Borrowing verbs from Oghuz Turkic: Two linguistic areas

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1 Introduction

Recent studies have shown that – contrary to the traditional view (Dixon 1997: 20) – verbs are as equally prone to borrowing as the members of other lexical categories (cf. Mifsud 1997; Cordero-d'Aubuisson and Wohlgemuth 2006; Wichmann and Wohlgemuth 2008; Wohlgemuth 2009 among others).[1] Moreover, similar to other lexical items, verbs are borrowed within a (universal) variety of strategies (Heine and Kuteva 2005; Matras and Sakel 2007; Matras 2007; Wohlgemuth 2009 among others). More specifically, Wichmann and Wohlgemuth (2008) and Wohlgemuth (2009) postulate that languages can insert a verbal root in their morphology, may use a light verb, whose function is to integrate the loan verb (see also Jäger 2004), or, in certain rare cases of unadapted loan verbs, they borrow the entire inflectional paradigm along with the verb (cf. Agia Varvara Romani, as reported by Bakker 2005). There are two ways according to which a verbal root can be inserted in the target's morphology: either by direct or by indirect insertion. In direct insertion (Wichmann and Wohlgemuth 2008: 99), verb roots of the donor are plugged directly into the verbal morphology of the recipient, and there may be only slight phonological modifications. In indirect insertion, as Wichmann and Wohlgemuth (2008: 97) state, a verbalizer is usually required in order for the verb to inflect according to the inflectional pattern of the recipient. This verbalizer may be an affix, which flags the part-of-speech membership or defines the class of the verb.

What is missing, though, is what exactly determines the direction and the type of the strategy(ies) that a specific language adopts while borrowing and accommodating verbs from other language systems. So far, the outstanding view is that languages may freely adopt one or more strategies and if there is some factor at stake defining or constraining the borrowing

strategy, it is the degree of contact between the donor and the recipient languages (cf. Wichmann and Wohlgemuth (2008) and Wohlgemuth (2009) – a factor which, unless determined quantificationally, does not add up to a satisfactory explanation.

A factor that could add up significantly to the account of the discussion on the direction and the selection of a specific accommodation strategy, meriting further investigation, is that of structural compatibility. Since Meillet (1921), this notion has been hotly debated with respect to its role in contact-induced grammatical change. The existing approaches vary from the statement that grammatical borrowing is unrestricted, supported by the extreme diffusionists (Wackernagel 1926–8: 8; Thomason 2001: 63 among others) to the thesis that it is not possible at all if there is no structural compatibility, supported by the extreme retentionists (e.g. Sapir 1921: 203). An intermediate position is voiced by scholars who argue that grammatical borrowing is possible provided that the donor and the recipient language display tendencies to structural compatibility (Jacobson 1938; Weinreich 1968: 25; Johanson 2002: 306).[2] Elaborating on this, Field (2002: 41–42) proposed the *Principle of System Compatibility* (PSC)) through which borrowability is predicted to be conditioned by the type of morphological structure of the languages involved in a language-contact situation.

This paper aims at presenting a comparative case-study of two linguistic areas, extending from the Balkan penninsula to Transoxiana, in which verbs borrowed from Oghuz Turkic to a variety of languages come with two borrowed morphological elements. With the use of data from these two linguistic areas, which involve typologically distinct languages, we elaborate on the postulation of 'structural compatibility' as a theoretical primitive enabling borrowing from one language to the other (cf. Meillet 1921; Johanson 1999; Field 2002). More specifically we will seek an answer to the following questions:

1. How did the same markers come into use in such typologically distinct languages?
2. Can the structural compatibility principle be related to the different accommodation principles and the different markers found in use among the different recipient systems?

The paper is organized as follows: in section (2.1), we define the limits of the first linguistic area with examples from various typologically distinct languages and answer the two questions above for this area. Section (2.2) repeats the same for the second linguistic area. The next section (2.3) presents an exceptional area to both the first and the second areas and

presents an account for its exceptionality. Section 3 concludes the paper with an outlook.

2 Defining Two Linguistic Areas: Analysis

2.1 D(I)-type Languages

It has been noted since Sandfeld (1930) that verbs from Turkish have most saliently been borrowed into various languages of the Balkan peninsula along with a specific marker *-D(I)-*.[3] Peninsular Greek vernaculars (Indo-European: Hellenic), Bulgarian Romani (Indo-European: Indo-Aryan), Pomak (Indo-European: Slavic) and Serbo-Croatian (Indo-European: Slavic)vernaculars are such exemplar languages and the list can easily be proliferated:[4]

(1) a. Peninsular Greek
    kazadízo 'become rich'   < kazan-
    kavurdízo 'roast'   < kavur-

  b. Serbo-Croatian[5]
    karìštisati 'mix, stir'   < karış-
    konùštisati 'converse'   < konuş-

  c. Bulgarian Romani
    ujdisajlo 'agree'   < uy-
    alastisajlo 'get used to'   < alış-

  d. Pomak
    kazandisavom 'I win'   < kazan-
    hazırladisavom 'I prepare'   < hazırla-

