Doing fast and slow: Qualia, prosody, and stylistic variation among house dancers in Singapore

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New Ways of Analyzing Variation 53 University of Michigan–Ann Arbor

Introduction

Social constructs are constituted by qualities

- E.g., personae, character types
- ➤ Differentiation through specific semiotic processes (Irvine & Gal 2000)
- How about differentiation of qualities?

Introduction

Qualia in sociolinguistics

- i.e., the subjective experience of quality (Chumley & Harkness 2013; Harkness 2013)
- Descriptions of languages, dialects, and accents (Inoue 2003; Zhang 2008)
- Issues of iconicity and embodiment (Calder 2019)

How do house dancers in Singapore use prosodic resources to do *fast* and *slow*?

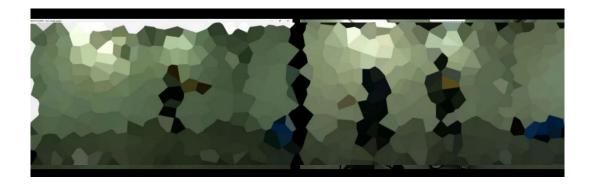
Data

Ethnographic fieldwork with house dancers in Singapore

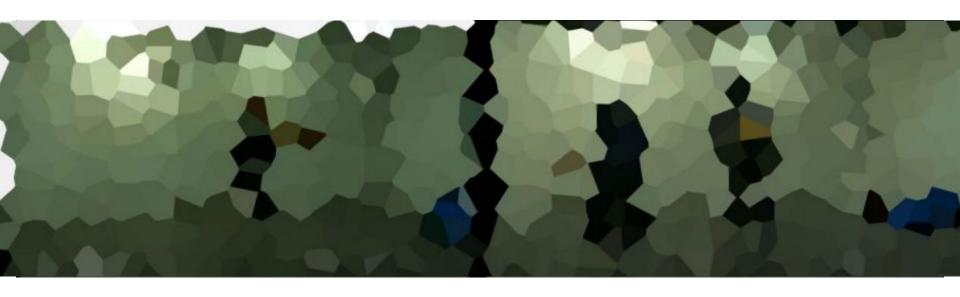
- Summer 2023, 2024
- Positionality as an existing community member

Dance and Discussion

- Five dancers
- Two-part interview



Data



Identify instances of fastness and slowness

- Explicit mention and elaboration of 'fast' and 'slow'
- Each IP coded as Fast, Slow, or Other
 - Other as a baseline comparison level

Extract prosodic features per word

- Pitch: mean, max, min, SD, range
- Intensity: mean, max, min, SD, range
- Speech rate

Linear mixed effects regression models for each feature

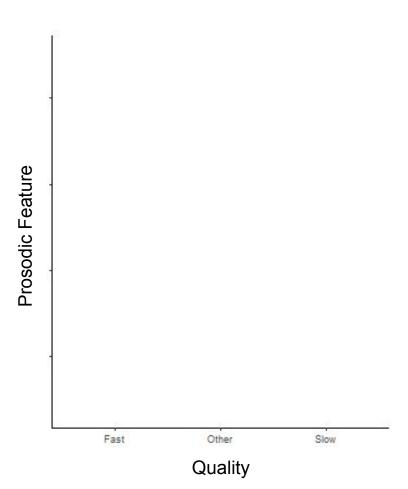
- Aggregate analysis
- By-speaker analysis

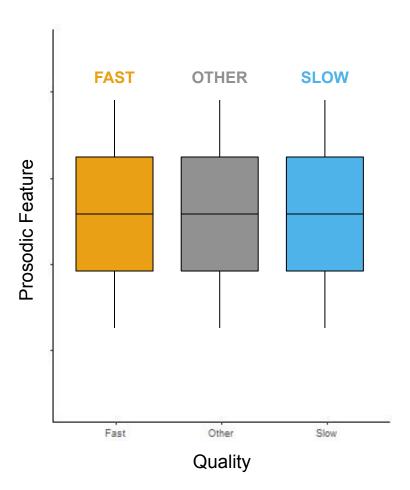
Effects structure

- > Fixed effects: Quality (Fast/Other/Slow), Distinction (Yes/No), Phrase Position
- Random effects: Word, Speaker

How do house dancers in Singapore use prosodic resources to do *fast* and *slow*?

