

# Accommodation to Passive Exposure in the L2

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How German learners of English become more native-like after watching an episode of the show *Friends*.

## L2 Accommodation

- Accommodation & Communication Theory<sup>[1]</sup> & Interactive Alignment Account:<sup>[2]</sup>  
→ **accommodation** = speakers become **phonetically** more **similar**.
- Second language **research**:<sup>[3]</sup> mostly on **interactive** accommodation **BUT** learners often face **passive** exposure, e.g. L2 **media**.

## Research Question

? Do **German** speakers **accommodate** to **native English** after short-term **passive exposure**?

## Methodology & Experiment




### Features:

1. No **TRAP vowel** /æ/ in German  
→ L1 **substitute**: higher **DRESS vowel** /ɛ/.<sup>[4]</sup>
2. **Final devoicing** stops in German.<sup>[5]</sup>

### Speakers:

- 9 native **German** speakers, **advanced L2 English** (B2-C2).

### Passive Exposure Paradigm:

-  **Recording**: wordlist + open questions about speaker.
-  **TV show**: episode *Friends* (20 min).
-  **Recording**: wordlist + open questions about plot.

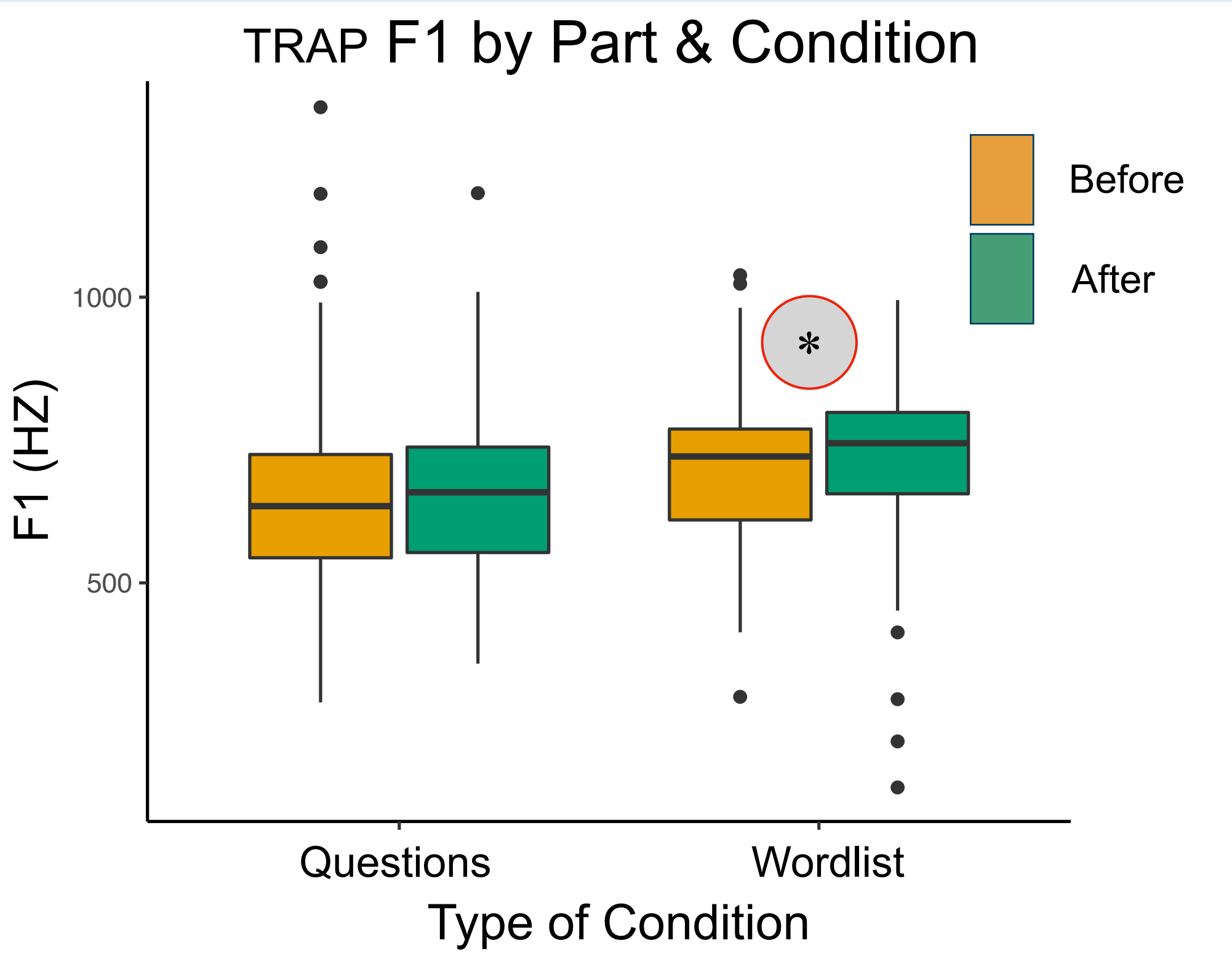
### Data:

- **TRAP**: **1115** vowel measurements.
- **Stops**: **1241** word-final target stops.

