

# PRE-ASPIRATION IN WALES AND ENGLAND

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# INTRO

## WHAT IS PRE-ASPIRATION?

→ **brief anatomy of plosives** (pre-aspiration most common with these)

→ **What is pre-aspiration?**

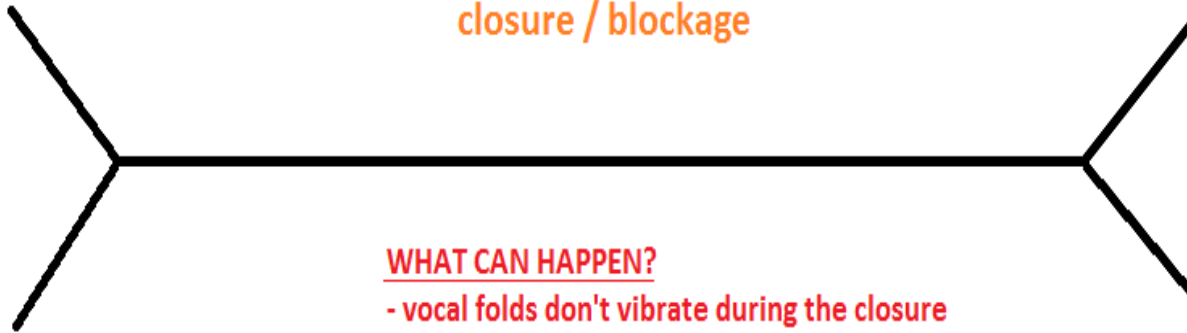
# INTRO

## ANATOMY OF PLOSIVES

closing / shutting phase

opening phase

closure / blockage



WHAT CAN HAPPEN?

- vowel gradually lower in amplitude
- glottalisation
- pre-aspiration

WHAT CAN HAPPEN?

- vocal folds don't vibrate during the closure
- or they do

WHAT CAN HAPPEN?

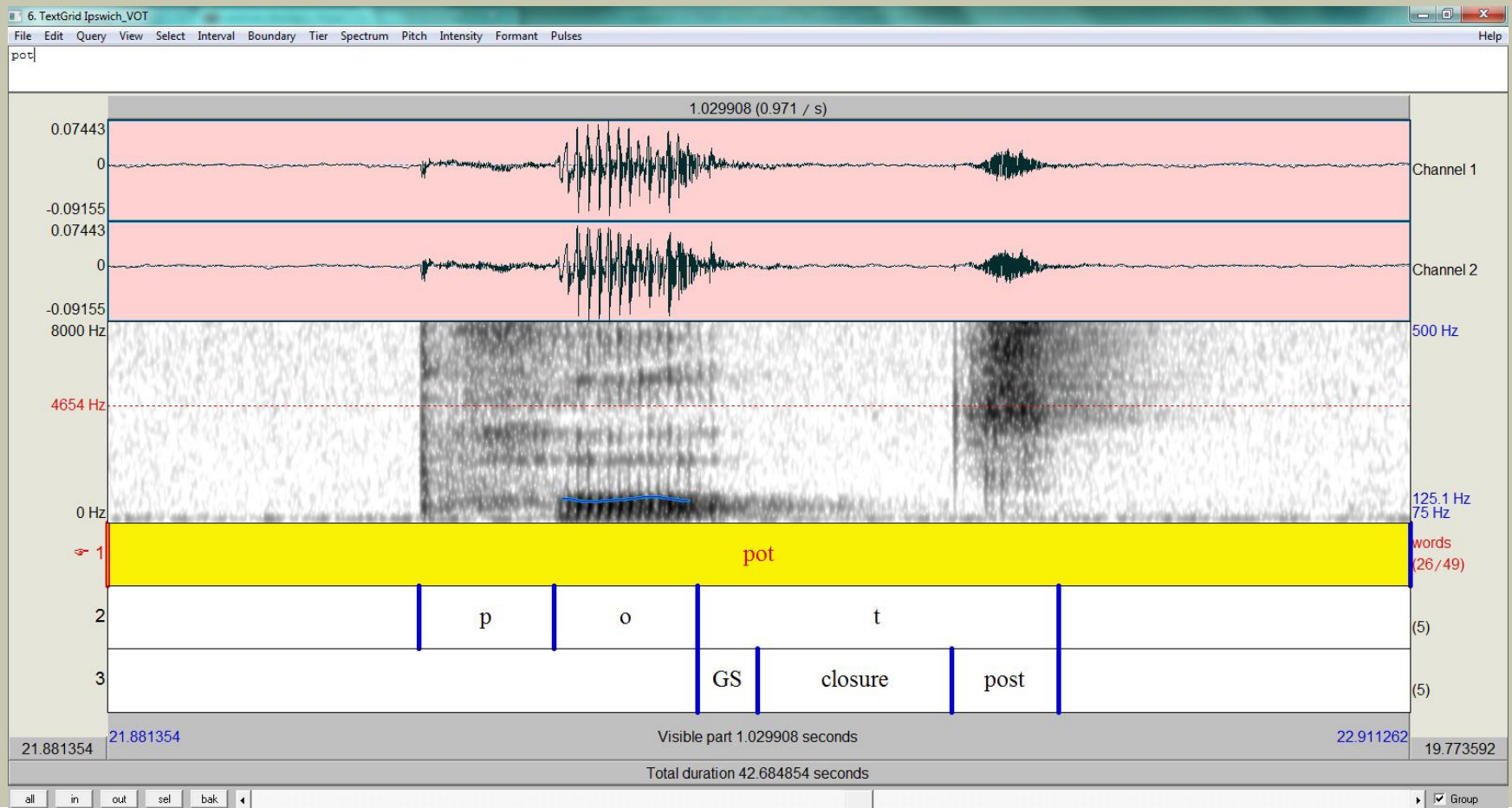
- release which can be post-aspirated
- but does not have to be
- the release may be both post-aspirated and voiced