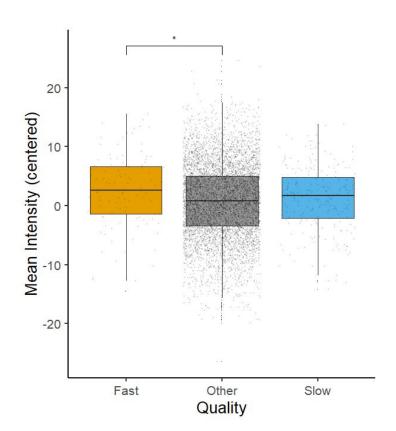
- > Speech rate
- Intensity
- > Pitch





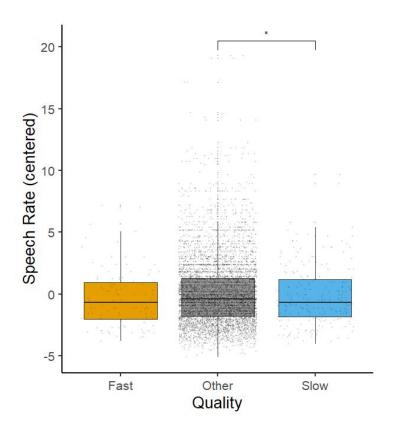
Aggregate data

→ 'Fast': ↑ intensity

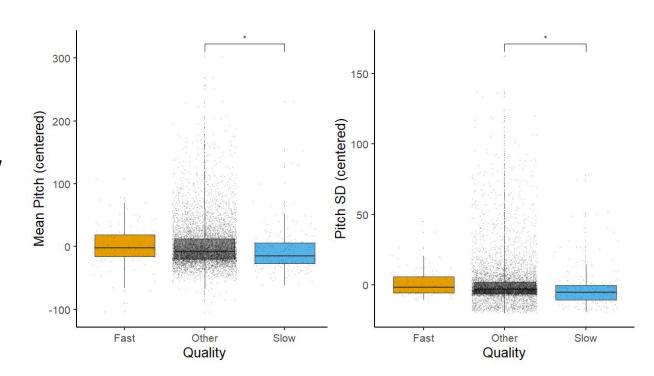


Aggregate data

- 'Slow':
 speech rate



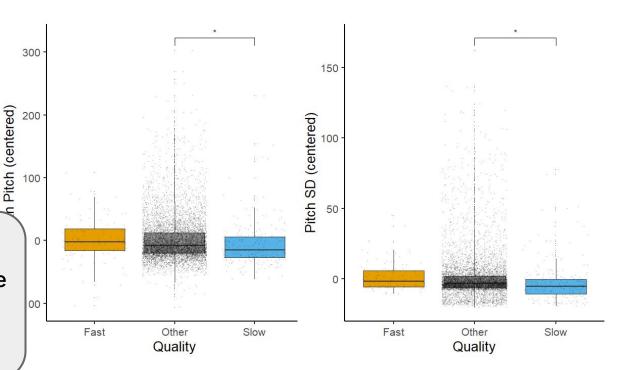
Aggregate data



Aggregate data

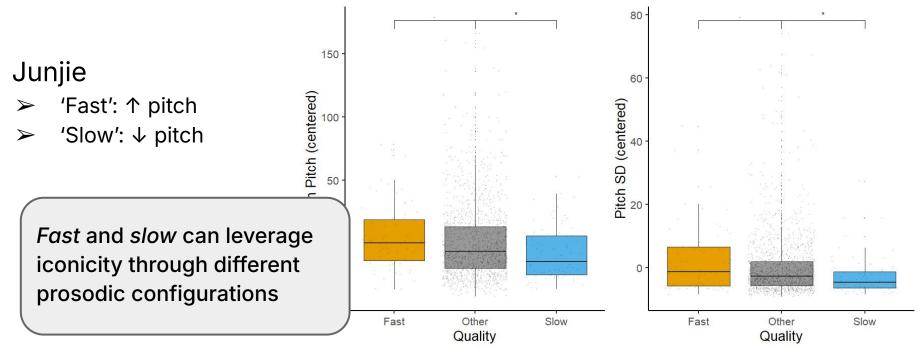
✓ 'Slow': ↓ speech rate,↓ pitch

Prosodic resources for doing fast and slow leverage iconic associations across different acoustic material