The *-D(I)-* marker is not exclusively confined to the Balkan peninsula. In Greek varieties of Asia Minor (Modern Turkey) and Cyprus – excluding Pontic – verbs from Turkish are systematically followed by the *-D(I)-* marker (cf. Ralli 2009, 2012; Melissaropoulou 2010, 2011):

(2) a. Cappadocian Greek
    juvarladízu 'roll'   < yuvarla-

    jɨraχatladízu 'lay down'   < rahatla-
    aradú   'seek, look for'   < ara-

  b. Pharasiot
    taʃlatízo 'stone'   < taşla-
    ʧifletízo 'double'   < çiftle-

  c. Lesbian/Aivaliot
    savurdó 'throw'   < savur-
    zurladízu 'stretch'   < zorla-
    axtardó/axtardízu 'overthrow'   < *aktar-*

  d. Cypriot Greek
    vazkestízo 'abandon'   < vazgeç-
    kistízo/kistó 'be angry'   < kız-

-D(I)- in all cases originates from the Turkish aorist suffix *-DI-* but it seems to be devoid of any morphosyntactic and semantic functions. As suggested by Ralli (2012) for the Aivaliot verbal loans, the concatenations *loan verbal root + D(I)* have undergone a reanalysis which rendered their internal structure opaque and eliminated the tense function. That is why *-D(I)-* in verbal loans can also appear in the present tense or in the future and is not limited to the aorist (past). We propose that this reanalysis has affected the loans of all Greek-based dialects. Consider the Cappadocian, Aivaliot, Lesbian and Cypriot examples in (3):

(3)a. Cappadocian
    [*juvarla -di*]   *-(í)z* *-u*[6]
    yuvarla -DI   -VRBZ -INFL
    'I roll'
  b. Aivaliot/Lesbian
    [*zurla-dí*]   *-(i)z* *-u*
    zorla -DI   -VRBZ -INFL
    'I stretch'
  c. Cypriot
    [*vazkes -tí*]   *-(i)z* *-o*
    vazgeç -DI   -VRBZ -INFL
    'I abandon'

Since *-D(I)-* has lost its function as a tense marker, the question which arises now is why the recipient language selects to borrow the forms in *-D(I)-* and not just the bare stem. According to Ralli (2012), this is due to the fact that verbal word-formation in Greek is usually based on the so-called 'aorist' stem, that is, on the stem which is employed in the past perfective context. Since loan formation may be considered as a word-formation process, speakers of the recipient language choose to borrow from the donor those forms which are used in the aorist tense. However, they ultimately undergo a reanalysis procedure (cf. Aikhenvald 2006) which makes them lose their tense function and thus, stems in *-D(I)-* can also appear in non-past contexts, that is, in the present and the future tenses. We would like to suggest that the other Balkan languages, which also borrow the verbal forms in *-D(I)-* have been subject to this Greek property to assign a prominent role to the aorist stem as far as loan formation is concerned. This is not surprising since in the Balkan sprachbund, the Greek influence on the other languages is well-known and has been manifested in several instances and on several occasions (see especially Sandfeld 1930).

Moreover, as also asserted by Ralli (2012), the selection of the particular aorist stem – instead of the bare verbal stem which is used in the infinitive – shows that external factors triggered by high exposure to another language may lead to verb borrowing, but the decisive factor for the shape of these loan verbs is heavily affected by language-internal structural factors, in our case, to the type of the base (i.e. to the particular stem allomorph) that is operative in the recipient language for word-formation purposes.

The examples (1–3) raise an important question pertinent to the type of strategy which is followed in the accommodation of the loan verbs: they show that, at least in Aivaliot/Lesbian and Cypriot, loan verbs may follow either the direct or the indirect strategy, or even both without any difference in the meaning (see also Melissaropoulou 2009, 2011). This is also explained by Ralli (2012) as a consequence of the fact to have the aorist stem as the base for verbal loan formation. Since Hatzidakis (1905), it has been observed by a number of authors (see, among others, Janse 2001; Melissaropoulou 2009, 2011 and Ralli 2012) that the aorist stem of either Greek verbs belonging to the second inflection class (ICII verbs, e.g. *nikó* 'I win' vs. aorist *níki-sa* 'I won')[7] or those of ICI bearing the verbalizer *–iz-* (e.g. *sapízo* 'I rot, putrefy' vs. aorist *sápisa* 'I putrefied') share with the Turkish aorist stems (e.g. *zorladi* 'he/she forced') the same stem-final vowel, that is, /i/.[8] This phonological similarity has triggered an analogy

