Intensifying Adverbial Particle or Emphatic Prefix? A Study of Intensive Adjectives in Mongolic Languages*

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1. Introduction

A perennial problem in historical linguistics is lack of reliable data, a problem an analyst often encounters even in a relatively well-documented language family such as Indo-European. So the problem is all the more pronounced in Altaic where the data available is much more limited. It is with this apprehension that I begin my investigation of intensive (emphatic) adjectives in Mongolic languages. My aim in this paper is to trace the development of emphatic adjectives in Mongolic, especially the origins of linking consonants, through comparison with other Altaic subgroups such as, for example, Turkic languages, but I found my analysis often thwarted by lack of etymological information, rendering it highly conjectural. In some cases I had to content myself only with adumbration of possible solutions, with the choice of the final analysis deferred until a further insight in etymology comes to light. While this emphasis on etymology is typical in most historical comparative analyses, it seems all the more justified in Altaic linguistics as there are still plenty of rooms for exploration, especially of subjects such as intensive adjectives, as is illustrated in this paper.

References on Mongolic languages perused for intensive adjectives raise a number of interesting questions on their development, most of which unfortunately must remain unanswered at this point, due to lack of understanding of the phenomenon itself and/or paucity of reliable etymological data. Of these, I have chosen the following two for discussion in this paper as they are not only the kind of problems one typically encounters in analyzing intensive adjectives in Mongolic but are the ones to which I could suggest some reasonable solutions:

1) Poppe (1954: 59) says that the prefixal part of the intensive adjectives actually functions as a modal adverb meaning ‘completely’. But this would mean that the emphatic prefixes are independent words formed by reduplication of the first (C)V of the corresponding

1) For the type of questions raised, see Kim (2013c), from which this paper has been expanded.
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base adjective and appendage of a linking consonant /b/. Such word formation, however, would be very unusual. There are, on the other hand, some forms that seem to have the same function as emphatic prefixes, referred to as ‘intensifying adverbial particles’ by Janhunen (2012: 213). Traditionally the two terms have been used interchangeably in Altaic linguistics but making the distinction between them is a crucial first step for properly understanding the formation of intensive adjectives in Altaic languages.

2) Janhunen (2003: 12) assumes that the Common Mongolic (CM) reduplicative pattern is (C)Vbrids(C)V-, e.g. *xulaxan ‘red’: *xu.b&xulaxan ‘reddish, quite red’.2) But some have claimed that there are linking consonants other than /b/ in Mongolic. For example, Hugjiltu (1998: 213), Tsumagari (2003: 135) and Wu (1996: 20) all claim /m/ to be a linking consonant in Dag. čim čigaan ‘very white’, while Ramstedt (1952/1985: 263) says that KhlK. bas bat ‘very firm’ and Klm. bim biti ‘firmly closed’ use linking /s/ and /m/ respectively. So the question naturally arises: what are the possible linking consonants in Mongolic?

In what follows then, I will elaborate on these questions in two sections: intensifying adverbial particle vs. emphatic prefix (2) and linking consonants in Mongolic (3). The conclusion highlights the ramifications of the analysis.

2. Intensifying adverbial particle vs. emphatic prefix

The need for this distinction is well demonstrated by the following Middle Mongolian data from the Dictionary of Sonom Gara’s Erdeni-yin Sang:

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2) Following abbreviations are used throughout the paper for names of languages: PM: Proto-Mongolic; CM: Common Mongolic; WM: Written Mongolian; MM: Middle Mongol; Mo.: Mongolic; Bon.: Bonan; Dag.: Dagur; Khll.: Khalkha; Klm.: Kalmuck; Khor.: Khorchin; Mong.: Monguor(Tu); San.: Santa; OT: Old Turkic; AZ: Azeri; Chag.: Chagatai; Chv.: Chuvash; Tksh.: Turkish; Trkm.: Trukmen; Kir.: Kirghiz; Kaz.: Kazak; Yak.: Yakut; Xib.: Xibe; Orq.: Oroqen; Sol.: Solon. ME: Middle English.
(1) Instensifier/intensifying prefixes in Middle Mongol (Kara & Kiripolská 2009)

AB₂ intensifier prefix \(ab\ ali\ čimeg\) whatsoever ornaments \(\ldots\) (p.2)
QAB₂ intensifying prefix, \(qab\ qami\-a\ ber\) wherever, anywhere \(\ldots\) (p.222)
ENG intensifier prefix in \(\ldots\) eng urida \(\ldots\) at first, first of all \(\ldots\) (p.99)

Even though all three entries function as intensifier of the following adjective, there is an important morphological difference between them: the first two are formed by reduplication, but the last is not. Yet the dictionary labels them all ‘intensifier/intensifying prefix’. It is clear, however, that \(ab\) and \(qab\) are emphatic prefixes but \(eng\) an adverbial particle. This is because the latter meaning ‘very, most’ is nonreduplicative and is an independent word that modifies a following adjective/adverb as in, e.g. WM \(eng\ saca\-u\) ‘identical, the same’, WM \(eng\ terigyn\ ‘first of all, very first’ (cf. Lessing 1960), while the former is reduplicative with linking /h/ appended.

