

Nominal Echo-Formations in Northern Pakistan

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北パキスタン諸言語の名詞類の反響形成

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In this study, I compare the morphophonological characteristics of the echo-formation processes of five languages spoken in northern Pakistan (Burushaski, Domaaki, Shina, Khowar, and Kalasha). The former three languages show identity- or similarity-avoidance in their echo reduplicants, while the latter two languages do not. This notable distinction between the groups matches their geographical distribution. The widely-used definitions of echo-formation do not include forms that exactly reduplicate the base word, but these forms have the same function as standard echo-words. Therefore, I advocate that the definition of echo-formation should be changed to include these forms in order to facilitate further study of the phenomenon.

本稿は、パキスタン北部で話されている五つの言語（ブルシャスキー語、ドマーキ語、シナー語、コワール語、カラーシャ語）の持っている反響形成と呼ばれる形態操作に関して、主に形態音韻論的側面から対照し、異同を描き出すことを目的としたものである。前三者が程度の違いこそあれ、同要素回避をする一方で、後二者は回避の方策を取らないという点で、地理的分布と合致した大きなグループ分けができることが明らかになった。このような同要素回避をしない一部の反響形成は、厳密には一般的に南アジア研究で広く認識されている形態的な定義から外れてしまう。けれども一方で意味的にはその他の反響形成と合致している。そのため、今後は反響形成の定義をもう少し緩く改変する必要があることを提唱した。

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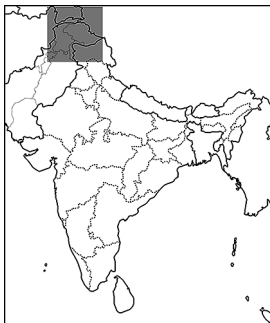
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1 Introduction

In South Asian languages, we often find what are known as echo-words. For example, Urdu has the echo-word *pa:ni: wa:ni:*, which contains the common noun *pa:ni:*, meaning ‘water’, and is used in informal conversation.

The rules for echo formation seem different in each language. In this study, I examine the morphophonological rules of nominal echo-words in several languages



Map 1 Map of South Asia



Map 2 Map of languages of northern Pakistan

in northern Pakistan, specifically Gilgit-Baltistan (formerly known as the Northern Areas) and Khyber-Pakhtunkhwa (formerly known as the North-West Frontier Province) (see Maps 1 and 2). I also demonstrate that two groups of formational characteristics can be distinguished in accordance with these geographical areas.

2 What is an echo-word?

The term ‘echo-word’ is commonly used in the linguistic studies of South Asian languages to denote reduplicated forms with some phonological change and some functional modification. However, in this paper, I use a looser definition because the common one is not necessarily relevant to the languages of northern Pakistan that I examine.

Some researchers would disagree with my decision to include even complete reduplications of words in the category of echo-words, but I believe that this inclusion is necessary for my comparative study focusing on the echo-formation of the Khowar and Kalasha languages, which show a strange irregularity in their repetitive morphology.

In general, reduplicative processes, including echo-formations, can be used for both word derivation and composition. In this paper, I use the term echo-word only to refer to word composition; that is, if the reduplicated expressions consist of two phonological words, I consider them as echo-words.

Another condition is that the echoed words must obtain a similar semantic extension. Echo-words give nouns an additional meaning of ‘and/or the like’, or they genericise the entity indicated by the nouns; the Urdu echo-word example illustrated in the former section, *pa:ni: wa:ni:*, means either ‘water and the like’ or ‘generic water’, depending on the context. See (1) for a nominal echo-word example from Burushaski:

- (1) *yamú mamú*¹⁾ ‘ice and/or the like’ < *yamú* ‘ice’

Echo-formation is applied to other parts of speech too, as well as phrases and sentences. See the following examples from the Hunza dialect of the Burushaski language; (2) is for adjectival echo-words and (3) for echo-sentences:

- (2) *aeaáto kuaáto* ‘very weak’ < *aeaáto* ‘weak’
 (3) *ámular níteá:?* *gómular níteá:?* ‘Where are you going?’ < *ámular níteá:?* ‘id.’

