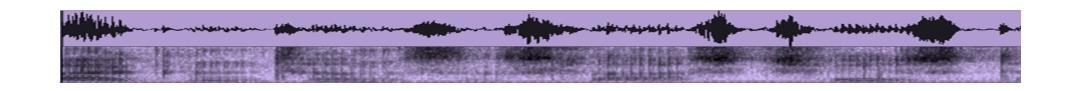


# Pronunciation teaching: Getting stress without getting stressed

Presented at the International Applied Linguistics Association conference, Brisbane, August 2014, by Dr Graeme Couper, Auckland University of Technology

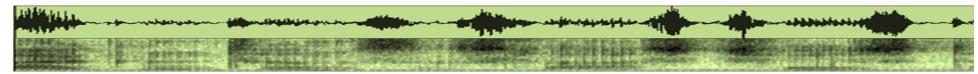




- Theory: Cognitive Linguistics and Socio-Cultural Theory.
- Two variables: Socially Constructed Metalanguage & Critical Listening
- Application: Teaching word and tonic stress
- Two qualitative classroom-based studies: The teaching
- Learners' perceptions of stress in L1 & LN: Cross-cultural explorations
- What the learners said
- Implications for teaching

## Theory: Why Cognitive Linguistics and SCT?

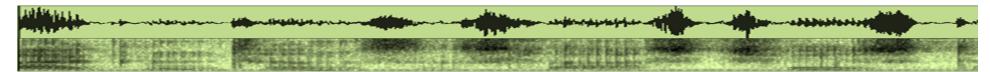
- Situationally embedded; complex interplay of social and cognitive variables to construct meaning (SCT etc.)
- Participant metaphor & Usage-based approach esp. in L2 speech res
- CL/CG/CP: Pronunciation as cognitive skill; can use general learning faculties:
  - Language results from properties of cognition (categorisation, perception, conceptual combination)
  - "Linguistic organisation (phonological inclusive) is also the outcome of the bodies humans have and how they interact with the socio-physical world" (Mompean, 2014, p. 357).
  - 1<sup>st</sup> use knowledge of cognition to build theories of language acquisition; rejects generative theory that language is in mind and autonomous; rejects computer processing analogies, not cognitive psychology
  - Fraser (2006, 2010) categories, concepts and concept formation are central to CP, applied to pron teaching.
- See: Lantolf (2011), Langacker (1987), Taylor (2002), Mompean (2006)



# Two variables: Socially Constructed Metalanguage (SCM) & Critical Listening (CL)

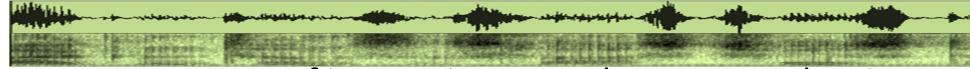
- My earlier research used CP approach to identify key variables which might explain the success or otherwise of pron teaching (explicit/implicit insufficient). Found significant empirical support for SCM and CL
- SCM: Begin with learners' perceptions of TL phonological concepts and compare with teacher's perceptions. Through class discussion socially construct metalanguage which can be used for ongoing explanation and feedback.
- CL: comparing learners' easily understood productions with productions which cause difficulty for the listener.





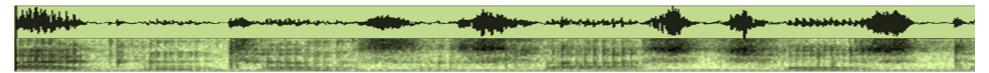
#### A focus on stress

- My findings related to the pronunciation of syllable codas: either epenthesis or absence
- In an attempt to explore how the same approach might be applied to other pronunciation features I focussed on word stress and tonic stress (sentence stress)
- Key understanding: Stress (as with all features of phonology)
  is a concept. It is realised and perceived differently in different
  languages.



