From Infinitives to Deverbal Nominals in the Language of Orkhon Inscriptions

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Abstract: Although inflection and derivation are two different morphological processes, there is not a strict distinction between them. Even in the modern Turkic languages some inflectional suffixes can be used for word-formation purposes and vice versa. Diachronic analysis of Orkhon Inscriptions and modern Turkic languages illustrates transformation processes from inflectional to derivational suffixes. However, it is not the only possibility, because with the increase in productivity and grammaticalization of meaning, derivational suffixes, especially deverbal nominal-forming suffixes in the language of Orkhon Inscriptions began to be used as the means of verbal inflection in the modern Turkic languages. This article focuses on the grammaticalization of the deverbal nominal suffixes in Turkic languages, and argues that the beginning of this process was registered in the language Orkhon Inscriptions. This study aims to prove that suffixes of infinitive were originally derivative suffixes making nouns and adjectives from verbs.

I.   INTRODUCTION

Being among the oldest written monuments of Turkic languages, Orkhon Inscriptions are very important for turkological studies. The language of the Inscriptions demonstrates some interesting word-formation features like lexicalization and grammaticalization of derivative suffixes. These processes are found especially in deverbal noun- and adjective-forming suffixes. Analyses show that some of the deverbal derivative suffixes are used as the suffixes of infinitive. The suffix *-iš*, for example, is one of the most productive noun-forming suffixes in modern Turkic languages, though the development of this morpheme was not that smooth. It comes from the suffix of reciprocal voice. However, it later turned into the suffix of noun-formation, and finally, became the suffix of verbal nouns in modern Turkic languages.

II.   FROM DEVERBAL NOUNS TO VERBAL NOUNS

The suffix *-iš* is an example of lexicalization in Orkhon Inscriptions. *-iš* came from the suffix of reciprocal voice. There are a lot of nouns in modern Turkic languages that are formed by the means of the suffix *-iš*, and they have various meanings. But the number of the nouns with this suffix is very restricted in Orkhon Inscriptions, and they are identical to one another for their meanings, three of them have the meaning 'war, fight', which is the name of the reciprocal process. And it proves that the suffix *-iš* itself has reciprocal meaning. For instance, the noun *uruš* means 'war, fight', but its root, the verb *ur-*, only means 'to beat', i.e. it does not have any reciprocal meaning. So we can assume that the element that gives reciprocal meaning to this word is the suffix *-uš*. It proves the claim that *-iš* originated from the morpheme of reciprocal voice. The language of Orkhon Inscriptions reflects this process perfectly.

The investigation of the word-formation processes in Turkic languages from Orkhon Inscriptions to modern Turkic languages helps identify three stages in the development of the suffix *-iš*. These are given below:

1. It occurs only in the nouns that are homonyms with the verbs. In this stage, the words with *-iš* depicted the names of reciprocal processes.

2. It is used as an independent noun forming suffix. In this stage the nouns with *-iš* depicts not only the name of process, but also the name of the person, the argument of the process, the result of the process and so on. Most of these words did not even have reciprocal meaning.

3. It is used as the suffix of verbal nouns. In this stage, *-iš* came closer to grammatical suffixes, and was able to be added to every verb.

The first stage is reflected in the language of Orkhon Inscriptions, the second one cover the period starting from the Middle Ages, while the last one continues in some modern Turkic language, such as Uighur, Uzbek, Turkmen, Kirgiz, Altai, and Turkish.

As it was mentioned above, there are few nouns formed with the suffix *-ïš* in the language of Orkhon Inscriptions. It would be useful to analyze these nouns before giving the examples from modern Turkic languages:

1. *Uruš* 'fight, war'. This noun was registered only in one example:

Eb-kä	täg-dük-im	uruš	qïl-ïp (Ongin front 10)
Home-DAT	reach-PTCP-POSS.1.SG	fight	do-PST

'I fought when I reached home'

This word comes from the verb *ur-* 'to beat', and it is the homonym of the verb *uruš-* 'to fight' [1: 616]. Though *uruš* was not used as a verb in Orkhon Inscriptions, it occurs in the later stages of the Turkic languages. It makes us to think that the verb uruš- was already used in the 8th century, but was not registered in the Inscriptions because of the small number of monuments. In *Oghuzname*, the written material of the 13th century the noun *urušɣu* is used instead of uruš [1: 616]. It proves that *uruš* was considered as a word depicting a motion, not a name of a process.