Although acknowledging this rich productivity, I will confine myself to examine nominal echo-words, in this study, because the additional meanings of non-nominal echo-formation are sometimes too subtle to differentiate and frequently so similar that they cannot be distinguished from other reduplications. Compare example (2)

with the following examples from Hunza Burushaski (4) and Ishkoman Khowar (5), which are not echo-words, but complete reduplications.

- (4) *buʈ buʈ* ‘very much’ < *buʈ* ‘much’
 (5) *nas nas ko:rik* ‘to smash’ < *nas* ‘fragment’ + *ko:rik* ‘to do’

In comparison, nominal echo-formation commonly results in the same meaning. Even if the language uses more than one reduplicative morphology, the other formation(s) cannot result in the same meaning as the echo one. In other words, a clear division of function can be observed between echo-formation and the other(s).

Since echo-words have been very simply described as ‘partial reduplication of words’, it must be noted that there are several similar expressions that consist of two words, both of which are semantically full-fledged lexical items, which have somewhat similar forms without actually being echo-words. For example, the following expressions from Urdu (6) and Hunza Burushaski (7) appear to be echo-words, but they are not:

- (6) *duk^h suk^h* ‘the sweet and bitter’ < *duk^h* ‘pain’ + *suk^h* ‘ease’
 (7) *iti k^hiti* ‘to and fro’ < *iti* ‘that way’ + *k^hiti* ‘this way’

There are also some onomatopoeic expressions that have no base word, for example, (8) from Hunza Burushaski:

- (8) *tit tat* ‘<grinding sound>’ (especially arising from intercourse)

Usually, echo-words are created on the spur of the moment and used in the daily conversation. Therefore, while various echo-words have acquired fixed forms over time, there are also some rules for forming new echo-words, which might even concern loan-words, proper names, and trade names. Because echo-formation depends on the savoir-faire of each speaker, some are good at producing echo-words, while others may be very poor.

3 Previous Studies

In the preceding section, I provided the simplest definition of echo-formation. Now I introduce some more detailed studies about the topic at hand.

The term ‘echo word’ in South Asian languages has gained publicity through the work of Chatterji and Emeneau, which I examine in 3.1 and 3.2. In 3.3, I examine a study on a language called Marathi published in the 1960s. In 3.4 and 3.5, I refer to Abbi’s definition, which is frequently cited in recent studies concerning echo-words or echo-formation.

In 3.6, I introduce Yip's theory of identity avoidance. In 3.7, I review one of Khan's studies based on Yip's theory, in which he presents a language typology according to whether or not a language avoids similarity between the base and reduplicant in echo-formation.

3.1 Chatterji's (1926) Definition

Chatterji (1926) points out the similarities between Indo-Aryan and Dravidian languages, one of which is the presence of echo-words.

In his study, he defines echo-words formally and semantically: 'A word is repeated *partially* (partially in the sense that a new syllable, the nature of which is generally fixed, is substituted for the initial one of the word in question, and the new word so formed, unmeaning by itself, echoes the sense and sound of the original word), and in this way the idea of *et cetera*, and things similar to or associated with that, is expressed' (Chatterji 1926: 176).

3.2 Emeneau's Studies in 1938

Emeneau advocates the distinctiveness of the Indian subcontinent linguistic area after 1956, stating that echo-formations are commonly found in Indian languages.

Before arriving at this conclusion, he wrote two papers in 1938 on echo-words and echo-formations in Dravidian.

Emeneau (1938b) explains that the echo-formation in Toda is schematised as 'CVX > 'CVX-, ki-X' and 'CV:X > 'CV:X-, ki:-X'. The echo-words have two accents, while the suffixes are unaccented, so these formations are not affixational, but are like compounds, for example, when a plural suffix is attached to *uɪ* 'buffalo', it will become '*uɪ.ɪ:m* 'buffaloes' with an accent, but its echo-formation '*uɪ.xiɪ* has two accents. Emeneau also mentions that the function of echo-formation is 'to denote a specimen which the speaker does not care to identify from among a hypothesized collection of identical discrete entities of infinite number or from a hypothesized infinite extension of a non-discrete handleable entity' (1938a: 554).

