

Copying direction as a factor in the classification system of Kartvelian echo-word constructions

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Abstract. The paper deals with Base/Reduplicant relationship in Kartvelian (South Caucasian) echo-word constructions as a determining condition in their classification with special reference to copying direction. Base/Reduplicant relationship is pivotal in reduplicative processes because a resulting entity is built of the Base and the Reduplicant. Hence, two types of echo reduplication are identified: Type 1 - L > R (Base-initial) and Type 2 - R > L (Reduplicant-initial). The data from the Kartvelian languages have highlighted the necessity of subdivision of echo-pairs into different types. The classification pattern, adhered to in the present paper, may be applied to similar phenomena cross-linguistically, provided that various types and/or sub-types occur in a language.

Keywords: echo reduplication, Kartvelian languages, Base/Reduplicant relationship, copying direction

1. Introduction

In the present paper I will discuss Base/Reduplicant relationship in reduplication, specifically in echo-word constructions, with special reference to copying direction. The bulk of illustrations will be drawn from Kartvelian languages. Base/Reduplicant relationship is pivotal in reduplicative processes because a reduplicative construction is built of the Base and the Reduplicant. Alongside with being one of its components, the Base also serves as an input material for the formation of the Reduplicant. The resulting entity is their combination. It is with respect to the character of copying that reduplicative constructions are classified. Irrespective of the fact that there are approaches, for instance, Morphological Doubling Theory (Inkelas, Zoll 2005), disallowing the aforementioned base-dependence, that is, accounting for a number of reduplication patterns without base-dependence, a student of reduplication can in no way neglect it owing to empirical data from various languages.

Base/Reduplicant relationship was focused on even in the early classification attempts; for instance, syntactic Total Reduplication (termed as 'Wiederho-

lung') was observed and mentioned even in the 1st volume of *Mithridates* (Ade- lung 1806, xxviii). W. von Humboldt too discusses the process in point conclud- ing the following: "Exact TR is a primitive strategy, whereas non-exact PR is a refined strategy" (see Stolz, Stroh, Urdze 2011, 74). It is particularly noteworthy that he distinguishes between Total and Partial reduplication (of course, it is made possible with respect to whether the Base is copied completely or partial- ly). It is also noteworthy that H. Steinthal (1860) and A. F. Pott (1862) acknowl- edged the division between Total and Partial reduplication according to Base/ Reduplicants relationships. To our days, this classificatory framework has been dominant in reduplication research.

As for echo-word formation, as a case in point in the present paper, I adhere to the stance put forth by T. Stolz who treats it as a non-prototypical type and refers to it as 'total-reduplication-*cum*-variation' (= TRCV) (Stolz 2008). Since in the present paper I am going to address the problem of copying direction in Kartvelian (South Caucasian) echo-constructions, initially I will deal with Base/ Reduplicant relation and copying direction within a general linguistic frame- work; only afterwards I will turn to types of echo-reduplication in Kartvelian languages with special emphasis on copying direction. Finally, my hypothesis is that copying direction is not a cause but rather an effect of particular linguistic processes in Kartvelian languages, specifically, and not only in them.

2. Copying direction in Base/Reduplicant relation

Notionally, the factor of Base and Reduplicant has almost always been ac- knowledged in reduplication research. It is obvious even from a very brief over- view presented in the introduction. Notably, more than a century ago the Swiss linguist Renward Brandstetter made extensive use of the term *Grundwort* 'basic word' (1917), albeit with less functional role. Terms for Base and Reduplicant varied and still vary; however, it is with respect to their relationships that schol- ars distinguish between and among various types of reduplicative constructions: take, for instance, Otto Jespersen (1961, 174) who was one of the first to offer a classification of reduplication patterns having identified three types of 'redupli- cative compounds':

- (1) The kernel repeated unchanged.
- (2) The kernel repeated with change of vowel.
- (3) The kernel repeated with change of consonant.

Jespersen views the kernel (that is, the Base) as an axial component and builds his classification upon whether and how it is modified. Hence, he identi- fies what in present-day terminology would be labeled as Total Reduplication, Ablaut Reduplication, and Echo Reduplication.

