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Uralic copulas and their analogues in other Eurasian languages

1.   Introduction

This paper, devoted to the expert on Finnish and Uralic etymology Ulla-Maija Forsberg, née Kulonen, is one in a series of papers dealing with selected issues of comparative Uralic and Altaic studies. My general premises correspond to the "anti-Altaicist" line of argumentation, according to which the so-called Altaic languages are not mutually related, that is, they do not form a divergent language family with a common protolanguage. They do however share both material and structural properties that are best explained as convergent developments due to a complex network of prolonged and recurrent areal contacts between the individual entities, which include not only those traditionally termed "Altaic", but also the Uralic languages. From this point of view, the traditional terms "Altaic" and "Ural-Altaic" are perfectly justified — but we should be careful to not treat them as more meaningful than they actually are.

The "Ural-Altaic" sphere is, consequently, best understood as a macroscopic transcontinental areal phenomenon, which comprises several language families sharing a basic typological orientation. In this context, Uralic differs from its "Altaic" partners by its considerably more complex internal taxonomy and more ancient chronology. While the families conventionally classified as "Altaic" — including Turkic, Mongolic, Tungusic, Koreanic, and Japonic — are all relatively shallow, with protolanguages dating to the Iron Age or even the Middle Ages, Uralic is a deep family, each of whose 7 to 9 branches is chronologically comparable to the individual "Altaic" families.

Although the exact depth of Uralic is still being disputed, the chronological discrepancy between Uralic and the "Altaic" languages is a factor that makes "Ural-Altaic" comparisons at any deeper time levels problematic.

The two language families in the core of comparative Altaic Studies have always been Turkic and Mongolic. If it could be shown that these two families are related, it would be possible to attempt to build a more extensive family tree. Unfortunately, it has been demonstrated beyond any doubt that the basic lexical resources of Turkic and Mongolic show only a few chance correspondences, as well as a rather small number of mutual borrowings (Georg 1999/2000, Erdal 2019). The same can be said of other binary comparisons that have been made between the individual "Altaic" entities, including, in particular, Koreanic and Japonic (as critically reviewed by Vovin 2010). Non-binary comparisons, on the other hand, fall into the category of omnicomparativism, which as a method is notoriously too strong to yield any scientifically valid results (Doerfer 1973).

There are however a few very basic areal similarities that have resisted the anti-Altaicist criticism, and for which no definitive explanation has been offered. Among these similarities there are, most importantly, the personal pronouns of the MIN : TIN type (Janhunen 2013), but cross-family similarities are also found in the demonstrative, interrogative and relative pronouns, as well as in other auxiliary elements. Typically, these parallels are not confined to "Ural-Altaic", but extend also to other Eurasian language families, including, in particular, Indo-European, Kolymic (Yukaghir), and Kamchukotic (Chukchee-Kamchadal), suggesting that it is a question of larger-scale areal phenomena (cf. also Nichols 2012). On the other hand, even within the "Ural-Altaic" sphere, some languages and language families, notably Koreanic and Japonic, show aberrations from the "norm", suggesting that they are recent members of this typological context.

Within the group of vague material parallels we may also include the copula-existentials, which show a number of superficial similarities both within the "Ural-Altaic" sphere and beyond. As will be shown below, most of these similarities are due to secondary developments, conditioned by the auxiliary functions and great frequency of the copula-existentials. In some cases, however, we can also assume borrowing.

2.   General aspects of Ural-Altaic copulas

Without going into the general typology of copula-existentials (on which see e.g. Pustet 2003), we can roughly outline how this category of auxiliary elements functions in languages with Ural-Altaic typology. In this context, copulas can be defined as elements implying an equative relationship (A EQU B), while existentials imply a locative relationship (A LOC B). The two functions are often expressed by a single lexical element, as in modern Finnish (*olla*), but many languages use two different elements. A further differentiation can be made with regard to the animacy (animate vs. non-animate) of

the subject of an existential relation, as in modern Japanese, which also has specific sets of both copulas and existentials depending on politeness registers. Moreover, many languages in the Ural-Altaic sphere have several separate lexical roots competing for basically identical copular and existential functions, with their distribution determined by temporal, aspectual, or modal criteria, as in Finnish (IND *ol/e-* vs. POT *lie-*) and Hungarian (PRS *va-* : PRT *vol-* vs. FUT *lë-*).