3.3 Apte's (1968) Definition of Echo-Formation with Regard to Marathi

Apte (1968) considered the requirements for echo-words or echo-formation and applied them to the Marathi language (an Indic language in Maharashtra, West India).

He defines the echo-formation in Marathi formally and semantically as 'a process in which a stem [*sic*] or a radical element, if any, is partially reduplicated following certain fixed patterns; such reduplication together with the stem forming words, which have in addition to the meaning of the stem or radical element, one of the meaning of 1) generally, 2) generality without reference to anything specific, and 3) "thing, manner, quality, or action of similar nature" as that of the stem' (Apte 1968: 22).

3.4 Abbi's (1980) Quintet of Repetitive Forms

With respect to Hindi (an Indic language in North India), Abbi (1980: 6–9) proposes five types of repetitive forms, including ‘Echo Words’, as follows:

- (i) *Complete Reduplication*: The phenomenon when a single word or clause is repeated once in the same sentence without any phonological or morphological variations.
- (ii) *Partial Reduplication*: A paired construction in which the second word is not an exact repetition of the first, but has some similarity or relationship to it on either a semantic or a phonetic level.
- (iii) *Echo Words*: A situation wherein the second word in the paired construction does not have any meaning of its own.
- (iv) *Mimic Words*: Situations where there is a complete reduplication, but both morphemes are onomatopoeic.
- (v) *Reduplication with an Infix*: When two repeated words have an infix between them that changes the phonological shape of the first morpheme.

Her definition conflates the formal and semantic criteria. Formally, (i) and (iv) exhibit complete repetition, while (ii), (iii), and (v) exhibit partial repetition. More precisely, although the members of (v) seem like repetitive forms, they contain not only reduplicated forms but also a meaningful morpheme. I present her categories, excepting (v), in Table 1 below.

Table 1 Classification of types with two variables

	Semantic	Meaningful reduplicant	Meaningless reduplicant
Formal			
Complete repetition		(i)	(iv)
Partial repetition		(ii)	(iii)

3.5 Abbi's (1991, 1994) Definition

Abbi defines echo-formation as a kind of lexical reduplication: ‘An echo word has been defined as a partially repeated form of the base word, partially in the sense that either the initial phoneme (which can be either a consonant or a vowel) or the syllable of the base is replaced by another phoneme or another syllable. The *replacer* (phoneme/syllable) sound sequences are more or less fixed and rigid’ (Abbi 1991: 20). She also addresses the meaning of the echo-word: ‘The echo word has neither any individual occurrence nor any meaning of its own in the language. It acquires the status of meaningful element only after it is attached to a “word”’ (Abbi 1991: 20).

Regarding the function/meaning of echo-formations in Indian languages, she concludes: ‘The semantic role of the echo words has also been investigated and most of the scholars maintain that an echo word, being meaningless by itself,

echoes the sense of the word in question. That is to say, it conveys the sense of “etc.” and “things similar to” or “associated with that”, etc. [...] [Echo-formations] might derive the phonetic shape from the word they are added to but they provide a semantic extension in each language. For instance, in Hindi echo formations widen the range of the word x by x^n and normally represent the concept of “... and the like” (Abbi 1991: 20). She adds: ‘[Echo-formations] manifest generality, casualness, nonspecificity, extremities, and group identity. Echo formations, in nominal category, are also used to create sets of entities with similar functions’ (Abbi 1994: 33). It is noteworthy that she mentions the functions of complete repetitive formation (or complete word reduplication) in a different way from echo-formation, namely: ‘Semantically, the basic meaning of the non-reduplicated word is retained in the class maintaining RS [reduplicated structure]. For instance, Santhali verbs *jom* ‘to eat’ > *jom jom* ‘to eat repetitively’ are both instances of the same verb class and with the same kernel semanteme’ (Abbi 1991: 26). She simplifies the functions of complete repetitions in South Asian languages into four categories: ‘Distributive’, ‘Emphasis (abstracts)’, ‘Exclusive’, and ‘Time (discrete)’ (Abbi 1991: 90–92). These features cannot be seen in descriptions of echo-formations.