2. *Süŋüš* 'fight, war'. This noun is registered only five times in the inscription of Kuli Chor:

Besbalïq-da   tört   *süŋüs*   süŋüs-dük-dä   Küli   čor   opla-yu   täg-ip bulɣa-yu... (Kuli chor 11)

Besbalik-LOC	four	fight	fight-PTCP-LOC Kuli	Chor	rush-CVB	reach-CVB

mix up-CVB…

'When they fought four times in Besbalik, Kuli Chor reached quickly and mixed up…'

Süŋüs	bol-sar,	čäri-g	it-är	er-ti... (Kuli Chor 9)
War	be-COND	army	send-FUT	AUX-PST…

'If there is a war, he would send an army…'

However, its verbal homonym was wide-spread in Orkon Turkic:

...qaɣan-ïn	birlä	Soŋa	yïš-da	*süŋüš-di-m* (Bilge Kaghan east 26-27)
...kaghan-POSS.3.SG	with	Sona	forest-LOC	fight-PST-1.SG

'I fought with their kaghan in the Shantun forest'

...alp-ïn   üčün   Tabɣač-qa   yeti   yegirmi   *süŋüs-di*,
Qïtay-qa   yeti   süŋüs-di,   oɣuz-qa   bis   süŋüs-di (Tonukuk 49)

...gallant-3.SG	for	Tabghach-DAT		seven	twenty	fight-PST
Kitay-DAT	seven	fight-PST	oghuz-DAT	five	fight-PST	

'…as he was gallant, he fought seventeen times against Tabghach, seven times against Kitay, five times against Oghuz'

It is not clear from what word exactly *süŋüš* was formed, but it is known that the root of this word is the noun *sü* 'army'. For Sir Gerard Clauson, *süŋüš* comes from the verb **süŋ-* [2: 842]. The noun *süŋüg/süŋü* 'spear' [1: 517] also formed from the same verb.

3. *Tägiš* 'encounter with the enemy, fight'. This word is used only in one example in the inscription of Kul Tigin:

Sü	*tägis-in-tä*	yitinč	är-ig	qïlïčla-dï (Kul Tigin north 5)
Army	encounter-3.SG-LOC	seventh	man-ACC	sabre-PST

'He sabred the seventh man in the encounter of the armies'

The noun *tägiš* 'encounter, collision, hostilities' was also recorded by Gerard Clauson [2: 487]. The use of possessive suffix and the suffix of locative case prove that it is a noun, not a verb. This word also has a verbal homonym: *tägiš-* 'to fight' [1: 548]. The root of these words is the polysemantic verb *täg-* with one of its meanings being 'to attack' [2: 476]. We come across with this meaning in Orkhon Inscriptions:

Nä	basïn-alïm,	*täg-älim,* –	tidim (Tonukuk 39)
What	be_defeated-IMP.1.PL	attack-IMP.1.PL	say-PST

'Why should we be defeated, let us attack, said I'

The words *tägiš-* and *tägiš* are formed from this meaning.

All of these words have the same meaning: 'war, fight'. However, there is another word with the suffix *-ïš*:

4. *Üküš* 'many, much'. This word is used in several sentences:

Üküš	öl-täči	an-ta	tirilti (Bilge Kaghan east 31)
Many	die-FUT that-LOC	that-LOC	return to life-PST

'Many who will die, returned to life there'

Yabïz	bat	biz,	azïɣ	*üküs-ig*	körtig	irti,	sülätim
tir	ermis (Ongin front 7)						
Weak	bad	we	few-ACC	many-ACC	see-PST AUX-PS		march-PST-
1.SG	say-PRS AUX-PST						

'We are weak and bad, we saw few and many, I marched, said he'

This word is from the verb *ük-* 'to collect, to gather':

Kälir	ersär,	kü	är	*ükül-ür* (Tonukuk 32)
Come-PRS	AUX-COND,	noise	man	gather-PRS

'If he comes, the men will gather because of the noise'

Unlike the other words formed with *-iš*, *üküš* is not a noun and does not have a reciprocal meaning. It can be accepted as a sign of beginning of the second stage.

