

A novel paradigm to investigate phonetic convergence in interaction

Martijn Wieling^{1,2}, Mark Tiede², Teja Rebernik¹, Lisanne de Jong¹, Anouck Braggaar¹, Martijn Bartelds¹, Masha Medvedeva¹, Penny Heisterkamp¹, Tom Freire Offrede³, Hedwig Sekeres¹, Anna Pot¹, Mara van der Ploeg¹, Karin Volkers⁴, Gregory Mills¹
¹University of Groningen (NL) ²Haskins Laboratories (USA) ³Humboldt Universität zu Berlin (DE) ⁴Philadelphia Care Foundation (NL)

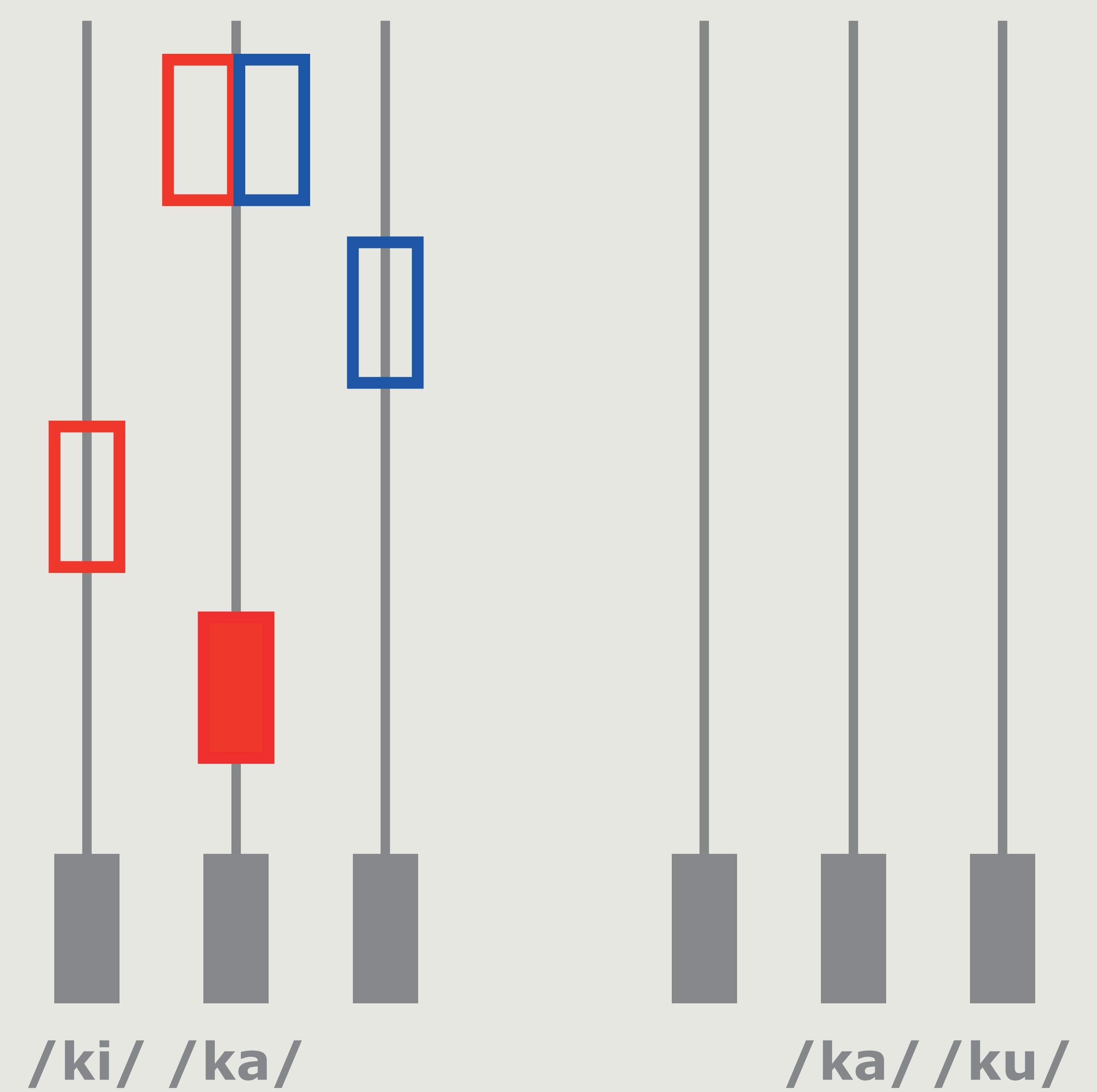
BACKGROUND

- ◆ Methodological trade-off when studying **phonetic convergence**: either highly controlled (*shadowing*) or a high level of interaction
- ◆ **Novel paradigm**: phonetic variant of the procedural coordination task (game) which is **both interactive and highly controlled**
- ◆ Additional feature: **emergence** of shared **communication** system using only three CV sequences

