from the common noun root and stems.

Mongolian Noun Inflection

The absence of the class division among nominals in agglutinative languages, provides the possibilities that the languages have the standard and united structure of inflection.

Noun inflectional system occurs (potentially) with all nouns except uninflected nouns.

Mongolian noun inflection involves number, relational, and definity. The paradigms of them are realized by suffixation.

In constrast to English and some other languages in which there are a number of ways of forming the plural, and which cannot be predicted, but must be examined, the Mongolian language has principally only one way of forming the partial number (almost all Mongolists mention the plural number except B.Rinchen, and T.Dashtseden[8]) which is suitable for all nominals at all times and places. It is must be noted that the partial is used a little in those places where English-speaking people except, whose language has the plural and singular number system. The generic number (singular according to many Mongolists) in Mongolian means not only one item or some items from that class, it also means the entire class of that item. The partial, which is termed by Mongolists plural as in the Indo-European plural system, is used only for denoting a part of an individual item from the class. John R.Krueger very intelligibly explained the number system of the Chuvash language and wrote that the content of plurality (in fact may be partial – Choi L.) in Chuvash is not the same as that in Indo-European languages[9]. A.N. Kononov personally told me that there is no *plural* and *singular* number system in Mongolian, and he expressesd his opinion concerning the Turkic languages in his *Uzbek Grammar*[10].

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[8] Т. Дашцэдэн. *Орчин цагийн монгол хэлний бодит нэрийн ерөнхий ба тодорхой тооны зарим жишээ.* "Монголын судлал". Улаанбаатар. 1971. pp. 171-180.

[9] John R. Krueger, id. pp. 93-94.

[10] А.Н.Кононов. *Грамматика современного узбекского литературного языка.* М.-Л.,

The Mongolian never expresses the plural like the English, in general statements as 'Children are a joy; Flowers are beautiful; Apples are good to eat'.

The sense of plurality is; highly developed in English and Indo-European languages, so that the Englishman feels that to say 'three man', 'four table' as the Mongolian does. Is quite impossible, and only in a few expressions of measure do we find's *a two-man-draft, a ten-foot-pole, a five-mile- trip*. In Mongolian, however, the *partial*, so-called plural, is never used after a numeral or quantity word, because the presence of the number or quantity word is sufficient to indicate *partiality* (in fact, not plurality as many people think) to a native Mongolian speaker, e.g.

> *γurbañ alima* (lit: three apple)   three apples
> *oloñ mori* (lit: many horse)   many horses
> *xojor baγsi* (lit: two teacher)   two teachers

According to traditional grammar, the plural in Mongolian is mostly used to indicate the presence of a number of items in the class of things denoted by the word involved, but not the entire class itself, the idea itself manifests that there is no plural system in Mongolian.

The partial (as habited *plural*) suffix is morphologically used without any exception in all substances, in Mongolian; but it is rarely used in partial form, as in English, some words do not have logical plurals, the so-called "mass nouns" like *water, milk*...etc.

We have done some statistical studies on the quantity of occurrence of English and Mongolian number suffixes.

We have chosen a Mongolian short story '*sibaγun saγaral*' "Fleet-Footed Bay" by D. Natsagdordži, a famous Mongolian writter, there are 455 words in this short story; we find only 3 suffixes of partial number (i.e. three morphological allomorphs *-ýd~-s~-d*) in the words *gýnýd* 'mares or some mares', *xögšid* 'elders, several elders', *dzalús* 'some young people'. But in a good English translation[11] of this story, we find that 28 plural suffixes have appeared. It gives a very graphic illustration of between the number systems in English and Mongolian, in general, and particularly the dispasively in the usage of number suffixes.

J.C.Street, has observed very much to the point the characteristic feature if the Mongolian number system and has explained: "...These (number – Choi L.) morphemes share several semantic and distributional characteristics as 1) all (number morphemes – Ghoi L.) are of low text frequency, 2) they never occur in a stem that is modified by a numeral... or by a quantifier e.g. *xojor mori* 'two horses' but never *xojor morid*, 3) a stem without a 'plural' morpheme is semantically unmarked for number, i.e. may refer to one or more than one entity. In Mongolian, number is not an obligatory category: *mori* 'horse' is translated as "a horse, the horse; some

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1960.p.

[11] D.Natsaγdordži, *Šibaγun saγaral 'Fleet-Footed Bay'*, an illustrative short story which has was written by him in 1930; and translated into English in 1970 by B.Damdin an English lecturer of Ulan Bator University. The Russian and English versions published in a booklet under the title 'D.Natsaγdordži'' in 1971, in Ulan Bator.

horses, the horses; horses'..." He continuously wrote: "many literary plurals are retained in cyrillic Khalka which are rarely or never used in speech[12].

Beginning with the fourties of this century, Mongolian academican B.Rinchen has suggested that there is a *generic* and *partial* number system in Mongolian, but no plural and singular like in Indo-European languages. He wrote in his work titled "Written Mongolian Grammar", that: "...the stem *овца* in Russian, one of the Slavonic languages, means "a sheep', it is singular in form, but in Mongolian, the semantical corresponding word stem *xoni* 'sheep' does not absolutely mean 'a sheep or one sheep', but repre.ents the entire class of sheep, just distinguishing it from the other animals, therefore, the meaning of 'a sheep' is naturally included in the stem xoni which conveys the meaning 'the entire class of sheep': the meaning of sheep throughout the world, accordingly is included in the stem *xoni* 'sheep', because they are not goats, since the native Mongolian is not curious whether there: is only one sheep or millions of sheep; on the contrary he is interested in *what* class of or *what* kind of item, that is to say, not in *how many* which is very important in Indo-European[13].