The second stage of the development of the suffix *-iš* came after the period of Orkhon Turkic. In this stage, a lot of nouns were made of the verbs with this suffix as an analogy of the previous nouns with *-iš*. *-iš* began to act as an independent noun forming suffix.

There are a lot of nouns with *-iš* in *Divanu lughat it-turk* which do not have any reciprocal meaning, e.g. *alqïš* 'blessing', *qarγïš* 'curse', *ülüš* 'part' [3: 133]. It proves that the language of this written monument belongs to the second stage. The word *ülüš* 'part' is more important, because it formed after the period of Orkhon Turkic. In the language of Orkhon Inscriptions, the word *ülüg* is used instead of that word:

İki	*ülüg-i* atlïγ er-ti,	bir	*ülüg-i* yadaγ er-ti (Tonukuk 4)
Two	part-POSS.3.SG with_horse AUX-PST	one	part-POSS.3.SG infantry AUX-PST

'Two parts of them were cavalry, one part was infantry'

It also shows that *-iš* then developed as a noun forming suffix, and it became a common derivative suffix, and used instead of *-ig*.

In the later periods of Turkic language history, the nouns with *-iš* was used widely, like *oqšaš* 'similarity', *yügrüš* 'running', *olturuš* 'assembly' [4: 150]. This process continued in modern Turkic languages: *ayanïš* 'pity' (ayan- 'to pity'), *ökiniš* 'sorrow' (*ökin-* 'to grieve, to sadden'), *ötiniš* 'proposal' (*ötin-* 'to ask, to beg') (Karakalpak) [5: 409]; *alγïš* 'blessing' (*alqa-* 'to bless'), *ülüš* 'part' (*üle-* 'to divide'), *žuuaš* 'calm' (*žuua-* "to calm down") (Karachai-Balkar) [6: 142-143]; *adïš* 'shot' (Altai); *talaš* 'quarrel' (Bashkir); *soruš* 'question', *oturuš* 'assembly' (Gagauz), *kürĭnĭš* 'view' (Tatar); *tïnïš* 'breath' (Tuva) [13: 164]; *kiriš* 'entrance' (Uzbek), *örinis* 'happyness' (*örin-* 'to be happy') (Khakas), *učuš* 'flight' (Kirgiz) [7: 107]; *žeš* 'food' (*že-* 'to eat') (Kirgiz), *pĕlterĕš* 'meaning' (*pĕlter-* 'to mean') (Chuvash) [4: 145]; *gačïš* 'running', *gülüš* 'laughter', *gediš* 'going', *gäliš* 'coming', *yeriš* 'walking' (Azerbaijan), *duruš* 'standing' (Turkish).

In Orkhon Inscriptions the suffix *-iš* combines two meanings:

1. Reciprocal action;

2. The name of the process.

However, in the modern Turkic languages, the range of the meanings formed with *-iš* is much larger:

1. Name of an action being done by two or more people: *sox-* 'to beat' – *soγïs* 'fight' (Khakas), *qïrq-* 'to break, to destroy' – *qïrqïs* 'fight' (Yakut).

2. Name of an action: *aračïlan-* 'to defend' – *aračïlanïs* 'defence', *xoptan-* 'to complain' – *xoptanïs* 'complaint' (Khakas).

3. Process of an action: *püdir-* 'to build' – *püdiris* 'construction', *pïzïr-* 'to cook' – *pïzïrïs* 'cooking' (Khakas).

