

When a language borrows a phoneme that is not present in the borrowing language, the borrowing language typically applies one of two strategies: either it borrows the phoneme wholesale, thereby adding to the phonemic inventory of the borrowing language, or it adapts the borrowed phoneme in some way, typically replacing it with a phonetically similar sound (Haugen 1950, Davis 1994). The second strategy is used by Fon, an African language spoken in Benin and Togo, in borrowing liquids from French and English (Gbéto 1997, Kenstowicz 2001). Fon borrows French or English /l/ as Fon [l] in all positions, epenthesizing a vowel after coda [l] because of the dominant CV structure. However, Fon borrows French and English /r/ as [l] in initial and medial position, but rather than converting /r/ to [l] syllable-finally and epenthesizing a vowel, it deletes /r/ in this position altogether. Examples are in (1).

(1) Adaptation of French liquids in Fon

a. /l/ → [l]	b. /r/ → [l]/__V	c. /r/ → ø/___]σ
/lam/ → [lamu]	/rido/ → [ɾlido]	/gar/ → [ga]
/kɔl/ → [kɔlu]	/byro/ → [bilu]	/tɔʀf/ → [tɔʃf]
/dɔləʀ/ → [dala]	/gREV/ → [glevu]	
/dɛlfɪn/ → [dɛlufɪni]		

While perceptual accounts of this problem have been proposed (Kenstowicz 2001), no purely phonological explanation has been put forward. If described in derivational terms, two rules in a bleeding relation would be required. A rule deleting coda [r] bleeds a rule epenthesizing a vowel after a coda. On the surface, this produces a transparent effect: surface [r] never appears, and epenthesis never overapplies. On the other hand, the case can be described as a grandfather effect: underlying French /l/ can be borrowed as Fon [l], but Fon cannot use [l] as a replacement for syllable-final /r/. In spite of the seeming transparency, an analysis of loanword adaptation in Fon requires theoretical mechanisms motivated by opacity. Within the framework of Optimality Theory, Fon can be analyzed using local constraint conjunction (Łubowicz 2002) or sympathy (McCarthy 1999). As such, it resembles a typical counterfeeding effect, rather than the bleeding effect that actually occurs. The use of opaque machinery to explain this transparent phenomenon is therefore unusual. This problem, then, is important for several reasons. It shows support for local conjunction and sympathy theories, while also demonstrating that comparative markedness (McCarthy 2002) has limitations in the types of opacity/transparency it can account for. Opacity effects are shown to underlie even some transparent outputs, a phonological anomaly. Finally, the Fon data demonstrate that opacity effects can occur in loanword phonology though not present in the source or borrowing language.

References

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