COMMON ALTAIC VERBAL SUFFIXES
IN
MODERN UYGHUR

by

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ABSTRACT

Common Altaic Verbal Suffixes in Modern Uyghur

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Although the Altaic theory established by the leading Altaists Ramstedt, Poppe and others on the basis of striking similarities existing among the Altaic languages gains support from most scholars in the field, there are still some other scholars who doubt or reject the theory. Those who doubt or reject the theory believe the similarities are not inherited from a hypothetical common Altaic unity but are the results of the language contact. Believing that verbal morphology is one of the most resistant areas to borrowing, I present in this dissertation for the first time my studies on 59 verbal suffixes in modern Uyghur. Through systematic and detailed comparative studies of the suffixes with the corresponding elements in Mongolic, Tungusic, and other Turkic languages phonologically and functionally, diachronically and synchronically, it is argued that all these suffixes actually derive from 21 very basic common Altaic suffixes which still play a very important role in verbal morphology in all modern Altaic languages. It is concluded that these striking similarities revealed in verbal morphology of Altaic languages can be explained only in terms of genetic relationship, but not of language contact; hence along with sound correspondence rules, they are crucial evidence for the Altaic theory.

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CHAPTER ONE

1. INTRODUCTION

1.1 The Pros and Cons of the Altaic Theory

1.1.0 The hypotheses about the possible genetic relationship between Altaic and some other languages date from as early as 18th century. At the beginning of the 18th century, Johann von Strahlenberg, a Swedish officer, who had been taken prisoner of war during the battle of Poltava, discovered certain similarities existing among Turkic, Mongolic, and Tungusic languages, which later came to be known as the Altaic languages (Poppe, 1965). Since then, employing the historical-comparative method successfully used in Indo-European linguistics, linguists have found more common features, and established the theory of an Altaic language family. Scholars such as M. Castrén, W. Schott, and H. Winkler extended their studies even more broadly, proposing that the Finno-Ugric-Samoyed languages are related to the Altaic languages. As a result, they postulated the Ural-Altaic family and the corresponding theories (ibid.). The similarities among Ural-Altaic languages are considerable. According to Baskakov (1981), they share the following common features or rules:

1.1.0.1 Phonologically: a. vowel harmony; b. consonant assimilation; c. voiced consonants are stable in intervocalic positions; d. there is only one consonant in word-initial

position; e. there are words in different meanings expressed in correspondingly different vowel harmony; f. the main stress in a phrase is on the modifier.

1.1.0.2 Morphologically: a. agglutinative suffixes play main role in morphology; b. they employ postpositions, not prepositions; c. there is no article; d. there is no grammatical gender; e. there is a possessive category; f. comparative meaning is expressed by the ablative; g. a possessive structure can indicate the same meaning that may be expressed by the verb 'to have' in other languages; h. possessive declension; i. singular and plural nouns take the same suffixes; j. verbal conjugation suffixes are abundant; k. they employ an agglutinative interrogative particle; l. a singular form can indicate plural meaning; m. personal pronouns are related to the demonstrative pronouns in origin; n. a nominative case has multiple functions.

1.1.0.3 Syntactically: a. in sentences and phrases a modifying element precedes what is modified; b. a noun does not agree in number with its modifier; c. a question is formed by interrogative particles; d. phrases with a converb, a participle, or a verbal noun can function as a subordinate clause; e. a noun of an object can modify another noun without any declension; f. an adjective or a numeral in a modifying position is always invariant.

Although no one can deny the similarities existing among Ural-Altaic languages, the Ural-Altaic theory still remains as

speculative. Furthermore, as the comparative studies on these languages continue, some scholars believe that Altaic languages are even distantly related to Indo-European, while some others believe that the Uralic languages are closer to Indo-European than Altaic (Baskakov, ibid.).

1.1.1 There has been no shortage of even more distant comparisons. As R. Wright (1991) writes in his article *Quest for the Mother Tongue*, the Nostraticists, led by such scholars as Dolgopolsky and Illich-Svitych in the former Soviet Union, believe that the Altaic, Indo-European, Uralic, Hamito-Semitic, Kartvelian, Dravidian, and Eskimo-Aleut language families, all belong to a "superfamily", i.e., the so-called Nostratic family, which was spoken more than 10,000 years ago. Some believe that this family, in turn, descends from a proto-Human or proto-World, the so-called "Mother Tongue" probably spoken 50,000-150,000 years ago somewhere in Africa. This hypothesis, of course, corresponds to that of the human genome. According to the above mentioned article, Dolgopolsky in 1964 published 16 clusters of seemingly cognate words found in two or more Nostratic daughter families, and Illich-Svitych proposed 600 proto-Nostratic reconstructions in 1965. One piece of evidence found in Nostratic languages is that an inordinate number of *m*'s are used in the first person singular and *t*'s or *s*'s in the second person singular, i.e., English "me" and the Middle English "thou"; Finnish *minna* 'I', *sinna* 'thou'; (Early) Turkic *sin, min*; and Kartvelian *man, shan*

(id.).

It is obvious that the broader the scope of the study, the older the hypothetical proto-language, hence the less information available to us. As a result, such hypotheses are always under heavy attack. It is not surprising then that the critics of the Nostraticists say their belief is "a kind of religion", or "a Communist attempt to unite native Soviet languages" (ibid.).

In my view such wide-ranging, megalo-comparisons are premature, and perhaps ultimately not even possible. Before entering upon speculation about such great time depths, we first need to do more work on families such as Altaic where there are still many unsolved problems in demonstrating a basic genetic affinity. Before hypothetical links to Uralic and other languages are proposed, these fundamental problems of Altaic itself must be addressed.

1.1.2 The beginning of Altaic comparative linguistics is associated with the name of Ramstedt, whose works inspire any scholar who is interested in the field. At the beginning, only Turkic, Mongolic and Manchu-Tungusic languages were included in the Altaic family. Later linguists found some common Altaic elements in Korean and Japanese as well, and tried to include them in the Altaic family. The detailed study of Korean by Polivanov has already convinced most Altaists to recognize Korean as an Altaic language. In the works, *Einführung in die Altaische Sprachwissenschaft*,

Formenlehre (1952), and *Lautlehre* (1957) by the famous pioneer Altaist, G. J. Ramstedt, and *Introduction to the Altaic Linguistics* by another leading Altaist, N. Poppe (1965), Korean was included among the Altaic languages, and especially in Ramstedt's work, its correspondence to the other Altaic languages is presented in great detail. As for Japanese, some striking evidence about its affinity to other Altaic languages is presented by R. A. Miller (1971) in his *Japanese and the Other Altaic Languages*. It is evident from the above-mentioned and other works that a language ancestral to Turkic, Mongolic and Tungusic languages, the so-called common Altaic language, may also underlie Korean and Japanese. In this paper, however, I limit myself to the comparative study of Turkic, Mongolic, and Tungusic, because my knowledge of Korean and Japanese is too limited.

1.1.2.1 The works by G. J. Ramstedt and N. Poppe have laid an integrated and systematic theoretical ground for Altaic linguistics. In addition to pointing out the common suffixes, common pronouns and personal endings, and common features of morphology and syntax among the Altaic languages, they developed rules of sound correspondence for these languages; this is the most important criterion in determining whether a language is genetically related to another. However, the Altaic theory based on all these common features has not been accepted by everyone in the field. Some scholars are doubtful about the Altaic affinity, and there are even some who

completely reject the Altaic theory.

1.1.2.2 Among the scholars who are doubtful about the Altaic affinity Grønbech and J. Benzing are leading figures. They do not reject the Altaic theory, but they insist that without more evidence, it is premature to come to any conclusion. Benzing is especially very cautious about accepting the theory. He emphasizes the absence of the common numerals in the Altaic languages. But Ramstedt and Poppe insisted that the existing sound correspondence and other common features in the Altaic languages are more important than the lack of common numerals. This is a situation like "the lack of a declension system of the Latin, Greek, or Sanskrit type in English does not render the latter unrelated to other Indo-European languages." (Poppe, 1965)

1.1.2.3 Sir Gerard Clauson and Doerfer are among the scholars who reject the theory. The main reason for Clauson's denial of the Altaic affinity is the lack of common numerals and such basic lexical items as "to say, to give, to take, to go, food, horse, good, bad", etc. But his rejection has not gained wide support, because, firstly, there is no agreement among scholars as to which words are essential in determining a language family; secondly, words such as "to take, to eat, bad" in Turkic, Mongolic, and Manchu-Tungusic languages do show phonological similarities to each other. It is not likely that these words were borrowed from one language into another.

Doerfer believes that what others call common Altaic elements are merely borrowings. He rejects the genetic relationship of these languages. In his formula, Turkic languages are always the lending languages, and Mongolic languages the borrowing ones. But he found himself in a difficult position in attempting to prove this. Firstly, it is normal for one language to borrow from others, but it is not the fact that one language is always a lender, and the other is always the borrower. As we know, Mongolic languages have not only borrowed words from Turkic, but Turkic languages have also borrowed words from Mongolic. Secondly, Doerfer's unrealistic formula forced him to deny some self-evident common Altaic elements. For example, in order to deny the cognate words **dagiz* > Mo. **daɣir* > *dayir* "brown" and Ancient Turkic *yaɣïz* (id.); **daqu* > Mo. *daqu* "fur, coat, pelt" and Ancient Turkic *yaqu* (id.), he argues that the Mongolic *dayïr* and *daqu* must be derived from proto-Turkic ?**daɣïz* and ?**daqu*, and that later proto-Turkic initial **d-* became *y-* in Ancient Turkic. Such a view is hard to defend. Firstly, there was no initial **d-* in Ancient Turkic, no matter how "proto-" it was. Secondly, the fact that Mongolic *dayïr, daqu* and Turkic *yaɣïz, yaqu* came from the older forms like **dagïz* and **daqu* respectively just proves that they have a common origin. Because the correspondence of Turkic *y* with the Mongolic *d* in word-initial positions is a well-established rule.

1.1.2.4 It is natural in historical and comparative studies of

languages to see pros and cons concerning any given theory among scholars, since in most cases each new theory in this field is suppositional and based only on indirect evidence or incomplete synchronic and diachronic materials available to researchers. Nevertheless, as studies on Indo-European languages show, scholars can reach a consensus if they follow sound correspondence rules and accept certain common methods and principles. I feel such a common ground is also necessary for both advocates and opponents of the Altaic theory to work together. Otherwise there will be no any "common language" among them.

I admit that the Altaic languages have not been studied as well as Indo-European ones and some individual languages have not been studied comparatively at all. But I believe if we stick on the commonly-recognized principles worked out by several generations of comparativists in such fields as Indo-European and Uralic, the materials available to us and discoveries presented by many Altaists so far should be enough to come to conclude that the Altaic languages are genetically related to each other. That is why the deeper Altaic studies go, the more the scholars who believe in the Altaic theory and the fewer the people who doubt or reject it. Nowadays rejecting the Altaic affinity has become more difficult than proving it. I am a strong believer in the Altaic theory. I hope this work of mine will serve to strengthen the case for what I believe.

1.2 Classification of the Altaic languages

1.2.0 The classification of Altaic languages varies according to different criteria employed by different scholars. The classification by N. Poppe (1965), which is widely accepted, is mainly based on phonological evidence. This classification assumes that at the beginning there was a time when only a language ancestral to modern Altaic languages, a common Altaic Unity, existed. Later this unity split into Chuvash-Turkic-Mongol-Manchu-Tungus Unity and proto-Korean. Then the Chuvash-Turkic-Mongol-Manchu-Tungus Unity further split into Chuvash-Turkic Unity and Mongol-Manchu-Tungus Unity. Perhaps during the 4th century B.C., these language unities further split to form proto-Turkic, proto-Chuvash, common Mongolian, and common Manchu-Tungus. Thus, the five branches of the Altaic family, modern Turkic languages, the Chuvash language, Mongolian languages, Manchu-Tungusic languages, and the Korean language are the result of further development of the proto-languages. In the classification, except for Chuvash and Korean, each language branch above includes several language groups, and each language group includes one or more languages or dialects. The subclassification of each language group is based on phonological features seen in some words or patterns. It should be mentioned that in the present work the term Tungusic is used instead of Manchu-Tungus, and that Chuvash is discussed along with other Turkic languages.

1.2.1 Classification of Turkic languages

1.2.1.0 Phonologically, the Turkic branch is classified as Kypchak (*tau-* ~ *tū*-languages), Turkmen (*ayaq*-languages), Chagatay (*taγ*-languages), Yakut (*tïa* ~ *atax*-language), and Tuva-Khakas (*adaq* ~ *azaq*-languages) groups, and each group consists of several individual languages or dialects as follows:

A. The Kypchak group includes Karay, Kumyk, Karachai-Balkar, Crimean Tatar, Volga Tatar, Bashkir, Nogai, Kazak, Kirgiz and Altai.

B. Turkmen (Oguz) group includes Turkmenian, Gagauz, Turkish, and Azerbaijan.

C. Chagatay group includes Uyghur, Uzbek and Salar.

D. Yakut itself stands for the Yakut group.

E. The Tuva-Khakas group comprises 1. *adaq*-subgroup: Tuvinian and Karagas; 2. *azaq*-subgroup: Abakan dialect, Yellow Uyghur; 3. *ayaq*-subgroup: Shor, Chulym, Tuba, Kumanda, Chalkan and Lebed.

Again, there are many other classifications. Li Zengxiang (1992:103-170), for instance, lists 10 different classifications of Turkic languages, depending on different authors and criteria. I believe Poppe's classification above is reasonable because he consistently sticks to phonological criteria. However I would like to make two minor adjustments concerning the classification and terms used in it. Firstly, the languages in the Turkmen group are conventionally called Oguz languages, thus in this work I use the term Oguz instead

of Turkmen whenever I refer to the same language group. Secondly, Salar should be in the Oguz (Turkmen) group instead of the Chagatay group. In both respects above the famous Uyghur scholar of 11th century, Mahmut Kashghari (v.I:77-78), gives very specific information about Oguz and Salar showing that the Oguz people are the Turkmens, and that the Salγurs (Salars) are the fifth tribe among the twenty tribes of the Oguz people. More evidence about the Oguzic origin of Salar have been also presented by Reinhard Hahn (1988) in his thorough study on Salar.

1.2.1.1 As we talk about phonological criteria, I would like to introduce here Kononov's (1980, §22) low vs. high vowel criterion by which Turkic languages can be classified into two big groups, i.e., *a*-languages and *ï*-languages. According to him, the Turkic languages spoken by the Oguz, Argu, Kypchak, Kirgiz, Chuvash and some Yakut people are *a*-languages, and ancient Uyghur and the languages spoken by the rest of the Turkic people are *ï*-languages. In *a*-languages suffixes contain the low vowel *a* (~ *ä*), while in *ï*-languages they contain high vowels *ï* ~ *i* (~ *u* ~ *ü*). The following are some typical examples:

	a-languages	*ï*-languages
Accusative	*+a (~ +na)*	*+ï (~ nï)*
Ablative	*+dan*	*+dïn*
Dative	*+ra*	*+rï*
Plural	*+lar*	*+lir*

Possessive	*+am* (1st sg.)	*+ïm*
	+añ (2nd sg.)	*+ïñ*
Participial	*-γan ~ -qan* (perfect)	*-γïn ~ -qïn*
Converbial	*-ap*	*-ïp*
Tense	*-tam ~ -dam* (1st sg. past)	*-tim ~ dïm*
Privative	*+sar* (in Chuvash)	*+siz*
Comitative	*+la(γ)*	*+lïγ*

The importance of this classification is that it can explain why modern Uyghur, an *ï*-language according to the classification, shows low vowel variants of some suffixes although they are standardized only with high vowels. For instance, in literary Uyghur the deverbal noun suffix *-γu ~ -qu ~ -gü ~ -kü* also has low vowel allomorphs *-γa ~ -qa ~ -gä ~ -kä*: *ačqu* 'key' <*ač-* 'to open' vs. *tutqa* 'handle' <*tut-* 'to handle, grasp' (see 2.1.3). Likewise, the causative suffix *-γuz- ~ -quz- ~ -güz- ~ -küz-* has the low vowel allomorphs *-γaz- ~ -qaz- ~ -gäz- ~ -käz-* (see 2.3.4): *tutquz-* 'cause to grasp' vs. *tutqaz-* (id.). At the beginning, the distinction between *a*-languages and *ï*-languages might have been very strict. But because of the intercommunication over a long period of time between the different Turkic speaking peoples, some elements of *a*-languages were introduced into *ï*-languages or vice-versa. The above-mentioned mixed situation in modern Uyghur is the result of such intercommunication. In fact, Kashghari (v.I:39-46) gives us first hand information about *a*- and *ï*-languages and geographic location as well as language

contact among the different Turkic speaking people. As a deep influence of such contact, the Kashghar dialect of modern Uyghur shows more low vowels in suffixes than other dialects: *qol<u>am</u>* 'my hand' (vs. standard Uyghur *qol<u>um</u>*), *köz<u>äm</u>* 'my eye' (vs. standard Uyghur *köz<u>üm</u>*). We will see more examples about the interaction of *a*- and *ï*-languages as we discuss other suffixes later.

1.2.1.2 Turkic languages are also classified diachronically, which is perhaps the most important for the present work. Again there are various classifications in this regard. I present here Mutii's (1990:6) classification only:

1. Ancient Turkic period: a. Kök Turk period (5th-8th centuries); b. Old Uyghur period (8th-10th centuries) and Khaqaniya period (10th-12th centuries)
2. Period of the formation of literary languages, including the western literary language (based on Oguz languages), the northern literary language (based on Kypchak languages), the eastern literary language (Chagatay, based on Qarluq-Uyghur and Qarluq-Kharazm languages) (13th-16th centuries)
3. Pre-modern Turkic languages period (16th-19th centuries)
4. Modern Turkic languages period (19th century until now)

I generally accept this classification. But for my purpose in this work, I use other terms instead with slight modification as follows:

1. Early Written Turkic period (5th-8th centuries). Main source for this period is presented by Tekin's (1968) Orkhon Turkic Grammar.
2. Old Uyghur period (9th-12th centuries). My main sources for this period are Mahmut Kashghari's Diwamu Luγatit Türk 'A Dictionary of Turkic languages' written in 1072-1075, Yusuf Haas Hajip's didactic epic Qutadγu Bilik 'Knowledge of Happiness' written in 1069-1070. This period is also marked by the introduction of Arabic letters in the writing system, Arabic and Persian loanwords into Old Uyghur, along with Islam.
3. Chagatay period (13th-19th centuries). The main study for this period is Eckmann (1966).
4. Modern Uyghur period (since 20th century until now). Works by Hamit Tömür (1987) and Tenišev (1981) are main sources for this period in this study.

As I try to stick to such diachronic classification, I feel I should cautiously use sources presented in Gabain's *Alttürlische Grammatik* (1974, 3rd ed.), which covers works from 8th-17th centuries.

1.2.2 Classification of Mongolic Languages

1.2.2.0 Mongolic languages are also classified synchronically and diachronically by Poppe (1955, 1964) on the basis of certain phonological evidence.

1.2.2.1 Synchronically they are divided into two branches, i.e., eastern Mongolic languages and western Mongolic

languages.

A. Eastern Mongolic languages include: a. Dagur (including Hailar and Tsitsikar dialects), b. Monguor (including Monguor proper, Aragwa, Sanch'uan, Santa, Shera Yugur, Shirongol), c. East Mongolian (or Mongolian, including Khalkha, Urdus, Urat, Tumut, Kharchin, Chipchin ~ Khuchin Bargu), d. Buriat (including Ekhirit, Tunka, Bokhan, Alar, Barguzin, Khori, Aga, Bargu Buriat, Tsongol, Sartul).

B. Western Mongolic languages include: e. Mogol, f. Oirat, g. Kalmuck.

This classification shows 7 main languages (from a to g). As it is sometimes difficult to distinguish a language from a dialect, there are always other classifications. As a result, Čenggeltei (1991:11) mentions that Chinese Mongolists generally believe that there are 9 Mongolic languages: a. Mongolian, b. Kalmuck, c. Buriat, d. Dagur, e. Monguor, f. Santa (Dongxiang), g. Baoan, h. Eastern Yugur, i. Mogol.

1.2.2.2 Diachronically the history of Mongolic languages is divided into three main periods:

1. Common Mongolian (CM) period (from the very beginning to the 12th century)
2. Middle Mongolian (MM) period (13th-16th centuries)
3. Modern Mongolian (MoM) period (from the 16th century until now)

The two main phonological evidence for this classification are that: a. the word-initial **p* or **f* was still preserved in CM;

it became **h* or **x* in MM. b. The groups **aγa*, **aγu*, etc., were preserved in CM; the consonants **γ* and **g* in intervocalic positions in MM disappeared, but the vowels, if they are not the same (i.e., *a* and *u*), were not contracted yet; in MoM long vowels have emerged in the place of the ancient groups **aγa*, **aγu*, etc.

1.2.2.3 Besides, the history of Written Mongolian can also be divided into three periods separately:

1. Pre-classical (from the very beginning to the 17th century)
2. Classical period (from the 17th century to the 20th century)
3. Modern period (starting from the first years of the 20th century till now)

This classification is mainly based on the writing systems used in different historical periods, shape and number of letters, etc. Michael Weiers came up with slightly different criterion, hence a different classification. He believes that it is reasonable to classify Mongolian literature of the 13th-14th centuries as Pre-classical Written Mongolian I, or "the Literature of the First period", and the literature of the 16th-17th centuries as Pre-classical Mongolian II, or "the Literature of the Second Period". In any case, Written Mongolian is very important because it reflected and is still reflecting some phonological features of ancient or common Mongolian.

1.2.3 Classification of Tungusic Languages

1.2.3.0 Tungusic languages are divided into two big groups: the Manchu group and the Tungus group. According to Poppe (1965), in the Manchu group the intervocalic γ ~ *g* have disappeared, while in the Tungus group they are preserved; the initial **p* developed into *p*, *f*, or *x* in the Manchu group, but it became *h* or zero in the Tungus group; the final **i* is preserved in the Manchu group, but it disappeared in the Tungus group. These two groups also differ from each other in respect of nasalization of the final *Vn* (vowel plus *n*), and so on. Thus, languages in each group are:

A. The languages in the Manchu group include Jurchen (an extinct language), Manchu, Nanai (Goldi), Ulcha, Orochi, Oroki, and Udehe.

B. The Tungus group includes Negidal, Evenki, Lamut, and Solon.

Benzing (1955a:957-956) presents a more complicated and more detailed classification of Tungusic languages. But I am satisfied with the classification above for my purpose in the present work.

1.3 The Morphological Evidence

1.3.0 There is no doubt that the Altaic languages share certain amount of common lexicon as well as common morphological and syntactic patterns. The sound correspondence rules discovered by Ramstedt (1957), Poppe (ibid.) and others are valid on the lexical as well as the

morphological level, providing strong evidence that the common features existing among the Altaic languages are not borrowed from each other, but inherited from an ancestral language, known as common Altaic. Comparatively speaking, studies on common Altaic morphology are not as advanced as one might expect. It is true that the sound correspondence rules are the most important part of the Altaic theory and that these rules can be obtained through comparative studies on common Altaic lexicon only. However, no one can ignore that common morphological features in Altaic languages play as an important role as sound correspondence rules. Because, as Baskakov (1981) describes, the similarities among Mongolic, Turkic and other Altaic languages are seen not in some marginal categories and forms or ordinary derivational systems, but in those categories where an element of a non-related language can not easily penetrate, that is, the morphological categories which indicate the relationship between phrases and clauses, declensional and conjugational categories.

Again, the beginning of the comparative studies of Altaic morphology is associated with the name of G. J. Ramstedt. He made his outstanding contributions to the field through his early works on special topics such as Khalkha-Mongolian conjugation (1903), Mongolic and Turkic verbal stem formation (1912), negation in Altaic languages (1924) as well as his posthumous work on general Altaic morphology (1952).

Especially the last one represents his overall achievements in the field. As an introductory work, the book discusses almost all common Altaic derivational and inflectional suffixes along with the examples from Turkic, Mongolic, Tungusic and Korean languages. Thus, it has been the most important guiding work for anyone who works in the field since its publication. However, the work is not free from shortcomings. Besides his endnote corrections on some specific mistakes in the Russian version of the work,[1] Baskakov's criticism about some general shortcomings of the work is also fair. As he points out, although Ramstedt compares the corresponding suffixes from each language branch or group, he fails to determine common Altaic forms for the compared items; his comparison lacks systematicy; he fails clearly to distinguish derivational suffixes from inflectional ones; he fails to distinguish the ancient usage of a suffix from its modern usage; as he discusses each suffix in isolation, he fails to mention the same suffix may occur in other compound suffixes; he tries to make quick conclusions where there is insufficient evidence, and so on (Baskakov, 1981). Perhaps the biggest shortcoming of the work is that Ramstedt tries to show evidence from all Altaic languages, but none of them is discussed in detail. He always jumps from one language to another, showing whatever example is available. Consequently, the work seems to be unsystematic, and some of his conclusions are not well-supported or still remain elusive.

Nevertheless, the work still remains the most valuable source for any researcher in the field. We neither can expect too much from such an introductory work nor blame it for the shortcomings. It is our task now to further the studies under the guidance of such a great work.

1.3.1 In this work I present my studies on common Altaic verbal suffixes in modern Uyghur. The reason I choose the topic for my dissertation is that I believe the verbal morphology is another area where foreign elements can hardly penetrate. Hence a common feature modern Uyghur shares with other Altaic languages in this field can be interpreted not in terms of language contact, but in terms of their genetic relationship. Thus my purpose is twofold: a. to present systematically for the first time the common Altaic verbal suffixes in modern Uyghur; b. to support the Altaic theory by such a study. There are 59 verbal suffixes, including derivational and inflectional ones, discussed in this work. Except a handful newly-formed suffixes such as *-dur ~ -tur* (developed from the auxiliary verb *tur-*), *-°wät* (developed from the converbial suffix *-°p* (see 3.3.2) plus the auxiliary ät-), etc., the 59 suffixes cover all verbal suffixes currently active in modern Uyghur. I attempt to prove their common Altaic origin by comparing them phonologically as well as functionally with the corresponding suffixes in other Altaic languages, while trying to overcome the shortcomings seen in the works of other scholars in the field. Before

discussing any specific suffix, there are some general issues I would like to mention:

a. As the title of the work shows, only the verbal suffixes are subject to my study, that is, only a suffix which can be added to a verbal stem is included in the study, other suffixes are excluded. In this regard, I should mention that Ramstedt (1912) and some other Altaists believe that some suffixes in Altaic languages can be added to both verbal and nominal stems, hence they indiscriminately discuss the deverbal and denominal function of such suffixes. But I believe that in Altaic languages there is a clear-cut distinction between verbs and substantives, and if a suffix seems to function as deverbal and denominal at the same time, perhaps the element changing a word class into another is missing or we fail to recognize it, or we may be dealing with two homonymic suffixes.[2] Thus I limit my discussion only to the deverbal function of such controversial suffixes.

b. There is no doubt that phonological evidence is as important in comparative morphology as in comparative lexicon. Fortunately, the sound correspondence rule of the Altaic languages is well established and they are working well in lexical as well as morphological level. Let us look at the correspondence of consonants in intervocalic positions proposed by N. Poppe (1965:199), which is closely relevant to comparison of suffixes (see next page). In most cases the sound correspondences are self-evident. For example, all

Manchu-Number	Tungus	Mongolian	Chuvash	Reconstructed Turkic	Phoneme
1	*p*	*b ~ γ*	*p*	*p*	**p*
2	*b*	*b ~ γ*	*v*	*b*	**b*
3	*t*	*t*	*t*	*t*	**t* before any vowel but **i, *ï*
4	*t*, Ma. *č*	*č*	*č*	*t*	**t* before **i, *ï*
5	*d*	*d*	*r*	*ż*	**d* before any vowel but **i, *ï*
6	*d*, Ma. *j*	*j*	*r*	*ż*	**d* before **i, *ï*
7	*k*	*k ~ g*	*k*	*k*	**k* in stems with front vowels
8	*k*	*q ~ g*	*x*	*q*	**k* in stems with back vowels
9	*g*	Kha. *g ~ ø*	*v*	*g*	**g* in words with front vowels
10	*g*	Kha. *g ~ ø*	*v*	*γ*	**g* in words with back vowels
11	*č*	*č*	*ś*	*č*	**č*
12	*j*	*j*	*y*	*y*	**j*
13	*s*	*s*	*s*	*s*	**s* before any vowel but **i, *ï*
14	*s*	*š*	*š*	*s*	**s* before **i, *ï*
15	*y*	*y ~ γ*	*y*	*y*	**y*
16	*m*	*m ~ γ*	*m*	*m*	**m*

17	*n*	*n*	*n*	*n*	**n*
18	*ń*	*n*	*y*	*ñ*	**ń*
19	*ŋ*	*ŋ ~ γ*	*n*	*ŋ*	**ŋ*
20	*l*	*l*	*l*	*l*	**l_1*
21	*l*	*l*	*l*	*š*	**l_2*
22	*r*	*r*	*r*	*r*	**r_1*
23	*r*	*r*	*r*	*z*	**r_2*

Turkic, Mongolic and Tungusic languages contain the very productive common Altaic verbal noun suffix **-m* (see 2.1.8), and no matter where the suffix appears, it remains the same in all languages. The same is true for the common Altaic verbal noun suffix **-n* (see 2.1.13). The common Altaic verbal noun suffix **-g(V) ~ *-k(V)* (see 3.1.3) is seen as *-γu ~ -qu ~ -gü ~ -kü*, etc., in Turkic languages, and *-qu(i) ~ -kü(i)* in Mongolic, and *-kū* in Manchu. Interestingly, we also see the correspondence of Turkic verbal noun suffix *-°š* with the Mongolic *-l* and Tungusic *-lii(n)*, which probably derived from the common Altaic verbal noun suffix **-l_2* (see 2.1.15). In some cases such correspondence needs explanation because the real form of a suffix has been changed due to further internal sound changes or the combination with other suffixes. I will provide as precise an explanation as possible whenever such a case occurs. As for vowel correspondences, I should mention that Turkic languages demonstrate a tendency to lose a final vowel of suffixes. Then according to the vowel harmony rule, a high vowel is inserted between such a suffix and a stem. As

a result, in many cases we see that a Turkic suffix in the form of -C corresponds to a form of -CV in Mongolic and Tungusic languages. For example, the CA converbial suffix **-pa ~ *-pi* developed into *-p* in Turkic languages, but it is *-ba(i) ~ -be(i)* in Mongolic languages, and *-fi (< *-pi)* in Tungusic languages (see 3.3.2). Whenever a suffix is developed through such a process in Turkic languages, we see a vowel (usually a high vowel) inserted in between a stem and suffix according to a vowel insertion rule (see Lindblad, 1990). Thus traditionally a Turkic suffix in the form of -C is written as -°C, like -°*p*.

There are also some other cases where the sound correspondence rule works only partially or does not work at all. Consider the imperfect participial (aorist) suffix *-r ~ -ar ~ -är* in modern Uyghur. It is hard to determine if the suffix contains the $*r_1$ or $*r_2$. If it is the former, why is the negative form of the suffix *-mas ~ -mäs (<-maz ~ -mäz)*, which probably developed from the combination of the verbal noun suffix **-m* + negative verb **e-* followed by the aorist suffix $*-r_2$? But if it is the $*r_2$, why does it remain as *r* in the positive form? Likewise, in Tungusic languages the aorist suffix **-ra* can only appear with the so-called Class I verbs, but **-sa* with the Class II verbs, and **-da* with the Class III verbs. It is hard to determine if the **-sa ~ *-da* developed from **-ra* due to certain phonological conditions still unknown to us or whether they are merely allomorphs of different

origin. As I discuss this issue in 3.2.1, I do not exclude any possibility. The point I want to make clear is that we can not always rigidly follow the sound correspondence rules in comparative morphology. Because, firstly, it is common in languages in the world that a condition which triggered a sound change disappears itself so that the original identity of the resulting sound can not be recovered. Secondly, paradigm and rules of grammatical patterns play a more important role than phonological rules in morphology. As a result, languages may undergo sudden changes due to analogy and morphological leveling, which may not be explained by any sound correspondence rule. When describing morphological analogy, R. Jeffers & I. Lehiste (1979:55) point out that "As a consequence of leveling, linguistic reconstruction through the method of internal reconstruction is often hindered or made impossible." Thus, a case like we have seen in the aorist suffix *-*r* (or *-*rV*), which does not fit or can not be explained by the regular sound correspondence rule, should not be considered as a counterexample, and it can be explained in other terms. Fortunately, such cases in Altaic languages are not too many.

c. Since a combination of two or more suffixes might have occurred after the languages split from the common unity, we can not expect a combination in one language to occur also in another. Thus it is reasonable to compare a suffix in one language with its counterpart in another only on the basis of

a root form, or minimal unit. For example, although both the verbal noun suffix *-*GU* and the diminutive suffix *+č* are common to all Altaic languages, the combination of the two only occurs in Turkic languages (see 2.1.5). Sometimes we may find such a combination in all language branches, but in most cases it differs functionally from language to language.

d. Functional correspondence of suffixes is another important factor in comparative morphology. In this work suffixes are dealt with in functional order: derivational suffixes are discussed in chapter two, non-finite inflectional suffixes in chapter three, and finite ones in chapter four. It should be clear that the discussion of suffixes in such an order is solely based on the function of modern Uyghur suffixes. In fact, because of different developments in each individual language and the analyses by different grammarians, function and definition of a common Altaic suffix vary from language to language. Thus a common problem we face is that in most cases a counterpart of a derivational suffix in one language or language branch functions as a finite or non-finite inflectional suffix in another, or the counterpart of a converbial suffix in one language or language group functions as a participial or deverbal adjective suffix in another, and so on. But no such a diversity can pose an obstacle to the comparative morphology in Altaic languages. Because, firstly, a suffix is considered as derivational if it only appears with a limited number of stems in a word class to form new words,

but it is inflectional if it can appear with all stems in the word class. But the frequency of usage of a common Altaic suffix in each language or language group is due to internal developments. Secondly, diachronically speaking, suffixes in Altaic languages are distinguished only as verbal vs. substantival ones. But in substantives there is no clear-cut distinction between nominal and adjectival suffixes (see Ramstedt, 1952:15).[3] Thus a synchronic difference in function and definition of a common Altaic suffix in different languages can be neutralized by diachronic studies if such a difference only occurs within the substantives. Along with deverbal adjectives and deverbal nouns, participles, verbal nouns and converbs are all included in the substantives.

e. Altaic languages are known as nominal ones in terms of finite forms of verbs. That is, a finite form of a verb is a verbal noun or participial form plus personal endings in origin. Sometimes the same verbal noun or participial form may be used as a regular noun or adjective. Thus it is not surprising if we discuss one and the same suffix as derivational and finite or non-finite inflectional on different occasions. A more common case is that a deverbal noun suffix may also function as verbal noun suffix or vice versa. Perhaps a verbal noun form is the most basic form in Altaic languages. In most cases other forms such as deverbal adjectives, participles, or converbs seem to have derived from a verbal noun through a functional shift or adding a further

element to it. For example, most converbial suffixes in Altaic languages are the combination of a verbal noun suffix and a case ending. I have mentioned above some general problems in this comparative study. I will explain some other specific issues as we discuss relevant suffixes.

1.4 Special Signs, Letters and Abbreviations

1.4.0 Following the convention in the Altaic studies, I employ the following signs, letters and abbreviations in this work:

1.4.1 Special Signs

~	or, in variation with	/ /	phonemic or archiphonemic representation
=	equals		
>	developed into	[ ]	phonetic representation
<	developed from	--	a sound or morpheme as part of a word but spelled separately
*	reconstructed as, hypothetical	" "	quotation
' '	gloss or translation	°	(after a vowel:) unpredictable position for a vowel which is deleted when preceded by another vowel; (before a consonant or in between two consonants:) unpredictable position where a high vowel is harmonically inserted
-	(before a suffix:) verbal suffix, (after a morpheme:) verbal morpheme boundary		
( )	optional, optional explanation		
+	(before a suffix:) nominal suffix, (after a morpheme:) nominal morpheme boundary	ø	zero, zero value
±	nominal or verbal suffix		

1.4.2 Letters Used for Transliteration

A archiphoneme, stands for *a* and ä

a unround, low, back vowel, like English *a* in *c<u>a</u>r*, but not that long

ä unround, low, front vowel, close to the vowel of English word *b<u>a</u>d*

e unround, mid, front vowel, like *e* in English *t<u>e</u>n*

ė stands for schwa

I archiphoneme, stands for *i* and *ï*

i unround, high, front vowel, like *i* in English *m<u>i</u>d*

ï back counterpart of *i* above, not represented in modern Uyghur orthography

o round, mid, back vowel, like *o* in German *M<u>o</u>ral* 'morality'

ö round, mid, front vowel, like *ö* in German *<u>Ö</u>konomie* 'economy'

U archiphoneme, stands for *u* and *ü*

u round, high, back vowel, like the vowel in English *c<u>oo</u>k*

ü round, high, front vowel, like *ü* in German *<u>ü</u>ber* 'on, top, over'

(repetition of a vowel indicates the vowel is long)

b voiced labial stop, like *b* in English *<u>b</u>ook*

č voiceless palatal affricate, like *ch* in English *<u>ch</u>op* (in Manchu and some other languages *c* is used instead)

D archiphoneme or variable phoneme, realized as either *t* or *d*, depending on the voice harmony

d voiced dental stop, like *d* in English *<u>d</u>og*

f voiceless dento-labial fricative, like *f* in English *<u>f</u>ive*

G archiphoneme, realized as either *γ*, *q*, *g*, or *k*, depending on the advanced tongue root and voice harmonies

γ voiced uvular fricative, a bit like *r* in German *R<u>oh</u>re* 'tubes'

g voiced velar stop, like *g* in English *<u>g</u>ood*

h voiceless laryngeal, like *h* in Czech *no<u>h</u>a* 'foot' (the

letter stands for the voiceless uvular *x* in Manchu)

j voiced palatal affricate, like *j* in English *John*

k voiceless velar stop, like *k* in English *sky*

l lateral, voiced, like *l* in English *lord*

m voiced labial nasal, like *m* in English *man*

n voiced alveo-dental nasal, like *n* in English *nice*

ñ voiced velar nasal, like *ng* in English *king* or *ŋ* in IPA

p voiceless labial stop, like *p* in English *pen*

q voiceless uvular stop, voiceless counterpart of γ above (in spoken Mongolian stands for uvular *x*)

r voiced alveo-dental trill, close to *r* in Russian *rabota*

s voiceless alveo-dental fricative, like *s* in English *sun*

š voiceless alveo-palatal fricative, like *sh* in English *sharp*

t voiceless dental stop, like *t* in English *ten*

w labial glide, like *w* in English *water*

x voiceless uvular, like *ch* in German *acht* 'eight'

y palatal glide, like *y* in English *you*

z voiced alveo-dental fricative, like *z* in English *zoo*

1.4.3 Abbreviations for Grammatical Terms

1pr.	first person	cf.	compare
2pr.	second person	conj.	conjunctive
3pr.	third person	cond.	conditional
abl.	ablative	conv.	converb(ial)
acc.	accusative	cop.	copula(r)
asp.	aspect	dat.	dative
C	consonant	DNN	denominal noun

(suffix)

DVA deverbal adjective (suffix)

DVN deverbal noun (suffix)

e.g. for example

equ. equative

evd. evidential

id. identical

i.e. that is, namely

intr. intransitive

imp. imperative

invo. invocative

gen. genitive

neg. negative

loc. locative

pas. passive

pl. plural

pos. possessive

pst. past tense

pr.ft. present-future

ppl. participle, participial suffix

priv. privative

prog. progressive

ptcl. particle

rec. reciprocal

refl. reflexive

sg. singular

tem. temeritive

tr. transitive

V vowel

VN verbal noun

1.4.4 Abbreviations for Languages

Alt. Altai

Az. Azerbaijan

Bao. Baoan

Bash Bashkir

Bur. Buriat

CA common Altaic

Chag. Chagatay

Chak. Chakh

Chuv. Chuvash

Dag. Dagur

Evk. Evenki

EWT Early Written Turkic

EYu. Eastern Yugur

Kalm. Kalmuck

Karak. Karakalpak

Kaz. Kazak

Kha. Khakas

Khal. Khalkha

Kir. Kirgiz

Lam. Lamut

Ma. Manchu

Mgl. Mogol

Mgr. Monguor

MM Middle Mongolian

Mo. Mongolic, Mongolian

MUy. Modern Uyghur

Na. Nanai

Ngd. Negidal

Nog. Nogai

Oir. Oirat

Orc. Orochi

Ord. Ordos

Ork. Oroki

OUy. Old Uyghur

Sal. Salar

San. Santa (Dongxiang)

Sol. Solon

Tat. Tatar

Tkc. Turkic

Tng. Tungusic

Trk. Turkish

Trkm. Turkmenian

Tvn. Tuvinian

Ude. Udehe

Ul. Ulcha

Ur. Urat

Uz. Uzbek

WM Written Mongolian

Yak. Yakut

CHAPTER TWO

2. DERIVATIONAL SUFFIXES

In this chapter we will explore derivational suffixes which form new words out of verbs. The suffixes will be discussed in the following order: deverbal noun suffixes, deverbal adjective suffixes, and deverbal verb suffixes. This order is only based on the function of modern Uyghur suffixes which have been described in detail by Hamit Tömür in his *Modern Uyghur Grammar* (1987). The corresponding suffixes in other languages may not necessarily fit this order. In this and following chapters generally Turkic examples are presented first, then Mongolic, and then Tungusic examples.

2.1 Deverbal Noun Suffixes

2.1.1 */-°G/, /-AG/*

2.1.1.0 The suffix */-°G/, /-AG/* = *[-q ~ -k ~ -iq ~ -ik ~ -uq ~ -ük, -aq ~ -äk]* in MUy. forms a noun which has the meaning of a process or result of an action or an instrument: *qiliq* 'behavior, action' <*qil-* 'do', *buyruq* (<*buyuruq*) 'order, command' <*buyru-* (<*buyur-*) 'order, command', *buyaq* 'dyestuff' <*buya-* 'dye', *pičaq*[1] 'knife' <*pič-* 'cut, slice' (Tömür, 1987:95). According to its meaning, */-°G/, /-AG/* is also known as a resultative suffix.

Etymologically, the suffix in MUy. can be traced back to at least three different sources: *-°γ ~ -°g, -q ~ -k ~ -uq ~ -ük,* and */-GAG/*. Nevertheless, all of them have a common Altaic

origin. At first, let us look at the evidence about first two sources in Turkic, Mongolic, and Tungusic languages.

2.1.1.1 **Turkic:** There are two sets of suffixes in EWT, *-°γ ~ -°g*, and *-q ~ -k*, *-uq ~ -ük*, which are phonetically distinct from each other, i.e., +voice vs. -voice, but functionally very much alike, i.e., both form substantives out of verbs, designating result or process of an action, or a place in which an action takes place: *bil<u>iq</u>* 'wisdom, knowledge' <*bil-* 'know', *kör<u>üq</u>* 'scout' <*kör-* 'see', *tir<u>iq</u>* 'alive' <**tir-* 'live', *öl<u>üq</u>* 'dead' <*öl-* 'die', *ö<u>q</u>* 'thought, understanding' <*ö-* 'think', *közün<u>ük</u>* 'window' <*közün-* 'be seen, appear', *to<u>q</u>* 'satiated, full' <*to-* 'be satiated' (cf. MUy. *<u>to</u>-l-* ~ *<u>to</u>-š-* 'be full'), *yo<u>q</u>* 'non-existent' <**yo-* 'not to exist, cease to exist', *anu<u>q</u>* 'preparation' <*anun-* 'prepare oneself', *kärgä<u>k</u>* 'needed, lacking, absent' <**kärgä-* 'lack, be without', *art<u>uq</u>* 'exceeding, much, more' <*art-* 'increase, remain over', *ämgä<u>k</u>* 'trouble, suffering' <*ämgä-* 'suffer from trouble or pain' *qišlaγ ~ qišla<u>q</u>* 'a place for spending winter' <*qišla-* 'to spend winter' *yaylaγ ~ yaylaq* 'a place for spending summer' <*yayla-* 'to spend summer' (Gabain, 1974:70, 74; Tekin, 1968:111, 113; Kononov, 1980:§106-107).

It is necessary to mention at this point that the two sets of suffixes above, in some cases, manifest a slight functional difference especially in OUy. The famous Uyghur scholar of the eleventh century, Mahmut Kashghari, implicitly pointed this out in his work, *Diwanu Luγatit Türk* 'A Dictionary of

Turkic Languages' (v.I.:15-19, 205, 663-665), that *-q ~ -k* tends to form a noun out of verbs, while *-γ ~ -g* tends to form an adjective. The difference was also mentioned when explaining the compound suffix *+lïq ~ +lik ~ +luq ~ +lük* and *+lïγ ~ +lig ~ +luγ ~ +lüg*, emphasizing that the former indicates a location, an object prepared for or used for something, and a human character, while the latter indicates an owner or possessor, or a passive action. It is obvious that this difference, as the author pointed out, must be a reflection of one of the characteristics of Kashghar and Khotan dialects at that time. As the editors of the Uyghur version of Kashghari's work have mentioned, the difference still exists in Khotän dialect[2]. Such a distinction is also evident in the following words in Chagatay literature: adjective-forming: *quruγ* 'dry' *<quru-* 'to dry, become dry', *süzüg* 'filtered, clear' *<süz-* 'filter, strain'; noun-forming: *ölčäk* 'measure, measuring instrument' *<ölčä-* 'to measure', *yalaq* 'feeding trough, *<yala-* 'to lick' (Eckmann, 1966:60-64).

However, since there is not a clear-cut distinction between nouns and adjectives themselves in Uyghur or other Altaic languages, it is hard to insist absolutely on the adjective-forming and noun-forming difference of the two sets of the suffixes. Moreover, there are many counterexamples to such a distinction even in Kashghari's own work, or, more acurately, in the transliteration of the editors of modern Uyghur of the work.[2] According to Gabain (1974:70,74), the functional

difference of -*q* ~ -*k*~ -*uq* ~ -*ük* from -°*γ* ~ -°*g* in EWT is not entirely clear, but the former carries the passive meaning and forms adjectives more often than nouns. I believe that there must have been phonological and functional differences of the two sets of the suffixes originally. But it is evident from MUy. that a phonological as well as functional changes of the two sets of the suffixes ultimately resulted in their complete merger. The merging process is understandable. First of all, due to the final devoicing rule, which can be formulated as C -> -voice/--# (see Kaisse, 1986; Hahn, 1991:84), the voiced -°*γ* ~ -°*g* started to be realized as unvoiced -°*q* ~ -°*k* in word-final positions. Thus, words such as *tiriq* 'alive', and *ölüg* 'dead' in EWT are pronounced *tirik* and *ölük* in MUy., and this obscured the voice distinction between -°*γ* ~ -°*g* and -*q* ~ -*k* ~ -*uq* ~ -*ük*. Furthermore, the devoiced -°*q* ~ -°*k* in words such as *tirik* and *ölük* is realized as -°*γ* ~ -°*g* as its underlying voiced form when a suffix with an initial vowel is attached. Likewise, except in some frozen forms, the underlyingly unvoiced suffix -*q* ~ -*k* ~ -*uq* ~ -*ük* in words such as *yalaq* 'feeding trough', is also realized as voiced -*γ* ~ -*g* ~ -*uγ* ~ -*üg* in the same environment due to analogy. I illustrate this phenomenon by utilizing the 3pr. sg. and pl. possessive suffix +*i* as follows:

(1)	Underlying form	/*tiriq*/	/*yalaq*/
	Final devoicing	*tirik*	---
	Possessive inflection	*tiriq*+*i*	*yalaq*+*i*

Analogy	---	::	*yalaɣ+i*
Surface form	*tiri<u>q</u>i*		*yalaɣi* > *yaliɣi*
English meaning	'the one which is alive'		'feeding trough of'

On the other hand, we notice that during the Chagatay period the underlying unvoiced *-q* was pronounced as voiced *-ɣ* in some cases: *buyru<u>q</u>* ~ *buyruɣ* 'order, command', *yat<u>aq</u>* ~ *yat<u>aɣ</u>* 'couch, bed, <*yat-* 'lie down' (Eckmann, 1966:64). Of course, this trend did not last long due to the final-devoicing rule. The analogy applied to the two sets of suffixes ultimately neutralized their voiced and unvoiced contrast, and led them into complete merger. Thus their distinction is not recoverable any longer. It is certain that after the two sets of suffixes merged as */-°G/* ~ */-AG/* in MUy., their function was not reduced. The suffix resulted from the merger is carrying all functions as before, i.e., forming nouns and adjectives out of active and passive verbs with the meaning of result or process of an action. Some other changes I should mention here are that the suffix developed allomorphs with low unround vowels such as *-aɣ* ~ *-äg*, *-aq* ~ *-äk* in Uyghur and some *a*-languages; and that the suffix *-ɣ* ~ *-g* developed into *-u*, *-w* or zero with or without compensating length of the preceding vowel in *ta*ᵘ ~ *tuu* or *tïa* languages, while *-q* ~ *-k* ~ *-uq* ~ *ük* remains the same or developed other allomorphs such as *-x:* Tat. *tatlï* 'sweet, delicious', Chuv. *tutlê* (id.) < EWT *tatïɣ* 'taste, sweetness', *tatïɣlïɣ* 'tasty, sweet' < *tat-* 'to taste,

be sweet'; Kaz. *jamauli* 'with a patch', Tat. *yamauli* (id.), cf. OUy. *yama-* 'to mend', *yamaɣ* 'mend, patch', *yamaɣliɣ* 'with a patch, mended'; Trk. *yazu ~ yazı* 'writing', Tat. *yazu* (id.), Chuv. *śiruu* (id.), cf. OUy. *yazïɣ* 'writing' < *yaz-* 'write'; Kaz. *etik* 'boots, shoe' EWT *etük*, MUy. *ötük* (id.) < EWT **ät-* 'wear, dress' (Ramstedt, 1952:134-141); Kha. *palγax (<paɣlax)* 'tied, a tie' *(<paɣ+la-* 'to tie', cf. EWT *ba-ɣ* 'a tie') (Tenišev, 1981). This shows that whereas the two suffixes have merged in MUy. they have remained distinct in many other Turkic languages. Likewise, in most cases the Turkic **-°q ~ *-°k* correspondes to Mongolic *-g (<*-k)* and Evk. *-k*, and the Turkic **-°γ ~ *-°g* to Mongolic **-°ga(n)* and Tungusic **-gan ~ *-han*.

Another important function of the suffixes that Kashghari (v.II.:40-92) pointed out is to form verbal nouns or infinitive verbs in OUy. such as *barïɣ* 'going, to go' *<bar-* 'go', *yorïq* 'behaving, acting' *<yorï-* 'go forward, stroll', *täpik* 'to kick, kicking' *<täp-* 'to kick'. In MUy. such forms are considered derivational, not inflectional, and for the same function their diachronic allomorph -γu ~ -qu ~ -gü ~ -kü or other suffixes may be used. But Kahsghari's statement reminds us that all deverbal adjectives and deverbal nouns in Turkic languages are lexicalized verbal adjectives or verbal nouns in origin.

As a substantive verbal suffix, */-°G/ ~ /-AG/* also appears in combinations such as */-GAG/*, */-mAG/*, */+l°G/*, */+lA-G/*,

/+DA-G/, */-G+sA/*, etc. Some of them became obsolete, while others are still active in MUy. The diachronic allomorphs of the suffix, */-GU/ ~ /-GA/* (see 2.1.3, 3.1.1), and */-GAy/* (see 4.5), developed as separate suffixes in MUy. According to the Turkic evidence above and its correspondence in Mongolic and Tungusic languages below, I postulate a CA verbal noun suffix, **-g(V) ~ *-k(V)*, as their basic form.

2.1.1.2 **Mongolic**: The CA verbal noun suffix **-g(V) ~ *-k(V)* shows a variety of its allomorphs in Mongolic languages. Mongolic languages in China, for instance, employ the suffix *-g ~ -ge* for the same function as in the Turkic languages, i.e., to form nouns out of verbs designating result of an action or an instrument: Mo. *buduq* 'dystuff' *<budu-* 'to dye, paint', Mgr. *budäg <budä-* (id.) (cf. MUy. *buyaq <buya-* (id.)), Bao. *päjiq* 'writing, letter' *<päji-* 'write' (cf. EWT *bitiq <bit-* (id.) <Middle Chinese **pit*), Mo. *begereq* 'fearsome of suffering from frost' *<begere-* 'suffer from frost', Mgr. *butarqä* 'vague' *<butar-* 'be vague', Bao. *me:roq* 'curved, crooked' *<me:r-* 'to curve, to crook', EYu. *xonoq* 'a place for spending a night' *<xono-* 'stay or spend a night' (Chen, 1985). Ramstedt (1952:134) mentions that the Turkic *-γ* corresponds to the Mongolic *-ga ~ -gu*, while the Turkic *-q* corresponds to the Mongolic *-g*. Apparently the Mongolic *-ga (-uγa ~ -uga ~ -uxa ~ -iya)*, *-gan (-uγan ~ -ugan ~ -uxan ~ -iyan)* which are pronounced as *-aa*, *-aan* perhaps due to the loss of intervocalic *g*, or its allomorph with high rounded vowel, *-gu*

(-γu ~ -xu ~ -gun ~ -γun ~ -xun ~ -igun), underwent different phonological developments from the Turkic one. It seems to have loosely combined with the so-called nominal ending *-n*. Nevertheless, their function remain as the same as in the Turkic languages, i.e., they indicate a result of an action: *ačiya(n)* 'heavy load, burden' <*ači-* (<*arti-* 'to load, to burden' <*aru* 'back'), Kalm. *astaan* (id.), (cf. Tat. *artuu* (id.) <EWT *art-* 'to load'); Mo. *ulaqa* ~ *ulaγ-a(n)* 'relay horses, relay transportation', Kalm. *ulaa* (id.), cf. Mo. *ulam* 'still more, further', *ulamjila-* 'transmit, pass on', MUy. *ulaq* <EWT *ulaγ* 'a horse or donkey used for transportation' <*ula-* 'connect, link; Mo. *tariy-a(n)* 'grain, crop' <*tari-* 'cultivate, sow', Kalm. *taraa* 'grain, crop', cf. EWT *tarïγ*, Trk. *darı* (id.), MUy. *teriq* 'millet' <*teri-* 'sow, cultivate'; Mo. *xalaγun* 'hot, warm' <*xala-* 'become warm or hot', Kalm. *xalun* (id.), cf. MUy. (*ot* 'fire') *qala-* 'burn (a fire)'; Mo. *xataγu* 'hard, strong' <*xata-* 'be dry, be hard', Kalm. *xatu* 'hard, strong', cf. EWT *qat-*, Yak. *kat-*, MUy. *qat-* 'be dry, be strong', EWT *qatïγ*, MUy. *qattiq*, Kaz. *qattï* ~ *qatï* 'dry, strong'; Mo. *uiledxun* ~ *üyiledkün* 'products' <*uiled-* ~ *üyiled-* 'produce'; Dag. *bodogun* 'thought' <*bodo-* 'think' (Chen, 1985).

Ramstedt (1952:140) implies that the Mongolic *-g (~ -γ)*, which is the correspondence of EWT *-q ~ -k ~ -uq ~ -ük*, remains in the combinations such as *+sa-γ ~ +se-g* 'longing for..., wish...'. The combinations such as *-γči ~ -gči, -γčin*

~ -*gčin* also seem to contain the suffix. I will discuss these combinations along with the Turkic ones later. Corresponding to the Turkic diachronic allomorphs */-GU/ ~ /-GA* and */-GAy/*, the Mongolic nomen futuri suffix -*γu(i)* ~ -*(qui)* and the nomen imperfecti suffix -*γa(i)* ~ -*ge(i)* also resulted from the CA **-g(V) ~ *-k(V)*. They will be discussed in 3.1.3 and 4.5 respectively.

2.1.1.3 **Tungusic**: The development of the CA verbal noun suffix **-g(V) ~ *-k(V)* in Tungusic languages shows same evidence as we have seen in the two language branches above, i.e., the corresponding suffixes in Tungusic languages perfectly matches the Turkic and Mongolic ones phonologically and functionally.

The Tungusic -*g* ~ -*k* ~ -*ek*, which forms an adjective or a place of an action, for example, seems to be the correspondence of the EWT -*q* ~ -*k* ~ -*uq* ~ -*ük*: Lam. *ŋoq* 'leader, commander' <*ŋo-* 'go ahead', *urlik* 'jealous' <*urli-* 'be jealous', *huklek* 'sleeping place' <*hukle-* 'lie, sleep', *bilek* 'village' <*bi-* 'to be, live' (*-l-*: inchoative), *ewilek* 'playground' <*ewi-* 'play' (Benzing, 1955b:38), Tng. (?Evk.)[3] *bužek* 'graveyard, tomb' <*buže-* 'be dying, lie to die', *bug* 'ill of fatal disease' <*bu-* 'die' (Ramstedt, 1952:140), (cf. MUy. *qišlaq* 'a winter place, a place where a winter is spent' <*qišla-* 'to spend winter', *yataq* 'bedroom' <*yat-* 'to lie, lie down', etc.). Corresponding to the Turkic allomorph */-GU/ ~ /-GA/*, Tungusic languages demonstrate the suffixes -*ku* ~ -*kū*

~ *-hu, -gi* ~ *-ki*, or their allomorphs in *-n* such as as *-gan* ~ *-gon* ~ *-gen, -xan* ~ *-xon* ~ *-xun, -wun* ~ *-un*, which also form nouns out of verbs, designating a result of an action or an instrument: Ma. *bodogon* 'plan, plot, scheme', <*bodo-* 'calculate, plan' (Norman, 1978:32), cf. Dag. *bodogun* 'thought' <*bodo-* 'think' above; Ma. *fadagan* 'magic' <*fada-* 'make magic' (ibid., 80); *boljohon* 'agreement' <*boljo-* 'agree on' (ibid., 34); *jancuhūn* 'sweet, pleasant', cf. EWT *tat-* 'be sweet', *tatïγ* ~ *tatïγlïγ* 'sweet, tasty' (Norman, 1987); Tng. (?Evk.)[3] *ariwun* 'clean'(aripun?), cf. Tat. *aruu*, Mon. *arigun* (id.), <EWT *art-* 'to clean', OM *aril-* 'be clean, disappear'; Lam. *erun* 'shovel' <*er-* 'to shovel' (Benzing, 1955b:37). More examples will be given in 3.1.3 along with the discussion of the Turkic */-GU/ (~ -GA)*.