   A widespread, though not universal feature in the Ural-Altaic sphere is the expression of a temporally and modally unmarked copula by zero. In the context of Ural-Altaic syntax with its strictly verb-final word order (SOV) this means that a nominal in clause-final position automatically tends to be understood as a nominal predicate, which can also take personal endings, as, for instance, in Turkic and Samoyedic. There are reasons to assume that the personal conjugation of nominals in predicative position actually involves the presence of a zero copula in the sequence of morphemes (see, e.g. Janhunen 2010: 165–172). The addition of temporal and/or modal complications will normally require the use of an actual material copula. The use of zero existentials is less typical, though not non-existent, in Ural-Altaic typology. Another parameter is connected with the morphological status of the copula-existential element. Although most typically expressed by an independent word, a copula-existential can also be a clitic, as in modern Turkish (=*dir*₄).

   Prototypically, copula-existentials are verbs, but their status in this respect can vary. Several languages in the Ural-Altaic sphere actually have nominal existentials, which, moreover, can be lexically differentiated depending on whether they express existence (affirmation) or absence of existence (negation), as in Turkic (EXIST AFF **ba:r* vs. NEG **yo:k*). Even languages that do not use an existential noun can have a corresponding negative existential noun ('absent, absence, not being'), as in Samoyedic (**yängka*) and Mongolic (**ügei*). The nominal elements used as copulas can also be of a pronominal origin, as in modern Mongolian, where the pronominal copulas are differentiated depending on whether they are combined with a true nominal predicate (**mön* 'that one') or with nominalized verbs (**yaxuma* 'something'), and where there is also a negative copula (**bisi* 'other than' < 'other', on the Mongolic copulas, see Janhunen 2012: 228–231, 250–254). Negative copulas have occasionally also been formed by the fusion of a negation verb with an actual copula, as in Estonian (*pole* < **e-p+ole-k* 'is not').

   Diachronically, copula-existentials have a dual status. On the one hand, they belong to the most basic part of the lexicon and are hence often inherited from early protolanguages, which allows them to be used to verify linguistic relationships. On the other hand, due to their great frequency, they often undergo irregular developments and may ultimately be reduced to the extent that they have to be replaced by secondary elements of a more transparent origin. Unlike primary copula-existentials, which often have irregular and/or defective paradigms, their secondary counterparts tend to be morphologically regular and typically have a concrete basic meaning connected with physical positions ('to stand', 'to sit', 'to lie').

In the following, the formal taxonomy and history of copula-existentials in the Ural-Altaic sphere will be surveyed with the Uralic languages as the starting point. The elements surveyed are all basically verbs, and, as it turns out, many of them have formal analogues in the "Altaic" languages, occasionally also elsewhere in Eurasia. As will be shown, the reasons for the observed similarities vary from case to case.

3.   The Uralic copula *o-

The formally most simple copula-existential in the Uralic languages may be reconstructed as Proto-Uralic *o- 'to be'. This item is unambiguously attested in Finnic (*)o-ma '(one's) own', which is morphologically a nominalization in *-mA from the verbal root *o- (SSA 2: 265). There is a formally exact cognate with the same meaning in Saamic (if this is not a borrowing from Finnic), but more importantly *o-ma was used in Proto-Finnic as the third person indicative present-tense copula-existential 3SG *o-ma 'is', with the corresponding plural 3PL *o-ma-t 'they are', formed with the regular nominal plural marker *-t. These forms are particularly transparently preserved in Veps, 3SG om : 3PL oma-d (Grünthal 2015: 184–186), while in the mainstream varieties of Finnic they have undergone various simplifications and analogical developments, as in Finnish 3SG o-n : 3PL o-va-t (with the suffixal complex -va-t < *-pA-t generalized from regular verbal conjugation).

