

ECHO-FORMATION IN GTA?

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Gta?, also known as Diḍeyi, is a South Munda language spoken by some 3,000 people living in the district of Koraput in Orissa. A characteristic feature of this language is the use of echo-words, particularly in the speech of women.¹ This paper gives an analysis of one class of Gta? echo-words, namely those phonologically derivable from their base words, and offers a set of rules governing their formation. Also discussed are the function of the various types of echo-words on the semantic level, their grammatical position, and their relationships in neighbouring languages.

Rules of Formation

Rule 1. Echo-words are formed by changing only the vowels of the base word.

Rule 2. The echo-word must differ from the base word. The vowel of univocalic base words is reflected as either /a/ or /i/ in the echo-word. For base-word /u, e, o/ the vowel /a/ is preferred, while for base-word /ε/ the vowel /i/ is preferred.

Rule 3. The vowels of disyllabic base words are reflected in the echo-word as follows:

- a. Both vowels are reflected as either /a/ or /i/; or
- b. Only one of the base-word vowels is reflected as /a/ or /i/ while the other is reflected unchanged; or
- c. The first vowel (V¹) changes to /u/ while the second (V²) changes to /a/.

Rule 4. In the case of trisyllabic base words, one, two or all three of the vowels (in adjacent

llables) are reflected as either /a/ or /i/.

Rule 5. The echo-forms of compound words, respective of their vocalic structure, are derived follows:

- a. In the case of compound verbs consisting of two verb stems, one or both stems undergo change, depending on their relationship with each other;
- b. Nominal combining forms occurring with verb stems change independently; those attached to noun stems change only at par with the main stem.
- c. In verbal constructions incorporating a prefix, both the prefix and the stem change as a unit.

Notes on the Rules

Rule 1.

In only one case, kuma-cuma, do we find at the echo-form cuma is apparently derived from ma 'to bathe' by change of consonant. Here, however, cuma is to be treated as a tag-word rather than a phonologically derived echo-word.

Rule 2.

Diphthongs are reduced as follows: /ua/ > /i/, /ue/ > /i/ or /a/, /ui/ > /a/, /ia/ > /i/, /e/ > /a/. Examples:

a > i	gna?	'basket'	> gni?
	miã	'blood'	> miĩ
	nswa	'spade'	> nsi
i > a	mni	'name'	> mna
	gsi	'louse'	> gsa
u > a/i	gsu?	'dog'	> gsa? / gsi?
	gbug	'pig'	> gbag / gbig
e > a/i	sle	'work'	> sla / sli
	bcwe?	'tama-rind'	> bca? / bci?
	luen	'road'	> lan / lin
o > a/i	tbo?	'earth'	> tba? / tbi?
	mmon	'uncle'	> mman / mmiŋ

$\epsilon > i$ gseŋ 'chick- > gsiŋ / (gsaŋ)
 en'
 ghe? 'rope' > ghi?

Rule 3.

By this rule, disyllabic base words may correspond to as many as seven different types of echo-words: (1) CaCa, (2) CiCi, (3) CVCa, (4) CVCi, (5) CaCV, (6) CiCV, and (7) CuCa. These types are illustrated by the twenty-five examples in the following table.

As is shown in the table, all possible echo-forms are permitted under classes 1, 2, and 5; under classes 3, 4, 6, and 7, on the other hand, there are restrictions with regard to some forms. In these excluded cases the quality and sequence of vowels in the base word do not allow the expected alternation for the formation of echo-words of a given pattern. A statement giving the phonological background of these restrictions follows (the symbol \times = "does not become").

- Class 3: (a) V^2 high \times /a/ when V^1 is /i/ (cf. items 1 and 2).
 (b) V^2 high front \times /a/ when V^1 is mid (cf. 11 and 16).
 (c) Vowel harmony blocks change (cf. 13, 14, 18, 19).
- Class 4: (a) V^2 \times /i/ when V^1 is /a/ (cf. 22, 23, 24, 25).
 (b) V^2 u \times /i/ when V^1 is back (cf. 7, 17).
 (c) V^2 e \times /i/ when V^1 is /o/ (cf. 18).
- Class 6: (a) Vowel harmony blocks change (cf. 7, 13, 14, 18, 19).
 (b) V^1 mid \times /i/ except when it is back and V^2 is low (cf. 12, 13, 14, 15, 17, 18, 19).
 (c) V^1 u \times /i/ when V^2 is front mid (cf. 8)

- ass 7: (a) V^1 a x /u/ when V^2 is back of (cf. 22, 24).
 (b) V^1 i x /u/ except when V^2 is back of (cf. 1, 3, 5).
 (c) V^1 mid x /u/ except when V^2 is /u/ (cf. 11, 13, 14, 15, 16, 18, 19, 20).