PARADIGM

Director view

Follower view



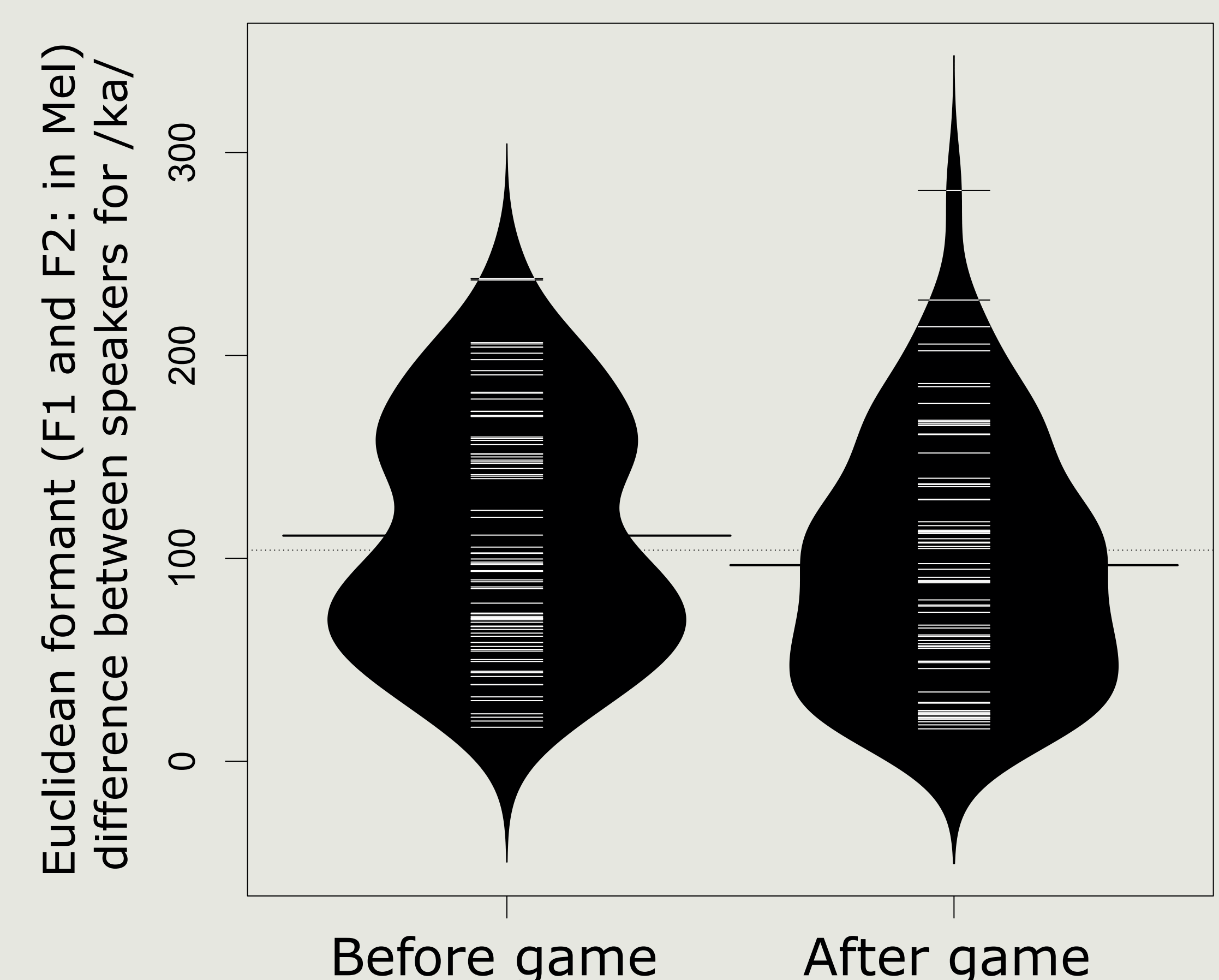
DATA COLLECTION

- ◆ Data collection at 3-day *Lowlands* music festival with 50,000 visitors
- ◆ $N = 77$ pairs x 15-min. game
- ◆ Convergence measured via F1-F2 Mel-scaled ED between speakers before and after game



RESULTS

- ◆ **Significant** ($p = .01$) task-specific **convergence** between speakers after game in /ka/



✉ m.b.wieling@rug.nl

🐦 @martijnwieling