Thus far I have discussed the first two sources of the suffix, *-°γ ~ -°g, -q ~ -k ~ -uq ~ -ük*, and their CA origin. The third source of the suffix is */-GAG/*, which will be discussed in 2.1.2 below. The suffix forms nouns and adjectives out of verbs, denoting repeatedly doing an action or an instrument. But in many cases in MUy. nouns formed with the suffix tend to carry only the last part, */-°G/* or */-AG/*, of the suffix. Another */-G/* appearing as the first part of the suffix is deleted in consonant-cluster positions. As a result, nouns originally formed with */-GAG/* are reanalyzed as nouns formed with */-°G/* or */-AG/*. Compare the following words: MUy. *qozuq*, but EWT *qazγuq* 'cork' <*qaz-* 'to dig';

MUy. *tiräk*, but EWT *tirgük* (<**tirägük*) 'post, doorposts, pillar' <*tirä-* 'to prop up, support' (Gabain, 1974:71); MUy. *qulaq*, but EWT *qulqaq* (<**qulγaq*) 'ear' <**qul-* 'to hear' (Tekin, 1968:112). In fact this distinction is recoverable semantically. As I mentioned above, substantives formed with *-°γ ~ -°g* or *-q ~ -k ~ -uq ~ -ük* usually indicate a process or result of an action, or a place where an action takes place. But nouns formed with */-GAG/* indicate an instrument. Therefore, words like *pičaq* 'knife' is actually *pičγaq* <*pič-* 'to cut' in origin.[4]

2.1.2 */-GAG/*

The suffix */-GAG/* = *[-γaq ~ -qaq ~ -gäk ~ -käk]* in MUy. forms nouns which tend to repeatedly perform or receive an action: *patqaq* 'mud, marsh' <*pat-* 'sink', *o(r)γaq (~ oγraq)* 'sickle' <*or-* 'reap' (Tömür, 1987:96,). More often the suffix forms an instrument. In fact, the suffix has the same origin with the DVA suffix *-γaq ~ -qaq ~ -gäk ~ -käk* in 2.2.2 in the next section.

In EWT the suffix demonstrates its other allomorphs such as *-γuq ~ -gük*. It seems to have functioned as a deverbal noun suffix more frequently in EWT than in MUy.: · *qazγuq* 'cork' <*qaz-* 'to dig', *ičkäk* 'vampire' <*ič-* 'to drink', *tirgük* (<**tirägük*) 'post, doorposts, pillar' <*tirä-* 'to prop up, support' (Gabain, 1974:71), *qulqaq* (<**qulγaq*) 'ear' <**qul-* 'to hear' (Tekin, 1968:112). Some more deverbal nouns formed with the suffix in OUy. were recorded by Kashghari (v.2:420-423):

türgäk 'a bundle wrapped in cloth' <*tür-* 'to roll up', *täzgäk* 'escapee, fugitive' <*täz-* 'to flee, escape'. It is interesting to notice that during the later developments of Turkic languages, */-GAG/* appears mainly as a deverbal adjective suffix, while its deverbal noun function is not noticeable any longer. This is perhaps due to the deletion of the initial *γ ~ g* in a constant cluster position. The result of the deletion, for instance, is seen in the pronunciation of the above EWT words in MUy.: *qulaq* 'ear' (<**qulqaq*), *qozuq* 'cork' (<**qazuq* <**qazγuq*), *tiräk* 'post, doorposts, pillar' (<**tirgük ~ tirgäk* <**tirägük ~ tirägäk*). Consequently, such a deletion resulted in the merger of */-GAG/* with another deverbal noun suffix */-°G/* we have discussed above (see 2.1.1). Thus, in MUy. some deverbal nouns ending in the suffix */-°G/* are actually formed with the suffix */-GAG/* in origin. They are still recognizable because the former denotes a result of an action, while the latter an instrument.

It is clear that */-GAG/* contains more than one element. According to Kononov (1980, §113), the suffix is the combination of the CA passive-causative suffix **-g(V)-* ~ **-k(V)-* (see 2.3.4) and another suffix *-γ ~ -q ~ -g ~ -k* which we have discussed as part of the DVN suffix */-°G/* above in 2.1.1. I believe that Kononov's assumption is well-supported semantically. Notice that */-GAG/* contributes a meaning of repeatedly doing an action as both deverbal noun and deverbal adjective (see 2.2.2). This meaning is mainly due to the

passive-causative suffix *-*g(V)*- ~ *-*k(V)*-, which is evident in other combinations such as /*-*GAn₂*/ in OUy. (see 3.2.2) and /-*GUr*/ in MUy. (see 2.2.3). In OUy. the /*-*GAn₂*/ suffix indicates a repeated or continuing action in a relative clause-like structure:

(2) *bu är ol söz unït -ɣan*
THIS MAN HE WORD FORGET PPL
'This is a man who always forgets words.' (Kashghari, v.1:212)

In MUy. the participial suffix /*-*GAn₂*/ and its repetitive meaning does not exist any longer. But the suffix /-*GAG*/ which carries the same passive-causative suffix *-*g(V)*- ~ *-*k(V)*- indicates the same meaning. Thus, a person who keeps forgetting things frequently can be described as *unutɣaq* 'forgetful, a person who always forgets'. Likewise, the repetitive meaning of the suffix *-*g(V)*- *-*k(V)*- is evident in the combination /-*GUr*/, which describes a feature of habitually doing an action: *säzgür* 'vigilant, sensitive (lit. one who always senses or feels something)' <*säz*- 'to sense, feel'; *jimiɣur* 'reticent, taciturn, uncommunicative (lit. one who always keeps quiet)' <*jimi*- 'to be quiet, be calm'.

We have already discussed the second component, the resultative /-°G/, of the suffix /-*GAG*/ earlier in 2.1.1. Although both components of the suffix are common to all Altaic languages, their combination is not so obvious in languages other than Turkic ones. Therefore, they are compared to their Mongolic and Tungusic equivalents in other occasions. The etymology of the CA passive-causative suffix

*-g(V)- ~ *-k(V)- will be discussed along with the causative suffix /-GUz-/ in 2.3.4 later.

2.1.3 /-GU/, /-GA/

The suffix /-GU/ = [-γu ~ -qu ~ -gü ~ -kü] in MUy. forms nouns which indicate an instrument: *ačgu* 'key' <*ač-* 'open', *ečitgu* 'yeast' <*ečit-* 'cause to ferment' (Tömür, 1987:93). The existence of nouns such as *süpürgä* 'broom' <*süpür-* 'sweep', *külkä* 'laughter' <*kül-* 'laugh' *tutqa* 'handle' <*tut-* 'hold, grasp' and *ilγa* 'hanger with a hook' <*il-* 'to hook' indicates that the suffix used to have its allomorph /-GA/ = [-γa ~ -qa ~ -gä ~ -kä], which contain low, unround vowels as in *a*-languages. Nouns formed with the suffix can be considered as lexicalized verbal noun (or gerund) forms in origin, since the main function of the suffix is to form verbal nouns in MUy. Thus I prefer to discuss the CA origin of the suffix in detail in 3.1.3 in the verbal noun section, where it perfectly matches the Mongolic nomen futuri suffix *-qu ~ -qui*, and Tungusic *-gi ~ -ki* (<**-gui ~ *-kui*), *-kū*, etc.

2.1.4 /-GUČI/

The suffix /-GUČI/ = [-γuči ~ -quči ~ -güči ~ -küči] forms nouns which indicate the doer or performer of an action in MUy.: *oquγuči* 'student' <*oqu-* 'read, study', *yazγuči* 'writer' <*yaz-* 'write' (Tömür, 1987:93-94).

The suffix *-γuči ~ -quči ~ -güči ~ -küči* is the combination of the verbal noun suffix *-GU* and the agent noun suffix *+čI*.

Not only the two elements are shared by all Altaic languages, their combination is also common to them. For instance, Mo. *yaburyči* 'goer, one who goes', etc. I will discuss the suffix in detail in 3.1.4.

2.1.5 */-GUč/*

The suffix */-GUč/* = *[-γuč ~ -quč ~ -güč ~ -küč]* forms nouns which indicate an instrument in MUy.: *öčürgüč* 'eraser' <*öčür-* 'erase', *sizγuč* 'ruler' <*siz-* 'draw (picture or line' (Tömür, 1987:94). Etymologically, a superficially possible source for the suffix has been noticed by Kononov (1980, §114). He mentions that as a result of the loss of the final vowel of the agent-forming suffix *-γuči ~ -quči ~ -güči ~ -küči*, the suffix *-γuč ~ -quč ~ -güč ~ -küč* emerged. But beware; although it is possible in some Turkic language to omit the final vowel *-i* of the agent noun suffix *-γuči ~ -quči ~ -güči ~ -küči*, we can not mix the result of such an omission with the deverbal noun suffix *-γuč ~ -quč ~ -güč ~ -küč* we are discussing here. It is true that both suffixes contain the verbal noun suffix *-γu ~ -qu ~ -gü ~ -kü* above. However, the second elements of the two seem to have different origins. As I mentioned in 2.1.4 above, the second element of *-γuči ~ -quči ~ -güči ~ -küči* is the CA agent noun suffix *+čI*. Thus it indicates a performer or doer, but not an instrument. But the deverbal noun suffix *-γuč ~ -quč ~ -güč ~ -küč* in MUy. does not indicate an agent, but an instrument which is usually small and has certain artistic value. In his work on verb-

formation in Mongolic and Turkic languages, Ramstedt (1912:§23) mentions that the second element of the same Turkic suffix is the deverbal noun suffix -*ča*. I reject this interpretation because when the first element of the suffix, -*γu* ~ -*qu* ~ -*gü* ~ -*kü*, is attached to a verbal stem, the stem is nominalized, thus it can not be followed by another deverbal suffix like -*ča*.[5] I accept, however, Ramstedt's (1952:217-218) another interpretation about the origin of the suffix. That is, the diminutive suffix +č in Turkic languages is also used in combination of -γu+č to express an instrument name: *basγuč* 'ladder' <*bas*- 'step on, step forward', *bïčγuč* 'knife' <*bïč*- 'to cut'. Both semantic and morphological evidence of the suffix show that the second element of the suffix is neither the agent suffix *+čI* nor the deverbal noun suffix -*ča*, but the diminutive suffix *+č (+ač)*. As we know, the CA diminutive **+č*, which might have followed or preceded by a vowel, is seen as *+ači ~ +či* in Mongolic and Tungusic languages and *+č (+š ~ +s) ~ +ač (+aš ~ +as)* in Turkic languages. It is used to express not only a smaller size of a person or an object, but also speakers' fondness of that person or object at the same time: Tng. (?Evk.) *hunaji* 'a girl, daughter' <*huniil* <*hunniil* (<*hun* <*fun* 'woman' + *nii* 'person'); Mo. *egeči* <**okeči* 'elder sister, ant' <*eke* 'mother'; Middle Tkc. *atač* 'a boy who plays the role of a father in a game' <*ata* 'father' (Examples quoted from Ramstedt, 1952:216). The use of the diminutive suffix in

Turkic languages is, of course, extended to objects which may have some artistic value or a smaller-than-usual size. This is evident from the MUy. examples above.

The suffix *-γuč ~ -quč ~ -güč ~ -küč* appears in relatively late documents. Tekin (1968) did not mention the existence of the suffix in Orkhon Turkic. Gabain (1974:71) gives examples of instrument names formed with the low-voweled allomorph of the suffix: *ačgač* 'key' <*ač-* 'to open', *qïsgač* 'pliers' <*qïs-* 'to squeeze'. Gabain does not mention the source of these examples. I believe they are not from EWT, but from Old Uyghur or later documents. Eckmann (1966:61-62) provides us with more instrument names formed with the suffix in Chagatay literature: *örgüč* 'comb for plaiting the mane of a horse' <*ör-* 'to plait', *sarayuč* 'coif' <*sar-* 'to wind or wrap around'. Interestingly, in some cases nouns formed with the suffix may be followed by another diminutive suffix *+aq*, despite the final *+č* of the preceding suffix is also a diminutive suffix: *yaryuč+aq* 'handmill' <*yar-* 'to grind coarsely' (ibid.). Of course, this kind of 'double usage' of two suffixes in the same meaning is not strange to Turkic languages. The causative suffixes in MUy. (see 2.3.3 and 2.3.4), for instance, is the result of such a 'double usage'.

The suffix is also alive in other modern Turkic languages, carrying the same function as in MUy.: Tat. *älgeč* 'hanger' <*äl-* 'to hang'; Kha. *xisxas* 'pliers' <*xis-* 'squeeze'; Kaz. *qïryïš* 'a small scraper' <*qïr-* 'to scrape'. There seems to be

some instrument names in Tng. languages formed in the same suffix: Ude. *igdiji digakči* 'loudspeaker', *ausikči* 'a washing room, cleaning room'; Evk. *ulumiikiit* 'squirrel hunting'; Lam. *ulmiikiič* 'a place where one hunts squirrel' (Benzing, 1955a:1012). But Benzing reconstructs the suffix as **-kuči*. Again, because the suffix does not indicate an agent, but an instrument, I compare it with Turkic */-GUč/*, not with */-GUčI/*. Although the two components of the Turkic suffix, the verbal noun suffix */-GU/ ~ /-GA/* and the diminutive suffix *+č*, find their equivalents in Mo. languages, their combination as a single suffix is not attested in them.

2.1.6 */-GUl°G/*

The suffix */-GUl°G/ = [-γuluq ~ -quluq ~ -gülük ~ -külük]* in MUy. forms nouns which indicate an event which necessarily and inevitably takes place: *tartguluq* 'inevitable suffering' <*tart-* 'pull, suffer', *körgülük* 'a fate one must face' *kör-* 'to see' (Tömür, 1987:97). It is obvious that the suffix is the combination of the verbal noun suffix *-γu ~ -qu ~ -gü ~ -kü* above and another very common nominal suffix *+luq ~ +lük (~ +liq ~ +lik)*. The latter, like the former, also has a CA origin. Although nominal suffixes are not the subject of this study, it is necessary to mention the existence of the suffixes in Tungusic and Mongolic languages which correspond to Turkic *+luq ~ +lük*. In Turkic languages the suffix is widely used to express possession, belongingness, location, nationality, existence, etc.: MUy. *atliq* 'one who has a

horse, <at 'horse', *Amerikiliq* 'American' <*Amerika* 'America', *qariγayliq* 'a land where pine trees grow' <*qariγay* 'pine tree'. Poppe (1955:203) confirms that the Written Mongolian comitative suffix **+luγa ~ **+lüge* corresponds to the Turkic suffix: (Poppe, 1955:203): *qaγanluγ--a* 'with the khaghan' <*qaγan* 'khaghan', *keükenlüge* 'with the child' <*keüken* 'child'. Especially the written form *+luγ--a* shows its closeness to the Turkic *+luq ~ lük*. In modern popular books or manuscripts the Mongolic comitative suffix appears as *+lo ~ +le* due to the loss of the intervocalic *γ ~ g*. More often, it is replaced by another comitative suffix, *+tai ~ +tei* (Poppe, 1964:76). Ramstedt (1952:230) points out that the Tungusic suffix *+ruk* functions as the Turkic *+luq ~ +lük*: Evk. *inmeruk* 'a needle box, a small needle container' <*inme* 'needle' (cf. MUy. *yiñnä* 'needle'), *sukeruk* 'an ax container' <*suke* 'ax'. The correspondence of the Tungusic *r* to the Mongolic and Turkic *l* is, of course, not an isolated case if we consider other examples of this type. Thus it is also plausible to trace back the CA origin of the Tungusic suffix.

2.1.7 */-G°n/*

The suffix */-G°n/ = [-γin ~ -qin ~ -gin ~ -kin ~ -γun ~ -qun ~ -gün ~ -kün]* forms nouns with the meaning of the result of an action in MUy.: *qačgun* 'escapee, deserter' <*qač-* 'flee', *yanγin* 'flaming' <*yan-* 'to burn, to flame', *kälkün* 'flood' <*käl-* 'come' (Tömür, 1987:95). The same suffix also forms adjectives out of verbs (see 2.2.4).

Both Kononov (1980, §112) and Gabain (1963a:186) argue that the combination of the CA passive-causative (or intensifying) suffix **-g(V)- ~ *-k(V)-* and the resultative **-n* resulted in its low vowel allomorph *-γan ~ -qan ~ -gän ~ -kän*, which function as perfective participial suffix in most modern Turkic languages (see 3.2.2), and its high vowel allomorphs *-γin ~ -qin ~ -gin ~ -kin ~ -γun ~ -qun ~ -gün ~ -kün*, which we are discussing here. But as I will argue in 3.2.2, the MUy. perfective participial suffix */-GAn/* historically has two different sources, */*-GAn$_1$/* and */*-GAn$_2$/*, and only the */*-GAn$_2$/* which lost its identity later to */*-GAn$_1$/* is related to the high vowel allomorphs. Ramstedt (1952:149-151) proposes the same etymology for the suffix, and compares the Tungusic *-kin* or *-pkin* with the Turkic *-γin ~ -qin*. I agree with the etymological analysis of the suffix by the above-mentioned scholars. Because as the MUy. examples above show, the suffix *-γin ~ -qin ~ -gin ~ -kin ~ -γun ~ -qun ~ -gün ~ -kün* indicates a result of an action. Thus, we can semantically determine that the second element of the suffix is actually has the same origin with the resultative *-°n* (see 2.1.13 and 2.2.10). Its first part, the CA passive-causative **-g(V)- ~ *-k(V)-* (see 2.3.4), is also understandable if we consider the implication of an intensifying action by the suffix. The combination of the two elements as one seems to have started from very early days. It is seen in EWT in the words such as *buzgun* 'storm' <*buz-* 'to ruin, destroy' (Tekin,

1968:113), *tirgin* 'pile, heap' <*tir-* 'to gather together' (Gabain, 1974:71). The same usage appears in OUy.: *tärgin sü* 'the gathered army' <*tär-* 'to gather' (*sü* 'army, troops'), *kälkin* 'flood' <*käl-* 'to come' Kashghari, v.1:576, 578). In Chagatay the suffix became more active: *čapγun* 'raid, incursion' <*čap-* 'to gallop, make incursions', *tutgun* 'captive' <*tut-* 'to capture', *tašγun* 'brimful, overflowing' <*taš-* 'to overflow' (Eckmann, 1966:62).

The existence of the combination of CA passive-causative **-g(V)-* ~ **-k(V)-* and the resultative **-n* in Mongolic languages is not clear to me. Ramstedt (1952:150) believes that the suffix *-kin* or *-pkin* in Tungusic languages is the equivalence of the Turkic suffix above: Ul. and Evk. (??) *igin* ~ *ikin* 'new', cf. Ma. *iče* 'new' <*ii-* 'enter, start to'; Na. *holopkin* 'dirty' <*holo-* 'become dirty'. Notice that in Na. the suffix *-pkin* may appear as *-kpin* in many cases due to the metathesis. The phonological and semantic correspondence of the Tungusic examples to the Turkic ones above convince me to believe that the Tungusic suffix *-kin* (or *-pkin*) has the same CA origin, i.e., **-g(V)-* ~ **-k(V)-* and **-n*.

2.1.8 */-°m/, /-Am/*

2.1.8.0 The suffix */-°m/, /-Am/* = *[-m ~ -im ~ -um ~ -üm, -am ~ -äm]* in MUy. forms nouns designating a result of an action: *kirim* 'income' <*kir-*'enter', *bilim* 'knowledge' <*bil-* 'know', *saylam* 'election' <*sayla-* 'elect' (Tömür, 1987:141). Some nouns formed with the suffix function specifically as

measuring words: *qetim* 'time (frequency)' <*qat-* 'add', *tutam* 'handful' <*tut-* 'hold, grasp'. */-°m/* is one of the very archaic suffixes in MUy., which developed its low-vowel allomorph */-Am/* through the contact with other Turkic languages, especially the *a*-languages. The suffix used to be very active by itself or in terms of other combinations in MUy. as well as other Turkic languages.

2.1.8.1 **Turkic**: The existence of the suffix */-°m/* in EWT as well as in modern Turkic languages enables us to postulate a proto-Turkic suffix, **-m*. In EWT */-°m/* was a productive suffix: *kädim* 'clothes' <*käd-* 'to wear, put on', *istäm* 'a wish' <*istä-* 'look for' (Gabain, 1974:72). In OUy. the suffix formed nouns designating a result of an action or an instrument, and, more often, measuring words in terms of an action: *yiγim* 'sum, pile' <*yiγ-* 'gather, collect', *yażïm* 'cotton-padded mattress' <*yaż-* 'spread, unfold', *yarïm* 'half' <*yar-* 'split, cleave', *yuγrum* 'kneading (as a measuring word) <*yuγur-* 'knead': *bir yuγrum un* 'flour enough for kneading dough once', *yügrüm* 'running (as a measuring word)' <*yügür-* 'run': *bir yügrüm yär* 'a place in a running distance' (Kashghari, v. III.:23, 62). Another usage of the suffix in OUy. was that when it was followed by the DNV suffix *+si-* and the reflexive *-°n-* it indicated the meaning of 'pretend to do..., seem to do...': *barimsin-* 'seem to be going' <*bar-* 'go', *kälimsin-* 'seem to be coming' <*käl-* 'come' (ibid. v. II.:376). The suffix continued to form measuring words and

substantives in Chagatay literature: *bir oq atïmï* 'a bowshot' <*at-* 'throw, shoot an arrow', *bolum* 'firmness, stability' <*bol-* 'be, become', *egrim* 'whirlpool' <*egir-* 'turn over and over' (Eckmann, 1966:63).

The function of the suffix in other Turkic languages is very much the same: Bash. *belem* 'knowledge' <*bel-* 'know', *aγïm* 'flow, current' <*aγ-* 'flow'; Kha. *čarïm* 'half' <*čar-* 'split, cleave', *közidim* 'example' <*közid-* 'look at, observe'; Kir. *čïgïm* 'expenses, cost' <*čïg-* 'emerge, go out' (Tenišev, 1981).

The proto-Turkic suffix **-m* is also the main element in many other compound suffixes which are still active in MUy. or some other Turkic languages: The DVN and DVA suffix */-mA/* (see 2.1.9, 2.2.5), the DVN and VN suffix */-mAG/* (see 2.1.10, 3.1.2), the DVN and indirect statement suffix */-m°š/* (see 2.1.11, 4.6), the DVN suffix */-mči/* (see 2.1.12), and the negation suffixes */-mA-/* (see 2.3.8), */-mAs/* (see 3.2.3), and */-mAy/* (see 3.3.8), all contain the suffix **-m*.

According to the evidence from Mongolic and Tungusic languages, we can also postulate an **-m* as the CA suffix, which is as productive in these languages as in Turkic ones.

2.1.8.2 **Mongolic**: The function of the **-m* in Mongolic languages is the same as in Turkic languages, e.g., it forms nouns out of verbs, designating a result of an action. A connecting vowel appears between a consonantal verb stem and the suffix: Mo. *toqum* 'saddle' <*toqu-* 'to saddle'; *naγadum*

'game, play' <*naγad-* 'to play, to enjoy or amuse oneself', Mgr. *na:däm* <*na:dä-* (id.); Dag. *xinä:däm* 'laughter' <*xinä:d-* 'laugh'; Mo. *barim* 'grip, width of fist' <*bari-* 'grasp, hold, take', EYu. *baräm* 'handle' <*barä-* 'take, hold'; Mo. *jirum* 'line of action, order, system, norm' <*jiru-* 'to draw (of a line or picture), scratch, strike (of a match)'; *aγudam* 'wide, vast, spacious' <*aγud-* 'spread, become vast' (Lessing, 1960).

In Ancient Mongolian, pre-classical Written Mongolian, and Middle Mongolian the suffix served as a predicative marker of a complete sentence. As a remnant of such a function, it still appears in Monguor sentences like *či mudiäm* 'you know'.

It should also be mentioned that in Mongolian the successive converbial form *geküle* <*ge-* 'speak, talk' consists a successive structure by following a verb ending in the *-m:* *üjem geküle* 'as soon as he saw' (lit: as soon as he said to himself 'I look').

Like in Turkic languages, the Mongolic *-m* can be seen in many combinations:

a. *-mta ~ -mte*: forms nouns designating the result of an action: WM. *bogumta* 'fortification, barricade' <*bogu-* 'to block'; *barimta* 'matter of fact' <*bari-* 'sieze, keep'. (The *+ta ~ +te* ending here is possibly the comitative suffix).

b. *-mji*: forms nouns designating abstract ideas: *seremji* 'vigilance' <*sere-*'be awake' (cf. MUy. *säz-* 'to feel', *säzgür* 'vigilant'); *ilgamji* 'difference' <*ilga-* 'distinguish' (cf.

MUy. *ilγa-* (id.)). According to Ramstedt (1952:109), the ending *-ji* is a kind of noun with the meaning of 'matter, fact, situation', which developed from the ancient noun **di*.

c. *-msiγ(tai) ~ -msig(tei)*: forms nouns and adjectives designating ability to evoke someone's action: *gayiqamsiγ(tai)* 'wonderful, amazing' <*gayiqa-* 'wonder, amuse'; *ayumsiγ(tai)* 'dreadful, horrible' <*ayu-* 'be frightened'. Here the ending can be analyzed as *-m + +si-* (CA denominal verb suffix) + *-g* (resultative ending, see 2.1.1).

d. *-msar ~ -mser*: with the word *ügei* 'not, is ~ are not' forms adjectives designating qualities: *sanamsar ügei* 'thoughtless' <*sana-* 'think'; *uqamsar ügei* 'unintelligent' <*uqa-* 'understand' (Poppe, 1964:47-49). The *+sar ~ +ser* ending seems to have the same origin as the Turkic privative suffix *+siz*. If this is the case, the construction with the word *ügei* above represents a double negation.

e. *-nam*: In WM the combination *-nam* used to function as an imperfect present tense suffix, which consisted of **-n* (a verbal noun, presently *converbum modale* suffix) and the extinct copula **a-* 'to be' followed by **-m*: *yabunam* <**yabun am* 'is going'. The remnant of the combination can be found in Mogol: *irånåmda* <*iren am bida* 'we come', *irånanto* <*iren am ta* 'you come' (Poppe, 1955:261).

f. *-mui ~ -mu*: The suffix in WM functions as an imperfect present tense suffix: *yabumui* 'someone goes ~ is going' <*yabu-* 'go'. According to Poppe (1955:262), the ending vowel

-ui after the **-m* is probably due to the analogy with the predicative forms such as *odui* 'he goes away' <*od-* 'to go', *bui* 'is' <*bi-* 'to be, exist', etc.

Besides, here are some other combinations which will be dealt with in next sections along with the Turkic ones: *-ma ~ -me*, *-magai ~ -megei ~ -mgai ~ -mkei* (see 2.1.9); *-mal ~ -mel* (see 2.1.11); *-mačä*, *-murči* (see 2.1.12); *-mag ~ -meg* (see 2.1.10), *-mar ~ -mer* (see 2.2.5).

2.1.8.3 **Tungusic**: In Tungusic languages the suffix *-m* does not appear in word-final positions very often, because it changed into *-n* in most cases in early times (Ramstedt, 1952:110-111). However, *-m* remains in some words and in many combinations as a deverbal substantive ending: *-m* indicates a wish: Lam. *jem* (? <*jeme*) 'hunger' <*jeb-* 'to eat'; *-(e)met*: indicates a result of an action just happened: *tugemet* 'a newly born calf' <*tug-* 'be born (cf. MUy. *tuγ-* 'give birth'). The following combinations will be discussed in next sections: *-ma, -me ~ -mi (-mai ~-mei)*, *-meliyan* (see 2.1.9, 2.2.5), *-mgi ~ -mji* (see 2.1.12), *-mak ~ -mek* (see 2.1.10).

2.1.9 /-mA/

2.1.9.0 The suffix */-mA/ = [-ma ~ -mä]* in MUy. forms nouns which indicate a result or an instrument of an action: *qurulma* 'structure' <*qurul-* 'be constructed, be built', *äslimä* 'reminiscences' <*äslä-* 'recall, recollect', *basma* 'printing, press' <*bas-* 'to press, print' (Tömür, 1987:94).

It is obvious that the suffix contains the CA **-m*. But the

etymology of the ending vowel of the suffix is not clear. Ramstedt (1952:105) believes that the suffix is the combination of *-m* and a sort of adjective ending *+a* which is the equivalent of Mo. *+ai ~ +a* (cf. *manu* 'our' plus *+ai* > *manai* 'ours'). However, Baskakov rejects such an interpretation. According to him, *-ma ~ -mä* is the imperfect pronunciation of *-maq ~ -mäk* (see the endnote 106 to the Russian version of Ramstedt's work above). There is, however, a slight semantic difference between *-maq ~ -mäk* and *-ma ~ -mä* in Turkic languages, i. e., the former denotes an action itself as a noun, and the latter a result of an action or a noun related to an action. If this semantic difference is primitive, then it is safe to treat them as separate suffixes in origin. The corresponding suffixes in Mongolic languages are *-ma ~ -me;* in Tungusic languages are *-me, -mi*. Due to the difficulty of identifying the ending vowels after **-m*, I postulate **-mV* as the CA suffix. Let us look at the evidence from each language branch.

2.1.9.1 **Turkic**: In EWT. *-ma ~ -mä* appears rarely as a DVN suffix. Both Gabain (1974:72) and Tekin (1968:114) give a single example: *yälmä* 'vanguard, advanced columns' <*yäl-* 'to ride fast, trot'. However, it appears frequently as a DVA suffix by itself or in the combination *-°γma ~ -°γmä* (see 2.2.5). The function of the suffix in Chagatay literature is the same as in EWT. This indicates that *-ma ~ -mä* is a DVA suffix in origin, and that nouns formed with the suffix are a

result of shift of function or meaning. A deverbal adjective formed with the suffix indicates a character resulted from an action. When the adjective is used as a noun, it carries the same meaning. Here are some more examples: Tat. *bülmä* 'room' <*bül-* 'divide, split', *yarma* 'grain, seed' <*yar-* 'grind, cleave into pieces'; Kaz. *jarma* (id.), *kespe* 'leather belt' <*kes-* 'cut'; Nog. *košpe* 'nomadic' <*koš-* 'move, immigrate', *yazba* 'manuscript' <*yaz-* 'write'. (In both Kazak and Nogai *-ma ~ -me* has other allomorphs such as *-ba ~ -be ~ -pa ~ -pe*.) Kir. *sayma* 'embroidery' <*say-* 'embroider, pierce'. (In Kirgiz the suffix has the allomorphs *-ma ~ -me ~ -mo ~ -mö*.)

2.1.9.2 **Mongolic**: The CA suffix **-mV* is seen in Mongolic languages as *-ma ~ -me*. The suffix forms adjectives as well as nouns out of verbs. In WM the suffix forms substantives designating fitness or possibility of an action: *bayima* 'a place where there can be something' <*bayi-* 'to be', *gayiqama* 'wonderful, astonishing' <*gayiqa-* 'be astonished'. On the basis of *-ma ~ -me*, the suffix *-magai ~ -megei* or *-mqai ~ -mkei* is developed. It forms substantives designating inclination or ability to act: *surmaqai* 'gifted' <*sur-* 'to learn', *martamqai* 'oblivious' <*marta-* 'forget'. Apparently, the suffix is the combination of *-ma ~ -me* and *±gai ~ ±gei ~ ±qai ~ ±kei*. The identity of the latter is not clear. It seems to be possible to compare it with the Turkic suffix */-GAy/* (see 4.5) which used to indicate a present-future action.

2.1.9.3 **Tungusic**: Corresponding to the CA suffix **-mV*, Tungusic languages manifest various forms as an imperfect converbial suffix: Tng. **-mi (*-mai)*, pl. **-mawuri* = Ma. *-me*; Na. *-mi*, pl. *-maari ~ -meeri*, Ulc. *-mi*, pl. *-mari ~ -märi*; Orc. *-mi*, pl. *-may*; Ude. *-mi*, pl. *-mei*; Sol. *-mi*; Lam. *-mi*. An imperfect converb modifies a main verb in time or manner in the sentence with the meaning of 'when doing...', 'doing...', 'by doing...': Ma. *ara<u>me</u>* 'while doing, doing' <*ara-* 'to do', *gene<u>me</u>* 'going, while going' <*gene-* 'to go'; Na. *pulsi<u>mi</u> mookamba baahani* 'He found a stick while going' (?**pulsi-n+wi*); Ude. *mahi bi<u>mi</u> atahi deu* 'Being strong, you will not be tired' (Benzing, 1955a:1090-1091). In Ma. a small number of deverbal nouns ending in *-ma ~ -me* show a similarity to what we have seen in Turkic and Mongolic languages: *sači<u>ma</u>* 'kind of cut pastry' <*sači-* 'to chop, cut', *uji<u>ma</u>* 'livestock' <*uji-* 'to raise, nourish', *ul<u>me</u>* 'needle' <*ule-* 'sew a straight seam', *je<u>me</u>ngge* 'food' <*je-* 'eat' (cf. MUy. *yimäk* 'food' <*yä-* 'eat'), *waji<u>ma</u>* 'end' <*waji-* 'to come to an end', *gočima* 'drawer' <*goči-* 'to pull', *gabta<u>ma</u>* 'nettle, brier' <*gabta-* 'to shoot an arrow' (Norman, 1978). Some examples found in Evk. show that the suffix forms adjectives out of verbs: *girku<u>ma</u>* 'walking, on foot' <*girku-* 'to walk', *doolčaat<u>me</u>* 'audible' <*doolčaat-* 'listen', *cula<u>ma</u>* 'green' <*čula-* 'turn green' (Vasilevič, 1958:769).

Another combination which should mentioned here is the so-called diminutive suffix *-meliyan*: *inje<u>meliyan</u>* 'laughing a

little' <*inje-* 'to laugh' (Clark, 1979-80:35). The suffix contains *-me* and *+liyan* of which the latter most likely carries a diminutive meaning.

2.1.10 /-mAG/

2.1.10.0 The suffix */-mAG/ = [-maq ~ -mäk]* in MUy. forms nouns which indicate the object, result or instrument of an action: *ilmäk* 'hook' <*il-* 'to hook', *čaqmaq* 'lightening' <*čaq-* 'strike (of lightening)', *tepišmaq* 'riddle' <*tepiš-* 'guess, find (Rec.)' (Tömür, 1987:94). Nouns formed with the suffix are the lexicalized forms of the corresponding VNs (see 3.1.2).

2.1.10.1 As a verbal noun or an infinitive verbal suffix , *-maq ~ -mäk* appears in EWT, in Chagatay literature as well as in modern Turkic languages: EWT *armaq* 'deceiving, deceit (as a noun)', 'action of deceiving (as a verbal noun)' <*ar-* 'to deceive' (cf. WM *qagurmaq* 'fraud' <*qagur-* 'to deceive'), *armaqči* 'deceiver' <*armaq* + *+či* (agent suffix). I will discuss the existence of the suffix in other Turkic languages in the verbal noun section (see 3.1.2). The suffix is the combination of the two CA verbal suffixes in origin: **-m* + **-q ~ *-k*, which we have discussed above (see 2.1.8 and 2.1.1). As Kashghari (v.I:34-35) points out, in OUy. both *-maq ~ -mäk* and *-°γ ~ -°q (~ -°g ~ -°k)* function as infinitive verbal suffixes. The difference is that the former is considered as original, and the latter as secondary: *barmaq ~ barïγ* 'to go, going', *kälmäk ~ kälik* 'to go, going'. This indicates the close semantic relationship of *-°γ ~ -°q (~ -°g*

~ -°*k*) with -*maq* ~ -*mäk*. In MUy., however, only -*maq* ~ -*mäk* is used as the infinitive marker.

2.1.10.2 **Mongolic**: The existence of the suffix -*maγ* ~ -*meg* in Mongolic languages and its similar function as in Turkic languages convince me that it has the same CA origin: *-*m* + *-*q* ~ *-*k*. The suffix in WM forms substantives designating a result of an action: *jorimaγ* 'bravery' <*jori*- 'make a decision', *qagurmaγ* 'fraud' <*qagur*- 'to deceive'. Mo. *čidamaγ* ~ *čidamaγai* 'capable, strong, skillful' <*čida*- 'be able, be capable', *yadamaγ* 'sickly, poor, feeble' <*yada*- 'be unable, be in need, exhaust'; *čidamaγ yadamaγ+iyer* (+*iyer*: Inst.) 'barely, hardly'. Of course, unlike in Turkic languages, the suffix does not function as an infinitive marker in Mongolic languages. This accounts for the unparallel functional developments of the suffix in the two language branches.

2.1.10.3 **Tungusic**: Ramstedt (1952:111-112) mentions two sets of suffixes, -*mak* ~ -*mek* and -*makta* ~ -*mekte*, from the Tungusic languages, which phonetically seem to be comparable to the Turkic -*maq* ~ -*mäk* and WM -*maγ* ~ -*meg*, but semantically deviate from them. The Evk. -*mak* ~ -*mek* functions as a DVA suffix: *ñgeerimek* 'bright' <*ñgeeri*- 'to shine' (Vasilevič, 1958:770). More frequently, a DVA formed by the suffix appears with the auxiliary verb *o*- 'be, become', denoting a sudden and unexpected action: *gunmek om* 'I spoke out suddenly ~ I blurted out...'; *melmak om* 'I suddenly woke up'. It is likely that the suffix is the combination of two

suffixes, i. e., *-m* and *±ak ~ ±ek*, or more likely, as Ramstedt pointed out, *-ma ~ -me* and *±(a)k*. In either cases the meaning of 'suddenness, unexpectedness' is not traceable in Turkic and Mongolic languages. Of course, the same structure with *bol-* 'be, become' in Uyghur may express a change in action, but not a sudden change: *barmaq bol-* 'be to go, decide to go', *kälmäk bol-* 'be to come, decide to come'. Thus, I believe that at least one of the suffixes in the combination is not from the same origin as the Turkic and Mongolic ones are. The Tungusic *-makta ~ -mekte* indicates the meaning of 'recently, newly, just', which is functionally hard to be treated in the same lines with the similar forms in Turkic and Mongolic languages. But I do believe that the combination contains the CA suffix **-mV* we have discussed in 2.1.9 above.

2.1.11 */-m°š/*

2.1.11.0 The suffix */-m°š/ = [-miš ~ -muš ~ -müš]* in MUy. forms nouns which indicate the result of an action: *ötmüš* 'the past, old days' <*öt-* 'to pass', *turmuš* 'life' <*tur-* 'stand, stay, live' (Tömür, 1987:96). The */-m°š/* is one of the archaic suffixes in MUy., which used to be a past participial ending in EWT with various meanings depending on the context. The nouns formed with the suffix can be considered as lexicalized forms of the corresponding participles. As another participle ending, */-GAn/* (see 3.2.2), gradually takes over its main function, the suffix remained as an indirect statement suffix in MUy. However,

this development is not common to all Turkic languages. The suffix *-miš ~ -mıš ~ -muš ~ -müš* in Turkish, for instance, is still a regular past participle ending.

2.1.11.1 **Turkic**: In EWT the suffix *-mïš ~ -miš (-mïs ~ -mis ~ -muš ~ -müš (-maš ~ -mäš)* used to function as follows:

a. as past tense suffix:

(3) *qañ +ïm qaγan yiti yegirmi är +in tašïq -miš*
FATHER MY KAGAN SEVEN TWENTY MAN INST GO OUT PST
'My father, the kagan, marched off with seventeen men.'

b. as a past participle ending, it functions as attributive

(4) as well as predicative (5):

(4) *el +sir +ä -mis qaγan+sïr +a -mis bodun*
STATE PRIV DNV PPL KAGAN PRIV DNV PST PEOPLE
'the people who have become stateless and rulerless'

(5) *böri täg är -miš*
WOLF LIKE BE PST
'They were like wolves.' (Tekin, 1968)

c. as a deverbal substantive suffix: *ögmiš* 'praise' <*ög-* 'to praise'.

Besides, the suffix also used to express an indefinite time, habitual action, and unreality, etc., depending on the context (Gabain, 1974:210).

The same usage continued in OUy., i. e., the suffix was used as a past participle and past tense marker: *qazmiš (arïq)* '(the ditch which someone) dug' <*qaz-* 'to dig'; *ol kälmiš* 'Evidently, he came.'

In OUy., as Kashghari (v.II:76-77) points out, the past tense suffix *-di ~ -ti* can be substituted by *-mïš ~ -miš*, and the difference is that the former indicates that the speaker

witnessed what happened, and the latter indicates that the speaker was not at scene when the event took place. This function of the suffix in OUy. remained as same in MUy. In Chagatay literature the suffix is used as an indirect statement marker more frequently than as past participle ending: *qalmišam* '(I gather that) I (have) remained' <*qal-* 'be left, remain', *asmïšañ* '(I gather that) you have hung' <*as-* 'to hang'. Another trend of the usage of the suffix in Chagatay literature is that it is followed by the copular verbs *bol- ~ ol-* 'be, become' and *er-* 'be' or preceded by a *-gan ~ -gän* participle to express indirect past or double past: *ötmiš edi* 'passed, have passed'; *körmiš olsañiz* 'if you have seen'; *körmägän ermiš* '(apparently nobody) has ever seen'. The form *imiš < ermiš < ärmiš* is active in MUy.

As I stated above, the functional development of the suffix *-mïš ~ -miš ~ -muš ~ -müš* in Turkic languages is not parallel. It is the regular past participle suffix in Turkmen languages. Az. *yazïlmïš* 'the one which is written' <*yazïl-* 'be written'; Trk. *bilmiš* 'one who has known' <*bil-* 'know'. In Yakut the corresponding suffix is *-bït ~ pït ~ -mït: ahaabït* 'the one which is eaten' <*ahaa-* 'eat'. In Bashkir the suffix forms nouns out of verbs: *tormoš* 'life' <tor- 'stay, live' (Tenišev, 1981).

Etymologically, the suffix is the combination of the two CA verbal noun endings, **-m* and **-l_2*, of which the latter developed into *-š* (see 2.1.5) in Turkic languages and remained

as *-l* in Mongolic and Tungusic languages as a general sound correspondence rule. The existence of the corresponding suffix *-mal ~ -mel* in Mongolic languages and its functional similarity to the Turkic *-mïš ~ -miš ~ -muš ~ -müš* proves that our etymological interpretation is well-supported.

2.1.11.2 **Mongolic**: In Mongolic languages *-mal ~ -mel* is a productive suffix which forms substantives out of verbs designating a result of an action: WM. *jirumal* 'painted, colored' <*jiru-* 'painted', *bicimel* 'written' <*bici-* 'write'; Mo. *tatamal* 'pulled, prolonged' <*tata-* 'pull' (cf. MUy. *tat-* 'pull'); Mgr. *gurämäl* 'woven' <*gurä-* 'weave'; EYu. *kesgemel* 'melted' <*kesge-* 'melt'; Dag. *šadmal* 'capable, able' <*šad-* 'be able, know'. The function of the Mongolic suffix is strikingly similar to the Turkic past participial suffix *-miš ~ -miš ~ -muš ~ -müš (-maš ~ -mäš)*: Mo. *kerčimel miq-a* 'the meat which is cut or sliced = cut or sliced meat' <*kerči-* 'cut, mince, slice' (*miq-a* 'meat'); *qadamal üge* 'interlinear or marginal notes' <*qada-* 'drive in, knock in, to nail' (*üge(n)* 'word, speech, utterance'). (cf. EWT *barmïš bodun* 'people who went', *qaγansiramïš bodun* 'people who lost their kagan = kaganless or rulerless people').

2.1.11.3 **Tungusic**: Although the CA **-m* and **-l_2* appear separately and in many other combinations, the combination of the two does not seem to have developed in Tungusic languages. We have discussed the **-m* in Tungusic languages above. For the occurrence of **-l_2* in the languages I refer the reader to

the sections 2.1.15 and 3.1.1.

2.1.12 /-°*mčI*/

2.1.12.0 The less productive suffix /-°*mčI*/ = *[-mči]* in MUy. forms nouns which indicate an agent who habitually perform an action: *tiläm<u>čI</u>* 'beggar' <*tilä-* 'beg, wish', *bašlam<u>čI</u>* 'leader, guide' <*bašla-* 'lead, guide', *doram<u>čI</u>* 'imitator' <*dora-* 'imitate' (Tömür, 1987:96-97).

2.1.12.1 It is not difficult to find out that the suffix *-mči* is the combination of the CA *-m we have been discussing so far and the agent suffix *+čI. This combination is relatively new. It usually appears after a verbal stem ending in a vowel, thus we can find only a few examples which manifest its allomorphs with an initial vowel. Sometimes it is hard to expect a newer combination to be seen in each language branch. But we do have some similar examples in Mongolic and Tungusic languages.

2.1.12.2 In Mongolian the suffix *-murči ~ -mürči* forms substantives out of verbs designating a doer or agent: *kelemürči* 'translator, interpreter, talkative (Chahar)' <*kele-* 'speak, talk'; EYu. *-mačä: šäkulm<u>ačä</u>* 'idle, <*šäkul-* '? be idle'. Of course, the suffixes in question in these examples are not based on the single *-m* but its further expansion *-mar ~ -mer* (see 2.2.5) and *-ma* (see 2.1.9).

2.1.12.3 There are several forms in Tungusic languages which can be discussed along with the MUy. *-mči*. Tng. **-mgi* (*Nomen auctoris*) = Ma. *-mji ~ -msi*, Na. *-mji*, Ude. *-mni*, Evk. *-mnii*,

Lam. *-mñă*, Tng. **bälä(či)mqi* 'helper, aide', Na. *belečimji*, Ude. *belemni*, Evk. *belemnïï*, Lam. *belemñe* (id.); Na. *alosimji* 'teacher, instructor' <*alosi-* 'teach, instruct' (<Tng. **alaguusɪ-* (id.)), Evk. *alaguumnii* 'teacher', Ma. *tačimsi* 'teacher' (<**tatɪmqɪ*'), Ude. *tatumni* (id.), Evk. *tatɪgaamnii* (id.) <*tatɪgaa-* 'teach, cause to learn'; Tng. **ätägümqi* 'watchman, guard', Na. *etumji* (id.), Ude. *eteusimji* (id.), Lam. *etumñe* (id.) (Benzing, 1955a:1012-1013). Apparently, all these suffixes contain the *-m*, but it is not likely that the further endings added to it are related to the agent suffix *+či*. The suffix *+nii*, according to Ramstedt (1952:111), is the contracted form of Nanai *nai* 'person, people'. The other ending, *+gi ~ +ji ~ +si*, phonetically seems to be comparable to *+či*. But the existence of *+či* itself in Manchu in words such as *aduči* 'herder' and *moriči* 'the person who watches horses at official establishments' makes such an comparison questionable.

2.1.13 */-°n/*

2.1.13.0 The suffix */-°n/* = *[-n ~ -in ~ -un ~ -ün]* in MUy. forms nouns with the meaning of the result of an action: *yiγin* 'meeting, gathering' <*yiγ-* 'gather, collect', *tügün* 'knot' <*tüg-* 'to knot' (Tömür, 1987:95).

The etymology of the suffix has already been solved. Altaists generally agree that there was a very productive verbal noun suffix in CA, **-n*, which used to indicate a result of an action. Thus it is also known as the CA resultative

suffix (Kononov, 1980:§112). The function of the suffix was extended during the later developments of Altaic languages, so the suffix started to be seen as converbial and participial endings by itself or in combinations, which indicate a past action or a continuing action. It is preserved in all modern Altaic languages without a considerable phonological and functional change. Of course, the suffix appears in many combinations where its phonological shape and function are more or less influenced by the context.

2.1.13.1 **Turkic**: In EWT the suffix *-n ~ -ïn ~ -in ~ -un ~ -ün* used to form substantives out of verbs designating a result of an action: *bul<u>un</u>* 'captive' <**bul-* 'get, obtain, find', *käl<u>in</u>* 'daughter-in-law' <*käl-* 'to come', *sa<u>n</u>* 'number' <**saa-* 'count, think', *tütü<u>n</u>* 'smoke' <*tüt-* 'to smoke'. Chag. *ek<u>in</u>* 'sowing, cultivation, crops' <*ek-* 'sow', *kišä<u>n</u>* 'hobble, shackle, fetter' <*kišä-* 'to hobble', *qošu<u>n</u>* 'troops, army' <*qoš-* 'add, assemble, put together'. Deverbal nouns and adjectives formed with the suffix are common in modern Turkic languages. In MUy. **-n* is still an active DVN and DVA (see 2.2.10) suffix by itself or in the combination */-G°n/* (see 2.1.7, 2.2.4).

Another function of the suffix *-n* in EWT is to form a converb which is similar to a converb formed in *-°p* in MUy. In this usage the semi-vowel *y* may appear between the verb stem and the suffix:

(6) *at +i kü +si yoq bol-ma -zun ti -y -<u>in</u>*
NAME OF FAME OF NON-EXIST BE NEG IMP SAY CONV
'in order to save the name and fame of (the Turkic people)' (lit: saying 'the name and fame of (the Turkic

people) should not be non-exist')

(7) *ud +či ymä iy -in kir -di*
COW DNN ALSO FOLLOW CONV ENTER PST
'Then the cattle herder also came in.'

The negative form of this converbial usage is *-mayin* (with the negation suffix *-ma- ~ -mä-* (see Gabain, 1974:124): *bulmayin* 'having not found' <*bul-* 'obtain, find'.

As a result of such converbial usage, several postpositions came into being in EWT: *adïn* 'except, other (than), besides' <*ad-* 'to except, separate'; *bilän* 'with, together' <*birlä-* 'be one, be together' <*bir* 'one' + *+lä-* (DNV suffix); *iyin* 'following, afterwards' <*iy-* 'follow'; *kin* 'after, afterwards' <**ki-* 'be at the end'; *öñin* 'different' <*öñ-* 'be different, differ from'; *üčün* 'for, for the sake of, in order to, because' <**üčü-* <**uču-* '? to aim at, to target' <*uč* 'a target', etc. (Gabain, 1974140-142). Among them *bilän, kin > kiyin*, and *üčün* are still active in MUy. with the same meaning.

While the converbial function of the EWT *-n* is gradually taken over by other converbial suffixes in some Turkic languages including MUy., it still remains in others as the same: In Yak. the suffix *-n ~ -an ~ -än ~ -on ~ -ön* forms a converb which modifies the action in the main clause in manner or time: *ülälän* 'having worked, after having worked' <*üläl-* 'to work', *oloron* 'having sat down, after having sat' <*olor-* 'sit down'. In Trkm. it appears with the negative suffix *-ma- ~ -me-* as the negative converbial ending: *yazman* 'having not

written' <*yaz-* 'write', *bil<u>men</u>* 'having not known' <*bil-* 'know'. In Tuvinian the negative converbial suffix is closer to the EWT *-mayin*, but it developed more allomorphs as a general consonant harmony rule. The suffix is: *-mayn ~ -meyn ~ -payn ~ -peyn ~ -bayn ~ -beyn ~ -wayn ~ -weyn:* *bas<u>payn</u>* 'having not squeezed out' <*bas-* 'press, squeeze', *bar<u>bayn</u>* 'having not left' <*bar-* 'go, leave'. In WYu. *-n* also appears with the negative converbial suffix *-miin ~ -meen:* *kez<u>meen</u>* 'having not dressed up' <*kez-* 'wear, put on, dress up', *äš<u>miin</u>* 'having not eaten' <*äš-* 'eat'. The Chuvash converbial suffix *-san ~ -sen* also seems to carry the *-n:* *wula<u>san</u>* 'having read, after having read' <*wula-* 'read', *ešle<u>sen</u>* 'having worked, after having worked' <*ešle-* 'to work' (Tenišev, 1981).

In MUy. **-n* does not function as a grammatical suffix by itself, but it appears in the OUy. compound participial suffix */*-GAn$_2$/* (see 3.2.2).

2.1.13.2 **Mongolic**: The CA **-n* is also seen in Mongolic languages as derivational as well as grammatical suffix. As a derivational suffix, it forms substantives out of verbs designating a result of an action: Mo. *kürge<u>n</u>* 'son-in-law, husband of one's daughter or sister' <*kürge-* 'cause to arrive, send'; Mgr. *kurge<u>n</u>* <*kurge-* (id.); Mo. *qata<u>n</u>* 'hard, strong' <*qata-* 'be dry, be hard; Dag. *kata<u>n</u>* <*kat-* (id.); EYu. *naadä<u>n</u>* 'game, play' <*naad-* 'to play'; Dag. *dasa<u>n</u>* 'politics' <*dasa-* 'govern'; Mgr. *šiñge<u>n</u>* 'thin' <*siñge-* 'be absorbed, saturated'; Mo. *kerki<u>n</u>* 'how, in what way' <*ker* 'how' + *ki-*

'to do'; *qarin* 'but, on the contrary' <*qari-* 'return, go back' (Chen, 1985).

More importantly, the **-n* appears as a grammatical suffix as early as in Pre-classical Mongolian as well as in modern Mongolic languages. In terms of grammatical function, the suffix forms so-called converbum modale (modal converb) and imperfect present tense II.

a. As the suffix of converbum modale **-n* occurs in Pre-cl. Mo., Cl. Mo., MM, Mgr, Urd, and Kalm, Dag. In Khal., San., and Bur. the suffix is also seen as *-ñ*, a velarized form. As a plural counterpart, *-d* appears in indicative forms in Pre-cl. Mo. and MM. The term converbum modale (modal converb) is accepted here following the convention established by Western Mongolists. Mongolists in China, however, use the term connective converb or successive converb instead. A modal converb modifies an action in the main clause in manner:

(8) Dag. *bos -un sawu-n kii-jabäi*
STAND CONV SIT CONV DO PRES PROG
'(He) is now standing up, now sitting down.'
(Engkebatu, 1988:363)

In Santa and Monguor the converb is used in duplicated forms:

(9) San. *äči-ku +dä śiniä-n śiniä-n äči-nä*
GO VN LOC LAUGH CONV LAUGH CONV GO IMPER PRES
'On the way of going he laughed and laughed.'
(Böke, 1986:169)

(10) Mgr. *te kele -n kele -n śinee -na*
HE TALK CONV TALK CONV LAUGH IMPER PRES
'He talks while smiling.' (Čenggeltei, 1991:230)

In Baoan the suffix appears in the form of *-añ ~ -yañ ~ -ya*:

(11) *laa -yañ xaraa -jä*
CRY CONV CURSE PROG

'crying while cursing' (Chen, 1987:222)

b. In Written Mongolian and MMo. *-*n* is used as the imperfect present tense II suffix. This tradition is still present in Dagur: *garγan* '(someone) takes out ~ is taking out.' <*garγa*- 'cause to go out', *saun* '(someone) sits down ~ is sitting down' <*sau*- 'sit down'. In WM. the combination -*nam* <*-*n am* (see 2.1.8.2 (e)) is used to indicate the present tense. Being in the predicative position, later the suffix is followed by other elements such as the secondary element *-*ai* or *-*a*, or personal endings in Buriat and Kalmuck, thus what we see in modern Mongolic languages are *-n, -na, -ne, -ni, no,* etc.:

(12) Mgr. *bu ndasgu utśi -nii*
I WATER DRINK IMPER PRES
'I drink water.' (Čenggeltei, 1991:231)

(13) Bao. *tere dondag +nä bä medä na* (= *medäm*)
THAT MATTER GEN-ACC I KNOW IMPER PRES
'I know that matter.' (Chen, 1987:192)

(14) San. *bi śifañ kiäliän kiäliä medźiä-nä*
I TIBETAN LANGUAGE SPEAK KNOW IMPER PRES
'I know (speaking) Tibetan.' (Böke, 1986:157)

It should be mentioned that in many Mongolic languages the word *bán <baina ~ bána* 'there is ~ are' which is formed by the suffix on the basis of the suppositional CA verb **ba*- 'to exist' (cf. MUy. *bar* 'there is ~ are') is used in more complicated predicative structures like in Chahar: *surč baina* 'is ~ are studying (present progressive), *surs'n baina* 'have studied (present perfect)' (Jagchid & Dien, 1967).