As a monosyllabic verbal element composed of a single vowel segment (*#V-), the copula-existential *o- is exceptional in the Uralic context and resembles the negation verb *e-. All other verbal roots in Uralic seem to have been bisyllabic (*(C)V(C)CV-). The formal simplicity of *o- may be due to irregular erosion over the course of time, but it might also point to a pronominal connection, in which case the verb could be identical with the pronoun *o 'that', as in Hungarian a-z 'that' : o-ly 'such' : ú-gy 'so' (MSzFE 102–104). The functional transition from pronoun to verb must, however, have taken place in Pre-Proto-Uralic, for in Proto-Uralic the two functions were already distinct.

If we look for parallels for Uralic *o- elsewhere in the Ural-Altaic sphere we should apparently focus our search on copula-existentials composed of a single vowel segment with no overt initial consonant (*#V-). Moreover, the vowel should have a velar quality. Such an item is Mongolic *a- 'to be', of which traces are preserved in most modern Mongolic languages (Nugteren 2011: 263). Although synchronically attested only in defective paradigms, this was once the basic copula-existential verb, from which derivatives like CAUS *a-xul- 'to place' were also formed. There is however no reason to assume any connection with the Uralic copula-existential, for the similarity is likely to be due to the simple form and auxiliary function of the two elements. It may be noted that Mongolic also has occasional other examples of monosyllabic verbal stems ending in a vowel, notably *ki- 'to do', though otherwise this structural type is reserved for pronouns.

Another superficially comparable item is Tungusic *oo- : AOR *oo-ra-* 'to make',
which is further connected with the homonymous stem *oo- : AOR *oo-da-* 'to become'
< PASS 'to be made' (SSTM 2: 3–4). In this case, however, the comparison can be dis-
qualified on the basis of the inherently transitive nature of the basic root.

4. The Uralic copula *lex/i-

Another structurally simple copula-existential in Proto-Uralic was *lexi-*. This seems
to have been a bisyllabic item with a medial "laryngeal" *x*, since its reflexes in Finnic
belong to the monosyllabic long-vowel stems of the structural type CVV-. The traces of
the "laryngeal" are, however, somewhat ambiguous, and Saamic, which in some verbal
stems of the same type has merged this segment with *k*, uses the simple stem *lea-* <
le- in most form categories, though the — possibly secondary — variant *lea(-)hke-* is
also attested. It happens that Saamic is also the only branch of Uralic in which this verb
functions as a general copula-existential, while in the other branches it has more specific
modal (potential) or temporal (future) connotations, as in Finnish POT *lie(-ne-)* 'is pos-
sibly' (SSA 2: 68), Hungarian FUT *lë-* : *lë-sz* : *lő-n* 'will be, becomes' (MSzFE 402–403).

The verb *lexi-* is absent in the "Ob-Ugric" branches, and in Mordvinic it is
attested only in a somewhat uncertain derivative, *le-pks* 'child, young'. It has how-
ever a regular reflex in the Samoyedic copula-existential *yi- ~*i-*. This item shows the
development of initial *l* to *y*, as also, for instance, in *läsi* 'adjacency' (Finnish *lähi* :
lähe- : *läs-*) > Proto-Samoyedic *yet* (SW 44, the comparison with Finnic was first pro-
posed by Eugen Helimski). The initial sequence *yi-* is, however, potentially unstable
in Samoyedic and can also be represented as *#i-*, at the same time as original *#i-* can
be accompanied by a secondary prothetic *y*, as in *ilä- ~ *yilä-* 'to live' (SW 27). In
the copula-existential, the initial glide is attested in the Nenets subordinative form
yi-put > Tundra Nenets *yi-bʰq* 'if it is', while in the other Samoyedic languages the
glideless variant *i-* dominates, as in Nganasan *i-* 'to be' (SW 16–17). In most Samoyedic
languages *yi- ~ *i-* functions as the basic copula-existential, though its paradigm can
have suppletive elements (on which more below).

An item often quoted as an external counterpart, or even a "cognate", of Uralic
le(xi)-, is Kolymic (Yukaghir) *l'ɔ- ~ le-* 'to be' (HDY 237). By the adherents of the
Uralo-Yukaghir hypothesis this comparison has been presented as evidence of a genetic
relationship (see e.g. Collinder 1940: 81). However, in the general corpus of otherwise
arbitrary and multiply problematic comparisons between the two language families,
this single seemingly perfect match in the realm of basic vocabulary can hardly serve as
evidence of a genetic relationship, nor even of contact. More likely, we are dealing with
an accidental lookalike from which no further conclusions should be drawn.