4. Result of an action: *qïrbaa-* "to cut into pieces" – *qïrbas* 'steak' (Khakas) [8: 67], *düzäliš* (Azerbaijan).

As it was already mentioned, in some modern Turkic languages including Uighur, Uzbek, Turkmen, Kirgiz, Altai, and Turkish, the suffix *-iš* is more productive, and it can be added to every verb, that's why it is regarded as a suffix of verbal nouns. Nouns with this suffix are similar to infinitive, for instance, *keliš* 'coming', *bičiš* 'writing', *tipildeš* 'beat', *učuš* 'flight', *tasqadïnïš* 'training' (Altai) [9: 671-672]. M.Ergin saw a difference between the nouns with *-iš* and other deverbal nouns, and included it to the same row with the suffixes *-maq/-mek* and *-ma/-me*. He called them the suffixes of verbal nouns, and noted that they have a meaning not of an object, but work: *alïš, geliš, arayïš, söyleyiš, oturuš, okuyuš, öksürüš, yürüyüš* [10: 187]. It can also be added to the verbs with negative suffix, i.e. *bilmeyiš* 'not knowing' [11: 117], which is not typical for derivative suffixes. We can call it the third stage of the development of the suffix *-iš*. In this stage, *-iš* increased its productivity, began to be added to every verb, and became a suffix of verbal nouns.

III. FROM DEVERBAL NOUNS TO INFINITIVE

maq/-mek is the main suffix of infinitive in the modern Turkic languages. However, in the earlier stages of Turkic languages, it did not form infinitive and served as a morpheme making nouns from verbs. It was only used once in Orkhon Inscriptions, in the noun *armaq* 'lie' which was the base of *armaqčï* 'lier':

...tabγač bodun täbligin	kürlig	üčün,	*armaqčïsïn*	üčün… (Kul Tigin east 6)
…Tabghach people sly	cunning	for	lier-POSS.3.SG	for…

'…because Tabghach people were sly and cunning, because they were liers…'

There are a lot of nouns made from verbs by the means of *-maq* in the Old Turkic language, for example, *uqmaq* 'mind, wit' (*uq-* 'to understand'), *tüzülmäk* 'silence' (*tüzül-* 'to get right'), *tutmaq* 'handle' (*tut-* 'to catch, to hold') [12: 53]. It is also typical for *Divanu lughat it-turk*: *čaqmaq* 'flint', *boγmaq* 'shirt button;

necklace', *qïsmaq* 'lasso', *toqïmaq* 'mallet' [3: 132]. But it is not unique for Old Turkic, as this suffix is also used in some modern Turkic languages as a deverbal noun-forming suffix, i.e. *qospaq* 'combination' (*qos-* 'to connect'), *ǯarïspaq* 'contest, competition' (*ǯarïs-* 'to compete') (Karakalpak) [5: 391]; *batmaq* 'marsh' (*bat-* 'to sink') (Karachai-Balkar) [6: 221]; *atïšmaq* 'exchange of fire' (*atïš-* 'to exchange fire'), *üyšmek* 'assembly' (*üyš-* 'to gather') (Turkmen) [4: 305]; *yemäk, čaxmaq* (Azerbaijani).

Many turkologists including E.V.Sevortyan assume that the derivative function of the suffix *-maq* comes before its grammaticalization [4: 221]. The condition of the suffix *-maq* in most modern Turkic languages, except Azerbaijani and Turkish [13: 159], proves that it was a derivative suffix originally. It also makes the ideas that infinitive was not developed in the early stages of Turkic languages [14: 483], and it is only typical for the languages in Oghuz group [15: 170].

It is from the verb *ar-* 'to lie, to deceive':

Süčig sabïn,yïmšaqaɣïn*ar-ïp*ïraq   bodunïɣ ančayaɣutïrermis (Kul tigin south 5)

Sweet word-INS valuable gift-INS deceive_CVB far people-ACC that bring_closer-PRS AUX-PST

'They brought closer the people that were far away deceiving them with their sweet words and valuable gifts'

The noun *armaq* was registered in the other written monuments as a part of the construction *ezük armaq* 'lie, mistake' [1: 192].

The use of the derivative suffix *-čï* after the suffix *-maq* proves that it was a derivative suffix, since derivative suffixes cannot be added after inflective ones.