Rule 4.

By this rule, echo-words corresponding to disyllabic base words fall into twelve types:
 (1) CaCaCa, (2) CiCiCi, (3) CaCaCV, (4) CiCiCV,
 (5) CVCaCa, (6) CVCiCi, (7) CaCVCV, (8) CiCVCV,
 (9) CVCaCV, (10) CVCiCV, (11) CVCVCa, and (12) CVCVCi.
 Since there are not a great many trisyllabic words in the language, these types may be illustrated with a few examples. The restricted cases (marked as -) show the same phonological conditions as in the case of disyllabic words.

Rule 5.

Morphology and semantics also play a considerable role in the echo-formation of compound words. While the same phonological rules govern the derivational process in these cases, application of these rules is directed to each component rather than to the whole compound. Hence compound base words sometimes have partial echo-words.

a. Verb stems compounded together show two types of relationship to one another:
 (1) the two stems may be main verbs occurring in sequence, or (2) one stem may be a main verb while the other is a subsidiary employed for some modification of the meaning. In echo-formations from compounds of the first type both verb stems may change independently; in those from compounds of the second type the main verb alone can have an echo-form, the subsidiary verb not changing independently of the other member. Examples (following page).

		1	2	3	4	5	6	
	CVCV	CaCa	CiCi	CVCa	CVCi	CaCV	CiCV	Cu
1.	cili	+	bw	-	bw	+	bw	
2.	cimur	+	+	-	=2	+	bw	
3.	ngire	+	+	+	=2	+	bw	
4.	kiton	+	+	+	=2	+	bw	
5.	diran	+	+	bw	=2	=1	bw	
6.	uli	+	+	+	bw	+	=2	
7.	kuru	+	+	+	-	+	-	
8.	kuṛe?	+	+	+	+	+	-	
9.	kupro	+	+	+	+	+	+	
10.	kuka	+	+	bw	+	=1	+	b
11.	meriṇ	+	+	-	bw	+	=2	
12.	kesu	+	+	+	+	+	-	
13.	gendre	+	+	-	+	+	-	
14.	seṛo	+	+	-	+	+	-	
15.	sela	+	+	bw	+	=1	-	
16.	horli?	+	+	-	bw	+	=2	
17.	tōkur	+	+	+	-	+	-	

	CVCV	CaCa	CiCi	CVCa	CVCi	CaCV	CiCV
18.	bole	+	+	-	-	+	-
19.	tohō	+	+	-	+	+	-
20.	konḍa	+	+	bw	+	=1	+
21.	sarī	+	+	=1	bw	bw	=2
22.	paʔḍu	+	+	=1	-	bw	+
23.	harke	+	+	=1	-	bw	+
24.	haʔḍo	+	+	=1	-	bw	+
25.	bala	bw	+	bw	-	bw	+

* Note the following abbreviations: bw = base word; + = in use; - = not in use
 = = same as.

No.	Base-word	Meaning	1	2	3	4	5	6	7	8	9	10	11	12
1.	aratra	up	=bw	+	=bw	+	=bw	-	=bw	+	=bw	-	=bw	-
2.	palasi	priest	+	+	=bw	=2	=1	-	=1	+	=3	=6	=1	=bw
3.	ngomare	scorpion	+	+	+	+	+	+	=3	+	=bw	+	=5	-
4.	picori	a bat	+	+	+	=2	+	=2	+	=bw	+	=2	-	=bw
5.	mosali	crocodile	+	+	+	=2	+	+	=3	+	=bw	=6	=5	=bw
6.	sewari	free drink	+	+	+	=2	+	+	=3	-	=bw	=6	=5	=bw
7.	onoro	rope-hanger	+	+	+	+	-	+	+	-	+	-	-	+

Type 1: gu?-teg 'to pull and break' >

gu?-tag, gu?-tīg, ga?-tag, ga?-tīg,
gī?-tag, gī?-tīg, ga?-teg, gī?-teg.

ha?-pia? 'to bite and tear' >

ha?-pī?, hī?-pī?, hī?-pia?.

jog-tlak 'to pick up and throw' >

jog-tlik, jag-tlak, jīg-tlik, jīg-tlak.