If we did not know that Samoyedic *(y)i-* goes back to *lex/i-*, we would be tempt-
ed to compare it with similarly sounding analogues in many languages in the Ural-Altaic
sphere, as well as elsewhere. These are however all accidental coincidences, caused by the

irregular reduction of more complex forms, as is confirmed by the relevant comparative and diachronic data. The modern Turkish copula *i-*, also used as a clitic =*i-* ~ =*y-*, goes back to Proto-Turkic **er-* (EDT 193–194), while the Japanese existential *i-* : *i-ru* (for animate subjects) derives from **wïy-* (Martin 1987: 698). This leaves the Korean copula *i-* and the corresponding existential *i-ss-* (Martin 1992: 217–219) alone in the "Altaic" context, though we may assume that it, too, is the result of some kind of reductive developments. It may be noted that the general tendency of reducing the form of copula-existentials is also visible in the fact that the modern Turkic *i-*, modern Japanese *i-*, and modern Korean *i-* can all under certain conditions be represented as a cliticized zero morpheme (= Ø-).

5.   The Uralic copula **ol/i-*

The most widely attested basic copula-existential in Uralic is **ol/i-*, present in all branches of Finno-Ugric except Saamic, e.g. Finnish *ole-*. In some of the central branches of Uralic the stem shows an initial labial glide **w* (> -*v*), as in Hungarian *vol-* : *val-* : *vagy-* : *va-(gyo)n* (MSzFE 669–671). This glide has often been considered as "original", requiring the reconstruction **wol/i-*, but the comparative data would rather suggest that it is a secondary prothetic segment. The situation may be compared with, for instance, **woy/i* 'oil, butter', which shows a preserved labial glide in virtually all members of the family, as in Finnish *voi* (SSA 3: 467) and Hungarian *vaj* (MSzFE 666–667).

        In Finnic, **ol/i-* > *ole-* : *ol-* completes the defective paradigms of **o-* and **lex/i-* with all the forms that the latter do not yield, that is, for instance, the personal forms of the first and second persons (PRS 1SG *ole-n* : 2SG *ole-t* etc.), the marked tense forms (PRT 3SG *ol-i*), the imperative (IMP 2SG *ole-x* < **ole-k* : 3SG *ol-ko-on*), the conditional (COND 3SG *ol-isi*), and various nominalized forms (PPLE PRS *ole-va* : PRF *ol-lut* < **ol-nut*). It also functions as the base for derivational forms (ITER *ole-ske-le-* etc.). In those languages, as in Hungarian, where both **ol/i-* and **lex/i-* have complete paradigms, they exist in parallel with a systematic modal and/or temporal difference in their functions.

        Especially in view of the complementarity of **o-* and **ol/i-* in Finnic it has always been assumed that **ol/i-* is actually a derivative of **o-*, that is **o-l/i-*, in which the element **-l/i-* may be identified as the common deverbal frequentative suffix (thus also SSA 2: 264). This is, indeed, a plausible analysis, especially as we know that the other monosyllabic vowel-stem verb, the negation verb **e-*, has also produced regular verbal derivatives, e.g. Finnish *e-ksy-* 'to become lost' : *e-hty-* 'to become less'. In fact, the Finnic imperative stem of the negation verb (Finnish *älä* : *äl-kä-* : *äl-kö-*) looks like a frequentative form (< **e-l/i-*) of the basic root **e-*. On the other hand, if **o-* has a pronominal connection, the element **-l/i-* in **o-l/i-* could perhaps also represent a trace of **lex/i-*. However this may be, a similar element of a possibly similar origin is present in the verb **to-l/i-* 'to come' (> Finnish *tulla*), which may also be compared with a pronoun, **to-* 'that'.