3.6 Yip’s (1998) Definition

Yip (1998: 5) defines the echo-word, which is a case of avoidance of identity in morphology, as ‘reduplication accompanied by a small change such that the two halves are not quite identical’.

She regards echo-words as resulting from the tension between two constraints, one requiring repetition (reduplication) and one banning it (the Obligatory Contour Principle). Therefore, the echo-formations of each language show a tendency to reduplicate the base word with *fixed segmental material(s)*.

3.7 Five Language Types Illustrated by Khan (2006)

Khan (2006) illustrates four ways in which languages can avoid pronouncing a reduplicant that is homophonous to a base. He places languages in five corresponding categories:

- A Allowing base-reduplicant homophony
- B Maintaining a paradigmatic gap
- C Using an established backup fixed segment
- D Choosing the best candidate from an established set of fixed segments
- E Choosing from a large and possibly undefined set of backup fixed segments

According to the formal definitions of previous studies, echo-words must avoid homophonous base-reduplicant pairs (by following methods B–E). This is why most researchers do not use the term ‘echo’ for so-called echo-words or echo-formations,

instead preferring the term *fixed-segment reduplication*.

3.8 Unification of the Studies

My terminology for echo-formation illustrated in Figure 1 parallels example (1):

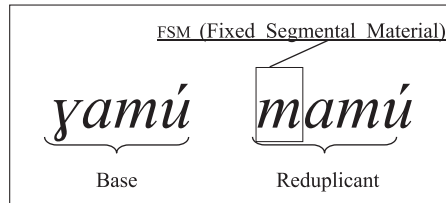


Figure 1 Terminology for echo-formation

I have unified the ideas regarding nominal echo-formation discussed so far by the above-mentioned researchers, as in (9):

- (9) The characteristics of nominal echo-formations
- Morphophonologically:
 The base word is followed by a reduplicated form and is thus partially replaced or padded out with a fixed segmental material.
- Functionally:
 The base meaning is extended by adding the meaning ‘and/or the like’.

While the function of echo-formation, even nominal, is actually quite complicated if we consider all the relevant languages in the world, I treat it as simply as I state in (9) and will not discuss it in depth in this paper because there is not much diversity in the functions of echo-formation in my target languages. Detailed functional discussion on echo-formation in northern Pakistan will be made in another paper.

4 Research Methodology

In this paper, I have presented other researchers’ definitions of echo-words and will now present the data collected through my own fieldwork.

I asked consultants about echo-formation via elicitation, i.e. the question-answer method. I provided them with several simple words and they told me their echo-words. Using this method, it is necessary to begin by illustrating some examples of echo-words, for which I mostly used Urdu, and sometimes Hunza Burushaski.

5 Data & Considerations

I will present the data on the echo-words of all the target languages, ordered from east to west. The related dialects are mentioned in the subsection of each language.

5.1 Burushaski

Burushaski speakers generally use the *m* sound in the reduplicant of echo-words. Sometimes, they may employ *ε* or certain other consonants. The *ε*-echo is especially used for labial sounds. The usage of this secondary candidate *ε* seems to be just a tendency, and not a rule. Table 2 presents a contrast between two examples of echo-words with *p^h* initial base words *p^hé̄sɔ* and *p^hó̄tɔ*. On the following tables, I show the meaning of base forms in the ‘Meaning’ column. Every echo-word has the meaning such as ‘and/or the like’ with the shown base meaning.

Table 2 Echo-words in Hunza Burushaski

Base	Reduplicant	Meaning
<i>t^hil</i>	<i>mil</i>	‘water’
<i>εapik</i>	<i>maik</i>	‘food (in particular chappati)’
<i>trap</i>	<i>map</i>	‘handshake’
<i>urk</i>	<i>murk</i>	‘wolf’
<i>p^hé̄sɔ</i>	<i>mé̄sɔ</i>	‘pear’
<i>p^hó̄tɔ</i>	<i>εó̄tɔ</i>	‘photo’
<i>bé̄pauy</i>	<i>εé̄pauy</i>	‘yak’
<i>makái</i>	<i>εakái</i>	‘corn’
<i>salá:m</i>	<i>kalá:m</i>	‘greeting’

The last example, *salá:m kalá:m* ‘greeting and the like’, employs a different FSM *k*-. This word is borrowed from another language, and so the rules for its echo-formation may not be the same as those for native words. Of course, this does not mean that all loan-words are echoed differently from Burushaski words. Such cases are sometimes observed in the other languages I present here; see the last example of Domaaki echo-formations in the next section.

