Online Experiments for Language Scientists, UoB

Lecture 4: Confederate priming

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Loy & Smith (2020)

Joy, J. E., & Smith, K. (2020). Syntactic adaptation depends on perceived linguistic knowledge: Native English speakers differentially adapt to native and non-native confederates in dialogue. https://doi.org/10.31234/osf.io/pu2qa.

5 confederate priming experiments

- Do people adapt differently to native and non-native speakers in dialogue?

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Structural priming

Priming: people repeat what they have recently heard or produced

Structural priming: people repeat abstract structures they have recently heard or produced

E.g. Bock, J. K. (1986). Syntactic persistence in language production. *Cognitive Psychology, 18,* 355-387.

PRIMING SENTENCES

ACTIVE:

ONE OF THE FANS PUNCHED THE REFEREE.

PREPOSITIONAL:

A ROCK STAR SOLD SOME COCAINE TO AN UNDERCOVER AGENT.

PASSIVE:

THE REFEREE WAS PUNCHED BY ONE OF THE FANS.

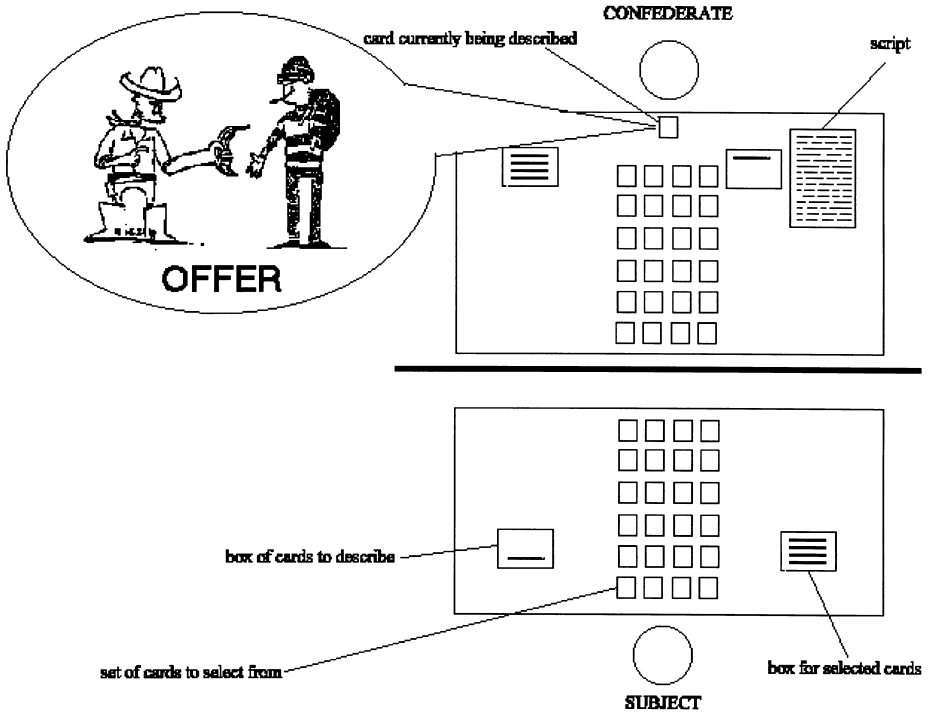
DOUBLE OBJECT:

A ROCK STAR SOLD AN UNDERCOVER AGENT SOME COCAINE.

TARGET PICTURES

Confederate priming

Confederate: “a person one works with, especially in something secret or illegal; an accomplice”



Branigan, H. P., Pickering, M. J., & Cleland, A. A. (2000). Syntactic coordination in dialogue. *Cognition, 75,* B13-25.