2.1.13.3 **Tungusic**: All Tungusic languages contain the *-*n*,

which functions exactly as the same as in Turkic and Mongolic languages, i. e., forms substantives out of verbs as well as manner participles. The suffix phonologically also remains the same except it is realized as *-m* in some cases due to the labial assimilation, same phenomenon we have seen in Mongolic languages; sometimes it is realized as zero due to the incomplete pronunciation.

a. Deverbal substantives formed with the suffix are evident from the following examples: Tng. ***xäpin*** 'a play' <*xäpi-* 'to play' > Ma. *efin* 'play', Evk. *ewin* (id.), Lam. *ewinre* <**xäpin si* 'you play'; Tng. ***tolkin*** 'a dream' > Ma. *tolhimbi* <*tolkin bi* 'dreams', Na. *tolkin* 'a dream', Evk. *tolkin*, Lam. *tolkan* (id.); Tng. **taman* 'payment, price' > Na. *taman* 'price', Ude. *tamani* (id.), Evk. *taman* (id.), *tamanri* <**taman si* 'you pay', Lam. *tamanra* <**taman si* (id.); Tng. **tatın* 'teaching, getting used to; instruction, habit' <**tatı-* 'to teach ' > Ma. *tačin* 'instruction', Evk. *tatı* 'habit' (Benzing, 1955a:1006); Lam. *bini* 'life' <*bi-* 'to be' ~ *ini* 'life' <*in-* 'to live' (Benzing, 1955b:39); Ma. *ačan* 'meeting' <*ača-* 'meet', *gusučun* 'sadness, annoyance, dejection, <*gusuču-* 'feel bored, be out of humor, be annoyed', *jabšan* 'good luck, advantage' <*jabša-* 'be by good luck, obtain an advantage', *jabun* 'answer, deposition (of law)' <*jabu-* 'answer, respond' (Norman, 1978). In Ma. deverbal nouns formed with the *-n* consist of a considerable portion of the class of deverbal nouns. This indicates that the *-n* is a very productive suffix in Tungusic languages on

the one hand, and on the other it seems to be true that another CA verbal noun suffix, **-m*, has merged with it in early times (see 2.1.8.3).

b. The suffix is also used grammatically to form contemporaneous converbs which indicate that an action takes place together with another action. In this usage a vowel, usually -a or -e, follows the suffix:

(15) Evk. *aa -je -ne*
SLEEP IMPER CONV
'sleeping, while sleeping'

(16) Lam. *teg -ni ken bi tet -tem*
STAND CONV DIM I WEAR AOR IPR SG
'I stand up and put on my clothes.'

It should be mentioned that Benzing (1955a:1006) believes that a form ending in *-n* like Tng. **xäpin* 'a play' <**xäpi-* 'to play' > Ma. *efin* 'play', Evk. *ewin* (id.), etc., is also an incomplete aorist form. Thus it can be used as a predicate with an appropriate personal ending: Lam. *ewinre <*xäpin si* 'you play'; Tng. **tolkin* 'dreaming' > Ma. *tolhimbi <tolkin bi* '(someone) dreams ~ is dreaming'; Evk. *taman* 'paying, payment, price' *tamanri <*taman si* 'you pay', Lam. *tamanra <*taman si* (id.).

2.1.14 */-°ndi/*

2.1.14.0 The less productive suffix */-°ndi/ = [-ndi ~ -indi ~ -undi ~ -ündi]* in MUy. forms nouns with the meaning of the result or remainder from an action: *yiγindi* 'sum' <*yiγ-* 'gather, collect', *yu(yu)ndi* 'dirty water remained from washing cloths, etc.' <*yu(y)-* 'wash' (Tömür, 1987:95-96).

According to Ramstedt (1952:108-110, 244-245), the suffix developed from the EWT **-ntï ~ *-ïntï*, which, in turn, can be traced back to an ealier form of **-mta* or **-mdi*. The corresponding suffixes in Mo. languages are **-mta* and **-mji*, in Tng. languages is *-nta*. I believe that Ramstedt's etymology is reasonable. But at the same time I am not sure if the first part of the suffix is **-m* or **-n*. Ramstedt, of course, confirms that it is the CA verbal noun suffix **-m* (see 2.1.8). But it is not impossible that it is the CA resultative suffix **-n* (see 2.1.13), since it appears as *-n* in both Turkic and Tungusic combinations. Nevertheless, in either case the suffix can be interpreted on a common Altaic ground. Ramstedt also implies that the second part in Mo. languages, *+ta ~ +te* or *+di* indicates a location, a place or a conceret object. This is evident in all languages.

2.1.14.1 **Turkic**: Ramstedt (ibid.) gives examples from EWT and OUy.: *birikinti* 'unification, reconciliation', *tapïntï* 'a deep respect', *quruntu* 'idle dream, unrealistic idea', *basïntï* 'a tangle, a trouble', *süpürüntü* 'garbage' <*süpür-* 'sweep, wipe', *qazïntï* 'a well, ditch' <*qaz-* 'to dig'. Ramstedt also extends his analysis to the EWT and OUy. ordinal forms like *ekinti ~ ikinti* 'second, in the second place' <*iki* 'two', Mo. *gurbanta* 'third, three times' <*gurban* 'three'. This analysis, of course, gives a good explanation of the etymology of the Turkic ordinal number suffix. But the only thing I consider here is that we are discusssing the Turkic **-ntï ~ *-ïntï* as

a verbal suffix, and numerals in Turkic languages are considered as substantives, hence take nominal endings. Thus I believe that at least the first part of the ordinal number suffix, *±n*, has a different origin from that of **-ntï ~ *-ïntï*.

2.1.14.2 **Mongolic**: The two suffixes in Mongolic languages, *-mta* and *-mji*, corresponds the Turkic suffix. The Mo. *-mta* indicates a place, a manner, or an opportunity of doing an action (Ramstedt, ibid.): *barimta* 'handle, basis, proof, data, certificate, receipt' <*bari-* 'to hold, grasp, capture', *darumta* 'pressure, load, burden' <*daru-* 'to press, squeeze'. The Mo. *-mji*, whose second part *+ji* originated from a more ancient word **di* or **ti*, appears in the words such as *ergümji* 'respect, the act or fact of being raised or supported' <*ergü-* 'show respect, raise', *tusalamji* 'help, aid' <*tusala-* 'to help, to aid', *ülemji* 'more, abundant' <*üle-* 'to be left over, remain, survive'.

2.1.14.3 **Tungusic**: Ramstedt (ibid.) explains that the Tng. suffix *-nta* is evident from the word *noodanta* 'gargabe, a dump'. Corresponding to Mo. *-mji*, Na. has *dalamji* 'leader, foreman' (cf. Ma. *dalaci* 'id.' <*dala-* 'to be leader'). But the Tng. examples illustrated for the suffix are not abundant.

2.1.15 */-°š/*

2.1.15.0 The suffix */-°š/* = *[-š ~ -iš ~ -uš ~ -üš]* in MUy. forms nouns which indicate the object or process of an action in MUy.: *tonuš* 'acquaintance' <*tonu-* 'recognize, get

acquainted with', *išläpčiqiriš* 'production' <*išläpčiqar-* 'produce' (Tömür, 1987:94).

Etymologically, the suffix originated from CA **-l₂* which remained in Mongolic and Tungusic languages as *-l*, and developed into *-š* in Turkic languages. This correspondence is not only seen in this suffix, but, more convincingly, also seen in a considerable number of words: CA **ńal₂ï* 'moist, fresh, uncooked, raw, green' > Evk. *ńalikin* 'moist, green (of wood), damp, not dried (of skins), fresh'; Lam. *ńaalakča* 'wet, damp, fresh, raw'; Nan. *ńalun* 'wet, raw (meat, fish), green (wood); Ma. *yali* 'meat (<'raw'); Mo. *nilig* 'smelling of raw meat or fish, *nilɣun* (id.), *nilg-a* 'infant, tender, *niljarun* 'newly born'; EWT *yaš* 'green, young, fresh', *yašïl* 'green, blue'; Trkm. *yaašïl* 'green'; Trk. *yaş* 'wet, damp, fresh, *yeşil* 'green, fresh, raw; MUy. *yaš* 'young', *yešil* 'green'. CA **dül₂i* 'middle, noon' > Evk. *dulin* 'middle, *duliga* 'noon'; Lam. *dulakan* 'middle'; Na. *dolï* 'middle'; Ma. *dulin* 'half, middle'; Mo. *düli* 'half, middle, noon, midnight'; OUy. *tüš* 'noon'; MUy. *čüš* 'noon' (Norman, lectures on Altaic linguistics). Since this correspondence rule is well-tested, I will not illustrate further examples. It should be mentioned though that the CA *l₁* remains as *l* in all three language branches.

2.1.15.1 **Turkic**: In EWT */-°š/* is a productive deverbal noun suffix: *tägis* <**tägiš* 'contact, conflict' <*täg-* 'to reach, arrive, touch', *süñüš* 'battle' <*süñü-* 'to stab, pierce', *uruš*

'fight' <*ur*- 'to hit, strike', *ükü<u>š</u>* 'many' <*ük*- 'to gather, heap' (Tekin, 1968:114-115). This function of the suffix continued in OUy.: *bili<u>š</u>* 'acquaintance' <*bil*- 'to know, acquaint', *toqu<u>š</u>* 'conflict, fight' <*toq*- 'hit' (Kashghari, v.I:14-15).

In Chagatay literature the usage of the suffix expanded so greatly that it functioned not only as a DVN suffix but also a verbal noun suffix, in other words, it started to function as both derivational and inflectional suffix at this period: *oqu<u>š</u>* '(act or manner of) reading' <*oqu*- 'read', *soru<u>š</u>* 'question' <*sor*- 'ask a question', *yürüš* 'manner of walking' <*yür*- 'to walk', *oxša<u>š</u>* 'resembling, similar' <*oxša*- 'to resemble' (Eckmann, 1966:66).

In modern Turkic languages it is active as DVN and VN suffix: Az. *bax<u>ï</u>š* 'sight' <*bax*- 'see'; Tat. *borïl<u>ï</u>š* 'turning, a turn' <*borïl*- 'turn oneself', *söylä<u>š</u>* 'conversation' <*söylä*- 'converse, speak'; Bash. *al<u>ï</u>š* 'taking' <*al*- 'take', *qara<u>š</u>* 'viewpoint, observation' <*qara*- 'look at'; Kha. *tan<u>ï</u>s* 'acquaintance' <*tanï*- 'recognize' (Tenišev, 1981). Perhaps */-°š/* is more active as a verbal noun suffix in MUy. than in other Turkic languages (see 3.1.1). As I stated above, the suffix is also seen in the combination */-m°š/* (see 2.1.11 and 4.6).

2.1.15.2 **Mongolic**: The Common Mongolian verbal noun suffix **-l* can be found in many deverbal nouns and verbal nouns throughout the modern Mongolic languages.

A. *-*l* as a deverbal noun suffix:

Mo. *tanil* 'acquaintance' <*tani*- 'to acquaint, recognize' (cf. MUy. *tonuš* <*tonu*- (id.)); Dag. *mėdėl* 'knowledge' <*mėd*- 'know', *garal* 'production' <*gar*- 'come out, go out'; Mgr. *pagdal* 'capacity' <*pagda*- 'hold, have a capacity of', *baril* 'handle' <*bari*- 'hold, grasp'; EYu. *agsel* 'borrowing, a borrowed thing' <*agse*- 'to borrow' (Chen, 1985). Besides, the following deverbal noun suffixes should be considered as compounds containing the *-*l*: a. *-dal ~ -del*: Mo. *yabudal* 'act of going or walking, motion, movement' <*yabu*- 'go, walk, depart', *saγudal* 'seat' <*saγu*- 'sit down', Dag. *saudal* <*sau*- (id.); *üküdel* 'corpse' <*ükü*- 'die', Dag. *ugudel* <*ugu*- (id.); EYu. *xadal* 'seam' <*xa*- 'sew'; Mgr. *sanadal* 'thought, thinking' <*sana*- 'think' (Chen, ibid.). Ramstedt (1952:146) believes that *-da*- ~ *-de*- in this combination is the passive ending. b. *-laň ~ -lėn ~ -loň ~ -lun*: Mo. *jobalaň* 'suffering' <*joba*- 'to suffer'; Dag. *tśudulaň* 'full' <*tśudu*- 'be full, eat one's fill'; Mgr. *čadėlaň* <*čadė*- (id.) (Chen, ibid.). The identity of the *-ň* ending in the combination is not clear. Perhaps it is related to the resultative suffix *-n* (see 2.1.13).

B. *-*l* as a verbal noun suffix:

As a verbal noun suffix, *-*l* merged into the so-called praesens perfecti (present perfect) suffix *-luγai ~ lügei (~ -laγai ~ -legei)* at the very early stages of development of Mongolic languages. In this combination *-*l* is the primary

A. *-*l* as a deverbal noun suffix:

Mo. *tanil* 'acquaintance' <*tani-* 'to acquaint, recognize' (cf. MUy. *tonuš* <*tonu-* (id.)); Dag. *mėdėl* 'knowledge' <*mėd-* 'know', *garal* 'production' <*gar-* 'come out, go out'; Mgr. *pagdal* 'capacity' <*pagda-* 'hold, have a capacity of', *baril* 'handle' <*bari-* 'hold, grasp'; EYu. *agsel* 'borrowing, a borrowed thing' <*agse-* 'to borrow' (Chen, 1985). Besides, the following deverbal noun suffixes should be considered as compounds containing the **-l*: a. *-dal ~ -del*: Mo. *yabudal* 'act of going or walking, motion, movement' <*yabu-* 'go, walk, depart', *sayudal* 'seat' <*sayu-* 'sit down', Dag. *saudal* <*sau-* (id.); *üküdel* 'corpse' <*ükü-* 'die', Dag. *ugudel* <*ugu-* (id.); EYu. *xadal* 'seam' <*xa-* 'sew'; Mgr. *sanadal* 'thought, thinking' <*sana-* 'think' (Chen, ibid.). Ramstedt (1952:146) believes that *-da- ~ -de-* in this combination is the passive ending. b. *-lañ ~ -lėn ~ -loñ ~ -lun*: Mo. *jobalañ* 'suffering' <*joba-* 'to suffer'; Dag. *tśudulañ* 'full' <*tśudu-* 'be full, eat one's fill'; Mgr. *čadėlañ* <*čadė-* (id.) (Chen, ibid.). The identity of the *-ñ* ending in the combination is not clear. Perhaps it is related to the resultative suffix *-n* (see 2.1.13).

B. **-l* as a verbal noun suffix:

As a verbal noun suffix, **-l* merged into the so-called praesens perfecti (present perfect) suffix *-luɣai ~ lügei (~ -laɣai ~ -legei)* at the very early stages of development of Mongolic languages. In this combination **-l* is the primary

verbal noun suffix, **-γai ~ *-gei* is the predicative mark, and *a ~ u* is a connective vowel (Poppe, 1955:265). This suffix already existed in Common Mongolian. In Middle Mongolian it appears in the form of *-la'a ~ -lu'a* due to the loss of the intervocalic *g*: *abula'a* 'took' <*ab-* 'to take', *ayisula'a* 'came' <*ayisu-* 'come, approach'. Further developed forms of the suffix are present in most modern Mongolic languages. Dag. *-laa ~ -lii*: *ellaa* 'spoke, said' <*el-* 'say, speak', *tarlii* 'cultivated, sewed' <*tar-* 'sew, cultivate' (Enkebatu, 1988:306-307). Mgl. *-lå*: *irålå* 'came' <*irå-* 'to come'. Kalm. *-laa*: *yowlaa* 'went' <*yow-* 'go'. The suffix appears in Urdus and Khalkha as *-laa ~ -lee*, as *-lää* in Buriat, but it isn't seen in Monguor.

Another converbial usage of the suffix is seen in Khalkha as the substitute of the modal converbial suffix *-n* (see 2.1.13.2) in the negative form: *meddeñ* 'knowing, knowingly', but *meddelgʷi* 'not knowing, unconsciously'. Such substitution also occurs in Urdus, and Kalmuck when the modal converb in *-n* is negated by the negative copular *ügei* 'not, is ~ are not' (Poppe, 1955:276).

2.1.15.3 **Tungusic**: What we see in Tungusic languages correspondingly are the suffixes *-lii ~ -liin, -ri ~ -rin*: Ma. *adali* 'like, same' <*ada-* 'to accompany, stand by, close to, be next to' (cf. MUy. *oxšaš* 'same, like' <*oxša-* 'be same, resemble'), *dabali* 'excessively, exceeding' <*daba-* 'cross, surpass, go beyond' (Norman, 1978:6, 50); *giltari* 'shining,

glowing' (?<*giltali*, perhaps due to assimilation. cf. *gilta gilta* (id.)); Sol. *giltari*^{n} (id.); Lam. *buṇ̃ulii* ~ *buñtulii* 'round', *debulii* 'woolly' (Benzing, 1955a:1038, 1955b:41). More examples can be supplied from Ma.: *dabdali* 'headstrong, exitable', *dabduri* 'quick-tempered, exitable', cf. *dabdurša-* 'flare up, go into a rage'; *bučeli* 'spirit of the dead' <*buče-* 'to die'; *bengneli* 'suddenly, hastily' <*bengne-* 'be in haste'. The Ma. suffix *-la(n)* ~ *-le(n)* ~ *-lo(n)* should also be considered along the same lines: *jobolon* 'harm, disaster' <*jobo-* 'suffer, worry'; *iladala* 'unstable, inconsistant' <*ilada-* 'jump forward with two legs crossed (a kind of game), be unstable'; *moholo* 'a hornless castrated bovine' <*moho-* 'be exhausted, be depleted' (Examples quoted from Norman, 1978). The occurrence of the CA deverbal noun suffix **-l_2* in Tungusic languages is relatively less than that in Turkic and mongolic languages. This is perhaps due to the internal sound shift such as **l > r ~ n* in Tungusic languages especially in a coda position: Tng. **palan* '(foot)mark' > Na. *palan*, Ul. *pala*^{n}, Ork. *palla*, Ude. *pala*, Evk. and Lam. *haran*; Tng. **paliña* 'palm of the hand' > Ma. *falangguu*, Na. *payña*, Ul. *pańa*, Ork. *pana*, Ude. *xańña*, Ngd. *xańñ*, Evk. and Lam. *hanña* (Benzing, 1955a:992-993).

2.1.16 */-Duq/*

The suffix */-Duq/* = *[-duq ~ -tuq]* in MUy. forms nouns with the meaning of the result of an action: *qalduq* 'remainder, balance' <*qal-* 'remain, be left', *harduq* 'fatigue, tiredness'

<*har*- 'become fatigued, tire' (Tömür, 1987:96). In origin the deverbal noun suffix -*duq* ~ -*tuq* is closely related to the 1pr. pl. definite past tense suffix -*duq* ~ -*tuq* (see 4.1.2), and in MUy. the suffix is known better for its latter function than its former function. However, in EWT and OUy. it appears as just a regular verbal noun and a past participial suffix, showing no link to the 1pr. pl. or any other persons. It is not hard to imagine now that its verbal noun usage in EWT and OUy. underlies its deverbal noun function in MUy. we are discussing here, and its past participial function remains in the 1pr. pl. past tense in MUy.

As Tekin (1968:178-179) mentions the suffix in EWT, it has the allomorphs -*duq* ~ -*dük* and -*tuq* ~ -*tük* (after *l*, *n*, and *r*), and it forms verbal nouns. A verbal noun in the suffix carries possessive and case endings as a regular noun:

(17) *bil-tük+üm+ün ö -dük+m+ ün bunča bitiig bitii-*
KNOW VN MY INS REMEMBER VN MY INS SUCH WRITING WRITE
di+m
PST I
'With what I know and remember, I have inscribed all these inscriptions.'

(18) *qazγantuq+iin üčün*
WIN VN HIS FOR
'because he won' (lit.: because of his having won)

As a past participle, a form in the suffix modifies other nouns:

(19) *bar-duq yir*
GO PPL LAND
'a land (you) went'

(20) *köz+ün kör-mä-dük qulqaq+ïn äsid-mä-dük bodun +um*
EYE INS SEE NEG PPL EAR INS HEAR NEG PPL PEOPLE MY
'my people in such numbers as have not been seen by eye

and have not been heard by ear (before)'

Both verbal noun and past participial usages of the suffix in OUy. are recorded by Kashghari. But he used the term infinitive instead of verbal noun to describe the first usage. He mentions that an infinitive verb is formed on the basis of the past tense when the suffix *-q ~ -k* is inserted in between *-d* and *-i* of the past tense suffix. Although this interpretation is not so correct theoretically, it provides us with important clue about the etymology of the suffix. As the infinitive usage, he presents the following example:

(21) *a+nïñ bar-duq+ï bar-ma-duq+ï bir*
HE GEN GO VN HIS GO NEG VN HIS ONE
'His going or not going is the same.'
(Kashghari, v.II:55)

Of course, we can interpret this form as infinitive in the sense that it does not indicate any information about tense and person. Thus it can be replaced by the *-°š* (see 3.1.1) verbal noun in MUy. When explaining the past participial usage of the suffix, Kashghari (v.II:78-81) mentions that the suffix is used in Oguz and Kypchak languages indiscriminately for the 1pr. sg. and pl. and other persons, while other Turkic speakers use the past tense suffix *-di* instead:

(22) *ya qur-duq*
BOW SET PPL
'He has set the bow.'

(23) *män ya qur-duq*
I
'I have set the bow.'

(24) *biz ya qur-duq*
WE
'We have set the bow,'

It is known from the context that during the Kashghri's time the suffix *-miš ~ -mïš*, which is functionally comparable to *-duq ~ -dük* as a past participial suffix , was used more often in a modifying position than *-duq ~ -dük*. In indirect statements, however, *-duq ~ -dük* seems to have taken over the function of *-miš ~ -mïš* (see 2.1.11) in some cases. For instance, when a negative verb in *-duq ~ -dük* is used for the third person, it indicates an indirect statement or a knowledge which is not witnessed but acquired through an indirect channel by the speaker: *barmaduq* 'apparently, he didn't go ~ I heard that he didn't go', *kälmädük* 'apparently, he didn't come ~ I heard that he didn't come' (Kashghari, v.II:81). In MUy., however, only in the combination of *ikänduq (<ikän iduq)* 'apparently, he ~ she ~ it was ~ they were' the suffix implies an indirect statement. Otherwise, the suffixes *-miš ~ -mïš* and *-°ptu* are used for an indirect statement instead. Kashghari (v.II:81) also mentions that like other Turkic speaking people, Oguz and Kypchaks do not use *-duq ~ -dük* as the past tense marker for the 3rd person. From Kashgari's recordings we can conclude that during the OUy. period *-duq ~ -dük* was not used as the past tense for the 3rd person in Oguz, Kypchak, and other Turkic languages, and that it was used for the 1st pr. sg. and pl. indiscriminately in Oguz and Kypchak languages. The implication is that the Turkic speakers other than Oguz and Kypchaks started to use the suffix only for the 1st person

singular or plural, most likely for the plural. Since we can imagine that as a result of further restriction in such usage the suffix became a specific past tense marker for only 1st person plural in Chagatay (Eckmann, 1966:156) and MUy. (see 4.1.2).

As for the etymology of the suffix, remember again what Kashghari (ibid.) mentions: an infinitive verb is formed when the suffix *-q ~ -k* is inserted between *-d* and *-i* of the past tense suffix. This indicates that the suffix contains the past tense suffix *-d* and another suffix *-q ~ -k*. For Ramstedt (1952:152-153) the suffix is the combination of a kind of deverbal verb suffix *-t- ~ -d-* and *-q ~ -k*, which perhaps is the CA resultative suffix. Baskakov (1981) interprets the etymology of the suffix differently. He believes that the Turkic past participle *-dïγ ~ -tï~ (~ -duq ~ -dük)* is not formed on the basis of the past tense suffix *-dï ~ -tï*, but the latter resulted from the imperfect pronunciation of the former. But even if Baskakov is right, we still need to account for each component of the suffix. We will discuss their etymology further in 4.1.1 and 4.1.2. According to Ramstedt (ibid.), the so-called nomen usus suffix *-daγ ~ -deg* in WM and the Tng. *-dig* (Ngd.) has the same origin as the Turkic *-duq ~ -dük*. They will be also discussed in detail in 4.1.2.

2.2 Deverbal Adjective Suffixes

2.2.1 */-°G/, /-AG/*

The suffix */-°G/, /-AG/ = [-q ~ -k ~ -iq ~ -ik ~ -uq ~ -ük, ~-aq ~ -äk]* in MUy. forms adjectives which carry the meaning of the result of an action: *sunuq* 'broken' <*sun-* 'break', *aγriq* 'ill, sick' <*aγri-* 'have a pain or ache', *očuq* (<*ačuq*) 'open' <*ač-* 'to open' (Tömür, 1987:114). Actually, the suffix has the same origin with the DVN suffix */-G/, /-AG/* in 2.1.1, where we have discussed its three different sources: *-°γ ~ -°g, -°q ~ -°k*, and */-GAG/*. Some evidence in MUy. show that as the deverbal adjective function is conserned, the third source, */-GAG/*, does not phonologically merge with the first two sources. Thus only the first two are relevant to our discussion here. Historically speaking, although the first two both carry the meaning of a result of an action, they function differently in EWT and even in some modern Turkic languages and dialects. That is, *-°γ ~ -°g* tends to form adjectives out of verbs, while *-°q ~ -°k* forms nouns. Since a complete merger of the two occurred in MUy., they can not be distinguished from each other any longer. As a result, the same suffix forms both nouns and adjectives out of verbs. For the discussion of their CA origin, I refer the reader to 2.1.1.

2.2.2 */-GAG/*

The suffix */-GAG/ = [-γaq ~ -qaq ~ -gäk ~ -käk]* in MUy. forms adjectives which indicate a nature or habit of repeatedly doing an action: *külqäk* 'one who always laughs' <*kül-* 'laugh', *urušqaq* 'warlike, one who likes to fight'

<*uruš*- 'fight each other', *teyilγaq* 'slippery' <*teyil*- 'skate' (Tömür, 1987:114). As I mentioned in 2.1.2, the suffix has the same origin as the deverbal noun */-GAG/*, which etymologically contains the CA passive-causative suffix **-g(V)- ~ *-k(V)-* and resultative *-°q ~ -°k* (Kononov, 1980:§113). The combined meaning of the two is easily understandable if we consider the function of an adjective formed with suffix, i.e., it indicates a nature of habitually or repeatedly doing an action, which I believe is its primary function. Of course, an adjective formed with the suffix also function as an instrument noun. But I believe that is a result of shift in usage, and secondary. For example, the EWT such as nouns *qazγuq* 'cork' <*qaz*- 'to dig', *ičkäk* 'vampire' <*ič*- 'to drink' can be understood through their adjectival description: 'having a habit of repeatedly doing an action'. Later this adjectival form started to indicate the object itself.

As the EWT evidence show, the suffix */-GAG/* merged with suffix */-°G/* due to the intervocalic deletion of the initial *g*. Thus EWT words such as *tirgük* (<**tirägük*) 'post, doorposts, pillar' <*tirä*- 'to prop up, support', *qulqaq* (<**qulγaq*) 'ear' <**qul*- 'to hear' (Tekin, 1968:112) became *tiräk* and *qulaq* respectively in MUy. However, this kind of merger occurs when a form in the suffix is used as a noun, but not as an adjective. That is, in deverbal adjective usage, the initial *g* of */-GAG/* is not deleted in MUy. For the CA

origin and further discussion of the suffix, I refer the reader to 2.1.1 and 2.1.2).

2.2.3 */-GUr/*

The suffix */-GUr/* = *[-ɣur ~ -qur ~ -gür ~ -kür]* in MUy. forms adjectives denoting a nature or quality of doing an action: *säz<u>gür</u>* 'vigilant, sensitive' <*säz-* 'to sense, feel', *öt<u>kür</u>* 'sharp, acute' <*öt-* 'pass, cross, penetrate' (Tömür, 1987:115). The suffix is relatively new. It is not seen EWT and OUy., but starts to appear in Chagatay as deverbal adjective suffix, denoting proneness of an action: *tay<u>ɣur</u>* 'slippery' <*tay-* 'to slip, slide', *tïn<u>ɣur</u>* 'one who easily relaxes, calms down' <*tïn-* 'to relax, calm down', *tïnma<u>ɣur</u>* 'restless, unable to rest' <*tïnma-* 'not to relax, not to calm down' (Eckmann, 1966:62). Etymologically, the suffix is the combination of the EWT intensifying suffix *-q-* ~ *-k-* which originated from the CA passive-causative suffix **-g(V)-* ~ **-k(V)-* (see 2.3.5) and the CA verbal noun suffix **-r(V)* (see 3.2.1). Interestingly, the combination of the two also seems to be present in Mo. languages. In WM., for instance, the suffix *-ɣur ~ -gür* forms nouns out of verbs, designating names of tools: *qana<u>ɣur</u>* 'lancet' <*qana-* 'to bleed someone' (cf. MUy. *qana-* (id.) <*qan* 'blood'), *ölgü<u>gür</u>* 'clothes-peg' <*ölgü-* 'to hang up'. Due to dissimilation of *r*, the suffix is also seen as *-ɣul ~ -gül*: *bari<u>ɣul</u>* 'handle' <*bari-* 'to take, to keep' (Poppe, 1964:46). In spoken languages the suffix is *-gur ~ -uur ~ -üür, -gul*, etc.: Mo. *qadu<u>ɣur</u>* 'sickle' <*qadu-*

'to mow', Dag. *qaduur* (id.), EYu. *baruul* 'handle' <*bare-* 'to take', Mgr. *kešguur* 'ladder' <*keš-* 'to step on' (Chen, 1985). The combination of the two has not been attested in Tungusic languages.

2.2.4 /-G°n/

The suffix */-G°n/* = *[-γin ~ -qin ~ -gin ~ -kin ~ -γun ~ -qun ~ -gün ~ -kün]* in MUy. forms adjectives denoting a feature of being in a stage of an action: *turγun* 'stable, still' <*tur-* 'stand, stay', *čüškün* 'low-spirited, downcast' <*čüš-* 'descend, fall, go down' (Tömür, 1987:115-116). Again, the suffix is the combination of the EWT intensifying suffix *-q-* ~ *-k-* which originated from the CA passive-causative suffix **-g(V)-* ~ **-k(V)-* (see 2.3.5) and the CA resultative verbal noun suffix **-n* (see 2.1.13). The same suffix also forms nouns as in 2.1.7, where we have already discussed its CA origin.

2.2.5 /-mA/

2.2.5.0 The suffix */-mA/* = *[-ma ~ -mä]* in MUy. forms adjectives characterizing a result of an action: *asma (xäritä)* 'hanging (chart)' <*as-* 'hang', *yasima (külkä)* 'artificial (laughter)' <*yasa-* 'make, repair' (Tömür, 1987:114). We have already discussed in 2.1.9 the CA origin of the suffix, **-mV*, along with its noun-forming function in MUy. and other Altaic languages. As I mentioned in the same section, the primary function of the suffix may be to form

adjectives out of verbs, denoting a result of an action. Nouns formed with the suffix seem to have resulted from the shift of that function.

2.2.5.1 **Turkic**: Tekin (168:176) mentions the appearance of the suffix in the form -°*γma* ~ -°*gmä* in Orkhon Turkic, where it functions as a participial ending:

(25) *il bir-<u>igmä</u> täñri*
STATE GIVE PPL HEAVEN
'Heaven who has granted the state'

(26) *ičiki -<u>gmä</u> ičik -di bodun bol -tï ölü-<u>gmä</u> öl-ti*
SUBMIT PPL SUBMIT PST PEOPLE BECOME PST DIE PPL DIE PST
'Those who meant to submit submitted (to me) and became a people, those who meant to die died.'

Here the initial element *γ ~ g* is possibly the CA passive-causative suffix. Since it implies an intensive meaning in (25) and a passive meaning in (26). Gabain (1974:78) gives examples perhaps from OUy. where *-ma ~ -mä* functions exactly as the same as in MUy.: *käs<u>mä</u> aš* 'cut noodles' <*käs-* 'to cut', *aš* 'food, noodles'; *bar<u>ma</u> yil* 'the past year, last year' <*bar-* 'go', *yil* 'year'. It is also active in Chagatay as a deverbal adjective suffix: *süz<u>mä</u>* 'filtered, strained'; *eg<u>mä</u>* 'crooked' <*eg-* 'to bend'; *teg<u>mä</u>* 'every, all' <*teg-* 'touch, reach' (Eckmann, 1966:63). The suffix is alive in almost all modern Turkic languages. A deverbal form in the suffix functions as an adjective in the sense of modifying a noun, but when the modified noun does not appear in the context, the deverbal form represents that noun. Thus, I believe that its primary function is to form adjectives.

2.2.5.2 **Mongolic**: The suffix *-mar ~ -mer* in WM is

functionally comparable with the Tkc. *-ma ~ -mä*, and it forms substantives out of verbs designating suitableness of doing an action: *idemer* 'edible, something which might be eaten' <*ide-* 'eat', *üjemer* 'worth seeing' <*üje-* 'see' (Poppe, 1964:48).

But etymologically the WM suffix contains more than *-m*. According to Poppe (1955:201, 262), it is the combination of **-m* and the Common Mongolian instrumental suffix **+γar ~ *+βar* which developed into *+bar ~ +ber, +iyar ~ +iyer*, etc., in modern Mongolic languages. Some other WM suffixes such as *-mal ~ -mel, -maγai ~ -megei*, etc., are also comparable to the Tkc. *-ma ~ -mä* in the sense that they also forms adjectives as well as nouns out verbs at the same time (see 2.1.8).

2.2.5.3 **Tungusic**: The corresponding deverbal adjective suffix **-mi* in Tungusic languages has a special meaning, i.e., it indicates spacial expansion: Tng. **xörümi* 'short' = Na. *hur(u)mi*, Ulc. *xúrmi*, Ork. *xurumi*, Orc. *urmi*, Ude. *umac'a* <**xörümičä:kä:n* (diminutive), Ngd. *uyumkun*, Evk., Lam. *urumku:n* (id.); Tng. **ño:limi* 'long' = Ma. *golmin*, Na. *wonemi ~ ñonemi ~ onemi*, Ulc. *wolmi ~ ñolmi*, Ork. *ñonemi*, Orc. *ñonimi*, Ude. *wanimi*, Sol. *nonimi*, Ngd. *ñonom*, Evk. *ñonim*, Lam. *ñonom* (id.) (Benzing, 1955a:1038).

2.2.6 */-A°ñGU/*

The suffix */-A°ñGU/ = [-ñγu ~ -ñgü ~ -añγu ~ -äñgü] in MUy.* forms adjectives characterizing a feature resulted from an action: *kötiräñgü (~ kötüräñgü)* 'high-spirited' <*kötär-* (~ *kötür-*) 'lift, raise', *eziläñgü* 'sluggish, lazy' <*ezil-* 'be

smashed, be crushed' (Tömür, 1987:115).

The etymology of the suffix is not straightforward. The first point I can make about it is that the suffix contains two elements, *-ñ ~ -Añ* and *-γu ~ -qu ~ -gü ~ -kü*. Let us deal with them separately. Ramstedt (1952:229) mentions the existence of the suffix *-ñ* in Altaic languages while quoting words such as Mo. *öleñ* 'grass <*öl* 'grassland'; Kaz. *örteñ* 'a burned grassland' <*ört* 'a fire on the grassland'; Mo. *jobalañ* 'suffering' <*jobal* (id.), *jirgalañ* 'happiness, joy' <*jirga* (id.). He even points out that both in Mongolic and Turkic the suffix is also followed by *-γu ~ -gui*, the very same combination we are discussing here: Tkc. *qarañγu*, Mo. *qarañqui* 'dark, darkness' <Tkc. and Mo. *qara* 'black, dark'; Tkc. and Mo. *borañγu* 'fog' <Mo. *bora* 'gray', Tkc. *boz* (id.).

An objection to Ramstedt's above analysis may come from the fact that in these examples *-ñ* or *-ñγu* appears not after a verb, but a noun or adjective, although he argues that the suffix can be attached to verbs as well as substantives. Based on the fact that there is a clear distinction in between verbs and substantives in Altaic languages, I assume that the suffix we are discussing here should be different from what Ramstedt suggests, since it appears after verbs. Actually, Poppe (1964:49) illustrates deverbal nouns formed with *-ñ* and *-ñγui ~ -ñgüi* in WM, which are what we exactly need here: *qaldañ* 'speck, stain' <*qalda-* 'to adhere to, to infect', *egedeñ* 'dough, sour paste' <*egede-* 'to sour'; *soγtañγui*

'drunkenness' <*soγta*- 'to become drunk', *jokiyañyui* 'deed, composition' <*jokiya*- 'to found, compile'. Correspondingly, Benzing (1955a:1012) illustrates many instrument names formed with *-ñku* in Tungusic languages: Na. *teñku* 'stool' <*te*- 'to sit down', Evk. *tegeñki* (id.); Ude. *xaiñku* 'plough' <*xai*- 'to plough'; Lam. *kolañka* 'a cup, a wine cup' <*kola*- 'to drink'; Na. *tareñku* 'seeder, planter' <**tari*- 'to sow, to plant' (cf. MUy. *teri*- 'to sow, plant', Mo. *tari*- (id.)). The examples above show the verbal noun suffix -ñ which is common to all Altaic languages. It is possible to link this suffix to the Altaic resultative -°n, which we have discussed in 2.1.13. Of course, we have enough evidence to treat it as an independent suffix in origin. Like in WM, it appears also in some deverbal nouns in MUy.: *yoqilañ* 'groundless, nonsensical' <*yoqal*- 'disappear, be nullified', *jüdäñ* 'thin, emaciated' <*jüdä*- 'be thin (of an animal)', *tozañ* 'dust, a powder-like object in the air' <*toz*- 'to rise or spread in the air (of a dust-like or powder-like object)'. I believe that the second part is the CA verbal noun suffix *-γu ~ -qu ~ -gü ~ -kü* (see 2.1.3 and 3.1.3). At this point, however, I feel doubtful about the combination of the two verbal noun suffixes, which is unusual in Turkic languages. I am certain about the identity of the second part of the suffix, but the identity of the first part, *-ñ*, seems to be questionable. I tried to connect its origin to the reflexive suffix *-°n-* (see 2.3.6), which can be followed by any verbal noun suffix. But I found

out that such an analysis would face even greater contradiction. Firstly, the words such as *ezil<u>äñqü</u>* 'sluggish, lazy' <*ezil-* 'be smashed, be crushed', *čečil<u>añyu</u>* 'distracted, absent-minded' <*čečil-* 'be dispersed, be scattered' contains the passive suffix *-l-* in the stem, which can be followed by other voice suffixes but not by the reflexive. Secondly, we can not expect the reflexive suffix to function as a deverbal adjective suffix in words like *yoqil<u>añ</u>* 'groundless, nonsensical' and *jüdä<u>ñ</u>* 'thin, emaciated'. Thus, before I find a better explanation, I maintain that *-ñ* is a CA verbal noun suffix, which may or may not have a common origin with resultative suffix **-°n*.

2.2.7 */-°šl°G/*

The suffix */-°šl°G/ = [-(i)šliq ~ -(i)šlik ~ -(u)šluq ~ -(ü)šlük]* in MUy. forms adjectives characterizing suitability or habituality of performing an action: *yiy<u>išlik</u> (tamaq)* 'nice to eat (of food)' <*yä-* 'eat', *min<u>išlik</u> (at)* 'nice or ideal to ride (of horse)' <*min-* 'mount, ride' (Tömür, 1987:115). It is clear that the suffix is the combination of the verbal noun suffix */-°š/* and the nominal suffix */+l°G/*. The CA origin of */-°š/* has been discussed in 2.1.15. The possible CA origin of */+l°G/* is mentioned in 2.1.6.

2.2.8 */-A°rl°G/*

The suffix */-A°rl°G/ = [-(a)rliq ~ -(ä)rlik]* in MUy. forms adjectives designating availability or capability of doing an

action: *yetärlik* 'enough, sufficient' <*yät-* 'reach, suffice', *xošallinarlig* 'worthy of being happy' <*xošallan-* 'be happy, rejoice' (Tömür, 1987:115). In origin the suffix is the combination of the CA verbal noun (aorist) suffix **-r(V)* (see 3.2.1) and */+lᵊG/* (see 2.1.6). Again, for the discussion of their CA origin, I refer the reader to the relevant sections.

2.2.9 */-čAG/*

The suffix */-čAG/* = [*-čaq ~ -čäk*] (*/-čUG/* = [*-čuq ~ -čük*]) in MUy. forms adjectives from reflexive verbs, denoting a feature of eagerly or habitually doing an action: *maxtančaq* 'arrogant, braggart' <*maxtan-*'praise oneself', *erinčäk* 'lazy' <*erin-* 'be sluggish' (Tömür, 1987:114). The suffix always carries the diminutive meaning. It is possible that one can find more than one etymology for the suffix. Firstly, according to the diminutive meaning, we can postulate that the suffix is the combination of the two diminutive suffixes, *+č* and *+aq*, which is present in Mo. and Tkc. languages (Ramstedt, 1952:217-218). If this is true, then we have to write the stem forms *maxtan-* and *erin-* without a dash, that is, we should consider them as deverbal nouns ending in *-n*, because the diminutive suffix *+čaq ~ +čäk* requires a nominal stem. Secondly, we can treat the suffix as the combination of two elements, the first one, *-č*, is a deverbal noun suffix, and the second one is the diminutive suffix *+aq ~ +äk ~ +uq ~ +ük*. Actually, I am taking the second approach here. Because, firstly, a verbal stem in *-n-* in these formations clearly

indicates the reflexive meaning. So it is the reflexive suffix (see 2.3.6), not a deverbal noun suffix. Secondly, the deverbal noun suffix -*č* and diminutive suffix *+aq ~ +äk ~ +uq ~ +ük* are also common to Altaic languages. Ramstedt (1952:126-130) is right in positing a CA verbal noun suffix *-*ča* and discussing the very same Turkic forms *emčäk* 'breast' <*em-* 'to suckle', *salïnčaq* 'a swing' *slaïn-* 'to swing'. It is misleading though that Ramstedt also discusses the Turkic verbal noun suffix *-š ~ -ïš ~ -iš* along the same lines. As we have discussed in 2.1.15, I argue that the Tkc. *-š ~ -ïš ~ -iš* developed from the CA suffix *-l_2*. The CA verbal noun suffix *-ča, on the other hand, reamins as *-č ~ -ča ~ -čä* in the same type of deverbal nouns in MUy.: *išänč ~ išänčä* 'belief, confidence' <*išän-* 'to believe', *söyünč* 'happiness, joice' <*söyün-* 'to rejoice'. Correspondingly, we find Mo. *-ča* and Tng. *-če ~ -či* functioning as deverbal noun suffixes: Mo. *yabuča* 'process, progress' <*yabu-* 'to walk, go', *talbiča* 'place where one deposits or puts something' <*talbi-* 'to place, put, set', *niγuča* 'secret, mystery' <*niγu-* 'to hide, conceal' (Lessing, 1960). According to Ramstedt (ibid), the Tng. suffix *-če ~ -či* forms past participles, which can be used as attributive as well as predicate: Evk. *ämčään* 'He came' <*äm-* 'to come'; Sol. *biśes (<bičes)* 'You were' <*bi-* 'to be'; Na. *holači* 'having read' <*hola-* 'to read'. However, there is a possibility that the Tungusic suffix may have its origin not from the CA verbal noun suffix *-ča but from *-dV*

~ *-*tV*, since the Nanai imperfect participial (aorist) suffix *-či ~ -ji* of the Type III verbs resulted from palatalization of **-dV ~ *-tV* (see 4.1.1.3).

As we concern the diminutive *+aq ~ +äk*, the suffix is evident in the combination with another diminutive suffix *+č* (see 2.1.5), *+čaq ~ +čäk* in Tkc. languages, and *+čaq ~ +čiq* in Mo. languages: Alt. *atčaq ~ adïčaq* 'small horse' <*at* 'horse'; MUy. *qizčaq* 'small girl' <*qiz* 'girl'; Tks. *evjik* 'small house' <*ev* 'house; Mo. *yanggirčay ~ yanggiy--a* 'packsaddle, saddle without cushion', *dobučay* 'small hill, elevated place' <*dobu* 'hill', Mgr. *tulumčaq* 'small sack' <*tulum* 'sack', *dumburčaq* 'small hill' <*dumbur* 'sand dune'. The combination of the diminutive suffixes is not known in Tng. languages.

2.1.10 */-°n/*

We have already discussed the resultative verbal noun suffix *-°n ~ -in ~ -un ~ -ün* and its CA origin in 2.1.13. It is necessary to mention that the suffix also forms adjectives out of verbs, maily with the spacial implication: *yeqin* 'near, close' <*yaq-* 'to approach, to touch'; *uzun* 'long' <*uzu-* ~ *uza-* 'to be long'; *qelin* 'thick' <?**qalï-* 'to be sick'.

2.3 Deverbal Verb Suffixes

The deverbal verb suffixes in MUy. include mainly those that form a new verb out of a verb stem by changing its voice at the same time. Therefore, they are treated as both

derivational and inflectional suffixes. As inflectional suffixes, they are explained in the voice category of verbs in MUy. grammars (Tömür, 1987:376-389). It is clear that for my special purpose, I only discuss them as derivational suffixes here. In most cases a root stem in MUy. is considered active, and other voices such as causative, passive, reflexive and reciprocal take special suffixes. There is more than one causative suffix in Tkc. languages. Among them only **-r-*, **-q- ~ *-k-*, and **-t- ~ *-d-* are primary suffixes. As a result of their combination with each other, and the split of *-r-* into *-r-* and *-z-* during the later stages of develoment, more causative suffixes came into being. In some cases, their usage are phonologically conditioned, in some other cases there is no such condition so that they are freely interchangeable. Semantically speaking, the causative meaning of the suffixes perhaps developed from an earlier intensive or frequentive meaning. Therefore, it is no coincidence that **-r-*, **-q- ~ *-k-*, and **-t- ~ *-d-* all appear as intensifying verbal suffixes in early Tkc. documents. The Turkic negative suffix *-ma- ~ -mä-* also has double function: grammatically it changes a positive verbal stem into negative; lexically the negative stem can be considered as a new word in contrary to the positive one. Thus I discuss it in this section also.

2.3.1 /-°r-/, /-A°r-/

The suffix */-°r-/, /-A°r-/ = [-r- ~ -ur- ~ -ür-, ~-ar- ~ -är-]* in MUy. is attached to some verbs ending in *č* and *š*. It

makes intransitive verbs transitive and transitive verbs causative: *učur-* (~ *učar-*) 'fly (tr.), cause to fly', <*uč-* 'fly', *čüšür-* (~ *čüšär-*) 'unload, cause to fall or descend' <*čüš-* 'fall, descend' (Tömür,1987:383).

Ramstedt (1952:176) posits **-ri-* ~ **-ŕ-* as CA causative suffix. Its existence in Turkic and Tungusic languages is very obvious. It is not active in Mongolic languages, nevertheless, remnants of it can be found in conjugational comparison of some verbal stems. When discussing the causative forms in Altaic languages, Kormušin (1978:87) mentions that "It is possible that other Common Turkic suffixes have parallels in Mongolic and Tungusic material. For example, *-(°)r-* is not only causative but also a medio-passive marker in Tkc. languages and probably should be compared with the Mo. and Tng. medio-passive *-r-*".

In EWT the suffix *-ur-* ~ *-ür-* appears to form causative verbs: *kälür-* 'to bring, to cause to come' <*käl-* 'to come', *ölür-* 'to kill, to cause to die' <*öl-* 'to die', *yitür-* to lose' <*yit-* 'to become lost' (Tekin, 1968:117). Semantically, the so-called middle verb suffix *-r-* in EWT should have the same origin: *kir-* 'to enter, go in' <**ki-* (id.) (cf. *kigür-* 'to let in'); *yaγur-* 'to come close, approach' <**yaγu-* (id.) (ibid.:116). Like other causative suffixes, *-r-* in these examples seems to function as intensifying elements. Kashghari (v.I:238-239) records the causative usage of the suffix in OUy.: *ötür-* 'to make a hole, to cause to cross

over' <*öt-* 'to cross over, pass', *öčür-* 'to extinguish, erase' <*öč-* 'go out, die out', *ičür-* 'to cause to drink' <*ič-* 'to drink'. In Chagatay literature the suffix demonstrates its low-voweled allomorphs *-ar- ~ -är-*: *ketär-* 'to remove' <*ket-* 'to go', *qaytar-* 'to return, bring back or give back' <*qayt-* 'to return, go back' (Eckmann, 1966:70).

There is no doubt that the suffix is alive in modern Turkic languages. Here I would like to specifically discuss the two developmental aspects of the suffix. Firstly, the suffix developed an allomorph in *-z-* in very early Turkic documents, which is consistent with the phonological split of *r* into *r* and *z* in lexical as well as morphological level in Turkic languages (see 3.2.1). The exact cause for such an split is not clear. The MUy. evidence only shows that *-r- ~ -ar- ~ -är-* appears in verbs ending in *š* and *č* as shown above, and that *-z-* appears in verbs ending in *m*: *emiz-* 'to cause to suckle' <*äm-* 'to suckle', *temiz-* 'to cause to drip' <*tam-* 'to drip'. In any case the distribution of *-z-* is narrower than that of *-r-*. In EWT *-z-* also appears in verbs ending in dental *t* and *d*: *tutuz-* 'to cause to seize' <*tut-* 'to catch, seize', *uduz-* 'to lead' <*ud-* 'to follow' (Tekin, ibid.). Kashghari (ibid.) records the OUy. verb *ämüz-* 'to cause to suckle', which is same as *emiz-* in MUy. above. In Chagatay *-z-* appears under the same conditions. One more new example Eckmann (ibid.:74) provides is *aqïz-* 'to cause to flow' <*aq-* 'to flow', whose stem contains the uvular *q*. These

phonological conditions may provide us with some clue about the *r* ~ *z* alternation. Secondly, in combination with other causative suffixes -*t*- (see 2.3.2 below) and -*q*- ~ -*k*- (-*γ*- ~ -*g*-), the causative -*r*- formed newer causative compounds -*dur*- ~ -*tur*- ~ -*dür*- ~ -*tür*- (see 2.3.3 below) and -*γur*- ~ -*qur*- ~ -*gür*- ~ -*kür*- (see 2.3.4). Corresponding to the *r* ~ *z* alternation rule, these compound suffixes also have allomorphs ending in *z*: -*duz*- ~ -*tuz*- ~ -*düz*- ~ -*tüz*- and -*γuz*- ~ -*quz*- ~ -*güz*- ~ -*küz*- (see 2.3.3 and 2.3.4 below respectively). Of course, the usage of these allomorphs has been standardized in MUy.

Ramstedt (ibid.) gives examples which show remnants of the CA causative **-ri*- ~ **-ŕ*- in some Mongolic conjugated verbal stems: *nidur*- 'to beat or strike with the fist', cf. *niduči*- (id.); *ulari*- 'change from one state or condition to another, change of season', cf. *ulam* 'further, gradually, more', Tkc. *ula*- 'to relay, to connect two ends', Ma. *ula*- 'to pass on, hand down'; *kedür*- 'to wear a garment over one's shoulders', *kedürge* 'coat, raincoat', cf. EWT *käd*- 'to wear', *kädim* 'dress, general appearance'. Except these limited number of conjugational forms, we really can not find further evidence to prove the existence of the CA causative suffix in Mo. languages. It is not clear why the suffix ceased functioning in modern Mo. languages.

In Tng. languages, the CA **-ri*- ~ **-ŕ*- are seen as intensifying or transitive suffixes in many verbal stems, a

kind of archaic usage of the suffix. In fact, perhaps all causative suffixes in Altaic languages are a kind of intensifying or causative elements in origin. It is likely that they obtained the causative meaning through connecting the intensifying result of an action to the performer or doer of the action by speakers. Besides Ramstedt's (ibid.) examples such as Na. *ugir-* 'to raise up', Sol. *ugeri-* ~ *ueri-* (id.); Na. *puyur-* 'to boil (tr.)', Ngd. *huyur-* (id.), cf. Na. *huyisi-* and Ngd. *huyusi-* 'to boil (intr.), etc., the existence of the suffix in Tng. languages perhaps can be better proven by the illustration of a small class of verbal pairs in Manchu, where the appearance of the corresponding suffix *-ra- ~ -re- ~ -ro-* marks the intensification of an action. Compare the following pairs of verbs: *bisa-* 'to overflow, to flood' vs. *bisara-* 'to overflow, to pour everywhere'; *cikta-* 'to take root, grow up' vs. *ciktara-* 'to mature, be in readiness'; *faita-* 'to cut, slice' vs. *faitara-* 'to cut into pieces, mince'; *fa-* 'dry up, be very thirsty (intr.)' vs. *fara-* 'to spread freshly harvested grain out to dry'; *fete-* 'to dig, dig out' vs. *fetere-* 'to dig out (intensive)'; *fodo-* 'to pant, gasp for breath' vs. *fodoro-* 'pant, gasp, bristle, go against the grain'; *gedu-* 'to gnaw' vs. *gedure-* 'to graze, munch on grass'; *maka-* 'become muddled, be confused in thinking' vs. *makara-* 'become weak, become decrepit' (Norman:1978).

2.3.2 /-t-/

The suffix /-t-/ = [-t-] in MUy. is mainly attached to the deadjectival verbs ending in *r, y* or some multisyllabic verbs ending in a vowel. It makes intransitive verbs transitive and transitive verbs causative: *aqart-* 'cause to become white' <*aqar-* 'become white', *azayt-* 'cause to lessen or decrease' <*azay-* 'become less, decrease', *oynat-* 'cause to play' <*oyna-* 'play (tr. & intr.)' (Tömür, 1987:383).

The causative *-t-* appears in very early Turkic documents. As Tekin (1968:116-117) illustrates, causative verbs formed with this suffix are very productive in Orkhon Turkic: *aγït-* 'to put to flight' <*aγ-* 'go up, ascend', *aqït-* 'to let raid, order to raid' <*aq-* 'to raid', *artat-* 'to destroy' <**arta-* 'be destroyed', *ayt-* 'to say, tell' <*ay-* 'say, tell'. Again, I believe that the same suffix **-d-* ~ **-t-* functioned as an intensive verbal ending at earlier stages of the Tkc. languages: EWT *tod-* 'to be satiated' (cf. *to-q* 'satiated', *to-l-* 'to be full'); *yüd-* 'to take a burden on someone's shoulder' (cf. *yü-k* 'burden') (Ramstedt, 1952:132-133). Of course, later the function of the suffix is stablized as causative. Kashghari (v.I:280, v.II:436), for instance, only records the causative function of the suffix in OUy.: *ärüt-* to cause to melt' <*ärü-* 'to melt', *azït-* 'to cause to go astray' <*az-* 'go astray', *bitit-* 'to cause to complete' <*bit-* 'to complete', *tatït-* 'to cause to taste' <*tat-* 'to taste'. In Chagatay literature the suffix continues its same function: *oqut-* 'to cause to read' <*oqu-* 'to read', *qorqut-* 'to

frighten' <*qorq*- 'to fear', *qozγat*- 'to stir up' <*qozγa*- (id.), *yügürt*- 'to cause to run' <*yügür*- 'to run' (Eckmann, 1966:74). There is no doubt that the causative suffix is also active in modern Tkc. languages: Az. *šlät*- 'to cause to work' <*šlä*- 'to work'; Trkm. *doqat*- 'to cause to weave' <*doqa*- 'to weave'; Chuv. *werent*- 'to teach, to cause to learn' <*weren*- 'to learn'; Kha. *čügürt*- 'to cause to run' <*čügür*- 'to run'; Yak. *kötüt*- 'to cause to fly' <*köt*- 'to fly'; Kaz. *bastat*- 'to cause to start' <*basta*- 'to start'; Kir. *tištet*- 'to cause to bite' <*tište*- 'to bite' (Tenišev, 1981).

In comparison to other causative suffixes, it seems to me that *-t-* appears mainly after verbs ending in uvulars, dentals, glides and vowels. But this is not an absolute rule. Some evidence show that since there is more than one causative suffix, selecting a proper one depends on the speaker rather than the phonological condition. For example, the causative forms of *qorq*- 'to fear' and *aq*- 'to flow' can be formed by either *-t-* or *-z-* (<**-ŕ-*), depending on the different speakers: *qorqut*- ~ *qorquz*-, *eqit*- (<*aqït*-) ~ *eqiz*- (*aqïz*-). The combination of the two causative suffixes, *-t-* and *-r-* (*-z-*), resulted in the newer causative suffix *-dur*- ~ *-tur*- ~ *-dür*- ~ *-tür*- (*-duz*- ~ *-tuz*- ~ *-düz*- ~ *-tüz-*), which is used more often than *-t-* itself in MUy. (see 2.3.3 below).