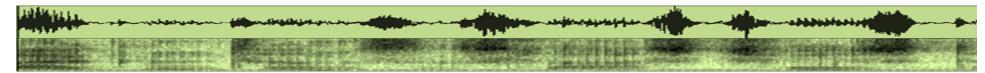
# Two courses of instruction to explore SCM and CL in teaching stress

- Participants: students attending degree preparation course in Auckland, New Zealand.
- C1: word stress, 12 hours over 3 days, N=9 (L1s: Chinese (3), Japanese (2), Indonesian, Korean, Russian and Spanish)
- C2: word and tonic stress, 16 hours over 4 days, N=7. (L1s: Japanese (3), Korean (2), Russian (2))
- Unfortunately not all participants attended all sessions i.e. difficult to collect reliable quantitative data on progress
- Focus is qualitative



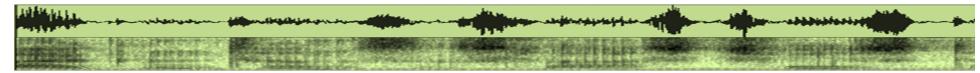
#### Research questions

- What are the Participants' perceptions of the concepts of syllables, word and tonic stress in both the English language and in their languages?
- How do these perceptions change during the instruction?
- What do these observations tell us about how teachers can best help learners?



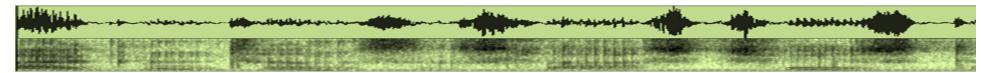
#### The teaching

- Centered around CL and developing SCM (focus on learners' perceptions)
- Combination of classroom and computer lab (used Wimba voiceboard to record and playback recordings: used for self, peer and teacher feedack)
- Same materials used for C1 and C2 with additions for C2.
- Vocabulary drawn from Academic Word List (AWL) as they have to learn this as part of regular course.
- Materials on my blog: pronunciationteaching.wordpress.com



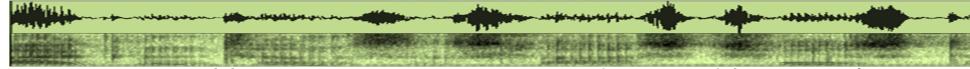
#### Learners' perceptions of English syllable concept

- Began with my name "Graeme": How many parts?
  - C2) Kat: 3, Rae and Kay: 2, Jan, Joy and June: 4, changed to 3 or maybe
    2 in English but 5 in Japanese.
  - C1) All: 3, after discussion 2 Japanese Ps say 4 in Japanese.
- Focus on consonants as important in syllables and stress
  - commit /commit stressed syllable: first t sound is very strong (Kay)
  - Epenthesis "in Korean sounds big "d" /iːˈmɜːˌʤed/ and /əˈmɜːʤd/
  - C1: It was noted that when students marked stressed syllables they underlined the consonants.



### Learners' perceptions of English word stress

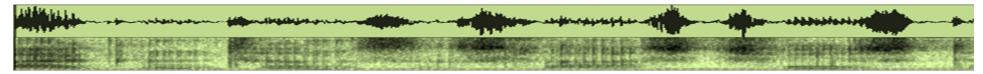
- In response to: 'What is the difference between 2 parts of Graeme' Participant descriptions: Stressed syllable; stronger, longer, change in tone, accent. Unstressed syllable: softer, shorter.
- Cross-linguistic comparisons Graeme/Kereama
  - Te reo: stress only marginally stronger than other syllables. English big diff.
  - Ps compare stress of own names, different languages. They note stress changes depending on context and intended meaning. Mother calling child.