Another suffix in this category is *-ma/-me*. This suffix is genetically related to *-maq/-mek*, but it is unclear whether *-ma* comes from *-maq*, or on the contrary *-maq* from *-ma*. This question is not settled yet.

Like *-maq*, the suffix *-ma* was also an unproductive derivative suffix in Old Turkic language. In *Divanu lughat it-turk,* it was used only in few examples, including *süzmä* 'condensed sour milk', *käsmä* 'bangs', *tügmä* 'button' [3: 132]. It started to be used widely in the written monuments of the 14th century [4: 139].

-ma and its phonetic variations are very productive as deverbal noun-forming suffixes in the modern Turkic languages, for instance, *dörötpe* 'creativity' (*döret-* 'to make, to create'), *aralaspa* 'mixed' (*aralas-* 'to mix'), *tapsïrma* 'task' (*tapsïr-* 'to charge'), *körsetme* 'instruction' (*körset-* 'to show'), *dizbe* 'list' (*diz-* 'to arrange') (Karakalpak) [5: 393]; *sürmä* 'smoothing plane' (*sür-* 'to scrub') (Karachai-Balkar) [6: 264]; *käŋäşmä* 'conversation' (Bashkir), *doquma* 'knitting' (Gagauz), *uydirma* 'finction' (Uzbek), *čarba* 'cereals' (Khakas) [13: 163]; *birlašma* 'combination' (Uzbek), *ěs'me* 'drink' (Chuvash) [4: 132, 134]; *dolma, qovurma* 'roast', *qazma* 'mud-hut' (Azerbaijani), *dondurma* 'ice-cream', *qïzartma* 'roast', *qïyma* (Turkish).

-ma/-me can also act as a synonym of the suffix *-maq/-mek* in Azerbaijani and Turkish [13: 163] which makes it the suffix of infinitive. It can also be added to the verbs with negative suffix, proving that it has inflectional function, instead of a derivational one.

There are only two nouns formed with the suffix *-ma/-me*, though the origin of the second one is dubious.

Yelmä 'intelligence group':

Yelmä,   qaraɣu edgüti ur-ɣïl,   basït-ma, –   ti-mis (Tonukuk 34)

Intelligence_group   guard   well   beat-IMP.2.SG   be_defeated-NEG   say-PST

'Set up the intelligence groups and guards well, do not be defeated, said he'

This noun is from the verb *yel-* 'to gallop, to go fast' [1: 254]:

Kün   yämä, tün   yämä   *yel-ü*   bar-dï-mïz (Tonukuk 27)

Day   too   night   too   gallop-CVB   go-PST-1.SG

'We went galloping day and night'

Yalma 'cloth, cloak':

Yaraq-ïn-ta   *yalma-sïn-ta*   yüz   artuq   oq-un ur-tï... (Kul Tigin east 33)

Weapon-POSS.3.SG-LOC   cloth-POSS.3.SG-LOC   hundred more   arrow-INS shoot-PST

'He shot more than hundred arrows to his weapons and cloths'

For Sir Gerard Clauson, the root of this noun is the verb **yal-* which also occurred in *yalïŋ* and *yalt* 'bare, naked' [2: 918, 922, 929]. There is also the verb *yalïn-* 'to undress' [1: 229] which can be considered as the reflexive voice of **yal-*. Although there is phonetic similarity in these words, the semantic relation is not clear.

IV.   CONCLUSION

Grammaticalization of the derivative suffixes is possible for the Turkic languages, just as the lexicalization of the inflectional ones. While the reason of the transformation from inflection to derivation is

petrifying of the grammatical form as an independent word, the main reasons of the change from derivation to inflection is increase in the productivity of the suffix. As a suffix begins to be added to every word from the same class, its derivational meaning disappears and turns into a grammatical one. This is a common process in the suffixes of verbal nouns, infinitives and participles, and the earliest traces of this process in the Turkic languages belong to the language of Orkhon Inscriptions.

There is also another opinion on this matter which claims the similarity of the functions of inflectional and derivational suffixes in the earliest texts of the Turkic languages [16: 5]. It is proved with the examples given from Orkhon Inscriptions.

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