Kurmušin (1978:87) beieves that the Turkic causative *-t-* is very archaic one, but he seems to be pessimistic about the existence of its equivalents in Mo. and Tng. languages: "The

'youngest' Tkc. causative suffix -*t*- is actually a rather archaic marker; on the Nostratic level, there are parallels in Uralic and Dravidian, but there are so far no hopeful comparisons in Mongolic and Tungusic". However, comparing the Turkic causative -*t*- with the Mongolic -*či*- and Tungusic -*ti*-, Ramstedt (1912:21, 1952:175) posits **-ti-* as the CA causative suffix. Confirming the existence of the **-ti- (*-t-)* in all Altaic languages, I should point out that it is not as active in Mongolic and Tungusic languages as in Turkic ones. In Mo. languages, for instance, the corresponding suffix -*či*-, which is likely the result of palatalization of *t* in front of the high vowel *i*, is recognizable only when a verbal stem containing the suffix is compared with other conjugational forms: *burči*- 'to destroy, break', cf. Tkc. *buz*- (id.); *arči*- 'to wipe, clean, erase', cf. *ariγ* 'pure, clean', MUy. *ärt*- 'to wipe, clean, erase', *eriγ* 'clean, pure', *eriγda*- 'to clean, to sort out'; *sürči*- 'to spray (paint, etc.), strew, spread by scattering', cf. MUy. *sür*- (id.), *sürt*- 'to polish or erase something to make brighter or cleaner'; *qabči*- 'to squeeze, compel, to exert pressure' cf. EWT *qapïγ* 'gate' (<**qap*- 'to close, squeeze' (Mo. examples quoted from Ramstedt, 1912; Lessing, 1960). In comparison with the Mongolic verb *öbči*- 'to remove the skin, flay', Ramstedt (1952:175) believes that Tungusic (?Evk.) verb *hupti*- ~ *hupte*- 'dissect, perform an operation on' contains the CA causative suffix **-ti-* ~ **-te-* which indicates quickness and

effectiveness of an action. It seems to me that since *-bu-* functions as the common passive-causative suffix in Tng. languages, *-ti- ~ -te-*, like *-ri- ~ -ŕ-*, can be seen only in a limited number of verbs as an unproductive intensifying suffix. Perhaps the following Manchu verbs containing the suffix *-ta- ~ -te- ~ -to-* can serve better to prove my point here: *ališa-* 'be bored, be unhappy' vs. *ališata-* 'be deeply depressed', *amca-* 'to pursue, hurry, take advantage of' vs. *amcata-* 'to strive to overtake, to overstep one's competence', *ana-* 'to push, urge, extend, blame others' vs. *anata-* 'to push together or repeatedly, put off (until), procrastinate', *fehu-* 'to step on, trample' vs. *fehute-* 'to trample', *karma-* 'to protect, take care of' vs. *karmata-* 'to protect continually', *mara-* 'to decline, reject' vs. *marata-* 'to decline weakly, reject moderately', *nime-* 'to ache, be ill' vs. *nimete-* 'be ill together, suffer mutually', *tuwaša-* 'to watch, guard' vs. *tuwašata-* 'to look after, supervise, gaze on' (Examples quoted from Norman, 1978).

2.3.3 */-DUr-/*

The common causative suffix */-DUr-/ = [-dur- ~ -tur- ~ -dür- ~ -tür-]* in MUy. makes intransitive verbs transitive and transitive verbs causative: *yazdur-* 'cause to write' <*yaz-* 'write', *taptur-* 'cause to find' <*tap-* 'find' (Tömür, 1987:382).

As I mentioned above, the combination of the two CA causative suffixes, **-ti-* and **-ri- ~ *-ŕ-*, resulted in the

compound suffix *-tur- ~ -tür-* in EWT: *irtür-* 'to cause to arrive, to send' <*ir-* 'to reach, arrive', cf. Mo. *ire-* 'to come' (Tekin, 1968:117). In OUy. the suffix also demonstrates its allomorphs *-dur- ~ -dür-*: *öldür-* 'to kill' <*öl-* 'to die' (Kashghari, v.I:292-298). In Chagatay and modern Turkic languages the suffix developed its other allomorphs such as *-dïr- ~ -tïr- ~ -dir- ~ -tir-*, and is widely used: Trk. *yedir-* 'to cause to eat' <*ye-* 'to eat'; Trkm. *yazdïr-* 'to cause to write' <*yaz-* 'to write'; Tat. *taptïr-* 'to cause to find' <*tap-* 'to find'; Uz. *orttir-* 'to increase, enlarge' <*ort-* 'become bigger, become more'. As the regular correspondence of the -r- ~ -z- alternation of the second causative element (see 2.3.1), the compound suffix is also seen as *-tuz- ~ -tüz-* in EWT (Tekin, ibid.): *altuz-* 'to cause to capture' <*al-* 'to take, capture'. In OUy. we also see its allomorphs *-duz- ~ -düz-*: *bulduz-* 'to cause to find' <*bul-* 'to find; *bildüz-* 'to teach, to cause to know' <*bil-* 'to know' (Kashghari, v.II:289). However, this allomorph is not present in modern Turkic languages. Although the CA causative suffixes **-ti-* and **-ri ~ -ŕ-* find their correspondence in Mongolic and Tungusic languages, their combination as a compound suffix has not been attested yet.

2.3.4 */-GUz-/*

2.3.4.0 The common causative suffix */-GUz-/* = *[-γuz- ~ -quz- ~ -güz- ~ -küz-]* in MUy. makes intransitive verbs transitive and transitive verbs causative: *yigüz-* 'cause to eat' <*yä-*

'eat', *ötküz-* 'cause to pass' <*öt-* 'pass, penetrate'. In most cases *-GUz-* is interchangeable with *-DUr-* above (Tömür, 1987:382).

Etymologically, the suffix contains the CA passive-causative suffix **-g(V)- ~ *-k(V)-* and the causative **-ri- ~ -ŕ-* (see 2.3.1). As the primary form of their combination, we see also its allomorphs *-γur- ~ -qur- ~ -gür- ~ -kür- (-γar- ~ -qar- ~ -gär- ~ -kär-)* in EWT and modern Turkic languages and dialects. Since we have already discussed the causative **-ri- ~ *-ŕ-* and its alternative *-z-* above, I focus my discussion here mainly on the first part of the combination, **-γ(V)- ~ *-k(V)-*.

2.3.4.1 **Turkic**: Ramstedt (1952:173-175) posits **-ga-* as the CA causative suffix, and believes that the suffix lost its final vowel, and appears as *-q- ~ -k-* in EWT. I believe that Ramstedt's comparison is convincing, since the corresponding suffixes in Mongolic and Tungusic languages provide strong support. However, I prefer to posit the suffix as **-g(V)- ~ *-k(V)-*, which indicates that the suffix may have had an unknown vowel originally. As we see the development of CA suffixes in each language branch, a suffix ending in a vowel tends to lose its final vowel in Turkic languages. Thus, we can reconstruct the suffix for Turkic languages simply as **-g- ~ *-k-*. It appears in EWT as *-q- ~ -k-* perhaps due to the application of consonant harmony and final devoicing rules in Tkc. languages. As for the semantic function of the suffix,

I use the term 'passive-causative' to refer to it, since in some cases in EWT the suffix implies a passive meaning instead of having a causative function. At the first glance, the term passive-causative may seem to be contradictory. But evidence in Altaic languages show that a single suffix can be used for expressing speakers' different perceptions. Likewise, when the suffix in concern is used to refer to the receiver of an action, it indicates a passive meaning; when it refers to the performer of the action, it indicates the causative meaning. Of course, in modern Uyghur and other Turkic languages the function of the suffix is mainly causative, since it always appears in combination with another causative suffix *-r-* ~ *-z-*. Its passive meaning, on the other hand, is seen in EWT in the compound suffix *-s°q-* ~ *-s°k-*: *tutsuq-* 'be held, be captured' <*tut-* 'to hold, capture', *bilsik-* 'be known' <*bil-* 'to know' (Examples from Gabain, 1974:82). The suffix *-s°q-* ~ *-s°k-* is obsolete in modern Turkic languages.

In both passive and causative usages above, the suffix appears in combination with other suffixes which may determine actual function of the compound. What would be its function when the suffix occurs by itself? Ramstedt (ibid.) recognizes some early Turkic verbs carrying the suffix: *yaq-* 'to burn (tr.)', cf. *yan-* 'to burn itself (intr.)'; *saqin-* 'to think' <*sa-* 'to count'. Again, the EWT *-q-* ~ *-k-* is best known as intensifying suffix (Tekin, 1968:115; Gabain, ibid.): *alq-* 'to bring, finish, complete' <*al-* 'to take'; *ök-* 'to think'

<*ö- 'to think', cf. *ökül-* 'be planned'; *qorq-* 'to fear' <**qorï-* (id). Eckmann (1966:73) mentions some newer formations in the suffix in Chagatay: *qïzïq-* 'to get quite red' <*qïzï-* 'to get red'; *azïq-* 'to roam losing one's way' <*az-* 'to lose one's way'. Except for the EWT verb *alq-*, all other verbs carrying the suffix are alive in modern Uyghur, and perhaps we can find more formations in the suffix. However, since the suffix ceased to function by itself in MUy., these formations might be reanalyzed as part of the root by most Uyghur speakers. In modern Turkic languages the suffix is alive in the compound suffixes */-GAG/* (see 2.1.2, 2.2.2), */-G°n/* (see 2.1.7 and 2.2.4), */-GUr/* (see 2.2.3), */*-GAn$_2$/* (see 3.2.2), and the causative */-GUr-/* ~ */-GUz-/* we are discussing here.

While the so-called intensifying suffix *-q-* ~ *-k-* gradually ceases to function by itself, its combination with another causative suffix *-r-* resulted in the compound causative suffix *-γur* ~ *-qur-* ~ *-gür-* ~ *-kür-*. As a reflection of the *-r-* ~ *-z-* alternation, the compound suffix also developed the allomorph *-γuz-* ~ *-quz-* ~ *-güz-* ~ *-küz-* later. This transition is evident from early Tkc. documents. Tekin (ibid.), for instance, only illustrates the causative compound *-γur-* ~ *-gür-* in Orkhon Turkic: *kigür-* 'to go in, enter' <**ki-* (cf. *kir-* (id.)), *tirgür-* 'to bring to life' <**tir-* 'to live'. When discussing the function of the suffix *-γur-* ~ *-gür-* along with another causative suffix *-tur* ~ *tür-* (see

2.3.2) in OUy., Kashghari (v.II:285-286) claims that in the combinations the genuine causative element is -*r*-, and that the preceding -γ- ~ -*g*- and -*t*- are inserted only for convenience of pronunciation or in order to avoid repeating the *r* sound two or three times in the same stem. Although Kashghari fails to identify the elements -γ- ~ -*g*- and -*t*- in the combination, he gives us first hand information that the suffixes contain more than one element and that all share the causative suffix -*r*-. According to Kashghari's definition, the basic function of the suffix in OUy. is same as in MUy., that is, it makes an intransitive verb transitive and a transitive verb causative. But some of his examples do not exactly fit the definition. For example, *kälgir*- 'be ready to come, be going to come' <*käl*- 'to come' (ibid.:282), *qatyur*- 'to laugh awkward' (ibid.:288). In these examples the suffix does not show a causative meaning but an intensifying action. Nevertheless, this meaning can be attributed mainly to the first part of the suffix, -γ- ~ -*g*-, which used to express the same meaning by itself as we have seen above. In Chagatay literature the suffix not only developed its low-voweled allomorphs -γar- ~ -qar- ~ -gär- ~ -kär-, it also has as allomorphs -γuz- ~ -güz- which is consistent with the -*r*- ~ -*z*- alternation: *bütkär*- 'to finish, bring to an end' <*büt*- 'terminate', *toyyar*- 'to satiate' <*toy*- 'to be satiated'; *körgüz*- 'to show' <*kör*- 'to see', *tirgüz*- 'to bring to life, resuscitate' <*tir*- 'live' (Eckmann, 1966:71-72). As a result

of further development, */-GUz-/* finally became dominant causative suffix in standard modern Uyghur, while */-GUr-/* ~ */-GAr-/* is only alive in some dialects. In some other Tkc. languages both of them are alive, while in some others only one of them is standardized: Tat. *menger-* 'cause to stand' <*men-* 'to stand', *torgïz-* 'cause to stand up' <*tor-* 'to stand up'; Bash. *toryoz-* (id.); Alt. *toygïs-* (<*toygïz-*) 'to satiate' <*toy-* 'to be satiated'; Kaz. *ötkiz-* 'cause to pass' <*öt-* 'to pass'; Uz. *kirgiz-* 'cause to enter' <*kir-* 'to enter' (Examples quoted from Tenišev, 1981).

2.3.4.2 **Mongolic**: The existence of the CA passive-causative suffix **-g(V)-* ~ **-k(V)-* in Mongolic languages is evident in WM, in which the suffixes *-γa-*, *-γul-* ~ *-gül-*,[6] and *-lγa-* make intransitive verbs transitive, and transitive verbs causative: *bolγa-* 'to make, to do' <*bol-* 'to become', *γarγa-* 'to take out, lead out' <*γar-* 'go out, be out', *oroγul-* 'to let in, lead in' <*oro-* 'to enter, go in', *yabuγul-* 'to send' <*yabu-* 'to walk', *ungšiγul-* 'to order to read' <*ungši-* 'to read', *bičigül-* 'to let write' <*biči-* 'to write', *saγulγa-* 'to set, plant' <*saγu-* 'to sit down'. The main causative element in these examples, of course, is *-γa-* ~ *-γu-*. According to Ramstedt's (1952:166-167) explanation, the element *-l-* which is sometimes preceding and sometimes following *-γa-* ~ *-γu-* is another CA suffix, which functions as causative in Mo. languages, and passive in Turkic ones (see 2.3.5 below). The same causative suffixes are active in modern Mongolic

languages, of course, with some phonological changes. In Santa the main causative suffix is *-γa-*: *oroγa-* 'to let in' <*oro-* 'enter', *oñšiγa-* 'to cause to read' <*oñši-* 'read'. It is interesting to point out that an intransitive verb becomes transitive when *-γa-* is added to it; and in order to make the same stem causative, another *-γa-* is needed: *bai-* 'stand, stop' > *baiγa-* 'to construct, to erect' > *baiγaγa-* 'to cause to erect, to cause to construct'. Corresponding to the WM *-γul- ~ -gül-*, Santa contains *-ulu-*: *qarulu-* 'to give back, to return' <*qari-* 'go back, return (intr.)' (Examples quoted from Böke, 1986:151-152). In Monguor the causative suffixes are the same *-γa-, -lγa-*: *surelγa-* 'to cause to study' <*sure-* 'to study'. In Mgr. the same suffixes also function as passive (Čenggeltei, 1991:218). In Baoan *-γa-* is also a causative suffix: *serγa-* 'to teach, to cause to learn' <*ser-* 'to study', *jixγa-* 'to cause to beat' <*jix-* 'to beat, hit' (Chen, 1987:236). Dagur contains the same causative suffixes, *-lγa-, -γa- ~ -γe-*, as in WM: *yaulγa-* 'to let go' <*yau-* 'to go', *bolγa-* 'to cause to become' <*bol-* 'become'. As a result of deletion of *γ ~ g* in intervocalic positions, Dagur developed third causative suffix which is just long *-aa- ~ -ee- ~ -oo- ~ -ėė-* (Engkebatu, 1988:375-376).

2.3.4.3 **Tungusic**: Ramstedt (1952:174) believes that the common Altaic causative suffix is alive in Tungusic languages in the compound suffixes *-wkaan-* and *-wkaat-*,[6] where *-n-* possibly is CA reflexive and *-t-* is the progressive elements:

Ngd. *wawkani-* ~ *wafkani-* 'to let to kill' <*wa-* 'to kill'; *huyuwa-* ~ *huyuwkaan-* 'to boil (tr.)' <*huyu-* 'to boil (intr.); Na. *aasiwaan-* 'to let to lie down to sleep' <*aasi-* 'to sleep'; Lam. *bakkan-* 'to let to look for' <*baku-* 'be looked for' (cf. Tkc. baq- 'to look at, look after'). Besides this comparison, Benzing (1955a:1070) reconstructs a causative suffix **-gi-* for the common Tungusic, which we can compare with CA passive-causative **-g(V)-* ~ **-k(V)-*. But in modern Tng. languages the suffix seems to have undergone a big phonological change that we can hardly recognize it: Tng. **üräqi-* 'to raise, to nourish' (<**ürä-* 'to grow') = Ma. *uji-* (cf. *ure-* 'to get ripe, to be done (of food)'), Na. *uji-* (cf. *ure-*); Sol. *irqi-* ~ *iggi-* , Ngd. *iiqi* ~ *iggi-*, Evk. *irqi-*, Lam. *irge-*; Tng. **žägdäqi-* (>*žägdii-*) 'to cause to burn' (<*žägdä-* 'to burn') = Ma. *deiji-*, Na. *jegji-*, Ul. *žegdi-*, Ork. *degde-*, Ude. *jegde-*, Evk. *jegdii-*, etc. Some more Evenki examples of this type can also be found in Vasilevič's Evenki-Russian Dictionary (1958:750): *kese-* 'to suffer' > *kesegii-* 'to make suffer'; *bere-* 'to be calm' > *beregii-* 'calm down (tr.)'; *ńure-* 'to glow' > *ńuregii-* 'to make glow' (cf. MUy. *yoru-* 'to glow, be light').

2.3.5 */-°l-/ (/-°n-/)*

The passive suffix */-°l-/* = *[-l- ~ -il- ~ -ul- ~ -ül-]* in MUy. is attached to transitive verbs in general except those ending in *l* or *l* plus a vowel, and its allomorph */-°n-/* = *[-n- ~ -in- ~ -un- ~ -ün-]* is attached to the verbs ending in *l* or

l plus a vowel. The suffix makes transitive verbs passive: *yezil-* 'be written' <*yaz-* 'write', *körül-* 'be seen' <*kör-* 'see', *bašlan-* 'be started' <*bašla-* 'start, begin', (Tömür, 1987:378). It is clear that the primary passive suffix is *-°l-*, and *-°n-* is only a phonologically conditioned allomorph. This distinction is revealed when a verbal stem is conjugated with both of them, where the form in *-°l-* always indicates passive meaning, while the one in *-°n-* indicates reflexive: *yuyul-* 'be washed' <*yuy-* 'to wash' vs. *yuyun-* 'to wash oneself'.

It is likely that the suffix has originated from the CA **-l-*, a sort of middle verb suffix. Ramstedt (1952:165) believes that the deverbal verb suffix *-°l-* is common to all Altaic languages. In Turkic languages the suffix tends to form passive verbs. He also suggests that its passive usage must be relatively new to Turkic languages, since its function is hardly known in Chuvash. It is certain that in Tkc. languages the suffix is always attached to transitive verbs to make them intransitive. In most cases it can be interpreted as passive, but in some cases it is reflexive. For example, the EWT verb *tiril-* 'to come to life' <*tir-* 'to live' seems to be reflexive rather than passive. Sometimes a same form in *-°l-* can be either passive or reflexive, depending on the context. For example, the form *ečil-* of the verb *ač-* 'to open' is interpreted as passive when its subject is *išik* 'door' in the sentence like *išik ečildi* 'The door was opened';

but it is interpreted as reflexive when its subject is *gül* 'flower' as in the sentence *gül ečildi* 'The flower blossomed.' (lit.: The flower opened by itself.) The argument is that a door can be opened by outside force, but a flower can not accept unnatural force to blossom. However, in contrast to the reflexive suffix *-°n-* (see 2.3.6 below), the passive meaning of *-°l-* is dominant. In Mongolic languages the suffix seems to have associated with the causative meaning, especially when it is used in compound suffixes *-lγa-*, *-γul-* ~ *-gül-*. The suffix is also seen in Mo. co-operative *-lča-*, reciprocal *-ldu-* and Tng. reciprocal **-ldu-* (Ramstedt, ibid.). It is clear that the functional development of the suffix varies from language to language.

The suffix appears in passive meaning in early Tkc. documents: *adrïl-* 'to be separated, be disjoined' <*adïr-* 'to separate', *ökül-* 'to be planned' <**ök-* (<**ö-*) 'to think, plan' (Tekin, 1968:115). The passive meaning of the suffix in OUy. is evident in Kashghari's (v.I:259-267, v.II:165-195, v.III:103-111) recordings. But some of his examples indicate that the suffix is also attached to intransitive verbs to indicate causative or intensive meaning: *yaγïl-* 'to be caused to fall (of rain)' <*yaγ-* 'to fall (from the sky)' (v.III:106), *čïqïl-* 'to be out of' <*čïq-* 'to go out, emerge' (v.II:188), *barïl-* 'to be gone' <*bar-* 'to go' (v.II:183). Kashghari (ibid.) explains that unlike Arabic, Turkic languages frequently form passive verbs out of intransitive ones. In

Chagatay, MUy., and other spoken Tkc. languages, however, the suffix mainly makes transitive verbs passive: Tat. *totïl-* 'be held, be captured' <*tot-* 'to hold, capture'; Alt. *aydïl-* 'to be said, be told' <*ayd-* 'to tell, say'; Kir. *ačïl-* 'to be opened' <*ač-* 'to open' (Tenišev, 1981).

Ramstedt (1912:§4-§6) recognizes more than one function of *-l-* in Mongolic languages. Firstly, the suffix is present in the deverbal noun suffixes *-lγa, -lγan: qubilγan* 'transformation, metamorphosis' (cf. *qubira-* 'to change, to fade'); *darulγ--a* 'pressure, oppression' <*daru-* 'to press, squeeze'; *yabulγ--a* 'the act of walking or going, departure' <*yabu-* 'to walk, go'. Secondly, it forms new verbs out of verbs, denoting an intensive meaning: *qubil-* 'to change' (cf. *qubira-* (id.)); *čakil-* 'to strike, flash' <*čaki-* 'to strike fire from a flint (cf. MUy. *čaqmaq čaq-* 'to strike of lightening'); *debil-* 'to frequently wave or fan' <*debi-* 'to wave, flap, fan'; *nuγul-* 'to bend, fold, curve' (cf. *nuγuči-* 'to fold, crumple, to separate bones at the joints,); *ötel-* 'to grow old, to age' (cf. *ötegü* 'seniors, elders', Tkc. *öt-* 'to pass (of time and space)'). Thirdly, the suffix is believed to form causative compounds *-lγa-, -γul- ~ -gül-* in combination with the causative *-γa-* and *-γu- ~ -gü-* (see 2.4.3.2 above). Fourthly, it is the part of the so-called reciprocal suffix *-ldu-* and cooperative suffix *-lča-*: *bayildu-* 'to struggle, make war (lit.: to stand against each other)' <*bayi-* 'to stand'; *saγulča-* 'to be present (at a

meeting, lit.: to sit with others)'. According to Ramstedt (1952:163), *-du-* (<*-*d*-) in the compound *-l*du-* is another CA suffix which indicates intensiveness or continuity of an action; *-ča-* in *-l*ča-* is the CA reciprocal suffix which became *-°š-* in Tkc. languages (see 2.3.7).

The same Mo. reciprocal *-ldu-* is present in Tungusic languages. Benzing (1955a:1069) posits **-ldu-* as the Tng. reciprocal suffix, which corresponds to Ma. *-ndu-* ~ *-nu-*, Ude. *-gdi-*, Sol. *-ldi-*, Ngd. *-ldi-*, Evk. *-ldii-*, Lam. *-lda-*: Ma. *afandu-* 'to fight each other' <*afa-* 'to fight', Sol. *afaldi-* (id.); Ma. *wandu-* ~ *wanu-* 'to kill together, to kill one another' <*wa-* 'to kill', Ngd. *waaldi-* 'to fight with somebody for the life', Evk. *waldii-* 'to beat one another'. Since both *-l-* and *-du-* are common to Altaic languages, it is hard to say that **-ldu-* in Tungusic languages is the Mongolic borrowing or vice versa. It is just a piece of evidence that *-l-* is also alive in Tng. languages. Besides, there is a so-called inchoative suffix *-l-* ~ *-li-* ~ *-lo-* in Tng. languages, for which Benzing (ibid.:1068) posits **-lu-* as the proto-Tungusic suffix: Tng. **xäpilü-* 'to start to play' <**xäpi-* 'to play' = Na. *hupilu-*, Ude. *ugili-*, Evk. *ewil-*; Tng. **tügdälü-* 'to start to rain' **tügdä-* 'to rain' = Na. *tugdelu-*, Ude. *tigdeli-*, etc. Based on the intensive meaning of *-l-* in Mo. languages, I assume that the same suffix may be functioning as inchoative in Tungusic languages.

2.3.6 /-°n-/ (/-°l-/)

The reflexive suffix /-°*n*-/ = [-*n*- ~ -*in*- ~ -*un*- ~ -*ün*-] in MUy. is attached to transitive verbs in general, and in some cases its allomorph /-°*l*-/ = [-*l*- ~ -*il*- ~ -*ul*- ~ -*ül*-] is used instead. The suffix forms reflexive verbs which indicate that one takes action toward oneself: *maxtan*- 'brag, praise oneself' <*maxta*- 'praise', *körün*- 'show oneself' <*kör*- 'see' (Tömür, 1987:381). It should be mentioned again that whenever a verbal root is conjugated in both -°*n*- and -°*l*-, the former stands for reflexive and the latter for passive. Thus, -°*n*- can be considered as dominant reflexive suffix in such comparison. However, because of the conjugational gap reflected in some verbal stems, only -°*l*- may appear as both reflexive and passive. In such cases the voice distinction depends on the context. For example, Kashghari records reflexive of the verb *at*- 'to throw, shoot' in -°*n*-, *atïn*- 'to throw oneself on, rush' (v.I:267) and its passive form in -°*l*-, *atïl*- 'to be thrown, to be shot' (v.I:259). This is a very ideal conjugation of the verb. But for some reason, the form *atïn*- is lost in MUy., and *atïl*- (>*etil*-) stands for both passive and reflexive, depending on the context. This kind of conjugational gap appears in a considerable number of verbs. Another extreme case is that as an expression of internal process of action in one's mind, -°*n*- is closely associated with the so-called thinking-verbs or feeling-verbs. As a result of consistent appearance of the suffix with such verbs, it seems to have fused with some verbal roots, that is, the

verbal roots do not appear without the suffix in MUy.: *išän-* 'to believe' (<**išä-*), *seγin-* 'to think, to miss' (<**saqïn-* <**saqï-*), *säskin-* 'to feel shivers, be panicked' (<**säski-*), *yirgin-* 'feel disgusted, feel bored' (<**yirgi-*).

In EWT *-n-* appears as both passive and reflexive (Tekin, 1968:116): *basïn-* 'to be overcome' <*bas-* 'to press, overcome'; *qïlïn-* 'to be created, be born' <*qïl-* 'to make, create'; *qon-* 'to settle' <**qo-* 'to lay down, place'; *tälin-* 'to collapse, give way' (<**täl*$_2$*-*) 'to hole, cause to cave in'; *yazïn-* 'to separate oneself, go astray' <*yaz-* 'to go astray'. Kashghari records the same passive and reflexive usages of the suffix in OUy. (v.I:267-343, v.II:196-240). When explaining the function of the suffix, Kashghari (v.I:267) mentions its two usages: Firstly, it indicates pretending to do something. Secondly, it indicates that someone performs an action oneself without outside help. Therefore, he records *atïn-* 'to pretend to be shooting an arrow' and *atïn-* 'to throw oneself on, rush' <*at-* 'to shoot, to throw' in two separate entries. In Chagatay as well as modern Turkic languages, however, the first function of the suffix seems to have disappeared, and its second function remains as basic. As a reflexive suffix, *-°n-* now is often used to indicate that someone performs an action toward oneself or by oneself.

Again, we can only posit a kind of middle verb suffix, **-n(V)-*, as a common Altaic form. Its later development as reflexive in Tkc. is a language-specific phenomenon.

According to Ramstedt (1952:168), there are corresponding deverbal verb forms in *-ni-* in Mo. and Tng. languages: Mo. *jobani-* 'to suffer, feel anxiety, be vexed' <*joba-* 'to suffer, worry'. Mo. *sarni-* 'to disperse, scatter (intr.)' (cf. Na. *sarani-* (id.)). However, only a few examples available so far to illustrate the existence of the deverbal *-ni-* in Mo. languages. It seems to have fused with verbal stems and other suffixes that we can hardly recognize them. It is not clear at this point that if there have ever been a primary verb **sar-* corresponding to the verb *sarni-* above. If so, what would have its meaning been? In such cases we only suggest a possibility according to other conjugational forms. As Ramstedt (ibid.) believes, *-ni-* is evident in other compound suffixes *-nigul-*, *-niga-*, *-niya-*, *-niyi-*, etc.: *sarniγul-* 'to cause to disperse or scatter', *qaniya-* 'to cough'. Ramstedt (ibid.) recognizes at least two compound suffixes carrying *-ni-* in Tng. languages. One of them is *-sini-* which indicates 'be ready to do..., to go to do...': Lam. *mašnom* 'I go to hunt' <*ma-* 'to kill (in hunting)'; Evk. *mulesinim* 'I go to bring some water' <*mule-* 'to bring water'. Another one is the combination of passive-causative and causative suffixes plus *-ni*, **-bu-ga-ni-*, which is realized as *-wkaan-*, *-pkaan-*, *-ugaan-*, *-uwaan-*, etc., in spoken Tng. languages: Lam. *bakukan-* 'to start to look for something' <*bak-* 'to look for' (cf. Tkc. *baq-* 'to look at, look for'); Ngd. *wawkane-* ~ *wafkane-* 'to let to kill' <*wa-* 'to kill'; Na. *tewenjini* 'He

was let sit down ~ He was persuaded to sit down' <*te-* 'to sit down'. As we consider the accumulation of voice suffixes in Tkc. and Mo. languages, these compound formations in Tng. languages do not seem to be too strange. Besides, Benzing (1955a:1068) posits a Tng. suffix **-ndaa-*, which, like *-sini-* above, indicates 'to go to do...'. Perhaps the initial *n* of the suffix is the same one we are discussing here, since semantically we can also interpret these forms as 'to prepare oneself to do something': Ma. *butana-* 'to go to catch' <*buta-* 'to catch', Na. *butanda-* 'to go fishing'; Ude. *isene-* 'to go to see', Sol. *isenee-*, Evk. *icenee-*, Lam. *itnee-* (id.).

If all of my comparison above can hold, I postulate **-n(V)-* as CA reflexive suffix.

2.3.7 */-°š-/*

The suffix */-°š-/ = [-š- ~ -iš- ~ -uš- ~ -üš-]* in MUy. forms so-called reciprocal verbs which indicate that an action is taken by more than one person together or against each other in a cooperative or competitive manner: *sözläš-* 'talk to each other' <*sözlä-* 'speak, talk', *soquš-* 'fight against each other' <*soq-* 'beat-, hit' (Tömür, 1987:384-385).

The suffix *-š- (-s-)* appears as reciprocal in very early Tkc. documents: *ögläš-* 'to think together, plan together' <**öglä-* (cf. *öglän-* 'to come to one's senses'), *süñüš-* 'to fight, battle' <**süñü-* 'to thrust into, pierce'. The same function of the suffix is evident in OUy. from the list of verbs (Kashghari, v.I:305-322, v.II:116-156) in the reciprocal

voice. The suffix still remains regular, productive and functions as same in Chagatay and modern Tkc. languages, thus, I do not think we need further examples to illustrate it here.

Correspondingly the compound suffix *-lča-* forms cooperative verbs in Mongolic languages. Thus we can posit either **-l$_2$-* or **-ča* as the CA deverbal verb suffix which can be the underlying form for both Tkc. *-°š* and Mo. *-lča-*. But the existence of the Chuvash reciprocal *-š- ~ -àš- ~ -èš-, -ś- ~ -àś- ~ -èś-* and absence of the **-l-* in Tng. reciprocal suffix **-mači-* or the Ma. *-ča- ~ -če ~ -čo-*, etc., justifies that only **-ča- (*-čV-)* is the right choice. Actually Ramstedt (1952:169) reconstructs **-ča-* as the CA reciprocal suffix. It is very likely that the suffix has lost its final vowel in Turkic languages first as a common phenomenon; then the remaining **-č-* developed into *-š-* as it is still seen as productive phonetic phenomenon in final positions in MUy.: */qušqač/* = [*qušqaš*] 'sparrow', */üč/* = [*üš*] 'three'. The suffix remains as *-ča-* in Mongolic languages, as *-či-* in Tungusic languages. However, in these languages, the suffix is not as free as in Tkc. ones. In Mo., for instance, the suffix always appears with another deverbal verb suffix *-l-* (see 2.3.5) to form the so-called cooperative suffix *-lča-*: WM. *ungši<u>lča</u>-* 'to read together' <*ungši-* 'to read' (Poppe, 1964:171); Dag. *tani<u>lča</u>-* 'to know each other' <*tani-* 'to know, get acquainted' (Engkebatu, 1988:380). In Santa the

suffix is *-nče-*: *kielienče-* 'to speak to each other, to converse' <*kielie-* 'to speak, say' (Böke, 1986:153). In Baoan the suffix is *-ča- ~ -či- ~ -če-*, which appears without the *-l-*. If it is original, it provides an important evidence to prove that **-ča-* is also the primary reciprocal or cooperative suffix in Mo. languages: *helči-* 'to run together' <*hel-* 'to run' (Chen, 1987:236-237).

In Tng. languages the suffix does not appear by itself either. According to Benzing (1952a:1070), **-mači-* in Tng. languages expresses reciprocal-durative aspect. It is plausible to think that *-či-* is the reciprocal element here. Except Nanai, the suffix seems to have undergone some phonological changes, so it is realized as *-masi- ~ -mesi-* in Ude. and Sol., *-mač(i)-* in Ngd., *-maat-* in Evk., *-maač-* in Lam.: Na. *ičemesi-* 'to see each other' <*iče-* 'to see'; Ude. *kenimesi-* 'to curse each other'; Evk. *jawamaat-* 'to catch each other' <*jawa-* 'to hold, catch'; Lam. *jawutmaač-* (id.).

2.3.8 Negation Suffix */-mA-/*

2.3.8.0 The suffix */-mA-/* = *[-ma- ~ -mä-]* in MUy. makes a verbal stem negative: *barma-* 'not to go' <*bar-* 'go', *yazma-* 'not to write' <*yaz-* 'write', *kälmä-* 'not to come' <*käl-* 'come' (Tömür, 1987:389-390). The negation suffix *-ma- ~ -mä-* appears as *-mi-* in most cases due to the general vowel raising rule:

(27) *Tursun bar-mi-di*
GO NEG PST
'Tursun did not go.'

(28) *sän yaz -mi-γan*
YOU WRITE NEG PPL
'You have not written.'

However, when a negative verbal stem is used as imperative for the second person singular, or when the suffix consists a closed syllable due to a further ending, it does not obey the vowel raising rule:

(29) *barma*! 'Don't go!'

(30) *barmas* 'not going, the one which is not going'

There are several speculations about the origin of the negative suffix *-ma- ~ -mä-* in Turkic languages. Ramstedt (1924) is the one who first convincingly explained the issue. He suggests that the Turkic negative suffix *-ma- ~ -mä-* is the combination of the CA verbal noun suffix **-m* (see 2.1.8) and the CA negative verb **e-* 'not to be' which still exists in many Altaic languages today. His theory is supported by Tekin (1989) on the basis of phonological evidence of *-ma- ~ -mä-* itself as well as the existence of the negative verb **e-* in modern Turkic languages such as Chuvash, Kirghiz, and Yakut. At the same time, Tekin points out that Ramstedt is not correct in connecting the negative verb to the positive *är-* 'to be' in Turkic. Here I accept Ramstedt's theory with Tekin's correction without hesitation, i. e., the MUy. negative suffix *-ma- ~ -mä-* is ultimately related to the CA verbal noun suffix **-m* and the negative verb **e-* 'not to be'.

Although the **-m* and **e-* became a suffix at very early stages of the development of Turkic languages, it is not hard

to speculate the process of becoming a suffix of the two. First of all, there is a general rule in Turkic languages, i. e., when two verbs are used one after another the first one must be in a substantive form, even if the second one is a copular or auxiliary verb. So in this case the appearance of the negative copular verb *e- after a verbal noun ending in *-m is understandable. We can assume a structure in pre-Turkic as *barïm e- 'be not going (lit.: be not the case of going)', *kälim e- 'be not coming (lit.: be not the case of coming)'. Secondly, the consistent usage of *e- after an *-m verbal noun resulted in merger of the two, thus the negative suffix -ma ~ -mä came into being: *barïm *e- > *barïme- > barma-, *kälim *e- > kälime > kälmä, etc. This process is very common in Turkic languages, and still continuing in MUy. The progressive suffix /-°wat-/, for instance, is the result of the merger of the converbial suffix /-°p/ in the preceding main verb and the progressive auxiliary yat- (<main verb yat- 'lie, lie down'): uquwat- <oqup yat- 'be reading, in the process of reading'. It is a common phenomenon in Altaic languages that the most suffixes developed from independent words. The development of both the negative suffix -ma- ~ -mä- in pre-Turkic and the progressive suffix /-°wat-/ in MUy. is a good example of such a claim. However, the formation of some suffixes like /-°wat/ is easy to prove, while of some others is not. In terms of the negative suffix -ma- ~ -mä-, we know that the first part of the suffix, the reconstructed

CA *-*m* (2.1.8) existed in EWT, in OUy, and Chagatay, and it still exists in MUy. But the second part of the suffix, the suppositional CA negation verb *e-, does not appear by itself in MUy. So we need more evidence to prove our speculation above.

2.3.8.1 **Turkic**: There is enough evidence to prove the existence of the CA negative verb *e- 'not to be' in Turkic languages. O. Pritsak (1963:45) mentions the negative copular *ä- in ancient Turkic. Kashghari mentions in his dictionary (v.I:47,57) the negative verb ä- 'not to be' in OUy. in the forms of *äp* and *äñ*:

(31) *äp bu äp ol*
NOT THIS NOT THAT
'neither this one nor that one'

According to this example, I assume that the CA and pre-Turkic negation verb *e- had already developed into *ä*- in OUy. and been lexicalized in the -°*p* converbial form at that time. It should be mentioned here that the editors of the Uyghur version of Kashghari's work transliterated the negative forms *äp* and *äñ* as *ap* and *añ* instead. But Tekin (1989) transliterated the same words as *äp* and *äñ*. Considering the possible ambiguity of spelling the vowels *a* and *ä* in the original Arabic manuscript, I accepted here Tekin's transliteration, which reflects more closely the front vocalic feature of *e.

In the example (31) above the negative verb is used before a pronoun. This usage reflects the very archaic feature of

the verb. As we will see later, in Tungusic languages the negative verb ä- ~ e- is still placed before a verbal substantive along with the newer developments where a verb may be followed by a negative suffix.

As for the other form, *äñ*, is concerned, Kashghari points out that it is an Oguzic word, and *äñ äñ* means 'no, no' in Oguz. The *-ñ* ending of this usage seems to be either the Turkic imperative suffix **-ñ* (Ramstedt, 1952:83, see also 4.4.1) or the CA verbal substantive ending **-n* which we have discussed in 2.1.13.

A similar form, *an*, is used pre-positively in Chuvash to form a negative imperative:

(32) *par*! 'Give!', *<u>an</u> par*! 'Don't give!'

kil! 'Come!', *<u>an</u> kil*! 'Don't come!' (Tekin, 1989)

The Chuvash *an* is closely related to the Oguzic *äñ*, and both of them developed from the CA **eñ* (Ramstedt, 1924:210-211).

In the Kirghiz historical epic Manas the negative particle *êlêk* is used after a converb:

(33) *baltir ėt +iñ tol -o <u>êlêk</u>*
WING MUSCLE GEN BE FULL CONV NOT
'Your wings haven't been strong enough.'

balban kêz +iñ bol-o <u>êlêk</u>
HERO TIME GEN BE CONV NOT
'Your heroic moments haven't arrived yet.'

According to professor Hu Jinhua (personal communication), *ê-* is the negative stem, and *-lêk* is probably a participial ending. In modern Kirghiz the negative particle has other allomorphs and tends to be used as a suffix (Tekin, 1989):

(34) *körölökmün <*kör-e elek+min*
SEE CONV NEG I
'I heven't seen yet.'

(35) *kel-e elek ~ kelelek*
COME
'He hasn't come yet.'

Correspondingly, we see the negative particle *ilik* in Yakut:

(36) *iste ilikpin <*ešid-e ilik min*
HEAR CONV NEG I
'I haven't heard yet.'

(37) *ahi ilikpin <*aša-yu ilik min*
EAT CONV
'I haven't eaten yet.'

The examples above show that the CA negative verb **e-* 'not to be' does exist in all Turkic languages. The difference is that in some Turkic languages it appears both in the negative suffix *-ma- ~ -mä-* and in certain partially independent forms, while in others only in the *-ma- ~ -mä-* combination. What we see in MUy. is the latter case. On the basis of the basic negation suffix *-mA-*, the negative participial suffix */-mAs/* and the negative converbial suffix */-mAy/* were formed. Since they are not regular considering the corresponding positive forms, they will be discussed in 3.2.3 and 3.3.8 respectively.

2.3.8.2 **Mongolic**: Among other negative particles, *ese* is still active in Mongolic languages. According to Poppe (1955:287) *ese* is the stem of the verb **ese-* 'not to be', and it has the following partial conjugation forms:

(38) *esekü* (Nomen Futuri)
esegsen (Nomen Perfecti)
esebesü (Converbum Conditionale)

eseküle (Converbum Successivum)

esebe (Praeteritum Perfecti)

In WM the particle is used preverbally in indicative, coverbial, and verbal noun forms:

(39) *ese kele-be*
NEG SAY PST
'did not say'

(40) *ese kür -ü-gsen*
NEG REACH VN
'someone who has not reached'

In structures like tag question, the negative particle is used without repeating the positive part:

(41) a. *yabu-qu*
GO VN
'to go, going'

b. *yabu-qu ese-kü*
GO VN NEG VN
'to go or not to go (lit: to go (or) not)'

(42) a. *ire-gsen*
COME VN
'having come'

b. *ire -gsen+i ese-gsen+i*
COME VN Gen NEG VN gen
'his having come or not having come (lit: his having come (or) not having'

In modern Mongolic languages such as Dagur, Urdus, Kalmuck, Monguor, and Mogol the particle appears in the forms of *ese*, *es*, *se*, *sa ~ sä ~ sö*, etc.

The phonological and functional correspondence of the Mongolic **ese* to the Tungusic **ä-* and pre-Turkic **e-* (and its later forms) enables us to trace its origin back to the CA **e-* 'not to do'.

2.3.8.3 **Tungusic**: In Tungusic languages the suppositional

Tungusic negative auxiliary *ä- 'not to be' (Benzing, 1955a:1021) fully conjugates as follows:

(43) a. *ä -si -n +bi (Present)
NEG AOR VN I
'I am not, I don't'

b. *ä -či(-n)+bi (Past)
PST
'I was not, I didn't'

c. *ä-tää -n+bi (Future)
AOR
'I won't be, I won't do'

d. *ä-ji (Imperative)
IMP
'don't be, don't do'

This archaic *ä- appears as e- (a-) in modern Tungusic languages. Let us look at the negative conjugation of the verb *ga-* 'take':

(44)	Present	Past	Future	Imperative
Evk.	*esim gara* 'I don't take'	*ečew gara* 'I didn't take'	*eteem gara* 'I won't take'	*ekel gara* 'Don't take!'
Lam.	*esem gad*	*ečuu gad*	*eteem gad*	*eji gakil*
Ude.	*ehimi gada*	*esimi gada*	*atami gada*	*eji gada*
Na.	*gadasembi*	*gadačembi*	*em gada*	*eji gada*

What we see in these examples is a mixed usage of the synthetic and analytic negation forms. When the negative verb e- is used analytically, it is placed before a verb; when it is used synthetically, it is attached to a verbal substantive form as in Na. present and past tenses. This usage can also be illustrated in the following Nanai examples (Petrova, 1960:191):

(45) a. Analytic Form:

e -m jobo -a tay
NEG VN WORK AOR ?
'doesn't work, not working, unemployed'

e -či -e jobo -a tay
NEG PST AOR WORK AOR ?
'didn't work'

b. Synthetic Form:

joboasi <jobo -y +e -si
WORK AOR NEG AOR
'doesn't work, not working, unemployed'

joboačin <jobo-y +e -čin
WORK AOR NEG PST
'didn't work'

In both analytic and synthetic negation forms we see different aorist suffixes. These suffixes are chosen according to the verb types. In Na., for exampe, verbs classified into four types: Type I: ending in a short vowel; Type II: ending in a dipthong or long vowel; Type III: ending in a consonant; Type IV: special verbs such as *o-* 'become', *bi-* 'live, be', *ga-* 'buy, gather'. The aorist suffix *-y* is added for the Type I verbs; *-re ~ -ri* is for the Type II verbs; *-ji ~ -či* is for the Type III verbs; and *-ji* is for the type IV verbs. We will discuss them more in 3.2.1 later. For the time being, let us notice that when the negative verb *e-* is used synthetically, it does not show up itself perhaps due to a vowel contraction rule, only its original aorist suffix *-si* and the past tense suffix *-čin* (see Benzing, 1955a:1021) appear symbolically. In some cases a compensating vowel length appers in place of the contracted *e-*:

(46) *buureesi* <*buu -re +e -si*
GIVE AOR NEG AOR
'doesn't give'

This suffixation process, in turn, can explain the process of development of the MUy. negative suffix *-ma- ~ -mä-* from the CA and pre-Turkic **e-*. More strikingly, the parallel examples as below give us a clear picture of such a process:

(47) Na. *buureesi* <*buu -re +e -si*
GIVE AOR NEG AOR
'doesn't give'

Trk. *bermedi* <*ber-°m +e -di*
GIVE VN NEG PST
'didn't give'

As I stated above, the preverbal usage of the negative verb **e-* reflects the archaic feature of the Altiac languages. But when it is used postverbally, it tends to become a suffix. This development, of course, matches the general tendency throughout languages where a suffix develops form a clitic which, in turn, developed from an auxiliary or a main word. Whenever a suffix is developed through such a process in Altaic languages, it obeys vowel harmony rule, and the original vowel features become obscured. This, on the other hand, explains why the pre-Turkic **e-* appears in the negative suffix *-ma- ~ -mä-* of MUy. and other Turkic languages as *a- ~* ä-, but not as *e-*. The reason why the suffixation of **e-* only happens in its postverbal usage but not preverbal usage may be accountable in terms of the SOV word order of the Altaic languages, in which there is no prefix but suffix.

CHAPTER THREE

3. NON-FINITE INFLECTIONAL SUFFIXES

In this chapter we will explore the non-finite inflectional suffixes which include verbal noun, participial, and converbial suffixes in MUy. Traditionally, the non-finite verbal forms refer to those that can not appear at a predicate position without a personal ending or a copula. However, the abandonment of the copulative verb *-dur ~ -tur* and the less usage of the personal endings in modern Uyghur literature created the possibility for the so-called non-finite verbal forms to function as a predicate. Admitting this fact here, I should mention that while I am using the term non-finite to refer to them, I am only following the classificatory convention.

Verbal nouns, participles, and converbs in MUy. are also called nominal (or substantive) verbs, since they function as nouns, adjectives, and adverbs in a sentence while they keep their verbal nature such as dominating objects or adverbial modifiers at the same time.

3.1 Verbal Noun Suffixes

3.1.1 */-°š/*

The suffix */-°š/ = [-š ~ -iš ~ -uš ~ -üš]* in MUy. forms verbal nouns which indicate the fact of performing of an action: *kör<u>üš</u>* 'seeing, a fact of seeing' <*kör-* 'see', *qur<u>uš</u>* 'constructing, a fact of constructing' <*qur-* 'construct,

establish' (Tömür, 1987:252). Except dominating objects and other elements as a verb, a verbal noun in -°š functions like a noun in terms of carrying possessive and case endings. Of course, its focus is always on doing an action.

For the Turkic and common Altaic origin of the suffix, i. e., CA *-l_2 > Tkc. -°š, Mo. -*l*, Tng. -*l(i)* ~ -*r(i)*), I refer the reader to the section 2.1.15, where I explained its deverbal noun function. What I need to mention here is that in MUy. the primary function of the suffix is to form verbal nouns, and that hence a deverbal noun in the suffix is actually considered as a lexicalized form of the corresponding verbal noun.

3.1.2 */-mAG/*

The suffix */-mAG/ = [-maq ~ -mäk] in MUy.* forms verbal nouns which indicate the process of an action: *al<u>maq</u>* 'taking, buying' <*al*- 'take, buy', *bär<u>mäk</u>* 'giving' <*bär*- 'give' (Tömür, 1987:258). Because of the neutrality in tense and aspect of the suffix, a verb in an Uyghur dictionary may appear in this suffix as an infinitive form.

We have already discussed the Turkic and CA origin of the suffix in 2.1.10 (i.e., CA *-*m* plus *-*g(V)* ~ *-*k(V)*). Thus, here I try to make a short remark about other aspects of the suffix. Like other VNs, a *-mAG* verbal noun can take further nominal endings, and constitute special grammatical categories. For example, the combination of the *-mAG* with the agent suffix *+či* constitutes the so-called purposive

predicate: *al<u>maqči</u>* 'be going to take or buy', *bär<u>mäkči</u>* 'be going to give'; and it expresses a progressive action when it is followed by the locative case *+DA*: *al<u>maqta</u>* 'be (in the process of) taking or buying', *bär<u>mäktä</u>* 'be (in the process of) giving'. It is just this kind of usage that makes the suffix different from the VN suffix *-°š* above.

3.1.3 */-GU/*

3.1.1.0 In MUy. the suffix */-GU/ = [-γu ~ -qu ~ -gü ~ -kü]* forms verbal nouns with the meaning of a desire, necessity, or possibility of doing an action. In contrast to other verbal nouns, a verbal noun with the suffix always appears with possessive endings or other elements:

(1) *bügün+ki kino +<u>γa</u> bar-γu+m yoq*
TODAY THAT MOVIE DAT GO VN 1PR SG POS NON-EXIST
'I don't want to go to see today's movie.'
(lit.: My desire of going to today's movie does not exist.)

(2) *bäš kün+gä yät -<u>kü</u>+däk un*
FIVE DAY DAT REACH VN EQU FLOUR
'the flour which is enough for five days' (Tömür, 1987:259)

As I mentioned in 2.1.1 and 2.1.3, */-GU/ = [-γu ~ -qu ~ -gü ~ -kü] ~ /-GA/ = [-γa ~ -qa ~ -gä ~ -kä]* in MUy. is one of the diachronic allomorphs of the CA verbal noun suffix **-g(V) ~ *-k(V)*, which corresponds also to the Mo. *-γu(i) ~ -qu(i)*, etc., and Tng. *-gi ~ -ki*, etc.

3.1.3.1 **Turkic**: In EWT the suffix *-γu ~ -qu ~ -gü ~ -kü* forms action nouns or infinitives: *ari<u>γu</u>* 'exhaustion, fatigue' <**aarï-* 'to be tired, exhausted'; *kürä<u>gü</u>* 'unruliness' <**kürä-*

'to be unruly' (Tekin, 1968:112). There are also nouns formed with the suffix, like in MUy., which indicate a performer or a means of an action: *qoriγu* 'protector' <**qorï-* 'to protect'; *qaryu* <**qarayu* 'watchtower' <*qara-* 'to watch, look at' (ibid.). A verbal noun in the suffix also appears in predicative and attributive positions, indicating the present-future tense which carries the meaning of necessity or possibility of doing an action:

(3) *saqla -n -γu ol*
PROTECT REF VN HE
'one must protect himself'

(4) *qïl-ma-γu qïlïnč*
DO NEG VN ACTION
'an action one should not take' (Gabain, 1974:117)

A verbal noun in the suffix, of course, is also followed by case endings and postpositions.

The same usage of the suffix continued in OUy. Kashghari (v.2:88-91) not only recorded its attributive usage such as *turγu yär* 'a place where one stays' <*tur-* 'to stay, live', *yär* 'place, land'; *kirgü öż* 'the time when one should enter' <*kir-* 'to enter', *öż* 'time, moment', but also mentioned that Oguz speakers use *-asï ~ -äsi* in place of *-γu ~ -qu ~ -gü ~ -kü*. Another function of the suffix which Kashghari (v.1:582) recorded is to indicate a time when one should perform an action:

(5) *at bošu -γu bol-di*
HORSE RELEASE VN BE PST
'It is time for releasing (or untying) the horse.'

The instrumental usage of the suffix was also recorded along

the same lines. An interesting example Kashghari (v.1:584) gives is *käräg̲ü* which means 'yurt, mobile house' in Turkmen language, which is likely from the verb *kär-* 'to stretch' (ibid., v.2:8) (cf. Mo. *ger* 'yurt, house'). The predicative usage of a verbal noun in the suffix is well-presented by Yusuf Haas Hajip throughout his didactic epic Qutadγu Bilik:

(6) *tägim+siz +gä bu qur bär -mä-g̲ü*
SHARE LESS DAT THIS RANK GIVE NEG VN
'One should not give such a rank to a disqualified person' (Qutatγu Bilik:842)

Comparatively speaking, in Chagatay and MUy. a verbal noun in *-γu ~ -qu ~ -gü ~ -kü* has become less active. It can not appear in predicative positions. It is also not as free as in EWT and OUy. in attributive positions. In most cases it can not occur without a possessive or case ending. This means that other verbal noun suffixes have taken over some of its function. In some other modern Tkc. languages the suffix appears without the initial *-g ~ -k* perhaps due to its loss in consonant-cluster positions, and in some cases it carries unround high vowels *ı* and *ï*: Tat. *al̲u* 'to take, taking' (infinitive form of *al-* 'to take'); Bash. *al̲yï+m* 'my desire of taking' (Tenišev, 1981).

The combination of the suffix with other endings is seen in very early documents. It appears with *+l°G* in EWT:

(7) *yuyqa qalïn bol-sar topla-γuluq alp är-mis*
THIN THICK BE COND BEND VN DIFFICULT BE PPL
yinčkä yoγun bol-sar üz -g̲ülük alp är-mis
TENDER HARD BE COND BREAK VN DIFFICULT BE PPL
'If thin becomes thick, it is difficult to bend it; and if tender becomes hard, it is difficult to break it.' (Tekin, 1968:175)

This combination demonstrates the meaning of necessity or possibility of doing an action in later documents. It is still productive in Khotan dialect of MUy. The combination of *+li* with the verbal noun suffix also produced the adverbial suffix */-GIli/* (see 3.3.4). The suffixes */-GIčä/* (3.3.3), */-GUči/* (3.1.4), etc., also contain the verbal noun suffix.

3.1.3.2 **Mongolic**: Corresponding to the Tkc. */-GU/*, the so-called nomen futuri suffix *-qu(i) ~ -kü(i)* in Mongolic languages also developed from the CA verbal noun suffix **-g(V) ~ *-k(V)*. In Written Mongolian the suffix expresses an action which will take place in future or an action of any time other than future. This form appears in subject, attributive, and predicative positions. More often, it is known as an infinitive form of a verb: *yabu<u>qu</u>* 'one who will go, going in the future' <*yabu-* 'to go'; *kele<u>kü</u>* 'one who will say, saying in the future, he will say' (Poppe, 1964:94). As Poppe points out, *-qu ~ -kü* and *-qui ~ -küi* were used in pre-classical Mongolian indiscriminately, but in modern and classical Mongolian languages the latter is used in verbal nouns only: *yabu<u>qui</u>* 'the process of going'; *kele<u>küi</u>* 'the process of saying'. This form only occurs in a subject position. In Written Mongolian the suffix also demonstrates its plural form *-qun ~ -kün* (ibid.).

The suffix *-qu ~ -kü ~ -qun ~ -kün* is very active in modern Mongolic languages. In Dag. the corresponding suffix *-γu* forms participles which can function as attributive as well as

subject:

(8) *yauγu+iñ yau-sėn*
GO PPL OF GO PERF
'Those who should go have already left.'

(9) *yau-γu ėrin*
GO PPL TIME
'the time when one should go'

Like in Mongolian, or like in all other Altaic languages, a form with *-γu* in Dag. is also lexicalized as a noun: *idγu* 'food' <*id-* 'to eat' (Engkebatu, 1988:344). In Mgr. the equivalent suffix *-gu ~ -gun* forms imperfect tense, followed by auxiliaries *ii* and *a*:

(10) *bu soγdo -gun -a*
I BE DRUNK IMPERF AUX
'(It is likely that) I am going to be drunk.'
(Čenggeltei, 1991:245-246)

In spoken Chahar Mongolian, the suffix is pronounced as *-h*, and forms so-called non-past imperfective gerund, which can be used as subject, object, nominal modifier, etc. (Jagchid & Dien, 1967:41). Most commonly, a verb with the suffix is used as infinitive or dictionary form in Mongolian (Lessing, 1960).

3.1.3.3 **Tungusic**: Ramstedt (1952:92-93) assumes that the Tungusic suffix *-gi ~ -ki* developed from the ancient **-gui ~ *-kui*, and it is the equivalence of Turkic *-γu ~ -qu ~ -gü ~ -kü* and Mongolic *-qu(i) ~ -kü(i)*. He illustrates the imperative and desiderative forms of Ma. *anakini* 'let him urge, in order for him to urge' <*ana-* to push, urge', and Na. *enegi-sun* 'please go'. It is possible that *-gi ~ -ki* in these examples is related to the CA verbal noun suffix **-g(V) ~ *-k(V)*, but I would prefer to compare it with the MUy.

imperative suffix */-GIn/* in 4.4.2, where they match each other well phonologically and functionally. Ramstedt (ibid.) also compares the Tng. compound suffix *-kiit* (pl. *kiičil*) with the Turkic *-γu+č*, both of which indicate an instrument or a location of an action: Tng. (Evk.?) *hurgukiit* 'a mill' <*hurgu-* 'to grind, smash in between two stones'; *tatkiit* 'school' <*tat-* to learn, get used to'. As I mentioned in 2.1.5, the Tng. *-kiit* in these examples matches well with the Turkic *-γu+č*, which does contain the verbal noun suffix */-GU/* plus the diminutive suffix *+č*.

The best Tungusic examples illustrating the equivalence of Turkic */-GU/* can be found in Manchu: *tačikū* 'school, learning' <*tači-* 'to learn, study, get used to'; *tafakū* ~ *tafukū* 'steps, stages' <*tafa-* 'to ascend, go up'; *tatakū* 'drawer' <*tata-* 'to pull, draw' (cf. MUy. *tat-* 'to pull'); *afakū* 'fighter' <*afa-* 'to fight'; *jafakū* 'handle, grip' <*jafa-* 'to grasp, seize' (Norman, 1978). There are many deverbal nouns in Manchu formed with the suffix, which indicate an instrument or a performer of an action. It is not hard to imagine that, like what we have seen in Turkic and Mongolic languages, the Ma. suffix *-kū* might have been a verbal noun (or gerund) suffix in origin, and nouns in the suffix can be considered as lexicalized forms. For instance, the word *tačikū* indicates both a process of learning and a place where one can learn, i.e., a school. In this sense, I assume that the Ma. negative particle *akū* 'not, without' is a

participial form of an ancient negative verb *a- 'not to do, not to be', which formed with the suffix. Of course, in Ma. *-kū* is not considered as a participial or gerundival suffix, but only a derivational one.