The previous sentence by J.C.Street reminds one that:
"In Mongolian, number is not an obligatory category.."[14]

B.Rinchen explained further, "...*nomüd* 'books, some books', *širénÿd* 'tables, some tables, some of the tables', in these examples, the meaning of the Mongolian partial number suffixes, on the one hand, logically expresses the sense of 'not one' or 'two or more than two', in such case, the meaning of the partial suffixes, are more or leas, similar to those of the Indo-European plural; on the other hand, it does not represent the entire class of that item; it is always obvious for the native speaker or hearer what the definite parts of the item are being expressed.

The Mongolian generic number suffixes, at least –*l*, -*r*, -*n*, -*i*[15], which are being identified by us on the basis of 1) the result of traditional studies of Mongolian grammar, although they were termed 'plural suffixes', 2) 'the mutual exclusion of partial number suffixes: -*s*, -*d* (as started below) in modern Mongolian, 3) the semantical opposition to the meaning of the partial number suffixes according to present-day Mongolian.

We may consider that the generic form of nouns are becoming more and more suffixless, because the generic number suffixes, except –*n*, have become non-productive, therefore, the generic meaning of nearly all the stems does not depend upon the presence or absence of the generic suffixes. For this reason, the free stems of nouns themselves, regardless with or without overt generic number suffixes structurally, as well as semantically, constitute the generic number forms of nouns as constrasted to stems with partial number suffixes. Some generic number suffixes have only formal connotation.

Many linguists have also noticed the generic function of the generic suffixes in some Altaic languages, e.g. the corresponding equivalent to the Mongolian partial number suffix –*nar/-ner*, is –*lar/-ler* in Turkish, as everyone knows, C.F.Voegalin and M.E.Ellinghausen wrote rightly: "A noun without

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[12] J.C. Street, id., pp 93-94.
[13] Б.Ринчен. id. pp.126-141.
[14] J.C.Street, id. p. 94.
[15] N. Poppe. *Introduction to Mongolian Comparative Studies*, Helsinki, 1955, pp. 176-184.

$-la^2$ r^{16} is without a number indication, rather than contrastively singular in number: *sepat* 'basket' or 'baskets'. If a number noun attribute presedes, the following noun it will not tolerate the suffix $-lx^2$ r". Particularly, the phrass: "rather than contrastively singular in number" by them is of great value in precisely determining the essence and content of number in Altaic languages; however, in our opinion it would be better if they had written: a noun without *-lar/-ler* is not without number indication, but with indication of generic number, no matter whether overt or covert.

There is another example, that is, the Mongolian generic number suffix *-n* may be compared with a suffix *-n* in Nivchen which was mentioned by V.Z.Panfilov, he wrote: "au ordem ist -wie weiter unten gezeigt wird - eine grosse Gruppe von Männernamen allein mit dem Suffix -n gebildet und viele Frauennamen mit dem suffix *-k*. Der Komponent *-n* im namen der Männer schient mit dem Suffix *-n* über einzustimmen, das in einer Anzahl von Hauptwortern vorkómt, die lebende Wesen und Vermandtschaftsgrade bezeichnen wie z,B. *okon* "Schwiegersohn",....etc.[17].

In Mongolian, the noun stem-forming suffix *-n* and the generic number suffix *-n* are of one and the same by origin, although in most cases, the stem-forming suffix *-n* tends to be a common derivative, in addition, many of the personal names and kindship terms and with the suffix *-n*, doubtlessly, it had and has originally the generic meaning i.e. it indicates the entire class or group of the person or clan.

V.Z.Panfilov investigated in detail the Nivchca language and made a conclusion, which is completely correct from the theoretical point of view, and is of great value for Altaic Study. He wrote: "...therefore, the form of a noun which is formally identical with the basic form of stem should be considered as a form in generic number, rather than singular form". He also wrote: "...So in our further statements, the basic form will be conditionally termed as a singular form of noun"[18].

Noun Relational Suffixes

Morphologically, a noun without other relational (case) suffixes is with zero relational suffixes (or traditionally: general cases).

In Mongolian, every so-called case has standard endings, and the ending or the relational suffixes essentially, always keep their structural form in all cases.

Many Mongolists are of different opinions on the case problem in Mongolian. Mongolian academican B.Rinchen, Japanese Mongolist Avematsu and American Mongolist, Owen Lattimore and others consider that the functions and meanings of suffixes of so-called case are very different from any other languages; we have named the suffixes as noun relational suffixes. The meaning of the suffixes are extremely various according to the syntactic context[19].

[16] C.F.Voegelin, and M.E.Ellinghausen, *Turkish Structure*, American Oriental Society, 1943, p. 65.
[17] W.S.Panfilov, *Uber die Ellinghausen (Anthroponyma) in der Sprache der Nivchen (Giljagan)*, Budapest, 1963, p. 453.
[18] В.З. Панфилов. *Грамматика ниехского языка*. часть 1. М.-Л., 1962. p. 93.
[19] Choi Lubsangjab. *On the case problem in Mongolian*: "Preprints of the Second International Congress of Mongolists", Ulan Bator, 1970.

Some Mongolists as John Street, B.Rinchen[20] include the relational suffixes in syntax, in their works. J.C.Street does not term the suffixes as case suffixes, but as particles[21].

Hungarian Mongolist, L.Bese, has stated quite correctly: "In Mongolian, case endings may stand exclusively after the nouns. That is why too, the case endings represent syntactical modifiers"[22].

There are no meaningful phrases and sentences in the final position where the relational suffixes occur i.e. the essential function of relational suffixes is related to words and phrases in a sentence or phrase, as stated above[23].

Usually, only one relational morpheme is added to a stem, but sometimes there is usage of compound relational morphemes, deriving from two or more inflectional endings. The successive occurrence of more than one relational suffixes, at the same time, after one noun stem, is called the double declension in traditional grammar.

The possibilities of successive occurences.

