A Look at how Students in the University of Ghana Realise Final Stops in Monosyllabic Words.

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Abstract:

Some students in the University of Ghana appear to elide the final stop in monosyllabic words or replace it with a glottal stop. A survey of 20 male and 20 female students of the University of Ghana under the age of 25 was undertaken to elicit how final stops were realized in monosyllabic words.

Introduction

This paper attempts to find out how students at the University of Ghana treat final stops, especially in monosyllabic words. We thus:

1. wanted to look at the tendency in younger students of the University of Ghana to elide final /t/ /d/ /p/ /b/ /k/ and /g/;
2. attempted to determine the prevalence of glottal stops (GS) as final-stop substitutes; and
3. wanted to find out whether the subsequent sound and/or preceding sound influences the selection of final stop or not.

The study was undertaken because it is apparent that some English words have assumed a distinct mode of pronunciation in Ghana. But, for example, is often heard as [ba] or [ba?]. That a final consonant sound can be elided in Ghana is not unusual, after all, as was noted by Strevens (1965: 113):

one would expect a description of the pronunciations of English which may be heard in West Africa to bear a close relationship to description of the phonetic characteristics of the language spoken as a mother tongue by various groups of people. This is in fact the case".

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However, this quotation leads us into a further question: *do aspects of pronunciation in Ghanaian English always reflect transfer phenomena?* In many Ghanaian languages the syllable structure does not have a consonantal coda, so one might wonder whether we are dealing with a transference phenomenon when students elide final stops. But as many students substituted final stops with a glottal stop, we have had to ask, where does the glottal stop come from? 

Whereas final consonant elision is a common feature of Student Pidgin, glottal stops are rare in this code. Can the use of the glottal stop or the elision of final stops be explained by the number of Ghanaian students going to the UK to work during the summer vacation and picking up Cockney traits in their speech? Can the use of the glottal stop or the elision of final stops be a temporary fad inspired by, for example, TV announcers who use glottal stops? How widespread is the elision of the final stop or its substitution by a glottal stop?

A glottal stop, according to Gimson (1972:9), is produced when “the glottis is held tightly closed with the lung air pent up below it”. This “glottal stop” [ʔ] frequently occurs in English, e.g., when it precedes the energetic articulation of a vowel or when it reinforces or even replaces p, t, k. In some English dialects glottalisation can be heard when especially unvoiced stops—[p],[t],[k]—initiate an unstressed syllable that occurs between vowels, as in *water*, or between a vowel and a sonorant, as in *button*, or at the end of a word, as in *put it on*. It is, however, not a sound found in RP, which is the target pronunciation in the Ghanaian education system. Word final consonant sounds, especially alveolar sounds, often assume the features of the word initial consonant of the following word. We can therefore expect that final stops are elided when the initial sound of the following word is consonantal.

**Methodology**

Twenty male and twenty female students under 25 years were asked to read 20 sentences (as in handout). The students came from a good spread of secondary schools from all the Regions in Ghana (list appended). The sample students were carefully selected to represent all the Regions of the
country and a broad selection of L1s (breakdown appended). Care was taken to avoid students who had been abroad.

The students were not told beforehand which aspect of their speech was of interest. As each student read a sentence, it was noted how each final stop was realised.

To gain a better feel of students' speech habits, an additional 90 minutes of informal conversation was recorded, using different students from the ones who had read the sentences. The recorded data was used to support our evidence from the read data.

Analysis of Data
The results can be broken down as follows.

Sentence 1: Water, water everywhere but not a drop to drink.
Six females and nine males read this sentence with all final stops.

  i) Water: no deviance in medial position

  ii) But: 8 females and 7 Males used glottal stop (hence GS), 2 males elided the final stop.

  iii) Not: 7 females and 3 males used GS, 1 female elided the final stop.

  iv) Drop: 1 female and 2 males used GS, none used elision.

  v) Drink: no deviance.

Sentence 2: The big, bad wolf ate the sheep.
19 females and all males read with all final stops.

  i) Big: 1 female used GS.

  ii) Bad: no deviance.
iii) Ate: no deviance.

iv) Sheep: no deviance.

Sentence 3: I could not log into the internet last night.