The echo-formations in the dialects of Burushaski do not vary significantly, but through my brief research, I noticed that the consultants were not always in agreement about the echo-forms made from inalienable nouns, that is, those always joined by a personal prefix. Table 3 shows the difference between the forms constructed by two consultants, one from Hunza and one from Yasin.

Table 3 Echo-words from an inalienable noun in Burushaski

Hunza (E.K.)		Meaning	Yasin (A.A.)	
Base	Reduplicant		Base	Reduplicant
<i>arí:ŋ</i>	<i>ɛarí:ŋ</i>	‘my hand’	<i>arén</i>	<i>marén</i>
<i>guri:ŋ</i>	<i>ɛuri:ŋ</i>	‘thy hand’	<i>gurén</i>	<i>murén</i>
<i>iri:ŋ</i>	<i>ɛiri:ŋ</i>	‘his/its hand’	<i>irén</i>	<i>mirén</i>
<i>muri:ŋ</i>	<i>ɛuri:ŋ</i>	‘her hand’	<i>murén</i>	<i>ɛurén</i>
<i>miri:ŋ</i>	<i>ɛiri:ŋ</i>	‘our hand’	<i>mirén</i>	<i>ɛirén</i>
<i>marí:ŋ</i>	<i>ɛarí:ŋ</i>	‘your hand’	<i>marén</i>	<i>ɛarén</i>
<i>urí:ŋ</i>	<i>ɛuri:ŋ</i>	‘their hand’	<i>urén</i>	<i>murén</i>

E. Karim, a consultant for Hunza Burushaski, told me that the echo-forms from inalienable nouns are always made with the *ɛ* sound because there are a few base forms with the *m* initial sound. Therefore, if they use the general *m* sound for inalienable nouns, the echo-forms conflict with the base words. A. Ali from Yasin, on the other hand, made the echo-forms from inalienable nouns as usual; in other words, he constructs echo-forms with *ɛ* only for the base forms with an initial *m* and uses *m* for the others. Therefore, the echo-forms of both second person singular and third person plural are formally identical with the base form of the third person female singular *murén*.

5.2 Domaaki

The echo-formation in Domaaki primarily uses the *m* sound in the reduplicant and secondarily employs the *ɛ* sound only if the initial consonant of the base word is *m*, as shown in Table 4 below:

Table 4 Echo-words in Domaaki

Base	Reduplicant	Meaning
<i>pa.ní</i>	<i>ma.ní</i>	‘water’
<i>bras</i>	<i>mas</i>	‘rice’
<i>boʃ</i>	<i>moʃ</i>	‘stone’
<i>ʃiná:</i>	<i>miná:</i>	‘Shina’
<i>mo</i>	<i>ɛo</i>	‘wine’
<i>mo:s</i>	<i>ɛo:s</i>	‘meat’
<i>maw</i>	<i>ɛaw</i>	‘fat’
<i>aráq</i>	<i>taráq</i>	‘liquor’

Again, the last item in Table 4, *aráq taráq* ‘liquor and the like’, uses the uncommon FSM *t-*, which can be interpreted as an irregular case of loan-word echo-formation.