Chart 7

Relational suffixes	-iň~-i	-a/t a⁴	-ig~ -i	-á⁴sa⁴	- á⁴r
-iň~ -i	-	+(d)	-	-	-
-d/t a⁴	-	-	-	-	-
-íd~ -í	-	-	-	-	
-á⁴sa⁴	-	-	-	-	
- á⁴r	-	-	-	-	

It is obvious from the chart that the relational suffixes are not always immediately reduplicated and followed by other relational ones; if we exclude the –da.

There is another very important factor that is, the enclitic or particle –xi (cf. in Turc. –xi e.g. in chuvash, sulxi 'what is in a year', irxi 'pertaining to the morning'; irxi pertaining to the morning[24]; Turk. ki e.g.karsidaki kir sana bakiyor 'the girl opposite is looking at you' which was called by J.C.Street as particle[25], in Mongolian, and by C.F.Voegelen and M.E.Ellinghausen as unclassed suffix; we would like to name it a freeing noun stem-forming suffix, because the suffix forms nouns from certain types of nouns.

The possibilities of the occurrence of the additional relational suffixes after –xi, are listed in the following chart.

[20] B.Rinchen. A Mongol Nyelv Grammatikaja. Budapest, 1956, pp. 20-25.
[21] J.C.Street. id. pp 214-219.
[22] L.Bese (Budapest). On the Problem of Word Classes in Mongolian. "Xele dzoxiol sudlal". Ulaanbaatar, 1969.
[23] B.Damdin. Mongolian Equivalents of the preposition "of". "Scientific Information" of the Mongolian State University. 1969. №.19. pp.8-12; B.Khenmedekhe. Translation of "do" into Mongolian. Id. pp. 13-15; L.Tsetsegma. On Translation of the English Preposition "in" into Mongolian. Id. 1970. №.22, pp 11-14.
[24] John R.Krueger. id. pp 129-130.
[25] (?)

Chart 8

	-xi	-íň~-í	-d/t a⁴	-íg~ -í	-á⁴sa⁴	- á⁴r
-íň~-í	+	-	+	+	+	+
-a/ta⁴	+	+	+	+	+	+
-íg~ -í	-	-	-	-	-	-
-á⁴sa⁴	-	-	-	-	-	-
- á⁴r	+	+	+	+	+	+

The occurrence of the relational suffixes after the sequence *ár+xi* is not common and very limited, that is, lexically, when the sequence occurs after the stems of places, names or demonstrative pronouns which may be followed by relational suffixes.

Suffix of Definity

In Mongolian, the category of definiteness is morphologically, obligatorily, marked by means of a suffix which occurs in the absolute final position of inflected free noun stems. The suffix is - *á⁴ň*, it always functions to manifest the definiteness of the object noun, no matter in what person the subject is.

The indefinite meaning in Mongolian is expressed in a sentence by a independent word *nege~nige* 'one, some one, a, an or by a noun stem without a definite suffix e.f. *nige xyň irelé* 'a man has come', *nige juma ideje* 'I would like to eat something. The word *nige*, expressing indefinite meaning may be used before numerals or interogative noun of numerals, for example, *nige xeden xyň* 'some people' (lit: 'a some people', means indefinite some people), *nige ɣurbaň xyň iredži jabana.* 'there are coming three man' (lit: a three man are coming; means indefinite three man).

The occurrence of the word *nege nige*, indicating the indefinite meaning, before numerals, is typologically closely connected with the number system in the Mongolian language.

Models of the Mongolian Noun Paradigmatic System

We have selected the following symbols to work out an established rotation.

The noun paradigm in Mongolian may be summarized as follows:

Z_1 suffix of (partial) number, the symbol equal to /-*úd*, -*ýd*, -*s*,-*d*, -*nar~-ner*, -*núd~-nýd*, -*da⁴*/

Z_2 suffix of relational (so-called case) suffix, equal to: /-*íň~-í*,-*da⁴~-ta⁴*, -*íg~ -í*, -*á⁴sa⁴*, - *á⁴r*.

Z_3 suffix of definity, equal to: - *á⁴ň*

The full noun paradigm patterns is as follows:

1. *nom* 'book' the base form or stem with zero suffix i.e. <<noun stem+ Ø>>;
2. *nomúd* 'some books', stem plus number suffix –*úd* i.e. <<noun stem+ Z_1>>;

3. *nomdó* 'to the book' stem plus relational suffix, i.e. <<noun stem+ Z_2>>;

4. *nomóñ* 'one's own book', stem plus suffix of definity i.e. <<noun stem+ Z_3>>;

5. *nomúdda* 'to some books', stem plus number suffix plus relational suffix, i.e. <<noun stem+ Z_1+ Z_2>>;

6. *nomúdañ* 'some of the one's own books', stem plus number suffix plus suffix of definity, i.e. <<noun stem+ Z_1+ Z_3>>;

7. *nomdóñ* *−nom+do+óñ* 'to one's own book', stem plus relational suffix plus suffix of definity, i.e. <<noun stem+ Z_2+ Z_3>>;

8. *nomúddáñ* *-nom+úd+da+áñ* 'to some of one's own books', stem plus number suffix plus relational suffix plus suffix of definity, i.e. <<noun stem+ Z_1+ Z_2+ Z_3>>.

So, we can symbolize the following sequences as normal and possible in Mongolian noun paradigm:

$$S+\emptyset$$
$$S+Z_1$$
$$S+Z_2$$
$$S+Z_3$$
$$S+ Z_1+ Z_2$$
$$S+ Z_1+ Z_3$$
$$S+ Z_1+ Z_2+ Z_3$$
$$S+ Z_2+ Z_3$$

There are no such sequences as follows, in Mongolian, $S+Z_1+Z_1$; $S+Z_2+Z_1$; $S+Z_3+Z_3$; $S+Z_3+Z_2$; $S_3+ Z_3+Z_1$...., in short, there are no other sequences except the above mentioned eight types of sequences in Mongolian.