Grouping what are intensifying adverbial particles with emphatic prefixes under the same category has been a long tradition in Altaic linguistics. Poppe (1954: 57), for example, writes that:

“There are modal adverbs with the meaning “completely,” derived by reduplication of the first syllable of the word with the inserted consonant \(\cdot\ b\). If the first syllable of the word concerned is \(no\), the adverb is \(nob\), if the first syllable is \(qa\), the adverb is \(qab\), and so on. \(qab\ qara\) completely black, \(qab\ qarang\-u\) pitch black, \(\ldots\) \(nob\ no\-\gamma\-an\ grass\ green\ldots\)”

He is thus assuming that \(qab\) and \(nob\) in the examples he provides derive from the base adjective by partial reduplication but function as independent adverbs that modify following adjectives/adverbs, just like the Middle Mongol intensifying adverb \(eng\) above.

On the Turkic side, a number of names refer to emphatic prefixes in Clauson (1972): ‘reduplicative intensifying prefix, usually placed before N./A.’s connoting colour or physical shape’ (p.3), e.g. OT \(ap\ ak\) ‘intensely white’ and OT \(ep\ edğı\) ‘very good’; ‘an intensifying particle’ (p.709), e.g. OT \(köm\ kök\) ‘dark dust-coloured’;
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‘an alliterative prefix to Adj, mainly of colour, indicating intensity’ (p.578), e.g. OT kap kara ‘quite dark’, OT kp kızıl ‘bright red’ and OT kp kırmızı ‘pure red’. But these are all emphatic prefixes formed by reduplication of the first syllable of the base with addition of a linking /p/ or /m/. On the other hand, the same dictionary calls the adverb et[i], e.g. OT et[i] ilk ‘first of all’ (cf. MM eng above) ‘an Adjectival Prefix forming a quasi-Superlative’ (p.166) while citing süm in OT süm stüçig ‘very sweet’ as ‘alliterative prefixes’ (p.828), and tüg meaning ‘several, many’ in OT tüg tümen ‘several thousand’ an ‘alliterative jingle’ (p.476). 3)

In this paper I only distinguish between an emphatic prefix, which occurs when the adjective is formed by (C)V-reduplication of the base with addition of a linking consonant, and an intensifying adverbial particle, which typically exhibits no reduplicative morphology. The former, having been attached as a prefix by affixation, is not an independent word in origin, while the latter, having originated as an independent word that modifies following adjective/adverb, is an adverb with intensive meaning but came to be fixed to occur only in certain adjectival phrases, which is why it is called an ‘adverbial particle’ rather than a simple ‘adverb’.

To see that the problem is not just terminological but deserves a careful scrutiny, consider the following intensive adjectives in Khalkha:

(2) Intensive adjectives in Khalkha:
  cev cever ‘perfectly clean’
  cev celmeg ‘clear and bright’
  cev cęňker ‘quite blue’
  cev sütten ‘quite cold’

Both Hangin (1986: 768) and Bawden (1997:514) regard cev in these examples as ‘intensifying (adverbial) particle’. Lessing (1960: 167), who cites only WM ceb cegen ‘entirely white or light’ and WM ceb cengker ‘very light blue’, on the other hand, describes ceb as an ‘intensifying particle used before certain adjectives and adverbs beginning with the syllable ce’, a description some dictionaries still use to refer to

3) Clauson’s (2002: 227) remark on Khik. tüg tümen as ‘a Turkish-looking reduplicated form’ suggests that he viewed tüg here to be an emphatic prefix, with /g/ as a linking consonant. Vide infra (3. 4) for explanation of this and other forms that ‘appear’ to be reduplicative with exotic linking consonants.
an emphatic prefix.

Since they all show reduplicative morphology with the usual default linker /v/ in Khalkha (from CM /b/), the first three examples are emphatic prefixes under Lessing’s description (though he calls them ‘intensifying particle’). However, the last example, Khlk. cev xüiten, is not reduplicative though it occurs with the same prefix, contradicting our initial supposition. The question is then what should we call cev in these examples: emphatic prefix or intensifying adverbial particle?

The answer depends on the origin of cev. If it turns out to have been an independent adverb historically, it is an intensifying adverbial particle, and even though cev in the first three examples happens to resemble an emphatic prefix, it is actually an adverbial particle, just as in the last example. According to the etymological information currently available, however, there is no evidence for cev ever having been an independent adverb with emphatic meaning, neither in Mongolic nor in Turkic. It is thus likely that cev in these examples originated as emphatic prefixes by CV-reduplication and appendage of /v/. The fact that examples with ceb in Written Mongolian as described by Lessing (1960) show the same reduplication also supports this view. The problem, however, is how we should explain the cev in Khlk. cev xüiten, which we cannot possibly imagine having been formed by reduplication.

One way to explain the oddity in Khlk. cev xüiten is by making use of the knowledge made available from previous study of language change, from which we know that new forms sometimes arise by 'reanalysis'. A well-known example is modern English pea, which was formed when speakers reanalyzed ME sg. pease as a plural form: /pi-z/. Perhaps the same is happening with cev: speakers, being aware that there are many intensifying adverbial particles such as WM cel ‘absolutely, very, completely’ that come before some adjectives and modify them, e.g. (Lessing 1960: 171; Hangin 1986: 769)

(3) Examples of adverbial particle WM cel ‘absolutely, very, completely’

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>cel kôke</td>
<td>‘deep blue’</td>
</tr>
<tr>
<td>cel kyiten</td>
<td>‘very cold’</td>
</tr>
<tr>
<td>cel noɣɣuɣ’an</td>
<td>‘deep green’</td>
</tr>
</tbody>
</table>

4) The base has its own intensive form with the emphatic prefix xüb: Khlk. xüb xüiten; Khor. [kyp xyyx̂on]. Cf. Janhunen (2012: 121) and Svantesson et al. (2005: 59).
Reanalyzed the emphatic prefix *cev* in the first three examples as an intensifying adverbial particle and ‘applied’ it to the adjective Khilk. *xuiten*, even though it cannot occur with this adjective if it was indeed an emphatic prefix formed by CV-reduplication of a base adjective with linking /v/.