## References

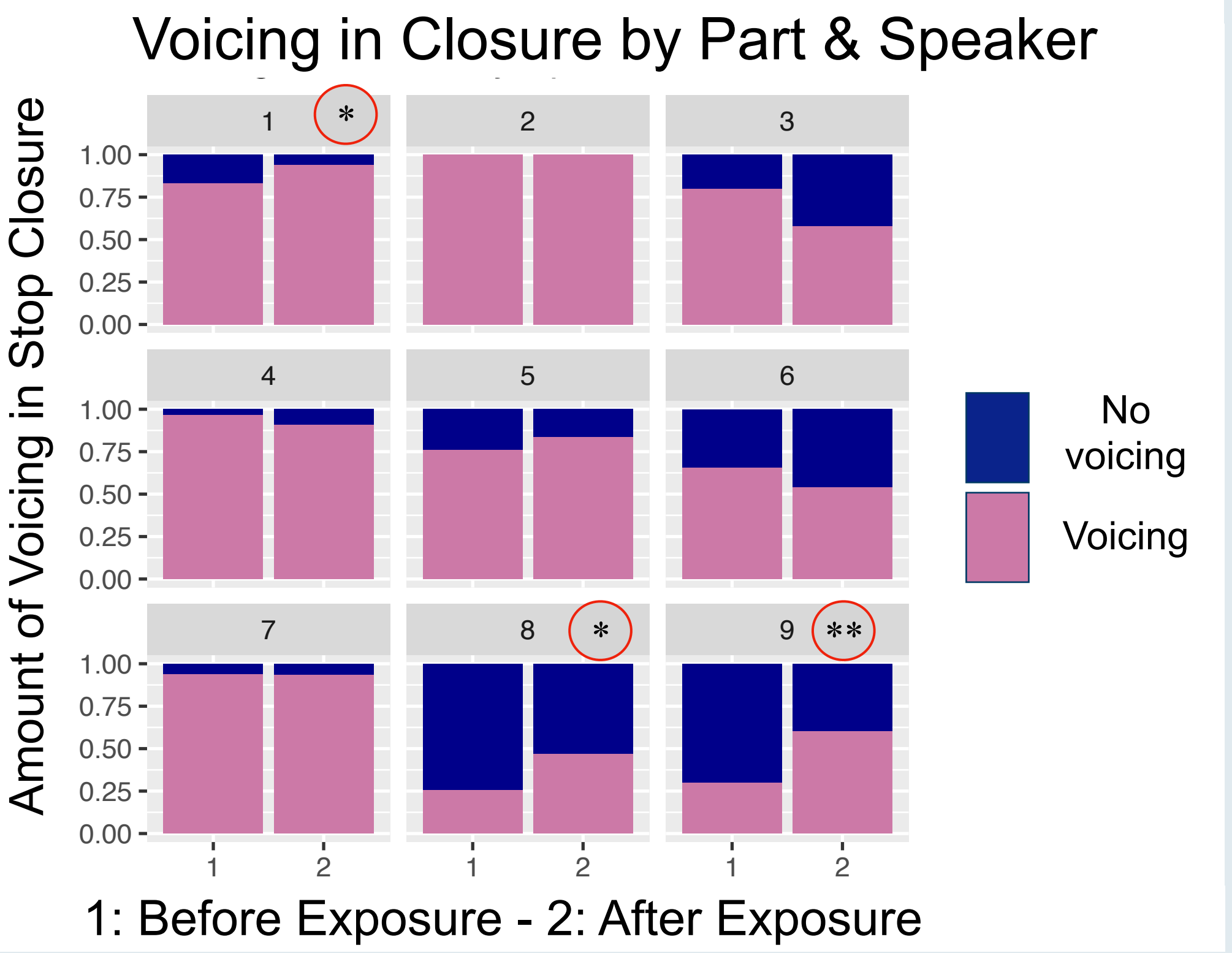
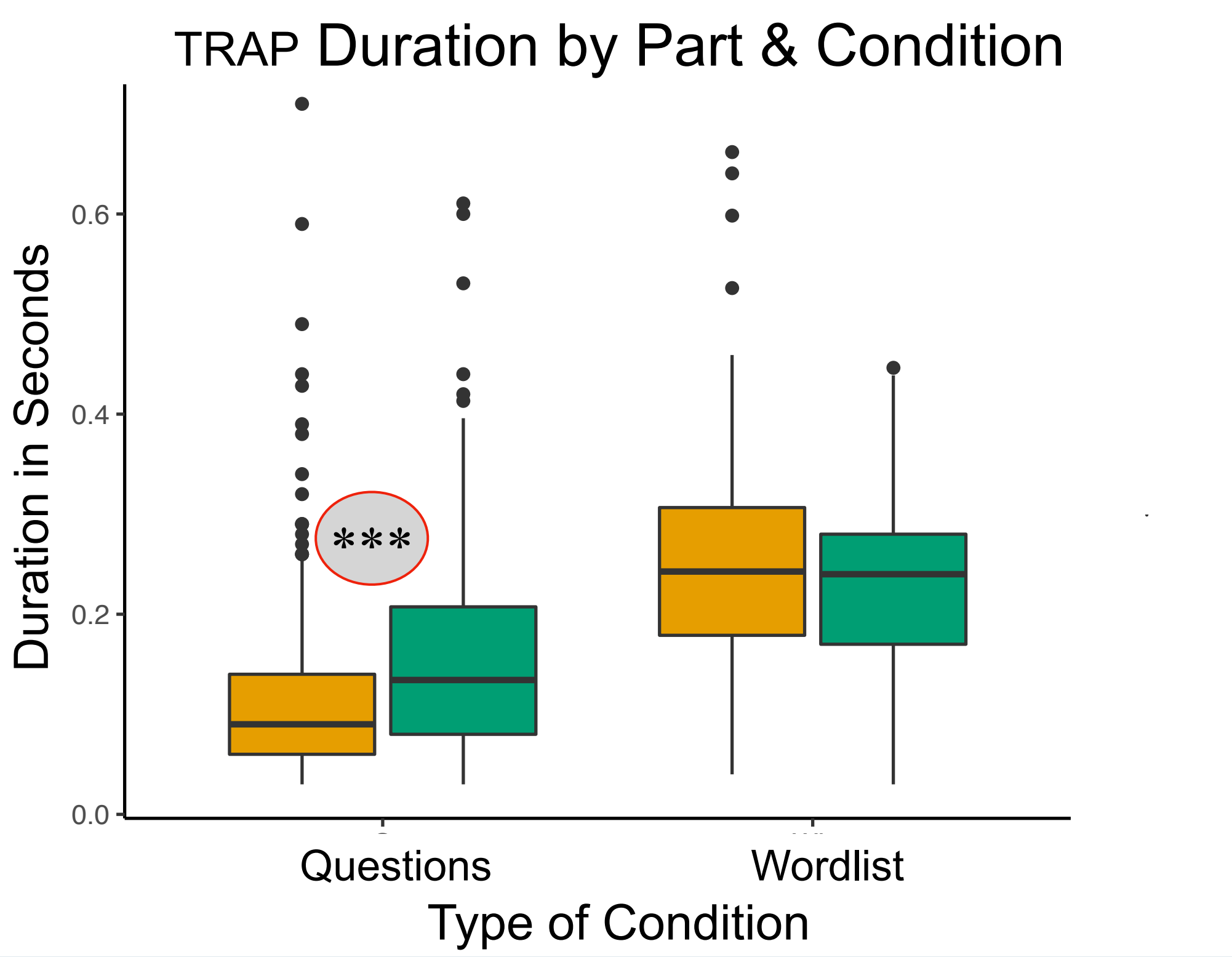
