This paper argues for an abstract analysis of the vowel system of Bondu, a Dogon language of Mali. Data come from fieldwork and have not been previously published. Phonetically, Bondu has seven vowels: two [+high, +ATR] vowels ([i], [u]), a [+low, –ATR] vowel [a], and a [±ATR] contrast in the mid vowels: front ([e], [ɛ]) and back ([o], [ɔ]). We argue, however, that underlyingly certain high vowels are [–ATR] while some low vowels are [+ATR]; the contrast is neutralized so that high vowels surface as [+ATR] and low vowels as [–ATR]. Evidence comes from the realization of the perfective suffix /–ɛ̀/ which alternates between [è] ~ [ɛ̀], depending on the underlying [ATR] value of the vowel in the verb root. The data in (1) illustrate root-controlled [±ATR] harmony. (Forms show 3rd person singular).

(1) a. [nòj–è] sleep    c. [dòq–è] leave
b. [nèmbìl–è] beg    d. [kèdj–è] cut

The data in (2) are more complex.

(2) a. [bij–è] lie down    c. [gij–è] dance
b. [sùq–è] go down    d. [dʒʊq–è] recognize

While all the root vowels in (2) are phonetically [+high, +ATR], we analyze those in (2c-d) as having an underlying [–ATR] feature. Here we follow Archangeli and Pulleyblank (1994) who view the feature combination [–ATR], [+high] as antagonistic: phonetically unrealized, though phonologically present. Similarly, while there is only one surfacing [+low, –ATR] vowel in Bondu, verb roots with low vowels are divided between those that take a [+ATR] suffix (3a) and those taking [–ATR] (3b).

(3) a. [bàr–è] help    b. [pàq–è] tie

We analyze the surface low vowel in (3a) as abstractly [+low, +ATR], (3b) as [+low, –ATR] with the underlying [ATR] feature of the root spreading to the suffix.

A further argument for the abstract feature analysis comes from the complex alternations found with the imperative suffix in (4) (same roots from above).

(4) a. [nój–ó]    f. [dóg–á]
b. [nèmbìl–ó]    g. [kèdj–á]
c. [bij–ó]    h. [gij–á]
d. [sùq–ó]    i. [dʒʊq–á]
e. [bàr–á]    j. [pàq–á]

We analyze the realization of the imperative suffix vowel by spreading of the underlying [ATR] feature of the root vowel as in the perfective, but with an additional assimilatory process raising the underlying [+low] suffix vowel to [–low] when preceded by a vowel that is underlying [–low, +ATR]. We view this as an instance of parasitic harmony which applies in (4a-d). The unexpected realization of [+ATR] on the stem vowels in (4f-i) is analyzed as the docking of a floating [+ATR] feature that comes with the imperative suffix. We argue that our abstract feature analysis is superior to an alternative under-specification analysis since there is no consistency whether [+ATR] or [–ATR] is underspecified given the behavior of high vowel roots in (2) and (4); our analysis of the imperative is also consistent with Wolf's (2007) observation that floating autosegments avoid docking on morphemes that sponsor them.