English Noun Inflection

English nouns are inflected in two categories: number and possessive, respectively. In English, the two inflectional suffixes, namely, the plural suffix Z_1 and the possessive suffix Z_2 which have very different standing.

The structural zero consists in a significans absence of the suffix -Z_1, which occurs in the predominant majority of plural formations. The contrasts between the singular *sheep deer*, etc, and the plural *sheep, deer* consist of a zero.

Certain loan words from other languages, mostly Latin, have retained the plural formation used in original language, at least in the spelling. There is a strong tendency to make these conform to the English pattern by changing the form of Z_1 to /-z~ -s~-iz/.

Mongolian Pronouns

The meaning of Mongolian pronouns consists of entirely noun class-meaning. B.Rinchen wrote that: "Inflected form or inflection of pronoun in Mongolian as being completely the same with noun. There is also no separate or special inflectional form of adjective in Mongolian[26]. Hungarian Mongolist

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[26] B.Rinchen, *A Mongol Nyeiv Grammatikája*, Budapest, 1956, p.11.

L.Bese wrote "I omit pronoun from the word classes...Thus the pronoun may be only a sub-category of the noun"[27].

Mongolian pronoun have no special kind of internal change i.e. they are not replaced by another form; nor do they have a suppletive paradigm. Only in the stem, some pronouns have more than one stem form, which are historically and phonologically conditioned allomophs of roots under the phonemic influence of the suffixes constantly occurring after them. Therefore, the subject form is different from the inflectional stems.

The inflectional paradigm of the Mongolian pronouns are not only similar to that of the noun but absolutely tha same.

We can prove the similarity between noun and pronouns:

1. The relational suffixes are always attached to the stems of pronouns; that is to say *min, tan, tšin, man, tšama, nama, nada*, not to the subject form *bi, ta, tši, tša-, ma-* etc.

2. The linguistic environment of the stems of pronouns with or without (generic) stem forming suffix *-n*, is quite the same as those of the stems of nouns.

3. There are no suppletive alternations as noun roots and stems in the language, because it is clear that the alternations: *b m* (in *bi~mi, ba~ma*) and *i a* (in *tsi~tsa-*) are obviously phonological ones, including *b~ m~n*, in *bi~mi~na-*.

Roots and Stems of Pronouns in Mongolian

The roots of pronouns in Mongolian are just like the roots of other form classes, as CV (*bi, ta, ta, tsi*) and V(*i,a*) patterns.

The morphological structure of Mongolian pronouns are very simple, i.e. they always consist of a single morpheme, in other words, they are always monomorphemic, e.g. free morpheme *bi* 'I", *tši* 'thou', *ta* 'you' and bound morpheme *na-* 'me, person' *tša-* 'you'. Phonemically, all Mongolian pronouns consist of either a single vowel phoneme as *a-* 'they', *i-* 'he, she, it' or they mostly consist of the CV type of roots as mentioned above.

Below is a list of root morphemes and the stems derived form certain roots. s

roots	primary stems		roots	primary stems	
bi	bi+	bi	ba	ma+n	man
mi	mi+n	min	ta	ta+n	tan
na	na+ma	nama	te	te+de	tede
	na+da	nada	e-	e+de	ede

bi 'I', *ta* 'you', *tši* 'thou' are free roots and are used independently in spoken and written languages; *ba* 'we' is used only in the written but it is highly important for language make out a system of all pronouns, *i-* and *a-* become a bound form and occur in combinated form with the stem forming suffix *-n* and the possessive relational suffix *-i* as *i+n+i*[28] *i+n+u* may be

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[27] L.Bese (Budapest), id. p.
[28] Some Mongolists are wrong in considering that the possessive form of the personal pronoun to be *ni* (H6), in fact, the form should be *ini* in Modern Mongolian; many famous Mongolists like G.T.Ramstedt, B.Ya.Vladimirtsov and N.Poppe and others have always used the transcription *ini* in their works.

translated as *his, her, a+n+i anu* 'their' is based essentially on the environment. The constant occurrence of the inflected forms *ini* and *ani* and non-occurrence of the subject form *i-* and *a-* of the two pronouns, has caused the absence of the third person subject form in Mongolian and the postposed position of *ini* and *ani*. So, in Mongolian, the third person, subject form (morpheme) syntactically does not exist (or they are zero) both in generic and partial number.

In Mongolian, the first person pronoun *bi* has two phonological conditioned allomorphs *bi* and *mi*; the root *na-* is not an allomorph of the root *bi*, but historically and lexically a different root.

bi is subject form of first person and equals to the English 'I'.

mi occurs only before noun stem-forming suffix *–ma* and *–da* as in *nama* 'me,I,to me, *nada* 'me,I'.

The pronoun *bida* 'we' is not a free root but a free stem. The first person partial pronoun *ma-* 'we' is a bound form which occurs only with stem forming suffix *–n* as *man*. The pronouns *bida* and *ma(n)* 'we' having a wider; distribution are more common in modern context than the form *ba* 'we'.

The root morpheme of second person *tsi-* has two phonological conditioned allomorphs: *tši-* is the free allomorph and occur before stem-forming suffix *–n* as *tšin*; *tsa* a bound allomorph occurs before stem-forming suffix *–ma*; thus there are two stems: *tšin* and *tšama*. The stem *tšin* occurs before possessive relational suffix *–i*, *tšama*_occurs before all other relational suffixes and negative word *–güi* (may be semi-suffix).

We may state that *ta* has two allosemes: (1) second person generic as well as honorific and (2) second person partial in combination with *–nar* which is one of the partial suffixes, occurring with nouns indicating human beings, gods and spirits.