In the above-cited paper, Thomas Stolz (2008, 108 ff.) makes use of other terms: 'origin' and 'copy', thus distinguishing between proper Total Reduplica- tion ("The prototypical pattern requires two phonologically identical and im- mediately adjacent strings of segments (called original and copy), each of which represents a syntactic word with identical content in the object language" (ibid.))

and TRCV which “comes close to this definition but fails to meet one criterion, namely absolute phonological identity, because it consists of two immediately adjacent strings of segments which differ as to the quality of the filler of one of their slots” (Stolz 2008, 109). Obviously enough, whenever the Base (otherwise, the kernel, the original) is copied completely, there is no necessity to address copying direction as such. Even in discussions of echo-constructions, copying direction is not discussed owing to the objective circumstances that only a single kind of copying direction is evidenced in most languages. For instance, only left-to-right direction is characteristic of Turkish and, through language contacts, of many languages in the Balkans and the Caucasus; Bulgarian provides noteworthy illustrations: a) $V_1C_1 > mV_1C_1$ as in e.g. *алкохоли-малкохоли* ‘alcohols and the like’, *албаници-малбаници* ‘Albanians and the like’, *овце-мовце* ‘sheep and the like’, *омбудсман-момбудсман* ‘ombudsman and the like’; b) $C_1V_1 > mV_1$ as in e.g. *телефони-мелефони* ‘telephones and the like’, *понички-монички* ‘donuts and the like’, *фейсбук-мейсбук* ‘Facebook and the like’, *картофи-мартофи* ‘potatoes and the like’; c) $C_1C_2V_1 > mC_2V_1$ (where C_2 is a sonorant) as in e.g. *врати-мрати* ‘doors and the like’, *глави-млави* ‘heads and the like’, *сняг-мняг* ‘snow and the like’ (Grannes 1996, 266-267; Burov, Petrov 2018, 47-48). On the other hand, there are languages in which only right-to-left copying is possible, as, for instance, in Bodo, a Tibeto-Burman language spoken in northeast India: “Therefore, the copying direction in Bodo can be formulated as Final R → L copying” (Brahma 2013, 189).

Naturally enough, in descriptions of languages with both copying directions in echo-word constructions, it is more expectable to come across with considerations on the issue in point. English is one of such languages, and here is what S. Pinker says about it: “Why do we say *razzle-dazzle* instead of *dazzle-razzle*? Why *super-duper*, *helter-skelter*, *harum-scarum*, *hocus-pocus*, *willy-nilly*, *hullygully*, *rolly-polly*, *holy moly*, *herky-jerky*, *walkie-talkie*, *namby-pamby*, *mumbo-jumbo*, *loosey-goosy*, *wing-ding*, *wham-bam*, *hobnob*, *razzamatazz*, and *rub-a-dub-dub*? [...] The word beginning with the less obstruent consonant always comes before the word with the more obstruent consonant” (Pinker 1995, 170). Trying to elaborate on what Pinker did not, specifically, “why the less obstruent sound should precede the more obstruent one”, J. Dienhart resorts to “the claim that as a syllable closes it moves from less obstruent to more obstruent. Thus, in such English words as *dwarf*, *help*, *sand*, we see that /r, l, n/ precede, respectively, /f, p, d/. This is the same pattern Pinker has noted for the larger structures of reduplicative compounds” (Dienhart 1999, 24).

Earlier Cooper and Ross (1975) established phonological constraints for the ordering of conjoined elements, including echo-words in English; however, this is not about copying direction, hence, not directly related to what we are concerned with here.

As already noted, the problem of copying direction in echo-word constructions has normally been dealt with in descriptions of languages with both kinds of direction, although only occasionally. Significantly, McCarthy and Prince outline a general principle of copying direction in reduplication processes: “The Base B is the phonological material to which the reduplicative is attached - for reduplicative *prefixes*, the following structure, and for reduplicative suffixes, the

preceding structure” (McCarthy, Prince 1994, 339). Hence, in other words, the Reduplicant either copies from the left edge of the Base (left-to-right copying, that is, $L > R$; Base-initial) or from its right edge (right-to-left copying, that is, $R > L$; Reduplicant initial).