Inter-speaker analysis

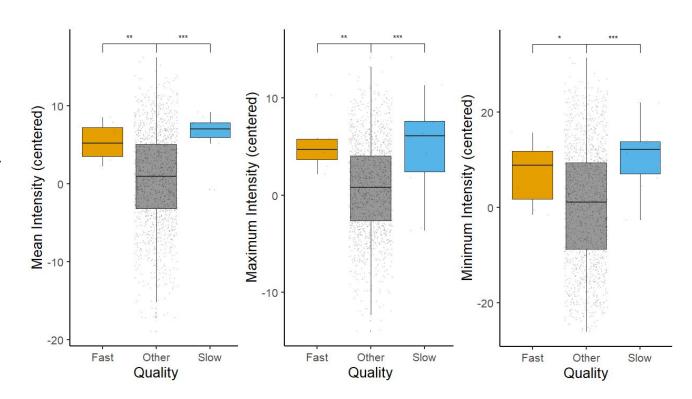
➤ Individual prosodic styles used to do *fast* and *slow*



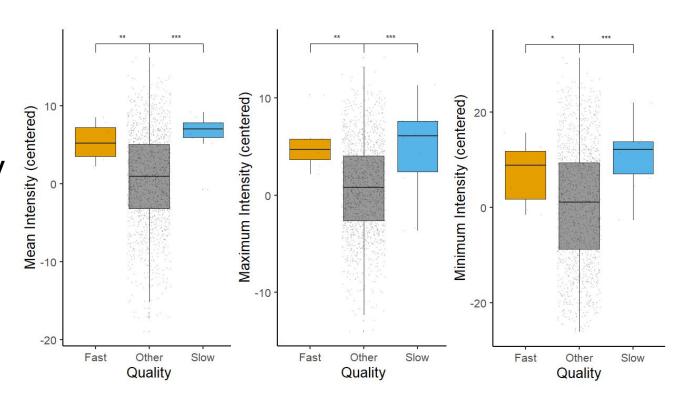
Sam

→ 'Fast': ↑ intensity

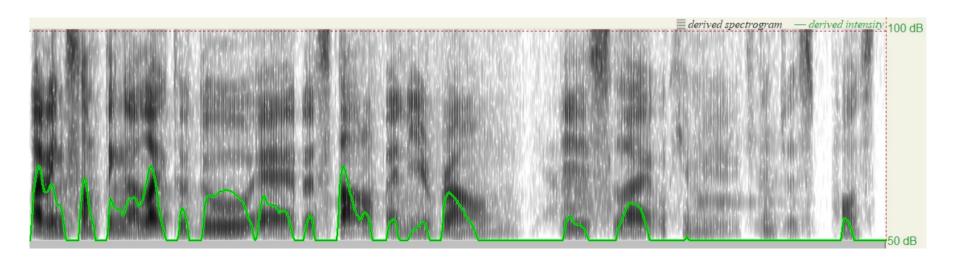
Sam

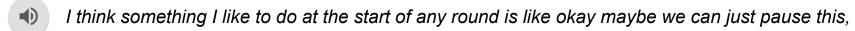


Sam

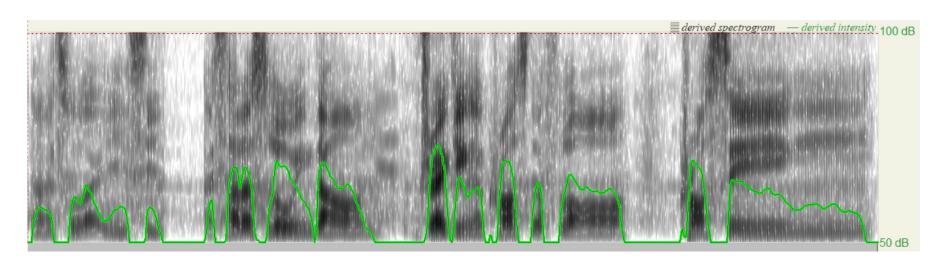


Analysis: Sam

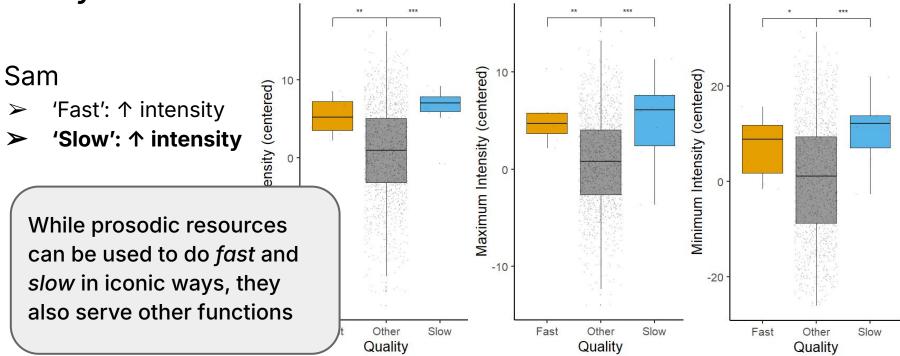




Analysis: Sam



ah so like eh see I started slowing down dragging across the floor, crossing, yeah.



Takeaways

Qualities of *fast* and *slow* are cultivated by transforming acoustic material into signs of fastness and slowness

Prosody can be used to construct social distinctions and linguistic distinctions

Thank you!

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References

Acton, Eric. 2021. Pragmatics and the third wave: The social meaning of definites. In Lauren Hall-Lew, Emma Moore, & Robert J. Podesva (eds.), Social meaning and linguistic variation: Theorizing the third wave, 105–126. Cambridge University Press.

Agha, Asif. 2003. The social life of cultural value. Language & Communication 23(3-4). 231-273.

Bates, Douglas, Martin Mächler, Ben Bolker, & Steve Walker. 2015. Fitting linear mixed-effects models using Ime4. Journal of Statistical Software 67(1). 1–48.

Boltz, Marilyn G. 2011. Illusory tempo changes due to musical characteristics. Music Perception 28(4). 367–386.