The reanalysis just described is often the first step in the grammaticalization routine (cf. Hopper & Traugott 1993: 49) and here we can say that *cev*, originally a reduplicated prefix derived from the Common Mongolic intensive formation of *(C)V.b&(C)V*, has been reinterpreted as an intensifying adverbial particle that modifies an adjective that does not necessarily share the same base. It is notable that if this process is carried through, that is, if all emphatic prefixes become intensifying adverbial particles by reanalysis, the distinction between the two will be lost and what prevails synchronically will be what Stachowski (2014: 204) calls ‘emancipated reduplicated anlaut,’ in which the reduplicated anlaut plus the closing consonant, i.e. our emphatic prefix, is promoted to an independent intensifier. Presumably the emphatic prefix *cev* in Khalkha is in the incipient stage of this grammaticalization process.5)

It is understandable then why previous scholarship has so often made no distinction between an emphatic prefix formed by CV-reduplication with addition of a linking consonant and an intensifying adverbial particle that often occurs before certain adjectives and modifies them as an independent adverbial. Maintaining the distinction, however, is important as we will see immediately below when we analyze possible linking consonants in Mongolic. Previously *čim* in Dag. *čim čigaan* has been regarded as an example of emphatic prefix with linking /m/, but this will complicate the Mongolic reduplicative pattern of intensive formation in which the

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5) We should also keep in mind that there is still another possibility, albeit a remote one: only the *cev* in the last example is an intensifying adverbial particle, whose form ‘happens to’ be homophonous with the emphatic prefix *cev* in the first three examples. As in the preceding explanation, the viability of this hypothesis ultimately rests on the etymology of *cev*. We should also note the abnormality of the first example, Khilk. *cev cever* ‘perfectly clean,’ which looks as if it is repeating the first CVC rather than the CV of the base. Such partial reduplication in emphatic adjectives, though rare in Altaic, occurs in Chuvash, e.g. Chv. *tak-takar* ‘absolutely flat’ and is most likely to be due to ‘full-to-partial’ reduction of reduplicative compounds (Kim 2009).
linking consonant is typically /b/. An alternative analysis, to be presented below, considers it to be an intensifying adverbial particle that happens to resemble an emphatic prefix.

3. Linking consonant(s) in Mongolic languages

It is generally agreed that unlike in Turkic where the linking consonant varies (among as many as four consonants, e.g. /p, m, s, t/ in Turkish), only one linking consonant /b/ occurs in Mongolic languages. This is why Janhunen (2003: 12) posits the CM reduplicative pattern for intensive adjectives as (C)V.b&/(C)V-. But there appear to be exceptions to this general rule, the most conspicuous of which are: Dag. ġim ġigaan ‘very white’, Khk. bas bat ‘very firm’ and Klm. bim biri ‘firmly closed’ (Ramstedt 1952/1985: 263). These examples seem to suggest that as in some Turkic languages /m/ or /s/ could also be a linking consonant in Mongolic, even if only rarely. In what follows I examine these claims to see if they constitute genuine cases of linking /m/ and /s/.

3.1 Dag. ġim ġigaan ‘very white’

Hugjiltu (1998: 213), Tsumagari (2003: 135) and Wu (1996: 20) mention Dag. ġim ġigaan as exhibiting linking /m/. There are however a number of problems with this claim. First, as in other Mongolic languages /b/ is the usual linking consonant in Dagur: Dag. xab xula:n ‘very red’; Dag. xab xar ‘very black’; Dag. dab dasu:n ‘very sweet’, etc., and Dag. ġim ġigaan ‘very white,’ if it indeed is an intensive adjective, is the only exception, with /m/ appearing in place of /b/. Moreover, the examples that appear in Martin (1961) show no linking /m/. Consider:

(4) Intensive adjectives in Dagur

<table>
<thead>
<tr>
<th>Adjective</th>
<th>Intensive adjective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ġigaan</td>
<td>čabe-ćagan</td>
</tr>
<tr>
<td>hare</td>
<td>habe-hare</td>
</tr>
<tr>
<td>šari</td>
<td>šabe-šari</td>
</tr>
</tbody>
</table>

‘snow white’ ‘jet black’ ‘vivid yellow’
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adili  ab(e)-adili ‘the very same’
amere.han  ab(e)-amere.han ‘most easy’

These examples are quite different from the data given by Hugjiltu (1998), Tsumagari (2003) and Wu (1996). Notable is the vowel /e/ that appears after the linking /b/, which optionally disappears before another vowel. Martin’s (1961: 110) entry in his lexicon of ‘abe/Cabe’ as the ‘intensive prefix,’ under which the above examples appear, makes it clear that at least in the dialect he is describing /b/ succeeded by an optional /e/ is the regular formative marking intensive adjectives. Thus what is peculiar is not the intensive adjective Dag. čabe-čagan but the lack of correspondence between the base Dag. čigaan, and it’s intensive adjective, which should have been the incorrect *čibe-čigaan. Since Dagur has many dialects due to a complicated ethnic history, this may be due to a dialect mixture, or contamination, perhaps from the standard dialect.6)