3. Echo-word constructions in Kartvelian languages

Since in the present paper I am addressing a specific type of reduplicative constructions in Kartvelian languages, a starting point for this discussion will be the definition according to which echo-word constructions are described “as a case of word reduplication involving both morphological alternation and a pseudo-morpheme. It in fact consists in the copying of a word and the addition to or substitution of the first consonant, consonant cluster or syllable of that copy with another consonant or fixed segment” (Kallergi 2015, 18). Having analysed Kartvelian echo-words, we will be able to conclude that either they conform to the definition or the definition needs some modifications.

The phenomenon of Kartvelian reduplication, at large, and of echo reduplication, specifically, has been discussed in a number of publications (see, for instance, Sanikidze 1976; Sanikidze 1977; Topuria 1979; Aronia 2010; Gersamia et al. 2016; Kikvidze, Gersamia, Lomia 2018). These and other works discuss almost all kinds of reduplication processes in Kartvelian languages; they, of course, dwell upon echo-word constructions with both copying directions albeit without elaborating about respective causes and effects.

With respect to copying direction, two types of echo reduplication can be identified in Kartvelian languages: Type 1 – $L > R$ (Base-initial) and Type 2 – $R > L$ (Reduplicant-initial).

3.1. Type 1 – $L > R$ (Base-initial)

This type comprises typical echo-word formations complying with the above cited definition by H. Kallergi according to which it “consists in the copying of a word and the addition to or substitution of the first consonant, consonant cluster or syllable of that copy with another consonant or fixed segment” (Kallergi 2015, 18).

Georgian

1.1.1 *bodiši-modiši* “empty excuses” < *bodiši* “apology”

1.1.2 *xili-mili* “fruit and the like” < *xili* “fruit”

1.1.3 *topi-mopi* “gun and the like” < *topi* “gun”

1.1.4 *ak’ak’i-bak’ak’i* “Akaki (deprecativ)” < *ak’ak’i* “Akaki” (man’s name)

Svan

1.2.1 *bulu-mulu* “mute, wordless” < *bliw* “stutterer”

1.2.2 *itk-pitk* “all kinds of grain” < *itk* “grain”

1.2.3. *īīl-mīīl* “divorce and such” < *mīīl* “divorce”

1.2.4 *lāir-māir* “some book” < *lair* “book”

Megrelian

1.3.1 *č'inč'a-minč'a* “wren and the like” < *č'inč'a* “wren”

1.3.2 *t'ura-mura* “jackal and the like” < *t'ura* “jackal”

1.3.3 *sxunapa-munapa* “to clean and the like” < *sxunapa* “to clean”

1.3.4 *txozini-mozini* “to chase and the like” < *txozini* “to chase”

Laz

1.4.1 *oxori-moxori* “house and the like” < *oxori* “house”

1.4.2 *posti-mosti* “leather and the like” < *posti* “leather”

1.4.3 *puži-muži* “cow and the like” < *puži* “cow”

1.4.4 *žari-mari* “bread and the like” < *žari* “bread”

Judging from the illustrations from the four Kartvelian languages, the Base is copied substituting its initial consonant (Georgian: 1.1.1, 1.1.2, 1.1.3; Svan: 1.2.1, 1.2.4; Megrelian: 1.3.1, 1.3.2; Laz: 1.4.2, 1.4.3, 1.4.4) or consonant cluster (Megrelian: 1.3.3, 1.3.4) with a labial consonant: the labial sonorant *m-* (Georgian: 1.1.1, 1.1.2, 1.1.3; Svan: 1.2.1, 1.2.4; Megrelian: 1.3.1, 1.3.2, 1.3.3, 1.3.4; Laz: 1.4.2, 1.4.3, 1.4.4), or, if it is vowel-initial, taking on a labial consonant: the labial sonorant *m-* (Svan: 1.2.3; Laz: 1.4.1), the labial voiced stop *b-* (Georgian: 1.1.4), the labial voiceless aspirated stop *p'-* (Svan: 1.2.2). In order to determine the copying direction, initially it is necessary to identify the Base; this is achieved in accordance with its wordhood. As far as the Bases in the above cited illustrations are left-hand elements taking on their modified copies to their right-hand side as Reduplicants, the copying direction is left-to-right (L > R).