It should be clear now that the phonological and functional similarities of Turkic *-γu ~ -qu ~ -gü ~ -kü*, Mongolic *-qu(i) ~ -kü(i)*, and Tungusic *-kū* are not by coincidence, but by genetic relationship: all of them derived from the CA verbal noun suffix **-g(V) ~ *-k(V)*. They show their similarities not only in very basic usages as we discussed above, but also in extended usages as follows: In Written Mongolian **-γujai ~ *-güjei*, a combination of the verbal noun suffix **-γu ~ *-gü* with the particle **jai*, is used as dubitative suffix, which expresses the concern about an action which may occur contrary to all expectations and cause inconvenience (Poppe, 1955:259-260). The same function of the suffix is seen in the so-called temeritive suffix *-rahū* in Manchu, which is likely the fusion of the imperfective participle suffix *-ra* and the negative particle *ahū*, which carries the verbal noun suffix. A temeritive form in Manchu indicates apprehension on the part of the speaker that something may occur:

(11) *ama nime -rahū se -me jobo -mbi*
FATHER BE ILL TEM SAY CONV WORRY INF
'He is worried lest his father be ill.' (Norman, A Grammatical Sketch of Manchu:35).

The same meaning is expressed in modern Uyghur by the suffix *-miγidi ~ -migidi*, which is the fusion of the negative suffix *-ma ~ -mä* (2.3.8), the verbal noun suffix *-γu ~ -gü*, and the

copulative *i-* (<**är-* 'to be') with the past tense ending *-di*:

(12) *u bu iš +ni untu -p qal-miγ<u>i</u>di*
HE THIS MATTER ACC FORGET CONV AUX TEM
'I am afraid that he will forget this matter ~ I hope he will not forget this matter."

The dubitative or temeritive meaning of these compounds is mainly due to the basic CA element **-γu ~ **-qu* which expresses an imperfective action, which sometimes necessarily or inevitably takes place in the near future.

3.1.4 */-GUČI/*

In MUy. the suffix */-GUČI/* = *[-γuči ~ -quči ~ -güči ~ -küči]* forms verbal nouns which indicate a temporary performer of an action:

(13) *bu iš +ni u +niñ+ γa eyt-<u>guči</u> bol-ma*
THIS MATTER ACC HE GEN DAT TELL VN BE NEG
'Do not tell this matter to him' (lit.: Do not be a teller of this matter to him.)

(14) *bu yär +gä ikkinči käl-<u>güči</u> bol-ma*
THIS PLACE DAT SECOND COME VN BE NEG
'Do not come here again.' (lit.: Do not be a comer for the second time to this place.)

It is obvious that *-GUČI* is the combination of the VN suffix */-GU/* (see 3.1.3) and the CA agent suffix *+ČI*, and that some VNs in */-GUČI/* are lexicalized as professional names (see 2.1.4).

3.2 Participial Suffixes

3.2.1 */-A°r/*

3.2.1.0 The suffix */-A°r/* = *[-r ~ -ar ~ -är]* in MUy. forms imperfect participles which indicate that an action happens frequently, habitually or will happen in the indefinite future

(Tömür, 1987:248). An imperfect participle can be used as attributive:

(15) *uč-ar täxsä*
FLY PPL DISH
'Unknown Flying Object (UFO)' (lit.: the dish which flies)

(16) *kel-(<käl-)-är yil*
COME PPL YEAR
'next year, the year which will come'

(17) *aq -ar yultuz*
FLOW PPL STAR
'shooting star' (lit.: the star which flows or will flow)

The main function of the suffix in MUy. is perhaps to form present-future tense in combination with the auxiliary *tur-* (= *turur*), which means 'stand, stay, live' when used as a main verb:

(18) *Äxmät baridu <bar-a dur <tur-ur*
AHMET GO CONV AUX PPL
'Ahmet goes ~ will go.'

(19) *u oquγuči <oquγučidur <oquγuči tur-ur*
HE STUDENT AUX PPL
'He (She) is a student.'

(20) *män kitap oqu -y +män <*oqu-y tur-ur+ män*
I BOOK READ CONV I AUX PPL
'I read ~ will read a book.'

It is possible though to think that a form like *oquymän* in (20) is directly derived from *oqur+män*. But in Hotan dialect the same form carries a *-t-* even in the 1st and 2nd pr. present tense forms, which is the remnant of *tur-ur*: *oquytmän* (<**oquy turur män*) 'I read ~ will read'; *oquytsän (<*oquy turur sän)* 'You read ~ will read'. Based on this evidence I believe that all present tense forms in MUy. carries the participle *turur (> -dur ~ -tur ~ -du ~ -tu)*. Nevertheless,

in either interpretation the participial suffix is the main marker of the present-future tense.

The participial form of *tur- (=tur<u>ur</u>)* is also present in many other tense and aspect formations in MUy. The only problem is that the phonological change of *turur > -dur ~ -tur ~ -du ~ -di ~ -t ~ -ø* always obscures the existence of the suffix in such forms (Tohti:1991):

(21) Past Incomplete: *yazatti <*yaz -a tur-<u>ur</u> är-di*
WRITE CONV AUX PPL BE PST
'He used to write.'

(22) Indirect Statement: *yeziptu <*yaz-ïp tur-<u>ur</u>*
CONV
'Evidently, he wrote.'

(23) Estimative Past: *yazγandu <*yaz-γan tur-<u>ur</u>*
PPL
'Perhaps he has written.'

Since the present-future tense in MUy. is bound to the occurrence of *-ø ~ -du ~ -dur ~ -tur <tur<u>ur</u>*, a regular verb ending in the aorist suffix in a predicative position indicates an estimative future action with a special tone:

(24) *u ätä bar-<u>ar</u>*
HE TOMORROW GO PPL
'I suppose he (she) will go tomorrow.'

In Uyghur folk songs as follows it remains as pure present (-future) tense:

(25) *ah ur -<u>ar</u> +män, ah ur-<u>ar</u>+män*
ONO HIT PPL I
'I bemoan, I bemoan'

The Uyghur participial suffix *-r ~ -ar ~ -är* originated from the CA verbal noun suffix **-r* (or **-rV*), which is a very archaic but still productive in modern Altaic languages. It

exists in WM in combination with the dative-locative ending +a (= *-ra* = Mgr. *-la*), or with the instrumental ending *+in ~ +un ~ +ün* (= *-rün*). In Tungusic languages it appears in the forms *-ra ~ -re ~ -ri ~ -ro*. In addition to its similar phonological shape in all Altaic languages, it provides us with more striking evidence with functional resemblance: it indicates an action which takes place frequently or habitually, or will take place in the indefinite future. Because of such a meaning, the suffix is described by different grammarians as aorist suffix, imperfect participle ending, or present-future tense suffix. All of these terms have the same implication.

3.2.1.1 **Turkic**: In EWT the suffix occurs with all (except *o, ö*) inserted or so-called connecting vowels depending on the vowel harmony: *-r ~ -ar ~ är ~ -ïr ~ -ir ~ -ur ~ -ur* (Gabain, 1974:111). Since the semi-vowel *y* is inserted after a stem ending in a vowel, the allomorph *-r* occurs rarely with the special verbs such as *te- ~ ti-* 'say, speak'. Tekin (1968:177) describes the inserted (or connecting) high vowels in Orkhon Turkic as long ones: *-r ~ -ar ~ -är ~ -uur ~ -üür ~ -ïïr ~ -iir*. His argument is that 'the existence of long vowels in non-first syllables is evident from the spelling. Long vowels of non-first syllables are generally written even when they occur in closed syllables, while the short vowels are not indicated in general (ibid.:67, see also p. 70). Due to the lack of further evidence to justify which

transliteration is more accurate, I accept here both long and short spellings by different authors. Its negative counterpart is *-maz ~ -mäz*. I assume that the *-r* is realized as *-z* after the negative suffix *-ma- ~ -mä-* (< **-m +e-* 'not to do ~ be' (see 2.3.8). The *r ~ z* alternation is not only evident from the EWT causative suffixes *-ur- ~ -ür-* and *-z-*; *-tur- ~ -tür-* and *-tuz- ~ tüz-* (Tekin, ibid.:117), but also from the Tungusic aorist allomorphs: *-ra* (*-ragi > -rii*, etc.) for the Type I verbs, but *-sa* (*-sii*, etc.,) for the Type II verbs (Benzing, 1955a:1071). The fact that the further development of the EWT *-maz ~ -mäz* into MUy. *-mas ~ -mäs* leads me to a speculation that the Tungusic *-sa* (*-sii*, etc.), *-se* as well as Mongolic negative auxiliary *ese* 'not, not to do ~ not to be' may also have developed from the CA verbal noun suffix **-r* through the morphophonemic split of **-r* into *-r ~ -z ~ -s*. I will discuss this issue in 3.2.3 in more detail.

The EWT suffix mainly forms present participle or aorist which functions as follows:

a. as an attributive:

(26) *kör-üür köz+üm kör-mäz täg bil-iir bilig +im*
SEE PPL EYE MY SEE NEG AS KNOW PPL KNOWLEDGE MY
bil-mäz täg bol-tï
KNOW NEG AS BE PST
'My seeing eyes became as if they did not see, and my grasping mind became as if it did not grasp.'

(27) *ï ba -r baš*
TREE EXIST PPL HILL
'the wooded hill, a hill where tree exists'

Notice that the existential word *bar* 'there is ~ are, existing' is a participle in **-r* in origin, whose root is the

verb **ba-* 'to exist' (cf. Mo *bayi-* 'be, exist, stay, live') (Examples quoted from Tekin, 1968:177).

b. as a substantive, carrying possessive and case endings, postpositions:

(28) *yoγur-ur +ča*
KNEAD PPL EQU
'as if kneading (snow)' (ibid.)

(29) *tur -γur-ur üčün*
STAY CAUS PPL FOR
'in order to make to stay' (Gabain, 1974:146)

(30) *bir ymä är-ür +i yoq är-ip*
ONE ALSO BE PPL POS NON-EXISTING BE CONV
'there is no (his ~ her ~ its) one which is existing' (ibid.:112)

Recall also the negative forms of the participle followed by the equative postposition *täg* in (11) above: *körmäz täg, bilmäz täg.*

c. as a predicate. In this usage it indicates the present tense, and corresponding personal endings follow it:

(31) *bän ančä te -r män*
I SUCH SAY PPL I
'I say as follows.'

(32) *türük bäg+lär qop bil -ir siz*
TURK LORD PL ALL KNOW PPL YOU (PL)
'Turkic lords, you all know that...' (Tekin, ibid.:191)

When followed by the auxiliary verbs like *är-* 'be', *bol-* 'become, be' in the past tense suffix, it indicates that an action took place in the past or continued over a period of time in the past:

(33) *buzqun+čä käl-iir är-ti +miz*
STORM EQU COME PPL BE PST WE
'We were coming like a storm.'

(34) *at +iγ ï +qa ba -yur är-ti +miz*
HORSE ACC TREE DAT TIE PPL BE PST WE
'We used to tie horses to trees.' (ibid.:194)

There is also a special usage of the participial forms of the verbs *är-* 'to be' and *bar-* 'to go' together in combination with *ärkli* 'being': *ärüür baruur ärkli* 'one who acts freely and independently' (ibid.:177).

Besides the participial function of the suffix, we see also some deverbal nouns formed with the suffix. As I mentioned above, the word *bar* 'existing, there is ~ are' contains the suffix. Gabain (ibid.:74) gives further examples of such deverbal nouns: *tilär* 'a God worshiper (female)' <*tilä-* 'to beg'; *ögdir* 'praise' <*ög-* 'to praise' (with Caus. *-d-* <*-üt-*); *ot öčüri* 'extinction of fire' <*ot* 'fire' + *öč-* 'be extinct' (+*i*: 3pr. Pos.).

In OUy. the suffix is used widely as the present-future tense marker. Kashghari (v. II:45) systematically treats it as the future tense suffix throughout his work in contrast with the past tense suffix *-di ~ -ti*. It is worthy of noting here that because the suffix indicates a present or indefinite future action, which, in the eyes of the speaker, takes place once, or habitually, repeatedly, and unchangeably, it is used in proverbs and poetry as a firm declaration of a truth:

(35) *kiši +g til aγir +la -r bul -ur qut*
PERSON ACC TONGUE HEAVY DNV PPL FIND PPL HAPPINESS
kiši
PERSON
kiši +g til uquzla-r bar-ïr är baš+i
PERSON ACC TONGUE SUFFER PPL GO PPL MAN HEAD POS
'Tongue makes a person respectable, and makes him find happiness; it also makes the person suffer and lose

his head' (Yusuf, 1984:74).

(36) *köp sögüt +kä quš qon -ur*
DENSE WILLOW DAT BIRD DESCEND PPL
körklüg kiši +gä söz käl -ir
BEAUTIFUL PERSON DAT WORD COME PPL
'Birds land on a dense willow tree, a gossip spreads rumor against a beautiful girl' (Kashghari, v. I:419).

(37) *av +či nä +čä al bil-sä ażïγ an +ča yol*
HUNT DNN WHAT EQU TRICK KNOW COND BEAR THAT EQU ROAD
bil -ir
KNOW PPL
'A bear knows as many passes as a hunter knows tricks' (ibid.:86).

This usage of the suffix continued from generation to generation, and we can find the suffix in proverbs in MUy. more than any other tense endings.

In Chagatay literature we see the allomorphs of the suffix *-r ~ -ar ~ -är ~ -ur ~ -ür (-yur ~ -yür)*, but, like in MUy., not *-ïr ~ -ir* (Eckmann, 1966:138). As a verbal noun suffix it is used as follows:

a. to form an action noun:

(38) *maan'i dur bar-ur +γa*
PROHIBITION BE GO PPL DAT
'He hinders from going' (ibid.:139).

(39) *baš+im +a aafat kel -ür +ni bil -mä -di +m*
HEAD MY DAT CALAMITY COME PPL ACC KNOW NEG PST I
'I did not know that (such a) calamity would befall me' (ibid.).

b. to form incomplete participle (aorist) which is used as attributive and predicate (with personal endings):

(40) *kör-üš -ür yer*
SEE RECP PPL PLACE
'a meeting place' (ibid.)

(41) *siz+lär bu yosun+luq söz -lä -r siz*
YOU PL THIS RULE WITH WORD DNV PPL YOU
'You are speaking so' (ibid.:164).

In formation of incomplete past and conditional structures, the auxiliary verbs *är-* 'be', *tur-* 'be' (<*tur-* 'stay, live, stand'), *bol-* 'be, become', etc., follow the participle, carrying further suffixes.

The suffix is preserved in most modern Turkic languages without a considerable phonological and functional change. Turkish shows all allomorphs of the suffix as we have seen in EWT, *-r ~ -ar ~ -är ~ -ur ~ -ür ~ -ır ~ -ir*, which forms present-future participle and tense (Tenišev, 1981:75, 77): *yanar* 'flaming, burning' <*yan-* 'burn, inflame (v.i.)'; *yazarsın* 'You write ~ will write' <*yaz-* 'write'. It should be mentioned here that the Turkish present progressive tense also contains the suffix in the form of *+yor*:

(42) *gelíyor <geléyor <geléyoru <gel -é yor-ur*
COME CONV WALK PPL
'He is coming (lit.: coming he walks)' (Tekin, 1989).

In Chuv. the suffix is realized as *-as ~ -es*, but *-r* remains in its negative form *-mar ~ -mer:* *wulas* 'reading, going to read' <*wula-* 'read'; *wulamar* 'not reading, not going to read' (Tenišev, ibid.:110). In other Turkic languages the suffix is regular, differing only in number of allomorphs: Yak. *körör* 'seeing' <*kör-* 'see' (ibid.:300); Kaz. *biler* 'knowing, will know' <*bil-* 'know', *kelermin* 'I come ~ will come' (ibid.:388, 390). Tuv. *bilir* 'knowing, one who knows' (ibid.:252); WYu. *satar* 'selling' <*sat-* 'sell' (ibid.:544); Bash. *éytер* 'saying, telling' <*éyt-* 'tell, say', *totormon* 'I hold ~ will hold' <*tot-* 'hold, grasp' (ibid.:160, 162).

The CA verbal noun suffix *-*r* is also seen in compounds like */-GUr/* (see 2.2.3), */-A°rI°G/* (see 2.2.8) in MUy.

3.2.1.2 **Mongolic**: The CA verbal noun suffix *-*r* is evident in WM, MM, and modern Mongolic languages like Mgr., EYu., Bao. First of all, the *-*r* itself is present in some deverbal nouns: Mo. *amur* 'rest, peace' <*amu-* 'to rest' (Poppe, 1955:279), *aγuljar* 'meeting, junction' <*aγulja-* 'meet'; Dag. *alkur* 'step' <*alku-* 'take a step', *nargur* 'rake' <*nargu-* 'to rake'; Mgr. *gadėr* 'sickle' <*gadė-* 'cut, reap'; Bao. *gadar* <*gada-* (id.); EYu. *andagar* 'oath' <*andaga-* 'take an oath' (Chen, 1985).

Secondly, the WM suffixes *-ra, -re* of so-called Converbum Finale (final converb) and *-run ~ -rün* of the Converbum Praeparativum (preparative converb) contain the suffix. As Poppe (ibid.) explains it, the final converbial ending *-ra* in WM and MM is the combination of the CA verbal noun suffix *-*r* and dative suffix *+*a* in origin. As we see in Secret History of Mongols, it indicates a purpose of doing an action, or the meaning of 'in order to...' in most cases:

(43) *Temüjin +i abu -ra ire -be*
ACC TAKE CONV COME PST
'(He) came to take Temüjin' (Eldengtei & Arajab, 1986:132)

(44) *Čarga ebügen yar--a+tu bol-ju ger+tür+iyen*
OLD MAN WOUND COM BE CONV HOME DAT REFL POS
ire-jü berke kebte -küi+dür Temüjin üje-re
GO CONV HARD LIE DOWN VN DAT SEE CONV
od -čuγa
GO PST IMPERF
'When the grandfather Čarga was wounded and went home, and lay down on bed seriously, Temüjin came to see him' (ibid.:142).

Of course, in some contexts the suffix expresses a process of an action instead of a purpose:

(45) *Eke Öjin+ü qaliyarsun menggersün-iyer*
MOTHER GEN WILD GARLIC WILD ONION INS
tejige-gsed kübegün qata bol -u-r+a kür -be
FEED PPL PL SON KING PL BECOME CONV REACH PST
'The children whom the mother Öjin raised by feeding them wild garlics and onions grew up as becoming kings' (ibid.:145).

The meaning of 'in order to...' is mainly due to the CA dative suffix **+a*. In MUy., for example, the same meaning is expressed by adding dative suffix to an */-°š/* verbal noun: *oqu-š+qa* 'in order to read', *kör-üš+kä* 'in order to see'. The correspondence of the WM final converbial suffix *-ra* in Santa, Baoan, and Monguor is *-la ~ -le ~ -lė ~ -lo*. Thus it is likely that the CA verbal noun suffix *-r* changed into *-l* in these languages. In Santa the suffix expresses a purpose:

(46) *niu du 'basi xolu-dżi mauėr +ni s'ifu*
ONE DAY TIGER RAN CONV CAT ACC MASTER
baiyi -la ėči-wo
ACKNOWLEDGE CONV GO PST
'One day the tiger went to acknowledge that the cat is his master'.

When the converb is followed by *čiyi-* or *kaiyi-* 'to start', the combination indicates that an action starts to happen:

(47) *dżasuñ bau-lė kaiyi-wo*
SNOW FALL CONV START PST
'It started to snow' (Böke, 1986:169-170).

The suffix forms purposive converbs in Baoan also:

(48) *ebseñ gada-la er-wa*
GRASS CUT CONV GO PST
'(He) went to cut grass' (Chen, 1987:229)

The same is true in Monguor:

(49) *more+ne sulaa -<u>la</u> garaa ćdži-dža*
HORSE ACC DRINK CONV GO OUT GO PST
'(He) went out to give water to the horse.'

(50) *more var -<u>la</u> ćidži-dža*
HORSE HOLD CONV GO PST
'(He) went to catch the horse' (Činggeltei, 1991:232).

The preparative converbial suffix *-run ~ -rün* is the combination of the verbal noun suffix **-r* and the CA instrumental suffix **-(i)n*, which indicates the meaning of 'because of...', 'in consequence of ...', 'as...', when...' (Poppe, 1955:279). This suffix only occurred in WM and MM:

(51) *teden-e mörgü-jü bü-<u>rün</u>*
THEY DAT BOW CONV BE CONV
'when he bowed before him' (Ibid.)

(52) *Ögelün Öjin+i eke +s kübegün+i ge(ge) -jü*
ACC MOTHER PL SON ACC ABANDON CONV
negü-gde-<u>rün</u> Qonggudatai Čarga ebegün od-ču
MOVE PAS CONV OLD MAN GO CONV
idqa -qu+tur Tötügen Kirda ügüle-<u>rün</u>
PERSUADE VN DAT SAY CONV
'When the old man Qonggudatai Čarga went to persuade (them) because (they) moved abandoning Ögelün Öjin's mothers and children, Tötügen Kirda said...' (Eldengtei & Ardajab, 1986:140).

There is no evidence that this suffix survived in modern Mongolic languages.

3.2.1.3 **Tungusic**: The striking evidence of existence of the CA verbal noun suffix **-r* comes from the Tungusic languages. As Menges (1943:251) pointed out a half century ago, "There is no doubt that a close relation exists between the suffix *-ra* of aorist noun of the Mandžu-Tungus languages and the suffix of like form and function in the Turkic languages. The noun of the aorist is formed in the latter languages by means of a

suffix which, even in the oldest Turkic linguistic sources, the Orkhon Inscriptions (732 A.D. et seq.), consists of vowel plus *-r*; i.e., either *-ar ~ -är, -ïr ~ -ir, -ur ~ -ür*, or simply *-r* (when the verbal stem ends in a vowel), is suffixed according to the laws of vowel-harmony." The phonological difference of the suffix between the Tungusic and Turkic languages is that in the former a vowel follows the *-r* (= *-ra ~ -re ~ -ro*, etc.), while in the latter a vowel is inserted before the *-r*, according to the vowel harmony. When we merely consider this evidence from the two language branches, we may reconstruct the CA suffix as **-rV* or **-Vr*. But, taking the Mongolic evidence into account, I simply reconstruct it as **-r*.

The existence of the aorist-forming suffix **-r* in Tungusic languages is self-evident. Benzing (1955a:1071) posits the aorist suffix **-ra* (*-ragii > -rii*, etc.) for the Cl. (Class) I verbs, **-sa* (*-sii*, etc.) for the Cl. II verbs, and **-da* (*-dii*, etc.) for the Cl. III verbs. The class difference of verbs is evident throughout the conjugation systems of modern Tungusic languages, which seems to be very archaic in nature. Since the aorist suffixes also vary depending on the class difference, I feel it is necessary to discuss the two general questions here: What is the criterion to classify Tungusic verbs? Why do the different suffixes occur in different classes of verbs in the aorist formation? As for the first question, it is hard to make a general rule to classify verbs

in all Tungusic languages. As we have seen in 2.3.8.3, Nanai distinguishes 4 types of verbs according to the ending sound of a verb: verbs ending in a short vowel (Type I); verbs ending in a diphthong or long vowel (Type II); verbs ending in a consonant (Type III); and special verbs such as *o-* 'become', *ji-* 'come', etc. (Type IV) (Petrova, 1960). On the other hand, in Lam. (Benzing, 1955b:88-89) Cl. I verbs include those that end in a vowel or in most consonants, and their aorist forms are formed by adding *-r(ė)* to the stem. Cl. II verbs are those such as *bi-* 'to be', *ė-* 'not to be ~ do', *huy-* 'to cook', *gel-* 'be cold', *hata-* 'be thirsty', etc., and they take *-s(ė)* in aorist formation. Cl. III verbs include *o-* 'become', *ga-* 'take, hold', *na-* 'meet', etc., and they take *-d(ė)* in aorist formation. Manchu shows another extreme case where the class distinction of verbs is very vague. Except a small number of so-called irregular verbs taking *-sire, -dara ~ -dere ~ -doro,* which may reflect the original class distinction in Tungusic languages, all other verbs take *-ra ~ -re ~ -ro* as imperfect participial (or aorist) suffix (Norman, A Sketch of Manchu Grammar:23). Thus, a comparison of class or type distinction of Tungusic verbs only leads us to a conclusion that Tungusic verbs are classified differently from language to language, and number of classes and the class status of a specific verb also vary from language to language.

There is no a straight answer to the second question either. I speculate that **-ra* (**-re ~ *-rii,* etc.) is the

basic Tungusic aorist suffix, and **-sa*, **-da*, etc., have developed through a morphophonemic split of **-r* triggered by a phonological process like assimilation or dissimilation in early ages of the development of Tungusic languages. But because of the lack of early historical materials, it is hard to establish the conditions which caused such supposed morphophonemic split. Nevertheless, this speculation is more likely true than treating the aorist suffixes of different verb classes as phonologically unrelated in origin. A piece of favorable evidence for this claim, as I mentioned above and will discuss more in 3.2.3, is that the MUy. negative suffix *-mas ~ -mäs* developed from EWT *-maz ~ -mäz*, whose earlier form, as Ramstedt (1952:248) reconstructed, should be **-mar ~ *-mär: bol-maz* 'not becoming, will not be ~ become' (<**bol-um e-r*). Further development of *-maz ~ -mäz* in Yak. resulted in *-mat ~ -bat ~ -bat*, etc. (ibid.:99). Thus, the participial suffix *-r* has its allomorphs of *-r*, *-s*, *-t*, etc., in modern Turkic languages. These allomorphs exactly correspond to the Tungusic allomorphs *-r(V)*, *-s(V)*, *-d(V)*, etc. It is natural to imagine at this point that an alternation such as *r ~ s ~ d ~ t* was probably caused by whatever condition it was in common Tungusic different class of verbs. At the same time I remind the reader that the *r ~ s* alternation is more natural than *r ~ s ~ d ~ t* alternation. Therefore, the appearance of the **-da* as an allomorph of the Tungusic aorist suffix **-ra ~ *-sa* may be explained better by the Ramstedt's (1952:123-124)

different remarks: "The Tungusic (past tense suffix) *-da ~ -de* changed into *-ra ~ -re* in post-vocalic positions, hence it merged with the aorist suffix *-ra ~ -re*." If this is true, then we claim that **-da* has different origin from **-ra ~ *-sa*. We will discuss this issue further in 4.1.1.3 later.

In any case, **-ra* is the main aorist suffix. In Ma., for example, *-ra ~ -re ~ -ro* appears even after an irregular stem which has already been followed by the endings that may be considered as the aorist suffixes for the Cl. II or III verbs in other Tungusic languages: *bi-si-re* 'being' <*bi-* 'to be', *o-jo-ro* 'becoming' <*o-* 'become', *je-te-re* 'eating' <*je-* 'eat' (Norman, ibid.:23). Menges (1943:240) mentions that in some Evk. dialects it is hard to determine if a stem ends in a vowel or a consonant. Whenever a stem carries a vowel the *-r* appears as the aorist suffix: Urulga *gir-dä-n* 'he cuts out', Maňkova *gir-i-rä-n* (id.). Thus, there are some doublets of this type: *ig-dä-n ~ ik-tän ~ ig-i-rä-n* 'he takes off' <*ig-* 'take off, remove'; *ot-to-n ~ od-i-ra-n* 'he ceases' <*od-* 'cease' (?<**xodi-* = EWT *qod-* 'leave (behind)'). When dealing with the same problem in Lam., Benzing (1955b:88) states that "Some scholars consider the *-s* and *-d* of the Cl. II and III verbs as a component of the verbal stem. In order to prove this view, one has to find the corresponding words in other languages. Besides, there are verbs ending in *-s* and *-d* which belong to the Cl. I verbs." Along the same lines, Benzing acknowledges that most verbs belong to Cl. I which take the

aorist suffix -*r*.

The functional similarity of Tungusic *-*ra* to Turkic and Mongolic *-*r* is the most striking evidence to prove its CA origin. In Ma. the suffix -*ra* ~ -*re* ~ -*ro* is added to a verbal stem according to the vowel harmony to form an imperfect participle (aorist) which is used as follows:

a. as a verbal noun, taking case particles or postpositions:

(53) *gisure-<u>re</u> be han donji-fi*
SAY PPL ACC KING LISTEN CONV
'the king having heard what was being said'

(54) *čooha isina-<u>ra</u> onggolo*
ARMY APPROACH PPL BEFORE
'before the army arrives'

When the participle is used as subject it generally takes the suffix -ngge:

(55) *arki nure omi -<u>re</u>-ngge, ai sain*
LIQUOR WINE DRINK PPL WHAT GOOD
'How is the drinking of liquor and wine good?'

b. as an attributive:

(56) *amban o -jo-<u>ro</u> niyalma*
OFFICIAL BECOME PPL PERSON
'a man who becomes an official'

(57) *baitala -<u>ra</u> arga*
MAKE USE OF PPL METHOD
'a method for using'

c. as a predicate:

(58) *bi si+n+de ala-<u>ra</u>*
I YOU DAT TELL PPL
'I'll tell you.'

(59) *sargan jui be si+n+de sargan bu -<u>re</u>*
FEMALE CHILD ACC YOU DAT WIFE GIVE PPL
'I'll give you the girl as a wife.'

The participle is also used in negative command with the

preceding particle *ume* 'not':

(60) *ume gisure-re*
NOT SPEAK PPL
'Don't speak!'

(61) *ume wa -ra*
NOT KILL PPL
'Don't kill!' (Examples above quoted from Norman, ibid.:24)

In imperfect participle formation of Na., **-r* appears in Cl. II verbs in the form of *-ri*. Cl. III and IV verbs take *-ji ~ -či*, which correspond to the allomorphs of **-d(V)* in other Tungusic languages. The allomorph *-y* of the Cl. I verbs seems to be another variant of the CA **-r*, since the *r ~ y* alternation is also a common phenomenon in many languages in the world (see Hahn, 1992). Another Tungusic aorist suffix, **-s(V)*, seems to be limited only to the synthetic negation form of **e-* 'not to be ~ do' in Na (see 3.2.3). Among these imperfect participial suffixes, *-ri* is the active one which also appears after *-o ~ -u*, *-wo ~ -wu*, *-bo ~ -bu*, in the impersonal participle formation (Petrova, 1960:192). In Na. an aorist can also be used as verbal noun, attributive, and predicate:

(62) *mii xola-o-ri +wa ulesi -y +(y)i*
I READ PPL ACC LOVE PPL 1PR
'I love reading.'

(63) *xola-o-ri dangsa*
BOOK
'a book (intended for) reading'

(64) *mii xolayi (<xola-y+yi)*
'I read.'

In conclusion, the basic Tungusic aorist suffixes **-r(V)*

**-s(V), *-d(V)* are present in all modern Tungusic languages, and their function is the same as we have seen in Ma. and Na. above. Among the allomorphs **-r(V)* is the most common one which originated from the CA. verbal noun suffix **-r*.

3.2.2 */-GAn/*

3.2.2.0 The suffix */-GAn/* = *[-ɣan ~ -qan ~ -gän ~ -kän]* in MUy. forms participles which indicate that an action has happened in the indefinite past, regardless if the action is complete or not:

(65) *kör -ün -<u>gän</u> taɣ*
SEE PAS PPL MOUNTAIN
'the mountain which is seen'

(66) *ẏaz -<u>ɣan</u> xät*
WRITE PPL LETTER
'the letter someone wrote'

(67) *öt -<u>kän</u> yil*
PASS PPL YEAR
'the last year, the year which has past'

It should be mentioned that when the participial suffix *-GAn* is added to a verbal stem ending in the present-future suffix *-idi- ~ -ydi- (<-A ~ -y tur-)*, it forms a participle which indicates that an action takes place frequently or will take place in the future:

(68) *män tonu <u>-ydi -ɣan</u> adäm*
I RECOGNIZE ASP PPL PERSON
'the person whom I know'

(69) *öy +i +gä qayt <u>-idi -ɣan</u> bala*
HOME POS 3PR DAT RETURN ASP PPL BOY
'the boy who is going to go back home'

When the suffix is added to a verbal stem ending in the progressive suffix *-ºwat- (<-ºp yat-)*, it forms a participle

which indicates that an action is taking place:

(70) *kitap oqu -wat -gan bala*
BOOK READ PROG PPL BOY
'the boy who is reading a book'

The */-GAn/* participle, in contrast to the present-future participle in *-r* (see 3.2.1), is also called past participle by some grammarians. It is frequently used in MUy. as a verbal noun in a sentence by adding a nominal ending to it (Tömür, 1987:260-272). It is common in MUy. also to use the participle as a predicate with or without a copula and personal ending.

In origin the participial suffix contains a CA perfective element **-gA* and the CA nominal ending **-n*. Not only the two suffixes are active in many other cases in Altaic languages, but their combination is also common to them. In Mongolic languages there are many words ending in the corresponding *-γan ~ -gen* suffix, and most Tungusic languages preserve its equivalent, the past participial ending *-han ~ -kan, -ha ~ -ka*, etc. Moreover, the CA perfective suffix **-gA* is also seen in other combinations such as MUy. */-GAč/*, Mongolic **-γad ~ *-ged*, and Ma. *-hači* and *hade* (see 3.3.5).

3.2.2.1 **Turkic**: The origin and semantic development of the participial suffix */-GAn/* in Turkic languages are not straightforward. Etymologically, I assume that the suffix has two possible origins: 1) The combination of the CA past or perfect participial suffix **-gA* and the nominal **-n*, which I call */*-GAn$_1$/*. 2) The combination of the CA passive-causative

suffix *-g(V)- ~ *-k(V)- and the resultative suffix *-n, which I call /*-GAn$_2$/. The first origin, the CA past ~ perfect *-gA + *-n, can be proven by evidence not only from Turkic languages, but also from Mongolic and Tungusic languages. Thus, it can be considered as archaic. Moreover, the MUy. usage of the suffix reflects only the first origin semantically. The second origin is posited by Kononov (1980,§112). According to his reconstruction, the combination of the CA passivė-causative suffix *-g(V)- ~ *-k(V)- and the resultative suffix *-n resulted in its allomorphs in low vowels, -γan ~ -qan ~ -gän ~ -kän, and in high vowels, -γin ~ -qin ~ -gin ~ -kin and -γun ~ -qun ~ -gün ~ -kün, in Turkic languages. The participial suffix we are discussing here is the allomorph in low vowels. The same analysis is evident in Gabain's (1963a:186) reconstruction: -qïn, -qan, -γïn, etc., a verbal noun in -n from an intensive verb in -q-. It seems to me that while the assupmtion about the first origin of the suffix is based on strong evidence diachronically as well as synchronically from all Altaic languages, the assumption about its second origin can only be accepted on a limited ground to interpret the semantic deviation of the suffix seen for a short period of time in OUy., which otherwise can not be explained by its first origin. Thus, I accept the assumption about the second origin conditionally on the basis that the suffix once expressed the meaning of 'repeatedly or continuously doing an action' especially in OUy. This meaning

can be attributed to the so-called passive-causative or intensive suffix *-*g(V)*- ~ *-*k(V)*-, but not to the CA past ~ perfect *-*gA*. At the same time, I should point out that the diachronic allomorphs in high vowels of the combination functionally developed as distinctive from that in low vowels in OUy., hence, they are synchronically treated as separate suffixes (see 2.1.7, 2.2.4).

In EWT the suffix -*γan* ~ -*qan* ~ -*gän* ~ -*kän* appears in some fixed forms: *qapγan* 'one who attacks' (regal title of Moč'o Kagan) <*qap*- 'attack, seize', *qorγan* <**qorïγan* 'fort, fortress, shelter' <**qorï*- 'protect, shelter' (cf. Mo. *qoriyan* 'camp, barracks') (Tekin, 1968:112). In these examples it is not clear if the suffix has the implication of a repeated or continuing action, or, in other words, if it is the /*-*GAn*$_1$/ or /*-*GAn*$_2$/. But in the following examples from OUy. literature the meaning of repeated action is evident perhaps due to the passive-causative or intensifying element *-*g(V)*- ~ *-*k(V)*- (see Kashghari, v.II:70, Muti'i, 1990:118-119) in the /*-*GAn*$_2$/ combination:

(71) *ol kiši ol tariγ arï -t -γan*
HE PERSON THAT WHEAT CLEAN CAUS PPL
'He is a person who keeps cleaning the wheat.'

(72) *ol kiši ol yol +dan az- ït -γan*
HE PERSON THAT ROAD ABL GO ASTRAY CAUS PPL
'He is a person who always causes people to go astray.'
(Kashghari, v.I:209-210).

The examples above show the meaning of 'repeatedly or continuously doing an action', which is evident only in the relative clause-like structures in OUy. In attributive

usages, however, the suffix seems to be a regular past participle ending as in MUy., which can be regarded as /*-GAn$_1$/ in favor of the first interpretation:

(73) *u -<u>γan</u> täñri*
BE ABLE HEAVEN
'the almighty heaven' (ibid.:106)

(74) *suv +qa čöm -<u>qän</u> är*
WATER DAT SWIM PPL MAN
'the man who swam' (ibid.:521)

In Chagatay literature and MUy. the meaning of 'repeatedly or continuously doing an action' of the suffix disappeared. It functions as a regular past participial ending which denotes that an action has taken place. This indicates that only the /*-GAn$_1$/, originally the combination of the CA past participial ending *-*gA* and the nominal *-*n*, is alive from the Chagatay period until now. Consequently, the suffix developed its present-future form on the basis of the auxiliary *tur-* (<main verb *tur-* 'stay, stand, live'): *-i(~ -y)diγan <-a (~ -ä ~ -y) + tur-<u>γan</u>*, and its progressive form on the basis of the auxiliary *yat-* (<main verb *yat-* 'lie, lie down'): *-°watqan < -°p + yat-<u>qan</u>* as mentioned above.

In Chagatay literature a participle in */-GAn/* is also used as a verbal noun. Thus, if the verb *käl-* 'to come' carries the suffix, it may not only mean 'one who has come', but also mean 'the act of coming'. If the verb is transitive, in addition to its verbal noun interpretation, it can also be understood as active or passive. For example, the participle *al<u>γan</u>*, whose stem is *al-* 'take', can be interpreted as 'the

one who has taken', 'the one which has been taken' (Eckmann, 1966:134), depending on the context. This usage continues in MUy.

The suffix is preserved in almost all modern Turkic languages as the past participial ending. The only difference I should mention is that in some Turkic languages, mainly in Oguzic ones, *-γan ~ -qan ~ -gän ~ -kän* became *-an ~ -en* (Muti'i, 1990:117-118) due to the loss of the intervocalic *γ ~ g*, or perhaps due to cluster simplification. Trk. *gör<u>en</u>* 'one who has seen' <*gör-* 'see'; Bash. *kil<u>ɛn</u>* 'one who came' <*kil-* 'come'; Alt. *ät<u>ken</u>* 'one which has done' <*ät-* 'to do'; Kha. *ös<u>ken</u>* 'one which has grown' <*ös-* 'grow', *tana<u>an</u>* 'one who has recognized' <*tana-* 'recognize'; Tuv. *tut<u>kan</u>* 'one which is holding' <*tut-* 'hold, grasp'; Nog. *sat<u>kan</u>* 'one that has sold' <*sat-* 'sell'; Kaz. *qur<u>γan</u>* 'one which is built' <*qur-* 'build'; Kir. *je<u>gen</u>* 'one who has eaten' <*je-* 'eat' (Tenišev, 1981).

3.2.2.2 **Mongolic**: There is no doubt that the CA perfective ending **-gA* and the nominal ending **-n* play a great part in Mongolic verbal morphology. But the combination of the two in Mongolic languages does not seem to be as productive as that in Turkic and Tungusic languages. The corresponding Mongolic *-γan ~ -gen* functions as not a grammatical, but a derivational suffix, and is seen in a number of deverbal nouns: Mo. *yabu<u>gan</u>* 'pedestrian, on foot' <*yabu-* 'go, walk'; *ečü<u>gen</u>* ~ *öčü<u>gen</u> edür* 'yesterday, the past day' (cf. *od-* 'go to, proceed to', Tkc. *öt-* 'pass, go away'); *ide<u>ge(n)</u>* 'food, nourishment'

<*ide*- 'to eat'; *umdagan* 'drink, beverage' (cf. *umdagas*- 'to be thirsty', *umdala*- 'to drink'); *uqaγan* 'intellect, mind, reason' <*uqa*- 'know, understand'; *qudalduγ--a(n)* 'trade, business' <*qudaldu*- 'barter, trade'. The following kinship terms can be better understood through the meaning of the verbal roots: *bergen* 'wife of an elder brother' (cf. *beri* 'daughter-in-law, bride, Tkc. *ber*- 'to give'); *kürgen* 'husband of one's daughter or sister, son-in-law' <*kür*- 'to reach, arrive' (cf. Tkc. *kir*- 'go in, enter') (Examples from Lessing, 1990). In Dag. and EYu. the corresponding suffix seems to have lost the γ ~ *g* in a intervocalic position, leaving a compensating length to the following vowel: Dag. *duréén* 'trade, selling and buying' <*dur*- 'to sell', *amaraan* 'comfortable, pleasant' <*amar*- 'take a rest, to rest; EYu. *teleen* 'firewood' <*tele*- (? 'to pick up') (Chen, 1985). The grammatical usage of the CA perfective suffix **-gA* is seen in the Mo. perfective converbial suffix **-γad* ~ **-ged* (see 3.3.5.2).

3.2.2.3 **Tungusic**: Although the corresponding suffix *-xan* ~ *-kan*, etc., may not be equivalently productive in all Tungusic languages, it demonstrates the origin of the CA perfective ending **-gA* and the nominal ending **+n* through the unique semantic consistency. It is seen in Ma., Sol., Na., Ngd., and Ude. as perfect participle or past tense ending (Ramstedt, 1952:148). In Na. the perfect participial suffix is *-xan* ~ *-xen* (for Cl. I and II verbs), *-kin* (for Cl. III verbs), and

-čin (for Cl. IV verbs). A perfect participle can be used as an attributive (Petrova, 1960:190):

(75) *xola-xan učenik*
READ PPL STUDENT
'a student who read'

(76) *saa -xan nay*
KNOW PPL PERSON
'a person who knew'

The participle can be used as predicative too:

(77) *nay +sal saa -xa +l (?-xan+l)*
PERSON PL KNOW PPL PL
'People knew.'

(78) *sii joba-xa +si (<-xan+si)*
YOU WORK PPL YOU
'You worked.'

The suffix seems to be well preserved in Ma., but without the final *-n*. In Ma. the regular suffix is *-ha ~ -he ~ -ho*, which forms past participles: *tuwaha* 'one which is looked at' <*tuwa-* 'look'; *gisurehe* 'one which is ~ has said' <*gisure-* 'say, speak'. A small number of verbs take its variant *-ka ~ -ke ~ -ko:* *dosika* 'one which has entered' <*dosi-* 'enter'; *tučike* 'one which has come out' <*tuči-* 'go out, come out'. A group of verbs ending in *n* have an irregular formation: *joñko* 'one which is ~ has mentioned' <*jon-* 'to mention'; *weñke* 'one which is melted' <*wen-* 'to melt' (Examples quoted from Norman, A Grammatical Sketch of Manchu:26). A perfect participle can be used as object, attribute, and predicate:

(79) *gisure-he be donji-fi* (object)
SPEAK PPL ACC HEAR CONV
'having heard what was said'

(80) *mini gisure-he gisun* (attribute)
MY SPEAK PPL WORD

'the word I said'

(81) *geli hoto de dosi -ka* (predicate)
AGAIN CITY DAT-LOC ENTER PPL
'Again (he) entered the city.' (Norman, ibid.)

Another usage in Ma. is that the participle plus the instrumental particle *+i* can function as a converb:

(82) *te -he +i aliya-mbi*
SIT PPL INS WAIT PART
'(I) waited while sitting down.' (Ramstedt, ibid.)

Benzing (1955a:1088) tries to reconstruct a Tungusic **-KSa ~ *-KSä* for the past tense suffix *-xa(n) ~ -ka(n)*. But the semantic evidence of Ma., Na. and Evk. examples perfectly matches the examples in the same ending in Tkc. and Mo. languages, i.e., all of them indicate a complete or past action. Thus, it is reasonable to believe that the Tng. suffix has the same origin as Tkc. and Mo. ones: CA perfective ending **-gA* and the nominal **+n*. It is likely that the CA perfective ending **-gA* developed into *-ha* in Ma. through fricativization of the intervocalic *g*. This is evident from many doublets in Ma. which carry either *-ga* or *-ha* without any difference in meaning: *ilha ~ ilga* 'flower' <*ila-* 'to bloom'.

3.2.3 */-mAs/*

The suffix */-mAs/* = *[-mas ~ -mäs]* is the negative counterpart of the participial suffix */-A°r/* (see 3.2.1 above): *yaz-ar* 'writing, will be writing' : *yazmas* 'not writing, will not be writing', *kel-är* <*käl-är* 'coming, will be coming' : *kälmäs* 'not coming, will not be coming'.

There is no doubt that */-mAs/* contains the negative suffix */-mA-/* plus *-s*. Since I have already discussed the CA origin of the first part, */-mA-/* (< DV **-m* + **e-* 'not, not to do ~ be') in 2.3.8, I try here to observe the etymology of *-s*, the second part of the compound suffix. While I was discussing the negative counterpart *-mas ~ -mäs* of the imperfect participle */-A°r/* in 3.2.1, I argued that we can trace the origin of *-s* back to the CA verbal noun suffix **-r* on the basis of a morphophonemic split of **-r* into *-r, -z, -s, etc.* Ramstedt (1952:87) takes the same approach to interpret the *-r > -z* alternation in the negative aorist suffix *-maz ~ -mäz*. He believes that the positive aorist suffix *-r* changed (or softened) into *-ź* in a position following back vowels, then *-ź* developed into *-z > -s* in modern Turkic languages, and its further development in Yak. resulted in *-t* (= *-mat ~ -bat ~ -pat*) as a regular rule. He is right in tracing the origin of *-z ~ -s ~ -t* back to the **-r*. But there are two points need to be cleared out in his analysis. Firstly, his analysis is based on the reconstructed form of verbal noun suffix **-m + ärür* (<participial form of *är-* 'to be') instead of the form of **-m + er* (<participial form of *e-* 'not to do ~ be'), the same mistake he committed in reconstructing the Turkic negative suffix *-ma ~ -mä* (ibid.:126). Secondly, the condition where *-r* changed into *-ź > -z* may not be a post-back-vocalic position, since neither *är-* nor *e-* contains a back vowel. Is it better to speculate a position following non-high vowels as

a conditional environment? There are some exceptions to this speculation also. Thus I leave the conditional environment for the *-r* > *-ŕ* > *-z* shift for further studies.

It is necessary to notice at the same time that Ramstedt seems to have corrected his mistake by positing the negative *e-* 'not to do ~ be' in the very same structure in another occasion (ibid:328):

(83) *bol -ur* vs. *bol-maz* (<**bol -um e -r*)
BECOME PPL BECOME VN NOT TO DO PPL
'will become ~ be' 'will not become ~ be'

Theoretically we can assume that the split *-r* underwent at least three steps to become *-s* as in MUy.: *-r* ~ *-ŕ*, *-ŕ* ~ *-z*, *-z* ~ *-s*. For the convenience of our discussion here, I reduce the first two steps to one. As we concern the first step, the *-r* ~ *-z* alternation, in Turkic languages, a strong evidence comes from the causative suffix *-r-* ~ *-z-* (= Mongolic *-r-* ~ *-ri-* and Tungusic *-r-* ~ *-ri-*) (Ramstedt, 1952:176-177). This alternation seemed to have already caused the split of the CA causative suffix **-r-* into *-r-* and *-z-* in EWT period, and resulted in the following parallel pairs of causative suffixes: *-r-* vs. *-z-*; EWT. *-γur-* ~ *-qur-* ~ *-gür-* ~ *-kür-* vs. MUy. *-γuz-* ~ *-quz-* ~ *-güz-* ~ *-küz-* (Gabaiņ, ibid.:80-83, see also 2.3.1, 2.3.3. and 2.3.4).

The second step, the alternation of *-z* ~ *-s*, is self-evident from the development of EWT *-maz* ~ *-mäz* into MUy. *-mas* ~ *-mäs*, a historical devoicing process of the sibilant *-z*. Furthermore, the *z* ~ *s* alternation is present in EWT

documents: *ägzig* ~ *äk<u>s</u>ük* 'lacking, insufficient', *tüt<u>z</u>ük* ~ *tüt<u>s</u>ük* 'incense', *ut<u>z</u>uq-* ~ *ut<u>s</u>uq-* 'be defeated' (Gabain, 1974:56).

At this point I remind the reader that although the *-r* ~ *-z* alternation we are discussing is partially similar to the well-established sound correspondence rule of CA intervocalic $*r_2$ = r in Mo., Tng., and Chuv., but = z in Tkc. (Poppe, 1965:199), the realization of the CA verbal noun suffix **-r* as *-r* ~ *-z* (and its further development as *-s* ~ *-t*, etc.,) in modern Altaic languages is not a regular sound change, but a complicated process of the morphophonemic development. This process only effected the aorist form of the negative verb **e-* in Turkic and Mongolic languages, and so-called Cl. II and III verbs including **e-* in Tungusic languages. Elsewhere **-r* remains unchanged, or it underwent some other minor internal sound changes (see 3.2.1). In Chuv. **-r* is still present in the negative participial suffix *-mar* ~ *-mer* (Tenišev, 1981:110). Thus, it is not possible to establish a general sound correspondence rule to define such a change. In other words, a simple phonological approach can not explain such a change, and we need to make morphophonemic analyses such as analogy, morphophonemic leveling, morphophonemic split, etc., to interpret the problem. The morphophonemic split of **±r* into *±r* and *±z* has a far-reaching affect especially on the Turkic languages. Besides the parallel causative suffixes I mentioned above, the following suffixes are also the result of

the same type of morphophonemic process: Tkc. non-singular suffix *+z* in *biz* 'we' <CA **bin* 'I' (cf. Chuv. *ĕpir* 'we'), siz 'you (pl.) <CA **sin* 'you (sg.) (cf. Chuv. *ĕsir* 'you (pl.) and pl. *+lar* ~ *+lär* (cf. Mo. pl. *+nar* ~ *+ner*); MUy. privative suffix *+siz* 'without, ...-less' and *+sir+a-* 'be without..., start to lack' (cf. Mo. *-m+sar ügei* 'without..., ...-less' (see 2.1.8.2)), etc. It is not exaggeration then to claim that the morphophonemic split of **±r* into *±r* and *±z* plus the regular sound shift of CA r_2 to *z* in Turkic languages created the phoneme *z* itself, since, as we know, the phoneme *z* does not exist in CA and most modern Mo. and Tng. languages.

I believe that these evidence I have mentioned above should serve to prove my speculation that MUy. negative participial suffix *-mas* ~ *-mäs* came into being through the historical sound shift of the CA verbal suffix **-r* into *-ŕ* > *-z* > *-s* in the position following the negative verb **e-* 'not to do ~ be': **-m + e-r* > *-mar* ~ *-mär* > *-maŕ* ~ *-mäŕ* > *-maz* ~ *-mäz* > *-mas* ~ *-mäs*. If this is true, then I claim that the Mongolic and Tungusic negative particles *ese* ~ *esii*, etc., are also the result of the same process: **e-* + aorist *-r*(V) > *ese* ~ *esii*. This process, in turn, also explains the development of other aorist suffixes in Tungusic languages (see 3.2.1.3).

A further development of *-mas* ~ *-mäs* is that its combination with *+1°G* can serve as the negative form of both *-°š* (see 2.1.15) and *-mAG* (2.1.10) verbal nouns: *beriš* ~ *barmaq* 'going, the fact or matter of going' vs. *barmasliq* 'not

going, the fact or matter of not going', *keliš ~ kälmäk* 'coming, the matter or fact of coming', vs. *kälmäslik* 'not coming, the matter or fact of not coiming'.

3.3 Converbial Suffixes

A converb (or verbal adverb) in MUy. can not appear at the predicate position of a main clause. It usually appears at the end of a subordinate clause or a phrase to modify the predicate verb in the main clause. Its main function is to indicate the relationship in time sequences, manner, cause and effect, etc., with the main verb in a context. The *-a ~ -ä ~ -y* and *-°p* converbs are also the basic forms for auxiliary verbs to express diverse aspects.

3.3.1 */-A/, /-y/*

3.3.1.0 The suffix */-A/, /-y/ = [-a ~ -ä ~ -y]* in MUy. forms imperfect (or present-future) converbs which indicate that an action takes place in a continuous manner. Except some lexicalized forms, a converb in the suffix always appears in the duplicated form in MUy.: *külä-külä* 'laughing and laughing', *yaza-yaza* 'writing and writing' (Tömür, 1987:280). Another main function of the suffix is to form present-future tense in MUy. with the corresponding personal endings:

(84) *oquymän (<*oqu -y tur-ur+män)*
READ CONV AUX PPL I
'I read ~ I will read.'

(85) *yazidu (<*yaz -a tur-ur*
WRITE CONV AUX PPL
'He ~ She ~ It writes ~ will write.'

Aspect auxiliaries such as *al-* (<main verb *al-* 'take, buy') which indicates capability of doing an action also requires the converb:

(86) *tonu -y +al -mi -di*
RECOGNIZE CONV ASP NEG PST
'He ~ She ~ It could not recognize.'

The origin of the suffix can be traced back to the CA participial suffix *-a (Ramstedt, 1952:114). In EWT period this suffix developed its allomorphs *-a ~ -ä ~ -ï ~ -i ~ -u ~ -ü*, and *-yu ~ -yü* which contains the inserted element *y*. Its further development in MUy. resulted in *-a ~ -ä (~ -u ~ -ü) ~ -y*.

3.3.1.1 **Turkic**: In EWT the imperfect converbial suffix demonstrates its allomorphs in all vowels except *o* and *ö* according to the vowel harmony: *-a ~ -ä ~ -ï ~ -i ~ -u ~ -ü*: *yan<u>a</u>* <*yan-* 'return back, *yät<u>ä</u>* <*yät-* 'lead, tow with a rope', *ud<u>ï</u>* <*ud-* 'follow', *it<u>i</u>* <*it-* 'to form, organize', *qïl<u>u</u>* <*qïl-* 'make, do', *kör<u>ü</u>* <*kör-* 'see'. For the verbs ending in a vowel only *-u ~ -ü* is used with an inserted *y* in between: *sa-y-<u>u</u>* <*sa-* 'inform, send a message', *ye-y-<u>ü</u> ~ yi-y-<u>ü</u>* <*ye- ~ yi-* 'eat' (Tekin, ibid.:180-181). It functions as follows:

a. Preceding a predicative or main verb, it denotes an action simultaneous with the main action

(87) *altun yïs +ïγ as -<u>a</u>*
GOLD WOODED MOUNTAIN ACC CLIMB OVER CONV
käl -ti +miz ärtis ögüz +üg käč -<u>ä</u>
COME PST 1PR PL IRTISH RIVER ACC CROSS OVER CONV
käl -ti +miz
COME PST 1PR PL
'We have come (this far), by climbing over the Altun (Golden) Mountains, and we have come (this far), by

crossing over the Irtish River.'

In this usage the converb also functions as an adverb, describing the main action in manner or sequential order:

(88) *ini* *+m kül tigin birlä ekii šad*
YOUNGER BROTHER MY PRINCE TOGETHER TWO (A TITLE)
birlä öl -ü yit -ü qazγan-ti +miz
TOGETHER DIE CONV REACH CONV WIN PST 1PR PL
'Together with my younger brother, Prince Kül, and together with the two Šads, I worked to death and won' (ibid.).

(89) *bäkärü (<bärk +är -ü) toqï-*
STRONG DNV CONV BEAT
'hit hard, beat strongly'

(90) *kötür-ü ilt-*
RAISE CONV LEAD
'lure, seduce'

It may also indicate a purpose in this usage:

(91) *qïl-u käl-*
DO CONV COME
'to come in order to do'

b. As a main verb before aspect and modal auxiliaries:

(92) *alta-yu tur-*
DECEIVE CONV AUX
'to deceive habitually, keep deceiving'

(93) *qïl-u u-*
DO CONV BE ABLE
'can do, be able to do' (Gabain, ibid.:122, 129)

c. As a postposition or conjunction. Most postpositions in EWT are actually lexicalized forms of the converb: *ara* 'between' <*ar-* 'pass through, traverse', *aša* 'beyond' <*aš-* 'pass over', *tapa* 'toward' <*tap-* 'seek, find', etc. Some forms of the converb also serve as conjunctions: *azu* 'or' <*az-* 'go astray', *udu* 'and' (lit.: 'following') <*ud-* 'follow', *yämä* 'and, also, too' <**yäm-* 'add, attach' (cf. Mo. *neme-*

'add, increase') (Tekin, ibid.:162-170).