The foregoing discussion indicates that to claim Dag. čim čigaan to be a genuine case of intensive adjective, one should explain why this particular adjective uses /m/ for its linker rather than the default /b/, which seems to be used with all other base adjectives in Dagur as well as in other Mongolic languages.7) To understand the logic behind this insistence on explanation, we may draw on a similar case from some Tungusic languages. The linking consonant in Xibe is, as in Mongolic, uniformly /b/, which sometimes appears as /v/ before voiced consonants, as in, e.g. Xib. gov golmin ‘very long’; Xib. nav narxun ‘very thin’; Xib. xab xalxun ‘very hot’, etc. But as Hugjiltu (1998: 221) notes, occasionally words that begin with labial consonants add /q/ instead, as in Xib. faq farxun ‘very dark’. The same holds in Oroqen (Hugjiltu 1998: 222; Li & Whaley 2000: 356), which also forms intensive adjectives with the default /b/ except when the base begins with a labial consonant,

6) One reviewer expressed concern with glossing of the intensive adjectives in (4). As noted in the book, the dialect Martin (1961) describes is based on the speech of one native speaker, Peter Onon, who was born in 1919 in Bokore-ciin, a place on the Noni River. They communicated in Japanese. As Street (1963) points out in his review of the book, there are some inconsistencies in the book due to this fact, one of which is the glosses on the text. Martin (1961: 1) also attributes some of the facts incompatible with previous works to dialect mixture and ‘standard’ influence in Onon’s speech at the time.

7) Exceptions are Khilk. bas bat and Klm. bim bitu, mentioned above and to be explained alternatively below.
e.g. Orq. kab kara ‘very black’, Orq. fəb fəyərən ‘very yellow’, Orq. kəb kəyərən – kəb kəyərən ‘very dark’ but Orq. bag bagdarən ‘snow-white’. These examples thus suggest a constraint at work: the default /b/ is avoided when the base adjective begins with a labial consonant. Although the number of examples so far gathered are too small for this generalization to be worked into a full-scale dissimilation rule for Tungusic, it is due to this constraint a velar consonant /k/ or /g/ appears in place of the default linking /b/, with the voiced/voiceless variation determined by voicing agreement with the initial consonant of the following base: /k/ in Xib. faq farxun but /g/ in Orq. bag bagdarən. Significantly, there is no such compelling motivation, neither phonological nor morphological, to change the default linking consonant /b/ to /m/ in Dag. չիմ չիգաան. The claim that /m/ can be a linking consonant in Dagur is therefore not well founded. 8)

It is true that /m/ is used as a linking consonant in modern Turkic languages, e.g. Tksh. göm gök ‘deep blue’ and Tksh. yem yeşil ‘very green’. In Old Turkic, however, /p/ was the default linking consonant and use of /m/ as a linker was restricted to the Oghuz group, the modern descendants of which are Turkish, Azerbaijani, Turkmen, and Gagauz. 9) Note that /b/, the Mongolic congener of Turkic /p/, is also

8) Li & Whaley (2000: 356) posit a rule that inserts /b/ if the first syllable of the adjective is open, while explaining the /g/ inserted in bag bagdarən ‘very white’ as a full copy of the first syllable when it is closed. Their rule, however, is problematic in two respects: 1) it fails to note the generalization that the same dissimilation rule occurs in Xib. faq farxun ‘very dark’ in which the same velar /g/ (with subsequent devoicing to [k] by voicing assimilation) is inserted because the base also begins with a labial consonant; 2) /b/ is inserted in kəb kəyərən ‘very black’ even though the first syllable of the base is closed. The second point needs some explanation as some speakers apparently use kəyərən for ‘black’ instead of kəyərən but still have the same emphatic prefix. The difference between these two forms seems to be the suffix -nə which appears in most Tungusic languages, e.g. Evk. kəyərən-mo, Sol. xoŋərəl, and Orq. kəyərən but is lacking in Orq. kəyərən (cf. Starostin et al. 2003: 720).

9) Note al-Kashgari’s remark in his Compendium: “The rule about colors and exaggerating the description of things is to take the first letter of the word and join it to /bə/ in most of the Turkic dialects, but to /məm/ in /Oğuz/” (Dankoff & Kelly 1982: 261). This isoglossic feature of linking consonant more or less continues in modern Oghuz Turkic languages mentioned here. The few exceptions are in North and North-western Kipchak languages such as Bashkir, Tatar and Karaim, and Uzbek. These are due either to influence from the Oghuz Turkic (as in the former languages) or to composite genealogy (as in Uzbek; cf. Stachowski 2014: 168 and passim, especially chapter 3).
(5) Intensive adjectives in Mongolian monuments

<table>
<thead>
<tr>
<th>Mongolian</th>
<th>Chinese</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ab ali Bur. 19b, 48a, Sub.IX 2a</td>
<td>‘no matter what’</td>
<td></td>
</tr>
<tr>
<td>jüb jügiyèr Hin.06, 27</td>
<td>‘quite all right’</td>
<td></td>
</tr>
<tr>
<td>keb kejige: Sul.I3b3</td>
<td>‘always’</td>
<td></td>
</tr>
<tr>
<td>qab qamiya: Mon.L06, SubJI 4b</td>
<td>‘wherever, anywhere’</td>
<td></td>
</tr>
<tr>
<td>qab qara Bur.38b</td>
<td>‘pitch-black’</td>
<td></td>
</tr>
</tbody>
</table>

This means that if Dag. čim čigaan is indeed an intensive adjective with linking /m/, it has been either borrowed from a neighboring language or developed recently on its own. Since we have no motivation for the base of this adjective to suddenly begin to use /m/ rather than /b/ for its linking consonant, we may suppose it to be a loan from a neighboring language such as Buriat, which is known to have heavily influenced Dagur. But the adjectival base for ‘white’ in Buriat is sagaan and its intensive form, sub-sagaan (cf. Bosson 1962: 197), which makes the loan hypothesis unlikely, as the prevalent corresponding base in Dagur is čigaan in all references, while its intensive form varies between čim čigaan (in Engkebatu 1984; Wu 1996) and čabe-čagan (in Martin 1961).