        Etymological dictionaries have generally been silent about any Samoyedic cognates of either **o-* or **ol/i-*. Samoyedic has however a copula-existential with the forms

*aə- ~ *ay- that must belong to this context. The form *aə-, with a vowel sequence, is suggested by Nganasan IMP 2SG *nguë-q* = Nenets *nga-q* : AOR 3SG *nga* (with no finite morpheme, Salminen 1997: 101), while the form *ay-, with a postvocalic palatal glide, is present in Nenets *ngae-*, as in CONV MOD *ngae-sy°* (= Enets *e-sh*). The difficulty is that we cannot for the time being explain the origin of the alternation *ə ~ *y, and some of the Samoyedic data, for instance, Selkup *ee-* : *iiy-* 'to be' (SkWb 1–2), are difficult to distinguish from the traces of *lex/i-* (SW 16–17). Also, it is not immediately clear whether the forms *aə- ~ *ay- correspond to Finno-Ugric *o- or *ol/i-. The crucial question is whether Proto-Uralic *l in this stem type is represented as *ə or *y in Samoyedic (see the discussion by Aikio 2012: 245–247):

(1) Assuming that the copula-existential is parallel to the verb *kal/i-* 'to die' > Samoyedic *kaə-, we might postulate a regular vocalization development of *l to *ə after a low vowel, in which case the form *aə- would have to go back to *al/i-. The correspondence of Samoyedic *a to Finno-Ugric *o does not seem to be quite regular in this case, but it could be due to the reductive tendencies in copula-existentials.

(2) Alternatively, we could assume that there was a regular development of *l to *y after all vowels in Samoyedic, as also in *tol/i-* 'to come' > *toy- ~ *tuy- in Samoyedic (SW 164). In this case, it would be the form *ay- that would correspond to Finno-Ugric *ol/i-, though there still remains a discrepancy in the vowel qualities.

(3) Finally, it is possible that the forms *aə- and *ay- represent two different sources, with perhaps *ay- = *a-y- standing for the simple stem *o- and *aə- for the extended stem *ol/i-. What is, in any case, clear is that Samoyedic shows no sign of a prothetic *w in any of the relevant forms. A less likely possibility is that *aə- and *ay- are both based on the simple stem *o-, with both *-ə- and *-y- being secondary elements.

In the context of Ural-Altaic comparisons, Uralic *o-l/i- has been compared with Turkic *bol-* 'to be, to become' = Mongolic *bol-* id., with a further "Transeurasian" pendant in the Japanese existential *wor-* (Robbeets 2005: 760–761). It happens that in some modern Turkic and Mongolic languages, as well as in modern Japanese, the initial labial is secondarily lost, as in modern Turkish *ol-* 'to be'. However, in view of the bimorphemic origin of Uralic *o-l/i- the comparison is untenable, as is, of course, also the connection of the Japanese data with the Turko-Mongolic item. At the same time, the identical shape and function of *bol-* in Turkic and Mongolic, which has conventionally been explained in the framework of the Altaic hypothesis (EST 2: 185–188), can only be the result of a contact between the corresponding pre-protolanguages. Like the bulk of the oldest layer of lexical parallels, this item must have been borrowed from Turkic to Mongolic. This is an important conclusion, since it reminds us of the fact that copula-existentials *can* be borrowed.

6.   The Uralic copula *as/i-

In addition to *o- : *o-l/i- and *lex/i- there is one additional Uralic copula-existential, though with a more restricted distribution. This item can be reconstructed as *as/i- 'to be', attested in archaic and dialectal Finnish as ase- (asea), with the somewhat un-expected transitive meaning 'to place'. The original meaning must have been intransi-tive, as is shown by the many derivatives this stem has yielded in the Finnic languages, e.g. Finnish CAUS ase-tta- 'to place', REFL a-su- 'to live' (also transitively 'to inhabit'), NMLZ as-u 'appearance', NMLZ ase-x 'tool, weapon', NMLZ ase-ma : ase-me- 'place, location' : FACT ase-n-ta- 'to install' : NMLZ ase-n-t-o 'position', etc. (SSA 1: 85–86).