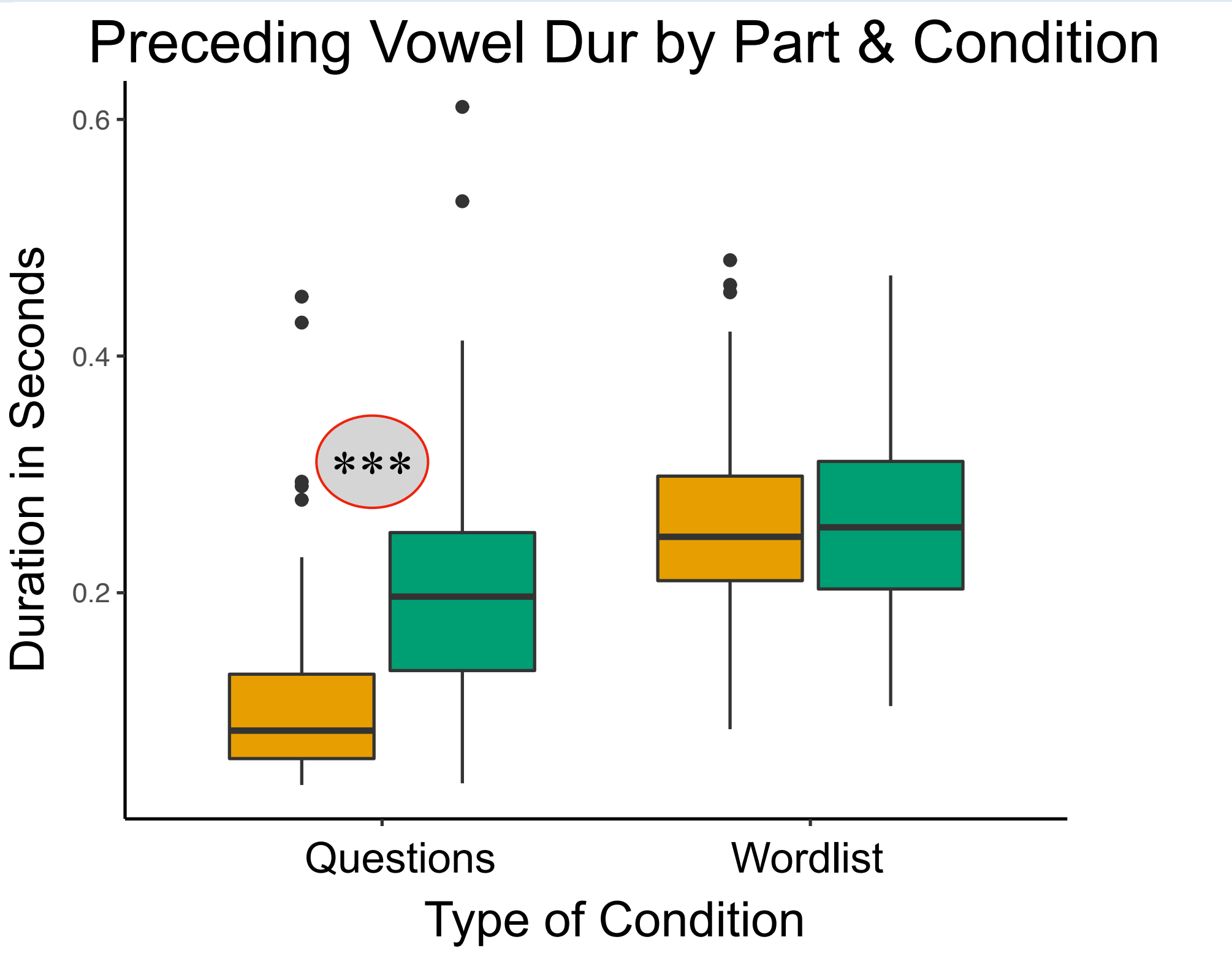
## Results TRAP Vowel /æ/