As it is seen, Kartvelian echo-word constructions (pertaining to Type 1) display the same structural properties as Turkish-like reduplication; the dominant prosthetic element is *m-*; however, other labial consonants occur as well (excluding the labial ejective stop *p'-*). Hence, there are *m-*, *b-*, *p'-* echo-pairs in Kartvelian languages.¹

3.2. Type 2 – R > L (Reduplicant-initial)

The pattern of echo-pairs pertaining to Type 2 is not that widespread across languages as those of Type 1. As it is seen from the subtitle, the copying direction is right-to-left (R > L).

Georgian

2.1.1 *ava-dava* “flaring quarrel” < *dava* “dispute”

2.1.2 *ač'ia-bač'ia* “senseless talk, stupid twaddle” < *bač'ia* “rabbit”

2.1.3 *ial-k'iali* “scurrying clouds” < *k'iali* “radiating, shining, brilliance”

2.1.4 *otlo-totlo* “soft boiled (egg)” < *totlo* “soft”

¹ Cf. instances of *b*-reduplication in Bulgarian as in e.g. *агънца-багънца* ‘lambs and the like’, *ангел-бангел* ‘angel and the like’, *охльо-бохльо* ‘snail and the like’, *зайо-байо* ‘rabbit and the like’ (Burov, Petrov 2018, 59-50).

Svan

2.2.1 *anger-manger* “cattle and the like” < *manger* “thick-hoofed, horned animal”

2.2.2 *ere-mere* “clouds” < *mēre* “cloud”

2.2.3 *int’ri-k’int’ri* “cucumber and the like” < *k’int’ri* “cucumber”

2.2.4 *urketi-turketi* “Turkey and the like” < *turketi* “Turkey”

Megrelian

2.3.1 *aza-k’vaza* “neat, strutting” < *k’vaza* “neat”

2.3.2 *alax-malaxi* “shaken to pieces, sick” < *malaxi* “sick”

2.3.3 *ažga-bažga* “sprawling out” < *bažga* “standing on strong, sprawling out legs”

2.3.4 *erex-merexi* “turning to dust and ashes” < *merexi* “thunder”

Laz

Laz is the least-studied and the most under-resourced of the Kartvelian languages; hence, relevant data are either not available or unreliable. Therefore, I decided not to discuss Laz data here.

As the illustrations demonstrate, the Bases occupy a right-hand position in the construction. They are copied devoid of their initial consonants (Georgian: 2.1.1, 2.1.2, 2.1.3, 2.1.4; Svan: 2.2.1, 2.2.2, 2.2.3, 2.2.4; Megrelian: 2.3.2, 2.3.3, 2.3.4) or consonant clusters (Megrelian: 2.3.1). The deleted segments are phonetically diverse: labial sonorant *m*- (Svan: 2.2.1, 2.2.2; Megrelian: 2.3.2, 2.3.4), labial voiced stop *b*- (Georgian: 2.1.2; Megrelian: 2.3.3), dental voiced stop *d*- (Georgian: 2.1.1), dental voiceless aspirated stop *t*- (Georgian: 2.1.4; Svan: 2.2.4), velar voiceless ejective stop *k*'- (Georgian: 2.1.3; Svan: 2.2.3), and the consonant cluster consisting of the velar voiceless ejective stop *k*'- and the dentolabial voiced fricative *v*- (Megrelian: 2.3.1).