Type 2: gwe?-we 'to die away' >

ga?-we, gwe?-ga?-we.

ria-bī? 'to heat water to give' >

rī-bī?, rīa-rī-bī?.

raṇ-wig 'to bring home' >

raṇ-wag, rīṇ-wig, raṇ-rīṇ-wig.

b. Nouns in Gta? ordinarily have two forms, one a free full form, the other a bound short form. These latter occur only when the noun is compounded with some other stem for derivational purposes, and are hence labeled "combining forms".² Combining forms occurring with verb stems can be echoed independently of the verb stems; those occurring with noun stems either remain intact or change at par with the main stems. Examples:

Type 1: sur-cu 'to fry in oil' >

sur-ca, sur-cī, sar-ca, sir-cī, sar-cu.

gag-bo? 'to tie onto the head' >

gag-ba?, gīg-bī?, gag-bī?, gīg-ba?,
gīg-bo?.

tur-tia 'to graze cattle' >

tar-tī, tīr-tī, tar-tīa, tīr-tīa.

Type 2: kula-re 'kinsman' >

kala-re, kīlī-re.

sari-ja 'paddy flower' >

sara-ja, sirī-jī, sirī-ja.

bara-ko 'peacock feather' >

bara-ka, bīrī-kī, bīrī-ko.

ulī-so 'mango wood' >

ala-sa, ilī-sī, ala-so, ilī-so.

huṅ-be 'baby bear' >

haṅ-ba, hīṅ-bī, haṅ-be, hīṅ-be.

c. Inflectional and derivational prefixes--such as the pronominal prefixes /-na-/ 'you (sg.)', /-pa-/ 'you (dual)', /-pe-/ 'you (pl.)', the causative /aʔ-/ , the reciprocal /ho-/ , and the indicator of the plurality of the object, /ma/--change along with the verb stem in its echo-formation. Examples:

pe andī pe-we pa-we la 'Wherever you all go and so forth'.

aʔcoṅ-iʔciṅ 'to feed and the like'.

ho-ṭ(m)ia-hī-ṭ(m)ia 'to collide with each other, and so on'.

me bole cili ma-coṅ mī-ciṅ ce 'He is eating rice and meat together etc.'

Semantic Functions

The *Gtaʔ* echo-word broadly designates thing, manner, quality or action of a general nature in relation to the specific idea of the base word. However, any given base word may have a number of echo-words and each type of echo-form may entail a different shade of meaning, however vague or marginal that may be. From the semantic point of view, the types of echo-forms derivable from one base form can be grouped into four broad categories:

1. a-forms, indicating gross variety;
2. i-forms, indicating diminutive or tender variety;
3. u/a-forms, indicating variety different from a related category;

4. partially changed forms, indicating inferior variety:

- a. a-forms, indicating grossness;
- b. i-forms, indicating tenderness.

While this type of classification on semantic grounds cannot be followed rigidly in all cases, it is nevertheless found to hold good in exemplary cases such as the base word *kiton* 'god'. The *Gta?* pantheon encompasses a number of gods, spirits, and other supernatural beings, all belonging to various classes and subclasses according to their appearance, powers, and activities. In each case the echo-forms of *kiton* indicate the specific class:

katan 'supernatural being with powers equal to those of a *kiton*', for example a benevolent ghost.

kitin 'supernatural being smaller and weaker than a *kiton*', for example a minor deity.

kitan or *katon* 'supernatural being inferior in status to a *kiton*', for example a bad ghost.

kutan 'supernatural being other than a *kiton*', including spirits, ghosts, and the like.

Another example is *kesu* 'wrapper'. This is a piece of thick cloth of a particular size and texture, used to protect the body from cold. Other familiar articles, similar to the *kesu* in form and function, are distinguished from it by echo-forms. Thus:

kasa 'any kind of cloth equivalent to the *kesu* in size and texture'.

kisi 'small or thin piece of cloth'.

kesa or *kasu* 'a large piece of thick cloth, torn and worn out, serving as a *kesu*'.

kesi 'a small piece of thin cloth, torn and worn out, serving as a *kesu*'.

kusa 'any other material usable against cold'.