It is very interesting to note that if we make a vertical and horizontal analysis of Mongolian pronoun roots we find the following:

b+i	'I'	b+a	we
		m+a	you
tš+i t+i	'thou'	t+a	you
Ø+i	'he, she, it'	Ø+a	they

On the one hand, regardless of the number in the initial position of the form of the first person of the pronoun, there is consonant m- b- (as *bi* and *ma-* (*ba*) which could be considered to be an indicator of first person; similarly, *t-* in the initial position of the second person pronouns as in *tši<ti* and *ta;* a zero morpheme in the initial position of the third person pronouns.

On the other hand, regardless of the person; whether first, or second or third, there is a common vowel element *-i-* in the roots of all generic (singular) pronouns: *bi* 'I', *tši* 'thou', *i-* 'he,she,it' which could be regarded as indicator of generic number of pronouns; at the same time, there is a common vowel element *–a-* in the roots of all partial pronouns (according to Indo-European plural): *ma- ba-* 'we', *ta* 'you', *a-* 'they'.

So we can summarire the structural system of the Mongolian pronouns as follows:

b- m- indicator of first person pronouns, in *bi* 'I', *mini* 'my', *ba bürin* 'we', *man* 'we'; *t->tš-* indicator of second person pronouns; indicator of third person pronouns *i-*, occurring after person indicators *b (m)-, t-, Ø* is indicator of generic number; *a* occurring also after person indicators *b-, t-, Ø* is at the same the indicator of partial number from the above mentioned definition we can make the following chart:

Chart 9

Number persons	Generic number		Partial number	
	Person indicator	Generic number indicator	Person indicator	Partial number indicator
First person	b~m	i	b~m	a
Second person	tš<t	i	t	a
Third person	Ø	i	Ø	a

Mongolian pronouns are not only grammatically related to the class of nouns, but are also the inflectional system of pronouns, completely identical with nouns.

Mongolian Verbs

Characteristic features of the Mongolian verbs are
1. Without agreement of subject and object in most cases.
2. The basic form of verb or dictionary form is the imperative mood second person, which corresponds the infinitive in English and other Indo-European languages.
3. A verb stem, means only free stems or free roots, i.e. the verb which is suffixless (i.e. without verb inflectional suffix), imperative form. The verbal forms are classified imperative, converb and indicative forms.

There are no defective paradigms which lack some of the inflectional forms like in English *can, may, shall, will* in Mongolian.

Verb Inflectional in Mongolian

All Mongolian verb inflection forms have the successive sequence like *waited-wait+ -ed* as in English. It is derived from the stem by the addition of only one inflectional suffix either of mood, tense or converbal suffixes.

In Mongolian, the addition of verb inflectional suffixes to verb free roots or free stems prevents further derivation.

So these suffixes may be called sentence-final suffixes.

Conversion in Mongolian

The Mongolian language does not have as many words (verbs) as the English language, *to face* or nouns like *a face*. There are very few homonymous nouns and verbs like Mongolian *balγa* 'mouthful, gulp' and *balγa-* 'to gulp'. Of course, the paradigms of them are, naturally, separate. So,

some Mongolists have said that it is accidental, and does not represent a productive type of stem conversion[29]. Sh. Lubsanvandan[30] also mentioned about it, but did not say that it would be a special type of stem or not.

We consider that the interparadigmatic homonyms in other words and the indifference of forms of roots and stems for any form classes must be regarded as conversion in Mongolian.

We have observed two kinds of conversion in Mongolian, one is stem conversion, the other is conversion between roots of form class, e.g. *baritsa* 'offering, to pawn', *alxa* 'step, to step'; *solibo* 'to place crosswise, placed crosswise' etc., are conversion between stem forms, such conversion occurs in about 40 words in Šaydža's dictionary.

Conversion between bound root forms are more than just conversion of stem. The conversion demands more examinations and analysis, because it is understandable on the level of inflection paradigm; we can only check it up by the derivational suffixes which occur immediately after it, e.g. bound root *u-* 'origin, beginning' may occur before noun stem forming *-y* as in *uy* 'origin, beginning' may occur verb stem forming suffix *-la* as in *ulam* 'still more, further'. All such kinds of bound roots cannot be determined as to what class they belonging, as in Russian *дел-* in noun *дело* and in verb *делать*.

If we take all syncretical or double functioned stems into consideration as to conversion then there will be a whole series of derivational conversions which are to found in thousands of words e.g. *xarúl~xaraúl* 'let them (her, him) see', *xaraúl~xarúl* 'guard, watch' (cf. Russian *караул* middle mongolian *qara'ul*).

Here is a list of the Mongolian sten conversion (incomplete) *baritsa* 'offering'-*baritsa-* 'to pawn'; *alxa* 'step'-*alxa-*'to step'; *xele* 'language, tongue'- *xele-*'to tell, to say'; *atуa* 'handfull'-*atуa-*'grup one's hand'; *tšimxi* 'pinch'-*tšimxi-* 'to pinch'; *šindži* 'appearance'-*šindži-* 'judje by appearences'; *oro* 'imprint impress'-*oro-*'to replace'; *xaritsa* 'return'-*xaritsa-* 'to return simultaneously'; *balуa* 'mouthful gulp'-*balуa-*'to gulp'; *balba* 'into pieces'-*balba-* 'to smash'; *xemxe* 'asunder'-*xemxe* 'to break'; *nitsa* 'bruise'-*nitsa-* 'to bruise, to be crushed'.

Conversion in English

This is important because a very large proportion of English stems can be used in two or more parts of speech, e.g. many such as *run, walk, nap, breakfast* can be used either as nouns or verbs. These words are both in the paradigm *work, works, worked, working* and paradigm *work, works, work's, works'* occur.

It is difficult to define degree of difference in meaning, and there are no single means of deciding whether forms are "distinctly different" or "related" in meaning.

There about 2000 words in English which are conversed between various form classes.

[29] John C.Street, *Khalkha Structure*, id. p. 81.
[30] Ш.Лувсанвандан. *Орчин цагийн монгол хэлний бутэц*. Улаанбаатар, 185.