# INTRO

## ANATOMY OF PLOSIVES

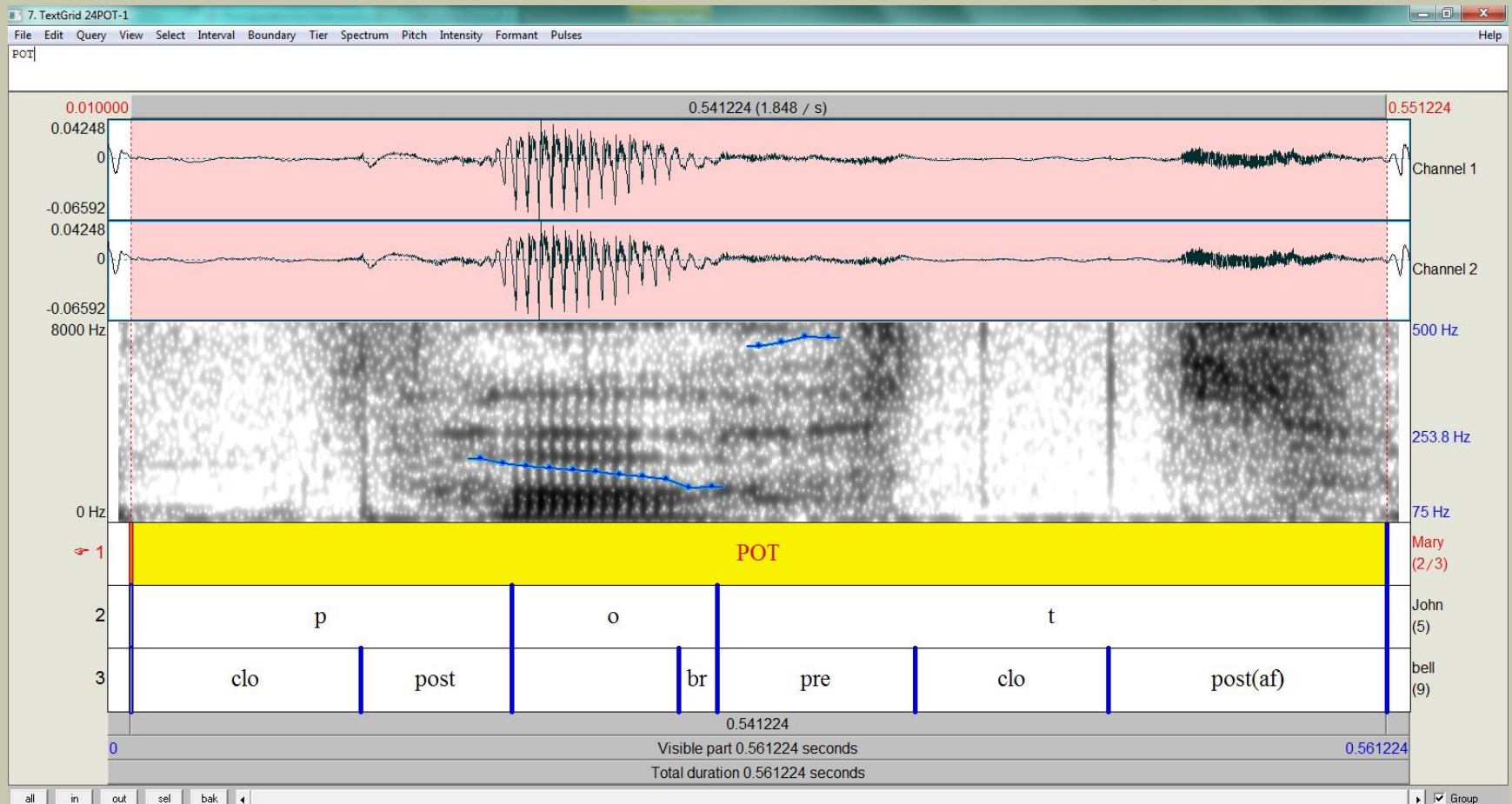
### ■ Ipswich English *pot*



# INTRO

## WHAT IS PRE-ASPIRATION?

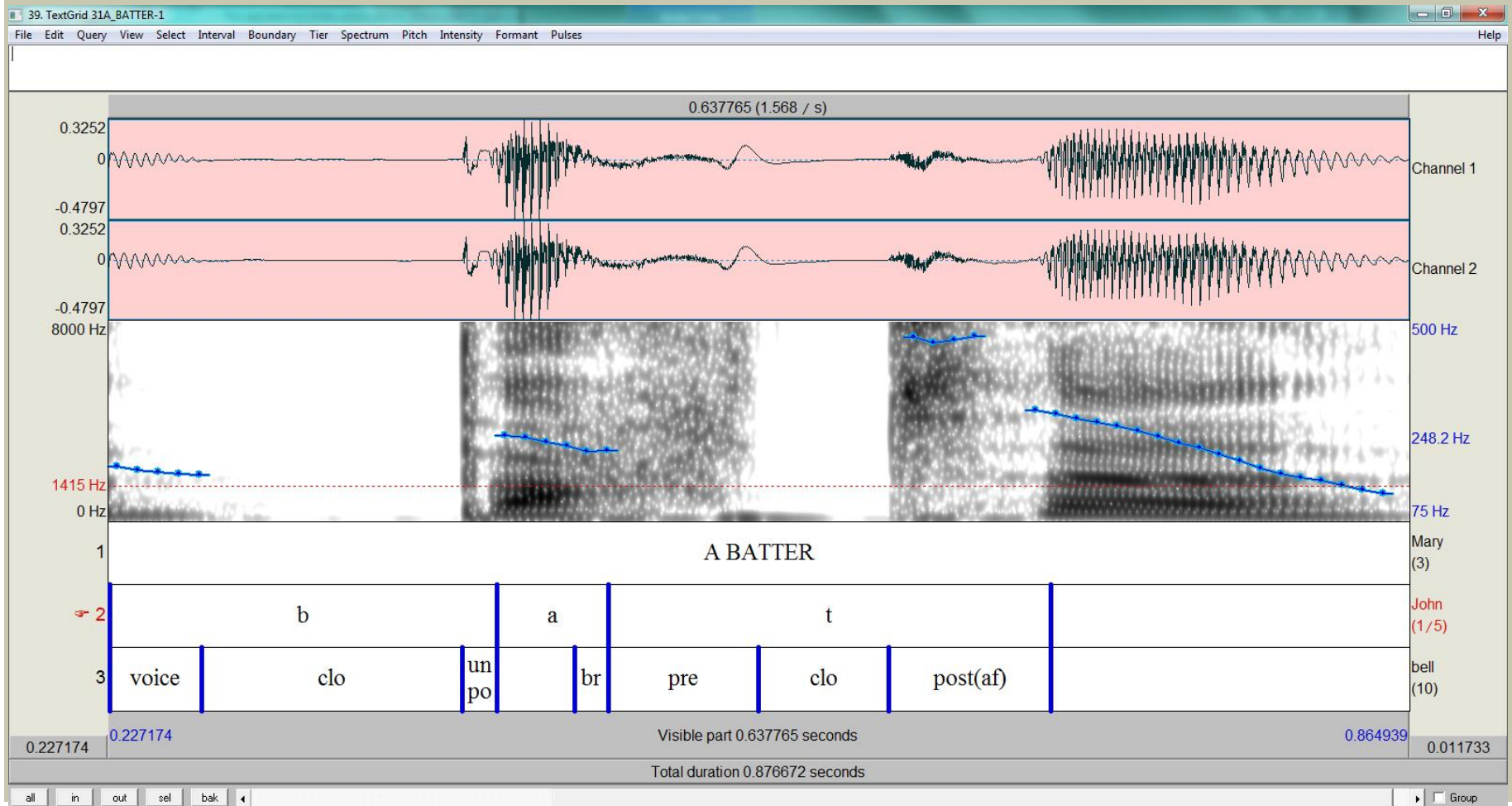
### ■ Aberystwyth English *pot* (pre-aspirated)



# INTRO

## WHAT IS PRE-ASPIRATION?

### ■ Aberystwyth English *batter* (pre-aspirated)



# AIMS OF THE TALK

To show that...

- pre-aspiration is more widespread than believed
  - perhaps because its study requires recordings of good quality
  - perhaps because it's usually difficult to hear even if we are told it's there!
- there are many interesting aspects of pre-aspiration
  - pertaining to
    - phonetics
    - phonology
    - sociolinguistics
    - historical linguistics
- You should do research on pre-aspiration! =o)

