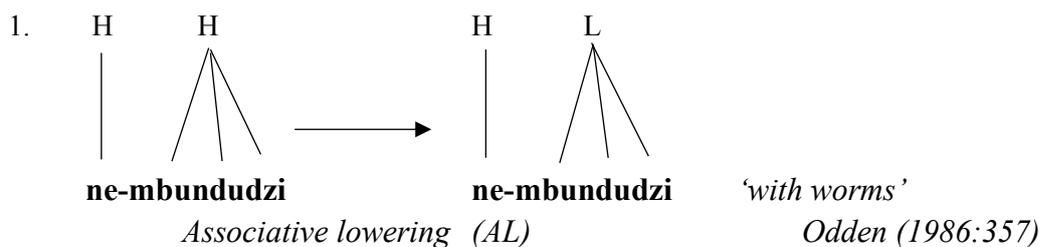


### Obligatory Contour Principle in Ewe Tonal Phonology

The obligatory contour principle (OCP), first proposed by Leben (1973) states that identical tones cannot occur on adjacent sounds. Thus, the tonal sequence LLH or HHL or LL or HH is prohibited in tone languages. He argued that identical adjacent tones should be treated as a single tone linked to multiple TBUs. However, Odden (1986) argued that the OCP only holds in underived words. Thus, words with any form of morphological derivation (morphologically derived tonal sequences and derived floating tonal melodies) may violate the OCP. Building on the work of Odden (1986), Yip (1988) identified five types of languages based on OCP effect on features.

In my analysis of Ewe tonal system, I observed that Ewe allows the application of the OCP in some instances but violates it in other instances. These violations are in underlying, underived words. I drew on the concept of geminate inalterability by (Hayes 1986) to show the application of the OCP and its violation in Ewe.

The principle of geminate inalterability suggests that sounds that are linked to a single feature of a tier cannot be involved in phonological processes independently. This principle applies in Associative lowering in Shona which states that a high tone preceded by another high tone becomes a low tone. In example (1) below, multiply linked tones undergo the phonological process together but not independently.



In Ewe, a tone raising rule in Ewe (*Low tone* → *Mid tone* / *High/Mid tone*) changes a low tone to mid when it is followed by a high or mid tone. In (2a) and (2b), when the tone raising rule is applied, both identical tones raise indicating that they are multiply linked. This suggests that the OCP is obeyed in those instances.

2. a. àmè 'person' + lá 'det' = āmēlá 'the person'  
 b. àṅè 'rubber/plastic' + lá 'det' = āṅēlá 'the rubber/plastic'

However, similar examples with identical adjacent tones do not pattern the same way as (2a) and (2b). When the tone raising rule applies, only the second identical adjacent tone undergoes this process. This suggests that the two identical adjacent tones are not multiply linked since they are able to pattern independently of each other.

3. a. àzì 'egg' + lá 'det' = àzīlá 'the egg'  
 b. àsì 'market' + lá 'det' = àsīlá 'the market'  
*Ansre (1961:30,31)*

These observations call into question the status of the OCP in tonal phonology. It goes further to revive the argument about whether the OCP should be treated as a universal principle (McCarthy 1986) or a phonological rule that can be present or absent in a language (Odden 1986;1988) since Ewe tonal distribution cannot be clearly situated between both arguments. The application of the OCP in Ewe supports McCarthy's (1986) assertion that the OCP is universal and its violation lends credence to the Odden's (1986) assertion that the OCP should be treated as a phonological rule that can be present or absent in a language.

### References

Ansre, Gilbert. (1961). *The tonal structure of Ewe* (No. 1). Hartford Seminary Foundation Bookstore.

Hayes, Bruce. (1986). Inalterability in CV phonology. *Language*, 321-351.

Leben, William (1973). "Suprasegmental Phonology". Doctoral dissertation, MIT, Cambridge.

McCarthy, John (1986). "OCP effects: Gemination and Antigemination," *Linguistic Inquiry* 17: 207-63.

Odden, David (1986). "On the role of the Obligatory Contour Principle in phonological theory." *Language* 353-383.

Odden, David (1988). "Anti-Antigemination and the OCP," *Linguistic Inquiry* 19: 451-475.

Yip, Moira (1988). "The Obligatory Contour Principle and Phonological Rules: A Loss of Identity," *Linguistic Inquiry* 19: 65-100.