5.3 Shina

Unlike Domaaki, Shina primarily uses *ε* and secondarily *m* for echo-formation. When the initial sound of the base word is either *ɟ* or *ε*, *m* appears at the beginning of the reduplicant. These are the only cases I found in my brief research. See Table 5 for Shina echo-words:

Table 5 Echo-words in Shina

Base	Reduplicant	Meaning
<i>te^húme</i>	<i>éúme</i>	‘fish’
<i>wéi</i>	<i>ééi</i>	‘water’
<i>bríu</i>	<i>éíu</i>	‘rice’
<i>urdú:</i>	<i>eurdú:</i>	‘Urdu’
<i>sin</i>	<i>éin</i>	‘river’
<i>ɟinaá</i>	<i>mínaá</i>	‘Shina’
<i>εic</i>	<i>mie</i>	‘head’
<i>εu</i>	<i>mu</i>	‘dog’

5.4 Khowar

Every Khowar consultant from the Ishkoman and Yasin valley in the Ghizer District and the Kalash valley in Chitral District makes echo-words using the *m* sound, as in Domaaki. See Table 6:

Table 6 Echo-words in Khowar

Base	Reduplicant	Meaning
<i>partfám</i>	<i>marfám</i>	‘woman’s hair’
<i>praf</i>	<i>maf</i>	‘rib’
<i>dont</i>	<i>mont</i>	‘tooth’
<i>u:x</i>	<i>mu:x</i>	‘water’

Unlike Domaaki, no other sound is used for echo-formation on *m*-initial base words in Khowar. This is illustrated through examples in Table 7:

Table 7 Seemingly complete repetitive forms with the initial *m* in Khowar

Base	Reduplicant	Meaning
<i>madiá:n</i>	<i>madiá:n</i>	‘mare’
<i>mayá:s</i>	<i>mayá:s</i>	‘fly’
<i>me:wá</i>	<i>me:wá</i>	‘fruit’
<i>mark^hán</i>	<i>mark^hán</i>	‘fog’

Even in these cases, they use the *m* sound in the initial position of the reduplicants.

Therefore, these forms cannot be considered echo-words as they have been defined in the previous studies. The forms in Table 7, however, show and are used for the typical function of the echo-word, i.e. they add the nuance ‘and/or the like’.

5.5 Kalasha

In Kalasha, as in Khowar, echo-formation is always made with the *m* echo-sound. Table 8 shows echo-words in Kalasha:

Table 8 Echo-words in Kalasha

Base	Reduplicant	Meaning
<i>p^huʃák</i>	<i>muʃák</i>	‘cat’
<i>du:r</i>	<i>mu:r</i>	‘house’
<i>á-ŋgu:</i>	<i>má-ŋgu:</i>	‘finger’
<i>istríza</i>	<i>mistríza</i>	‘woman’

The *m*-initial base words seem similar to Khowar; that is, speakers make complete repetitive forms from them to express the functions of typical echo-words. Compare the examples in Table 9 with those from Khowar in Table 7:

Table 9 Seemingly complete repetitive forms with the initial *m* in Kalasha

Base	Reduplicant	Meaning
<i>mof</i>	<i>mof</i>	‘man’
<i>mats^hi</i>	<i>mats^hi</i>	‘fish’
<i>moʃér</i>	<i>moʃér</i>	‘car’
<i>magazík</i>	<i>magazík</i>	‘fly’

There is more on these (formally) complete repetitive forms in the next section.

6 Discussion

Based on the results presented in 5.4 and 5.5, the expressions for echo-formational meanings in Khowar and Kalasha can be summarised as in Table 10:

Table 10 Complementary distribution in Khowar and Kalasha

Formation type with the echo-formational meaning	Initial sound of a base word	
	Not <i>m</i>	<i>m</i>
Echo-formation	✓	–
Complete repetitive	–	✓

In other words, these are Type A languages, according to Khan (2006) in 3.7. The remaining three languages studied in this paper, Burushaski, Domaaki, and Shina, are overall Type C languages. Of course, there are a few exceptions, such as *salá:m kalá:m* ‘greetings and such’ in Burushaski, *aráq taráq* ‘liquor and such’ in Domaaki, etc. Therefore, I conclude that there are at least two language types in northern Pakistan with respect to echo-formation. So far, Khan (2006) and many other papers have not mentioned any language belonging to Type A except the Western Bengali dialect, but I wish to add two more languages to this category: Khowar and Kalasha.