Broze, Yuri & David Huron. 2013. Is higher music faster? Pitch-speed relationships in Western compositions. Music Perception 31(1). 19–31.

Boersma, Sam & David Weenink. 2025. Praat: doing phonetics by computer [Computer program]. Version 6.4.27, retrieved 27 January 2025 from http://www.praat.org/.

Bucholtz, Mary. 2001. The whiteness of nerds: Superstandard English and racial markedness. Journal of Linguistic Anthropology 11(1). 84–100.

Calder, J. 2019. The fierceness of fronted /s/: Linquistic rhematization through visual transformation. Language in Society 48(1). 31–64.

Calder, J. 2024. 'Harsh' SoMa vs 'Beige' Castro: The cross-modal construction of contrasting femininities in queer San Francisco. Language & Communication 99. 107–128.

Chumley, Lily Hope & Nicholas Harkness. 2013. Introduction: Qualia. Anthropological Theory 13(1/2), 3-11.

Collier, William G. & Timothy L. Hubbard. 2001. Judgments of happiness, brightness, speed, and tempo change of auditory stimuli varying on pitch and tempo. Psychomusicology 17. 36–55.

Cooper, William E., Stephen J. Eady, & Pamela R. Mueller. 1985. Acoustical aspects of contrastive stress in question-answer contexts. Journal of the Acoustical Society of America 77. 2142–2156.

D'Onofrio, Annette. 2015. Persona-based information shapes linguistic perception: Valley Girls and California vowels. Journal of Sociolinguistics 19(2). 241–256.

D'Onofrio, Annette. 2018. Personae and phonetic detail in sociolinquistic signs. Language in Society 47(4), 513–539.