process for the molding of verbal loans in the present tense, which is done either according to those of ICII verbs, that is, verbs in –*o* (e.g. Aivaliot *axtardó* 'overthrow') or according to those in –*iz*– (e.g. *kazadízu* 'to become rich'). In Aivaliot and Lesbian, the selection of one particular strategy over the other seems to be adopted rather ad hoc. In fact, in these dialects, free alternation between the two strategies is often observed, as the pair *aχtardó/aχtardízu* (1c) illustrates. However, this is not the case for the other dialects, where one particular choice prevails over the other. For instance, the ICI –*iz(o)* verbs are more frequent in Cypriot, while the ICII -*o* verbs appear to be the only choice in the Ulaghats variant (see Dawkins 1916). We believe that this is a dialect-dependent tendency, which makes a particular inflection class more productive than the other and thus, it assigns to it a more prominent role for the formation of loan verbs. If verbs of ICI are very productively formed in one specific dialect, then, verbal loans should appear with the verbalizer -*iz*-, that is, they will be accommodated according to the indirect strategy. On the contrary, if ICII verbs are equally productively formed as those of ICI – as appears to be the case with Aivaliot and Lesbian (see Ralli 2009) – the direct strategy will also be used for the integration of Turkish verbs.

It is worth noticing that the adaptation of loan verbs following the direct strategy, that is, those which do not bear a verbalizer and appear only with a person/number inflectional ending –*o* (e.g. Cappadocian *aradú* and Aivaliot *savurdó* in (2a) and (2c) respectively), show that in the recipient language the Turkish complex *verbal loan+D(I)* is still marked as verb. If inflectional endings are category-neutral, the base is the only item which could provide a category to the loan word. In line with this reasoning, the presence of -*iz*- for the accommodation of Turkish verbs seems to be rather accidental (but due to analogy), since it is not required for the assignment of the verbal category, at least in those dialects where ICII verbs are productively formed, as for instance, in Aivaliot, Lesbian and Ulaghats Cappadocian.

Finally, the hypothesis on verb borrowing on the basis of the aorist (perfective) stem gets additional support from other Balkan languages. One example is Pomak, which has also been influenced by Greek within the framework of the Balkan sprachbund. In this language, the *loan verbal root+D(I)* concatenation is further affixed with the Greek aspectual (perfective) marker -*s*- (Breu 1991, Adamou 2012), which originates from the Greek verbal forms in the perfective context:

(4) *kazan –di –s –av –om*
kazan –AOR$_T$ –NP$_G$ –IMP –1s

hazırla –di –s –av –om
hazırla –AOR$_T$ –NP$_G$ –IMP –1s

We suppose that the presence of *-s-* is due to contact with Greek, which transferred to Pomak not only its tendency to build verbal loans on the basis of the aorist (perfective) stem, but also its own perfective marker. This case, where initial loan verbs are subject to further affixation with another loan verb marker, is termed 'forward diffusion' by Wohlgemuth (2009: 98). Note that if these loans come to Pomak from Greek, the [root+DI] stem is already structurally opaque, that is, they are not tense marked. Moreover, similarly to the *-D(I)-* case in Greek, we suppose that a reanalysis applies to the concatenation [stem loan+-s-], which renders the new structure opaque as well and the *-s-* devoid of any perfective value. That is why the entire structure [verb root-DI-s] accepts the attachment of another aspectual marker, the native imperfective *-av-*.

2.2 Miʃ-type Languages

It should be noticed that *-D(I)-* is not present in all Asia Minor languages which are influenced by Turkish. In fact, in other languages, another Turkish marker, *-miʃ*, appears to be attached to the Turkish root, which, in Turkish, marks evidentiality and perfectivity (Göksel and Kerslake 2005: 75) as the following examples illustrate:

(5) Turkish
a. *oku –muş –sun*
read –EV/PERF –2SG
'apparently you (have) read'

b. *oku –muş –tu –k*
read –EV/PERF –PAST –1PL
'we had read'

Relatively well-known cases in the literature are the spoken informal Kurmanji, (Indo-Iranian: Kurdish) (Dorleijn 1996: 65; Haig 2006; Bulut 2006 among others) and Zaza (Indo-Iranian: Zaza) (Paul 1998: 100):

(6) a. Kurmanji
    tanişmiş bûn   'get to know'   < tanış-
    sömürmüş kirin 'exploit'   < sömür-

  b. Zaza
    dāmiş biyāyiş   'endure'   < dayan-
    dişmiş biyāyiş/kerdiş 'think'   < düşün-

Turkish verb roots accompanied by the *-miʃ* suffix are integrated in both languages with the use of a light verb; *bûn* 'be' and *kirin* 'do' in Kurmanji and *biyāyiş* 'be' and *kerdiş* 'do' in Zaza. The *X-miʃ + light verb* template for accommodating the Turkish verbs is not exclusive to these two languages of Asia Minor though. Armenian dialects of Hemşin (Homshetsi, Vaux 2001a), Aslanbeg (now extinct, Ačaryan 1898; Vaux 2001b) and Istanbul (Bolsahayeren) (Indo-European: Western Armenian) also exploit the same template:

(7) a. Homshetsi
    duşunmiş elluş 'think'   < düşün-
    taşinmiş elluş 'move'   < taşın-   (Vaux 2001a: 8)

  b. Aslanbeg
    ʁərslanmiʃ gəl l a 's/he got angry' < hırslan-
    atʃʰa:lamiʃ gənin 'they punish'   < aşağıla-(Vaux 2001b: 20)

  c. Bolsahayeren
    patlamiš illas 'you shall burst'   < patla-

In (7) above, the X-*miʃ* concatenation is accompanied by the Armenian light verb SWA (ըլլալ [əllal]) 'be' or (ընել [ənel]) 'do/make' to surface as a verb. Note however that the use of *-miʃ* is not bound to a light verb in all languages. In Kabardian (Caucasian: Circassian), for example, spoken in the Uzunyayla region of Turkey, Turkish verbs are directly borrowed with the *-miʃ* suffix but no light verb strategy is employed (cf. Alagozlu 2002, 2007). Consider the following Kabardian cases which seem to be accommodated via direct insertion, since the inflectional endings *-bijinus* and –*yiyas* follow the *verb root+miʃ* concatenation:

(8) Kabardian
belirtmiş-bıjinus 'you will specify'   < belirt-
belirtmiş-FUT.2s

takla atmış-yijas 'he somersaulted'   < takla at-
takla atmış-PAST.3s
(Alagozlu 2007: 4)

Crucially, in all the examples of (6–8), *–miʃ* is devoid of its evidentiality function. Thus, its borrowing is similar to the *-D(I)-* case, which is used in the languages of the Balkan peninsula, in Cypriot and Asia Minor Greek. In other words, *–miʃ* may also be considered as being subject to a reanalysis together with the Turkish root which has rendered the structure opaque.

Yet, it should be noticed that the limits of *-miʃ* far exceeds the Asia Minor geographic area and expands through Caucasia and Chorasan to Transoxiana. For instance, Doerfer (1993) gives a neat survey of the presence of *-miʃ* in the Iranian languages of the area. Persian texts from as early as the 13th century are reported to show loan verbs from Turkic with *-miʃ* and an abstract nominal suffix *-i* (Doerfer 1993, Menges 1956: 90–91), which is ultimately combined with a light verb *numūdan* 'show' or with the verb *kardan* 'do':

(9) *aɣirlāmīʃī numūdan* 'respect'   < ağırla-
bāʃlāmīʃī kardan   'lead'   < başla-

Doerfer also states that the *X-miʃi* template was long in use in Persian, till the end of the Mongolian dominion with the fall of the Timurid Dyntasty in 16th century, and was also in use to accommodate Mongolian loan verbs, such as the following examples illustrate:

(10) *ūljāmīşī kardan* 'show loyalty to the king' < M. *улцан* [ʊltsan]
'weep'
tūʃīmīşī kardan 'appoint'   < M. *mушаах* [tʊʃaːχ]
'put in charge of'

The same template, though without the abstract nominal suffix *-i*, survived in Northern Tajik dialects (Indo-Iranian: Persian) and has been extensively used to accommodate verbs from neighboring Uzbek (Doerfer 1967):

(11) *bŭlmiʃ kardan*   'find'   < U. *bul-*
    salqinlamiʃ kardan 'cool oneself'   < U. *salqinla-*

The X-*miʃ* template with a light verb is in use in the Iranian languages around modern day Azerbaijan as well. Tati (Indo-Iranian: Persian), in Northern Azerbaijan and Talysh (Indo-Iranian: Talysh) in Northern Iran and Azerbaijan are two such languages:

(12) a. Tati
    injitmiʃ sæxtæn 'hurt'   < A. *incit-*
    utanmiʃ bivæn 'be ashamed'   < A. *utan-*

  b. Talysh
    baɣiʃlamiʃ karde 'donate'   < A. *bağışla-*
    azmiʃ be 'err'   < A. *(yolunu) az-*

Yet, in these languages, similar to Kurmanji and Zaza (6a–b), and contrary to Northern Tajik (11), transitives and intransitives differ in terms of the light verb employed. While the transitive verbs are expressed with the 'do' verbs, intransitives are expressed with 'be'. This difference maintains even in non-Iranian languages around Azerbaijan. Lezgian (Northeast Caucasian: Samur) makes use of the light verb $\chi^h un$ for the intransitive verbs, whereas transitive verbs are not expressed with a light verb. Here they are cited with the infinitival *-un*:

(13) a. *qʰazanmiʃun* 'win'   < A. *qazan-*
    qʰurtarmiʃun 'save'   < A. *qurtar-*

  b. *qʰurtarmiʃ χʰun* 'escape oneself'   < A. *qurtar*
    dynmiʃ χʰun   'turn into sth'   < A. *dön-* (Gadzhiev 1950)

