

# ALL ABOUT ABLAUT: A TYPOLOGY OF REDUPLICATIVE VOWEL CHANGE

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## Aim

We provide an overview of **ablaut reduplicative structures**, (reduplicative pairs with vowel alternation), such as *flip-flop*, *teeter-totter*, *chit-chat*. We propose a unified analysis of these patterns in typologically diverse languages.

## Types of reduplication included / not included

We include data in which the two words are fully or partially reduplicated, and a vowel is changed. Cross-linguistically, these words all have similar meanings: repetition, continuation, onomatopoeia, ideophones, unspecified subject or manner, playfulness, etc.

We do not include the following types of reduplication:

- **TOTAL REDUPLICATION**  
The reduplicant is an exact copy of the base.  
**Turkish:** [gyzel] 'beautifully' → [gyzel gyzel] 'very beautifully'
- **PARTIAL REDUPLICATION**  
The reduplicant is a portion of the base.  
**Tagalog:** [takbuh] 'run' → [ta-takbuh] 'will run'
- **REDUPLICATION WITH FIXED SEGMENTISM.**  
This process, like ablaut, involves a change in the vowel (or consonant) in the copied portion; however, the changed segment has a fixed quality. For example, in **Mandarin** onomatopoeia the reduplicant (first constituent) is always realized with [i]: [ti ta] 'sound of raindrops', [ci su] 'rustling of leaves or clothing'.

In other cases, the fixed segment is only partially specified. For example, **Igbo** always has a high vowel in the reduplicant, but its backness and rounding is determined by various factors: if the base has a high vowel, that is copied; if the base has a non-high vowel, the backness and rounding features of the high vowel in the reduplicant are determined by the adjacent consonant (labial or palatal) or the vowel of the base (round) (Alderete, et al. 1999: 342).

Out of the **203 languages** in **26 families** that we investigated, we found **14 languages** from **6 families** with ablaut reduplication.

## High vowel - low vowel

**German** (Indo-European, Germanic):

- [hɪk hək] 'bickering'

**Bargam** (Papuan):

- [kwasin kwasan] 'various edible greens,'
- [gimi gimɔ] 'various plural EMP things'

**Italian** (Indo-European, Romance):

- [ninna nanna] 'lullaby'

Also: **English** (Indo-European, Germanic)

## Low vowel - high vowel

**Indonesian** (Austronesian, Malayo-Sumbawan):

- [basa basi] 'polite language'
- [dʒuŋkat dʒuŋkit] 'see-saw'

**Javanese** (Austronesian, Javanese):

- [celak celuk] 'to call a name repeatedly'
- [elan elin] 'remember'

**Toba Batak** (Austronesian, Northwest Sumatra Barrier-Islands):

- [marabas marabus] 'to strike right and left (like the tail of a crocodile)'

**Turkish** (Altaic, Turkic):

- [jamuk jumuk] 'lopsided'

Also: **Malaysian** (Austronesian, Malayo-Sumbawan), **Balinese** (Austronesian, Malayo-Sumbawan), **Minangkabau** (Austronesian, Malayo-Sumbawan), **Madurese** (Austronesian, Malayo-Sumbawan)

## Back-vowel - front vowel

**Thai** (Thai-Kedai):

- [saʔduŋ saʔdiŋ] 'flinging manner',
- [khayuk khayik] 'leaning'

## Front-vowel - back vowel

**Hungarian** (Finno-Ugric):

- [tʃip tʃup] 'unimportant, insignificant',
- [ris: ros:] 'very bad'

## Generalization

For ablaut reduplicative structures:

- **The contrast between the two vowels is maximally distinct in terms of height and/or backness.** We have not found cases in which the distinction is expressed in terms of tenseness or roundness.
- **The linear order of the vowels is fixed** (for example, high vowel in the first element and a low vowel in the second).
- **The relative order of the base and reduplicant varies to accommodate the order of the vowels.** For example, in English the base can be either on the left (*rickety-rackety*), or on the right (*criss-cross*).

## Analysis

We adopt Minkova's (2002) INTEREST constraint, which enforces a maximum perceptual difference between the vowels of the two parts of the pair. She formulates INTEREST as a constraint that avoids height identity, in which violations are gradient.

**\*Ident-BR (High):** Correspondent segments have different values for the feature [high]

We extend this approach to account for the less common distinction along the backness parameter.

**\*Ident-BR (Back):** Correspondent segments have different values for the feature [back]

Minkova employs FINAL-LENGTH to account for the ordering of vowels in English ablaut reduplicative structures: the low (longer) vowel is part of the second constituent, reflecting a universal preference for longer segments in final position. This cannot be extended to the other languages we investigated, as the high vowel is sometimes in the second constituent, and this does not apply to the front-back distinction. We propose that the ordering of the vowels is stipulated by language-specific constraint rankings.

The only exception we found to the patterns identified above is **Farsi** where the reduplicant is always the rightmost constituent, and the relative order of the vowels shifts: high-low with a base containing a high vowel ([pif paf] 'brand name of insecticide'); low-high with a base containing a low vowel ([dædær dudur] 'go outside in a fun way'). Thus, it appears that Farsi ranks the constraint that specifies the position of the reduplicant relative to the base *higher* than the constraint that stipulates the ordering of the vowels.

## References

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