# OUTLINE

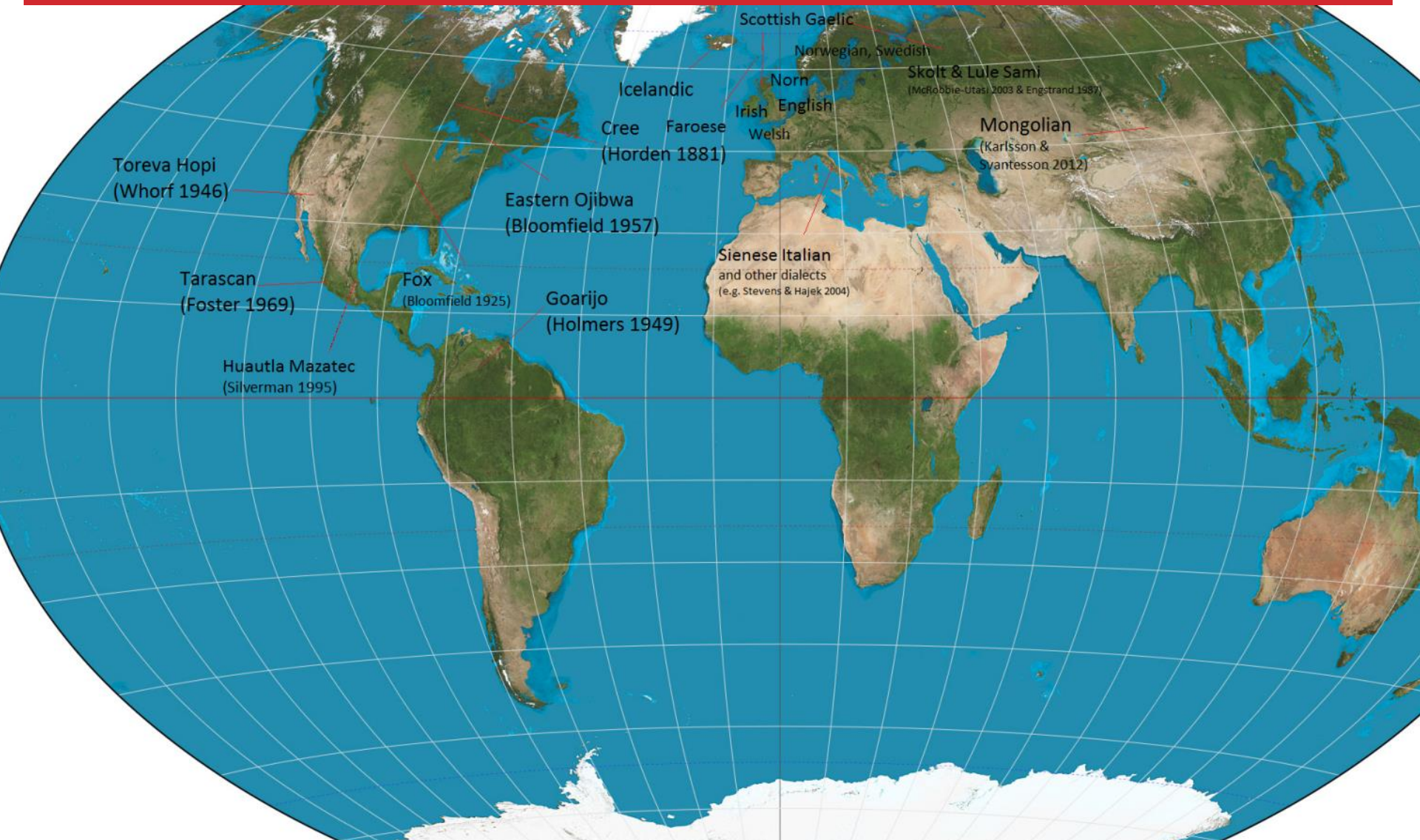
- **reported pre-aspiration**
  - **in the world**
- **pre-aspiration (un)reported in England**
- **pre-aspiration (un)reported in Wales**

## **Aberystwyth English pre-aspiration**

- **linguistic conditioning & phonetics and phonology interface**
- **sociolinguistic aspects**
- **historical questions**