We may also look for another source of borrowing from the outlier languages that share the same first syllable vocalism with Dag. čigaan. In Svantetesson et al. (2005: 160), we find the following candidates: Mong. čʰiqaan; San. čʰiqaŋ; Bon. čʰ ixaŋ. Of these Monguor (Tu) and Santa form intensive adjectives by simple CV-reduplication, without any addition of a linking consonant, e.g. Mong. čʰi čʰiqaan ‘very white’; San. qa qa ‘very black’ (no intensive form for San. čʰiqaŋ) is available; cf. Hugjiltu 1998), while the sKa.gsar dialect of Banon more or less

10) Kara & Kiripolská (2009) and Lessing (1960) have been consulted for glosses. Two forms, jib jibken and rāg rūmen, have been excluded from Tumurtogoo’s list of ‘particle +adjective’ group as they are not intensive adjectives.
11) I am grateful to Prof. Toshiro Tsumagari for pointing this out to me.
12) This CV-reduplication (with no addition of a linking consonant) seems to have been quite regular in some Mong-Tungusic languages, as exemplified by these Shirongol languages as well as some Tungusic languages such as Udihe, e.g. kū-kū-li ‘very pale’; ho-ho-li ‘sky-blue’ (Tolskaya 2012).
follows the Common Mongolic reduplicative pattern, e.g. Bon. 
*faw fulang* ‘very red’, Bon. *shew sbera* ‘quite yellow’ (again, no intensive adjective for Bon. *čʰixaŋ* is available; cf. Hugjiltu 2003: 332). 13) Santa and Bonan (*gNyan.thog* dialect) also form intensives by infixing an emphatic particle /pu/~/pa/ (e.g. San. *xu-pa-laxaŋ* ~ *xu-pa-lašaŋ* ‘very red’) and /w/ (e.g. *gNyan.thog* Bon. *ho-w-lang* ‘very red’) respectively. 14) Although the data available is sparse, there is no indication that any of these languages add a consonant other than the default /b/ (or [w]) if they indeed form intensive adjectives by adding a linking consonant.

Now, with all these suspicions raised with regard to linking /m/ in Dag. *čim čigaan*, it is incumbent upon us to offer an alternative explanation, an obvious candidate of which is that *čim* is an intensifying adverbial particle that happens to look like an emphatic prefix with linking /m/. We have already noted a similar adverbial particle occurring in WM *cel*, e.g. WM *cel koke* ‘deep blue’, WM *cel kyiten* ‘very cold’, etc. (Lessing 1960: 171). Instructive in this regard is the description of Turkmen by Clark (1998: 510-511) who not only lists the usual Altaic emphatic adjectives with the default linking /p/ (the congener of Mongolic /b/), e.g. *ap a:k* ‘snow white’, *yap yaː:sı* ‘bright green’, *θap aːrın* ‘bright yellow’ and *gap gara* ‘coal black’, but also several forms that function as ‘intensifying syllables’:

The elements *… /duw/*, *… /sax/, … /qan/ and *… /čim/* for the most part are obscure in origin and have no meaning by themselves. They are paired with a very few adjectives to form superlative degrees. The element *… /duw/* occurs only in *… /duw aːk/* ‘pale white, ghost white’,

13) Hugjiltu (1998: 215) gives *tɕab tɕaxaŋ* ‘very white’ for *gNyan.thog* dialect of Bonan, but it is not introduced here due to the aberrant back /a/ in the emphatic prefix corresponding to the front /i/ in the base, even though it does show use of the linking /b/.

14) See Hugjiltu (1998: 214) and Field (1997: 182) for Santa and Hugjiltu (2003: 332) for Bonan. Kim’s (2003: 352) analysis of *xu-pa-laxaŋ* ‘very red’ as *hup&ulaghang* (that is, *xu-pa-laxaŋ*: /b=s/4) under Common Mongolic reduplicative pattern with /p/ as the linker is obviously incorrect: both Field (1997: 182) and Hugjiltu (1998: 214) give another intensive adjective that shows the same variation, *zi-pa-raxaŋ* ~ *zi-pa-raxaŋ* ‘very yellow’, which clearly shows that no CV-reduplication is involved but only simple insertion of the emphatic particle /pA/ whose frontal variant /pe/, I take, to have been labialized to /pu/ due to the preceding /p/. The two variants were then fossilized when the language lost its vowel harmony.
Clark’s ‘intensifying syllables’ are what I have been calling ‘intensifying adverbial particles’. Interestingly, the same particles also occur in Mongolian, as noted by Janhunen (2012: 213):

The … intensifying particles are a group of about dozen items which express various levels of intensity of action. Most of these items, including such as mash ‘very (much), extremely,” aria ‘somewhat, scarcely’ and egee idem, exhibit no synchronic morphology, though others may contain petrified suffixal elements, as in nilee.n ~ mileen.n: milee.d ~ milee.d ‘rather (much).’ … Syntactically, the most important property of the intensifying particles is that they can also modify adjectival nominals… In their role as modifiers to adjectival nominals, the intensifying particles are reminiscent of the alliterative particles.15)

We should keep in mind, however, that this is only one alternative explanation, albeit a plausible one that I currently adopt and hope a further etymological study will verify. Even if we accept čim in Dag. čim čigaan as an ‘intensifying adverbial particle’, the question of how it is related to Trkm. čim remains. According to Clauson (1972: 424), Turkic čim is a Medieval form of the intensifying particle čıŋ, itself of onomatopoeic origin, e.g. OT čıŋ tolu: ‘completely full,’ and appears as čım as well as čım, e.g. Kir. čım ak ‘very white’ and Kaz. čım kara ‘very black.’ This explanation, however, has problem of its own, as it is not clear how the final /m/, which occurs before the vowel /a/ and the velar /k/ of the base, has developed from /ŋ/.