The same usage continues in OUy. Its typical usage in a predicative position of a subordinate clause can be seen in poems:

(94) *käl -di bärü artur -u*
COME PST HITHER EXCEED CONV
bär -di äl +in artur-u
GIVE PST COUNTRY ACC ADD CONV
munda qal -ip oltur-u
HERE STAY CONV SIT CONV
bügri bol -up ün püt-är
CROOKED BECOME CONV VOICE END PPL
'(The captive) came toward us while exceeding his limits
And having yielded even his country to us
He is sitting down here
Becoming crooked and voiceless' (Kashghari, v. I:294)

(95) *köñl (<köñül) +üm añar qayna-y-u*
HEART MY TO HER BOIL CONV
ič +tin añar oyna-y-u
INSIDE ABL WITH HER PLAY CONV
käl -di maña boyna-y-u
COME PST TO ME FONDLE CONV
oyna-p mäni ar -ɣur -ur
PLAY CONV ME TIRE CAUS PPL
'As my heart is excited toward her as boiling water
As I play with her inside (the room)
As she comes to me fondling
(She) exhausts me by playing' (ibid.:301)

In Chagatay literature the suffix is widely used as in EWT and OUy. To avoid repeating what I have already stated about the converb, I focus my concern here only on the phonological and functional changes that the converbial suffix underwent during the Chagatay period. Phonologically its allomorphs reduced to *-a ~ -ä*, and *-y*, which used to be a connecting element in EWT and OUy. Of course the other allomorphs can be seen also, but very seldom. Correspondingly, its negative form started to appear as *-may ~ -mäy* (Eckmann, 1966:141, see

also 3.3.8). Functionally, while its pre-predicative, pre-auxiliary, adverbial, and postpositional usages continued as in EWT and OUy., its combination with the copula *dur* <*turur* plus personal ending is used more often than ever to indicate the present-future tense:

(96) *tap -a dur sen*
FIND CONV COP YOU
'You find ~ will find.'

(97) *al -ma -y dur men*
TAKE NEG CONV I
'I don't take ~ won't take.'

The fist and second person singular and plural endings also frequently occur immediately after the converb without the copula *dur* in between: *tapa men* 'I find ~ will find', *tapa sen* 'You find ~ will find', etc. (ibid.:174-175). The involvement of the converb in this structure parallels the other very archaic present tense expression where the aorist suffix *-r* plus a personal ending is directly attached to a verbal stem instead: *tapar men* 'I find ~ will find', *tapar sen* 'You find ~ will find', etc. It is evident from MUy., however, that during the later development of Chagatay literature and at the beginning of MUy. the former form such as *tapa dur men* or *tapa men* became a dominant and regular present-future tense structure, while the latter form like *tapar men* remains as a marked form with special meanings besides the present-future tense expression (see 3.2.1).

Some other functional restrictions of the converb mainly occurred during the MUy. period. The converb, for example,

except its pre-auxiliary, present-future predicative, postpositional, and repetitive usages, can no longer occur with another verb to indicate a manner, purpose, time, etc., of the main action. This function of the converb has been taken over by other converbs. Let us compare the following Chagatay and MUy. structures:

	Chagatay	MUy.
(98)	*meni kör-<u>ä</u> kel-di* I (ACC) SEE CONV COME PST 'He came to see me.'	*meni kör-<u>gili</u> käl-di* (id.)
(99)	*an +dïn toy -<u>a</u> ič -ti* THAT ABL BE FULL CONV DRINK PST 'He drank of it until his thirst was quenched.'	*uniñ+din toy-<u>ɣičä</u> ič-ti* (id.)
(100)	*yïɣla-y-<u>u</u> kir -di* WEEP CONV ENTER PST 'He entered by weeping.' (Eckmann, ibid.:142)	*yiɣla-<u>p</u> kir-di* (id.)

Only in a repeated form may the converb occur before another verb to indicate a manner or cause:

(101) *mañ-<u>a</u> mañ-<u>a</u> her-(<har-)ip qal-di +m*
GO CONV GO CONV TIRE CONV ASP PST 1PR SG
'By going and going, I get tired.'

In comparison to the *-a ~ -ä ~ -y* converb, the *-°p* converb is used in MUy. more freely and frequently to express a manner, cause, time, etc., of another action (see 3.3.2). However, the basic difference in meaning of the two converbs remains the same in MUy., i. e., while the former indicates an incomplete and continuing action, the latter expresses a complete and past action.

The converbial suffix is also active in other modern Turkic

languages, but it did not necessarily undergo the same phonological and functional changes as in MUy. It is used in these languages singly or repeatedly to express time, manner, or cause of another action: Trk. *ala ala* 'taking for a long time' <*al-* 'take', Chuv. *tăra* 'standing, while standing' <*tăr-* 'to stand', Tat. *bara bara* 'going and going' <*bar-* 'go', Alt. *oynoy* 'playing, by playing' <*oyno-* 'to play', Kha. *kile* 'when comes' <*kil-* 'come', Tuv. *öörenі* 'by studying' <*öören-* 'to study', Yak. *körö* 'while seeing' <*kör-* 'see', Kaz. *üyrene üyrene* 'by studying and studying, studying for a long time' <*üyren-* 'to study', Kir. *mine* 'while mounting (a horse)' <*min-* 'ride, mount' (Tenišev, 1981).

3.3.1.2 **Mongolic**: The CA suffix **-a* developed into Common Mongolian imperfective verbal noun suffix **-γa ~ *-ge* with the connecting element *γ ~ g*. Its another allomorph is seen as **-γai ~ *-gei*: *yabuγa* 'going' (Poppe, 1955:273). In Middle Mongolian the suffix is seen as *-'a (~ -'e) ~ -'ai (~ -'ei)* due to the loss of intervocalic *γ ~ g*: *yabu'ai* 'going'. Its further development in modern Mongolic languages such as Urd. Khal., and Kalm. resulted in the long vowel variant *-aa (~ -ee)*. The imperfect verbal noun has already been used as a predicative in *Secret History*:

(102) *bari -γda -'a bi*
CAPTURE PASS VN I
'I was taken prisoner' (ibid.).

Despite the various phonological developments of the CA suffix **-a* in Turkic and Mongolic languages, it shows striking

functional similarity: it forms imperfective converbs in Turkic languages, imperfective verbal nouns in Mongolic languages. Ramstedt (1952:115-116) gives the example from hP'ags-pa Script: *yabu'a yabuji* 'someone is going and going continuously'. This usage resembles exactly the MUy. example above: *mañ<u>a</u> mañ<u>a</u>* 'going and going, by going continuously'. Poppe (ibid.) mentions the appearance of the suffix in so-called perfectum imperfecti in Khal.: *yaw<u>aa</u>sǎñ* 'went' ('it happened that at that time he had gone and was still going'). Here we can contribute the perfective meaning to the suffix *-sǎñ* (<**-γsan* ~ **-gsen*), but the imperfective meaning to the verbal noun suffix *-aa*.

3.3.1.3 **Tungusic**: The CA suffix **-a* in Tungusic languages is not as active as in Turkic and Mongolic languages. Ramstedt (1952:116) believes that in Tungusic languages the suffix has already disappeared in positions prior to a verb, but only survived in compound verbs: Ma. *jaf<u>a</u>na-* 'to go to seize, go and take', <**jaf-* 'take', **na-* 'go, go out', *jaf<u>a</u>ji-* 'to come to take' <**jaf-<u>a</u> + ji-* 'come'; Lam. *bak-<u>a</u>+l-dom* 'I start to look for ~ find' <*bak-* 'look for, find' (cf. MUy. *baq-* 'look, look at'), *+l-* <*il-* 'stand up'. But what makes me doubtful about Ramstedt's interpretation above is that according to Professor Jerry Norman's dictionary (1978:153) the second *a* in Ma. *jafa-* 'take, seize' does not seem to be a suffix, but the part of the verbal stem. Furthermore, the compound verb of the meaning of 'to come to take' is *jafanji-*, but not

jafaji-. This indicates that the connecting element of the two verbs in the compound is not *-a*, but *-n*, the other CA verbal noun suffix (see 2.1.13). Thus, if we look for the correspondence of the CA **-a* in Tungusic languages, only the Lam. example *bakal-*, where the CA **-a* likely connects the verb *bak-* 'find, look for' and *+l-* (< **il-* 'stand up'), provides us a clue. The usage is, of course, comparable to the same kind of compound verbs in EWT: *učа bar-* 'to fly, i. e., to die (lit: 'to go flying')', *yälü bar-* 'to ride fast, to ride at a gallop' (Tekin, 1968:119). It also resembles the purposive usage of the suffix in Chagatay literature: *körä kel-* 'to come to see', *qišlay bar-* 'to go to spend winter' (Eckmann, 1966:142). But in any case the existence of the CA suffix **-a* in Tungusic languages needs more proof besides these problematic examples.

3.3.2 */-°p/*

3.3.2.0 The suffix */-°p/ = [-p ~ -ip ~ -up ~ -üp]* forms converbs which indicate that an action takes place before or simultaneously with a main action, modifying the main verb in manner, sequentiality, etc. (Tömür,1987:281-283):

(103) *oltur -up sözlä-ñ*
SIT DOWN CONV SPEAK 2PR SG RESP IMP
'Please speak while you sit down.'

(104) *u ätigän tur -up čey+i +ni ič -ip*
HE EARLY GET UP CONV TEA POS 3PR ACC DRINK CONV
mäktäp+kä kät-ti
SCHOOL DAT GO PST
'He got up early, drank his tea, and went to the school.'

perhaps the */-°p/* converb is the one which is most commonly used in MUy. Most aspect auxiliaries follow a */-°p/* converb: *oqup tur-* 'keep reading' <*oqu-* 'read', *körüp qal-* 'to see unexpectedly', etc. In contrast to the imperfect converb in *-a ~ -ä ~ -y* (see 3.3.1), a converb in *-p ~ -ip ~ -up ~ -üp* indicates a past or complete action, hence it is called perfective converb. Both converbs can be used in a duplicated form to express a repeated action. The difference is that the duplication is obligatory for the former before a main verb, but it is optional for the latter. The perfective converb suffix has its origin from the CA past perfective suffix **-pa ~ *-pi* (Poppe, 1960:42). As evident from the modern Altaic languages, the CA **-pa ~ *-pi* developed into **-p* in most Turkic languages through the loss of the final vowel, which, in turn, requires a connecting initial vowel if a stem ends in a consonant. The CA suffix developed into *-bai ~ -bei, -ba ~ -be* in Mongolian perhaps due to the voicing of the initial labial stop *p*. In Tungusic languages, the correspondence occurs in various labials with the high vowel *-i: -pi ~ -fi ~ -wi*. In some combinations it is seen as *-b ~ -p ~ -w*, etc.

3.3.2.1 **Turkic**: As an archaic converbial suffix, **-°p* occurs frequently in EWT. While the suffix *-a ~ -ä ~ -ï ~ -i ~ -u ~ -ü ~ -yu ~ -yü* forms imperfective converbs (see 3.3.1), a converb in **-°p* denotes a past or complete action. The suffix **-°p* has its allomorphs with inserted high vowels *ï ~ i ~ u ~ ü* after stems ending in a consonant. Its another variant,

-pan ~ -pän, is believed to carry the CA instrumental suffix **-in* (Ramstedt, 1952:132). Functionally, a converb in the suffix appears before a main verb, or at the predicative position of a subordinate clause, to indicate that an action takes place before the main action:

(105) *toquz oγuz bodun yer +in sub +in ïd -ïp*
PEOPLE LAND ACC WATER ACC LEAVE CONV
tabγač+γaru bar-di
CHINA DAT GO PST
'The Tokuz Oguz people left their land and went toward China (lit.: Leaving (~ Having left) their lands and waters, the Tokuz Oguz people went toward China).'

(106) *uruš qïl-ïp täg -ip ini +m +ä*
FIGHT DO CONV REACH CONV YOUNGER BROTHER MY DAT
oγl+um +a ančä ötlä -di +m
SON MY DAT SUCH ADVICE PST 1PR SG
'After I had fought and reached (home), I advised my younger brothers and my sons as follows.'

(107) *säläñä qodï yorï-pan*
DOWNWARD MARCH CONV
'having marched down along Selenga'
(Tekin, 1968:182-183)

The pre-auxiliary usage of the suffix seems to be as common in EWT as in MUy.: *yatïp yür-* 'lie down habitually' (<*yat-* 'lie down', *küzätip tur-* 'keep protecting' (<*küzät-* 'protect'). (Gabain, 1974:131). The *-pan ~ -pän* form is not seen in pre-auxiliary usage.

A rare derivative function of the converbial suffix is seen in the word *qop* 'all' <**qo-* 'leave, remain'. Its another special usage is to form the indirect quotation mark *tip ~ tep* <*te- ~ ti-* 'say' (ibid.:130), which is equivalent of MUy. *däp;* cf. Ma. *seme* <*se-* 'say', and Mo. *kemen* <*keme-* 'say'.

The same usage and function of the perfective converbial

suffix continue in OUy. and Chagatay literature. Functionally, converbs in -°*p* started to form perfect and past perfect predicates in Chagatay literature. In perfect predicate formation the copula *dur ~ tur* 'is, are' plus a personal ending follows the converb:

(108) *qïlïp tur men*
DO CONV COP I
'I have done.'

(109) *qïl-ïp tur sen*
DO CONV COP YOU
'You have done.'

The first and second sg. and pl. are often used without the copula *tur:* *qoyup men* 'I have put' <*qoy-* 'put, leave (behind)'; *kelip siz* 'You (pl.) have come' <*kel-* 'come' (ibid.:176-177). This perfect indicative usage of -°*p* parallels to the imperfect predicative usage of converbs in -*a* ~ -*ä* ~ -*y:* *tapa dur men* 'I find ~ will find' (see 3.3.1 above). Interestingly, the regular perfect indicative form in -°*p* in Chagatay literature always carries a special meaning, either an indirect or evidential statement of a past action, in MUy.:

(110) *qiliptumän* <Chag. *qïl-ïp tur men*
DO CONV COP I
'It turns out that I have done (it).'

(111) *qilipsän* <Chag. *qïl-ïp sen*
DO CONV YOU
'Evidently (~ It turns out that) you have done (it).'

In past perfective the copular *e(r)-* 'to be' in the past ending -*di* follows a converb in -°*p:* *barïp erdim* 'I was gone' <*bar-* 'go'; *qïlïp edim* 'I had done' <*qïl-* 'to do'

(ibid.:179). This usage continues in MUy. with regular contraction and sound changes in both the converbial suffix and copula (*i-* 'to be' <Chag. *e(r)-*): *beriwidim* <Chag. *barïp erdim*, *qiliwidim* <Chag. *qïlïp edim*. As Eckmann (ibid.:178-179) mentions, when the copula *e(r)-* carrying the *-miš* suffix follows the converb in *-°p*, it forms an indirect past statement; while the copula in the same position carries the conditional suffix *-sä*, it forms the past conditional predicative. But such structures became obsolete in MUy.

The converbial suffix *-°p* remains productive in other Turkic languages also: Trk. *gelip* 'having come' <*gel-* 'come'; Tat. *alïp* 'having taken' <*al-* 'take'; Kha. *alïp* '<*al-* (id.); Kaz. *alïp* <*al-* (id.); Bash. *uqïp* 'having read' <*uqï-* 'read'; Alt. *konïp* 'having spent a night' <*kon-* 'to spend a night'; Kir. *külüp* 'having laughed' <*kül-* 'laugh' (Examples from Tenišev, 1981). Converbs in *-°p* are not attested in Chuvash and Yakut.

3.3.2.2 **Mongolic**: The CA suffix **-pa ~ *-pi* is seen in WM as the past perfective tense suffix *-ba ~ -be*, or *-bai ~ -bei*, an emphatic form. Its feminine form *-bi* also occurs in Pre-classical WM and MM (Poppe, 1955:266-267). The suffix remains in most modern Mongolic languages as the past tense suffix with its further allomorphs such as *-wa ~ -fa ~ -pa*, *-w ~ -b ~ -p*, etc. In Bao. the suffix is *-wa*:

(112) *tėrė kuñ hala ödė-wa*
THAT PERSON WHERE GO PST
'Where did that person go?' (Chen, 1987:189).

In Mgr. it is -va:

(113) *guraan kun yau-va*
THREE PERSON GO PST
'Three people went (away)' (Chenggeltei, 1991:224).

In San. the suffix -wo:

(114) *bi badza +sė gansuñ atśi-dżi ire -wo*
I MARKET ABL DRY GARLIC LOAD CONV COME PST
'I brought dry garlic from the city by loading it'
(Büke, 1986:156).

The Spoken Chahar Mo. suffix -*ba* ~ -*be*, however, is close to the WM form above:

(115) *bi öčögd'r sur'gaal+daan oči-ba*
I YESTERDAY SCHOOL DAT REFL GO PST
'I went to (my) school yesterday' (Jagchid, 1967:173).

The corresponding suffix in other Mo. languages is: Urdus -*w* (-*b* ~ -*p*) or -*wu* (-*bu*) or -*waa* (-*baa*); Khal. -*w* ~ -*wå* ~ -*wää*; Kalm. -*w* ~ -*waa* ~ -*wää* (Poppe, ibid.).

It is interesting to notice that the corresponding suffix in Dag. indicates the present-future tense instead of the past:

(116) *tėr xuu bas ič-bėi*
THAT PERSON ALSO GO PRE-FUT
'That person also goes' (Engkebatu, 1988:302).

Poppe (ibid.) mentions the involvement of the past tense suffix -*ba(i)* ~ -*be(i)* in other combinations such as WM conditional suffix -*basu* ~ -*besü*, or *bala* (<-*ba* + *ele*) in some modern Mo. languages, WM concessive form *-*basu ber*, -*bačų* ~ -*bečü*, etc. These forms are present in modern Mo. languages in a variety of allomorphs.

3.3.2.3 **Tungusic**: Benzing (1955a:1091) reconstructs the *-*pii* (*-*pai?*), pl. *pawuri*, as a Tungusic converbial suffix which,

in turn, descended from the CA *-*pa* ~ *-*pi*. In modern Tungusic languages it is preserved with slight phonological changes, and it forms perfect converbs as its Turkic counterpart. In Ma. the regular suffix is -*fi* (*tuwa*<u>*fi*</u> 'having looked <*tuwa*- 'look'). A small number of verbs take -*pi* or -*mpi* (*dule*<u>*pi*</u> 'having passed' <*dule*- 'pass', *sa*<u>*mpi*</u> 'having stretched' <*sa*- 'stretch'), of which -*pi* seems to be an archaic form of -*fi* (Norman, A Grammatical Sketch of Manchu:30). In contrast to the imperfect converbial suffix -*me*, -*fi* forms perfect converbs which indicate that one action has completed before the next begins:

(117) *songgo-ro be naka-*<u>*fi*</u> *emgeri hengkile-he*
CRY PPL ACC STOP CONV ONCE KOWTOW PPL
'Having stopped crying, he kowtowed once.'

(118) *yali be sinda-*<u>*fi*</u>*, muke +i dolo feku-he*
MEAT ACC PUT CONV WATER GEN INSIDE JUMP PPL
'He put down the meat and jumped into the water'
(Examples quoted from Norman, ibid.).

In Na. the corresponding suffix -*pi* (sg.), -*paari* ~ -*peeri* (pl.) forms relative converbs: *xola*<u>*pi*</u> 'when (he) read, having read (of sg.)' <*xola*- 'read' *xola*<u>*paari*</u> 'when (they) read, having read (of pl.)' (Petrova, 1960:212). Benzing (1955a:143) relates the Ude. converbial suffix -*si* to the Tungusic *-*pi* on the basis of a supposition<u></u>al sound shift of Tng. **pi*- > Ude. *si*- (ibid.:41). But I am not sure to what extent this kind of sound shift can hold. Thus I avoid to compare the Ude. -*si* with the Tng. *-*pi* morphologically.

In addition to the usage above, the involvement of the suffix in combinations such as *-<u>*b*</u>*kaa* ~ *-<u>*b*</u>*kee* > -<u>*w*</u>*kaa* ~ -<u>*w*</u>*kee*

in Evk. is also mentioned by Ramstedt (1952:133-134): *biwkee* 'living, staying' <*bi-* 'live, be'; *tañiwkaa* 'account, balance' <*tañ-* 'to count'. Although Ramstedt seems to be right in pointing out the involvement of **-b ~ *-w*, etc., in the compound, his explanation of the meaning needs to be more specific. According to Vasilovič (1958:747), there are two different types of *-wkaa* in Evk.: a. *-wkaa* is a deverbal noun suffix which denotes names of objects or processes which are a result of an action: *taag-* 'to guess', *taagiwkaa* 'answers to a riddle'. b. *-wkaa*, which means 'it is necessary to...'. Thus, only the deverbal noun suffix *-wkaa* in the first meaning may be relevant to what we are discussing here.

In conclusion, the CA suffix **-pa ~ *-pi* is well preserved in modern Altaic languages. Despite some phonological changes seen in some languages, its basic meaning, the implication of a past or complete action, remains the same in these languages.

It should be mentioned that Ramstedt reconstructs the CA form of the suffix as **-ba ~ *-bi* (Ramstedt, 1952:132). But, as known above, I accept Poppe's idea that the underlying form is **-pa ~ *-pi*. Ramstedt perhaps mainly relies on the Mo. form *-ba ~ -be, -bai ~ -bei*, etc. But both Tkc. *-°p* and Tng. *-pi ~ -fi* forms suggest that **-pa ~ *-pi* has more ground than **-ba ~ *-bi* to be the underlying form. There are some evidence in Tkc. languages though that may favor Ramstedt's reconstruction. For example, in MUy. the converbial suffix

-°p changes into *-°w* when an auxiliary with an initial vowel follows it: *oqup al* > *oquwal-* 'read for someone's own benefit', *körüp ät-* > *körüwät-* 'see something thoroughly'. One can argue that *w* can not be expected if the converbial suffix is not in underlying **-b*. But there are cases in EWT where the underlying final **-b* changed into *-v* (or *-w*), but not into *-p*, in modern Turkic languages: EWT *sab* 'word, message', cf. MUy. *sawaq* 'lesson'; EWT *äb* 'tent, camp, house' (> **äw*) > MUy. *öy* (id.); Mo. *kebi-* 'chew the cud', cf. Trk. *gev-* (id.) (Poppe, 1960:46); Mo. *aba* 'hunt', cf. EWT *ab*, Trk. *av*, MUy. *ow* (id.). The change of *-p* into *-b* or *-w* in an intervocalic position is mainly seen since Chagatay literature or later, perhaps due to the influence of Arabic and Persian borrowings. Remember that the EWT variant *-pan ~ -pän* is seen as *-ban ~ -bän* only in Chagatai literature (Eckmann, 1966:149). Furthermore, changing of the plosive *p* into the semi-vowel *w* in such positions may not indicate that the underlying form is **b*, but it is a possible option for this deplosivization procees, because the expected sound, that is, *f*, is so exotic to Turkic languages. Thus, on the basis of distinct developments of Tkc. underlying final **-b* and **-p* in modern Tkc. languages, I favor Poppe's reconstructed form of the suffix: **-pa ~ *-pi*.

3.3.3 */-GIčä/*

The suffix */-GIčä/ = [-γičä ~ -qičä ~ -gičä ~ -kičä]* in MUy. forms limitative converbs which indicate that an action

takes place or continues before a main action occurs (Tömür, 1987:276):

(119) *män käl -<u>gičä</u> küt -üp tur -uñlar*
I COME CONV WAIT CONV STAY IMP 3PR PL
'Wait for me untill I come.'

(120) *yamγur tañ at-<u>gičä</u> yaγ -di*
RAIN DAWN CONV FALL PST
'It did not stop raining until dawning.'

It may also indicate the process of an action during which another action takes place:

(121) *bar<u>γičä</u> ayropilan+da ber-ip*
GO CONV PLANE LOC GO CONV
käl-<u>gičä</u> poyiz+da käl -di -m
COME CONV TRAIN LOC COME PST 1PR SG
'I took flight while I was going there, and I took train while I came back.'

It is obvious that the suffix is the combination of the verbal noun suffix */-GU/* and the equative suffix *+čä*. Since we have discussed the CA origin of the former in 2.1.3 and 3.1.3, we need to concentrate only on the origin of latter. The equative suffix *+ča ~ +čä* appears in very early Tkc. documents: *bunča* 'this much, this many' <*bu* 'this', anča 'like that, that much' (Equ. of *ol* 'that, he, they' (Tekin, 1968:140). There is no doubt that the equative suffix is preserved in OUy., Chagatay literature, and MUy. Its combination with */-GU/* is also evident in pre-Chagatay and Chagatay literature:

(122) *qïlïč suγur-<u>γuča</u> fursat bol-ma -di*
SWORD DRAW CNV TIME BE NEG PST
'There was not sufficient time to draw (my) sword' (Eckmann, 1966:148).

Eckmann (ibid.) mentions the other forms, *-γïnča ~ -ginčä,*

-γunča ~ -günčä, as earlier variants of the suffix. Since they carry the same meaning, except in some poems, the variant *-γuča ~ -güčä* became dominant over other variants. Its further phonological development resulted in *-γičä ~ -qičä ~ -gičä ~ -kičä* in MUy.

Poppe (1955:280) points out that the Mo. contemporal converb *-mayča* contains the CA equative case suffix *+ča. But the fate of the suffix in Tungusic languages is not so clear.

3.3.4 */-GIli/*

The suffix */-GIli/ = [-γili ~ -qili ~ -gili ~ -kili]* in MUy. forms converbs which indicate a purpose or a time span during which an action takes place (Tömür,1987:277]:

(123) *ular tamaq yi-gili kät-ti*
THEY FOOD EAT CONV GO PST
'They went to eat (food)'

(124) *u bu yär +gä käl-gili üč kün bol -di*
HE THIS PLACE DAT COME CONV THREE DAY BECOME PST
'It has been three days since he came here'

The converb also expresses very subtle meanings in combination with auxiliary verbs:

(125) *yaz -γili tur-*
WRITE CONV AUX
'start to write'

(126) *kör-gili bol-*
SEE CONV AUX
'to be possible to see'

The suffix is seen in EWT as *-γalï ~ -qalï ~ -gäli ~ -käli*, which indicates a purpose, or, in later documents, a time point when an action starts. When followed by the auxiliary verbs *bol-* 'be possible' and *u-* 'be able', it expresses the

possibility and capability of doing an action (Gabain, 1974:123-124, 130). In Chagatay literature the suffix appears in the same phonological shape and without substantial functional changes (Eckmann, 1966:145-147). Due to the general vowel raising rule, the suffix is seen as *-γili ~ -qili ~ -gili ~ -kili* in MUy.

Etymologically, O. Pritsak (1963:44) reconstructs the suffix for ancient Turkic as *-γ+a+li* (verbal noun suffix *-γ* plus the dative-locative *+a* and intensifier *+li*). But I do not think he is right in his reconstruction. Firstly , the element preceding *+li* is not *-γ* plus the dative-locative *+a*, but simply the verbal noun suffix *-γa* (*-qa ~ -gä ~ -kä*, etc.) Since its diachronic allomorph *-γli ~ -gli* does not show the supposed dative-locative **+a*. Secondly, I would rather believe that *+li* does not function as an intensifier, but, as Ramstedt (1952:42-43) points out, it functions as a dative-locative. Thus, I treat the suffix as the combination of *-γa ~ -gä*, which is the low-voweled diachronic variant of **-g(V) ~ *-k(V)* (see 2.1.3), and the CA suffix **+li* which implies locative meaning. Again, since we have already discussed the first part of the suffix, we may need to focus only on the second part, **+li*, here. Ramstedt (ibid.) posits two sets of functionally different **+li*, the one which indicates the comitative meaning of 'with, and, together with', and the other that has locative meaning. He explains that the **+li* with locative meaning not only occurs in the EWT and OUy.

compound *-γalï ~ -gäli:* *bar<u>γalï</u>* 'in order to go, should go' <*bar-* 'to go', *öl<u>gäli</u>* 'in order to die, should die' <*öl-* 'to die'. The meaning of purpose or a time ponit when an action is performed is accountable to both the verbal noun suffix and the locative suffix. At this point, it might be helpful to recall the MUy. form of the *-°š* plus the dative *+qa ~ +kä*, which indicates the same meaning: *oqu<u>šqa</u>* 'in order to read' <*oqu-* 'to read', *kör<u>üškä</u>* 'in order to see' <*kör-* 'to see'. Since the verbal noun suffix *-γa ~ -qa ~ -gä ~ kä (-γu ~ -qu ~ -gü ~ -kü)* also has its diachronic allomorph *-γ ~ -q ~ -g ~ -k* (see 2.1.1, 2.1.3), it is natural to see the locative *+li also occurring in the compound *-γli ~ -gli:* *yat<u>ïγli</u>* 'one who is to lie down, one who must lie down' <*yat-* 'lie, lie down', *käl<u>iqli</u>* 'one who is to come, one who must come' <*käl-* 'come'. The function of this form is well-defined by Kashghari (v.II:75), that is, it indicates a purpose or readiness to do something: bar<u>ïγli</u> 'to plan to go, to be going to go', tur<u>uγli</u> 'to paln to stay, to be going to stay'. Later, this compound started to have a *γ ~ g* ending due to analogy to the CA comitative suffix *+lïq ~ +lik ~ +luq ~ +lük*.

The CA locative **+li* is seen Mongolic and Tungusic words as an archaic case suffix: Mo. *te<u>li</u>* 'like that, at that time' <*te* 'that', *ke<u>li</u>* 'how, like what, when', cf. *ken* 'which, who', *ker* 'in what way, how'. It is very likely that *+la ~ +le* in the WM terminal converb suffix *-tala ~ -tele* is actually related to the CA locative **+li:* *yabu<u>tala</u>* 'until he goes'

<yabu- 'to go', *keletele* 'while he was talking' <*kele*- 'to say, talk' (Examples quoted from Poppe, 1964:94). As we follow Ramstedt's (1952:119-120) explanation that *-ta ~ -te* is a CA verbal noun suffix, it is natural to compare these Mo. forms with the Tkc. forms *barγali*, *kälgäli*, etc., above. This comparison is so reasonable semantically that the meaning of a purpose, a time limit or time point for performing an action, can be defined by the locative suffix in all Altaic languages. The obsolete locative suffix **+la ~ *+lo*, etc., is evident from Tungusic directional or locative terms: Tng. **dolo* 'inside, in' = Ma. and Ude. *dolo*, Lam., Sol, and Ngd. *doolaa*, Na. *dola*, Evk. *dooloo* (Benzing, 1955a:1032). More examples can be quoted from Ma.: *amala* 'behind, north', *dele* 'top, east', *fejile* 'under', *wala* 'under, west', *tule* 'outside', *čala* 'that side', *ebele* 'this side', *bajila* 'opposite shore', *oilo* 'surface' (Norman, A Grammatical Sketch of Manchu:18-19). Although the stems in these frozen forms hardly occur without the locative ending, the obsolete suffix is self-evident morphologically, and semantially. On the other hand, the suffix *+lii* does exist in Tungusic languages. Benzing (ibid.) calls it prolative suffix, and assumes that it is the combination of the locative **+laa* and **+gi*. This suffix is seen in modern Tng. languages as *+li ~ +duli*: Ude. *wėė yakpalini* 'through that mountain pass'; Evk. *bıra*li 'along the river'; Na. *tėli* 'then, at that time', *xali* 'when'. Benzing (ibid.) illustrates the Ma. suffix *+ri* in

geri 'time, number of times', *fejiri* 'under', *dari* 'each, every', etc., along with *+li*. But etymologically *+ri* seems to have its origin from the CA dative suffix **+rV*, which can be seen in MUy. directional words like *neri* 'toward that', *beri* 'toward this', *tašqiri* 'outside, to outside' <*tašqaru* <*taš* 'outside' + *+qa* (Dat.), *ičkiri* 'inside, toward inside' <*ičkärü* <*ič* 'inside' + *+kä* (Dat.). Furthermore, in Ma. the place words in *+ri* can consist a small class, and in most cases *+ri* appears after a stem which contains the locative *+la ~ +le ~ +lo*: *amari* 'behind, north', *juleri* 'front, south', *deleri* 'top, east', *dolori* 'middle', *tuleri* 'outside', *eberi* 'this side', *oilori* 'surface' (Norman, ibid.).

In conclusion, the CA locative **+li* is evident from some fixed or frozen forms in modern Altaic languages. In modern Uyghur case, it appears in the compound suffix */-GAli/*.

3.3.5 */-GAč/*

The suffix */-GAč/* = *[-ɣač ~ -qač ~ -gäč ~ -käč]* in MUy. forms converbs which indicate performing an action conveniently or in passing while doing another action (Tömür, 1987:279):

(127) *Äxmät+ni yoqli(<yoqla-)-ɣač šähär+gä kir -ip*
ACC VISIT CONV CITY DAT ENTER CONV
čiq -tuq
EMERGE PST 1PR PL
'We went to the downtown while visiting Äxmät on the way.'

(128) *meniñ luɣit(<luɣät)+im +ni al-ɣač*
MY DICTIONARY POS 1PR SG ACC TAKE CONV
kel(<käl-)-iñ
COME 2PR SG IMP RES

'Please bring my dictionary at your convenience.'

Etymologically, both Ramstedt (1952:153-154) and Poppe (1955:277) mention that the Tkc. /-GAč/ has the same origin as the Mo. *-γad ~ -ged*. Tenišev (1981:301) also implies the same idea. If this is true, then we can compare them to each other on the basis of the CA perfective suffix **-gA* (see 3.2.2), which also enables us to link the Ma. suffix *-hači, -hade,* etc., to the same source. The second part of the suffix in each language branch, however, is not so straightforwardly comparable. Thus, it is necessary to focus on it here.

3.3.5.1 **Turkic**: The compound suffix *-γač ~ -qač ~ -gäč ~ -käč*, which is possibly the combination of the CA perfective **-gA* and the Tkc. equative suffix *+čä*, occurs in a relatively late period. (Notice not to confuse the combination with the deverbal noun suffix *-γač ~ -qač ~ -gäč ~ -käč* which designates an instrument.) In Chagatay literature the combination denotes an action which takes place immediately before a main action (Eckmann, 1966:145):

(129) *ol bu söz +ni ešit -<u>käč</u> ol -di hamuuš*
HE THIS WORD ACC LISTEN CONV BECOME PST SILENT
'As soon as he heard the word, he became silent.'

(130) *la'l+ï köñlüm (<köñül+üm) haal +ï +nï sor-<u>γač</u>*
RUBY OF HEART MY CONDITION OF ACC ASK CONV
tiri -l -di +m
REVIVE REF PST 1PR SG
'As soon as her ruby lips asked the conditions of my heart, I revived.'

It is evident from the examples above that the suffix carries the meaning of 'as soon as...' or 'after having done...'. This meaning is expressed simultaneously by the CA

perfective *-*gA* and the Tkc. *+*čä*, which became +*č* as a result of the final vowel loss, a general tendency in Tkc. languages. The Tkc. equative suffix +*čä* has a broad meaning. It indicates not only the meaning of 'as, like, such, such as, as big as', etc., but also the meaning of 'in a manner of, in the way of, in a fashion of', etc. Thus its combination with *-*gA* can also be interpreted as 'in a manner of having done...' or 'by having done...'. This meaning is specifically evident in MUy. where it stands for 'doing an action in convenience or in passing while doing another main action' as mentioned above. Perhaps the basic meaning of the suffix is well preserved in many modern Turkic languages other than Uyghur: Tat. *yasa<u>gač</u>* 'as soon as having done'; Bash. *tap<u>gač</u>* 'as soon as having found'; Tuv. *al<u>gaš</u>* 'after taking, having taken', *čet<u>keš</u>* 'after having reached'; Uz. *tek<u>kač</u>* 'after having touched'; WYu. *yörgen<u>geš</u>* 'after having learned'; Alt. *kel<u>gejin</u>* 'as soon as he came' (Tenišev, 1981). In Yak. the suffix is *-aat ~ -ėėt ~ -oot ~ -ööt ~ -t:* *kiir<u>ėėt</u>* 'as soon as he entered'. Tenišev (ibid.:301) believes that the Yak. suffix is the borrowing from the Mo. *-aad ~ -eed (<*-γad ~ *-ged)*, etc. As I consider its CA origin, I do not see any reason to treat it as a Mo. borrowing. Of course, the correspondence of the Tkc. equative +*čä* in Mo. languages is not seen in the same kind of combination, but in the ablative case, where the suffix +*AČA* is the combination of archaic dat. ~ loc. *+*A* and the ablative *+*ČA*. In Ma., however, the combination of *-hači* 'after having

done' contains both the perfective -*ha* and the ablative +*ǰi*, a close match to the Tkc. -*GAǰ*.

3.3.5.2 **Mongolic**: In Mongolic languages the so-called perfective converbial suffix **-γad ~ *-ged* (> *-aad ~ -eed, -aat ~ -eet ~ -oot ~ -ööt*, etc.) matches the Tkc. suffix functionally. It indicates the meaning of 'having done..., after having done...'. Since the suffix always implies doing an main action immediately after having done another action, Mongolists in China call a converb in the suffix *'fēnlí fùdòngcí* (departive converb)', an expression of 'after having done something, leave for another action'. There is no doubt that the Mo. suffix contains the CA perfective suffix **-gA* in the first place. But the second part, *+d*, seems to be the contraction of the dat. ~ loc. suffix *+du*. The same kind of combination is also evident in Ma.: perfective *-ha* + dat. ~ loc. *+de* 'when having done'.

In modern Mo. languages, of course, the perfective converbial suffix demonstrates other varieties too. In Mgr. the corresponding suffix is *-aa ~ -ee ~ -oo, -aane ~ -eene ~ -oone, -vaa ~ -vaane* (Chenggeltei, 1991:227-228):

(131) *če ne +ne uj -ee yau*
YOU THAT ACC SEE CONV GO
'(You) go after having seen this'

When preceded by the adverb *nigėde* 'once, one time', the converb, like in many Tkc. languages, expresses the meaning of 'as soon as':

(132) *uj-eene nigėde jiilaać -ja*
SEE CONV ONCE BE ANGRY PERF

'As soon as he saw it, he became angry.'

In Dag. the corresponding suffix is -γaar ~ -γéér, -aar ~ -eer ~ -oor ~ -éér, etc., which indicates that an action took place prior to the main action (Engkebatu, 1988:361):

(133) *warklaa ėms -<u>ėėr</u> garaar yau-sėn*
CLOTHES? WEAR CONV OUTSIDE GO PPL
'Having put on clothes, he went out.'

In spoken Chahar the so-called perfective converb is formed with the corresponding suffix *-aad ~ -eed ~ -ood ~ -ööd* (Jagchid, 1967:126):

(134) *ta hool id -<u>eed</u> yab*
YOU FOOD EAT CONV GO
'Please eat something before you go (lit.: after having eaten something, then go)'

In San. the parallel converb is formed with the suffix *-dė ~ -dėnė* (Büke, 1986:168). But it is not known if the suffix is etymologically related the Mo. **-γad ~ *-ged*. The corresponding suffix in Bao. is not attested (Chen, 1987:232).

3.3.5.3 **Tungusic**: From the comparison above it is clear that there are two kinds of combination in Ma., *-hači* and *-hade*, which can be compared to the Tkc. *-GAČ*. The compound *-hači* contains the perfective participial ending *-ha* and the ablative particle *+či*, which possibly has the same origin as Tkc. *+č* (<equative *+čä*) in *-GAČ* and Mo. ablative *+čA* in +AČA: *ara-<u>hači</u>* 'after having done' <*ara-* 'to do, to work'. The compound *-hade* contains the same perfective ending and the dat. ~ loc. particle *+de*, which is comparable to the Mo. *-γad ~ -ged*: *ara-<u>hade</u>* 'when having done' (Examples quoted from Jerry Norman, A Grammatical Sketch of Manchu). The CA

perfective suffix *-*gA* is evident in all these combinations.

3.3.6 */-GAČGA/*

The suffix */-GAČGA/* = *[-γačqa ~ -qačqa ~ -gäčkä ~ -käčkä]* in MUy. forms causative converbs which indicate the reason of happening another action (Tömür, 1987:278):

(135) *ular käl -mi-gäčkä yiγin eč(<ač-)-il -mi -di*
THEY COME NEG CONV MEETING OPEN PAS NEG PST
'Because they did not come, the meeting was not held.'

It is clear that the suffix is the combination of */-GAč/* discussed above and the dative suffix */+GA/*. Not only the former has a CA origin, but the latter also originated from the CA dative ending **+ga*, which has its correspondence *+a* in Mongolic languages, and *+e, +ga ~ +ge* in Tungusic languages (Ramstedt, 1952:32-35). Since the case ending is not the focus of my work, I will not discuss it in detail.

3.3.7 */-GAnseri/*

The suffix */-GAnseri/* = *[-γanseri ~ -qanseri ~ -gänseri ~ -känseri]* in MUy. forms converbs which express the meaning of 'the more... the more...' (Tömür,1987:279):

(136) *bu räxt +ni yu -γanseri aqir(<aqar-)-i +du*
THIS CLOTH ACC WASH CONV WHITEN CONV COP
'The more one washes the cloth, the more it becomes white.'

It is not difficult to see that the suffix contains the participial ending */-GAn/* which we have discussed in 3.2.2, and the second element *+seri*, which is the focus of our discussion here. The combination of the two appears mainly in later Uyghur literature. In origin the suffix *+seri* developed

from the word *sarï* 'toward, in direction' which is seen in OUy. (Ähät, 1989:237) and Chagatay literature (Eckmann, 1966:123). The word is active in Chagatay literature, and used as postposition in most cases: *zindaan* <u>*sarï*</u> 'toward the jail' (*zindaan* 'jail'); *Mïsr* <u>*sarï*</u> 'toward Egypt' (*Mïsr* 'Egypt'). It is also used as a directional noun:

(137) *ket -är +äm bir* <u>*sarï*</u>
GO AWAY PPL I ONE DIRECTION
'I am going to go somewhere.'

(138) *bu* <u>*sarï*</u> *+din*
THIS DIRECTION ABL
'from this direction' (Eckmann, ibid.)

In chagatay literature the meaning of 'the more..., the more...' is expressed by the postposition *sayï ~ sayïn ~ sayu* (EWT *sayu* 'every, each') following a */-GAn/* participle:

(139) *vafaa keräk aña qïl-ɣan sayï jafaa mahbub*
FIDELITY NEEDED HIM (DAT) DO PPL EACH CRUELTY BELOVED
'The more the beloved torments (his lover), the more the latter must be faithful to him.'

In later developments of Uyghur, *sarï* took the place of *sayu* in the same usage. Semantically this replacement is understandable. As we know, the */-GAn/* participle indicates a perfective or complete action; the postposition *sarï* has the meaning of 'toward, in direction of'. Thus their combination actually indicates the meaning of ''toward having done..., as someone has done...', which can be interpreted as 'the more..., the more...' depending on the context.

It seems to me that the word *sarï* actually is the location noun **sa* 'direction, side' in the dative case *+rï* (<*+ru ~ +rü*). The noun **sa* does not appear in MUy. by itself, but it

is evident from the word *sayan* 'direction, side' which is likely a compound of two words in identical meaning: **sa + yan* 'side, direction', of which the latter occurs by itself in most cases in MUy. If this is the case, then the dative meaning of *sarï* 'toward, in direction of' can obtain a better explanation. On this basis, we can also discuss the CA origin of the Tkc. dative suffix *+ru ~ +rü*. As I mentioned in 3.3.4, the CA dative suffix **+ru ~ *+rü* remains in location adverbs in the form of *+ri*: *beri* (<**bän* 'I' *+rü* (Ramstedt, 1952:38)) 'to this side, hither'; *tašqiri* 'outside, to outside'; *ičkiri* 'inside, to inside' (the last two examples actually contain two dative suffix: */+GA/* and *+ri* (<*+ru ~ +rü*)). In Mo. languages the suffix is seen in fixed words such as Mo. *inaru* 'before, until'; Khal. *modoru* 'toward the forest'; *usuru* 'toward the water' (ibid.:39). The suffix is seen in Tng. directional names as *+ri*: Ma. *amari* 'behind, north', *juleri* 'front, south', *deleri* 'top, east', *dolori* 'middle', *tuleri* 'outside', *eberi* 'this side', *oilori* 'surface' (Norman, A Grammatical Sketch of Manchu:18-19). Thus, except for etymology of the word **sa* 'direction, side' not being clear to me , I believe other elements of the Uyghur compound suffix */-GAnseri/* share a CA origin.

3.3.8 */-mAy/*

The suffix *-mAy = [-may ~ -mäy]* functions as the negative counterpart of both the imperfect converb in */-A/, /-y/* (3.3.1) and the perfect converb in */-°p/* (3.3.2) in MUy.:

yaz<u>may</u> 'having not written', *käl<u>mäy</u>-käl<u>mäy</u>* 'having not come for a long time'. In origin *-may ~ -mäy* is only the negative form of the */-A/, /-y/* converb, and its use as the negative counterpart of the */-°p/* converb can be seen as a morphological suppletion, because it does not contain the *-°p* ending. Furthermore, in the negative form of the evidential statement suffix *-°ptu (<°p + turur)*, *-°p* does appear with the negative suffix *-ma- ~ -mä-: yeziptu* 'Evidently (~ It turned out that) he wrote.' vs. *yaz<u>map</u>tu* 'Evidently (~ It turned out that) he did not write.' *keliptu* 'Evidently (~ It turned out that) he came.' vs. *käl<u>mäp</u>tu* 'Evidently (~ It turned out that) he did not come.'

The etymology of the suffix does not seem to be complicated. It contains the negative suffix *-ma- ~ -mä-* and *-y*. Since we have already discussed the origin of the negative *-ma- ~ -mä-* in 2.3.8, we only need to concentrate on the suffix *-y*. It is clear that *-y* is one of the allomorphs of the */-A/, /-y/* imperfect converbial suffix, which appears after a stem ending in a vowel (see 3.3.1). Because the negative suffix *-ma- ~ -mä-* contains an ending vowel, it is natural to assume that *-y* is the right allomorph of the imperfect participial suffix.

However, the origin of *-y* in *-may ~ -mäy* is as problematic as in its positive form *-a ~ -ä ~ -y* I have mentioned in 3.3.1. According to Tekin (1968:182), negative stems with the converbial suffixes *-a ~ -ä ~ -ı ~ -i ~ -u ~ -ü* are not

attested in Orkhon Turkic. Gabain (1974:108, 210, 395) mentions that *-may ~ -mäy* occurs in later documents as the negative form of the converb in EWT, but very seldom: *bul-may* 'as he didn't find, having not found'. Both authors point out that the most common negative converbial suffixes in EWT are *-matï ~ -mäti ~ madï ~ -mädi* and *-matïn ~ -mätin ~ -madïn ~ -mädin*. For Gabain (ibid.:124) the former serves as the negative form of the converbs in *-°p*, and the latter for those in *-°pan*, but for Tekin (ibid.:184) they are the negative forms of converbs in both *-°p*, *-°pan* and *-a ~ -ä ~ -ï ~ -i ~ -u ~ -ü*. In any case, they try to match the negative and positive forms only on the functional base. Phonologically (or etymologically) it is hard to do so. Let us look at the second part of the negative suffix. We can compare the *+n* in *-dïn ~ -din ~ -tïn ~ -tin* with that in *-°pan*, which is likely the CA instrumental suffix (Ramstedt, 1952:132). But the main part, *-dï ~ -di ~ -tï ~ -ti*, has nothing in common with their positive counterparts. They are likely the morphological suppletions in this case. It seems to me that they have the same origin as *-d* in Mo. perfect converbial suffix *-γad ~ -ged* (see */-GAČ/* in 3.3.5).

Another clue we may look for is the suffix *-mayin ~ -mäyin*, which, according to Gabain (ibid.:124), is the negative form of the *-°n* converb. As I mentioned in 2.1.13, the *y* in between *-ma ~ -mä* and *-°n* is likely the inserted or connecting element. This *y*, in turn, corresponds to the same type of *y*,

which occurs in between a verbal stem ending in a vowel and the *-u ~ -ü* allomorphs of the imperfect converbial suffix (see 3.3.1). Thus, the conclusion is that the *-y* in *-may ~ -mäy* is the same *-y* that functions as an allomorph of the */-A/* converbial suffix, but it is an inserted or connecting element in origin. While the use of *-may ~ -mäy* is not common in EWT, it is a dominant negative form for converbs in both *-a ~ -ä -y* and *-°p* in Chagatay literature. At the same time *-mayïn ~ -mäyin* (not *-matïn ~ -mätin*, etc.,) appears as negative form of *-ban ~ -bän* (= EWT *-°pan*) (Eckmann, 1966:151). As a result of further development, only the *-may ~ -mäy* survived in MUy. while other negative converbial forms disappeared gradually.

Although I have discussed the CA origin of the negative suffix *-ma- ~ -mä-* in 2.3.8 and the converbial suffix *-a ~ -ä ~ -y* in 3.3.1 separately, I do not attempt here to find a correspondence of the MUy. *-may ~ -mäy* in Mongolic and Tungusic languages. Because their developments in each language branch are not the same.

CHAPTER FOUR

4. FINITE INFLECTIONAL SUFFIXES

4.1 Definite Past Suffixes

4.1.1 */-DI/*

4.1.1.0 The suffix */-DI/* = *[-di ~ -ti]* in MUy. indicates that an action has taken place in the past. It is always followed by an appropriate personal ending:

(1) *sän nägä bar-<u>di</u> +ñ*
YOU WHERE TO GO PST 2PR SG
'Where have you been?'

(2) *män mäktäp-kä bar-<u>di</u>+m*
I SCHOOL DAT 1PR SG
'I have been in the school.'

In comparison to other forms with suffixes such as *-°ptu* (see 3.3.2) and */-GAn/* (see 3.2.2), a form in *-di ~ -ti* expresses that an action took place in the definite past, and that the action was witnessed by the speaker. It should be mentioned that although *-di ~ -ti* is known as the past tense suffix in MUy., it is not difficult to determine its verbal noun origin through the possessive endings that follow the suffix. At the same time we should notice that only the first part of the suffix, *-d ~ -t*, is the past tense element in origin (see Tekin, 1968:188), and that *+i* is the 3rd person possessive suffix, although the two are traditionally written together in MUy. Thus, the following possessive endings after the suffix are almost the same as the regular possessive endings that occur after a noun:

(3)

	After *-d ~ -t*	After a noun
1pr. sg.:	*+°m*	*+°m*
1pr. pl.:	*(-duq) (*+(i)miz*	*+(i)miz*
2pr. sg.:	*+°ñ*	*+°ñ*
2pr. pl.:	*+°ñlAr*	*+°ñlAr*
3pr. sg. & pl.:	*+i*	*+i (~ +si)*

(Polite and respectful possessive endings which developed later in MUy. are not listed here.)

The comparison above shows that except the 1pr. pl. past tense suffix *-duq ~ -tuq* which took over the function of the regular EWT suffix *-d+imiz ~ -t+imiz ~ -d+ïmïz ~ -t+ïmïz* (see 4.2.2), the two sets of possessive endings are the same. Thus the verbal noun origin of *-d ~ -t* (not *-di ~ -ti*) is self-evident. At this point I prefer to quote Poppe's (1965:196) remarks which are relevant here: "Altaic languages do not have indicative forms of the Indo-European type. The indicative forms, the tenses, are verbal nouns in origin, namely, verbal nouns in predicative position, i.e., verbal nouns with personal endings, namely, possessive suffixes or predicative suffixes." As we recognize the verbal noun origin of *-d ~ -t*, we should also respect the fact that in MUy. the suffix is only used as the past tense suffix in a predicative position. That is, except a few frozen forms, a form with the suffix can neither be accompanied by case endings and postpositions nor appear in subject, object, and attributive positions. This kind of restrictive usage of the suffix seem to have started

very early in Turkic languages.

4.1.1.1 **Turkic**: Tekin (1968:188-190) describes *-d ~ -t* in Orkhon Turkic as the perfective suffix, which expresses that an action began and completed in the past, and the action is supposed to have been witnessed by the speaker. Possessive endings following the suffix seem to be more archaic and regular at that time: *+im (üm) ~ +ïm (+um)* (1pr. sg.), *+imiz ~ +ïmïz* (1pr. pl.), *+iñ (+ig ~ +üg) ~ +ïñ (+ïγ ~ +uγ)* (2pr. sg.), *+iñiz (+igiz) ~ +ïñïz (+iγïz)* (2pr. pl.), *+i ~ +ï* (3pr. sg. & pl.): *bul<u>tum</u>* 'I found, I have found' <*bul-* 'to find', *bas<u>dïmïz</u>* 'we attacked, we suppressed' <*bas-* 'to press, attack', *ičik<u>diñ</u>* 'you (sg.) submitted yourself' <*ičik-* 'to submit oneself', *bar<u>dïγ</u>* 'you (sg.) went' <*bar-* 'to go', *är<u>tiqiz</u>* 'you (pl.) were ~ would have been' <*är-* 'to be', *bar<u>dï</u>* 'he ~ she ~ it ~ they went'. In comparison with these archaic possessive suffixes, we can find some new developments in MUy. Firstly, as I mentioned above, the 1pr. pl. suffix *-dimiz ~ -dïmïz* has been replaced by the past participial suffix *-duq ~ -tuq* in Chagatay and MUy. Secondly, the 2pr. sg. possessive ending *+ñ* demonstrates its allomorph *+γ* which is the result of denasalization of the former (Tekin, ibid.:92). Such denasalization process is not common in MUy. Thirdly, the 2pr. pl. suffix *+iñiz (+igiz) ~ +ïñïz (+ïγïz)* is actually the combination of the 2pr. sg. possessive ending and the archaic plural suffix *+z*. Interestingly, this ending has already started to refer to the 2pr. sg. as a polite form: *uča*

bardïγïz 'you passed away (lit.: you went flying)'. As a result of the continuation of such a usage, the suffix remains as the 2pr. sg. polite form, and it is no longer used for the 2pr. pl. in MUy. The ordinary 2pr. pl. suffix *+°ñ+lAr* is a newer formation in this regard. The suffix with the same possessive endings as in Orkhon Turkic also appears in OUy. Comparing the suffix with *-miš ~ -mïš*, Kashghari (v.II:77) mentions that both suffixes indicate the past tense; and that the difference is that while *-miš ~ -mïš* indicates that the action took place when the speaker was not at the scene, *-di ~ -ti* indicates that the speaker witnessed while the action took place. Kashghari also used the suffix *-di ~ -ti* for verbs as a dictionary form throughout his work (see v.II). In Chagatay literature the same suffix continues its same function as in EWT and OUy., i.e., functions as the definite past suffix. But at this period *-duq (-dük) ~ -tuq (-tük)* has taken over the function of *-dimiz ~ -dïmïz* as the 1pr. pl. suffix. Another new development is that the newer 2pr. pl. possessive ending *+°ñlAr* is used in parallel with the archaic form *+iñiz ~ +ïñïz*. Its further development can explain why in MUy. only *-°ñlAr* is the regular 2pr. pl. possessive ending. All modern Turkic languages employ *-d ~ -t* as the past tense suffix, varying from each other only in terms of the number of its allomorphs, reflecting different vowel and consonant harmony rules. Based on the Turkic evidence above, we can postulate **-d ~ *-t* as the proto-Turkic form for the suffix.

But for Baskakov (1981) the proto-Turkic form of the suffix is **-dïγ ~ *-tïγ* which, in turn, developed from the CA participial suffix **-dyïγ ~ *-dïγ*. He believes that the proto-Turkic participial suffix **-dïγ ~ *-tïγ* developed its different allomorphs seen in ancient and modern Turkic languages such as *-duq ~ -tuq ~ -dük ~ -tük, -tïq ~ -tïγ ~ -dïq ~ -dïγ (> -dï(γ) ~ -tï(γ)), -čïx ~ -jïx ~ -čux ~ -jux (> -ju ~ -ču), -yuq ~ -yük ~ -yïq ~ -yik*, and among them *-di ~ -ti* may be resulted from imperfect pronunciation of the proto-form. I agree with Baskakov that all allomorphs listed above are related to each other through a basic Turkic suffix, but the basic suffix should not be **-dïγ ~ *-tïγ*, but **-d ~ *-t*, since there is a reason to believe that the former contains two elements. This is evident from Kashghari's (v,II:54) information that the past participial suffix *-duq ~ dük* is formed by inserting the infinitive ending *-q ~ -k* between the *-d* and *-i* of the past tense suffix. Of course, except using Kashghari's vision about the structure of the suffix, we can not accept here every term Kashghari used to describe the suffix. As I mentioned above, **-d ~ *-t* is a verbal noun suffix in origin, which denotes a complete or past action. Thus it has become a specific past tense suffix. But its verbal noun usage can also be seen in some very limited cases. Ramstedt (1952:123) quotes OUy. deverbal nouns in *-ti* such as *kälti* 'of the future' <*käl-* 'to come', *käčti* 'of the past' <*käč-* 'to pass'. But he tries to distinguish the *-ti* in

these forms from the past tense *-di ~ -ti*. Baskakov (see the endnote 120 in the Russian version of Ramstedt's work), however, insists that *-ti* in these forms has the same origin as the past tense suffix. Besides these old formations, there are only a few deverbal nouns in the suffix in MUy.: *aldi--satti* 'buying and selling' <*al-* 'to take, buy', *sat-* 'to sell'; *bardi--käldi* 'mutual visit, going and coming' <*bar-* 'to go', *käl-* 'to come'.

Comparing the Turkic *-di ~ -ti* with the WM past imperfective *-ju ~ -ču, -ji ~ -či* and Tng. *-da ~ -de (-ra ~ -re)*, Ramstedt (ibid.) posits **-te* as the CA past tense suffix. But since the ending vowel varies from language to language, I postulate it as **-dV ~ *-tV*.