# PRE-ASPIRATION IN THE WORLD

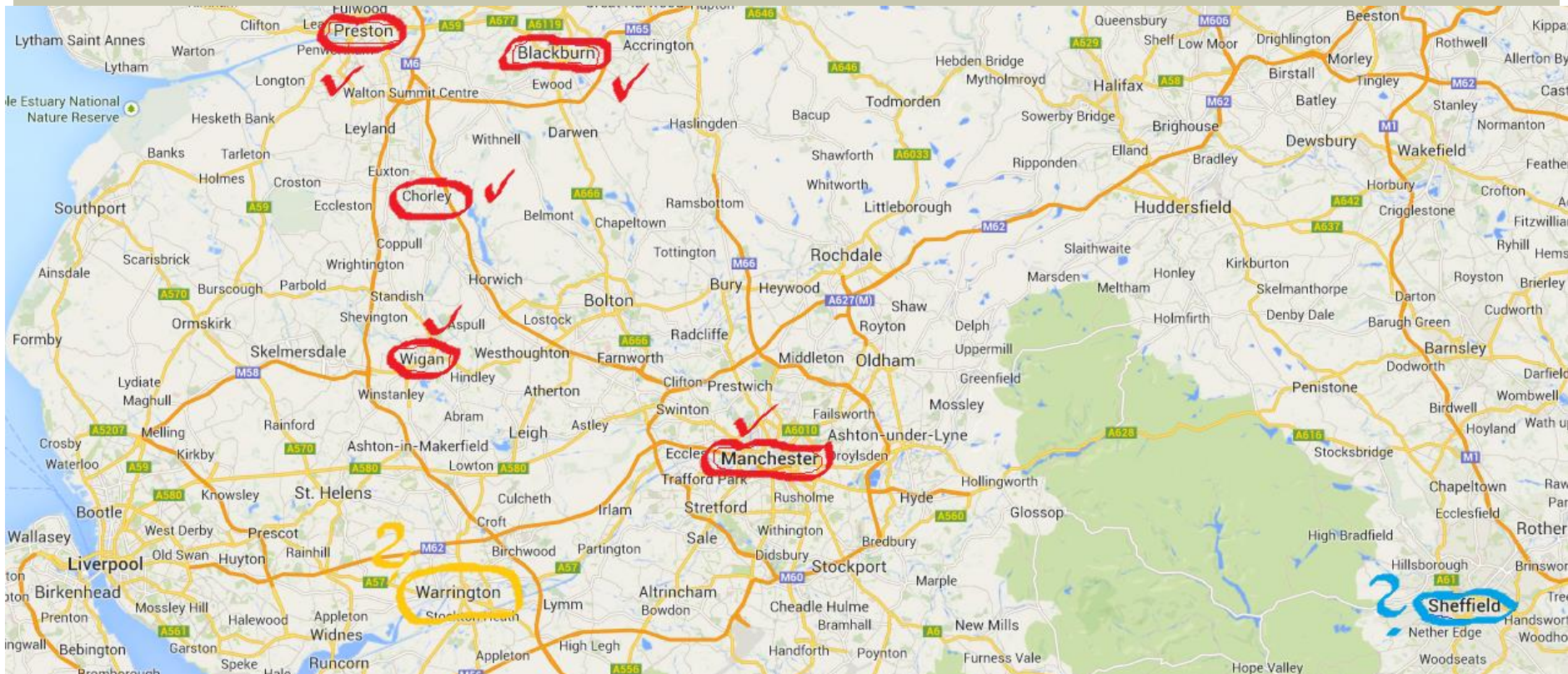


# REPORTED IN ENGLISH

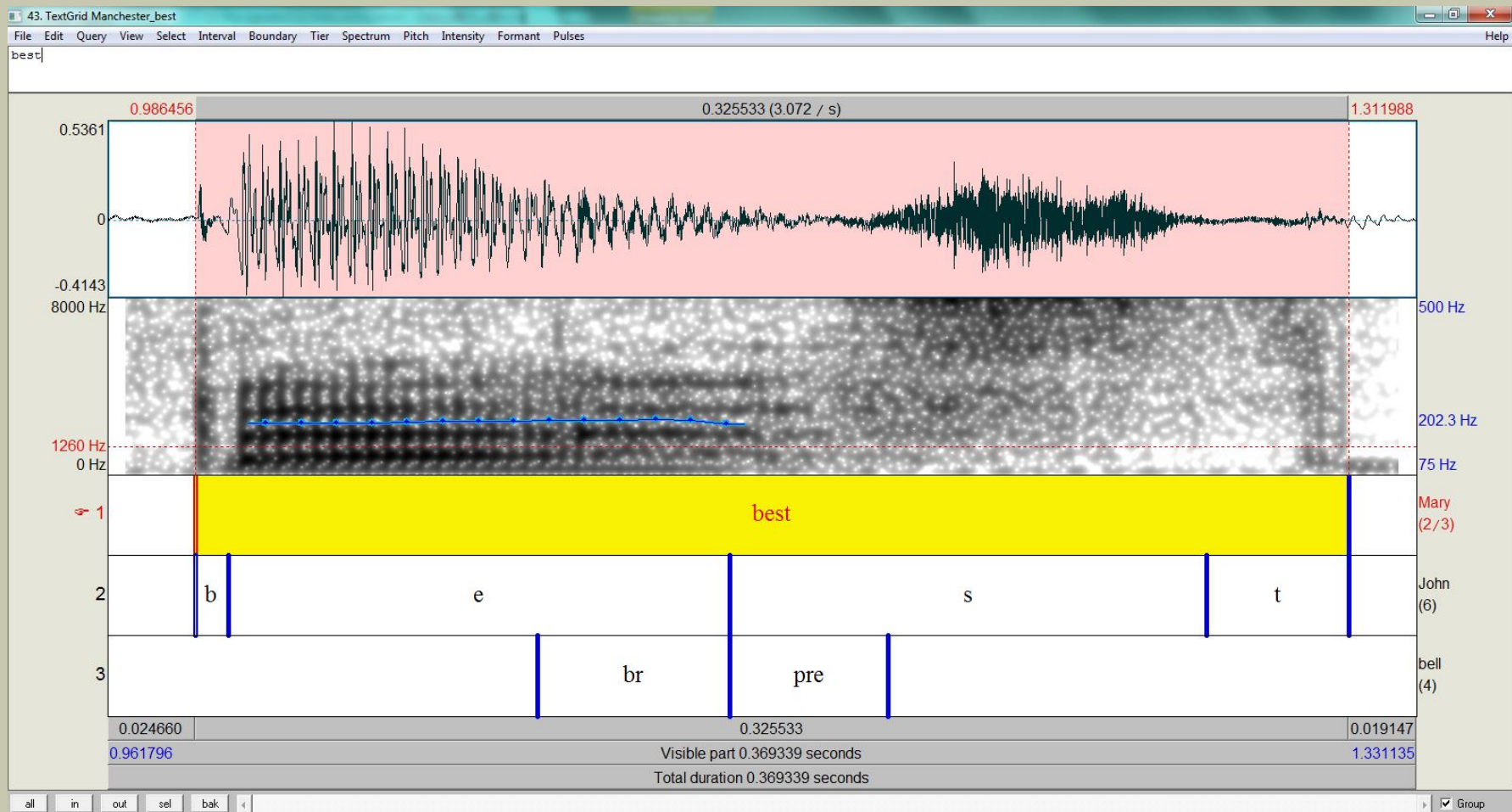
- English in Edinburgh (Gordeeva & Scobbie 2007)
- English in Lewis & Harris (Ní Chasaide 1985)
- Northern Welsh & Northern Welsh English (Morris 2010)
- English English
  - Middlesbrough (Jones & Llamas 2003)
  - Tyneside (Docherty & Foulkes 1999)
  - Liverpool (Watson's thesis & IPA illustrations 2007)
  - However, the spectrograms for Liverpool data look like spirantisation, not pre-aspiration.

# UNREPORTED IN ENGLAND

- but I've also noticed it in Manchester, Wigan, Chorley, Preston, and Blackburn (*supported by recordings*)
- also overheard a person from Birmingham pre-aspirate