Alternatively we could compare it to Az. čım ‘all, whole, complete, total’ (O’Sullivan et al. 1995: 346), which seems connected to PM *čım ‘all, entirely’ (Starostin et al. 2003: 451): WM čım (Lessing 1960: 202); Khlk. čım Bur. sün (Bossen 1962:199) Bkm. tsöm (Ramstedt 1935: 432). Ramstedt (1935: 432) also notes the loan transfer to Chag. čım, which connects, albeit indirectly, with Az. čım

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15) Janhunen’s ‘alliterative particle’ corresponds to ‘emphatic prefix’ in this paper.
and Trkm. čim. Another plausible connection is established if the particle is a descendant of Old Turkic čim, which appears in the *Compendium* in two examples: čim jïg ‘very raw meat’ and čim oöl čën ‘a very damp garment’ (Stachowski 2014: 205; Dankoff/Kelly 1982: 267). The vowel difference between Az. čim and Trkm. čım should not worry us, as the front/back quality of the vowel in the Turkmen intensive particles seem to be determined by the adjective they modify: Trkm. čım a:k ‘snow white’ and čım guhl ‘bright red’ The same goes for Dag. čim čigaan where the vowel in the particle agrees with the first vowel of the base in frontness, which has been influenced by the preceding palatal /ʃl/. While much of the analysis here is conjectural and leaves many points to be clarified, I present it here as a hypothesis worth pursuing for further study of the matter.

3.2 Khlk. bas bat ‘very firm’

First thing to note in this adjective and Klm. bım bitü ‘firmly closed’ to be explained immediately below is that both adjectives begin their bases with /b/. As we have noted above while explaining the rare occurrence of non-default linking consonants /k/ and /g/ in Xibe and Oroqen, it is often with such labial-initial bases that the dissimilation effect barring three successive bilabial stops is observed in intensive adjectives. So, is the same constraint responsible for using /s/ as a linking consonant in Khlk. bas bat instead of the default labial /b/? To find out, we must first see how the bases with initial /b/ form their intensive adjectives in Khalkha. The following examples collected from Hangin (1986), Bawden (1997), Janhunen

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16) Stachowski (2004: 204) says that this particle is what he calls ‘emancipated reduplicated anlaut,’ an example of which we saw with grammaticalization of the emphatic prefix *cev* in Khlk. *cev xuiten* ‘very cold’. It should be noted, however, that for such a process to occur the same prefix should be in prevalent use so that speakers will unconsciously reanalyze the form as a simple adverb that modifies the following adjective. There is no way of knowing how prevalent čım was in Old Turkic as an emphatic prefix but the possibility of such a process taking place is weakened considerably with neither of the two forms with čım showing CV-reduplication.

17) Cf. Nugteren (2011: 100 and passim), who expresses concern over the fact that the vowel fronting of /a/ to /i/ is occurring in a stressed syllable. But the base adjective may be *čigan* with the /j/ in the first syllable as a sound symbolic variation of /a/ in *čigan* (cf. Diffloth 1994).
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(2012: 120) and Song (2011: 119) clearly demonstrate that these labial-initial bases form intensive adjectives with linking /v/, just like other bases with nonlabial initials:

(6) Intensive formation of labial-initial bases in Khalkha

<table>
<thead>
<tr>
<th>Base</th>
<th>Intensive Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>bov bor</td>
<td>‘quite swarthy’</td>
</tr>
<tr>
<td>bööv böörönxii</td>
<td>‘perfectly round’</td>
</tr>
<tr>
<td>buv buuru</td>
<td>‘completely wrong’</td>
</tr>
</tbody>
</table>

That is, the dissimilation constraint that is in effect in intensive formation of labial-initial bases in Xibe and Oroqen is not being observed in Khalkha.

How should we then explain this lack of dissimilation effect in Khalkha, a language that shows perhaps the most robust application of Common Mongolic intensive formation? Before dismissing the dissimilation hypothesis itself, we should first note an interesting fact regarding distribution of intensive adjectives in Written Mongolian, in which /b/ is the sole linker: a close reading of Lessing (1960) reveals that no intensive adjectives are formed with adjectival bases beginning with /b/ or /m/, two labials that occur in base-initial position of adjectives. For example, unlike the Khalkha examples in (6), we do not find in Lessing (1960) any intensive adjectives for WM booru ‘swarthy’, WM bööyerengkei ‘round’ and WM buruɣu ‘wrong’. This strongly suggests that the dissimilative effect was in effect once in the history of Mongolian but the restriction was relaxed recently in Khalkha, allowing these adjectives with base-initial /b/ to form their intensive adjectives with default /v/ as the linking consonant.18)

Another fact also shows that the same dissimilation was indeed in effect in Mongolian: A close reading of Ramstedt(1935)’s Kalmûkisches Wörterbuch also reveals the same lack of intensive formation by adjectives beginning with /b/ or /m/, again the two labials that occur in the base-initial position of adjectives. As in Written Mongolian, the default linker is /b/ (or [w]) and the sole exception for this

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18) This relaxation has to do with the similarity condition on dissimilation that dissimilation is observed preferentially between two sufficiently similar elements, and between less similar elements only as a generalization of this preferential condition. For details, see Kim (1990; 1994). The relaxation of dissimilative constraint in Khalkha may also have to do with the fact that the default linking consonant is not /b/ but /v/, which has become less similar to the base-initial /b/.
Common Mongolic pattern is Klm. bim biti ‘firmly closed’ with linking /m/, which is explained in the next subsection.