# Critical listening exercises to understand learners' perception of stress and to help them understand English perception of stress

Listen to these words. You will hear each word twice. Write down if the word sounds the same or different each time. If it is different, describe the difference. Does one sound better? Listen and make notes.

| occur:   |
|--|
| commit:  |
| constrain:   |
| constant:  |
| corporate:   |
| emerged:   |
| breakfast:   |
| precise:   |
| Discuss how the unstressed syllable sounds, and differences in different languages |



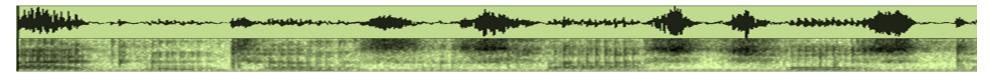
#### Perceptions of word stress

- CL occur/occur; occur described as 'very strong stress'
- CL some examples had stress on both syllables; sometimes could hear this but **constant/con**stant and **procedure/**pro**ced**ure sounded the same to them (they also found it hard to reduce the vowel in 'stant', which seems like an example of literacy bias).
- Listening and speaking practice: perception and production appear to improve but as noted in CL practice the reduced vowel is a particularly difficult concept to grasp.
- T introduces schwa symbol, uses board to show changes:
  - Writes 'constrain' crosses out 'o' writes schwa: "You see an 'o' but it isn't an 'o', listen...
  - Ps find this hard as used to visualising spelling, can't ignore it, need to use their ears. Another example of literacy bias.



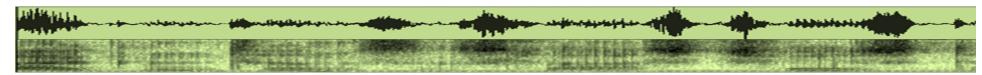
#### More perceptions of word stress

- CL: first one is smooth, second one is divided into syllable.
- Signs they are starting to hear the difference between stressed and weak syllables. Rob describes the difference: I consider this as distortion and not a stress. He describes the correctly stressed word as: more mild, more English sound.
- Why can't English speakers work it out?
  - I was asking about a car Estima. I always said on 2<sup>nd</sup> and they say it on the first and they could never understand me. I don't know why it's so hard just to try and change it. (Rob)... When foreign people put the wrong stress in Russian we can still work it out ... Maybe they don't realise that it could be the wrong stress. It doesn't even come into people's mind that it's possible to put the stress somewhere else.
- Raises important issue: role of listener in communication, need tolerance: English hypersensitive to stress.



#### Primary and secondary word stress

- Evidence that Ps recognise stress patterns of L1 when transferred to English: Joy laughs when she hears 'distribution' noticing Japanese accent but when asked to produce English and Japanese versions Js couldn't say 'distribution'
- Ps experimented with adding suffixes to see how stress changes with changing parts of speech but they often produced obscure words. So when teaching grammatical patterns we need to make sure the words learners are creating are also reasonably frequently used.



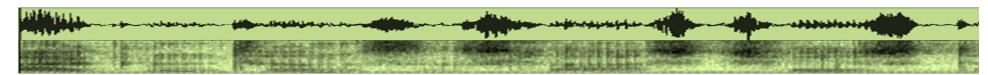
#### Participants' perceptions of tonic stress (1)

- Ps tend to focus on phoneme level or spelling: takes time and effort to extend focus to word and tonic stress.
- In this student production "Accidents can occur on the road"
  - Stress noticed on accidents, occur, road: but initially no difference perceived between them (tonic syllable "road" not noticed).
- Ps not sensitive to prominence of tonic syllable
- In listening to own recordings don't notice if no tonic stress
- Awareness raised by demonstrating how moving tonic syllable changes the focus and therefore meaning.



#### Participants' perceptions of tonic stress (2)

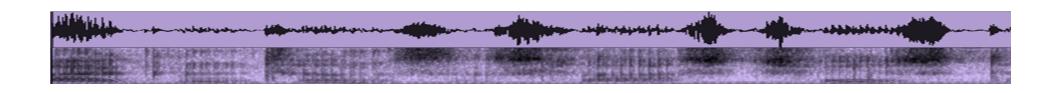
- Seen that not using weak forms creates unintentional TS.
  - The messenger told us about the plans; Practice "told us"
  - Ps enjoy experimenting to create contrast, change focus.
  - Ps note importance of context in determining stress and intonation
  - Once they get the idea of TS, see when unmarked it signals end of tone unit, falling on last stressed syllable.
- Focus on role of pausing
  - Ps realise they use too many pauses: effect on meaning and rhythm
  - Leads to sounding "cut" vs "smooth" I think it's about the pronunciation of our language, we always put a break after the words, cut cut cut (Rob)