Similar examples from Azerbaijani are also attested in Udi, another Samur language of the Northeastern Caucasus. While transitives are expressed with *besun* 'do', intransitives are formed with *aksun* 'become' and *baksun* 'fit into':

(14) *jaralamiʃ besun* 'injure'[9]   < A. *yarala-*
    jaralamiʃ aksun 'be injured'   < A. *yarala-*

  beɣamiʃ besun 'approve'   < A. *bəyən-*
  beɣamiʃ baksun 'be approved of' < A. *bəyən-*
                (Gukasyan 1974)

Tsakhur, a Western Samur language, similary possess many forms of X-*miʃ* with the light verb *(i)χes* 'be' or *haʔas* 'do':

(15) *tsekɨmmiʃ χes* 'doubt'   < A. *çəkin-*
  telesmiʃ χes 'hasten'   < A. *tələs-*
  ɢattamiʃ haʔas 'fold'   < A. *qatla-*
  arzulamiʃ haʔas 'desire sth'   < A. *arzula-*

As stated earlier, verbs with -*miʃ*- were attested as early as in the 13th century Persian texts. Bulut (2006: 108) states that most of these borrowings were from Chagatay to Persian in which the -*miʃ* suffix was then still productive. Doerfer (1993) asserts that they are mostly from Old Uzbek as they are also in Norhtern Tajik dialects. The suffix in Old Uzbek was present between the 11th–15th centuries, whereas in Modern Uzbek, the suffix is rather rare in use. In either case though, the borrowed verbal root+*miʃ* – contrary to languages around Azerbaijan and in Asia Minor – always surfaces with the light verb *kardan* 'do'. In the languages around Azerbaijan though, there is a systematic difference of transitivity employed in the selection of the light verb. Kurmanji (6a), Zaza (6b), Tati (12a), Talysh (12b), Lezgian (13), Udi (14), Tsakhur (15) systematically differentiate between the transitivity and intransitivity with the light verb or suffix employed. This, according to us, indicates a sub-lingustic area in the overall linguistic area of the *miʃ*-type languages. In these languages, the borrowing is mainly from Azebaijani. This is plausible especially if one considers the fact that Azerbaijani served as a 'lingua franca' in the Transcaucasia, Eastern Asia Minor – excluding Pontus – and Northern Iran from 16th to 20th century when Russian took its place (Wurm 1996: 956, Trubetzkoy 1999: 478). One piece of evidence to this is presented by Doerfer (1993): in Tati, verbs which involve the -*ʃl*- cluster in Turkish, Uzbek and Western Azerbaijani, are borrowed as -*ʃd*-, e.g.:

(16) Tati
  baʃtamiʃ sæχtæn 'start'   < başla-

The only *l > d/t* alteration is observed in Eastern Azerbaijani in the region, which was possibly the source language of the borrowing.

Ultimately, we hypothesize that the already adopted template in Northern Tajik and perhaps Persian, X-miʃ +*do*, served as a prefigured frame for the adaptation of Azerbaijani verbs in the neighboring languages with further differentiation between transitives and intransitives. The case is possibly extended to Kurmanji and Zaza in Asia Minor as well, where it is frequently and productively used. However, in these two, it is not entirely clear, contrary to the case of Tati, Lezgian, and others, whether the verbs are borrowed from Azerbaijani or Turkish due to lack of written sources.[10]

Despite the fact that we have somehow given an account of how X-miʃ (+light verb) diffused from Uzbek/Chagatay and most saliently from Azerbaijani to neighboring languages of the area, the main question, i.e. why the suffix *-miʃ* and not another suffix is employed in the accommodation of verbs still maintains. To present a tentative answer, however, we have to give an account of *-miʃ* in Uzbek and most importantly in Azerbaijani. In the discussion revolving around (5), we have stated that *–mIş* in Turkish expresses both perfectivity and evidentiality. Johanson (1971, 2000) further elaborates the semantic functions of *–mIş* in Turkic languages. More specifically, he argues that *–mIş*, in Turkic, expresses both indirectivity and postterminality. Indirectivity is a cover term, and more importantly a cognitive category, which entails various meanings such as 'hearsay, inferential, admirative' and so on which are also entailed in asserted sentences, i.e. sentences with contradictible content. Indirectivity does not occur in embedded contexts (Johanson 2000: 61). It should also be noted that indirective meaning is entailed only by the finite *–mIş* and no such meaning derives from the non-finite, i.e. participial, one.

Postterminality, however, is a different notion: both finite and non-finite *–mIş* suffixes share the aspectual quality of postterminality. The aspect of postterminality, which in Turkish is expressed by *-mIş*, "envisages an event at a point where its relevant limit is transgressed, 'having done" (Johanson 2000: 62). Johanson (1971: 280–292) elaborates that indirectivity and postterminality are highly related. Postterminality, that is the view of an anterior event from the vintage point of now easily entails the reading of indirectivity. At this point, whether the inference of indirectivity is established either by way of inference from perceptional traces or through hearsay becomes only anchillary.