It is clear then that Khilk. bas bat ‘very firm’ cannot be a usual intensive adjective: if batu, whose intensive form is missing in Lessing (1960) like the other /bl/-initial adjectives therein, is to form an intensive adjective in Khalkha, there is no reason it should not be *bav batu, with the default /v/ (in place of /s/) as the linker, as in the above adjectives beginning with /b/ in (6). The /s/ in Khilk. bas bat thus cannot be a linking consonant.

If denying Khilk. bas bat the status of intensive adjective with linking /s/ seems convincing, finding an alternative explanation in its place is not. As with Dag. čim čigaan ‘very white’, we may think of it being an intensifying adverbal particle, as Khilk. bas means ‘again, also’ and it seems to occur as a modifier in, e.g. Khilk. bas daxin ‘again, anew’ and Khilk. bas tegeed ‘(and) then’. But these do not seem to really fit the criteria for an ‘intensifying particle’: Khilk. bas daxin seems to be simply a juxtaposition of two adverbs that mean ‘again’ (cf. Khilk. daxin ‘again’), and the emphatic connotation, if any, may be due to this juxtaposition of two synonymic stems, while bas in Khilk. bas tegeed seems more like a conjunction than an adverbial.

There are nonetheless some interesting facts concerning etymology of bas, which goes back to WM basa ‘again, also, too’ (Lessing 1960). Clauson (1972: 371) says that Turkic basa, the source of Mongolic basa, ‘began at a very early period to be used as an Adv. or Conjunction’ and was loaned early into Mongolic as basa ‘again, then, thereafter’. The adverbial and conjunctive use of bas in Khalkha supports this assessment. But Clauson (1972: 371) also notes that the word is built on the verbal stem bas- ‘press’ with a gerundive suffix -a (cf. Clark 1980: 39). Starostin et al. (2003: 906), who agree with Clauson (1972) on the source of Mongolic basa from Turkic basa, however, denies the connection with the verb bas- ‘press’, relating it rather to Mongolic *masa ‘very, extremely’: WM masi; Khilk. maš; Bur. mašə; Klm. mašə. Their basis for this etymological relationship is the traditional Poppe-Ramstedt correspondence of initial /m/ and /b/ between Mongolic and Turkic, e.g. Mo. meŋge ‘mole’ Tks. bünüük id. (Poppe 1965: 199; Poppe 1960: 34). Although controversial as it brings with it all the ramifications of the Altaic Hypothesis, this doublet connection with Mongolic *masa ‘very, extremely’ nevertheless provides a more proper context in which bas in Khilk. bas bat ‘very
firm’ may function as an intensifying adverbial particle.\(^{19}\)

### 3.3 Klm. bim bitü ‘firmly closed’

It has already been mentioned that this is the only intensive adjective that occurs with a labial-initial base in Ramstedt (1935): there is no other adjective with initial /b/ or /m/ that does so. This fact alone raises suspicion on the status of /m/ as a legitimate linker. But more surprising is the fact that there are two more intensive forms in Kalmuck built on the same base and meaning: Klm. bis bitü and Klm. biŋ bitü. This makes the intensive formation with the base bitü ‘closed’ still more unusual because now we have to admit three non-default linkers in Kalmuck (/m/, /ŋ/ and /s/) just for this example, beside the default /b/ used for all other intensive adjectives.

Of the three supposed linkers /ŋ/ is especially unusual: for one thing, there is no other language in Altaic except Yakut that uses it as a linker. And the sole base that has its intensive form with linking /ŋ/ in Yakut, Yak. kyŋy ‘passion to act contrary to the usual way’, also occurs with linking /ŋ/: Yak. kyŋkyŋy ‘perverse, contrary (of a person); unruly (of a horse)’; Yak. kyŋkyŋy ‘id.’\(^{20}\) This suggests /ŋ/ here is a simple variation of /n/ appearing by assimilation with the following velar consonant of the base.

What does the foregoing discussion entail with regard to the origin of the three variant intensive forms in Kalmuck? I suggest the following: 1) since the initial consonant of this base is the same as the default linking /b/, the intensive formation of the base bitü is relatively recent in Kalmuck, due to the same dissimilation effect that barred intensive formation of labial-initial bases in Written Mongolian; 2) since this dissimilation effect was still at work at the time of its formation, using /b/ (or its congener /w/) as the linker for this form was out of the question so that alternative linkers had to be sought: /m/ and /ŋ/ were chosen as its linkers because the neighboring Oghuz Turkic languages had the same consonants as linkers beside the default /pf/; 3) but the linker /m/, though not exactly the same as the base-initial

\(^{19}\) But this correspondence is denied by Doerfer (1963: 60); see Starostin et al. (2003: 38-43) for further discussion.