**Hypothesis 1**: /æ/ → longer duration + higher F1 after exposure.





## Results Word-Final Stops

**Hypothesis 2**: stops → longer preceding vowels, shorter closure, more voicing.



## Discussion & Conclusion

- **Hypothesis 1**  :
- Significantly **longer vowels** in part 2 **after exposure** & in the **wordlist**.
- Significantly **higher F1**, i.e. **lower vowels** in part 2 **after exposure** & in the **wordlist**.
- Realizations got **closer** to /æ/ on **temporal** & **spectral** level.

- **Hypothesis 2** (partially)  :
- **Preceding vowels** already native like before exposure - no change → **ceiling effect**.
- **Closure duration** significantly **shorter after exposure**, especially in the **wordlist**.
- Significantly **more voicing** in closure after exposure.

- **Shift** of most features towards **more native-like** realizations.
- In line with **usage-based theories**, like exemplar theory.<sup>[6]</sup>
- **Passive exposure** possible **benefit** for learners.



[4] Bohn, Ocke-Schwen & Flege, James. 1992. The Production of New and Similar Vowels by Adult German Learners of English. *Studies in Second Language Acquisition* 14(2), 131-158. doi:10.1017/S0272263100010792

[1] Giles, Howard. 1973. Accent mobility: A model and some data. *Anthropological Linguistics*, 15, 87-109.

[3] Hwang, J., Brennan, S. E., & Huffman, M. K. 2015. Phonetic adaptation in non-native spoken dialogue: Effects of priming and audience design. *Journal of Memory and Language*, 81, 72-90. <https://doi.org/10.1016/j.jml.2015.01.001>

[2] Pickering, M. J., & Garrod, S. 2006. Alignment as the basis for successful communication. *Research on Language and Computation* 4(2-3), 203-228. <https://doi.org/10.1007/s11168-006-9004-0>

[6] Pierrehumbert, Janet B. 2006. The next toolkit. *Journal of Phonetics* 34, 516-530.

[5] Röttger, Timo, Bodo Winter, Grawunder, Sven Kirby, James P. Kirby & Martine Grice. 2014. Assessing incomplete neutralization of final devoicing in German. *Journal of Phonetics* 43, 11-25. <https://doi.org/10.1016/j.wocn.2014.01.002>