      The obvious similarity of the stem ase- < *as/i- with the Indo-European copula-existential *es-/*os- has not gone unnoticed by generations of scholars, and in view of the basic semantics of the items, an explanation has been sought in "Nostratic" and "Indo-Uralic" comparisons. However, as is also demonstrated by the case of Turko-Mongolic *bol-, copula-existentials can be borrowed, for which reason there is no obstacle to assuming that Finnic *as/i- is a borrowing from an Indo-European source. Moreover, the vocalism (*as- < *es-/*os-) suggests that the source was of an early Indo-Iranian type (thus also Koivulehto 1999: 340, for a summary of the earlier research, see Joki 1973: 252–253). The transmission must have taken place under cir-cumstances when an ancestral form of Finnic was still spoken in the immediate vicinity of Indo-Iranian speakers.[1]

      Earlier research has occasionally questioned the Indo-Iranian connection by assuming that the Finnic stem originally had a palatal sibilant, *c (= conventionally *ś), that is, *ac/i- (= conventionally *aśe-). This assumption has been based on a com-parison of Finnic ase-ma with Mordvin eźem ~ iźim 'place, bench' (SSA 1: 85). The correspondence is, however, far from perfect, and the Mordvin item could as well be connected with Finnic (*)is-t-u- 'to sit', which, on the other hand, is conventionally compared with the likewise phonologically incompatible Mordvin word oza-ms 'to sit down' (SSA 1: 229). Leaving aside a few even more obviously mistaken compari-sons (see UEWb 18–19), two additional items that have been compared with the Finnic data are Nenets ngeso- 'to stop for putting up a tent' (MDTN 306) and Selkup esu- 'to become' (SkWb 41). Again however the correspondences, even within Samoyedic, are not regular, which is why we may confidently conclude that it is a question of separate etymons, independent of Finnic *as/i-.

In this connection we may also rehabilitate the idea that Finnish *asia* = Estonian *asi* : *asja-*, with cognates in all Finnic languages (SSA 1: 86), is an actor noun in *-yA* from the copula-existential stem **as/i-*. We do not know, however, whether the form is based on the consonant stem **as-* (**as-ya*) or on the vowel stem **asi-* (**asi-ya*), for the two forms cannot be reliably distinguished in the modern spoken languages. In any case, the attempt to explain this item as a separate Germanic borrowing (Koivulehto 1982) is based on unnecessarily complicated and therefore, totally unlikely, speculations.

7. Conclusions

The three principal conclusions from the comparative corpus of Uralic copula-existentials are, (1) first, that these elements often do belong to the most ancient layers of genetically inherited lexicon, (2) second, that the identification of genetic cognates is often made difficult by the reductive developments characteristic of this type of frequently used and semantically void vocabulary, and (3) third, that the system of copulas can be expanded by way of internal derivation, suppletive morphology, and external borrowing, perhaps exactly to compensate for the loss of clarity caused by the reductive developments.

Due to the reductive developments, we should be careful when we compare copula-existentials across language families, for the very simple forms that often characterize this category of lexical items can have very different origins, as is shown by coincidental similarities between modern languages like Turkish *i-* = Nganasan *i-* = Japanese *i-* = Korean *i-*. On the other hand, in cases where we have a less trivial likeness of copula-existentials in two language families, as in Turkic **bol-* = Mongolic **bol-* and Finnic **as/i-* = Indo-Iranian **as-*, we have to assume borrowing, rather than genetic affinity.

There is one structural type of copula-existentials which, though common in Eurasia, is not attested in Uralic. This is the type **PI-*, involving a labial consonant with a high vowel, but with no syllable-final consonant. Copula-existentials of this type are attested in, for instance, Tungusic (**bi-* : **bi-si-*), Mongolic (**bü- ~ *bu-* > modern *bi-*), Japanese (**wi-*), and Ghilyak (*fi-* : *phi-* < **pi-*), as well as, of course, Indo-European (English *be*, German *bi-n* : *bi-st*, Latin *fu-i*, Slavic *by-* : *bud-* etc. < **bhu-h-*). Needless to say, the cross-family similarities must be accidental also in these cases.

Acknowledgements

Abbreviations

1	first person	ITER	iterative
2	second person	LOC	locative
3	third person	MOD	modal
AFF	affirmative	NEG	negative
AOR	aorist	NMLZ	nominalization
CAUS	causative	PASS	passive
COND	conditional	PL	plural
CONV	converb	PPLE	participle
EQU	equative	POT	potential
EXIST	existential	PRF	perfect
FACT	factitive	PRS	present
FUT	future	PRT	preterite
IMP	imperative	REFL	reflexive
IND	indicative	SG	singular

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