\(^{20}\) These examples are from Stachowski (2014: 177), who provides a detailed survey of intensive adjectives in Turkic languages.
/b/, is still a labial; so a compromise was made by keeping the nasality of /m/ but changing its labiality. The choice of the highly unusual /ŋ/ perhaps reflects this effort on the part of the Kalmuck speakers to avoid the labial /m/.

I must concede again that the scenario is highly conjectural and its plausibility needs to be carefully assessed in a future analysis. What I have tried to show in the mean time is that the emergence of the three non-default linking consonants in Kalmuck does not necessarily negate my contention that /b/ is the only default linker in Mongolic languages. This contention, I claim, is also supported by my reanalysis of the intensive adjectives of Dag. čim čigaan ‘very white’ and Khilk. bəs bəs ‘very firm,’ often described in references possessing linking /m/ and /s/ respectively but are equally suspicious.

3.4 Other exotic linkers

A reference to other more ‘exotic’ linking consonants has been made for Khilk. ical cagaan ‘snow white’ and Khilk. tül tümen ‘an innumerable quantity, great multitude, thousands and thousands, millions’ as examples with linking /l/ and /g/ respectively.21) I could not find ical cagaan in any of the dictionaries I consulted but according to Starostin et al. (2003: 442), ical means ‘grey’ in Turkic and is etymologically related to Mongolic cil (cf. WM cilbang ‘Albino (of animals), albinic’); the Turkic form was borrowed into Mongolic languages and occurs in, e.g. Klm. ical būr ‘white-haired’ and Khilk. ical būral ‘id’. The information gathered thus far makes it clear that Khilk. ical cagaan is not an adjective with the first syllable reduplicated and an exotic linker /l/ added, but a hybrid hendiadys with two color stems meaning ‘white/grey’ juxtaposed to have the same expressive effect as the reduplicated intensive adjective Khilk. cab cagaan. Recall the same hybrid intensive construction in Trkm. ənəŋ gat ‘rock hard’ in which the adverbial particle ənəŋ is borrowed from Persian and occurs with a Turkic adjective. I suspect the same for Khilk. tül tümen, even though no evidence is currently available for the same hendiadys formation.

4. Conclusion

The foregoing discussion strongly suggests that it is only /b/ (or its variant /w/) that occurs as the linking consonant in Mongolic emphatic adjectives: other adjectives with consonants that look like linkers at first glance turn out to be cases of pseudo-intensive adjectives in which the same emphatic effect is achieved either by an intensifying adverbial particle that occurs before the adjectives and modifies them, e.g. Dag. čim čigaan ‘very white’ and Khlk. bus bat ‘very firm’, or by hendiadys, which juxtaposes two synonymic stems, e.g. Khlk. cal cagaan ‘snow-white’, rather than by (C)V-reduplication with addition of a linking consonant, e.g. Khlk. čav čagaan ‘snow-white’. It is only in Kalmuck, where the dissimilation rule avoiding /b/ as the linking consonant for labial-initial bases is still at work, that shows an incipient sign of using linking consonants other than the default /b/: Klm. bim bitü ~ bis bitü ~ bii bitü ‘completely closed’.

From this conclusion, that all Mongolic languages once used only /b/ as the default linking consonant, we can now set up hypotheses on other aspects of the development of intensive adjectives in Mongolic. For example, even though it is generally agreed that Mongolic borrowed intensive formation from Turkic during the early Turco-Mongolic period (Schönig 2003: 417-418), nothing is known of the Old Turkic group that was responsible for the loan transfer. The conclusion, however, suggests that the transfer of intensive adjective formation to Mongolic occurred mainly through contact with the non-Oghuz Turkic, which had only /p/ as the default linker (Kim 2013b).

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381-396.


Conjectures are made on the origins of linking consonants in Mongolic intensive adjectives. It is argued that Dagur čim čigaan ‘snow-white’ and Khalkha bas bat ‘very firm,’ previously claimed to possess linking /m/ and /s/, are not really intensive adjectives but adjectives modified by intensifying adverbials čim and bas, which happen to resemble the emphatic prefixes formed by CV-reduplication and addition of linking /m/ or /s/. Two evidences in support of this claim are adduced: 1) čim and bas are the only examples in each language that carry such ‘exotic’ linker among Mongolic languages, which generally use only /b/, e.g. čab čagaan ‘snow-white’; 2) a comparative study of Turkic and Mongolic intensifiers suggests that Dagur čim is likely to be related to Turkmen cı in, e.g. Turkmen cı a:k ‘very white’, while bas may be a doublet of Khalkha maš ‘extremely’. The three-way variation of linker in Kalmuck bim bitü ~ bis bitü ~ biŋ bitü ‘completely closed’, on the other hand, indicates that: 1) the dissimilative constraint preventing default /b/ as a linker in labial-initial bases in Mongolic is being relaxed in Kalmuck; 2) the choice of /m/ and /s/ as an alternative linker to the default /b/ is probably due to influence from neighboring Turkic languages that have linking /m/ and /s; 3) the use of linking /ŋ/ reflects an effort by the Kalmuck speakers to avoid another labial /m/ in compliance of the dissimilation constraint. It is concluded that Mongolic generally use only /b/ (or its variant /w/) for its linking consonant, and other apparent linkers are all alternatively explained. It is hypothesized on this conclusion that if Mongolic borrowed its intensive
formation from Turkic, as is generally agreed, it was during the early Turco-Mongolic contact and the rule was transferred from non-Oghuz Old Turkic, which, like Mongolic, had default labial /p/ as the only linking consonant.

Key words: intensive (emphatic) adjectives, linking consonants, dissimilation, Mongolic, Turkic, comparative and historical analysis.

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