#### Describe stress to a learner with your L1

- Jan: Japanese also has stress in each word but it's not so strong and more like monotone.
- T: So you don't have a change of pitch?
- Jan: Not so much.
- T: So what would you say to Japanese?
- Jan: I think Japanese tend to stress letter of alphabet like flato for flat. So we put the stress more on the consonant sounds.

Comment on role of consonant sounds supports previous observation Ps don't appreciate role of vowel as syllable nucleus.



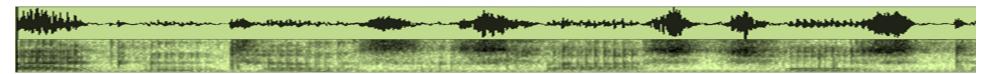
#### More descriptions

- Stress is a clue to understand the word. If we don't have stress on any word maybe nobody can understand the word. Like a key or a clue (Tamiko, C1).
- Sakura (C1) agrees, adding It is very important
- In Korean we don't have word stress or sentence stress except if someone is asking there is stress but in English every word has stress (Kat, C2).
- Okjim (C1) makes similar comments about Korean: We don't have stress, we just have intonation in sentence. Also, we pronounce the same as written. People can understand without stress and in talking about weak syllables The sound changes, it is not exactly like spelling
- In Russian we usually just hear one stress in a word but in English there can be more than one and stress in English has pronunciation longer and stronger (Rae, C2)
- Make it louder and push more (Feng, C1)



## After each day's teaching Ps reflected and commented on what they had learned.

- Theme: increased awareness of syllables and stress:
  - I have never thought before that stress is used in English language, but the stress helps to pronounce words correctly! (Rae, C2)
- Theme: recording, listening and feedback helps:
  - Universal agreement on this from both C1 and C2.
  - The opportunity to see myself "from aside" to estimate to what extent my personal pronunciation is lacking fluency (Rob, C2)
  - Helped to realise differences between own pronunciation and target, either to make stress more prominent and to de-stress unstressed words.
- Theme: Critical listening helps develop perception
  - When I compared two words in different ways. It helped me to find how to say the word correctly and what is wrong to say (Kat, C2)



#### Written reflections continued

- Relevance of academic word list (importance of stress in being able to use those words effectively)
- Stress patterns, primary and secondary stress and changes according to part of speech: seen as useful learning
- Online dictionary to hear pron: useful tool
- Importance of contextualising words in sentences and then in discussions was widely appreciated.
- Learning how to pause and stress correctly in a speech helped me the most (Jan, C2)
- Learning features of connected speech helped pron
- Watching video of their own discussions was also helpful



#### • Syllables:

- Increased awareness of concept of syllable (+cross-ling. diffs)
- Misunderstandings from letter/phoneme confusion
- CV languages focus on C rather than V (leads to epenthesis)

#### Word stress:

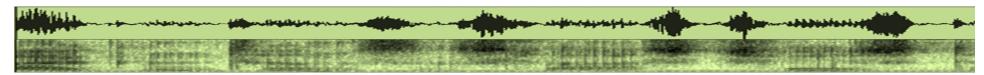
- Spelling causes confusion
- SCM: stronger/longer and soft/short
- Difficulties in perception of reduced vowel: but signs of learning
- Increased awareness of cross linguistic differences in stress
- Increased awareness of role of context
- SCM for too many stressed syllables: cut, distortion vs smooth, milder
- Awareness of English hypersensitivity to stress: try harder English L1s
- Russians commented on false friends: same word different stress



## Summary of findings (2)

#### Tonic stress

- Initial perception difficulties: both stress and weak forms
- Sometimes created unintended tonic stress
- Experimenting by moving TS around helped perception (value of comparing and contrasting – CL).
- Focus on pausing helped understand TS
- Focus on unmarked position of TS helped understand TS
- Increased awareness of effect of tonic syllable (especially too many of them) on rhythm: Cut, word-by-word rather than smooth.



