Where are the moun[ʔ]ns in Utah?
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Linguists have investigated a number of traits that characterize English in Utah. Among these are the cord/card merger (Bowie 2003), the fill/fell merger (Baker and Eddington 2009, DiPaolo and Faber 1990), and the use of propredicate do (DiPaolo 1993). However, one of the most often stigmatized characteristics of Utah English is that Utahns “drop their Ts” in words such as mountain, and kitten, which is pervasive enough that it even receives local press coverage. One challenge for investigating the factors that influence t-dropping, as well as its social meaning, is defining exactly what t-dropping is in phonetic terms; it could involve actual deletion, or may refer to the glottal pronunciation, or it may entail an oral release after the glottal stop. The goal of the present study is to determine the phonetic correlate of this stigmatized pronunciation and to make an initial foray into how age, being from Utah, and gender affect it.

The participants consisted of 57 native western U.S. English speakers, of whom 35 were Utahns. They were recorded while reading a passage containing 24 instances of words such as mountain in which /t/ is followed by a syllabic nasal. The resulting 1368 tokens were examined spectrographically for /t/ retention, deletion, glottalization, and following oral release. Mixed effects logistic regression analysis using Rbrul (Johnson 2008) was performed on the data with word and participant as random factors.

The analyses reveal that deletion and glottalization of /t/ are not likely candidates for t-dropping. (Deletion rates are 11% for Utahns and 3% for non-Utahns. Glottalization rates are 81% for Utahns and 89% for non-Utahns.) In contrast, oral releases after glottal stops (e.g. [mawʔən] vs. [mawʔn]) were produced by Utahns in 17% of the cases and by non-Utahns in less than 1%. As the graph indicates, oral releases are produced by Utah females in their 20s in over 60% of the cases. We conclude that what is commonly referred to as t-dropping is actually an oral release of the glottal stop rather than deletion or glottalization. The social distribution of oral releases merits further study.