Morphological Structure of Words

There are three parts in the study of morphological structure of words: to study derived words differing from the primary words, compounds from simple words, uninflected words from inflected ones.

Derived and Primary Words

Mongolian divided into derived and primary words, on the basis whether they have or have not derivational morphemes.

In the given analyzing text, there are no primary words, but the 100 words are all derived words. It shows that the primary words occupy a very small proportion in Mongolian lexicology.

Inflected and Uninflected Words

Mongolian words, just as words in other languages, can also be divided into inflected and uninflected words, according to those words which can take the inflectional suffixes or after them or not. In our analysing passage there are 98 inflected words and 2 uninflected words. The latter two words are, in fact, inflected but in 'frozen' form, they will not be again inflected by other forms.

Mongolian inflected words are divided onto inflected nouns and inflected verbs. All inflected nouns and verbs have standard and uniform paradigmatic system i.e. all uninflected nouns occur before all noun inflectional suffixes; all inflected verbs occur before all verb inflectional suffixes, both without any exception.

All bound stems and roots are uninflected. The overwhelming majority of uninflected words are nouns, and they are segmentable. e.g. *suɣa~suɣu* 'pull out', *gilas* 'lustre', *pad* 'noise of dropping' are typical nouns, but are uninflected ones; although Mongolists have various opinions on this issue, e.g. some have classified the words as particles, others as root words.

There are thousands of uninflected words which do not occur with any inflectional suffixes. It should be noted that such uninflected words are divided into two groups: one of them occurs neither with derivational suffix, nor with inflectional suffixes, e.g. *ba*[31] 'and', *pá* 'oh'.

Many Mongolists regard the uninflected words and syntactic words as a special form class, according to the traditional Grammatic classification.

Many expressive words, sounds and movements may serve as the underlying stem of derived words, and if we observe their further derivational environment, it is clear that they are nouns which are syntactically free and morphologically uninflected. The Hungarian Mongolist, L.Bese, is right in listing the form classes of uninflected words, his definition is cited below further on.

There are several words which may be morphologically analysed, but syntactically quite different from the other types of words, e.g. *bolód, bögöd* 'and, and so; so that...etc.', *bujú* 'or', *ba* 'and', *tši~tšu~tšy, dži~džu~džy* 'even, further more, also....etc.'. We may consider them as uninflected words. They do not serve as bases for further morphological constructions, and such kind

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[31] Ж.Бадраа, *Дөрвөн ба минийх биш.* "цог". 1956. стр. 26.

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of words fulfill unique functions and occupy a special syntactic position. They somewhat resemble bound morphemes, but they could be employed in isolation as syntactical function words.

Mongolian syntactic words are not different in structure and by origin, from other words, e.g.

The syntactic words *bögöd, bolod* and *xigéd* belong to the same structural series *bö-, bo-, xi xi-* root morphemes of verbs, which occur in *bölog* 'chapter', *böl-* 'to stop, to interrupt', *böl* 'couson'; *bol-* 'to be, to become', *xidel* 'deed, action', *xitse* 'construction', *xi-* 'to do'; *-öd, göd, -géd* are allomorphs of suffix morpheme of *converbum perfecti*, but the combinations *bögöd, bolod, xigéd* etc. are no longer an inflected verb as other inflected verb forms, from the syntactic point of view, they have become conjunctions only. Such series of syntactic words have double function, their basic function is to operate as common words, the other is to he used as syntactic conjunctions between words and phrases.

It is clear that the conjugation and other syntactic words are, from the structural point of view, not a special form class.

L.Bese wrote, "Similarly, neither the conjugations, nor the particles form a separate word class. These morphemes which we are discussing are more or less syntactical modifiers having only operative function"[32].

We prefer to use the principle of segmentation of words presented by E.S.Kubryakowa[33], as reference data for morphological segmentation of English and other Germanic languages.

There are six groups of words accordint to the possibilities of combining morphemes.

    I.   A word consists of one minor morpheme.

    II.   A word consists of more then one minor morpheme, i.e. it involves several minor morphemes or morphemes and marker, then at least, one of the minor morphemes must be a root.

    III.   A word consists of one major morpheme.

    IV.   A word consists of combination of one nonservice morpheme with one or several minor morpheme or marker.

    V.   A word consists of combination of two or more major root morphemes.

    VI.   A word consists of combinations of two or more major morpheme with one or several minor morphemes or marker.

Structural Groups of the Mongolian Words

On the bases of the analysis of the given passage and the facts stated in the previous chapters, it is possible to divide the Mongolian words into four groups according to the combination of morphemes in the word.

    I. A word consists of one root morpheme (R) or monomorphemic words.

    II. A word consists of a combination of one root morpheme with one or more suffix morphemes (R+S+...) which can be either two morphemic or polymorphemic words.

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[32] L.Bese. *On the problem of Word Classes Mongolian.* Xele dzoxiol sudlal. Ulan Bator, 1969.

[33] Е.С.Кубрякова. *Морфологическая структура слова в современных германских языках.* — "Морфологическая структура слова в индоевропейских языках". М., стр. 144-149.

III. A word consists of the combination of two root morphemes with two or more suffix morphemes (R+S+(S+)R+S) polymorphemic words.

VI. A word consists of reduplication of one and the same root morphemes.

Words or the first group: there are two kinds of words, not very many in number: 1) free roots of nouns, e.g. *sỹ~sy-* 'milk', *tsá~tsa* 'reindeer'; of verbs, e.g. *ge-* 'to say, to speak'. The words have the full paradigmatic system; 2) syntactic words with limited usage such as, some interjections, e.g. *pá, lá, i, é, té,* negative words, e.g. *bỹ* the words are originally root morphemes by origin.