4.1.1.2 **Mongolic**: The common Altaic verbal noun suffix **-dV ~ *-tV* finds its correspondence in Mongolic languages also. Following Ramstedt, Baskakov (1981) compares the WM past tense suffix *-jee ~ -čee, -ji ~ -či, -j ~ -č* with the Turkic **-dïγ ~ *-tïγ*. I do not reject his comparison. But I insist again that the Turkic **-dïγ ~ *-tïγ* is the further development of **-d ~ *-t*, not vice-versa. Besides that, this comparison seems to be well-supported if we consider their phonological and functional similarities. First of all, the initial consonant of the Mo. suffix is accountable by a regular palatalization rule such as **d > j, *t > č* before the high vowel *i*. Functionally, Poppe (1955:265-266) mentions that the primary suffix *-ji (<*-dï ~ *-di) ~ *-ju* indicates a past

imperfect action, and that it also forms imperfective converbs in WM. As an indicative ending, it appears in spoken languages such as Ord. *-dži (-tši)*, Khal. *-dži ~ -tši*. In pre-classical WM the suffix was *-juγui ~ jügüi* for male beings, and *-jiγi ~ -jigi* for female beings: *ögčiqi* 'gave (to a woman) <*ög-* 'to give', *ajiqi* 'she was' <**a-* 'to be'. In classical WM the suffix appears as *-juqui ~ -jüküi*. The suffix occurs in MM with the predicative element **-γai* as *-ji'ai <-jiγai*. Perhaps its further development resulted in Mgr. *-džia*, Mgl. *-dže <*-jai <*-jiγai*, Khal. *-džää*, and Kalm. *-džee*.

It is interesting to notice that the very same suffix also serves to form imperfect converbs. In WM the suffix is *-ju ~ -jü ~ -ču ~ -čü* (Poppe, 1964:96). Its further development yielded some other allomorphs in different languages and dialects: MM. *-ju ~ -ču ~ -ji ~ -či*, Mgr. *-dži*, Dag. *-d'ži ~ t'ši*, Mgl. and Ord. *-dži ~ -tši*, Bur. *-ža ~ -ša*, etc., Kalm. *-dž^{i} ~ -tš^{i}*, Khal. *-dži ~ -tši* (Poppe, 1955:277). An imperfect converb expresses an action performed simultaneously with main action. The suffix may also express an action which sequentially took place before another action, or a cause of another action. Thus, a converb in the suffix is described as imperfect converb or sequential converb by different authors. Mongolists in China usually prefer to use the term sequential converb (bìngliè fùdòngcí):

(4) Mgr. *gule-dže çine-na*
SAY CONV LAUGH VN

'(Someone) is speaking and laughing'
(Čenggeltei, 1991:226)

(5) Dag. *Mood+ii seuder+d bitiγ uji -j sau-j +aabei*
TREE GEN SHADOW LOC BOOK READ CONV SIT CONV BE
'sitting under the shade of the tree while reading a book (lit.: reading a book and sitting under the shade of the tree)' (Engkebatu, 1988:358)

(6) Bao. *dara -dži ölör -dže*
BE COLD CONV BE HUNGRY VN
'Be cold and hungry' (Chen, 1987:221)

(7) San. *bi yau -ji heče-wo*
I WALK CONV TIRE PST
'I am tired by walking ~ Since I walked, I am tired.' (Böke, 1986:164)

(8) Chak. *Sur'gč suu-j bič-ne*
STUDENT SIT CONV WRITE VN
'The student writes sitting.' (Jagchid & Dien, 1967:54)

All these examples show that the Mo. imperfect converbial suffix *-ju ~ -ču, -ji ~ -či, -j ~ -č*, etc., function as the Turkic perfect converbial suffix *-°p* (see 3.3.2), but not as the past tense suffix *-di ~ -ti*. The interesting point in this correspondence then is that while the CA **-pa ~ *-pi* developed into the perfect converbial suffix in Turkic languages, its equivalence *-ba(i)) ~ -be(i)* functions as the past tense suffix in Mo. languages; in contrast, while the CA **-dV ~ *-tV* developed into past tense suffix in Turkic languages, its correspondence *-ju ~ -ču, -ji ~ -či, -j ~ -č*, etc., in Mo. languages, function as the imperfect converbial suffix.

4.1.1.3 **Tungusic**: Ramstedt (1952:123-124) believes that since the corresponding Tungusic **-da ~ *-de* changed into *-ra ~ -re*

in post-vocalic positions, it merged with the imperfect participial suffix *-ra ~ -re*. If his statement is true, we not only can find the correspondence of the CA **-dV ~ *-tV* in Tungusic languages, but we also can solve the mystery why *-da (-dii)*, whose initial sound *d* is too distinct from *r* and *s* to be their allophone, appears as a phonologically conditioned allomorph of the Tungusic aorist suffix *-ra (-rii)* and *-sa (-sii)* (see 3.2.1.3). Benzing (1955a:1071) defines that **-ra (-ragii > -rii)* is for Class (Cl.) I verbs, *-sa (-sii)* is for Cl. II verbs, and *-da (-dii*, etc.) is for Cl. III verbs. In Benzing's classification, however, there is no a clear-cut distinction between verbs of different classes phonologically. Thus, it is hard to test Ramstedt's claim. A better classification is provided in Petrova's (1960) Nanai grammatical sketch. According to Petrova, Nanai speakers distinguish four types verbs by the final sounds: Verbs ending in a short vowel (type I); verbs ending in a diphthong or long vowel (type II); verbs ending in a consonant (type III); and special verbs such as *o-* 'become', *ji-* 'come', etc. (type IV). If Ramstedt's claim that the Tungusic **-da ~ *-de* changed into *-ra ~ -re* in post-vocalic positions hence merged with the aorist *-ra ~ -re* is true, then we can expect *-da ~ -de* to occur in post-consonantal positions. It is interesting that in Nanai the imperfect participial (aorist) suffix *-či (<*-ti) ~ -ji (<*-di)* appears only with the type III verbs ending in consonants and type IV special verbs, while *-y* and

-ri appear after type I and Type II verbs respectively (Petrova, 1960:190-192). Actually, the Nanai Type III and IV verbs in Petrova's classification match the general Tungusic class III verbs in Benzing's (1955a:1074-1075) classification, which includes a few special verbs like *o-* 'become', *ji-* 'come', and verbs ending in *-n*: Na. *oji* 'becoming', Ude. *odo*, Ngd. Ma. *ojoro* <**odira*, Lam. *ood* (id.), *odan* 'he will become'; Na. *jide* ~ *jiji* 'coming', Ma. *jidere* (id.); Lam. *gad* ~ *gadi* 'taking, will be taking' <*ga-* 'to take', Na. *gada* ~ *gaji*, Ude. *gada* ~ *gadai* (<**gadari*) (id.), Ngd. *gadan* 'he will take'; Na. *jelganda* ~ *jelganji* 'speaking, will be speaking' <*jelgan-* (<**dilgan-*) 'to speak', *unde* ~ *unji* 'saying' <*un-* 'to say'. As aorist form, a verb ending in *-da* ~ *-de* ~ *-ji* can function as subject, object, attribute, or with personal endings, as predicate. Phonologically, like in Mo. languages, the suffix seems to have undergone palatalization in Na., thus it is *-ji* ~ *-či* in the language. The suffix may also appears in partial palatalized form *-jere* ~ *-joro* in Ma., but more often it is *-dara* ~ *-dere* ~ *-doro*, *-tara* ~ *-tere* ~ *-toro* for the special verbs. Notice the combination of the regular aorist suffix *-ra* ~ *-re* ~ *-ro* with *-da* ~ *-de* ~ *-do* and *-ta* ~ *-te* ~ *-to*. To explain this phenomenon I refer the reader to Ramstedt's (1952:124) remarks: "Perhaps due to the consistency between the past tense *-d* and present tense *-r*, the form *-jara* started to be used together to express the present tense".

The suffix */-Duq/ = [-duq ~ -tuq]* in MUy. is used specifically for the first person plural. It indicates both the definite past and the 1pr. Pl. at the same time:

(9) *biz mäktäp+kä bar-<u>duq</u>*
WE SCHOOL DAT GO PST 1PL
'We went to the school.'

When discussing the deverbal noun function of the suffix in 2.1.16, I mentioned that the suffix used to form regular verbal nouns and past participles in EWT and OUy. However, its etymology as well as its limited use for the first person plural only as a past tense marker in Chagatay and modern Turkic languages still remain controversial. Thus I try to explain the possible origin and functional developments of the suffix in this section.

Firstly, let us look at the meaning of a complete action or the past tense of the suffix. It seems to me that the suffix *-duq ~ -tuq ~ (-dük ~ -dük)* implies a completed or past action from the beginning. Such implication is very clear in its usage as a past participle suffix in Orkhon Turkic: *bar<u>duq</u> yir ~ yer* 'a land (you) went to' <*bar-* 'to go', *yir ~ yer* 'land, place'; *sančduq yer* 'the place where (we) pierced (the enemy)' (Tekin, 1968:178-179). The tense implication is also clear when the suffix is used by Oguz and Kypchak speakers as a predicate during the OUy. period: *män ya qurduq* 'I have set the bow.' <*män* 'I', *ya* 'bow', *qur-* 'to set, establish' (Kashghari, v.II:79). A verbal noun in the suffix in EWT can

also be interpreted as carrying the meaning of past or complete action: *qazγantuqiin* 'his having won' <*qazγan-* 'to win' (Tekin, ibid.). But the same OUy. verbal noun forms in Kashghari's work (v.II:55) are translated by the Uyghur editors in the form of *-°š* verbal noun in MUy., which is neutral in terms of tense: *barduqi barmaduqi* (MUy. tr.: *beriš-barmasliγi*) 'his going or not going'. It is not clear to me if this verbal noun form in OUy. also indicated a past action. If it did, we can expect to translate it as 'his having gone or not having gone'. In any case, it is not hard to imagine that the past participial usage of the suffix in EWT and OUy. ultimately resulted in its specific usage as the past tense marker for the first person plural in Chagatay and MUy.

Secondly, as for the grammatical persons concerned, the suffix is neutral in origin. That is, the suffix was not bound to the first person plural at the beginning. Being personally neutral, a form in the suffix in EWT can be followed in any possessive suffixes: *biltük+üm* 'my having known' (*+üm*: 1pr. sg. possessive); *qazγantuq+iin* 'his having won' (*+iin*: 3sg. & pl. possessive) (Tekin, ibid.). Thus, the 1pr. pl. is expressed by the regular suffix *+miz* (<*biz* 'we'):

(10) *ekii biñ är-ti +miz*
TWO THOUSAND BE PST 1PR PL POS
'We were two thousand.' (Tekin, ibid.:250, 285)

Likewise, during the OUy. period, as Kashghari (ibid.) points out, the Oguz and Kypchak speakers used the suffix for any

person: *Ya qurduq* 'He has set the bow' (*ya* 'bow', *qur-* 'to set, establish'); *Män ya qurduq* 'I have set the bow' (*män* 'I'); *Biz ya qurduq* 'We have set the bow' (*biz* 'we'). Of course, from Kashghari's implicit information, we can guess that the Turkic speakers other than Oguz and Kypchaks started to use the suffix only for the first person plural. This is clear from its further functional development in Chagatay and MUy. In conclusion, the suffix *-duq ~ -dük ~ -tuq ~ -tük* used to be a regular verbal noun and past participial suffix in EWT and OUy., without any implication of grammatical person. Its further functional developments in Chagatay and MUy., however, resulted in its being limited to the first person plural as the past tense marker only.

Thirdly, as far as its etymology is concerned, we can take Kashghari's remarks into account first. He (v.II:55) mentions that an infinitive form in *-duq ~ -dük* is formed by inserting the infinitive marker *-q ~ -k* between *-d* and *-i* of the past tense. As I mentioned in 2.1.16, the term infinitive does not fit the function of the suffix. But he etymologically informs us that the suffix contains the past tense suffix *-d* and the suffix *-q ~ -k*, which, according to Kashghari's earlier remarks in the context, is what we call CA resultative suffix (see 2.1.1) in this work. Ramstedt (1952:152) proposes almost the same etymology for the suffix. But he varies from Kashghari in calling *-d ~ -t* a kind of deverbal verb suffix. Baskakov (1981), on the other hand, believes that the

different allomorphs of the suffix seen in ancient Turkic or modern Turkic languages such as *-duq ~ -tuq ~ -dük ~ -tük, -tïq ~ -tïγ ~ -dïq ~ -dïγ [>-dï(γ) ~ -tï(γ)], -čïx ~ -jïx ~ -čux ~ -jux (>-ju ~ -ču), -yuq ~ -yük ~ -yïq ~ -yik*, etc., all stemmed from the earlier Turkic participial suffix **-dïγ ~ *-tïγ*. He believes also, as mentioned in 4.1.1, that the Turkic past tense suffix *-dï ~ -tï* resulted from the imperfect pronunciation of **-dïγ ~ *-tïγ*. Mentioning the existence of the past tense suffixes such as *-jee ~ -čee, -ji ~ -či, -j ~ -č* in Mongolic languages and dialects, Baskakov went on further to claim that all Turkic and Mongolic suffixes above have stemmed from the proto-form **-dyïγ ~ *-dïγ*. I agree with Kashghari's and Baskakov's interpretation that the general past tense suffix *-di ~ -ti* (see 4.1.1) and the past tense ending for the first person plural *-duq ~ -tuq* in MUy. are genetically related. That is, both suffixes share the past tense element **-d ~ *-t*, which may not be the same as what Ramstedt calls a kind of deverbal verb suffix. As for the second element *-°q ~ -°k* is concerned, there are at least two possible sources. Firstly, we can accept Kashghari's interpretation that it is an infinitive marker, or in our definition, the CA resultative suffix. Secondly, we can follow Baskakov and assume that the element is actually a suffix for the first person plural. When listing the first person plural suffixes in Turkic languages, Baskakov (1981) mentions *-q* as an allomorph along with *-bïz, -mïz*, and *-z*.

Of course, Baskakov is right in his listing because in addition to the past tense we are discussing here, *+°q ~ +°k* also appears in optative, imperative, and conditional forms as the first person plural suffix in many Tkc. languages: Bash. *totayïq* 'let us hold' <*tot-* 'to hold, take', *alhaq* 'if we take' <*al-* 'take, hold'; Alt. *ište(y)lik* 'let us work' <*ište-* 'to work', *kütsek* 'if we look after' <*küt-* 'look after'; Kir. *aytalïq* 'let us say' <*ayt-* 'to say', *körsek* 'if we see' <*kör-* 'to see, watch' (Examples quoted from Tenišev, 1981). However, both assumptions are questionable. If we assume that *-°q ~ -°k* has the same origin as the resultative */-°G/* in 2.1.1, how can we explain its appearance after a verbal noun stem ending in the past tense suffix *-d ~ -t*, otherwise it appears only after a verbal stem? If we treat *+°q ~ +°k* as an allomorph of the first person plural suffix, we can do so only on the basis of its usage in modern Turkic languages, but we lack historical evidence to prove the point etymologically. In fact, as Ramstedt (1952:126) explains, after the Turkic past tense suffix *-d+ïmïz* of the first person plural was replaced by the verbal noun suffix *-duq* in eastern, southern, and western languages, *-q* acquired the meaning of 'we', and it spread into imperative and conditional forms perhaps due to analogy. Thus I leave the question about the identity of +q ~ +k in *-duq ~ -dük* open.

We have already discussed in 4.1.1 the existence of the CA suffix **-d ~ *-t* which is alive in all Turkic, Mongolic, and

Tungusic languages as a past or complete action suffix. Since the suffix *-duq ~ -tuq* contains the very same element, we do not need to repeat the same comparison here. But it is interesting to point out that corresponding to *-duq ~ -tuq* in Turkic languages, the existence of the Negidal suffix *-dig*, a combination of the same nature, is mentioned by Ramstedt (1952:152):

(11) *gen+in alba* *-dig+in, gen+in wa -dig +in*
ONE OF UNABLE TO DO PPL ONE OF KILL PPL OF
'One of the hunters always couldn't hit (the target), while the other one always could hit (it).'

Ramstedt also compares the Mo. nomen usus suffix *-daγ ~ -deg* along the same lines. However, the suffix *-daγ ~ -deg* does not indicate a past or complete action, but indicates a habitual, customary, or usual action (Poppe, 1964:94): *yabudaγ* 'someone who usually goes, the usual goer, the usual act of going, he usually goes' <*yabu-* 'to go'. Thus, I do not feel that the Mo. *-daγ ~ -deg* matches with the Turkic *-duq ~ -tuq* and Tungusic *-dig* semantically.

4.2 The Conditional Suffix */-sA/*

The suffix */-sA/ = [-sa ~ -sä]* is known as the conditional in MUy. It takes the same personal endings that */-DI/* and */-Duq/* take (see 4.1.1 and 4.1.2). The suffix */-sA/* indicates a condition when a present-future tense verb is used as predicate of the main clause (Tömür, 1987:299-306):

(12) *ätä* *yamγur yaγ -mi-sa, biz taq (<taγ)+qa*
TOMORROW RAIN FALL NEG COND WE MOUNTAIN DAT
čiq -i +miz
CLIMB PR FT 1PR PL

'If it doesn't rain tomorrow, we will climb the mountain.'

It indicates a wish or desire when it is used as a predicate of a main clause:

(13) *män-mu bar-<u>sa</u> +m*
PCL 1PR SG
'I wish I also could go'

It indicates a past event which contradicts the speaker's expectation when the predicate verb in the main clause is in the past tense:

(14) *sori(<sora-)-<u>sa</u>+m jawap bär -mi-di*
ASK ANSWER GIVE NEG PST
'When I asked, he/she/they didn't answer (to me).'

In EWT, however, the suffix does not carry a personal ending, but appears in the form of *-sar ~ -sär: sän tod<u>sar</u>* 'if you are satiated' <*tod-* 'be satiated' (*sän* 'you), *yay bol<u>sar</u>* 'in summer (lit.: when it becomes summer)' <*bol-* 'to become' (*yay* 'summer'), *yaš käl<u>sär</u>* 'when tears come down' <*käl-* 'to come' (*yaš* 'tears') (Tekin, 1968:185-186). A widespread opinion about this form is that the *-r* ending after *-sa ~ -sä* is the so-called aorist suffix (see 3.2.1). As I argue below, the accuracy of such opinion depends on the identity of *-sa ~ -sä*. In OUy, *-sa ~ -sä* is more common than *-sar ~ -sär*:

(15) *yaγi kör-<u>sä</u> alp är*
WAR SEE COND HERO MAN
'if the hero faces a war' (Yusuf, 1984:510)

(16) *män+i birlä bol -<u>sa</u>*
I GEN WITH BECOME COND
'if he is with me' (ibid.:660)

From Chagatay literature on, the conditional suffix -*sa* ~-*sä* regularly appears with an appropriate personal ending, but not with -*r* any longer: *barsam* 'if I go' <*bar-* 'to go', *körsäñ* 'if you see' <*kör-* 'to see' (Eckmann, 1966:158). This is true in most spoken Tkc. languages today. However, in some Tkc. languages we see other developments. In Yak. the suffix is -*tar* which corresponds to the EWT -*sar* ~ -*sär:* *ahaatarbïn* 'if I eat' <*ahaa-* 'to eat'. In Alt. the suffix shows more allomorphs: -*za* ~ -*ze* ~ -*zo* ~ -*zö*, -*sa* ~ -*se* ~ -*so* ~ -*sö*. In Tuv. the suffix is also -*sa* ~ -*se*, -*za* ~ -*ze*. But when the suffix is used for the first and second persons, it is preceded by -*sï* ~ -*si* and -*zï* ~ -*zi* plus a personal ending: *berzimze* 'if I give you' <*ber-* 'to give', *berziñze* 'if you (sg.) give'. I wonder if the same conditional suffix is repeated in this case. In Bash. the suffix is -*ha* ~ -*hä:* *alham* 'if I take' <*al-* 'to take' (Examples quoted from Tenišev, 1981).

There are two main speculations about the origin of the Tkc. conditional suffix -*sa* ~ -*sä*, none of which is satisfactory. But I do not have a better definition. Let us discuss the old speculations and my new one. Firstly, Ramstedt (1952:131, 187-188) is of the opinion that the suffix is related to the ancient verb **se-* 'to say, think, do, hope' which is still very active in Manchu, and that together with the participial suffix -*r*, the form **ser* resulted in the Turkic -*sar* ~ -*sär:* *bolsar* 'if it becomes', which might

originally mean 'believing the becoming', *öl<u>sär</u>* 'if dies' which semantically might have developed from the concept 'believing the dying'. I object to this assumption because in Turkic languages we can not combine two verbs together without changing the first one into a kind of substantive form. If the suffix developed from the suppositional verb **se-*, the verbs *bol-* and *öl-* above should show a nominal ending, or, if they have lost such an ending, a compensatory sound change. But they do not show any of the signs. Secondly, both Ramstedt (ibid.) and Baskakov (1981) believe that the Tkc. conditional suffix is related to the compound form *-ïγ<u>sa</u>- ~ -ig<u>sä</u>-*, where the suffix *-sa- ~ -sä-*, as Kashghari (v.II:72) explains, means 'like to have, wish to do'. However, the dispute between Ramstedt and Baskakov is that the former believes again that *-sa ~ -sä* in the compound also developed from the verb **se-*, but the latter insists that it is closely related to the CA imperative suffix **-su* (see 4.4.3). Thus, Ramstedt compares the forms *käl<u>igsä</u>-* 'to wish to come' and *bar<u>ïγsa</u>-* 'to wish to go' (Kashghari, ibid.) with the Mongolic forms *kereg<u>se</u>-* 'to be necessary, needed' <*kereg* 'thing, matter' and *ger<u>se</u>-* 'wish to have house' <*ger* 'yurt, house'. In contrast, Baskakov compares the Tkc. suffix *-ïγ<u>sar</u> ~ -ig<u>se</u>r* with the Mo. *-aasai ~ -eesei: unš<u>aasai</u>* 'it would be good if someone has finished reading' <*unš-* 'to read', *med<u>eesei</u>* 'it would be good if someone has known' <*mede-* 'to know'. Again, I can not agree with them. My objection

against such an attempt is based on the fact that the *-ïγ ~ -ig*, the first part of the compound suffix *-ïγsa- ~ -igsä-*, is a verbal noun suffix (see 2.1.1), thus, the following component should be *+sa- ~ +sä-* which is a denominal verb suffix, but not *-sa ~ -sä* which can be compared with the conditional suffix we are discussing here. As I mentioned earlier, I categorically reject the opinion that in Altaic languages the same suffix can be attached to verbal as well as nominal stems.[1] In fact there is a strict distinction between verbs and substantives that a verbal suffix can not function as a nominal one or vice versa. Whenever that happens, we should look for a missing element which might change a word from one class of speech into another. Therefore, I do not believe that denominal verb suffix *+sa- ~ +sä- (+sï ~ +si-)* itself or its combination with the verbal noun (aorist) suffix *-r* developed into the conditional suffix. I do believe that there is a denominal suffix *+sa- ~ +sä- ~ (+sï- ~ +si-)* used to mean 'to lack something, to wish to have something'; thus its combination with the aorist suffix *-r* resulted in not the conditional suffix, but the so-called privative suffix *+siz* (<**+sïr ~ +sir*) in Tkc. languages and *-msar ~ -mser* in Mo. languages (see also 2.1.8.2, 3.2.1).

Baskakov's opinion that the conditional suffix *-sa ~ -sä* is genetically related to the CA imperative suffix **-su* seems also to have been advocated by Chen (1987:203-207). In his comparative studies of Baoan and Mongolian, Chen tries to

explain historically the formation of the Baoan imperative *-see (-ree)* and desiderative *-sa ~ -gisa*, and their relationship with other Altaic languages. Quoting from Ramstedt, Kotvič and Todayeva, Chen attempts to show that in Mo. languages the basic imperative element *s* is evident in desiderative *-su, -sugai, -aasai* and conditional suffixes *-basu, -gasu*, and that it is logical that an imperative form can indicate a desire, a wish or a supposition. As a proof of such a universal phenomenon, Chen also analyzed English sentences "If you will wait a minute, I shall go and find him" and "If I haven't repeated the mistake", where a conditional structure also implies a wish or desire. I believe Chen's attempt is well-supported. Especially when we consider the fact that an imperative form or a conditional form may also express a desire or wish, we can agree with Baskakov's supposition that the Tkc. conditional suffix *-sa ~ -sä* originated from the CA imperative **-su*.

However, it seems to be logical to me only to think that the meaning of an existing imperative form or conditional form can be extended to indicate a wish or desire, but it is hard to believe semantically that a same element can evolve into both imperative and conditional forms. Thus I assume that the conditional suffix *-sa ~ -sä* may have a different origin from the CA imperative **-su*, possibly another CA suffix **-s(V)±*. Correspondingly, Manchu shows rather distinct suffixes in this respect:. *-ci* as conditional: *geneci* 'if one goes' <*gene-* 'to

go', but -*su* as (irregular) imperative: *bi<u>su</u>* 'be!' <*bi*- 'to be'. If my above assumption holds, I further assume that the suppositional *-s(V)± might have expressed a past or complete action orginally. Because, firstly, there was not originally a conjunction like English "if" in Altaic languages. The introduction of such a Persian word *gär ~ ägär* 'if' into Tkc. languages was not earlier than the introduction of Islam, perhaps after 10th century. Logically it is very natural throughout the languages of the world to use a past or complete suffix for conditional or suppositional expression, assuming that an action has taken place before a main action in imagination. This is true even in English which already has the conjunction "if", e.g., If I <u>were</u> you,...; If you <u>had come</u> yesterday..., etc. Secondly, as we know, personal endings for the Tkc. conditional form developed later. If we assume that the conditional suffix used to indicate a past or complete action in origin, we do not think it is a coincidence that the personal endings for the conditional form are exactly the same as that for the past tense suffix *-di ~ -ti* (see 4.1.1): *+m* for 1pr. sg., *+q* for 1pr. pl., *+ñ* for 2pr. sg., *+ñlAr* for 2pr. pl, and zero for 3pr. sg. and pl. Otherwise, the corresponding personal pronouns with slight phonological changes are used as personal endings for present and future tenses. Thirdly, the conditional suffix always expresses a past action when the predicate verb in the main clause is in the past tense as in (14) above. In this respect

we can replace the conditional suffix -*sa* ~ -*sä* in (14) with the past participial suffix /-*GAn*/ (see 3.2.2) plus the locative case:

(17) *män sori(<sora-)-γan+da jawap bär -mi-di*
I ASK PPL LOC ANSWER GIVE NG PST
'When I asked, he/she/they didn't answer (to me).'

Furthermore, a /-*GAn*/ participle in locative may even function as conditional form as -*sa* ~ -*sä* in certain contexts:

(18) *šundaq bol -γan+da (~ bol-sa) yaxši bol -i +du*
SUCH BECOME PPL LOC GOOD BECOME CONV COP
'When (~ If) it is like that, it would be very good.'

All this evidence shows that a conditional expression is closely related to a past or perfect form. If the Tkc. -*sa* ~ -*sä* really originated from a suppositional CA past or perfect suffix, we can compare it with the Mo. perfective verbal noun suffix -*γsan* ~ -*gsen*, and, possibly, with the Tng. aorist suffix of Class II verbs, -*sa* (~ -*sii*, etc.), (see 3.2.1.3).[2]

At this point I must admit that my above assumption about the origin of the suffix is not based on solid diachronic evidence, but mainly on synchronic evidence in MUy., or, partly on logical grounds. In addition to the assumptions by Ramstedt and Baskakov, it can only be viewed as another alternative explanation. Of course, one definitely needs to do further research before concluding which assumption is better. Despite this etymological difficulty, we can find a perfect functional match between the conditional suffixes throughout Altaic languages. In Manchu, for instance, the combination of the conditional suffix -*ci* and the particle *be*

forms concessive converb: *bederecibe* 'even though (you) return', which exactly the same as the conditional -*sa* ~ -*sä* plus the particle *mu* (= -*simu*) in MUy.: *barsimu* 'even though (he) goes'. Likewise, in classical and modern Mongolian the concessive is formed the conditional -*basu* plus the particle *ber*: *yabubasu ber* 'although he goes ~ went' (Poppe, 1964:96). In these constructions not only the conditional suffixes show similarity to each other, but the particles *be* in Manchu, *mu* in MUy. and *ber* in Mongolian also seem to share a common origin, perhaps a CA intensifying particle **bV*. When followed by the verb *o*- 'to become', a Manchu conditional form in -*ci* may indicate possibility or permissibility of doing an action:

(19) *moo sa -ci o -mbi*
TREE CUT COND BECOME PR.FT
'You may cut down the tree.'

The same is true when the MUy. conditional is followed by the verb *bol*- 'to become':

(20) *bar-sa +ñ bol -idu*
GO COND YOU BECOME PR.FT
'You can go ~ It is ok if you go.'

Moreover, when followed by the respective conditional suffixes, both the manchu verb *o*- 'become' and MUy. verb *bol*- 'become' are used to set off the subject or topic of a sentence:

(21) Ma. *Hada+i gurun +i wan han o -ci, uyun*
GEN COUNTRY GEN KING BECOME COND NINE
hūlha be wa-ha se -mbi
ROBBER ACC KILL PST PPL SAY PR.FT
'As for King Wan of Hada, they say he killed the nine robbers.'

(22) MUy. *bu bol -sa meniñ uka +m*
THIS BECOME COND MY YOUNGER BROTHER my
'As for this (person), he is my younger brother.'

More interestingly, in Manchu the conditional suffix *-ci* plus *+na* (= *cina*) serve as desiderative or imperative, i.e., expresses the speaker's desire for the realization of an action: *aracina* 'you had better do ~ why don't you do ~ I wish that you would do' <*ara-* 'to do, to make'. In my Toqsun dialect of MUy., the suffix *-sina* functions exactly the same, i.e., it is used for intimately urging someone to perform an action:

(23) *tez mañ-sina*
FAST GO
'Please go faster ~ I wish you to go faster.'

Of course, one may also be able to interpret this form on the basis of the imperative *-sun* (see 4.4.3) instead of the conditional *-sa ~ -sä* (Manchu examples above from Norman:A Grammatical Sketch of Manchu, L. Clark:1979-1980).

4.3 Voluntative Suffixes

4.3.1 */-A°y/*

The suffix */-A°y/* = *[-ay ~ -äy ~ -y]* in MUy. expresses a voluntative intention of performing an action on the part of the first person singular: *baray* 'Let me go'; *köräy* 'Let me see ~ I must see'. Traditionally the suffix is known as the first person imperative in MUy. grammars. Since the suffix indicates a desire of performing an action by the speaker himself or herself, I find the term voluntative more suitable.

In Mongolic languages the corresponding suffix is *-ya ~*

-ye. Again this may be another typical example where the Tkc. languages tend to lose a final vowel of a suffix, while Mongolic and Tungusic languages maintain it. Thus, we can postulate *-*y(V)* as the CA suffix.

In EWT the suffix appears in the form of *-yïn ~ -yin ~ -ayïn ~ -äyin: tüšäyin* 'I shall go down!' <*tüš-* 'to go down, descend', *qonayïn* 'I shall settle down!' <*qon-* 'to settle' (Tekin, 1968:187). The identity of the *+ïn ~ +in* ending of the suffix is not clear. It is probably identical with the *+n* ending developed later in the imperative suffixes */-GIn/* (see 4.4.2) and *-sun* (see 4.4.3). It is known from Yusuf's Qutadγu Bilik that the same suffix is used for the same purpose in OUy.:

(24) *nägü ol muniñ män'i +si ay maña*
WHAT IT ITS MEANING POS TELL TO ME
bil -äyin uq -ayïn püt -äyin saña
KNOW UNDERSTAND BELIEVE TO YOU
'Please tell me what its meaning is, let me know, let me understand, and let me believe you!' (p. 192)

In Chagatay literature, along with the forms *-(a)yïn ~ -(ä)yin, -(a)yïm ~ -(ä)yim*, the newer form *-(a)y ~ -(ä)y* is used as 1pr. sg. voluntative, which finally became dominant in MUy.: *qïlay ~ qïlayïn ~ qïlayïm* 'let me do!' <*qïl-* 'to do' (Eckmann, 1968:155). Most modern Tkc. languages preserved the suffix. However, it may appear only in plural form or in older forms in some languages: Kaz. *-(a)yïn ~ -(e)yin*, Tuv. *-ayn ~ -eyn ~ -ïyn ~ -iyn ~ -uyn ~ -üyn*, Alt. *-ayïn ~ -eyin ~ -oyïn ~ -öyin* (Tenišev, 1981). In some Turkic languages the suffix contains the *m* ending instead of *n*: Ta. *-ïym ~ -im*,

Bash. *-ayïm ~ -äyim*, Yak. *-ïïm ~ -iim ~ -uum ~ -üüm* (ibid.). Thus, in these languages the regular 1pr. sg. ending *+m* seems to have replaced the original *n* ending whose identity remains unclear to me so far. Actually, this kind of replacement may have started in Chag. literature. Recall the Chag. examples *qïlayï<u>n</u> ~ qïlayï<u>m</u>* above.

As I mentioned above, I do not hesitate to compare the Mo. voluntative suffix *-ya ~ -ye* with MUy. voluntative *-ay ~ -äy*. Functionally they perfectly match each other, i.e., both express a strong desire of the speaker to perform an action. Phonologically, they are comparable on the basis of a very common phenomenon that while Tkc. languages lose a final vowel of a suffix and harmonically develop an initial one instead, Mo. languages usually preserve it. In Written Mongolian the suffix *-ya ~ -ye* is usually spelled as *-y--a ~ -y--e*. Thus, Poppe (1955:255) proposes that the Mo. voluntative is the verbal noun suffix **-i* plus the dative suffix **+a* in origin: *odu<u>i--a</u> ~ oduy--a* 'Let us go!' I believe Poppe's definition is supported by the fact that all finite forms in Altaic languages are verbal substantive forms in origin. At the same time I can not semantically connect a verbal noun in the dative to a voluntative meaning. Thus for the time being I preserve my supposition above that the Tkc. and Mo. voluntative suffixes may have originated from a CA suffix **-y(V)*.

Most modern Mo. languages contain the voluntative suffix

today. In Dag. the corresponding suffix -*yaa* is used for 1pr. sg. and pl. (both inclusive and exclusive) voluntative: *yauyaa* 'Let me ~ us go!', *garyaa* 'Let me ~ us go out!' (Engkebatu, 1988:334) In Nianduhu dialect of Bao the suffix is -*ya*: *nökörgeya* 'Let me help (you)!' (Chen, 1987:196) Mgr. has the same suffix for the same function: *sureya* 'Let me study!', *göya* 'Let me give!' (Chenggeltei, 1991:222) Santa also has the same suffix -*ye*: *ujeye* 'Let us watch!', *suruγaye* 'Let me teach!' (Böke, 1986:154).

4.3.2 */-A°yli/*

The suffix */-A°yli/* = *[-ayli ~ -äyli ~ -yli]* in MUy. expresses a voluntative intention of performing an action on the part of the first person plural: *barayli* 'Let's go', *köräyli* 'Let's see'. It is clear that the plural form is based on the singular suffix -*ay* ~ *äy* above. Thus we need to discuss the development of the suffix in Tkc. languages only. In EWT the pl. form is -*(a)lïm* ~ -*(ä)lim*: *yanalïm* 'Let us return!', *sülälim* 'Let us wage war!' (Tekin, 1968:188) It is likely that the *l* in the pl. voluntative form is etymologically related to the *l* in the Tkc plural suffix *+lAr*. In Chag. literature the suffix is -*(a)lï* ~ -*(ä)li* ~ -*(a)lïñ* ~ -*(ä)liñ* ~ -*(a)lï* ~ -*(ä)li*: *oqulï* 'Let us read!', *ičäliñ* ~ *ičälim* 'Let us drink!' (Eckmann, 1966:155-156) The *ñ* and *m* endings in the suffix seems to be irregular. In some modern Tkc. languages they have been replaced the regular 1pr. pl. suffix *+q* ~ *+k* (see 4.1.2): Tat. *karïyk* 'Let us look at!',

Bash. *totayïk* 'Let us hold!', Alt. *išteylik* 'Let us work!', Kaz. *qaγayïq* 'Let us 'Let us knock!' Likewise, in some dialects of MUy. *-ayluq ~ -äylük* is used instead of *-ayli ~ -äyli*.

4.4 Imperative Suffixes

A verb stem with zero suffix in MUy. can be used as ordinary imperative form for the 2nd person singular, which is very common in Altaic languages and many other languages in the world: *bar* '(You) go!', *kör* '(You) see!' (cf. Mo. *yabu* 'go!', Ma. *afa!* 'attack!') Considering the fact as a universal phenomenon, I do not feel it is necessary to discuss it comparatively here.

4.4.1 */-°ñ/*

The imperative suffix */-°ñ/ = [-ñ ~ -iñ ~ -uñ ~ üñ]* in MUy. is used for the 2nd person singular, which contains the meaning of politeness: *ber(<bar-)-iñ* 'Please go', *körüñ* 'Please see'. The polite imperative form for the 2nd person plural is */-°ñizlAr/*, which contains the archaic plural ending +z and the regular plural ending */+lAr/*.

As one might expect, the regular plural form */-°ñlAr/* does exist. However, it is not the polite but the ordinary imperative ending for the 2nd person plural, which functions as the plural counterpart of the zero suffixed imperative form as I mentioned above (cf. Tömür, 1987:297).

The etymology of the imperative suffix *-°ñ* is not so clear

to me. Ramstedt (1952:83) mentions that this imperative suffix is a very archaic one, and that it is present in the Chuvash negative imperative particle a*n* 'not to, not to do' (<negative verb *e- plus the suffix -*ñ*, 2.4.1) and Mongolic -*õñ*: Mgr. *suurgaõñ* 'let him sit down' < *surga-* 'to sit down' (ibid., Monguor Gr., p. 104). Its existence in Tng. languages has not been attested yet.

Kashghari gives very specific information about the usage of the suffix in OUy. He (v.II:59) mentions "if the listener is an aged person and needs to be respected, the imperative *barïñ* 'please you (sg.) go' is used instead of *bar*! 'you go!'. In fact, it means *barïñlar* 'you (pl.) go'... Oguz and Kypchak speakers use *-ñ* plus *+z* for the 2pr. sg. in respect. That is, in their form there are two plural suffixes". In another occasion (v.III:429) he mentions that while Oguz and Kypchak speakers use *-ñ* for the 2pr. pl. imperative such as *tσγrañ*! 'you (pl.) cut!', *σγrañ*! 'you (pl.) go!', Turkic speakers use it for the 2pr. sg. in respect. In fact the Oguz and Kypchak usage is regular. According to his statement, we can conclude that *-ñ* was the imperative suffix for the 2pr. pl. in origin, and that a verbal root without any suffix, as it is the case in MUy. and many other Altaic languages, was used for the 2pr. sg. imperative. But among the Turkic speakers a respectful or polite imperative form for the second person is distinguished from an ordinary one. Thus the original ordinary plural suffix *-ñ* is used as polite 2pr. sg. form. Actually, this

kind of functional switch corresponds another universal phenomenon, i.e., to use the ordinary second person plural pronoun for the singular as a polite form. For instance, the EWT *siz* 'you (pl.) became a polite pronoun for the second person singular in MUy. Likewise, when the second person plural pronoun is used for the singular in Russian and German, it indicates politeness. Eckmann (1966:153) presents all *-ñ*, *-ñïz*, and *-ñïzlar* as the 2pr. pl imperative suffixes in Chagatay literature, without mentioning any difference in terms of politeness. I believe that actually the difference is present even in Chagatay. It is interesting to point out that although the suffix *-ñ* is being used as the polite imperative suffix for the 2pr. sg. since the OUy. period until MUy., its combination with the regular Plural suffix *+lAr* is not used for polite plural, but only for ordinary plural. The polite 2pr. pl. imperative suffix in MUy. is *-°ñizlAr*, which, according to Kashghari's explanation about the Oguz-Kypchak polite form above, contains three plural suffixes. As an imperative for the 2pr., *-ñ* perhaps is present only in a few modern Turkic languages. In Yak. the suffix *-ïñ ~ -iñ ~ -uñ ~ -üñ* is used as regular imperative for the 2pr. pl. It suggests that Yak. preserves its original usage. In Tuv. the suffix carries the plural suffix *+r*, thus is used only for 2pr. pl imperative (Tenišev, 1981).

4.4.2 */-GIn/*

The suffix */-GIn/* = *[-γin ~ -qin ~ -gin ~ -kin]* in MUy. is

used as the imperative for the 2nd person singular, which expresses intimacy between the speaker and listener (Tömür, 1987:298):

(25) *bar-<u>γin</u> bala +m*
CHILD MY
'Please go, my child!'

(26) *γäm qil-mi-<u>γin</u> apa*
WORRY NG MOTHER
'Don't worry, mom!'

The suffix appears in EWT as regular 2pr. sg. imperative in the form of *-γïl ~ -gil* (Tekin, 1968:187):

(27) *sab+ïm +ïn äšid -<u>gil</u>*
WORD MY ACC LISTEN IMP
'hear my words!'

(28) *yaγ(γ)<u>ïl</u> ti-di*
JOIN IMP SAY PST
'"join me!" he said'

Kashghari (v.II:56-58) is also specific about the usage of the suffix *-γïl ~ -qïl ~ -gil ~ -kil* in OUy., mentioning that it is used as imperative for the 2pr. sg.: *tur<u>γïl</u>* '(you) stay there! ~ stand up!', *kir<u>gil</u>* '(you) enter! ~ go in!'. In Chagatay literature both *-γïl ~ -gil* and *-γïn ~ -gin* are used in parallel: *al<u>γïl</u> ~ al<u>γïn</u>* '(you) take!), *kör<u>gil</u> ~ kör<u>gin</u>* '(you) see!'. It is obvious that the latter form, *-γïn ~ -gin*, finally became dominant in MUy. We see some other developments in modern Turkic languages. In Tat. the 2pr. sg. imperative *-gïn ~ -gen ~ -kïn ~ -ken* also developed its plural form *-ïgïz ~ -egez ~ -ïkïz ~ -ekez*. In Bash. it appears in the plural form of *-γïz ~ -gez ~ -ïγïz ~ -egez ~ -oγoz ~ -ögöz*, where, I believe, the final *n* fused with the plural

suffix *+z. In Yak. the suffix occurs only with the plural *+z as the imperative for the 2pr. pl. (Tenišev, 1981).

There are speculations about the origin of the suffix that it might have originated from the independent Tkc. verb *qïl-* 'to do, make' (= Mo. *ki-*) (Ramstedt, 1952:83), which can be compared with Tng. *-kalm*. This etymology is acceptable semantically. But morphologically it poses a problem, since a verb like *qïl-* in Tkc. languages can not be preceded by another verbal stem. Thus, I postulate **-gV ~ *-kV* as the CA imperative suffix.

In pre-classical Written Mongolian the so-called benedictive suffix *-dqui ~ -dkün* and its plural form *-dqun ~ -dkün* function as imperative for the second person: *yabudqun* 'please go!', *keledkün* 'please say'. Later in Middle Mongolian the suffixes appear as *-γtun ~ -gtün* perhaps due to metathesis: *yaburγtun, kelegtün* (Poppe, 1955:253, 1964:89). According to Poppe (ibid.), the benedictive suffix contains the secondary (passive) suffix *-d- ~ -da-* and the nomen futuri suffix *-qu(i) ~ kü(i), -qun ~ -kün* (pl.), which, as I discussed in 3.1.3.2, can be traced back to a CA verbal noun suffix **-g(V) ~ *-k(V)*. Now the question is if the reconstructed CA imperative **-gV ~ *-kV* above is another version of the CA verbal noun suffix. I do not exclude such a possibility, because all finite verbal forms in Altaic languages ultimately go back to verbal substantive forms in origin. But at this stage I compare the Mongolic imperative

(benedictive) suffix with Turkic and Tungusic ones only on the functional basis.

In Tng. languages Ma. shows the corresponding desiderative suffix *-ki* and optative suffix *-kini*. In Ma. the desiderative shows a desire or intention to perform an action on the part of the speaker:

(29) *soorin be baha -ki*
THRONE ACC OBTAIN
'I want to attain the throne.'

(30) *bi nene -me gene-ki*
I BE FIRST CONV GO
'I shall go first.' or 'Let me go first!'

Likewise, an optative in *-kini* shows a strong desire on the part of the speaker that some action be performed. It generally refers to the third person:

(31) *bi buce-ci mini sunja jui banji-kini*
I DIE COND MY FIVE CHILD LIVE
'If I die, I hope my five children will live!'

The obvious functional difference of Ma. *-ki* and *-kini* is that the former refers to the first person and the latter the third person, which seems to contradict the function of the corresponding suffixes in Turkic and Mongolic languages where they refer to the second person. But this is a minor concern here as we see their common imperative meaning. Moreover, the Ma. optative suffix *-ki* may be used as polite imperative for the second person:

(32) *tubade dedu-ki*
THERE STAY
'Please stay there!'

Correspondingly, other Tng. languages also contain a third

person imperative in *-*Gi*+: Na. -*geni*, Ul. -*jini*, Orc. -*gin*, Sol. -*gini*, Ngd. -*ñin*, Evk. -*gin* (Benzing, 1955a:1092).

4.4.3 /-sun/

The suffix /-*sun*/ = [-*sun*] in MUy. is used as the imperative for the 3rd person singular and plural(Tömür 1987:298):

(33) *nimä aldira-y +sän, yaz käl-sun, miwi+lär piš-sun*
WHAT HURRY CONV YOU SUMMER COME FRUIT PL RIPE
'Why do you hurry, let summer come and the fruits ripen (first).'

It also expresses a strong wish:

(34) *toy +iñiz +γa mubaräk bol-sun*
WEDDING YOUR (PL) DAT CONGRATULATION BE
'Congratulations for your wedding!'

In the structure *mäyli...-sun* 'no matter..., ...ever it might be', it expresses a decisive action:

(35) *mäyli boran čiq -sun, mäyli yamγur yaγ-sun*
CONJ WIND EMERGE CONJ RAIN FALL
čoqum bar-i +miz
DEFINITELY CONV WE
'No matter it blows wind or it rains, we will go definitely.'

As I mentioned in 4.2 above, there are speculations among Altaists whether the suffix has the same origin as the conditional suffix -*sa* ~ -*sä*. Again, for the reasons I mentioned in the same section, I believe that the imperative suffix might have originated from an independent source, perhaps a CA imperative *-*su* ~ *-*sü*. Although the corresponding imperative suffix is not present in the limited Orkhon Turkic documents, I believe it did exist in very early ages of Turkic languages. Otherwise, we can not expect its

wide usage in Yusuf's didactic epic Qutadγu Bilik written in eleventh century:

(36) *yaγï+qa alïn qïl kötür-sü čärik*
WAR DAT FRONT MAKE LIFT IMP SOLDIER
'Let (them) stay in the front line and lead the soldiers!' (p. 510)

In Qutadγu Bilik which represents the OUy. written language, *-su ~ -sü*, like in MUy., is used as imperative for the third person. It is obvious from the recording that the basic suffix is still *-su ~ -sü* in OUy., and the *n* ending seen in Chagatay and MUy. is the result of later development. Another point we should notice is that Yusuf also used the conditional suffix *-sa ~ -sä* as imperative in many cases. But whenever *-sa ~ -sä* was used together with *-su ~ -sü* in the same context only the latter functioned as imperative:

(37) *äšit -sä köñül bär -sü al -su özi*
LISTEN COND HEART GIVE IMP TAKE IMP SELF
'Whoever listens to (it) should pay attention and understand!' (p. 532)

(38) *yaqïn yort-sa bäg +kä küdäz -sü baš +ï*
CLOSE GO COND MASTER DAT SUPERVISE IMP HEAD OF
'Should supervise first while staying close to the master (king)!' (p. 550)

In Chagatay literature the suffix starts to appear with *n*, thus *-sun ~ -sün* and its plural form *-sunlar ~ -sünlär* function as the third person imperative: *barsun* 'let him go', *barsunlar* 'let them go' (Eckmann, 1966:152-153). The plural form of the 3pr. imperative suffix ceased to function in MUy., but is preserved in other Turkic languages: Trk. sg. *-sın ~ -sin ~ -sun -sün*, pl. *-sınlar ~ -sinler ~ -sunlar ~ -sünler*; Ta. sg. *-sïn ~ -sen*, pl. *-sïnnar ~ -sennär*; Bash. sg. *-hïn ~*

-hen ~ -hon ~ -hön, pl. *-hïndar ~ -hendär ~ -hondar ~ -höndär*, where the initial *h* in Bash. corresponds to the initial *s* in many other Tkc. languages; Alt. sg. *-zïn ~ -zin, -sïn ~ -sin*, pl. *-zïndar ~ -zinder ~ -sïndar ~ -sinder*, etc.

In pre-classical Mongolian, *-su ~ -sü* appears as voluntative suffix, but in WM and modern Mo. languages the suffix appears in combination with *-γai ~ -gei* for the same function (Poppe, 1964:90): *yabusuγai* 'let me go!', *kelesügei* 'let me say!' According to Poppe (1955:256), in the most conservative colloquial Mongolian languages the suffix is still **-su*, i.e., without the secondary element **-γai*. In Mogul, for instance, the suffix is *-suun ~ -suunà ~ -aasun*, where the final *n* is due to the analogy to the benedictive in *-tunà*, and the long *-aa* in *-aasun* is due to the contraction of the secondary verbal suffix *-ge-*: *ire-ge-sü+na > irààsun* 'come!'

Among the Tng. languages, Ma. demonstrates the suffix *-su ~ -so* in some so-called irregular imperative forms: *baisu* 'seek!' <*bai-* 'to seek', *gaisu* 'take!' *gai-* 'to take', *bisu* 'be!' <*bi-* 'to be', *osu* 'become!' <*o-* 'to become'. I believe the Manchu forms contain the CA imperative suffix **-su ~ *-sü*.

4.5 The Invocatory Suffix /-GAY/

4.5.0 The suffix */-GAy/ = [-γay ~ -qay ~ -gäy ~ -käy]* in MUy. expresses a strong wish or desire. It takes no personal endings for the 3rd person singular and plural, and for the 1st and 2nd persons the regular pronouns with minor sound

changes are attached as personal endings:

(39) *xuda saqli(<saqla-)-γay*
GOD SAVE
'Might God save (us)!'

(40) *turmuš+imiz teximu bayašat bol-γay*
LIFE OUR MORE PROSPEROUS BE
'Might our life be more prosperous!'

The suffix is also used in an indirect command in place of *-sun* for softening the speech:

(41) *ati(<ata) +ñiz +γa dä -ñ, ätä käl-gäy*
FATHER YOUR POL DAT TELL IMP POL TOMORROW COME
'Please tell your father that he should come tomorrow.'

As I mentioned in 2.1.1 and 3.1.3, the invocative suffix */-GAy/* is one of the diachronic allomorphs of CA verbal noun suffix **-g(V) ~ *-k(V)* (see Kononov 1980:§109-§110). It appears in very early Turkic documents with less frequency and slightly different meanings from that in MUy. In Mongolic languages the same suffix occurs in the optative suffix *-tuγai ~ -tügei* as the secondary element. In Tungusic languages the imperative or desiderative suffix *-gaa ~ -gee (-gaat ~ -geet)*, the future participle suffix **-ñaa (<*ngaa)* seem to have the same origin (Ramstedt, 1952:91).

4.5.1 **Turkic**: What we see in EWT is the suffix *-γa ~ -qa ~ -gä ~ -kä*, which, like its high-voweled allomorph */-GU/* (see 2.1.3, 3.1.3), indicates necessity or possibility of doing an action in the future. Thus, it is also known as imperfective gerund suffix. In Orkhon Turkic, however, the suffix is seen mainly in deverbal nouns: *bilgä* 'wise' <*bil-* 'to know'; *qisqa* 'short' <*qis-* 'to shorten'; *tamγa* 'brand, seal' <**tam-*

'to burn' (Tekin, 1968:111-112). It is obvious from these examples that since a verbal noun formed with the suffix indicates an action which is taking place presently or will take place in the future, a performer or an instrument related to the action is easily referred to by the same verbal noun.

Based on the primary form */-GA/ [-γa ~ -qa ~ -gä ~ -kä]* (Gabain, 1974:395), the secondary form of the suffix, */-GAy/ [-γay ~ -qay ~ -gäy ~ -käy]*, is developed, and it became more active especially in OUy. and Chagatay literature. I am not sure about the origin of the *+y* ending. It seems to be a intonational particle, since, in contrast to the primary verbal noun suffix */-GU/* and */-GA/*, the secondary suffix */-GAy/* tends to appear in predicative verbs, indicating a wish, a supposition, or simply a future action: *tükämägäy* 'if it wouldn't end' <*tükä-* 'to end, finish'; *yarayay* 'may it be suitable' <*yara-* 'be suitable, be acceptable' (Gabain, 1974:133). Of course, even without the +y ending, the optative or imperative usage is still accountable on the basis of necessity meaning of the verbal noun suffix. Thus, along with */-GAy/*, */-GU/ ~ /-GA/* is also frequently used as optative and imperative throughout Yusuf's work Qutadγu Bilik: *yïratγu* 'May it be estranged!' <*yïrat-* 'to estrange' (p. 550), *bärmägü* 'Don't give!' <*bär-* 'to give' (p. 748). Kashghari (v.2:86) gives explicit definition of the suffix *-γay ~ -qay ~ -gäy ~ -käy* that it is used to indicate an action which will take place very soon:

(42) *ya qur -ɣay*
BOW CONSTRUCT
'(He) will set the bow soon.'

(43) *ol äv +gä bar-ɣay*
HE HOME DAT GO
'He will go home (very soon).'

The suffix is also expresses an intention to perform an action soon:

(44) *män ät toɣra-ɣay+män*
I MEAT CUT I
'I am going to cut the meat soon.' (Kashghari, v.3:427)

In Chagatay literature, the suffix sometimes appears without the *-y* ending, and in addition to the expression of the future tense, it is also widely used to indicate a wish, request, or a guess:

(45) *til birlä nečük qilɣa men izhar saña*
TONGUE WITH HOW DO I STATEMENT TO YOU
'How shall I tell you (my situation) orally.'

(46) *šah ol dur, ki al -ma-ɣay vä bir -gäy*
KING HE BE THAT TAKE NEG AND GIVE
'A king is one who does not take, but gives.'

(47) *qorɣan +din daryaa bir oq atïm+ï bol-ɣay*
FORTRESS ABL RIVER ONE BOW SHOT OF BE
'The river is approximately at bowshot distance from the fortress.' (Eckmann, 1966:161)

In MUy. and other Turkic languages, the suffix mainly expresses a wish or a desire of doing an action in the future: Nog. *islegeymez* 'let's work' <*isle-* 'to work'; Kaz. *kirgeysiz* 'hope you come in' <*kir-* 'to enter'; Kir. *algay älek* 'we want to take, let's take' <*al-* 'to take'. Among Turkic languages the suffix /*-GAy*/ is preserved better in Kypchak group than in others. In Oguzic languages the suffix is vague perhaps due to the loss of the initial *g* ~ *k* in consonant cluster

positions: Trk. *al̲asin* 'please (you) take it' *al-* 'to take' (Tenišev, 1981).

4.5.2 **Mongolic**: Correspondingly, in Classical Mongolian we see the optative *-tuγai ~ -tügei* (for 3rd person), and *-suγai ~ -sügei* (for the 1st person): *uñsi̲tuγai* 'let him read', *uñsi̲suγai* 'let me read' (Poppe, 1955:256). According to Poppe (ibid.), *-γai ~ -gei* is the secondary element in the combination. In modern Mongolic languages, however, *-γai ~ -gei* is the inseparable part of the optative suffix. In Dag. *-tγai* is used for the 3rd person imperative, desiderative, etc.: *jau-t̲γai* 'let him (~ her ~ them) go.' This form does not imply the number difference. If one needs to specify the plurality of the 3rd person, one can add the suffix *+sul* after *-tγai* (Engkebatu, 1988:336). Of course, in some languages the element is hardly recognizable due to the fusion of the two element or sound changes. In Kalmuck, for example, the fusion of the suffix with personal endings resulted in complicated forms as follows:

(48)

	Sg.	Pl.
1pr.	*-hääp <*-suγai bi*	*-hääbdi <*-suγai bida*
2pr.	*-hääš <*-suγai si*	*-häät <*-suγai ta*
3pr.	*-hää <*-suγai*	

In addition to the occurrence of *-γai ~ -gei* in the compound optative suffix, it appears as nomen futuri suffix in Written Mongolian: *yabu̲γa(i)* 'someone who started going and is still going' <*yabu-* 'to go' (Poppe, 1964:94). Remember

that the Turkic optative /-GAy/ is also a verbal noun suffix in origin, which indicates a future or imperfective action. In this sense, we can relate them to each other, and ultimately to the CA verbal noun suffix *-*g(V)* ~ *-*k(V)* easily.