In addition, the three Type C languages can be classified into two subtypes based on their range of avoidance. Burushaski and Shina, on the one hand, show not only identity avoidance but also similarity avoidance. On the other hand, my fieldwork shows that Domaaki exhibits avoidance of identity between the base and reduplicant of echo-words, but does not exhibit avoidance of similarity like Burushaski, even though these languages commonly use the *m* sound for the primary fixed segmental material. Compare *boṭ moṭ* ‘stone and such’ as an unavoided echo-word in Domaaki with *bépaṭ épaṭ* ‘yak and such’ as an avoided one (**bépaṭ mépaṭ*) in Burushaski.

The ranges of avoidance differ among languages, dialects, and even idiolects. Burushaski, in which the primary FSM is *m*, has a tendency to include all the bilabial stop consonants, *p*, *pʰ*, *b*, and *m*, in the trigger of the secondary FSM *ε*, while Shina, in which the primary FSM is *ε*, excludes the sibilant sound *s* from being a trigger of *m* even though both of the remaining sibilants, *ε* and *ʒ*, behave equally (as hushing sounds). Further, E.K., a Hunza Burushaski consultant, illustrated that the inalienable or personal-prefixed noun must echo with the secondary FSM *ε* even if the initial sound of the base word is neither identical nor similar to the primary FSM *m* in order to avoid other person-number forms. Another Hunza Burushaski consultant, M.B., did not make echo-forms from the inalienable noun at all. He explained that the echo-forms from these words would be semantically ungrammatical. He (Hunza) and A.X. (Nager) could make fewer echo-words from the inalienable noun than E.K. (Hunza) and A.A. (Yasin).

Table 11 below shows features of the nominal echo-formations in these languages.

Table 11 Simplified classification with language types

LT	Name	FSM(s)	Avoidance type
C	Domaaki	<i>m/ε</i>	identity
	Burushaski	<i>m/ε</i>	similarity
	Shina	<i>ε/m</i>	similarity
A	Khowar	<i>m</i>	none
	Kalasha	<i>m</i>	none

7 Conclusion and Possible Solutions

Considering the above discussion, I summarize the characteristics of the nominal echo-formations in northern Pakistan as in (10):

- (10) The characteristics of the echo-formations in northern Pakistan:
- i. *m*- and *ε*- are the universally preferred ^{FSM}s.
 - ii. The languages are Type C or A, locating from east to west.
 - iii. Among Type C languages, there are two subtypes: those with identity avoidance and those with similarity avoidance.
 - iv. In Type A languages, there appear complete repetitive forms with the echo-formational function.

Researchers of identity- and similarity-avoidance usually use terms like fixed segment reduplication instead of ‘echo-formation’. Regarded formally, forms like *madiá:n madiá:n* ‘mare and/or such’ in Khowar, *mof mof* ‘man and/or such’ in Kalasha, etc., are not considered echo-words. However, semantically speaking, these forms are extremely similar to echo-words; in Khowar and Kalasha, there is no distinction between these failed echo-words and genuine echo-words (cf. *parfám marfám* ‘woman’s hair and/or such’ in Khowar). Unlike echo-formation, the function of complete reduplication is distributivisation and its usage is limited to numerals and some nouns, for example, *dzu dzu* ‘each two’ of *dzu* ‘two’ and *nabát nabát-a* ‘in turns, turn by turn’ of *nabát* ‘turn’ (with the locative case marker *-a*).

I wish to make special mention of item (10)-iv. The forms described in (10)-iv seem like complete repetitions at first sight, but are completely equal to echo-words in function. In addition, these idiosyncratic complete repetitive forms show a complementary distribution with echo-words, as illustrated in Table 10 (§6). I advocate two possible solutions for this problem below.

Solution 1: Assuming two kinds of *m* sounds

The problem emerges because the Khowar and Kalasha languages do not avoid identity between the base and the reduplicant. However, if we think more carefully, we can consider the complete repetitive forms as being in fact echoed with the only ^{FSM} *m*- in these languages. That is, representing the ^{FSM} with ***m***, the repetitive forms can be interpreted as having changed the form of the bases, as indicated in (11):

- (11) Echo-formation that appears to be a complete repetition in Khowar
madiá:n ^{FSM}***m****adiá:n* ‘mare and the like’ < *madiá:n* ‘mare’

If this is the case, the complete repetitions conform to (9) both in terms of function and morphology. However, this solution requires the somewhat forced interpreta-

tion that the *m*'s are in fact different.