Du Bois, John W. 2007. The stance triangle. In Robert Englebretson (ed.), Stancetaking in discourse: Subjectivity, evaluation, interaction, 139–182. Amsterdam: John Benjamins Publishing Company. Eady, Stephen J., William E. Cooper, Gayle V. Klouda, Pamela R. Mueller, & Dan W. Lotts. 1986. Acoustical characteristics of sentential focus: Narrow vs. Broad and Single vs. Dual focus environments. Language and Speech 29(3). 233–251.

Eckert, Penelope. 2008. Variation and the indexical field. Journal of Sociolinguistics 12(4), 453-476.

Eckert, Penelope. 2012. Three waves of variation study: The emergence of meaning in the study of sociolinguistic variation. Annual Review of Anthropology 41. 87–100.

Eckert, Penelope. 2017. Comment: The most perfect of signs: Iconicity in variation. Linguistics 55(5). 1197–1207.

Eitan, Zohar & Roni Y. Granot. 2006. How music moves: Musical parameters and listeners' images of motion. Music Perception 23(3). 221–248.

Eitan, Zohar & Renee Timmers. 2010. Beethoven's last piano sonata and those who follow crocodiles: Cross-domain mappings of auditory pitch in a musical context. Cognition 114(3). 405–422.

Fernández-Lizárraga, Evelyn. 2024. Recursive recalibration and the social meaning of codeswitching. Language in Society First View. 1–25.

Gal, Susan. 2013. Tastes of talk: Qualia and the moral flavor of signs. Anthropological Theory 13(1/2). 31–48.

Gal, Susan. 2016. Sociolinguistic differentiation. In Nikolas Coupland (ed.), Sociolinguistics: Theoretical debates, 113–135. Cambridge: Cambridge University Press.

Gal, Susan & Judith Irvine. 2019. Signs of difference. Cambridge: Cambridge University Press.

Goffman, Erving. 1974. Frame analysis: An essay on the organization of experience. Harvard University Press.

References

Harkness, Nicholas. 2012. Vowel harmony redux: Correct sounds, English loan words, and the sociocultural life of a phonological structure in Korean. Journal of Sociolinguistics 16(3). 358-381.

Harkness, Nicholas. 2013. Softer soju in South Korea. Anthropological Theory 13(1/2). 12-30.

Harkness, Nicholas. 2022. Qualia, semiotic categories, and sensuous truth: Rhematics, pragmatics, symbolics. Estudos Semióticos 18(2). 56-81.

Harrol, Marguerite L. 2024. Chicago house music: Culture and community. Arcadia Publishing.

Heard, Larry & Chuck Roberts. 1988. Fingers Inc. featuring Chuck Roberts - Can You Feel It [Song]. Desire Records. London/New York: Leo Song/Fiction Song.

Inoue, Miyako. 2003. The listening subject of Japanese modernity and his auditory double: Citing, sighting, and siting the modern Japanese woman. *Cultural Anthropology* 18(2). 156–193.

Irvine, Judith & Susan Gal. 2000. Language ideology and linguistic differentiation. In Paul V. Kroskrity (ed.), Regimes of language: Ideologies, polities, and identities, 35–84. Santa Fe: School of American Research Press.

Johnstone, Barbara, Jennifer Andrus, & Andrew E. Danielson. 2006. Mobility, indexicality, and the enregisterment of "Pittsburghese". Journal of English Linguistics 34(2), 77–104.

Katz, Jonah & Elisabeth Selkirk. 2011. Contrastive focus vs. discourse-new: Evidence from phonetic prominence in English. Language 87(4). 771–816.

Keane, Webb. 2004. Semiotics and the social analysis of material things. Language & Communication 23. 409-425.

Kiesling, Scott F. 2019. The "gay voice" and "brospeak": Toward a systematic model of stance. In Kira Hall & Rusty Barrett (eds.), *The Oxford handbook of language and sexuality*. Oxford: Oxford University Press. URL: https://doi-org.stanford.idm.oclc.org/10.1093/oxfordhb/9780190212926.013.11.