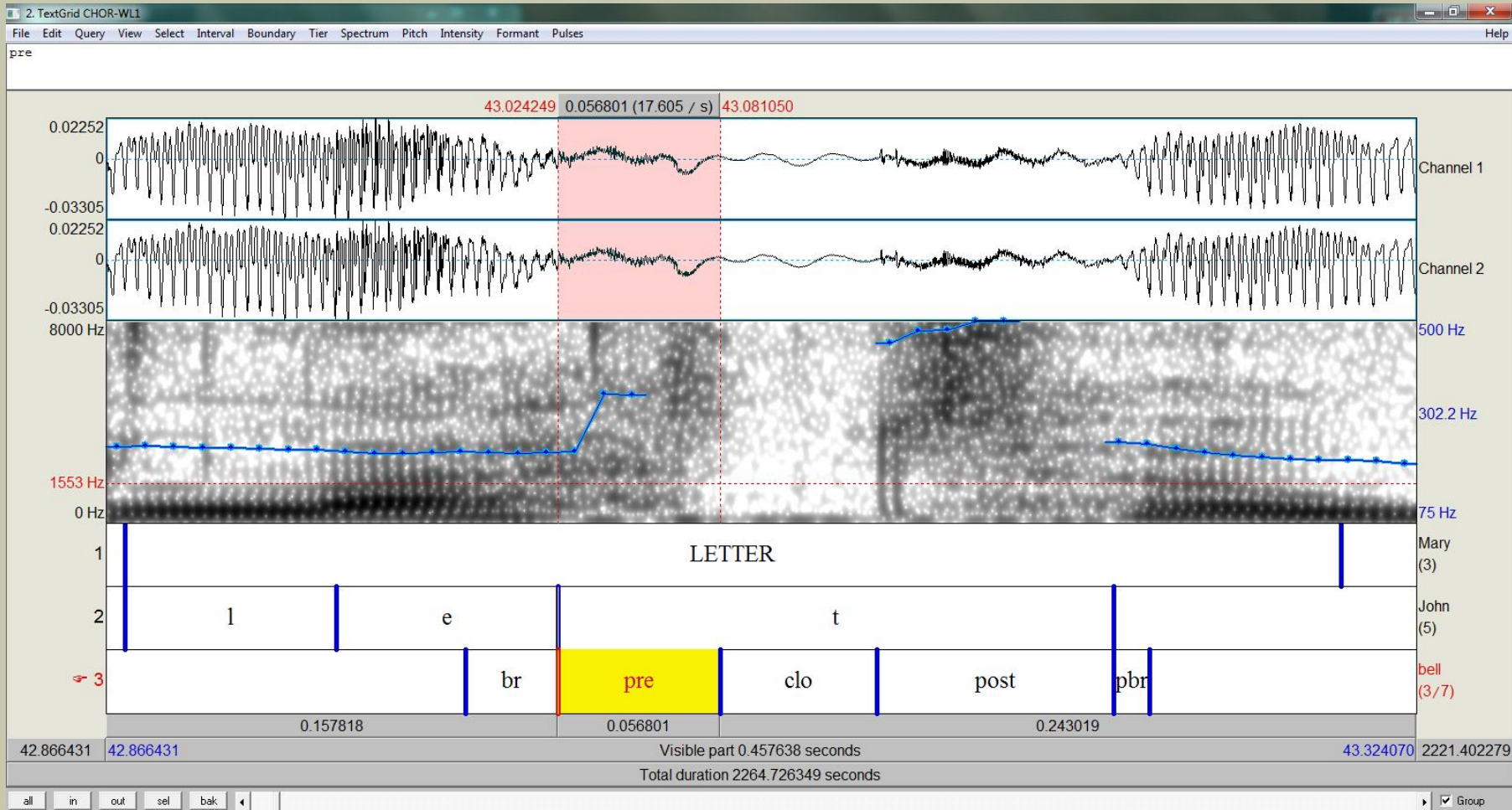


# UNREPORTED IN MANCHESTER

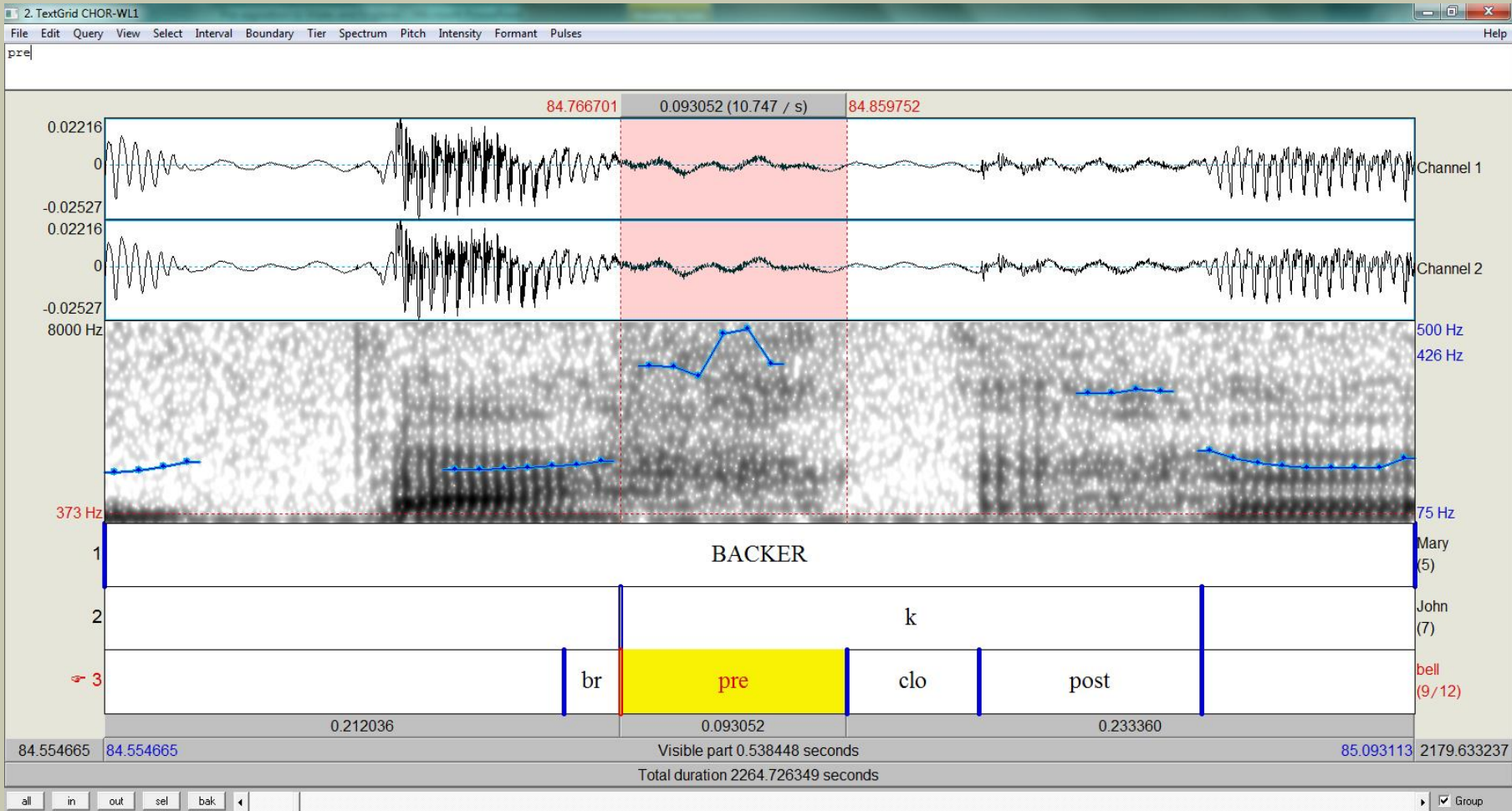


many thanks to [Danielle Turton](#) for her Manchester recordings

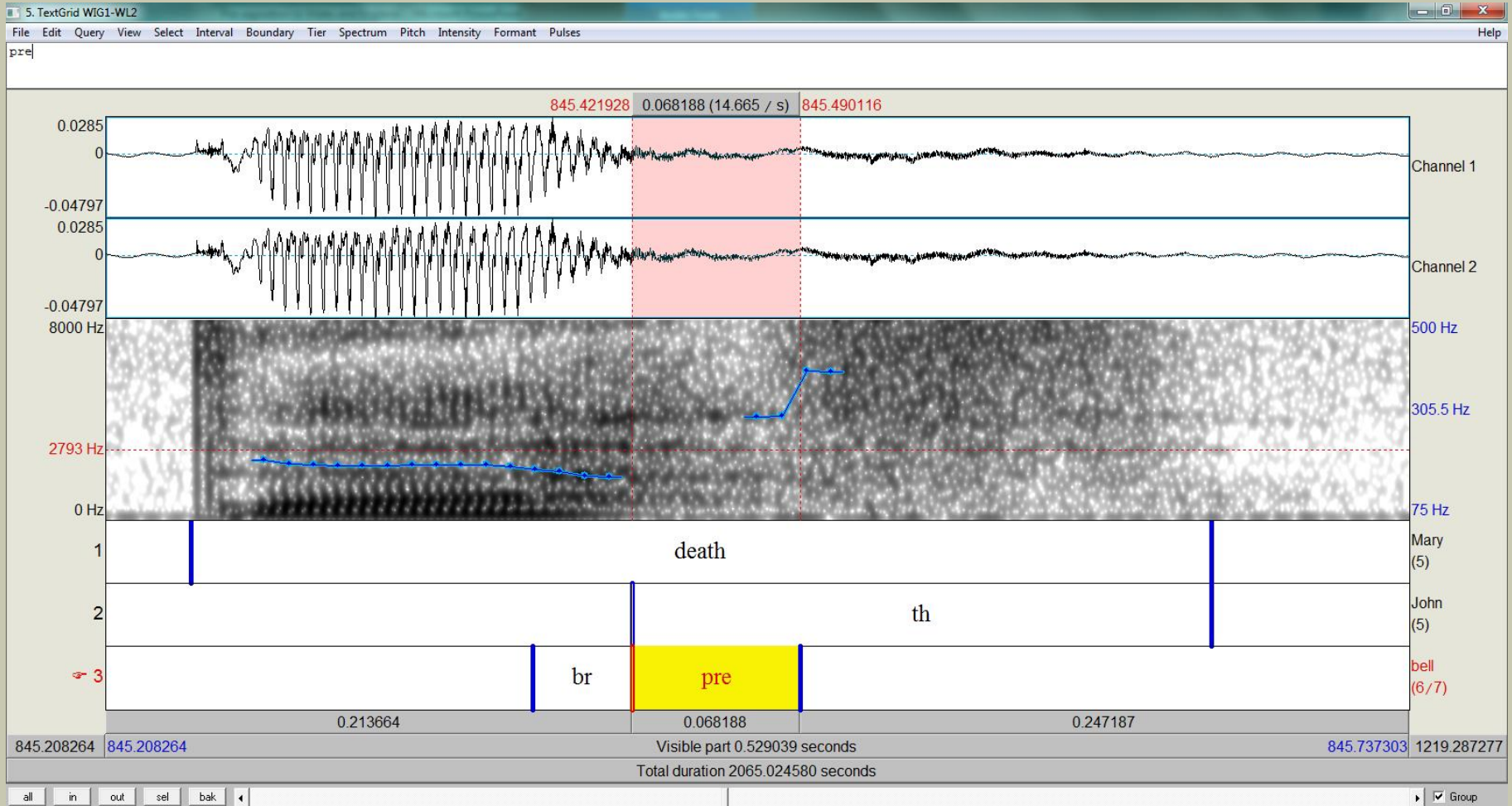
# UNREPORTED IN CHORLEY



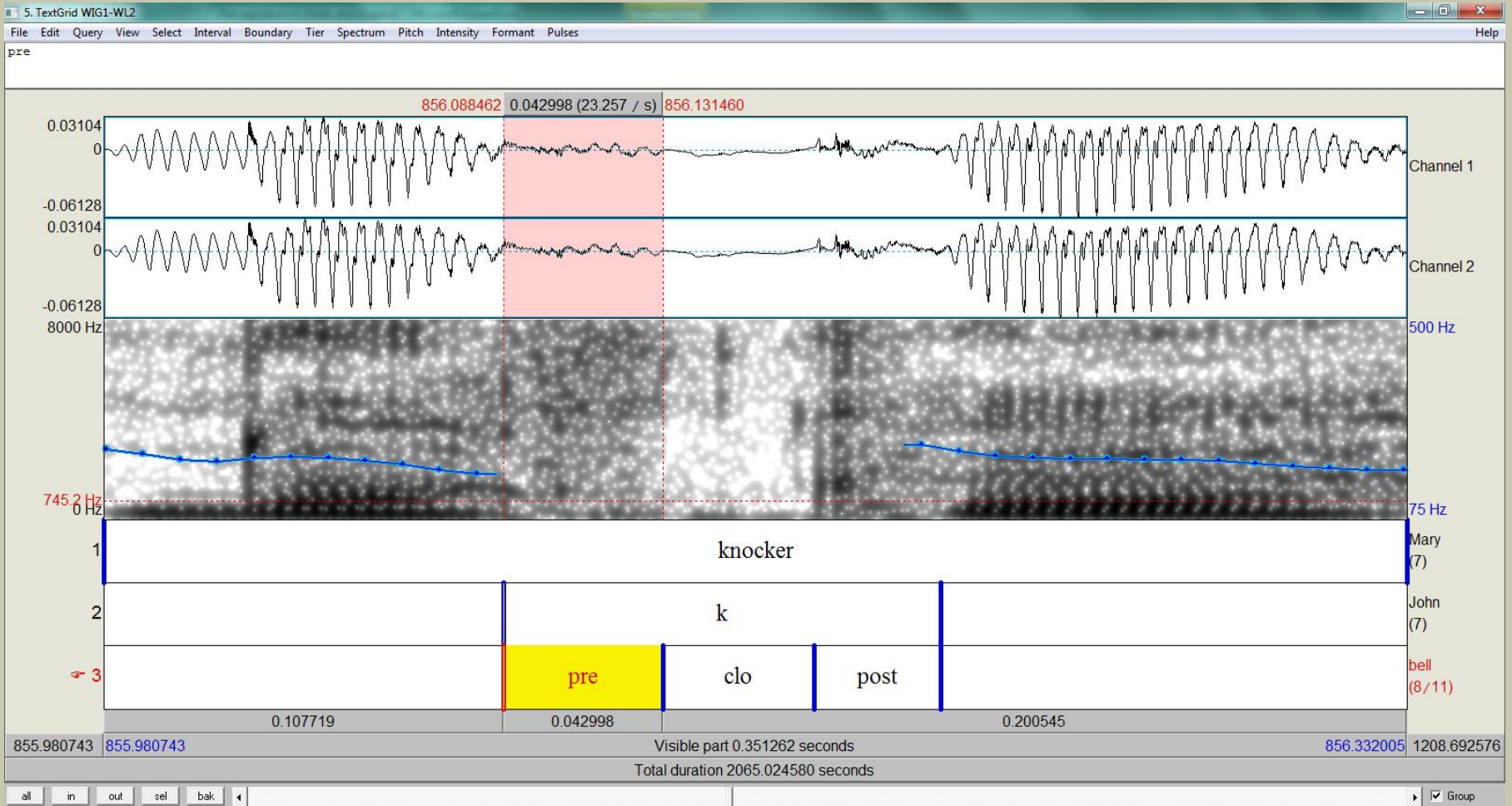
# UNREPORTED IN CHORLEY



# UNREPORTED IN WIGAN



# UNREPORTED IN WIGAN

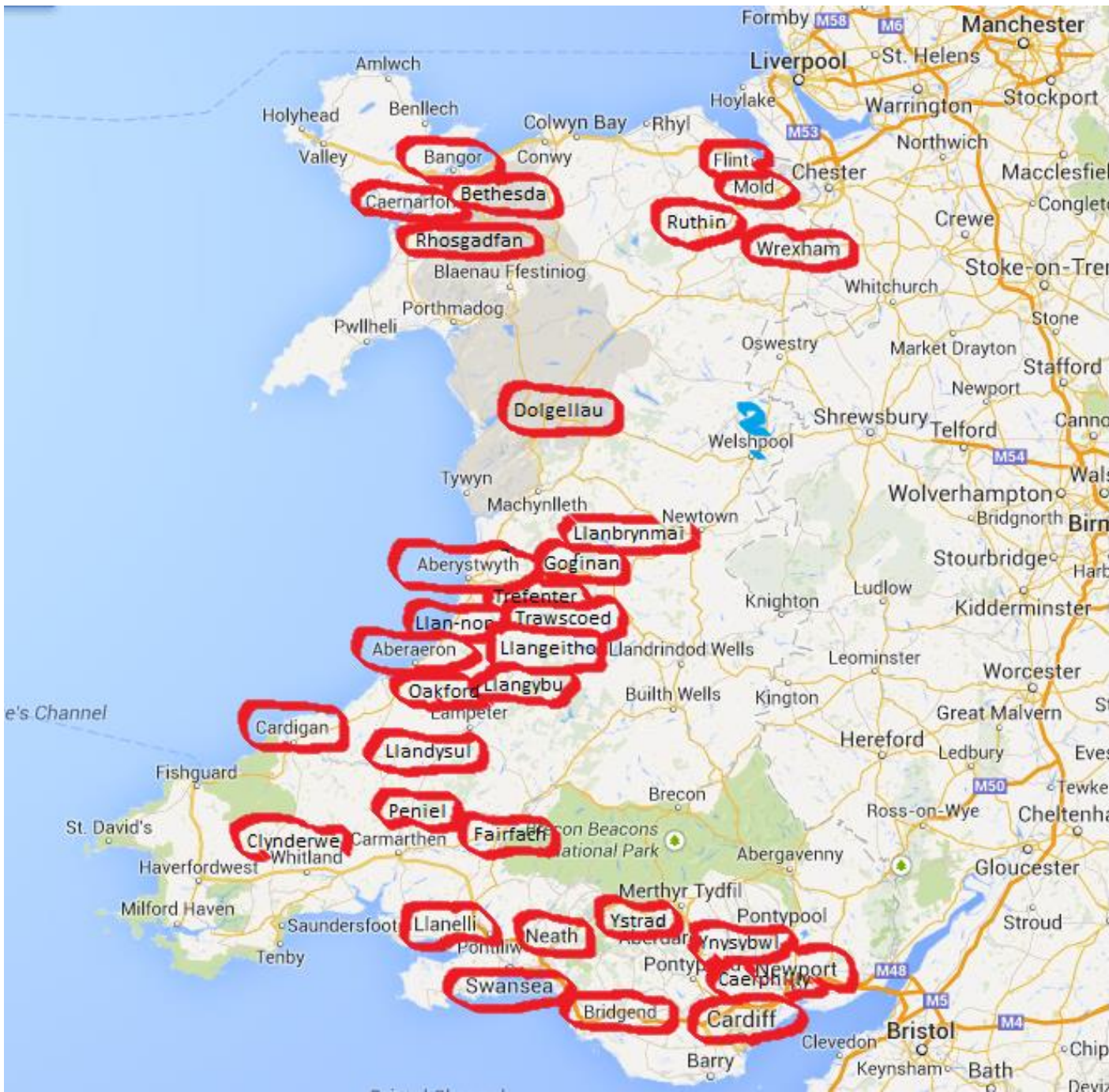




# UNREPORTED IN WELSH ENGLISH

## UNREPORTED:

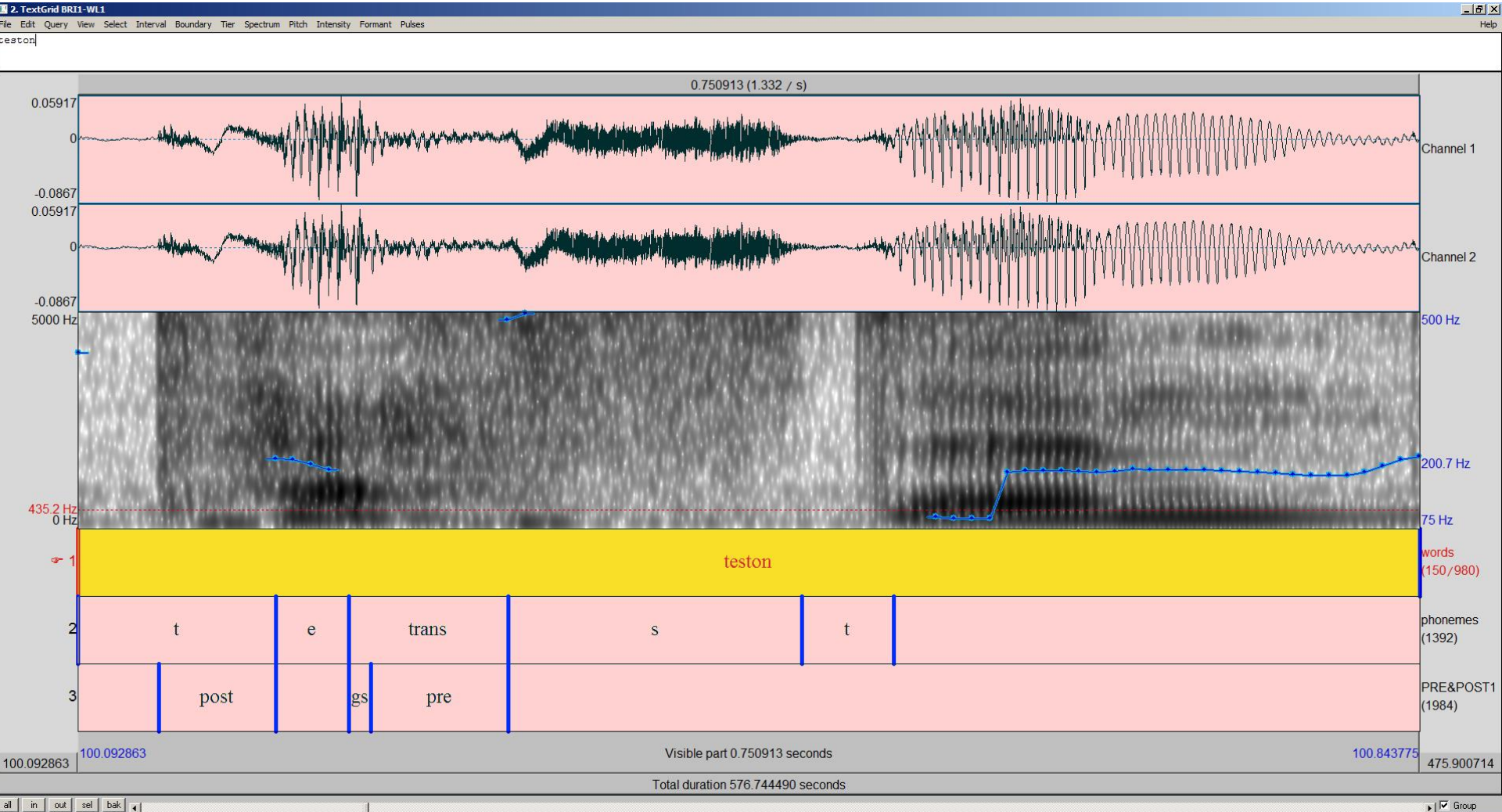
- I've recorded 50 respondents from various parts of Wales
- and another 53 from Aberystwyth
- pre-aspiration more or less across the whole country
  
- most of my respondents are native speakers of Welsh