Words of the second group: the overwhelming majority of words in Mongolian belong to this group, e.g. free and bound noun stem *sula*'weak' contain *su-* bound root and the derivational suffix (noun forming suffix) *-la, γar* 'hand, arm' contains bound root *γa-* and noun forming suffix *-r* free and verb stems e.g. *xele-* 'to tell, to speak', *suγul-* 'to pull put', *bitsi-* 'to write', some syntactic words, e.g. ese 'not', *bujú* 'or', negative words, e.g. *ülü* 'no, not', *ese* 'no, not' by'.

Words of third group: there are a few compound words or semi-compound words belonging to this group of words; verbs as well as nouns.

Words of the fourth group: they consist of reduplcated root morphemes occurring in the initial position, and are always free verb stems; we may symbolize them as follows: *xöxö-* 'to suckle at the breast', *tsatsa-* 'to make libation', *baba-* 'to talk too much', *tšitši-* 'to pick', *tata-* 'to pull'.

The models of the second and third groups of words may be divided further into the following three subclasses, depending upon the form class of the suffix morphemes:

    (1)   with inflectional morphemes (only suffixes);
    (2)   with derivational morphemes (only suffixes);
    (3)   simultaneously with either №1 or №2.

Thus, it is clear that the models I, III-1 and IV belong to primary words. The model of third group of words are always compounds therefore, III-1, 2, and 3 are always derived and compounds II-2 and II-3 are always derived one too.

Morphemic Structure in Mongolian and English

A word in every language has certain models although there is no limitation.

When we establish the models of words, we must not be concerned with the part of speech, but must rely on the quantitative approach of the inner morpheme structure of words.

The majority of Mongolian words consist of polymorphemes.

Monomorphemic words are rare, and there are some that are always free root words.

The dominant morphological form of words in Mongolian is the binary form, namely, including the derivational suffixes and inflectional suffixes.

The Mongolian words are mostly (about 93%) stem words; i.e. derived words, regardless of nouns and verbs, even so-called adjectives[34], except for pronouns.

The total number of morphemes, in the 100 given word passage in the two languages:

Chart 10

Consistence of words	English	Mongolian
One morphemic word	63	-
Two morphemic word	37	12
Three morphemic word	30	31
Four morphemic word	7	25
Five morphemic word	-	18
Six morphemic word	-	10
Seven morphemic word	-	4

Chart 11

Language	English			Mongolian		
	minor	major	compounds	minor	affixes	major
English	34	66	2	75	41	68
Mongolian	2	98	-	291	283	100

Contrastive Summary

1. There are words: derived vs primary, inflected vs uninflected, compound vs simple in both English and Mongolian.

Mongolian primary words are mostly free roots which are very small in proportion in Mongolian, whereas there are many in English; derived words are predominant in Mongolian.

All verb stems in Mongolian are inflected, but some noun stems are uninflected which may be divided into the following parts: 1) some syntactical words; 2) many expressive word stems of sound and motion.

Many of these words in Mongolian which are considered compounds are, in our opinion, not compounds, they are, in fact, syntactical doublings and word combinations.

In comparision with the English, there are a few compounds in Mongolian which can be subject to morphological study, e.g. *önödör* 'today' (lit: 'this day').

2. The overwhelming majority of Mongolian words are polymorphemic, and the morphemic number in a word are, on the average, more than in English, e.g. here is a ratio 100 words: 143 morphemes: (E): 100 words: 391 morphemes (M).

According to the combination of morphemes in one word, it is possible to divide the Mongolian words into four groups: R, $R+S_1+...+ R+S_1R+R$ while in English into six groups.

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[34] Morphemic structure of native Mongolian proper names are identical with the structure of common words. A.A.Darbeeva, *Параллельные формы личных имен Бурят. Антропонимика.* М. 1976. 205-211.

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3. Conversion in English happens on a larger scale than in Mongolian. In Mongolian, there are two kinds of conversions, one is a root conversion which is determined by derivational suffixes; another is, that similar to the English, stem conversion which is determined by paradigmatic systems, e.g. the conversions in English are always identical with the forms of root morphemes of any form classes, whereas in Mongolian with the stems.

4. The paradigmatic classes, nouns, verbs in Mongolian and nouns, verbs, adjectives and pronouns in English, have their specific usages.

5. The nature of the Mongolian substantive or noun is rather difference from that of the English and other Indo-European languages. Characteristic features of English and Mongolian noun classes are, in general:

a. Noun classes have the number contrasts in both Mongolian and English; it is singular and plural in English, and generic and partial in Mongolian.

b. The relational suffixes between words are mostly use instead in Mongolian because of the absence of prepositions, prefixes, and even postpositions in Mongolian as in English prepositional relationship.

A very obvious similarity between the two languages is the fact that Mongolian and English nouns can both function freely as modifiers of other nouns.

6. In English, inflectional polymembered models are not typical, whereas two to five-member models are typical for Mongolian inflection, e.g. axa+nar+in+da+áñ <<stem+number suffix+possessive relational suffix+locational relational suffix+suffix or definity>>(five membered)

We may say that the plural form in English is almost standard. In Mongolian, all inflectional forms are standard.

7. There are four important types of structure in English:
(1) unchanged stems plus suffix, like work+ed, lead+ing, table+s;
(2) unchanged stem plus zero, like sheep+∅;
(3) changed stems plus suffixes, like keep, kept;
(4) changed stem plus zero like *feet, teeth*.

There is only one type of structure that is, unchanged stems plus suffix in both nouns and verbs, in Mongolian.

8. There is no inflectional paradigm of adjective in Mongolian as in English. All semantic equivalents of the English adjective will morphologically be nouns in Mongolian, so there is no grammatical class of adjective in Mongolian, consequently, there are no cases in which the variation occurs in the form of a stem as *good-better-best, bad-worse-worst* etc.

The comparative suffixes of an adjective is an instance of an English category that is absent in Mongolian. The meaning of the suffixes *-er* and *-est* is expressed in Mongolian syntactically.