3 females and 3 males read with all final stops.

i) Could: 15 females and 13 males used GS. 1 female and 3 males elided the final stop.

ii) Not: 3 females and 3 males used GS. 1 female elided the final stop.

iii) Log: no deviance.

iv) Internet: no deviance.

v) Last: no student used GS, 1 female elided the final stop.

vi) Night: no deviance.

Sentence 4: But what does it mean?

10 females and 5 males read with all final stops.

i) But: 7 females and 7 males used GS.

ii) What: 8 females and 11 males used GS. 1 Female and 1 Male elided the final stop.

iii) It: 1 Male used GS.

Sentence 5: He works in a lab somewhere

All students observed stops.

i) Work(s): no deviance.
ii) Lab: no deviance.

Sentence 6: I liked Kwesi, but did he like me?

11 females and 11 males read with all final stops.

i) Liked: 2 males used GS. 1 female and 4 males elided the final stop.

ii) But: 5 females and 2 males used GS. 1 female elided final stop.

iii) Did: 2 females and 1 male used GS. 1 male elided final stop.

iv) Like: no deviance.

Sentence 7: Don’t kick the dog!

16 females and 16 males read with all final stops.

i) Don’t: 4 females and 4 males elided final stop.

ii) Kick: no deviance

iii) Dog: no deviance

Sentence 8: I asked him to put it down.

All females and 10 males read with all final stops.

i) Asked: 8 males elided final stop.

ii) Put: 2 Males elided final stop.

iii) It: no deviance.

Sentence 9: If you are still hungry, lick the plate!
16 females and 15 males read with all final stops.

i) **Lick**: 2 females and 2 males used GS. 2 females and 3 males elided final stop.

ii) **Plate**: no deviance.

Sentence 10: **You must pat the dog gently.**

11 females and 6 males read with all final stops.

i) **Must**: 1 male used GS. 9 females and 13 males elided final stop.

ii) **Pat**: 1 male used GS.

iii) **Dog**: no deviance.

Sentence 11: **Would you look at that great, red bud!**

12 females and 11 males read all final stops.

i) **Would**: 5 females and 5 males used GS. 1 female and 2 males elided stop.

ii) **Look**: 1 female elided stop.

iii) **At**: 1 female used GS.

iv) **That**: 1 female and 2 males used GS.

v) **Great**: 1 female and 2 males used GS.

vi) **Red**: 1 female elided stop.

vii) **Bud**: no deviance.

Sentence 12: **He put the book away and could sit down.**
15 females and 10 males read with all final stops.

i) **Put:** 1 female and 1 male used GS. 1 male elided stop.

ii) **Book:** no deviance

iii) **And:** 4 males used GS. 1 female and 2 males elided stop.

iv) **Could:** 3 females and 3 males used GS.

v) **Sit:** no deviance.

**Sentence 13:** The cat sat on the mat and jumped into my lap.

18 females and 15 males read with all final stops.

i) **Cat:** no deviance.

ii) **Sat:** 1 male used GS.

iii) **Mat:** 1 male elided stop.

iv) **And:** 1 female and 3 males elided stop.

v) **Jumped:** no deviance.

vi) **Lap:** 1 female elided stop.

**Sentence 14:** Do you get it? be tip top and a bit fad.

18 females and 17 males read with all final stops.

i) **Get:** no deviance.

ii) **It:** 1 female and 1 male used GS. 1 male elided stop.

iii) **Tip:** 1 male elided stop.

iv) **Top:** no deviance.
v) And: no deviance

vi) Bit: 1 female used GS.

vii) Fad: 1 male elided stop.

Sentence 15:  
I just bought a new set of books.
11 females and 10 males read with all final stops.

i) Just: 2 females used GS. 7 females and 9 males elided stop.

ii) Bought: no deviance.

iii) Set: 1 male elided stop.

Sentence 16:  
I bet he stopped the fight.
18 females and 17 males read with all final stops.

i) Bet: 1 female and 1 male elided stop.

ii) Stopped: 1 male used GS. 1 female and 1 male elided stop.

iii) Fight: no deviance.

Sentence 17:  
He asked me to make a bid.
9 females and 10 males read with all final stops.

i) Asked: 2 males used GS. 10 females and 8 males elided stop.

ii) Make: no deviance.

iii) Bid: 1 female used GS.

