Intervocalic devoicing?

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Introduction

Intervocalic (or postvocalic) voicing is common: T > D / V (V)
- The most frequent type of lention (alongside spirantization, approximatization and others)
- Kaplan (2010)
- 26 of 153 languages have intervocalic lention
- Passive voicing: voicing into closure of intervocalic voiceless stops
  - (e.g. German)
- Jensen (1998)
- P-map: minimal change to achieve phonotactics
  - Steiriade (2010)
- Very common sound change, reported in over 40 languages
  - Kimmel (2007)

Intervocalic devoicing is a universal phonetic tendency.

- Intervocalic devoicing is the opposite process: D > T / V (V)
- Unattested as a synchronic phonological process
- It would operate against the universal phonetic tendency: voicing intervocalic voiceless stops
- P-map: spirantization is perceptually less salient that devoicing in intervocalic voiceless stops

Questions

- Can sound change operate against universal phonetic tendency?
- Is synchronic grammar more constrained than sound change?

The data

- Sound change D > T / V (V) reported for Kiput, the Berawan dialects (Austronesian) and Tswana (Bantu) (Blust 1992, 2005, 2013)
  - Kiput: g = k / V (V) y > c / V (V)
    - *agam > alam
    - *ujul > ujul
  - Tswana: b > p / V (V)
    - *jyaw > daya
  - Labials and alveolars do not undergo devoicing:
    - *balyu > balyu and *palya > ala
  - Loanwords often undergo devoicing
    - Malay barja, Kiput balahi: ‘price’ or M balya, K bala: ‘bachelor’
  - Palatal affricate enters complementary distribution: jy > d / # ___
    - *jian > dani
  - Berawan dialects
    - Labials and velars undergo devoicing, labials additionally change place of articulation (but only intervocally!)
      - g (from s) > k / V (V)
      - *begas > badah
      - Word-initially, stops remain voiced
        - *babuy > babuy
    - Unconditioned devoicing is very common and phonetically motivated sound change
      - Voice is difficult to maintain: voiced fricatives dispreferred
      - Most importantly: it happens in Kiput as well: v > f

Previous proposals

- Blust (2005: 243):
  - “Devoicing affected a single feature value. There is thus no possibility of considering a concatenation of natural changes which cumulatively produced an unnatural result.”
- Proposals in the literature: dissimilation; hypercorrection (in Ohala’s 1981, 1993 terms; IVD is natural: onset strengthening.
- First not explanatory, latter unusual (why not initially?), all three unable to explain the asymmetries.

A new explanation

- d lenites to r, stays voiced stop initially. I argue that such intervocalic lention operated on all stops.
- Traces or direct evidence of complementary distribution: palatal affricate loses fricative initially in Kiput; d lenites intervocally in Berawan; in Tswana evidence for complementary distribution come from dialectal data: some speakers have voiced stops initially and post-nasally, but voiceless fricatives elsewhere
- Unconditioned devoicing is a very common and phonetically motivated sound change

References


Conclusion

I argue that a set of three sound changes operated in the development of Kiput and Berawan dialects, and Tswana
- Intervocalic devoicing is not a natural process
- Sound change cannot operate against universal phonetic tendency
- Sound change is not less constrained that synchronic phonology

Because voiced fricatives surface only intervocally, we get apparent, but not actual IVD.

Advantages:
- Explains asymmetries v, g vs. b, d, and g vs. d
- Explains b > k (b > y is much more motivated)
- Explains why d lenites! and b and g seemingly ‘devoicing’ intervocally
- No problems with relative chronology
- Natural sound changes
- The same explanation for Kiput: voiced fricatives and affricates undergo devoicing
- And Setswana: voiced stop fricativize intervocally and post-nasally, which is followed by devoicing of fricatives
- Both show clear traces of complementary distribution
- I propose a model for explaining such seemingly unnatural system:
  - (a) a set of segments enters complementary distribution;
  - (b) a sound change occurs that operates on the (un)changed subset of those segments;
  - (c) optionally, another sound change occurs that blurs the original complementary distribution.