Klatt, Dennis H. 1976. Linguistic uses of segmental duration in English: Acoustic and perceptual evidence. The Journal of the Acoustical Society of America 59. 1208–1221.

McAuliffe, Michael, Michael Socolof, Sarah Mihuc, Michael Wagner, and Morgan Sonderegger. 2017. Montreal Forced Aligner: trainable text-speech alignment using Kaldi. In *Proceedings of the* 18th Conference of the International Speech Communication Association. 498–502.

Moore, Robert. 2011. "If I actually talked like that, I'd pull a gun on myself": Accent, avoidance, and moral panic in Irish English. Anthropological Quarterly 94(1). 41–64.

Müller, Cornelia. 2017. How recurrent gestures mean: Conventionalized contexts-of-use and embodied motivation. Gesture 16(2). 276–303.

Parmentier, Richard. 1994. Signs in society: Studies in semiotic anthropology. Bloomington: Indiana University Press.

Podesva, Robert J. 2007. Phonation type as a stylistic variable: The use of falsetto in constructing a persona. Journal of Sociolinguistics 11(4). 478–504.

R Core Team. 2023. R: A language and environment for statistical computing. R Foundation for Statistical Computing. Vienna, Austria. URL: https://www.R-project.org/.

Rietveld, Hillegonda C. 1998. This is our house: House music, cultural spaces, and technologies. Ashgate Publishing/Routledge.

Silverstein, Michael. 1992. The uses and utility of ideology: Some reflections. *Pragmatics* 2(3). 311–323.

Sloetjes, Han & Peter Wittenburg. 2008. Annotation by category – ELAN and ISO DCR. Proceedings of the 6th International Conference on Language Resources and Evaluation (LREC 2008).

Sommer, Sally R. 2012. C'mon to my house: Underground-house dancing. Dance Research Journal 33(2). 72-86.

Tannen, Deborah. 1984. Conversational style: Analyzing talk among friends. Oxford University Press.

Walker, Peter & Sylvia Smith. 1984. Stroop interference based on the synaesthetic qualities of auditory pitch. Perception 13(1). 75–81.

Zhang, Qing. 2008. Rhotacization and 'Beijing Smooth Operator': The social meaning of a linguistic variable. Journal of Sociolinguistics 12(2). 201–222.

1	cause as you like that, ((looks down at right hand)) 1.15 s, 116.73 Hz, 65.94 dB, 4.34 syl/s (0.25)	
2	SLOWLY. ((looks at interlocutor, palms come up)) 0.49 s, 156.83 Hz, 72.57 dB, 4.11 syl/s (0.22)	
3	if you do it slowly, 0.77 s, 142.74 Hz, 66.68 dB, 7.53 syl/s (0.53)	
		A A
4a	it'll be like 0.36 s, 94.93 Hz, 61.21 dB, 10.34 syl/s	
4b	[e]:→ ((looks at hand, right arm moves horizontally	
	across, fingers move back and forth)) 1.32 s, 87.14 Hz, 53.78 dB, 0.76 syl/s	a a
4c	you can you can feel your hands moving. ((hand sweeps to left)) 1.22 s, 101.03 Hz, 60.14 dB, 7.01 syl/s (0.62)	

(3)



you will probably like, 0.74 s, 143.45 Hz, 72.73 dB, 6.73 syl/s

(0.36)

(0.92)

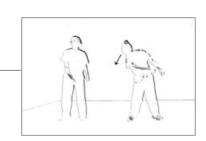
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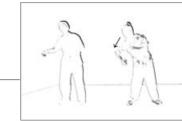
6

7

be like that. ((right forearm flows out from elbow))

0.44 s, 105.03 Hz, 65.74 dB, 6.25 syl/s





Identifying Distinctions

Using contrastive discourse structures, i.e., distinctions, to identify relevant qualities in the interaction

- Discursive sites for differentiation
- Instances where qualities are explicitly contrasted against each other using linguistic material

There is a difference between [A] and [B].

yeah there is a difference between like - boom - and like - boooom
It's not [A], it's [B].

it's not - ha ha ha ha - it's - ha aa aa aa aa
if I do like this, compared to,

Japanese versus like let's say the Europeans,