One of the most striking differences between English adjectives and the corresponding words in Mongolian is the fact that the latter can function as a subject, object, etc., at the same time, it is possible to occur in attributive position with relational suffix or with zero suffix.

9. The pronoun in English is considered as a special lexical and grammatical class. In Mongolian, it is a subclass of a noun, because its inflectional system is, in general, similar to that of the noun.

All the third person pronouns in English, no matter whether plural or singular, *he, she, they* are expressed in the main in Mongolian syntactically, such as *his* (or *her* or *its*) *house* (ger ini).

A suppletive alternant replaces the underlying form in English not only in a pronoun as *I- we, he, she, it-they*, etc., but also in some verbs as *be, can, shall* and in some adjectives as *bad, good, while*; in Mongolian there are no such forms of alternation.

10. Gender also plays a relatively minor part in English grammar, there is no gender in the grammatical sense of that term. We do find between English nouns and pronouns the type of grammatical relationship which is called cross reference, that is, we say "the *boy-he*", "the *girl-she*", "the *table-it*", and we also say "*the ship-she/it*" etc. but this is quite different from grammatical gender.

In Mongolian, there is only the gender possessed by the word inherent in its meaning, if it denotes a specific kind of male or female being. No particular changes or endings are required because of the gender of any word in the sentence. Thus the question of gender is really nonexistent. If it is necessary to denote a male being opposed to a female being, morphemes like *ere eregcin* 'male' or *eme* 'female' are added, for animals, humans beings and gods.

Unlike some European languages, Mongolian does not assign a real or arbitrary gender to its nominals (including pronouns, numerals, demonstratives, etc.). All nouns (or nominals) exist in one unvarying form, a fact which makes the learning of Mongolian easier for the learners.

The gender systems in the two languages are, however, logical or physical, based primary on sax. In Mongolian, even the pronouns have no gender difference.

11. There is no infinitive form in the Mongolian verb system, where as it does exist in the English language has the form, like many other Indo-European languages.

A verbal base (root or stem) in Mongolian, is used without any suffix in only one function – in the imperative function second person generic number while the basic form of a verb exists in several different functions in English.

Every verb stem is inherently transitive or intransitive: transitive verbs sometimes occur with an object, while intransitive verbs never do. All verbs containing a causative suffix are transitive, all those containing a passive suffix intransitive.

12. In Mongolian verb inflection, there is no such type of phenomenon (or exception) as in *need*, or in *put*, the choice of zero phonemic shape. In Mongolian, there is neither the verb inflection *wrote* from *write* by the vowel change, nor *built* from *build* by the consonant change, nor *sold* from *sell* by vowel change and suffixation together, *went* from *go* by suppletion, *cut* from *cut* zero change, etc., the inflection of the English verb, according to the processes by which various inflected forms are derived or not derived from underlying bases. So there is no problem in Mongolian as in *take* (or *took*) in one morpheme or two morphemes: (1) /t...k/ and (2) /ay/, /u/.

13. One of the characteristic features of Mongolian verb inflection that differs it from the Indo-European languages is the absence of person-number marker in all persons.

14. Every Mongolian verb has a base with only one phonetic shape, i.e. with only one morpheme alternant, without any exception, before all verb inflectional suffixes. In English, some type of verbs as *live, wait* etc., have a base with only one phonetic shape too.

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15. The Mongolian verb system is the most complex of the morphologically distinct classes. Verbs are inflected in tense. There are five categories producing a total of fourty six distinct forms. This can be compared with only four or five distinct forms of English verbs; with categories of tense, person, number, and two participles imperfect and perfect (traditionally called present participle and past participle).

16. In Mongolian, the use of indicative suffixes: *-la, -džé, -tšé, -tuγae*...etc close the verb construction to their formation.

17. In Mongolian, the passive voice is used more rarely than in English and in other Indo-European languages. Many constructions which always expressed the passive form in English are obligatory active form in Mongolian[35].

18. There no irregular verbs in the Mongolian language. All the counterparts of the small group of words *can, could, will, would, shall, should, may, might, must* which are traditionally included in the verb class, in turn, belong to regular verbs in Mongolian, because there are no defective paradigms which lack some of the inflected forms as in English, *can, may, shall, will, must* in Mongolian. There is no parallelism in inflected forms of nouns and verbs. Therefore there is no differentiation in syntactic function as, *there are sheep* or there is sh a sheep in English.

The view is not correct that there are auxiliary verbs in Mongolian, because, the whole paradigmatic system or so-called auxiliary verbs do not diffen from the system of the ordinary class of Mongolian. We also cannot agree with some Mongolists who have stated that some verbs in Mongolian can operate as auxiliary verbs. It is out of the question to consider such verbs as auxiliary verbs, because the semantic equivalent of the Mongolian verb is the auxiliary verb in English; therefore how can we regard a Mongolian verb to be an auxiliary verb when it has completely the same paradigmatic and syntagmatic classes, distributional structure, syntactic functions and positions, with all other regular Mongolian verbs.

Syntagmatically, all verbs which are regarded as auxiliaries in Mongolian by some scholars have the same sequence classes with all other common verbs. All deverbal noun sequence classes and denominal verb sequence classes are derived the same way from the so-called auxiliaries like other regular verbs by adding the verb derivative formatives without any exception.

*   *   *

In the Conclusion, the main ideas under discussion have been summarized, the work is the first detailed investigation of the morphological structure of words in Mongolian comparing the structure with that in English.

Consequently, it may be said that the present dissertation is a contrastive typological study and it is hoped that it may be helpful to other linguists in their further morphological studies of the Mongolian language, from the typological point of view, namely a) the different classes of morphemes, b) the derivational system, c) the morphemic construction of words, d) the lexico-grammatical classes and their paradigms...etc.

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[35] B.Damdin. *Passive Voice of the English Language.* - "Scientific Information" of the Mongolian State University, 1970, №. 22. pp. 6-10.

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