Azerbaijani and Turkish show considerably differences in the semantic functions of finite *–mIş* (Johanson 1971). While in Turkish, the semantic

interrelatedness between postterminality and indirectivity is rather complex and postterminal meaning entails the indirective one, in Azerbaijani the use of *–mIş* tends purely to its postterminal meaning (for an elaborate analysis of *–mIş* in Turkish, see Johanson 1971, Aksu-Koç 2000, Csató 2000 among others). In that sense*, -mIş* and *-(I)p(tIr)*, which can roughly be thought as the Azerbaijani counterparts of Turkish *–DI*, mostly form a common paradigm which bears the meaning of postterminality:

(17) yar-ım-ı itir-miş-əm
      beloved.one-POSS1s-ACC lose-POST-1s
      'I have lost my beloved one'   (Johanson 2000:74)

What is crucial here is that, this type of postterminality is similar to the Persian perfective construction which has a vague indirective meaning roughly corresponding to Azerbaijani postterminal *–mIş*:

(18) a. dideh (æst)
      seen 3s
      's/he has seen'

    b. ræfteh æm
      gone   1s
      'I have gone'

Johanson attests this roughly perfective use of *–miş* in Azerbaijani to a possible Persian influence on the language. On the other hand, in Northern Tajik, due to possible Uzbek interference, a tense-neutral indirective category is grammaticalized, as Windfuhr (2005: 99) states:

> Their appearance in early texts, as well as their reappearance in contemporary standard Persian of Iran, can again be explained by interference from Turkic where inference is marked by *emiş*. Unlike Turkic, inference is not tense-neutral in Persian, but confined to the past. In Tajiki, however, *mi-raft-e ast* has already become tense-neutral.

Similarly, although not grammaticalized as a category, indirectivity became salient in Kurmanji in Asia Minor mostly due to Turkish interference (Bulut 2000).

We think that this contact-induced aspect of perfectivity/indirectivity in the surrounding Iranian languages served as a basis for the borrowing of verbs in *–mIş* form from Uzbek and later from Azerbaijani. It should be

noted that this view of ours entails that we do not think that verbs from Turkic are borrowed as participles into Iranian languages. At this point, we also think that the employment of a complex predicate with a light verb should further be discussed. It is a well-known fact that Iranian languages often use a light verb, rather than affixal verbalizer, to verbalize a nominal, which possibly fostered the accommodation of Persian and Arabic verbs in (Ottoman) Turkish with the same accommodation strategy. Compare the Persian example (19a) with the Turkish counterpart in (19b)

(19) a. Persian
   sohbet kardan 'chat'   < Ar. *ṣuḥba* 'friendship'

  b. Turkish
   sohbet etmek 'chat'   < Ar. *ṣuḥba* 'friendship',
                   (possibly via Persian)

This light verb strategy is highly productive in Iranian languages also with native nominals:

(20) *ræng kærdæn* 'paint'   < P. *ræng* 'color'
  ba:z kærdeh (ast)   < P. *ba:z* 'open'
  open done 3s
  's/he has opened'

We think that X-*miʃ* concatenations whose borrowing is fostered by the new aspect of perfectivity/indirectivity, were simply accommodated with the most salient loanverb accommodation strategy, i.e. the light verb strategy. It should be repeated here that Middle Persian even went further here and employed the abstract nominal suffix –i to 'nominalize' the X-*miʃ* concatenation. This newly created X-*miʃ*+light verb complex possibly served as a preconfigured template for the other non-Iranian languages of the area, i.e. Armenian dialects, Circassian languages and so on, which employ the light verb strategy more saliently to accommodate borrowed items, let it be verbs or nouns.

2.3 A note on Pontic and Laz

It has been noted in passim in section 2.1 that contrary to other Greek dialects, Pontic Greek never exhibits verbs borrowed with the marker –

D(I). The Turkish verb roots are accommodated by the native verbalizer –*ev(o)*:

(21) Pontic Greek
      kiralaévo 'rent'   < kirala-
      paʃlaévo 'start'   < başla-

Ralli (forthcoming) states that the exceptionality of Pontic among the Greek dialects is largely due to its almost exceptionless verbalizer suffix -*ev*-. She further explains that the lack of phonological similarity between the Turkish aorist –*D(I)* and the Pontic aorist -*eps*- < -*ev*-, which has triggered an analogy process for the molding of verbal loans in the present tense in other dialects, was one of the causes of the lack of verbs with –*D(I)* in Pontic. However, Pontic neither does employ the -*miʃ* suffix in the accommodation of verbs. We believe that the strongest reason why Pontic does not exhibit X-*miʃ* is the fact it does not possess (a counterpart of) postterminality, contrary to the Iranian languages of the area. In addition, Pontus was out of the linguistic area of Azerbaijani. As a consequence, it did not acquire the already available X-*miʃ* template which is employed largely in Transcaucasia and Eastern Asia Minor.