- but non-Welsh speakers pre-aspirate as well



**WALES**  
 unreported  
 pre-aspiration  
 in English

1 speaker  
 from Welshpool  
 did not  
 pre-aspirate

# WELSH ENGLISH: BRIDGEND NON-SPEAKER OF WELSH



# LINGUISTIC CONDITIONING

- What conditions pre-aspiration?
- Voiceless obstruents
  - /p/, /t/, /k/
  - /f/, /θ/, /s/, /ʃ/
  - /tʃ/
- Are there any differences in how these obstruents condition it?
- What about vowels?
- How about stress?

# LINGUISTIC CONDITIONING

Duration of pre-aspiration in Aberystwyth English conditioned by

- place of articulation of the following plosive
  - /p/ always the shortest, including zero values
- vowel height
  - /I/ the shortest, including zero values
  - Some speakers linearity (/I/ < /e/ < /æ/), others not (/I/ < /æ/ < /e/)
  - this seems to apply to fricatives as well
- stress (preliminary analysis)
  - for some speakers, only in stressed syllables
  - for others, much shorter in unstressed syllables
- vowel length, duration, backness not factors on the whole
  - with very few exceptions

# AFFILIATION OF PRE-ASPIRATION

- a segment of its own?
- part of the following obstruent?
- part of the preceding vowel?
  
- implications for the rhythmic profile of the variety

## My hypothesis:

- for female Aberystwythians above 25, part of the consonant
- for female Aberystwythians below 25, a segment of its own

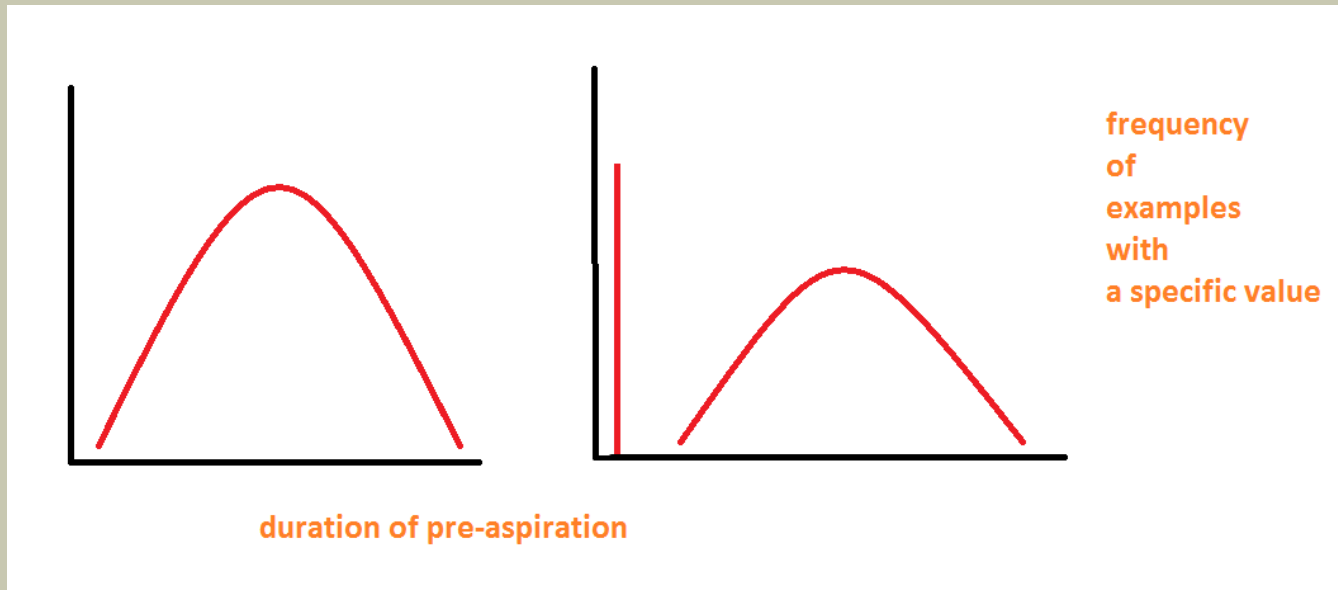
## Results

- to be obtained from new data after April!