In the same way the echo-words of bole 'rice' denote other foods:

bala 'foodstuffs capable of constituting a main dish', such as millet gruel.

billi 'snacks' and the like not constituting staple food.

bale 'any type of food not made of grain', as tubers and mango-stones.

It must be noted that, regardless of the difference between a-forms and i-forms on the semantic level, the latter always find first preference in the speech of women. This circumstance only corroborates our classification, since i-forms connote smallness or tenderness, qualities characteristic of women's speech in many cultures.

Tag-words and Repeated Words

Echo-words have nearly the same syntactic functions as tag-words. Semantically, the difference between them is that the latter refer to objects or actions of a nature similar to the base words from which they are derived, whereas the former denote objects or actions of a general nature. Perhaps because echo-words express only vague generality, tag-words are of more frequent occurrence. Thus it is always found that when a question is put with an echo-word the answer is given with a tag-word. In enquiring about the mobility of an invalid, for example, if one asks me olee-iliŋ ke 'Has he started to walk and the like?', the reply is me olee-ḍalia ke 'He has started to walk and wander about'--never me olee-iliŋ ke. Similarly if the question is me bog-bag ke 'Did he beat [someone] or do things like

at?', the reply is *me bog ke* 'He beat...' but not *bog-bag ke*.

Tag-words are generally synonyms, antonyms, correlative terms, or even meaningless ancillaries. In most cases some sort of phonetic similarity can be recognized between them and the base word. A few examples are:

<i>nɔ̃ia?-sua</i>	'water and fire'
<i>koŋɔ̃a-bri</i>	'mountains and forest'
<i>kitɔ̃ŋ-ɔ̃ɔ̃ɔ̃</i>	'gods, etc.'
<i>g-har-g-ta?</i>	'Dom and Dideyi people'
<i>lage-sare</i>	'affliction and relief'
<i>kia-ũhuã?</i>	'paddy and millet'
<i>pa?ɾu-kre</i>	'twigs and the like'
<i>lpo-lcir</i>	'soft, etc.'

In contrast, repeated words have altogether different semantic functions. These words contain the additional connotation of plurality and absolute exclusiveness. Thus *ɔ̃okra ɔ̃okra we ge* 'Only the old persons went', *me cili cili coŋ ke* 'He ate only the meat portion', *me gali gali oɔ̃ɔ̃ŋ ke* 'He wandered on the streets only', *me oɔ̃ɔ̃ŋ oɔ̃ɔ̃ŋ we ke* 'He went on foot only'.

Grammatical Position of Echo-words

Echo-words belong to the same form-class as their base words. When they occur with nouns and verb stems, inflectional affixes are added finally to the compound stem. Examples:

<i>sela</i>	'girl'	>	<i>sela-sili-</i>	'girls, etc.'
			<i>hiŋ</i>	
<i>koŋɔ̃a</i>	'hill'	>	<i>koŋɔ̃a-</i>	'from the hills,
			<i>kaŋɔ̃a-</i>	etc.'
			<i>baŋ</i>	

con	'to eat' >	cōṇ-caṇ-e	'He will eat and the like'.
ko	'to sit' >	ko-ka ce	'after sitting, etc.'

In past-tense constructions echo-words occur only in interrogative sentences. The reason for this restriction seems to be that echo-words indicate a sense of vagueness and uncertainty, whereas past-tense constructions indicate specific actions known to have been performed. For the same reason there can be no imperative construction with echo-words.

Echo-formation in Neighbouring Languages

Gta? echo-formation shows some striking similarities with echo-formation in neighbouring Munda languages such as Remo and Gorum as well as in the Desia dialect of Oriya spoken in the Koraput Munda region. The most conspicuous feature they have in common with Gta? is that echo-words in all three of these languages are also derived from base words by changes in the vowels alone. However, the vowels of base words in Remo, Gorum and Desia do not change in as many alternative ways as they do in Gta?, and a given base word does not seem to have more than one echo-form. The following types of vowel change are to be observed

Remo

- a. All vowels change to either /a/ or /i/;
- b. $v^1 > /u/$, $v^2 > /a/$;
- c. $v^2 > /a/$ or /i/, v^1 remains intact.