Solution 2: Revision of the definition

Another solution is to revise the definition of echo-formation.

Taking into account the prior studies about echo-words, especially in Indian languages, the term 'echo-word' appears to have a functional meaning on top of a formal one. Simply put, it refers to expressions that have both a partial repetitive form and a meaning like 'X and such', 'generic X', etc. Cross-linguistically, fixed segment reduplications sometimes allow base-reduplicant homophony, as in Western Bengali dialects. This means that the fixed segment reduplications can vary. Meanwhile, the semantic function of the echo-word in Indian languages seems rather rigid. I therefore believe that the formal and semantic definitions of the echo-word, at least in the Indian subcontinent, do not have equal weight, i.e. the semantic function is more important than the formational morphology.

Hence, I suggest that the substance of echo-words as an areal feature in the Indian subcontinent consists mainly of the function, as in (9)'. Having said that, I believe that a formal limitation is still needed to restrict the use of the term.

(9)' The definition of nominal echo-formations

Morphophonologically:

The base word is followed by a reduplicated form (including ones being partially replaced or padded out with a fixed segmental material).

Functionally:

The base meaning is extended by adding the meaning 'and/or the like'.

With these modifications, even the forms in Tables 7 and 9 would be considered 'echo-forms'.

Appendix

Below, I list the main consultants for each language and some information about the fieldwork. The information consists of each language or dialect's name, the consultant's name, the consultant's birth year, birthplace (valley, district), followed by the date of research on echo-formation, and the intermediate language.

Burushaski (Hunza):

➤ Essa Karim, 1976, Aminabad (Hunza, Gilgit), 24–30 AUG 2005, Urdu

➤ Musa Beg, 1979, Ganesh (Hunza, Gilgit), 18 OCT–10 NOV 2008, Urdu

◆ Ali Ahmad Jan, 1984, Mominabad (Hunza, Gilgit), 7–8 AUG 2014, Hunza Burushaski

Burushaski (Nager):

- Ainur Khayat, 1973, Hoppar (Nager, Gilgit), 9–11 OCT 2008, Urdu
Burushaski (Yasin):
- Arshad Ali, 1989, Ghojalti (Yasin, Ghizer), 1–3 SEP 2007, Urdu
Domaaki (Hunza):
- Ali Ahmad Jan [q.v. Burushaski (Hunza)]
Shina (Gilgit):
- ◆ Sherbaz Khan, 1982, Ganesh (Hunza, Gilgit), 22–27 AUG 2005, Urdu
- Masood Rehman, 1968, Amphary (Ghizer, Gilgit), 10–11 SEP 2015, Urdu
Khovar (Ishkoman):
- S. Ghulam Nabi Wafa, 1968, Chatorkhand (Ishkoman, Ghizer), 7–9 NOV 2008, Urdu
Khovar (Yasin):
- Sharif ul-Lah Khan, 1980, Ghojalti (Yasin, Ghizer), 2–4 SEP 2007, Urdu
Khovar (Chitral):
- ◆ Yasir Arafat, 1979, Balanguru (Rumbur, Chitral), 27 OCT–2 NOV 2008, Urdu
Kalasha (Rumbur):
- Yasir Arafat [q.v. Khovar (Chitral)]
 - indicates consultants of their first languages
 - ◆ indicates consultants of their second languages

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Notes

- 1) I represent the words from each language using the International Phonetic Alphabet. An acute accent symbol (´) over vowels means a high pitch accent. In all the languages in this paper, every monosyllabic word has an accent on the vowel.

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1938b Echo Words in Toda. *New Indian Antiquary* 1: 109–117.

Khan, Sameer ud Dowla

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Yip, Moira

1998 Identity Avoidance in Phonology and Morphology. In S. LaPointe, D. Brentari, and P. Farrell (eds.) *Morphology and its Relation to Phonology and Syntax*, pp. 216–246. Stanford: CSLI Publications.