As in the case of Type 1 echo-pairs, for the sake of determining the copying direction, initially we have to identify the Base. The Bases of these constructions are right-hand elements; it is them who have wordhood. As Reduplicants, their modified copies occur to their left-hand side. Hence, the copying direction is right-to-left (R > L). Thus, this is what does not comply with and challenges H. Kallergi’s (2015) definition of echo reduplication since the copying process in the Kartvelian echo-pairs, pertaining to Type 2, includes neither the addition nor the substitution of any segment but rather the deletion of the initial consonant or consonant cluster. Therefore, in order to make the deficient definition adequate, it should be reformulated in the following way: echo reduplication consists in the copying of a word and the addition to or substitution of the first consonant, consonant cluster or syllable of that copy with another consonant or fixed segment, or the deletion of the initial consonant or consonant cluster.

4. Conclusions

As noted above, I hypothesized that copying direction would have been not a cause but rather an effect of particular linguistic processes; it primarily concerns echo-pairs pertaining to Type 2. In terms of this hypothesis, I should ask specific questions and try to find answers to them.

Why this method of identification of the Base and, subsequently, the Reduplicant is instrumental in treating of echo reduplication processes? The Base is to be identified initially because it is a pivotal element of the construction; moreover, the Reduplicant is derived as a result of its copying. After the Base and the Reduplicant are identified, it is no longer problematic to determine copying direction.

Why does copying direction matter? When looking back at the following examples, 2.1.2 *ač'ia-bač'ia*, 2.2.1 *anger-manger*, 2.2.2 *ere-mere*, 2.3.2 *alax-malaxi*, 2.3.3 *ažga-bažga*, 2.3.4 *erex-merexi*, one may assume that they are illustrations of Turkish-like labial-initial reduplication. Such an assumption would be due to the pattern: Base + *m*-Base. However, if we apply the above described method, we will find out that it is the right-hand elements that are meaningful words (Georgian *bač'ia* “rabbit”; Svan *manger* “thick-hoofed, horned animal”, *mere* “cloud”; Megrelian *malaxi* “sick”, *bažga* “standing on strong, sprawling out legs”, *merexi* “thunder”). Therefore, the copying direction is right-to-left (R > L). The procedure allows for the avoidance of similar confusions.

Why copying direction is rather an effect than a cause in echo-word constructions? The echo-pairs, pertaining to Type 2, are reconstructable as

Georgian

- R.2.1.1 **dava-dava* < *dava* “dispute”
- R.2.1.2 **bač'ia-bač'ia* < *bač'ia* “rabbit”
- R.2.1.3 **k'ial-k'iali* < *k'iali* “radiating, shining, brilliance”
- R.2.1.4 **totlo-totlo* < *totlo* “soft”

Svan

- R.2.2.1 **manger-manger* < *manger* “thick-hoofed, horned animal”
- R.2.2.2 **mere-mere* < *mēre* “cloud”
- R.2.2.3 **k'int'ri-k'int'ri* < *k'int'ri* “cucumber”
- R.2.2.4 **turketi-turketi* < *turketi* “Turkey”

Megrelian

- R.2.3.1 **k'vaza-k'vaza* < *k'vaza* “neat”
- R.2.3.2 **malax-malaxi* < *malaxi* “sick”
- R.2.3.3 **bažga-bažga* < *bažga* “standing on strong, sprawling out legs”
- R.2.3.4 **merex-merexi* < *merexi* “thunder”

Obviously, earlier they were total reduplicatives, that is, their bases were copied fully without any modification. When their onsets were deleted (apherisis), the resulting entities could have been ordered either as B-R or as R-B. As it has already been established (Kikvidze 2011), in binomials, structurally similar echo-pairs, Georgian, and Kartvelian languages at large, prefer the rule-governed principle, that is “Panini’s Law” (“shorter items precede longer ones”; see Cooper, Ross 1975). Since, in the constructions pertaining to Type 2, the Reduplicants are shorter than the Bases as a consequence of the onset deletion, the component-order is the following: Reduplicant-Base. This is the diachronic context of the synchronic given. This is why that copying direction is believed to an effect and not a cause.

The data from the Kartvelian languages have highlighted the necessity of subdivision of echo-pairs into different types. The classification pattern, adhered to in the present paper, may be applied to similar phenomena cross-linguistically, provided that various types and/or sub-types actually occur in a language.

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