

# 1. The Glottal Stop/ Plosive [ʔ]

## Introduction

T-Glottalization refers to the pronunciation of /t/ as a glottal stop [ʔ]. Glottalization is a type of lenition in which the oral gesture of a stop is removed. It is a common phonetic evolution for oral stops to evolve to have a glottal point of articulation. Glottal stops are common allophones of /t/ in most varieties of English, however, there is an impressionistic idea that their frequency in British varieties is much higher than in American varieties, so much so that Robinson (n.d.) asserts that t-glottalization is not “a feature of any US accent and thus one of the many examples that British English and American English, in terms of their pronunciation at least, are diverging rather than converging.”

The glottal stop is a very common sound in British English. How often a native speaker uses it depends on their accent and how fast they are speaking. It generally refers to a stop made in the larynx by the abrupt and sustained closure of the vocal folds. In other words, a **glottal stop**, symbolized /ʔ/, is a plosive made at the glottis (= made by the vocal folds). In English it is sometimes used as a kind of t-sound, and sometimes has other functions. In addition to the bilabial /p b/, alveolar /t d/, and velar /k g/ plosives, the glottal plosive [ʔ] (often referred to as “glottal stop”) also occurs in English.

## 1. Glottal replacement

The most important occurrence of the glottal plosive in English is as an allophone of the /t/ phoneme. This is known as **glottal replacement**. Glottal replacement occurs in only a specific set of phonetic contexts. The most important of these is when /t/ is in a syllable coda, preceded by a sonorant (i.e., vowel, nasal, or approximant) and followed by another consonant, examples :

**Within words:** butler ['bʌʔlə], lightning ['laɪʔnɪŋ], pitfall ['pɪʔfɔl], tents [tɛnʔs]

**Between words:** felt wrong ['fɛlʔ 'rɒŋ], sent four ['sɛnʔ 'fɔr], light rain ['laɪʔ 'reɪn], part time ['pɑrʔ 'taɪm]

Glottal replacement is also common before a pause, e.g., *wait* [weɪʔ]. Although, in General American (GA), [ʔ] does not occur between vowels in word-medial position, as in *meeting*, it can be heard in word-final position before a vowel in high-frequency words, for example *got a* ['gɔʔ ə], *met us* ['mɛʔ əs]; note, however, that t-tapping/flapping is far more common in this position

Some other similar uses of the glottal stop when it comes to replace the plosives/stops /p,t,k/.

1. Some speakers replace final /p,t,k/ by a [ʔ] when a consonant follows ; e.g.,
2. Such a glottal stop often replaces /t/ when the following consonant is homorganic ; e.g., no[ʔ] now ; wi[ʔ]ness ; Sco[ʔ]land.
3. The glottal stop [ʔ] is also heard before other consonants such as : foo [ʔ]ball (bilabial) ; no[ʔ] mine nasals ; no[ʔ] for me, no[ʔ] very much (fricatives) ; before /h/ as in : no[ʔ] here ; some of the Cockney accent (a local/regional accent of persons generally born in the East-end of London, England). E.g. Have a look [æv ə lʊʔ] ; but what he ought to do [bʌʔ wʊʔ i: ɔ:ʔ ə dəʊ] ; I hate him [aɪ ʔeɪ ʔɪm].

## 2. Glottal reinforcement

In addition to [ʔ] acting as an allophone of /t/, it can also occur together with /t/ and the other voiceless stops, /p k tʃ/, in a process known as **glottal reinforcement**. A glottal closure overlaps with the oral closure: first the glottal closure is made; then the bilabial, alveolar, palato-alveolar, or velar closure is made; then the glottal closure is released inaudibly behind the oral closure before finally the oral closure is released; this phenomenon is sometimes also referred to as “pre-glottalization.” Glottal reinforcement occurs in the same phonetic contexts

as for glottal replacement of [t] (except for /tʃ/, which does not have to be followed by a consonant), and like glottal replacement, although it's common, it isn't obligatory.

Some other similar uses of the glottal stop when it comes to reinforce the plosives/stops /p,t,k/.

1. The glottal stop[ʔ] serves as a syllable boundary marker when the initial sound of the second syllable is a vowel, e.g., cooperate [[kəʊʔ'ɒpəreɪt] ; reaction [rɪʔ'ækʃn] ; geometry [dʒɪʔ'ɒmtrɪ].
2. Any initial accented vowel may be reinforced by preceding the glottal stop ; e.g., It's [ʔ]'empty ;

I haven't seen[ʔ]'anybody ; she's[ʔ]'awfully good ; it's un[ʔ]'eatable ; such dis[ʔ]'order.