These changes are exemplified by the following:³

Type a:

Vowels in the following sequences change to /a/:

e - e	kekep	>	kakap	'kebra' ⁴
i - i	piri?	>	para?	'bird'
u - u	sulup	>	salap	'kotri deer'
e - ɔ	remo	>	rema	'man'
u - ɔ	guso?	>	gasa?	'dog'
i - e	gime?	>	gama?	'goat'

Vowels in the following sequences change

ɔ /i/:

ɔ - ɔ	ɔɾɔŋ	>	iɾiŋ	'kangu grain'
e - a	elam	>	ilim	'cital deer'
a - e	sa?me	>	si?mi	'mandia millet'
u - a	rumag	>	rimig	'biri pulse'

Type b:

e - u	semuk	>	sumak	'tree'
e - ɔ	kerɔŋ	>	kuraŋ	'paddy'

Type c:

v^2 /i, ɔ/ > /a/; v^2 /a/ > /i/ in the

following sequences:

u - i	uli	>	ula	'mango'
i - ɔ	ɖiɔ	>	ɖia	'house'
i - a	kiyaŋ	>	kiyiŋ	'cooked rice'
e - a	selã	>	selĩ	'girl'

Gorum

- All vowels change to either /a/ or /i/;
- v^1 > /u/, v^2 > /i/.

These changes are exemplified by the following:⁵

Type a:

u - i > a - a	uri?d	>	ara?d	'by this way or that'
u - u > i - i	bubu?	>	bibi?	'snake'
i - a > i - i	titaŋ	>	titiŋ	'cooking'
i - e > i - i	i?leŋ	>	i?liŋ	'grandchild'

o - i > i - i	poɾi?-d > piɾi?-d	'bird'
o - e > i - i	orel > iril	'plowing'
a - i > i - i	abyɪr > ibyir	'turning over'
a - u > i - i	taʔbul > tiʔbil	'settling up'
a - e > i - i	aled > ilid	'twisting'
a - a > i - i	araʔ > iriʔ	'stick'

Type b:

i - a > u - i	siraŋ > suriŋ	'foot- soldier'
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Desia

a. The vowel of univocalic verb roots changes as follows:

- (1) /o, u, i, e/ > /a/;
- (2) /a/ > /u/.

b. The vowel of univocalic noun stems having the pattern $C^1V^xC^2$ changes to /u/, and /a/ is added finally to the echo-form.

c. The vowels of disyllabic words change as follows:

- (1) V^1 maintained, V^2 a > /i/;
- (2) V^1 a > /u/, V^2 a > /i/;
- (3) V^1 > /u/, V^2 > /a/.

These changes are exemplified by the following:⁶

Type a:

- | | | | |
|-----|-----|-------|------------|
| (1) | por | > paɾ | 'to burn' |
| | pũk | > pãk | 'to blow' |
| | cir | > car | 'to split' |
| | beɟ | > baɟ | 'to meet' |
| (2) | baj | > buj | 'to fry' |

Type b:

git	> guta	'song'
dud	> duda	'milk'
tel	> tula	'oil'

ḍol	>	ḍula	'drum'
jor	>	jura	'fever'
mac	>	muca	'fish'

Type c:

(1)	pila	>	pili	'child'
	kumḍa	>	kumḍi	'pumpkin'
	meṛa	>	meṛi	'post'
	coṭa	>	coṭi	'lame'
	gorṇḍa	>	gorṇḍi	'rags'
(2)	bana	>	buni	'loincloth'
(3)	sili	>	sula	'wheel'
	celi	>	cula	'goat'
	jōtu	>	jūta	'animal'
	poti	>	puta	'book'
	pani	>	puna	'water'

On the basis of the above, and since it is found at echo-words in most Dravidian and Indo-Aryan languages are derived by changing the consonants of the base word, we may suppose that echo-formation by changing only the vowels of the base is an essentially Munda feature; and more particularly a feature of the Raput Munda languages.

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²See K. Mahapatra and Norman H. Zide, "Gta? Minimal Combining Forms," in *Indian Linguistics*, (1972).3.

³My Remo examples are taken from S. Bhattacharya, *Bonda Dictionary*, Poona, 1968.

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⁴A species of striped cat-like animal.

⁵My Gorum examples are taken from my personal field-notes from Balram Mudli, Semla.

⁶My Desia examples are taken from my own 1970 dissertation on Desia, unpublished.