    One other language, which possess Turkish verbs with neither -*D(I)* nor -*miʃ* is Laz (Kartvelian: Zan), also spoken in Pontus. The fact that only few borrowed verbs occur in Laz is peculiar when one considers the number of other borrowed lexical items and the high degree of structural influence both from Turkish and Greek (Haig 2001; Boeschoten 1990). Besides, and more related to the current paper, is the fact that these verbs are never -*miʃ* marked:

(22) b. Laz
      iduʃun.ai 'he thinks'   < düşün-
      think.PRES.3sg   (Wodarg 1995: 119)

      b-i-çalis-am-t'i-a 'I worked'   < çalış-
      I1-VAL2-work-THS-IMPF-REP   (Lacroix 2009: 824)

It is true that Laz has extremely complex verb structures, where most of the grammatical information for the clause is indexed, and that head-marking languages of this type are generally more resistant to borrowing verbs, as Haig (2001: 214) states. We fully agree with this assertion, but only add

that one possible contribution to why X- *miʃ* verbs never occur in Laz is the fact that Pontus, where Laz was spoken as well, was exempted from the Azerbaijani linguistic area.

At the end of our discussion, we can tentatively define two linguistic areas in terms of verbal borrowing from Turkish/Turkic. The first one, the *-D(I)-type languages*, extends from the western frontiers of the old Ottoman boundaries in the Balkan peninsula to Western Asia Minor, and the second one, the *-miʃ-type languages*, starts from Transoxiana and covers Chorasan and Caucasia as well as Eastern Asia Minor. Between the two, Pontus constitutes an exception. We propose that it is due to the structure of the two languages in the area and also to the fact that Pontus was excluded from the range of Azerbaijani serving as a lingua franca (see figure 1).
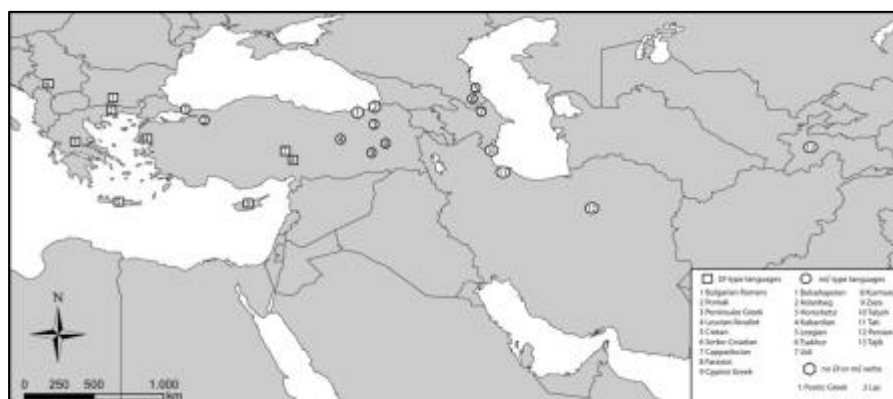

Figure 1. Two linguistic areas of borrowing verbs from Oghuz Turkic.

3   Conclusion

This paper defined two linguistic areas in which Turkic verbs are borrowed into a number of languages with two distinct Turkic suffixes: the aorist *-D(I)* and the postterminal/indirective suffix *-miʃ*. We stated that the first area overlaps with the western borders Ottoman Empire and the verbs are borrowed into the languages of the area from Turkish. Concerning the choice of the *-D(I)* suffix, we agreed with Ralli (2012) that this is due to two interrelated factors: (a) Greek word formation is based on the aorist stem and (b) the phonological similarity between the Turkish aorist and the Greek aorist further triggered an analogy process for the molding of the

verbal loans in present tense. We proposed that the other Balkan languages, which also borrow the verbal forms in *-D(I),* have been subject to this Greek property to assign a prominent role to the aorist stem as far as loan formation is concerned.

Concerning the second area in which verbs are borrowed with the postterminal/indirective suffix *-miʃ*, we have shown that its borders are not confined to Asia Minor and reach until Transoxiana. We stated that the verb root-*miʃ* template with the use of a light verb possibly emerged in Transoxiana, more specifically in Northern Tajik dialects, and further diffused into the languages of the area surrounding Azebaijan, with a further refinement that transitives and intransitives are differentiated with the light verb employed. We suggested that the emergence of *-miʃ* as a loan verb marker is, similar to the case of *-D(I),* not coincidential and largely hinges on the contact-induced emergence of postterminality in Northern Tajik and other Iranian languages. The employment of the light verb strategy is only auxiliary to the discussion as it is the most salient 'native' strategy of denominal verb-formation in Iranian languages. We stated that the template *X-miʃ* is created inside the Iranian language family and is adopted by the surrounding languages of different typologies with the further elaboration on the distinction of transitivity/intransitivity.