4.5.3 **Tungusic**: According to Ramstedt (1952:91), the Tungusic 1pr. pl. imperative suffix -*gaat* ~ -*geet* is the fusion of the ancient *-*gai* and the personal ending +*bti* 'we?': Evk. *ilgaat* 'Let's get up' <*il-* 'stand up', *gunigeet* 'Let's speak out' <*guni-* 'to speak'. It is obvious that the imperative meaning in these examples is due to the main part *-*gai*, which has its equivalents in Turkic and Mongolic languages as we have seen above. Notice that the corresponding Turkic and Mongolic suffixes form a verbal noun, denoting an imperfective or future action, and their optative or imperative meaning is secondary. Only on this common basis can they be related to the CA *-*g(V)* ~ *-*k(V)*. When we discuss the Tungusic imperative element *-*gai* along the same lines, we should also expect its occurrence in imperfective or future usages. Such usage, I believe, can be found in the Tungusic future participle formed with *-*ñaa* (Benzing, 1955a:1082): Na. jemñee 'eating, one who will eat' <*jeb-* 'to eat'; Lam. emñeenri 'you will come, come then'. More often the suffix is preceded by another future participle suffix, *-*ja*, and followed by personal endings, to form an imperfect tense: Orc. waajañati 'they will kill' <*wa-* 'to kill'; Sol. waajiqaa

(id.); *maañaal* (id.).

Notice that I compare here the Tungusic future participial suffix *-*ñaa* with the Turkic /-GAy/ and Mongolic *-*gai* because I assume that the initial *ñ- of the Tungusic suffix may have developed from a more ancient sound **ng-* or **g-*. When introducing the consonant ñ, Benzing (ibid.:985) mentions that "In Verbindung mit *m* ist *ñ* in manchen tg. Sprachen Assimilationsprodukt <**g* ('In conjunction with *m*, *ñ* in some Tungusic languages is a product of the <**g* assimilation')." I also expand my assumption to the initial *ñ- (<*ng- ~ *g-)* in the following examples: Ma. *gere-* 'to become bright, to down'; Na. *ñegjen ~ ñejien* 'bright'; Ude. *ñei* 'light, bright'; Evk. *ñeerii* 'light'; Lam. *ñeeriin* 'light' (Benzing, 1955a:969). Ma. *golmin* 'long'; Na. *ñonemi ~ wonemi ~ onemi*, Ork. *ñonemi*, Ngd. *ñonom*, Evk. *ñoonim*, Lam. *ñoonom* (id.) (ibid.:90). Notice again that Benzing reconstructs the Tungusic forms for examples I quoted above with an initial **ñ-*, but not with an initial **g-* or **ng-*, i.e., **-ñaa* (future participle suffix): **ñäärı* 'light, bright', and **ñolımı* 'long', respectively. Of course, he is right in the reconstruction, since in the examples, excepting Manchu, all other Tng. languages show an initial *ñ-* which can be justified as original by principles of comparative reconstruction. But I try to reconstruct the examples here with an initial **ng-* or **g-*. Because firstly, the date of the Tungusic written documents is generally later than the Turkic and Mongolic

ones. Thus in comparative Altaic studies the Tungusic internal reconstruction may not provide parallel information in some cases. Secondly, neither Ramstedt nor Poppe reconstructs an word-initial **ñ-* for Altaic languages. In their reconstruction, **ñ* appears only in final and intervocalic positions. This may be also a universal phenomenon. Thirdly, as I mentioned above, Benzing does not reject the possibility of the **g* origin of *ñ* at least in some, but not all, cases. If I am right in my argument above, I assume that the Tungusic future participial suffix **-ñaa* originated from a more ancient form, **-ngaa* or **-gaa*, which can be compared with the imperative suffix *-gaa ~ -gee (~ -gaat ~ -geet)*, hence can also be related to the Turkic */-GAy/* and Mongolic *-gai*.

4.6 The Indirect Statement Suffix */-mºš/*

The suffix */-mºš/* in MUy. is phonetically realized as *-miš* when it functions as an indirect statement mark. Its other allomorphs such as *-muš ~ -müš* as we have seen in 2.1.11 do not appear in this usage. This is due to the harmonic fossilization of the suffix with the copula *i- (<är-)* 'to be' which itself is a high unround vowel. The suffix with or without the copula *i-* is used to state an event which is known to the speaker through an indirect source:

(49) *u burun mušu mäktäp+tä*
HE FORMERLY THIS SCHOOL LOC
oquγanikänmiš(<oqu-γan i -kän i -miš)
STUDY PPL COP PPL COP
'(As I know,) he formerly studied at this school.'

More frequently, the suffix indicates that the speaker does not believe or mocks at an allegation:

(50) *qiziq* *gäp,* *bu* *xät* *+ni* *män*
INTERESTING UTTERANCE THIS LETTER ACC I
yez(<yaz-)-iptu-<u>miš</u>(<i-<u>miš</u>)+män
WRITE EVD COP I
'How ridiculous it is! (According to the allegation,) it is me who wrote the letter.' (Tömür, 1987:292-293)

We have already discussed the CA origin of the suffix, **-m* plus **-l₂*, in 2.1.11 where it is presented as a deverbal noun suffix. Thus it might be just enough for us here to concentrate only on the special predicative function of the suffix.

As we know, in addition to functioning as a verbal noun or participial suffix, *-miš (~ -mis)* is also a past tense suffix in EWT. According to Tekin's (1968:192) definition, "it functions as a past tense expressing past actions known from hearsay". This means that the suffix is used for an indirect statement even as early as in Orkhon Tkc.:

(51) *qan* *+ï* *sü* *+sï* *ter* *-il-<u>miš</u>*
KHAN OF TROOP OF GATHER PAS PST
'(Apparently) their khan and their soldiers came together.'

(52) *bunča* *bodun* *käl-ipän* *siγtaa-<u>miš</u>* *yoγlaa-<u>miš</u>*
THIS MUCH PEOPLE COME CONV WAIL PST MOURN PST
'(Apparently) this many people came and mourned and lamented.' (Tekin, ibid.:193)

Kashghari (v.II:77-78) is very specific about the usage of the suffix in indirect or evidential statement in OUy. He mentions that both *-dï ~ -di* and *-mïš ~ -miš* can indicate the past tense, and that the difference is that the former

indicates that the speaker witnessed the action, while the latter indicates that speaker was not at the scene: *bardi* '(he) went' or 'I saw that he went', but *barmïš* 'Apparently he went (but I didn't see that he went'. The same usage of the suffix in Chagatay is evident by Eckmann's (1966:167) definition "indirect preterit": *bolmïš men* '(I gather that) I have become', *asmïšañ* '(I gather that) you have hung'. It is obvious that the MUy. usage of the suffix is based on the strong historical ground. Perhaps not too many modern Tkc. languages use the suffix for the past tense. If it is used so, in contrast with the regular past tense suffix *-di ~ -ti*, it indicates an evidential event. This is the case in Turkish: *yazmışım* 'Apparently I have written'. In Salar, however, the suffix seems to function as same as the regular past tense suffix *-tçi (<-ti)*: *almiš ~ altçi* '(he) took' <*al-* 'to take' (Tenisev, 1981).

CHAPTER FIVE

5. SUMMARY

We have discussed in above sections 59 MUy. verbal suffixes which derived from common Altaic origin. Actually, the number of the suffixes can be reduced when we consider that some suffixes have appeared more than once in the discussion because of their multiple function. More importantly, the basic Altaic elements which underlie these suffixes are even smaller in size and number. The combination of these basic or nuclear elements with each other or with other CA nominal suffixes which are not presented in this study resulted in more suffixes in each language or language group. It is very important to summarize these nuclear CA verbal suffixes, because not only the common Altaic suffixes in modern Uyghur can be presented systematically, but the genetic relationship of Altaic languages also can be captured better on the basis of these more archaic forms.

5.1 **-g(V) ~ *-k(V)*

5.1.0 Perhaps the most productive CA verbal noun suffix is **-g(V) ~ *-k(V)*.

5.1.1 In MUy. and other Turkic languages the suffix developed into:

a. the so-called resultative DVN and DVA suffix *-°γ ~ -°g ~ -q ~ -k ~ -uq ~ -ük, -aq ~ -äk*, etc., (see 2.1.1 and 2.2.1).

b. the DVN and VN suffix *-γu ~ -qu ~ -gü ~ -kü, -γa ~ -qa*

~ -gä ~ -kä, etc., (see 2.1.3 and 3.1.3). These forms resulted in newer suffixes in combination with other suffixes:

c. the combination of -γu ~ -qu ~ -gü ~ -kü, -γa ~ -qa ~ -gä ~ -kä with the equative suffix +čä resulted in the converbial suffix -γičä ~ -qičä ~ -qičä ~ -kičä (see 3.3.3).

d. the combination of -γu ~ -qu ~ -gü ~ -kü, -γa ~ -qa ~ -gä ~ -kä with the obsolete CA dative-locative suffix *+li resulted in the converbial suffix -γili ~ -qili ~ -qili ~ -kili (see 3.3.4).

e. its combination with the CA agent suffix +čI resulted in the agent noun and VN suffix -γučі ~ -qučі ~ -qüčі ~ -küčі (see 2.1.4 and 3.1.4).

f. its combination with the CA diminutive suffix *+č(V) forms the DVN suffix -γuč ~ -quč ~ -qüč ~ -küč, -γač ~ -qač ~ -gäč ~ -käč, which indicates an instrument (see 2.1.5).

g. in combination with +l°G, a sort of comitative suffix, it forms the DVN suffix -γuluq ~ -quluq ~ -qülük ~ -külük (see 2.1.6).

h. it is evident in the DVA suffix -ñγu ~ -ñqü ~ -añγu ~ -äñqü (see 2.2.6).

i. the invocatory suffix -γay ~ -qay ~ -gäy ~ -käy is a diachronic allomorph of the suffix.

j. the suffix is also a part of the MUy. temeritive suffix -miγidi ~ -miqidi (see 3.1.3.3).

k. the suffix -γ ~ -g ~ -q ~ -k is the ending element of the DVN and DVA suffix -γaq ~ -qaq ~ -gäk ~ -käk (see 2.1.2

and 2.2.2).

l. the second pert of the DVN and VN suffix -*maq* ~ -*mäk* carries the suffix (see 2.1.1, 2.1.10, and 3.1.2).

m. the first part of the compound suffix -°*γ+sa* ~ -°*q+sä* 'like to do, wish to do' (see 2.1.1 and 4.2).

The suffix is seen in more combinations such as *+la-q* ~ *+lä-k*, *+da-q* ~ *+dä-k*, etc,. Since such denominal suffixes are not my subject, I do not numerate them here.

5.1.2 In Mo. languages the CA suffix is as productive as in Turkic ones. In most cases we see its parallel development in the Two language branches:

a. the DVN suffix -*ga* ~ -*γa* ~ -*uga* ~ -*uγa* ~ -*uxa*, -*gan* ~ -*γan* ~ -*ugan* ~ -*uγan* ~ -*uxan*, etc. (see 2.1.1.2).

b. the imperative suffix -*γai* ~ -*gei*, -*suγai* ~ -*sügei* (see 4.5.1).

c. the DVN suffix -*γu* ~ -*xu* ~ -*gu* ~ -*γun* ~ -*xun* ~ -*gun* ~ -*igun* and the nomen futuri suffix -*qu(i)* ~ -*kü(i)* (see 2.1.1.2 and 3.1.3.2).

d. in the compound agent suffix -*γči(n)* ~ -*qči(n)* (see 2.1.1.2 and 2.1.4).

e. in the compound suffix -*γsaγar* ~ -*gseger* (see 2.1.1.2).

f. in the WM dubitative suffix -*γujai* ~ -*güjei* (see 3.1.3.3).

g. in the DVN and DVA suffix -*maγ* ~ -*meq* (see 2.1.10.2).

The suffix is also evident in Mo. denominal suffixes like *+sa-γ* ~ *+se-q* 'long for..., wish for...' (see 2.1.1).

5.1.3 In Tungusic languages the CA suffix is evident from:

a. the deverbal noun suffixes *-ku ~ -hu ~ -kū ~ -hū*, *-qan ~ -gen ~ -qon*, *-xan ~ -xen ~ -xon*, etc. (see 2.1.1.3).

b. the Ma. negative particle *akū* 'not, is ~ are not' and the temeritive suffix *-rahū* (see 3.1.3.3).

c. the DVN suffix *-kči*, *-kiit ~ -kiič* (see 3.1.3.3).

d. the DVA suffix *-mak ~ -mek* (Evk.) (see 2.1.10.3).

5.2 **-m ~ *-mV*

5.2.0 The CA verbal noun suffix **-m ~ *-mV* is as productive as **-g(V) ~ *-k(V)* above in all language branches. Fortunately it is one of the archaic suffixes that underwent less phonological as well as functional changes.

5.2.1 In MUy. and other Turkic languages the suffix is seen by itself or in the combinations as follows:

a. the DVN suffix *-m ~ -im -um ~ -üm*, *-am ~ -äm*, which mainly denotes a result of an action (see 2.1.8).

b. the DVN and DVA suffix *-ma ~ -mä* (see 2.1.9 and 2.2.5).

c. in combination with another verbal noun suffix, i.e., the resultative *-°q ~ -°k* above, it appears as the DVN and VN suffix *-maq ~ -mäk*, which is also the basic element in the compound suffixes *-maqta ~ -mäktä*, *-maqči ~ -mäkči* (see 2.1.10 and 3.1.2).

d. in combination with the CA agent suffix *+čI* it appears as another compound agent suffix *-mci* (see 2.1.12).

e. the combination of the suffix with another CA VN suffix **-l₂* resulted in the DVN and indirect statement suffix *-miš*

~ -*m*uš ~ -*m*üš, etc. (see 2.1.11 and 4.6).

f. the suffix is also evident in the Tkc. negative suffix -*m*a- ~ -*m*ä-, which was developed through the usage of a verbal noun ending in *-*m* plus the CA negative verb *e- 'not to do, not to be (see 2.3.8). On this basis the negative participial -*m*as ~ -*m*äs (see 3.2.3) and the negative converbial -*m*ay ~ -*m*äy (see 3.3.8) are developed.

5.2.2 In Mongolic languages the CA verbal noun suffix *-*m* ~ *-*mV* functions as DVN suffix by itself or it is involved in many deverbal substantive suffixes as follows:

a. the DVN -*m* ~ -*am* ~ -*um* (see 2.1.8.2).

b. the DVN suffix -*ma* ~ -*me* (2.1.9.2).

c. the DVN suffix -*m*ta ~ -*m*ta which denotes a result of an action (see 2.1.8.2).

d. the DVN suffix -*m*ji which denotes abstract ideas (2.1.8.2).

e. the DVN and DVA suffix -*m*siγ(tai) ~ -*m*sig(tei) which denotes an ability to evoke someone's action (see 2.1.8.2).

f. the VN suffix -*m*sar ~ -*m*ser which is used with the word ügei 'there is ~ are not' to indicate '...-less, without...' (see 2.1.8.2).

g. the suffix is evident in the WM imperfect present tense suffix -na*m* (< a VN in -*n* + *a- 'to be' + -*m*) (see 2.1.8.2)

h. the suffix is also present in the WM imperfect present tense suffix -*m*ui ~ -*m*u (see 2.1.8.2).

i. the suffix is also evident in the compound suffix -*m*aγai

~ -*megei* (-*mγai* ~ -*mgei*) (see 2.1.9.2).

j. the combination of the suffix with the CA *-l_2 expectedly resulted in -*mal* ~ -*mel* in Mo. languages (see 2.1.11.2).

k. in combination with the unknown ±*r* and the CA agent suffix +*čI* the suffix resulted in the -*murči* ~ -*mürči*, a kind of agent suffix (see 2.1.12.2).

l. in combination with the resultative -γ ~ -*g* above, the suffix resulted in the DVA suffix -*maγ* ~ -*meg* (see 2.1.10.3).

m. through the usage of a VN in -*m* plus the Common Mongolian instrumental suffix *+*γar* ~ *+*βar* the compound DVA suffix -*mar* ~ -*mer* is formed (see 2.2.5.2).

5.2.3 The CA verbal noun suffix *-*m* ~ *-*mV* is also productive in Tng. languages. It is seen in the following forms:

a. the suffix -*ma* ~ -*me* itself forms nouns out of verbs (see 2.1.8.3 and 2.1.9.3).

b. the suffix -*mi(n)* forms adjectives out of verbs, denoting a spacial extension (see 2.2.5.3).

c. suffix developed into the imperfect converbial suffix -*ma* ~ -*mi* ~ -*me* (sg.), -*maari* ~ -*meeri* (pl.) (see 2.1.9.3).

d. it is seen in the Ma. compound suffix -*meliyan* (2.1.9.3).

e. corresponding to Tkc. -*mči* and Mo. -*murči* ~ -*mürči* above, Tng. languages have -*mga* ~ -*mña*, -*mgi* ~ -*mji*, etc. (see 2.1.12.3).

f. the suffix is also seen in the compound suffix -*mak* ~ .

-mek (see 2.1.10.3).

5.3 *-n

5.3.0 The CA verbal noun suffix *-*n* is a productive one, which forms nouns and verbal nouns out of verbs denoting a result of an action. It appears in all language branches.

5.3.1 In Tkc. languages it is seen in the following forms:

a. the DVN and DVA suffix -*n* ~ -*in* ~ -*un* ~ -*ün*, etc. (see 2.1.3 and 2.2.10).

b. in the negative converbial ending -*ma*n ~ -*me*n, -*may*n ~ -*mäy*n, etc. (see 2.1.13.1).

c. the OUy. participial suffix /*-*GA*n_2/ (see 3.2.2).

d. the DVN and DVA suffix -*γi*n ~ -*qi*n ~ -*gi*n ~ -*ki*n, -*γu*n ~ -*qu*n ~ -*gü*n ~ -*kü*n, -*γa*n ~ -*qa*n ~ -*gä*n ~ -*kä*n (see 2.1.7 and 2.2.4).

5.3.2 In Mo. languages the suffix is present in the following forms:

a. the DVN suffix -*n* (see 2.1.13.2).

b. the WM and MM converbial suffix -*n* ~ -*na* ~ -*ne* (see 2.1.13.2).

c. the DVN suffix -*γa*n ~ -*ge*n (see 2.1.13.2).

5.3.3 In Tng. languages the suffix is active as:

a. the deverbal substantive suffix -*n* (see 2.1.13.3).

b. the converbial suffix -*n* ~ -*ne*, etc. (see 2.1.13.3).

5.4 *-gA

5.4.0 The CA perfect participial suffix *-*gA* is not very

productive, but plays important role in each language branch.

5.4.1 In Tkc. languages it functions as:

a. the first part of the past participial suffix *-γan ~ -qan ~ -qän ~ -kän (< /*-GAn$_1$/)* (see 3.2.2). Based on this form the converbial suffix *-γanseri ~ -qanseri ~ -qänseri ~ -känseri* is formed (see 3.3.7).

b. it is the first part of the converbial suffix *-γač ~ -qač ~ -qäč ~ -käč* (see 3.3.5), which is the basis of another converbial suffix *-γačqa ~ -qačqa ~ -qäčkä ~ -käčkä* (see 3.3.6).

5.4.2 In Mo. languages the suffix appears as follows:

a. the main part of the DVN suffix *-γan ~ -gen* (see 3.2.2.2).

b. main part of the perfective converbial suffix *-γad ~ -qed* (3.2.5.2).

5.4.3 In Tng. languages it appears as follows:

a. the perfect participial suffix *-xa(n) ~ -xe(n), -ka ~ -ke ~ -ko, -ha ~ -he ~ -ho* (see 3.2.2.3).

b. it is the basic part of the Ma. compound suffixes *-han ~ -gan*, etc., (see 3.2.2) and *-hači* and *-hade* (see 3.3.5.3).

5.5 **-ri ~ *-ŕ (-r$_2$)*

5.5.0 The CA verbal noun suffix **-ri ~ *-ŕ* is best known as aorist suffix in modern Altaic languages.

5.5.1 In Turkic languages it is the imperfect participial suffix *-r ~ -ar ~ -är, -ur ~ -ür* (see 3.2.1.1) which is also the main part of the compound suffix */-A°rl°G/* (see 2.2.8).

In negative forms it appears as *-mar ~ -mär* in Chuvash, but as *-maz ~ -mäz ~ -mas ~ -mäs* in other Tkc. languages (see 3.2.3). It is also present in the DVA suffix *-γur ~ -qur ~ -gür ~ -kür* (see 2.2.3).

5.5.2 In WM the suffix is evident in the forms *-ra, -run ~ -rün* (see 3.2.1.2).

5.5.3 In Tng. languages it is active as the aorist (imperfect participial) suffix *-ra ~ -rii, -re ~ -ro*, etc. (see 3.2.1.3).

5.6 **-pa ~ *-pi*

The CA deverbal suffix **-pa ~ *-pi* is active in all language branches. It is the perfective converbial suffix *-p ~ -ip ~ -up ~ -üp, -pan ~ -pän* in Tkc. languages (see 3.3.2.1); it is the past tense suffix *-ba(i) ~ -be(i)* in Mo. languages (see 3.3.2.2); and it is the perfective converbial suffix *-fi (< *-pi)* in Tng. languages (3.3.2.3).

5.7 **-a*

The CA deverbal suffix **-a* is evident in Tkc. languages as the imperfective converbial suffix *-a ~ -ä ~ -u ~ -ü ~ -y*, etc. (see 3.3.2.1). In Common Mongolian it developed into the imperfective VN suffix *-γai ~ -gei* with connecting element γ ~ *g*. In MM it is *-'a(i) ~ -'e(i)*, etc. (see 3.3.2.2). In Tng. languages it is evident from some Ma. fixed forms such as *jafaji-* 'to come to take', *jafana-* 'to go to take' (see 3.3.2.3).

5.8 **-l₂*

The CA VN suffix *-l_2 became the productive DVN and VN suffix -š ~ -iš ~ -uš ~ -üš (see 2.1.15 and 3.1.1) which is also the main part of the compound suffix /-°šl°G/ (see 2.2.7) in Tkc. languages. It is also present in the DVN and indirect statement suffix -mïš ~ -miš ~ -muš ~ -müš ~ -maš ~ -mäš, etc. (see 2.1.11 and 4.6). In Mo. languages -l is a productive DVN suffix by itself (see 2.1.15.2). It is also involved in the DVN suffixes -dal ~ -del, WM. -lañ ~ -lėn ~ -loñ ~ -lun (see 2.1.15.2), and the WM present perfect suffix -luγa(i) ~ -lüge(i) (see 2.1.15.2), and the DVN suffix -mal ~ -mel (see 2.1.12.2). In Tng. languages the suffix is seen in the DVN and DVA suffixes -lii (n), -la(n) ~ -le(n) ~ -lo(n) (see 2.1.15.3).

5.9 *-dV ~ *-tV

The CA verbal noun suffix *-dV ~ *-tV is active in all language branches with the implication of a kind of tense meaning which may have been passed on from the CA unity. In Tkc. languages it appears as the past tense suffix -di ~ -ti (see 4.1.1) and as the main part of the VN and the 1pr. pl. past tense suffix -duq ~ -tuq ~ -dük ~ -tük, etc. (see 2.1.16 and 4.1.2). In Mo. languages the suffix appears as the imperfective converbial suffix -j ~ -č, -ji ~ -či, -ju ~ -ču, *-juγui ~ *-jükü, etc., perhaps due to the palatalization of the initial consonant (see 4.1.1.2). In Tng. languages the suffix appears as the imperfective participial (aorist) suffix -da ~ -de, -ji ~ -či, etc., for the Cl. III verbs mainly

ending in consonants (see 2.2.9 and 4.1.1.3).

5.10 *-ča

The CA verbal noun suffix *-ča is evident from the Tkc. DVN suffix -č and Mo. DVN suffix -ča (see 2.2.9).

5.11 *-s(V)±

The suppositional CA past tense suffix *-s(V)± is present in the Tkc. conditional suffix -*sa* ~ -*sä*, Mo. perfective verbal noun suffix -*γsan* ~ -*gsen*, and the Tng. aorist suffix of Class II verbs, -*sa* (-*sii*, etc.) (see 4.2).

5.12 *-su (~ *-sü)

The CA imperative suffix *-su (~ *-sü) still functions in all language branches as imperative, e.g., Tkc. imperative (for the 3rd person) -*su(n)* ~ -*sü(n)*, Mo. -*su* (for the 2nd person), WM -*suγai* ~ -*sügei* (for the 1st person), and Ma. imperative -*su* ~ -*so* (for the 2nd person) (see 4.4.3).

5.13 *-gV ~ *-kV

The CA imperative suffix *-gV ~ *-kV is seen in the same function in Tkc. imperative -*γïn* ~ -*gïn* ~ -*gin* ~ -*kin*, -*γïl* ~ -*gïl*, etc. It is evident in WM benedictive suffix -*dgui* ~ -*dkün*, and Ma. desiderative suffix -*ki* ~ -*kini* (see 4.4.2).

5.14 *-y(V)

The CA voluntative suffix *-y(V) is evident from the Tkc. voluntative -*y* ~ -*ay* ~ -*äy*, etc. (1pr. sg.) (see 4.3.1) and -*yli* ~ -*ayli* ~ -*äyli*, etc. (1pr. pl.) (see 4.3.2), and Mo.

voluntative -*ya* ~ -*ye* (see 4.3.1).

5.15 *-*ñ*

The CA imperative suffix *-*ñ* is evident from the Tkc. imperative -°*ñ* (sg.), -°*ñlAr* (pl.) and Mgr. imperative suffix -*õñ* (see 4.4.1).

5.16 *-*g(V)*- ~ *-*k(V)*-

5.16.0 The CA suffix *-*g(V)*- ~ *-*k(V)*- is very productive and active in all language branches with its passive-causative meaning or a kind of medial verb formation.

5.16.1 It is evident in Tkc. languages as:

a. the EWT intensifying suffix -*q*- ~ -*k*-, etc., (see 2.3.4.1).

b. a part of the passive compound suffix -*s°q*- ~ -*s°k*- (see 2.3.4.1).

c. the main part of the DVN and DVA suffix -*ɣin* ~ -*gin* ~ -*qin* ~ -*kin* (see 2.1.7 and 2.2.4).

d. a part of the DVA suffix -*ɣur* ~ -*qur* ~ -*gür* ~ -*kür* (see 2.2.3).

e. a part of the OUy. repetitive participial suffix /*-*GAn*$_2$/ (see 3.2.2).

f. the first part of the Tkc. compound causative suffixes -*ɣur*- ~ -*qur*- ~ -*gür*- ~ -*kür*-, -*ɣar*- ~ -*qar*- ~ -*gär*- ~ -*kär*-, -*ɣuz*- ~ -*quz*- ~ -*güz*- ~ -*küz*-, -*ɣaz*- ~ -*qaz*- ~ -*gäz*- ~ -*käz*-, etc. (see 2.3.4.1 and 2.3.1).

g. the first part of the repetitive DVN and DVA -*ɣaq* ~

-gaq ~ -gäk ~ -käk (see 2.1.2, 2.2.2, 2.1.1 and 2.3.4).

5.16.2 In Mo. languages it is present in the (passive-) causative suffixes *-γa- ~ -lγa-*, *-γul- γ -gül-*, etc. (see 2.3.4.2 and 2.3.5).

5.16.3 In Tng. languages the suffix is evident in the causative suffixes *-gi- ~ -gii-*, *-wkan- ~ -pkan-*, etc. (see 2.3.4.3).

5.17 *-ri- ~ *-ŕ-

5.17.0 The CA causative suffix *-ri- ~ *-ŕ- is present in all language branches.

5.17.1 In Tkc. languages it is seen as:

a. the intensifying or causative suffix *-(°)r- ~ -(°)z-* (see 2.3.1).

b. as part of the compound causative suffixes *-γur- ~ -qur- ~ -gür- ~ -kür-*, *-γar- ~ -qar- ~ -gär- ~ -kär-*, *-γuz- ~ -quz- ~ -güz- ~ -küz-*, *-γaz- ~ -qaz- ~ -gäz- ~ -käz-*, etc. (see 2.3.1 and 2.3.4.1).

c. as part of the causative suffix *-dur- ~ -tur-* (EWT *-duz- ~ -tuz-*) (see 2.3.1 and 2.3.3).

5.17.2 In WM it is evident as a medial verb suffix (see 3.2.1).

5.17.3 In Tng. languages it is active as the intensifying medial verb suffix *-ri- ~ -ra- ~ -re- -ro-*, etc. (see 3.2.1).

5.18 *-ti- (~ *-tV-)*

The CA causative suffix *-ti- (~ *-tV-)* is present in

Turkic languages as intensifying or causative suffix by itself (see 2.3.2); it is also the part of the causative suffix *-dur- ~ -tur-* (EWT *-duz- ~ -tuz-*) (see 2.3.3 and 2.3.1). In Mo. languages it is seen as the intensifying element *-či-* perhaps due to palatalization (see 2.3.3). In Tng. languages it exists also as an the intensifying medial verb suffix *-ti- ~ -te- ~ -ta- ~ -te-*, etc. (see 2.3.3).

5.19 *-l-

The CA medial verb suffix *-l-* is the main passive suffix in Tkc. languages (see 2.3.5). In Mo. languages it appears as part of the (passive-) causative suffixes *-lγa-*, *-γul- ~ -gül-* (see 2.3.5 and 2.3.4.2) and reciprocal *-ldu-* and cooperative *-lča-* (see 2.3.5 and 2.3.7). It is also a part of the Tng. reciprocal suffix *-ldu-* (see 2.3.5).

5.20 *-n- (~ *-nV-)

The CA medial verb suffix *-n-* mainly functions as a reflexive suffix in Tkc. languages (see 2.3.6). In both Mo. and Tng. languages it seems to have mixed with other secondary verb suffixes (see 2.3.6).

5.21 *-ča- (~ *-čV-)

The CA reciprocal suffix *-ča- (~ *-čV-)* functions in all language branches as a reciprocal or cooperative suffix by itself or in combination with other suffixes (see 2.3.7 and 2.3.5).

I have discussed above the 21 basic common Altaic suffixes.

Not only the 59 modern Uyghur verbal suffixes presented in this dissertation are derived from these basic elements, the newer formations such as -°*wät*- (<-°*p* plus aux. *ät*-), -°*wat*- (<-°*p* aux. *yat*-), etc., are also based on them. That is, there is not any other verbal suffix in MUy. that is not linked to a common Altaic root. In conclusion, modern Uyghur verbal morphology, which is one of the most resistant areas to a foreign element, not only shows that modern Uyghur inherited basic verbal suffixes from common Altaic, but, in turn, it also reveals strong evidence to support the Altaic theory.

ENDNOTES

Chapter One

1. There are 203 explanatory notes by Baskakov on the Russian version of Ramstedt's work, which are translated into Chinese with the work itself by Chen Wei and Shen Chengming. I believe most of Baskakov's comments are reasonable and fair.

2. There are some scholars who believe that at the beginning of Turkic languages there was not a clear distinction between verbs and nouns, and that a same form functioned as a verb as well as a noun depending on the context (see Kononov, 1980:§92). I believe that the distinction between verbs and substantives existed even in very early stages of Turkic languages. Perhaps due to the loss of some sounds in such forms the distinction might have been neutralized. The same is true in suffixes.

3. In my M.A. thesis I argued that Ramstedt's claim that there is no clear-cut morphological distinction between nouns and adjectives in Altaic languages does not fit Uyghur. I must revise my argument by admitting that Ramstedt is right from the diachronic point of view, but synchronically modern Altaic languages including Uyghur have already developed some morphological features which are unique to only nouns or adjectives, but not to both.

Chapter Two

1. Notice also that Gabain (1974:60) analyses the form *pičaq* 'knife, small knife' as the combination of the Old Turkic form *bï ~ bi* 'knife' plus the diminutive form *+čaq ~ +čäk*.

2. The editors of the modern Uyghur version of Kashghari's work (see volume I, introduction:55) clearly point out that since the deverbal substantive suffix *-k* and *-g* both were indicated by a same letter in Old Uyghur writing system, the way distinguishing them in transliteration is to use *-k* when a deverbal form indicates a noun, but to use *-g* when it is both noun and adjective at the same time. Not only Kashaghari mentions such a distinction in Old Uyghur, but it still exists in Khotan dialect of modern Uyghur. However, this distinction is not consistent in OUy. as well as in MUy.

3. Usually a Tungusic example Ramstedt quotes matches that of modern Evenki. Thus I use Evenki with a question mark in parenthesis when use such example from Ramstedt.

4. See note 1.

5. Although it is widely believed that in Altaic languages a nominal suffix does not appear with a verbal stem and a verbal suffix does not appear with a nominal stem. There are some cases where two suffixes in the same function appear one after another, regardless whether the status of the stem with the first suffix is suitable for the second one. This phenomenon is more psychological than grammatical. Because in most cases a speaker tries to make a clearer and stronger statement by double use of such suffixes in the same function.

6. There is a possibility that the Mo. causative *-γul- ~ -gül-* may have originated from the CA passive-causative **-bu-*, which, according to Ramstedt (1952:157), is the *-w-* and *-p-* in Tungusic causative form *-w-kan ~ -p-kan-*. Such assumption is based on a common sound change of *b > w*, then *w > g*. We can further assume that Turkic causative suffixes in initial *g ~ k* may also have developed through the same process. Because, as I mentioned in 3.3.2, there is evidence to show that EWT *b* changed to *w* especially in word-final positions. As for the sound change of an initial *w* to a *g*, it is not strange to Tkc. languages. For instance, it is a regular sound change rule in Turpan dialect of modern Uyghur.

Chapter four

1. See note 5 of Chapter 2.

2. Although I assume in 3.2.1.3 that the Tungusic aorist suffix of Class II verbs, *-sa (~ -sii)*, may have developed from the main aorist suffix *-ra (~ -rii)*, it may have another totally different origin which also links it to the Tkc. conditional suffix and the Mo. perfective participial suffix.

Verbal Suffixes Index

(The numbers in brackets refer to sections where a suffix is discussed)

-*diγ* (see -*duq*)

-*dkün* (see -*dqui*)

-*dqui* (~-*dkün*) (WM benedictive) [4.4.2]

-*dur-* (~ -*tur-* ~ -*dür-* ~ -*tür-*) (MUy. causative /-*DUr-*/, EWT allomorph -*duz-* ~ -*tuz-* ~ -*düz-* ~ -*tüz-*) [2.3.3, 5.1.8]

-*duq* (~ -*tuq*) (MUy. 1pr. pl. past tense /-*Duq*/ < EWT -*diγ* ~ -*tïq* ~ -*duq* ~ -*dük* ~ -*tuq* ~ -*tük* ~ -*yuq* ~ -*yük*, etc.) [2.1.16, 4.1.2, 5.9]

-*duz-* (see -*dur-*)

-*dük* (see -*duq*)

-*dür-* (see -*dur-*)

-*düz-* (see -*dur-*)

-*'e(i)* (see -*γai*)

-*ek* (see -g_1)

-*fi* (< *-*pi*) (Tng. perfective converbial) [3.3.2.3, 5.6]

-g_1 (~ -*k* ~ -*ek*, -*gu* ~ -*kū* ~ -*hu*, -*gan* ~ -*gen* ~ -*gon*, -*xan* ~ -*xon* ~ -*xun*) (Tng. deverbal substantive) [3.1.3.3, 5.1.3]

-g_2 (see -*γ*)

*-*g(V)* (~ *-*k(V)*) (CA resultative verbal noun or deverbal substantive) [2.1.1, 2.2.1, 5.1]

*-*gV* ~ (*-*kV*) (CA imperative) [4.4.2, 5.13]

*-*g(V)-* (~ *-*k(V)-*) (CA passive-causative) [2.3.4, 5.16]

*-*gA* (CA perfective nominal or participial) [3.2.2]

-*ga* (~ -*γa* ~ -*uga* ~ -*uγa* ~ -*uxa*, -*gan* ~ -*γan* ~ -*ugan*) (Mo. deverbal substantive) [2.1.1.2, 5.1.2]

-gan_1 (see -g_1)

-gan_2 (see -*ga*)

-*gä* (see -*γu*)

-*gäč* (see -$γač_1$)

-*gäčkä* (see -*γačqa*)

-*gäk* (see -*γaq*)

-*gänl* (see -$γan_1$)

-$gän_2$ (see -$γan_2$)

-*gänseri* (see -*γanseri*)

-*gär-* (see -*γuz-*)

-*gäy* (see -*γay*)

-*gäz-* (see -*γuz-*)

-*gči(n)* (see -*γči(n)*)

-*ged* (see -*γad*)

-*gei* (see -*γai*)

-gen_1 (see -g_1)

-gen_2 (see -$γan_3$)

-*gi-* (~ -*gii-*, -*wkan-* ~ -*pkan-*) (Tng. causative) [2.3.4.3, 5.16].

-*gii-* (see -*gi-*)

-*gičä* (see -*γičä*)

-*gil* (see -*γin*$_1$)

-*gili* (see -*γili*)

-*gin*$_1$ (see -*γin*$_1$)

-*gin*$_2$ (see -*γin*$_2$)

-*gon* (see -*g*$_1$)

-*gsen* (see -*γsan*)

-*gu* (see -*g*)

-*gü* (see -*γu*)

-*güč* (see -*γuč*)

-*güči* (see -*γučі*)

-*güjei* (see -*γujai*)

-*gül-* (see -*γa-*)

-*gülük* (see -*γuluq*)

-*gür* (see -*γur*)

-*gür-* (see -*γuz-*)

-*güz-* (see -*γuz-*)

-*γ* (~ -*g* ~ -*q* ~ -*k* ~ -*uq* ~ -*ük*, -*aq* ~ -*äk*) (Tkc. deverbal noun, deverbal adjective, MUy. /-°G/, /-AG/) [2.1.1, 2.2.1]

-*γa*$_1$ (see -*ga*)

-*γa*$_2$ (see -*γu*)

-*γa-* (~ -*lγa-*, -*γul-* γ -*gül-*) (Mo. passive-causative) [2.3.4.2, 5.16]

-*γač*$_1$ (~ -*qač* ~ -*gäč* ~ -*käč*) (Tkc. converbial, MUy. /-GAč/ [3.3.5, 5.4]

-*γač*$_2$ (see -*γuč*)

-*γačqa* (~ -*qačqa* ~ -*gäčkä* ~ -*käčkä*) (MUy. converbial /-GAč/ [3.3.6, 5.4].

-*γad* (~ -*ged*) (Mo. perfective converbial) [3.3.5.2, 5.4].

-*γai* (~ -*gei* (WM), MM -'*a(i)* ~ -'*e(i)*) (Mo. imperfective verbal noun) [3.3.2.2, 5.7]

-*γan*$_1$ (~ -*qan* ~ -*gän* ~ -*kän*) (MUy. perfective participial /*-GAn$_1$/) [3.2.2, 5.4]

-*γan*$_2$ (~ -*qan* ~ -*gän* ~ -*kän*) (OUy. repetitive participial /*-GAn$_2$/) [2.1.7, 2.2.4, 5.16]

-*γan*$_3$ (~ -*gen*) (Mo. deverbal noun) [3.2.2.2, 5.4]

-*γan*$_4$ (see -*ga*)

-*γanseri* (~ -*qanseri* ~ -*gänseri* ~ -*känseri*) (MUy. converbial /-GAnseri/) [3.3.7, 5.4]

-*γaq* (~ -*qaq* ~ -*gäk* ~ -*käk*) (Tkc. deverbal adjective and noun) [2.1.2, 2.2.2]

-*γar-* (see -*γuz-*)

-*γay* (~ -*qay* ~ -*gäy* ~ -*käy*) (MUy. invocatory /-GAy/) [2.1.3, 4.5, 5.1.1]

-*γaz-* (see -*γuz-*)

-*γči(n)* (~ -*gči(n)*) (Mo. agent suffix) [2.1.1.2, 2.1.4, 5.1.2]

-*γičä* (~ -*qičä* ~ -*gičä* ~ -*kičä*) (MUy. converbial /-GIčä/) [3.3.3, 5.1.1]

-*γin*$_1$ (~ -*qin* ~ -*gin* ~ -*kin*) MUy. imperative /-GIn/,

EWT *-γïl ~ -qïl ~ gil ~ kil*) [4.4.2, 5.13]

-γin$_2$ (*~ -qin ~ -gin ~ -kin, -γun ~ -qun ~ -gün ~ -kün*) (Tkc. deverbal noun and deverbal adjective, MUy. */-G°n/*) [2.1.7, 2.2.4, 5.16]

-γïl (see *-γin*$_1$)

-γili (~ -qili ~ -gili ~ -kili) (Tkc. converbial, MUy. */-GIli/*) [3.3.4, 5.1.1]

-γsan (~ ~ -gsen) (Mo. perfective verbal noun) [4.2]

-γu (~ -qu ~ -gü ~ -kü, -γa ~ -qa ~ -gä ~ -kä) (Tkc. deverbal noun and verbal noun, MUy. */-GU/*, */-GA/*) [2.1.3 , 3.1.3, 5.1.0]

-γuč (~ -quč ~ -güč ~ -küč, -γač ~ -qač ~ -gäč ~ -käč) (Tkc. deverbal noun, instrument, MUy. */-GUč/*) [2.1.5, 5.1.1]

-γuči (~ -quči ~ -güči ~ -küči) (Tkc. deverbal agent, MUy. */-GUčI/*) [2.1.4, 3.1.4, 5.1.1]

-γujai (~ -güjei) (WM dubitative) [3.1.3.3, 5.1.2]

-γul- (see *-γa-*)

-γuluq (~ -quluq ~ -gülük ~ -külük) (MUy. verbal and deverbal noun */-GUl°G/*) [2.1.6, 5.1.1]

-γur (~ -qur ~ -gür ~ -kür) (Tkc. Deverbal adjective, MUy. */-GUr/*) [2.2.3]

-γuz- (~ -quz- ~ -güz- ~ -küz-, -γur- ~ -qur- ~ -gür- ~ -kür-, -γar- ~ -qar- ~ -gär- ~ -kär-, -γaz- ~ -qaz- ~ -gäz- ~ -käz-) (Tkc. causative, MUy. */-GUz-/*) [2.3.4.1, 2.3.1, 5.16]

-ha (~ -he ~ -ho) (Ma. perfective participial) [3.2.2.3, 5.4]

-hači (Ma. converbial) [3.3.5.3, 5.4]

-hade (Ma. converbial) [3.3.5.3, 5.4]

-he (see *-ha*)

-ho (see *-ha*)

-hū (see *-g*$_1$)

-i (see *-a*)

-ï (see *-a*)

-im (see *-m*$_1$)

-in (see *-n*$_1$)

-iñ (see *-ñ*)

-iñlar (see *-ñlar*)

-iñlär (see *-ñlar*)

-ip (see *-p*)

-iš (see *-š*)

-iz- (see *-r-*)

-ïz- (see *-r-*)

-j (~ -č, -ji ~ -či, -ju ~ -ču) (WM. **-juγui ~ *-jüküi*, Mo. imperfective converbial) [4.1.1.2, 5.9]

-ji$_1$ (see *-da*)

-ji$_2$ (see *-j*)

*-juγui (see -j)

*-jüküi (see -j)

-k_1 (see -g_1)

-k_2 (see -γ)

-ka (~ -ke ~ -ko) (Ma. perfective participial (irregular)) [3.2.2.3]

-kä (see -γu)

-käč (see -γač$_1$)

-käčkä (see -γačqa)

-käk (see -γaq)

-kän1 (see -γan$_1$)

-kän$_2$ (see -γan$_2$)

-känseri (see -γanseri)

-kär- (see -γuz-)

-käy (see -γay)

-käz- (see -γuz-)

-kči (~ -kiit ~ -kiič) (Tng. deverbal noun, instrument) [2.1.5, 5.1.3]

-ke (see -ka)

-ki (~ -kini) (Ma. desiderative) [4.4.2, 5.13]

-kičä (see -γičä)

-kiič (see -kči)

-kiit (see -kči)

-kil (see -γin$_1$)

-kili (see -γili)

-kin$_1$ (see -γin$_1$)

-kin$_2$ (see -γin$_2$)

-kini (see -ki)

-ko (see -ka)

-kū (see -g$_1$)

-kü (see -γu)

-küč (see -γuč)

-küči (see -γuči)

-kü(i) (see -gu(i))

-külük (see -γuluq)

-kür (see -γur)

-kür- (see -γuz-)

-küz- (see -γuz-)

-l (Mo. deverbal noun suffix) [2.1.15.2, 5.8]

*-l- (CA medial verb suffix) [2.3.5, 5.19]

*-l$_2$ (CA verbal noun suffix) [2.1.15, 5.8]

-la(n) (see -lii(n))

-laň (~ -lėn ~ -loň ~ -lun) (Mo. deverbal substantive) [2.1.15.2, 5.8]

-lča- (Mo. cooperative) [2.3.5, 2.3.7, 5.21]

-ldu- (Mo. reciprocal) [2.3.5, 5.19]

-len (see -laň)

-le(n) (see -lii(n))

-lγa- (see -γa-)

-lii(n) (-la(n) ~ -le(n) ~ -lo(n)) (Tng. deverbal noun) [2.1.15.3, 5.8]

-*lo(n)* (see -*lii(n)*)

-*loñ* (see -*lañ*)

-*luγa(i)* (~ -*lüge(i)*) (WM present perfective) [2.1.15.2, 5.8]

-*lun* (see -*lañ*)

-*lüge(i)* (see -*luγa(i)*)

*-*m* ~ *-*mV* (CA verbal noun) [2.1.8, 5.2]

-m_1 (~ -*im* ~ -*um* ~ -*üm*, -*am* ~ -*äm*) (Tkc. deverbal noun suffix, MUy. /-°m/, /-Am/) [2.1.8, 5.2.1]

-m_2 (~ -*am* ~ -*um*) (Mo. deverbal noun) [2.1.8.2, 5.2.2]

-ma_1 (~ -*mä*) (Tkc. deverbal substantive, MUy. /-mA/) [2.1.9, 2.2.5, 5.2.1]

-ma_2 (~ -*me*) (WM deverbal substantive) [2.1.9.2, 5.2.2]

-ma_3 (~ -*me*) (Ma. deverbal noun) [2.1.9.3, 5.2.3]

-ma_4 (~ -*mi* ~ -*me* (sg.) -*maari* ~ -*meeri* (pl.)) (Tng. imperfect converbial) [2.1.9.3, 5.2.3]

-*ma-* (~ -*mä-*) (Tkc. negative suffix, MUy. /-mA-/) [2.3.8, 5.2.1]

-*maari* (see -ma_4)

-*madïn* (-*may*)

-*maγ* (~ -*meg*) (Mo. deverbal substantive) [2.1.10.2, 5.2.2]

-*maγai* (~ -*megei*, -*mγai* ~ -*mgei*) (Mo. deverbal substantive) [2.1.9.2, 5.2.2]

-*mak* (~ -*mek*) (Evk. deverbal adjective) [2.1.10.3, 5.2.3]

-*mal* (~ -*mel*) (Mo. deverbal substantive) [2.1.12.2, 5.2.2]

-*maq* (~ -*mäk*) (Tkc. verbal and deverbal noun, MUy. /-mAG/) [2.1.10, 3.1.2, 5.2.1]

-*maqči* (~ -*mäkči*) (MUy. purposive) [2.1.10]

-*maqta* (~ -*mäktä*) (MUy. progressive) [2.1.10]

-*mar* (~ -*mer*) (WM deverbal adjective) [2.2.5.2, 5.2.2]

-*mas* (~ -*mäs*) (Tkc. negative participial, EWT -*maz* ~ -*mäz*, Chuv. -*mar* ~ -*mär*) [3.2.3, 5.2.1]

-*maš* (see -*miš*)

-*may* (~ -*mäy*) (Tkc. negative converbial, MUy. /-mAY/, EWT -*may* ~ -*mäy*, -*matïn* ~ -*mätin*, -*madïn* ~ -*mädin*, -*mayn* ~ -*mäyn*, etc. [2.1.13.1, 3.3.8, 5.2.1]

-*mayn* (see -*may*)

-*mä* (see -ma_1)

-*mä-* (see -*ma-*)

-*mädin* (see -*may*)

-*mäk* (see -*maq*)

-*mäkči* (see -*maqči*)

-*mär* (see -*mas*)

-*mäs* (see -*mas*)

-*mäš* (see -*miš*)

-*mätin* (see -*may*)

-*mäy* (see -*may*)

-*mäyn* (see -*may*)

-*mäz* (see -*mas*)

-*mci* (MUy. deverbal noun) [2.1.12, 5.2.1]

-*me*$_1$ (see -*ma*$_2$)

-*me*$_2$ (see -*ma*$_3$)

-*me*$_3$ (see -*ma*$_4$)

-*meeri* (see -*ma*$_4$)

-*meg* (see -*maγ*)

-*megei* (see -*maγai*)

-*mek* (see -*mak*)

-*mel* (see -*mal*)

-*meliyan* (Ma. diminutive converbial [2.1.9.3, 5.2.3]

-*mga* (~ -*mña*, -*mgi* ~ -*mji* ~ -*msi*) (Tng. deverbal noun, agent) [2.1.12.3, 5.2.3]

-*mgei* (see -*maγai*)

-*mgi* (see -*mga*)

-*mγai* (see -*maγai*)

-*mi* (see -*ma*$_4$)

-*mi(n)* (Tng. deverbal adjective) [2.2.5.3]

-*miγidi* (~ -*migidi*) (MUy. temeritive) [3.1.3.3, 5.2.1]

-*migidi* (see -*miγidi*)

-*miš* (~ -*mïš* ~ -*muš* ~ -*müš* ~ -*maš* ~ -*mäš*) (Tkc. deverbal noun, past participial, evidential, MUy. /-m°s/) [2.1.11, 4.6, 5.2.1]

-*mïš* (see -*miš*)

-*mji* (see -*mga*)

-*mña* (see -*mga*)

-*msar* (~ -*mser*) (Mo. privative) [2.1.8.2, 5.2.2]

-*mser* (see -*msar*)

-*msi* (see -*mga*)

-*msiγ(tai)* (~ -*msig(tei)*) (Mo. deverbal substantive) [2.1.8.2, 5.2.2]

-*msig(tei)* (see -*msiγ(tai)*)

-*mta* (~ -*mte*) (Mo. deverbal noun, resultative) [2.1.8.2, 5.2.2]

-*mte* (see -*mta*)

-*mu* (see -*mui*)

-*mui* (~ -*mu*) (WM imperfect present tense) [2.1.8.2, 5.2.2]

-*murči* (~ -*mürči*) (Mo. deverbal noun, agent) [2.1.12.2, 5.2.2]

-*muš* (see -*miš*)

-*mürči* (see -*murči*)

-*müš* (see -*miš*)

*-*n* (CA verbal noun, resultative) [5.3]

-n_1 (~ -*in* ~ -*un* ~ -*ün*) (Tkc. deverbal substantive, MUy. /-°n/) [2.2.10, 5.3.1]

-n_2 (~ -*na* ~ -*ne*) (Mo. deverbal substantive, imperfect present tense) [2.1.13.2, 5.3.2]

-n_3 (~ -*ne*) (Tng. deverbal substantive, contemporaneous converbial) [2.1.13.3, 5.3.3]

*-*n*- (~ *-*nV*-) (CA medial verb suffix [5.20]

-*na* (see -n_2)

-ne_1 (see -n_2)

-ne_2 (see -n_3)

*-ñ (CA imperative) [5.15]

-*ñ* (~ -*iñ* ~ -*uñ* ~ -*üñ*) (MUy. 2pr. sg. polite imperative /-°ñ/) [4.4.1, 5.15]

-*ñgü* (see -*ñγu*)

-*ñγu* (~ -*ñgü* ~ -*añγu* ~ -*äñgü*) (MUy. deverbal adjective /-A°ñGU/) [2.2.6]

-*ñlar* (~ -*iñlar* ~ -*iñlär* ~ -*uñlar* ~ -*üñlär*) (MUy. 2pr. pl. imperative /-°ñlAr/) [4.4.1]

-*õñ* (Mgr. imperative) [4.4.1, 5.15]

-*p* (~ -*ip* ~ -*up* ~ -*üp*, -*pan* ~ -*pän*) (Tkc. perfective converbial, MUy. /-°p/) [3.3.2.1]

*-*pa* ~ *-*pi* (CA perfective converbial) [5.6]

-*pan* (see -*p*)

-*pän* (see -*p*)

-*pkan*- (see -*gi*-)

-*q* (see -γ)

-*q*- ~ -*k*- (EWT intensifying medial verb) [2.3.4.1].

-*qa* (see -γu)

-$qaǰ_1$ (see -$γaǰ_1$)

-$qaǰ_2$ (see -γuǰ)

-*qačqa* (see -γačqa)

-*qanl* (see -$γan_1$)

-qan_2 (see -$γan_2$)

-*qanseri* (see -γanseri)

-*qaq* (see -γaq)

-*qar*- (see -γuz-)

-*qay* (see -γay)

-*qaz*- (see -γurz-)

-*qičä* (see -γičä)

-*qïl* (see -$γin_1$)

-*qili* (see -γili)

-qin_1 (see -$γin_1$)

-qin_2 (see -$γin_2$)

-*qu* (see -γu)

-*quč* (see -γuč)

-*quči* (see -γuči)

-*qu(i)* ~ -*kü(i)* (Mo. nomen futuri) [3.1.3.2, 5.1.2]

-*quluq* (see -γuluq)

-*qur* (see -*qur*)

-*qur*- (see -*γuz*-)

-*quz*- (see -*γuz*-)

-*r* (~ -*ar* ~ -*är*, -*ur* ~ -*ür*) (Tkc. imperfect participial, MUy. /-A°r/) [3.2.1.1, 5.5.1]

-*r*- (~ -*ar*- ~ -*är*-, -*ur*- ~ -*ür*-) (Tkc. causative, MUy. /-°r-/, /-A°r-/, EWT -*z*- ~ -*ïz*- ~ -*uz*- ~ -*üz*-) [2.3.1, 5.17]

-ra_1 (WM purposive converbial) [3.2.1.2, 5.5.2]

-ra_2 (~ -*rii*) (Tng. imperfective participial, aorist, Ma. -*ra* ~ -*re* ~ -*ro*) [3.2.1.3, 5.5.3]

-*rahū* (Ma. temeritive) [3.1.3.3]

-*re* (see -ra_2)

*-*ri* ~ *-*ŕ* (CA aorist, imperfective participial) [5.5]

*-*ri*- ~ *-*ŕ*- (CA medial verb suffix) [5.17]

-*ri*- (~ -*ra*- ~ -*re*- -*ro*-) (Tng. intensifying suffix) [2.3.1]

-*rii* (see -ra_2)

-*rlik* (see -*arliq*)

-*rliq* (see -*arliq*)

-*ro* (see -ra_2)

-*run* (~ -*rün*) (WM converbial) [3.2.1.2, 5.5.2].

-*rün* (see -*run*)

*-*s(V)*± (CA perfective verbal noun) [4.2, 5.11]

-*sa* (~ -*sä*) (Tkc. conditional, suppositional, MUy. /-*sA*/) [4.2, 5.11]

-*sä* (see -*sa*)

-*s°k*- (see -*s°q*)

-*so* (see -*su*)

-*s°q*- (~ -*s°k*-) (OUy. deverbal verb) [2.3.4.1]

-*su* (~ -*so*) (Tng. imperative) [4.4.3, 5.12]

*-*su* ~ *-*sü* (CA imperative) [5.12]

-*su(n)* (~ -*sü(n)*) (Tkc. imperative) [4.4.3, 5.12]

-*suγai* (~ -*sügei*) (1pr. optative [4.5.1, 5.12]

-*sü(n)* (see -*su(n)*)

-*sügei* (see -*suγai*)

-*š* (~ -*iš* ~ -*uš* ~ -*üš*) (Tkc. verbal noun, MUy. /-°š/) [2.1.15, 3.1.1, 5.8]

-*°šlik* (see -*°šliq*)

-*°šliq* (~ -*°šlik* ~ -*°šluq* ~ -*°šlük*) (MUy. deverbal adjective /-°š1°G/) [2.2.7]

-*°šluq* (see -*°šliq*)

-*°šlük* (see -*°šliq*)

-*ta*- (see -*ti*-)

-*te*- (see -*ti*-)

-*ti* (see -*di*)

-*ti*- (~ -*ta*- ~ -*te*-) (Tng.

intensifying suffix) [2.3.2, 5.18]

*-ti- ~ *-tV- (CA medial verb suffix) [2.3.2, 5.18]

-tïq (see -duq)

-tuq (see -duq)

-tur- (see -dur-)

-tuz- (see -dur-)

-tük (see -duq)

-tür- (see -dur-)

-tüz- (see -dur-)

-u (see -a)

-uga (see -ga)

-ugan (see -ga)

-uγa (see -ga)

-um$_1$ (see -m$_1$)

-um$_2$ (see -m2)

-un (see -n$_1$)

-uñ (see -ñ)

-uñlar (see -ñlar)

-up (see -p)

-uq (see -γ)

-ur (see -r)

-ur- (see -r-)

-uš (see -š)

-uxa (see -ga)

-uz- (see -r-)

-ü (see -a)

-ük (see -γ)

-üm (see -m$_1$)

-ün (see -n$_1$)

-üñ (see -ñ)

-üñlar (see -ñlar)

-üp (see -p)

-ür (see -r)

-ür- (see -r-)

-üš (see -š)

-üz- (see -r-)

-wkan- (see -gi-)

-xan (see -g$_1$)

-xon (see -g$_1$)

-xun (see -g$_1$)

-y$_1$ (~ -ay ~ -äy) (Tkc. voluntative for the 1pr. sg., MUy. /-A°y/) [4.3.1, 5.14]

-y$_2$ (see -a)

*-y(V) (CA voluntative) [4.3.1, 5.14]

-ya ~ (-ye) (Mo. voluntative) [4.3.1, 5.14]

-ye (see -ya)

-yli (~ -ayli ~ -äyli) (Tkc. voluntative for the 1pr. pl., MUy. /-A°yli/) [4.3.2, 5.14]

-yuq (see -duq)

-yük (see -duq)

-z- (see -r-)

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