Sentence 18:  
You should put a stop to the fight.
3 females and 5 males read with all final stops.

i) **Should:** 14 females and 12 males used GS. 3 females and 3 males elided stop.

ii) **Put:** no deviance.

iii) **Stop:** no deviance.

iv) **Fight:** no deviance.

**Sentence 19:** **Cut the cord!**

18 females and 15 males read with all final stops.

i) **Cut:** 2 females and 4 males used GS. 1 male elided stop.

ii) **Cord:** no deviance.

**Sentence 20:** **Take the next street left!**

14 females and 15 males read with all final stops.

i) **Take:** 1 female used GS. 5 females and 5 males elided stop.

ii) **Next:** no deviance.

iii) **Street:** no deviance

iv) **Left:** no deviance.
We expected more deviance in male speech than in female speech. We made this assumption based on an earlier study of the presence of dental fricatives in the speech of students at the University of Ghana (Dako 1995) and also earlier work on female speech (Chambers 1992; Milroy and Milroy 1993) that show that females tend to be more prestige conscious than males in their speech and thus more likely to regard speech habits as social determinants. At the end of our survey, we came to realize, however, that the use of the glottal stop and the elision of final stops were considered prestigious speech elements in the University.

Discussion

From the breakdown of the findings of these sentences, we can make the following observations:

1. There is no definite pattern of glottal stops or elisions, i.e., a word might have a glottal stop or elision in one sentence and no glottal stop or elision in the next sentence in the same environment.

2. Elision or the glottal stop was not salient when the stop was followed by a vowel sound, but again, no definite pattern could be determined as seen in the following:

   1:iii: not a (10 GS, 1 ES)  8:ii: put it (2 ES)
   13:ii: sat on (1 GS)        13:iii: mat and (1 ES)
   13:v: jumped into (no deviance) 14:i: get it (no deviance)
   14:iv: top and (no deviance) 14:v: and a (no deviance)
   15:ii: bought a (no deviance) 15:iii: set of (1 ES)
   17:ii: make a (no deviance)  18:ii: put a (no deviance)
1. Final alveolar stops often assimilate to the place of articulation of the following word initial consonant. This has been noted by early English phoneticians (Jones, Gimson, Abercrombie). We would therefore expect that a final stop followed by a consonant sound would be assimilated, i.e., elided. But if we look at the final alveolar sounds followed by a word initial consonant sound, the pattern is highly irregular:

1:ii: but not (15 GS, 2 ES)  2:ii  bad wolf (no deviance)
2:iii ate the (no deviance)  3:i  could not (28 GS, 4 ES)
3:iv internet last (no deviance)  3:v  last night (1 ES)
4:i  but what (14 GS)  4:ii  what does (19 GS, 2 ES)
4:iii it mean (1 GS)  6:i  liked Kwesi (2 GS, 5 ES)
6:ii  but did (7 GS, 1 ES)  7:i  don’t kick (8 ES)
8:i  asked him (8 ES)  8:iii it down (no deviance)
10:i  must pat (1 GS, 22 ES)  10:ii  pat the (1 GS)
11:i  would you (10 GS, 3 ES)  11:iii at that (1 GS)
11:iv that great (3 GS)  11:v  great red (3 GS)
11:vi red bud (1 ES)  12:i  put the (2 GS, 3 ES)
12:iii and could (4 GS, 3 ES)  12:iv could sit (6 GS)
12:v  sit down (no deviance)  13:i  cat sat (no deviance)
14:v  bit fad (1 GS)  15:i  just bought (2 GS, 16 ES)
16:ii  stopped the (1 GS, 2 ES)  17:i  asked me (2 GS, 18 ES)
18:i  should put (16 GS, 18 ES)  19:i  cut the (6 GS, 1 ES)
20:i  take the (1 GS, 10 ES)  20:ii  next street (no deviance)

20:iii  street left (no deviance)

Note the three examples with but:
  but did (7 GS, 1 ES), but what (14 GS), but not (15 GS, 2 ES). We would have expected but did to show a high rate of elision since /t/ and /d/ are both alveolar sounds and thus easily coalesced, but both but what and but not show higher rates of substitution.