### Implications for teaching

- Some learners understand concept of stress: need to learn where the stress goes each time they learn a new word: Learning strategies for these learners:
  - Online dictionary with pron when learning new words
  - T correction straightforward modelling or pointing out where stress is.
- Some learners, even at advanced level, have not learned the concept (implicitly or explicitly)
  - Teaching needs to address their perception of stress
  - Different learners at different stages: can't hear a difference requires lots of CL to establish that, where and how there is a difference.

## Guidelines for teaching

- Raise awareness of the nature of the problem; communicate explicitly and meaningfully about it (i.e. through SCM).
- Help form category boundaries by presenting contrasts between what the native speaker does and does not perceive as belonging to the category (i.e. through Critical Listening).
- Actively involve learners in the meaning making process (a broadly communicative approach).
- Practice: focus on forming concepts (i.e. compare and contrast, allow for feedback).
- Provide the right kind of corrective feedback (use SCM).
- Define instruction in terms of what helps learners to form and practice new concepts (e.g. SCM and CL).

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#### Analysis of changes on perception task

Commit: 1. /'kpmit/ 2. /kp'mit/

Obtain: 1. /əb'teɪn/ 2. /'ɒbˌten/

Occur: 1. /ə'ks:/ 2. /'ɒkə/

Constrain: 1./'kpn<sub>i</sub>stremd/ 2. /kpn'strem/

Breakfast: 1. /brek'fa:st/ 2. /'brekfast/

Credit: 1. /'kredət/ 2. /kre'dıt/

Constant: 1. /kpn'stænt/ 2. /'kpnstant/

Percent: 1. /pp'sent/ 2. /'ps:sen/

Emerged: 1. /i:'ms: ded/ 2. /o'ms:dd/





#### Rating or perception ( $N=4 \times 10 = 40$ )

- 0 = Cannot hear the difference: Pre − 6, Post 1
- 1 = Can hear a diff but can't say which is better OR may be wrong about which is better: Pre 6, Post 1
- 2 = Perceive which word is better but can't describe the difference apart from *It sounds wrong*. Pre 17, Post 2
- 3 = Perceive which word is better, aware of some pron differences, but usually in terms of phonemes, still no evidence of awareness of role of stress. Pre 10. Post 12
- 4 = Accurately understand English language concept of stress: perceive and accurately describe differences (for 9 & 10 describe additional and deleted syllables) Pre – 1, Post - 24

| i a tra i |     |     |     |     |     |     |     |     |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|
| -         | Kat | Kat | Rae | Rae | Jan | Jan | Joy | Joy |
|           | T1  | T2  | T1  | T2  | T1  | T2  | T1  | T2  |
|           | 2   | 4   | 2   | 4   | 2   | 4   | 3   | 4   |
|           | 2   | 4   | 3   | 3   | 3   | 4   | 3   | 3   |
|           | 2   | 3   | 2   | 4   | 2   | 4   | 1   | 4   |
|           | 2   | 2   | 2   | 4   | 3   | 4   | 1   | 4   |
|           | 2   | 3   | 3   | 4   | 1   | 4   | 0   | 3   |
|           | 2   | 4   | 2   | 2   | 3   | 4   | 1   | 4   |
|           | 2   | 3   | 3   | 4   | 1   | 4   | 4   | 4   |
|           | 2   | 3   | 3   | 3   | 2   | 4   | 0   | 3   |
|           | 2   | 4   | 0   | 4   | 3   | 3   | 0   | 4   |
|           | 1   | 1   | 2   | 3   | 0   | 0   | 0   | 3   |
|           | 8   |     | 7   |     | 8   |     | 7   |     |