# PHONETIC AND/OR PHONOLOGICAL?

Bimodal distribution of durational values

- in the same conditioning



- it seems the latter is the case, but statistical tests needed

# PHONETIC AND/OR PHONOLOGICAL?

Contribution to the fortis-lenis contrast

(/p/, /t/, /k/ vs /b/, /d/, /g/)

- pre-aspiration
- voicing
- vowel duration
- post-aspiration duration
- voiceless closure duration
- → all significantly different for fortis and lenis
  
- not in itself a proof
- Which of them is/are in the underlying structure?
- to be tested...



# PHONETIC AND/OR PHONOLOGICAL

Could bear a unit of weight, but how do we know?

- If it is found in stressed syllables only
- If it is found after short vowels only
  
- If a case of degemination?
  - *lapper* lap:ə → lahpə → lapə
- unclear whether Welsh English gemination is actually moraic!
  
- if a segment of its own?
- not necessarily a sign of moraicity

# SOCIOLINGUISTIC

## SEX and GENDER

- It has been claimed women pre-aspirate more often and with longer durations of pre-aspiration in various languages (e.g. Helgason 2002)
  - If conditioned by gender, why do we find it across different pre-aspirating languages?
  - → due to their physiology?
  - no good explanations suggested so far

## AGE

- Is pre-aspiration conditioned by age?
- hypothesis: younger Aberystwythians pre-aspirate more often, with longer durations, and in more contexts
- → pre-aspiration an innovation / an advancing change

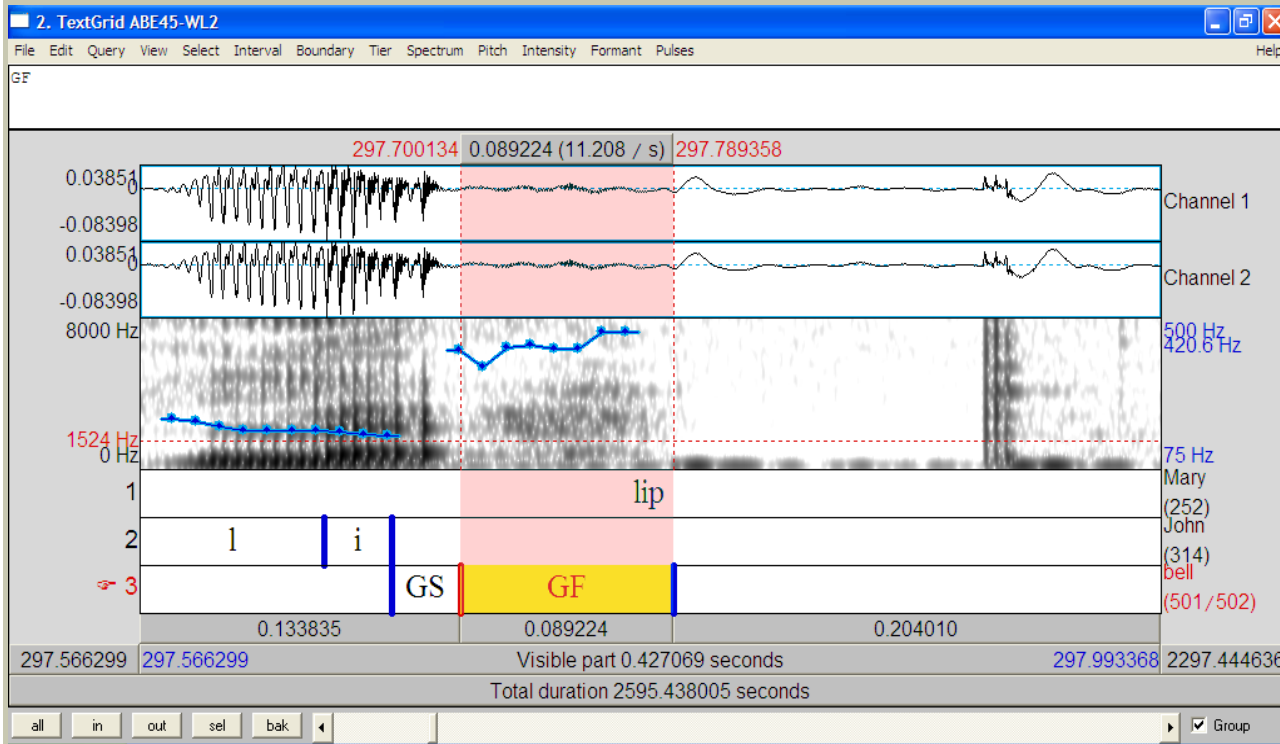
# SOCIOLINGUISTIC

## PRE-ASPIRATION and GLOTTALISATION

- Is there competition between glottalisation and pre-aspiration?
- If so, is this conditioned by social variables or linguistic variables?
- **ABE37**
  - glottalises systematically word-finally (*bap, bat, back*)
  - pre-aspirates systematically word-medially (*lapper, batter, backer*)
- **ABE45**
  - glottalises as well
  - but pre-aspirates in the same lexical items
  - How and why does this happen?

# SOCIOLINGUISTIC: PRE-ASPIRATION & GLOTTALISATION

ABE45 glottalises and pre-aspirates in the same lexical items



- two possible sociolinguistic sources:
  - England → glottalisation
  - Wales → pre-aspiration
    - (Wells 1982: Welsh English typically lacking glottalisation)

# HISTORICAL QUESTIONS & AGE VARIABLE

- Where does pre-aspiration come from in Wales?
- Why do we have pre-aspiration in Middlesbrough, Tyneside, Manchester, Wigan, Chorley, Preston, Blackburn, etc.?

## Further questions

- Could pre-aspiration in Wales and pre-aspiration in England have the same origin? (Celtic migrations)
- Is pre-aspiration the first stage of spirantisation that is found in Liverpool?

## Or not:

- Is pre-aspiration a stage of degemination or an allophone of gemination in Welsh English? (transfer from Welsh)
- Does pre-aspiration in England coincide with the area of Danelaw? (transfer from Scandinavian)
  - Is pre-aspiration in the north of England connected with the North vs South /baθ/ vs /ba:θ/ *bath*, possibly blocking the lengthening?

# CONCLUSION

- pre-aspiration is heavily understudied
- (if you don't know what to research, here's a tip for you)
- If you notice any pre-aspirators, please let me know =o)
- If you do decide to research pre-aspiration, do let me know as well!

**Thank you for listening!**

# BIBLIOGRAPHY

- Docherty, G., and P. Foulkes. (1999) “Derby and Newcastle: instrumental phonetics and variationist studies”. In *Urban Voices: Accent Studies in the British Isles*. Eds G. Docherty and P. Foulkes. London: Arnold. 47-71.
- Gordeeva, O., and Scobbie, J. (2007) “Non-normative preaspirated voiceless fricatives in Scottish English: Phonetic and phonological characteristics”. QMU Speech Science Research Centre Working Papers
- Jones, M. J., and C. Llamas. (2003) “Fricated pre-aspirated /t/ in Middlesbrough English: an acoustic study”. In *15<sup>th</sup> ICPHS*. 655-658.
- Morris, J. (2010) “Phonetic Variation in Northern Wales”. In *Proceedings of the Second Summer School of Sociolinguistics*. Eds M. Meyerhoff, C. Adachi, A. Daleszyska, and A. Strycharz. Edinburgh: Edinburgh University.
- Ní Chasaide, A. (1985) *Preaspiration in phonological stop contrasts*. PhD thesis, University College of North Wales.
- Watson, K. (2007a) *The Phonetics and Phonology of Plosive Lenition in Liverpool English*. PhD thesis, Edge Hill/Lancaster University.
- Watson, K. (2007b) “Liverpool English”. *Journal of the International Phonetics Association* 37(3): 351-360.