## 2. Multiple variation use for /t/ sound

**Introduction :** there roughly exists three realizations of the sound [t]. These are : the **'true' /t/** ; the **tap/the flap /t/** ; the **glottalized/held /t/**.

### 1. The true /t/:

The /t/ is a regular, aspirated /t/ when it is the first sound of a word or a stressed syllable. This rule overrides all other /t/ allophone patterns. In short, the **True T** sound is heard when T or Double T (TT) is at the beginning of a word or at the beginning of a [stressed syllable](#) in a word. As such, the /t/ is pronounced normally in the examples below because the sound begins a **stressed syllable** : attach: /ə'tætʃ/ ; pretend: /prɪ'tend/ ; italic: /ɪ'tælɪk/ ; tattoo /tæ'tuː/ ; attack /ə'tæk/ . **True /t/ can be also found at the start of an initial cluster, e.g. trend, stop, spell, string etc ; or at the end of a word or syllable, e.g. fact, doctor, past, faster, erupt , captain, faint, scented ; or in the English past tense where 'D' is pronounced like 'T' when it is after an unvoiced consonant sound (f, p, s, k, th, sh, ch, but not T). Unvoiced or voiceless consonant sounds are sounds that are not made with the vocal cords. Instead, they are made using a puff of air, e.g.s. jumped = jumpt, washed = washt, laughed = laft.**

### 2. The flap [ɾ] :

The American English accent has naturally evolved towards saying sounds in the most simple (and often lazy) way. The 'flap t' is what is often called a 'soft d' in pronouncing /t/. A fully pronounced, fully aspirated 't' sound takes more effort to pronounce in the middle of a word or phrase than a 'soft d.' **Actually, a tap or a flap is a single rapid contact of the tongue tip with the roof of the mouth at the end of which the tongue tip returns to a position of rest, resembling a very brief and quick articulation of a stop, as seen in the change of /t/ to [D] in American English in the medial position in such words as **writer** and **rider**. Flapping of the /t/ phoneme into [D] is a typical case of American English pronunciation. Thus, flapping of /t/ into [D] becomes a distinguishing mark between British and North American pronunciations. Flapping is just a phonetic change, but may be a phonemic development in certain environments for the foreign language learners with a limited background in North American English.**

So, what is the key/clue to understand words similar in sound but different in meaning ?

e.g. Litter / leader ; writer / rider ; title / tidal

■ [ɾ] /d/ [ɾ] /d/ [ɾ] /d/

**\*The vowel length:** the vowel is longer before the tap which represents /d/ and shorter before the flap that stands for /t/.

**\*The context :** e.g. I won a medal **vs.** metal chairs are comfortable. Although the two words may have almost the same pronunciation, but when considering the context of each, the meaning is quite different.

## When to use the ‘flap t’?

Stressed      Examples : biting – waiting – heated – invited

1. Between 2 vowel sound → Unstressed

2. With double ‘tt’ e.g bitter ; lettuce ; ditto ; motto ; latter ; better

3. Before /l/ : e.g. Little ; battle ; bottle ; hospital ; mortal

4. Preceded by /r/ → with /r/ and a vowel after, before, or both : e.g. waiter ; quarter ; artist ; hearty ;

**thirty** ; thirty ; forty ; daughter.

## In general, here are the rules for when to use the ‘flap t’ (repeated):

- If a ‘t’ is between two vowels, whether in a word or between 2 words, it’ ll be pronounced as a ‘soft d.’
- ‘Flap t’ will often occur between a vowel and a ‘dark l’ such as in “little” or “bottle.”
- ‘Flap t’ will also happen before or after an r-controlled vowel such as in “turtle” or “daughter.”
- ‘Flap t’ will happen after a ‘c’ /k/ or ‘s’ /s/ sound as in “doctor” or “sister.”

*\*Remember, this is English, so, there might be exceptions to these rules.*

**Exercise one** : Read the following words and put each in the appropriate column, whether it is a ‘true t’, a ‘flap t’, or a ‘glottal stop’.

betwéen, fourtéén, impórtant, máttter, patéernal, atómic, búttter, réticent, Manháttnan, retúrn, búttton, fórtty, sáatin, pátent, átom, máster, pátttern, rétina.

|             |               |                       |
|-------------|---------------|-----------------------|
| /t/ is true | /t/ is a flap | /t/ is a glottal stop |
|-------------|---------------|-----------------------|