We also stated that Pontic Greek constitutes an exception among the Greek dialects as it borrowed no verbs from Turkish with the *-D(I)* suffix. Aligning with Ralli (2012), we stated that this is partly due to the fact that the Turkish aorist suffix and the Pontic Greek aorist suffix do not exhibit the phonological compatibilty that other Greek dialects show. Concerning the lack of verbs borrowed according to the template *verb root+miʃ*, we proposed that this is due to the fact that Pontic Greek has no morphologically marked postterminality and that Pontus has never been under the linguistic dominion of the Azerbaijani 'lingua franca'. Laz, another language of the area, similarly lacks *-miʃ* marked verbs.

The discussion in sections 2.1 and 2.2 clearly shows that external factors triggered by high exposure to another language may lead to verb borrowing, even in the extreme cases such as Laz, but the decisive factor for the shape of these loan verbs is heavily affected by language-internal structural factors, in our case, to the type of the base (i.e. to the particular stem allomorph) that is operative in the recipient language for word-formation purposes for the *-D(I)*-type languages, and to the existence of postterminality as a morphological category combined with the extensive

use of light verbs in creation of denominal verbs in the case of -*miʃ*-type languages.

The current paper has not dealt with some related issues to verbal borrowing from Oghuzic Turkic. First of all, as a matter of course, these two templates are not exclusive for the languages examplified. In some, such as the Armenian dialects, verbs from Turkic are borrowed either with -*miʃ* or the Turkish verb root is directly inserted into the native paradigm. Still in some, such as Pharasiot, verbs come either with the -*D(I)* suffix or bare roots are affixed with native verbalizers. However, no language makes use of both *verb root + miʃ* and *verb root + -D(I)* template together. We think that factors that define the choice of bare verb-roots and/or their accommodation with either -*miʃ* or -*D(I)* should be studied separately for each language. We leave this topic for future research. Second, although we discussed that the choice of -*miʃ* is largely related to the emergence of postterminality in Northern Tajik and Iranian languages, we did not discuss it extensively for all the languages employing the same template. Beside the Iranian ones, languages which are inside the borders of the *miʃ*-linguistic area also developed – in various shapes – morphologically expressed postterminality and/or indirectivity (see for example Danobedian 1996 for Western Armenian). The final topic that has not been dealt with is the reanalysis of the Turkic denominal verbalizer suffix -*lA* in the languages exemplified in the paper. Although observed that the suffix can even combine with native nominals or non-Turkic nominals in some languages to render them verbs, we see the necessity of its systematic analysis and also leave it for further research.

Notes

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2. Gardani (2008: 29), examining direct grammatical borrowing (transfer), argues that typological divergence does not impede grammatical transfer

    although he acknowledges that the lack thereof favours the above mentioned process (grammatical borrowing).

3. The letter in capital denotes an archiphoneme, and its surface value is determined by some assimilatory rules depending on the language. *<I>* in parentheses is not overtly expressed when followed by another vowel (see (1a) and (2)). Abbreviations used in the glossing are as follows: A=Azerbaijani, ACC= accusative, AOR_T=Turkish aorist, Ar: Arabic, EV=evidential, FUT=future, IMP=imperfect, INFL=inflection, I1=1st Series-1st person, M: Mongolian, NP_G=Greek non-progressive, PAST=past, PERF=perfect, PRES=present, POSS=possessive, POST=postterminal, rep=reported, THS=thematic suffix, U: Uzbek, VAL2=valency operator 2, VRBZ=verbalizer, 1/2/3s/p=first/ second/third person singular/plural.

4. A quick note on the convention for transliteration employed throughout the paper: Greek examples and languages which have established Armenian, Cyrillic or Kartvelian alphabets are transliterated in broad phonetic transcription. Kurmanji and Zaza are exemplified in the alphabet in use in Turkey. Armenian dialects are transliterated as proposed by Vaux (2002). Kabardian examples are transliterated as proposed by Alagozlu (2007). Other languages which do not possess an established alphabet are broadly transcribed in IPA.

5. In Serbo-Croatian, the *-D(I)-* marker is subject to (the phonological process) of devoicing.The same holds for Pharasiot and Cypriot Greek (see also examples under (2b,d)).

6. -o in Cappadocian becomes /u/ in word-final position and in Aivaliotit, it becomes /u/ in unstressed position.

7. See Ralli (2005) for details on Greek inflection classes.

8. In this paper, we talk about stems because Greek word-formation is stem-based (Ralli 2005). However, since in the Turkish 3p singular of the past tense stems coincide with words, we may suppose that the entire inflected word is adopted which is ultimately reanalyzed into a stem, following the requirements of Greek word-formation (see also Ralli 2012).

9. The verb has variants with *jaralu* 'wounded' < A. *yaralı*, i.e. *jaralu besun* and *jaralu baksun*.

10. The oldest records of X-mi*ʃ* + light verb in Kurmanji date back only to some 150 years ago (cf. Lerch 1857).

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