Note the instances of /t/ followed by the dental fricative:

  ate the (no deviance),  pat the (1 GS) put the (2 GS, 3 ES), cut the (6 GS, 1 ES). It was initially thought that ate the showed no deviance – possibly as a result of the diphthong preceding the alveolar stop which makes it distinct from the other three examples: pat the, put the, cut the, but it was realized that ate was pronounced /et/ and thus exhibited no vowel features distinct from the other words. The rate of deviance: 0–1–5–7 can therefore not be explained phonetically.

Bilabial stops are not very likely to be elided or be replaced with a glottal stop.

1:iv:  drop (to) (3 GS)  2:iv:  sheep (-) (no deviance)

5:ii:  lab(somewhere) (no deviance)  14:iii:  tip (top) (1 ES)

14:iv:  top (and) (no deviance)  18:iii:  stop (to) (no deviance)

Note that drop to had 3 GS whereas stop to had no deviance.

Velar stops are also not very likely to be elided or replaced with a glottal stop:

6:iv:  like (me) (no deviance)  1:v:  drink (no deviance)
6. The modals could, would, should also exhibited curious results. We had two examples of could:

3: ‘I could not log onto the internet last night.’ (28 GS, 4 ES) i.e. 32/40 students did not articulate final stop.

S.12: ‘He put the book away and could sit down.’ (6 GS) i.e. 6/40 students did not articulate final stop.

The one example of should:

18: ‘You should put an end to the fight.’ (14 females and 12 males GS, 3 males ES) – i.e. 29/40

The one example of would:

11: ‘Would you look at that..’ (5 females and 5 males GS, 1 female and 2 males ES): 13/40

Must as in:

S.10: ‘You must pat the dog gently.’ (1 male GS, 9 females and 13 males ES) – 23/40.
Concluding Remarks

From these findings, and supported from our recordings, we can conclude that female students use more glottal stops than male students, as the ratio was 89% of females to 77% of males. Male students, on the other hand, used more elisions: females, 55% and males 80%. We can also note that whereas Student Pidgin (SP), which is a male code, elides final consonants, not only stops, the glottal stop is hardly noticeable in SP.

This new speech trend is idiolectal rather than gender specific. It might be of interest to mention that we taped the Chief Vandal (the head student of Commonwealth Hall) in informal conversation. He did not exhibit one single case of either glottal stop or elision of final stop. Some female students, however, when asked, said they started using glottal stops when they came to Legon.

We did not find any evidence that we are dealing with transference phenomena. The glottal stop is not a salient feature in the bigger Ghanaian languages, and even though these languages do not have a consonant coda, elision of final consonants is not apparent in educated Ghanaian English speech. The inclusion of the glottal stop and the elision of the final stop are obviously fashion trends among our students. It is possible that it is a language feature that has its roots in the London dialect, Cockney, and is acquired by our students during stays in London. The distribution of both the glottal stop and the elided final stop is not systematic, but random, as our examples show.

Endnote

We are grateful to Prof. E. Boadi who pointed out the glottal stops do indeed occur in Asante Twi. We checked whether the students who favoured glottal stops were in fact Asante and spoke Asante Twi, but saw that this was not the case.
References:


Appendix I:

1. The students came from the following schools:

2. **Upper West Region**: Nandom Secondary School, Francis Xavier Seminary.


10. **Brong Ahafo Region**: St James, Sunyani Secondary School.

11. **Northern Region**: Tamale Secondary School.
Appendix II:

SENTENCES

1. Water, water everywhere but not a drop to drink.
2. The big, bad wolf ate the sheep.
3. I could not log onto the internet last night.
4. But what does it mean?
5. He works in a lab somewhere.
6. I liked Kwesi, but did he like me?
7. Don't kick the dog!
8. I asked him to put it down.
9. If you are still hungry, lick the plate!
10. You must pat the dog gently.
11. Would you look at that great, red bud!
12. He put the book away and could sit down.
13. The cat sat on the mat and jumped onto my lap.
14. Do you get it? - be tip top and a bit fad.
15. I just bought a new set of books.
16. I bet he stopped the fight.
17. He asked me to make a bid.
18. You should put a stop to the fight!
19. Cut the cord!
20. Take the next street left!