

Reduplication in Atchan as prosodically constrained morphological doubling

Per phonological copying approaches to reduplication (e.g. Marantz 1982, Steriade 1988, McCarthy & Prince 1999), reduplication involves the affixation of a particular prosodic template and copying of phonological material from the base onto the reduplicant. In morphological copying approaches like Morphological Doubling Theory (Inkelas & Zoll 2000, 2005), on the other hand, reduplication is viewed as the multiple occurrence of a morphological constituent meeting a particular morphosemantic description. I argue here that verbal reduplication in Atchan [ebr, Kwa, Côte d’Ivoire] constitutes a case of reduplication which must be analyzed as morphological doubling, accompanied by a prosodic size constraint imposed on both base and reduplicant. This work contributes to the ongoing debate on whether morphological approaches to reduplication are necessary (e.g. Zukoff 2022).

Verbal reduplication in Atchan imparts a frustrative meaning (Dido 2018), glossed here as ‘in vain’. All data presented here is based on original fieldwork in Abidjan, Côte d’Ivoire, with fifteen Atchan speakers since 2019. A clause involving verbal reduplication follows one of two patterns (1 vs. 2): the choice of surface pattern is predictable based on the amount of phonological material present within the verb phrase. When the verb is a single syllable, and no material immediately follows the verb, the outcome is the pattern in (1): Subject Verb-RED *drã*. In the second pattern (2), however, the verb may not be faithfully copied in the same way. This pattern must be used if any phonological material (X) is present between the first syllable of the verb and *drã*, surfacing as Subject Verb X Verb_{σ1}-RED *drã*. That ‘intervening’ material could come from an object, adverb, or postpositional phrase (2a), or even the second syllable of the verb (2b). The verbal material copied in reduplication includes only the initial syllable of the verb (cf. 2b).

- (1) *mẽ=na-na* *drã*
1SG=pray.PFV-RED in.vain
‘I prayed in vain.’
- (2) a. *mẽ=na* *nãŋkã/ne/gbagbra/tábrɛ-t^he* *na-na* *drã*
1SG=pray.PFV God/3SG.ACC/fast/table-under pray.PFV-RED in.vain
‘I prayed to God/to him/quickly/under the table in vain.’
- b. *mẽ=hrəmã* *hrɔ-hrɔ* *drã*
1SG=hide.PFV hide.PFV-RED in.vain
‘I hid in vain.’

I argue that a phonological copying approach to reduplication cannot account for the Atchan data, and that the data instead must be analyzed as doubling within the morphology. While the pattern in (1) could be straightforwardly explained through affixation of a skeletal RED morpheme plus copying from the base, this approach immediately fails as soon as the verb is followed by any phonological material, or is larger than a single syllable (2). Verbal reduplication in Atchan involves morphological identity: the material being copied must be verbal, though it need not be linearly adjacent to the verb itself. Verbal reduplication in Atchan additionally involves prosodic size constraints: first, the surface pattern depends on the amount of phonological material present between the initial syllable of verb and *drã*. Second, verbal reduplication involves truncation to a single syllable when the main verb of the clause is disyllabic. Therefore, any analysis of verbal reduplication in Atchan must be able to make reference to morphological identity, while simultaneously imposing prosodic

size constraints. These criteria are satisfied by Morphological Doubling Theory, in which copies are morphological constituents and may be subject to phonological modification via cophologies.

I propose that the morpheme *drã* ‘in vain’ is associated with a phonologically empty verb slot which is doubled in the morphology, along with the prosodic requirement that each verb slot consist of exactly one syllable. This empty verb slot may be filled either by copying over the features of another verb already present in the clause, as shown in (1) and (2), or alternatively through do-support (3-4). When do-support is involved, all cases of verbal reduplication follow the pattern Subject Verb (X) *tɛ-tɛ drã*.

- (3) mẽ=na tɛ-tɛ drã
 1SG=pray.PFV do.PFV-RED in.vain
 ‘I prayed in vain.’
- (4) a. mẽ=na nãŋkã/nɛ/gbagbra/tábrɛ-t^he tɛ-tɛ drã
 1SG=pray.PFV God/3SG.ACC/fast/table-under do.PFV-RED in.vain
 ‘I prayed to God/to him/quickly/under the table in vain.’
- b. mẽ=hrɔmã tɛ-tɛ drã
 1SG=hide.PFV do.PFV-RED in.vain
 ‘I hid in vain.’

The reduplication data involving do-support reveals that the distinction between two patterns of verbal reduplication (1 vs. 2) is purely superficial, and that the two patterns share an identical underlying structure: Subject Verb Verb_{σ1}-RED *drã* (cf. 3). I propose that the surface pattern Subject Verb-RED *drã* is motivated by a haplology constraint militating against three identical adjacent syllables. In addition, the do-support data supports an account of verbal reduplication in Atchan in which doubling is introduced in the morphology, rather than in the phonology.

The data I present here for Atchan pose a problem for purely phonological accounts of reduplication. I propose that verbal reduplication in Atchan must be analyzed as doubling in the morphology accompanied by prosodic size constraints, rather than doubling in the phonology, providing support for Morphological Doubling Theory as a necessary tool for the analysis for reduplication.

References

- Dido, Yao Maxime. 2018. Description Grammaticale de L’Ébrié ou Cãmáncân. PhD thesis, Université Félix Houphouët Boigny Abidjan-Cocody.
- Inkelas, Sharon. 2000. Morphological Doubling Theory: Evidence for morphological doubling in reduplication. In Bernhard Hurch (ed.), *Studies on Reduplication*. Berlin: Mouton de Gruyter.
- Inkelas, Sharon, & Cheryl Zoll. 2005. *Reduplication: Doubling in morphology*. Cambridge, U.K.: Cambridge University Press.
- Marantz, Alec. 1982. Re reduplication. *Linguistic Inquiry*, 13, 483–545.
- McCarthy, J., & Prince, A. 1999. Faithfulness and identity in prosodic morphology. In R. Kager, H. van der Hulst, & W. Zonneveld (eds.), *The prosody-morphology interface* (pp. 218–309). Cambridge, U.K.: Cambridge University Press.
- Seriade, Donca. 1988. Reduplication and syllable transfer in Sanskrit and elsewhere. *Phonology*, 5, 73–155.
- Zukoff, Sam. 2022. Reduplicant Shape Alternations in Ponapean and Tawala: Re-evaluating Base-Dependence. lingbuzz/006862.