Demo using our code

Loy & Smith: manipulating confederate nativeness and syntactic flexibility

Confederate: native English speaker vs non-native

Exps 1, 3 & 4: alternating verbs (PO or DO acceptable), confederate alternates

PO prime*: the chef gives the apple to the golfer*

DO prime: *the chef gives the golfer the apple*

Exps 2 & 5: Alternating and PO-only verbs, confederate uses DO throughout

Alternating verb, DO prime: *the chef gives the golfer the apple*

PO-only verb, DO prime: * *the chef reveals the golfer the apple*

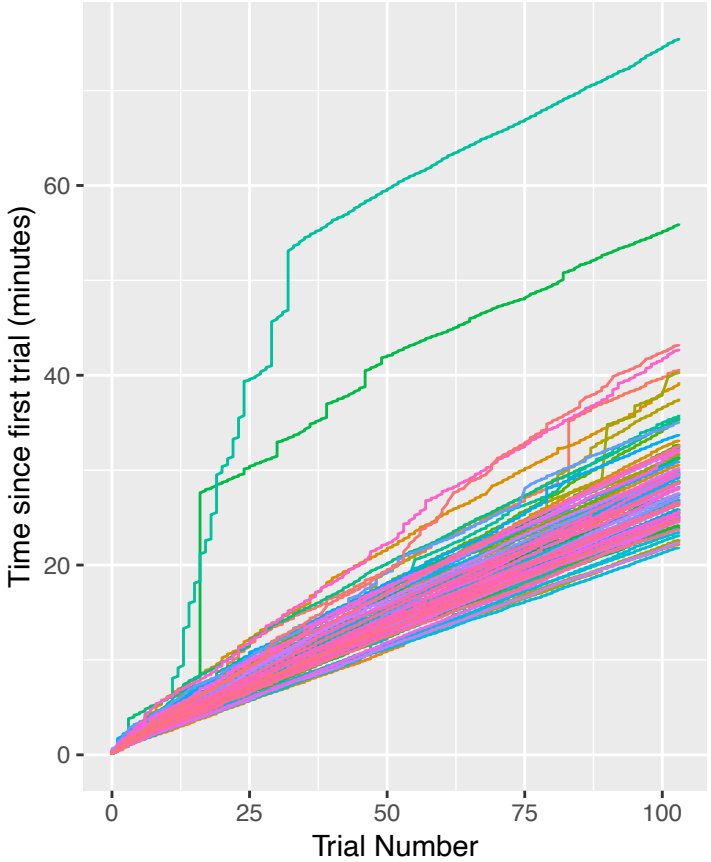
Loy & Smith sample size, study duration etc

Exps 1-3: lab-based

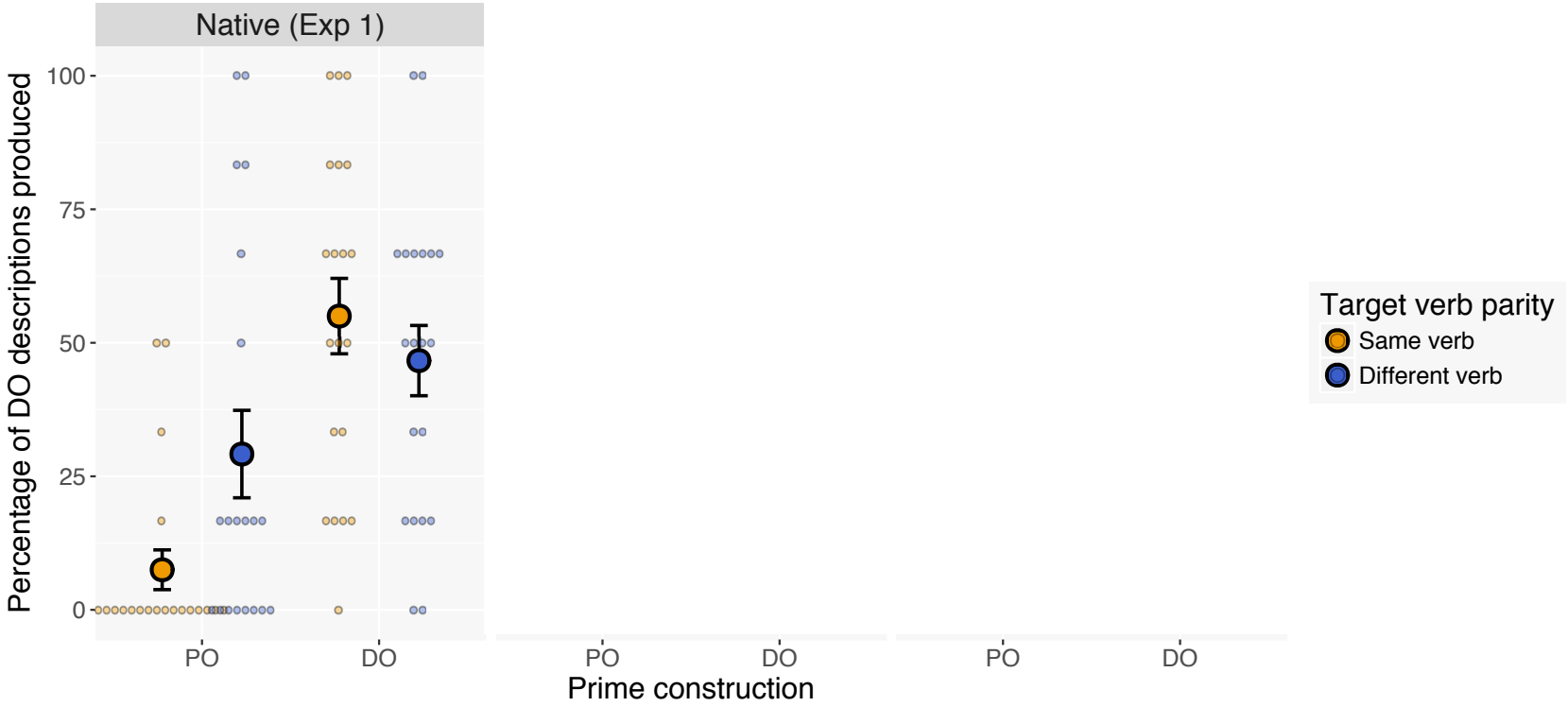
- N=20 per condition
- Took 30-40 minutes (?), paid £6

Exps 4-5: MTurk

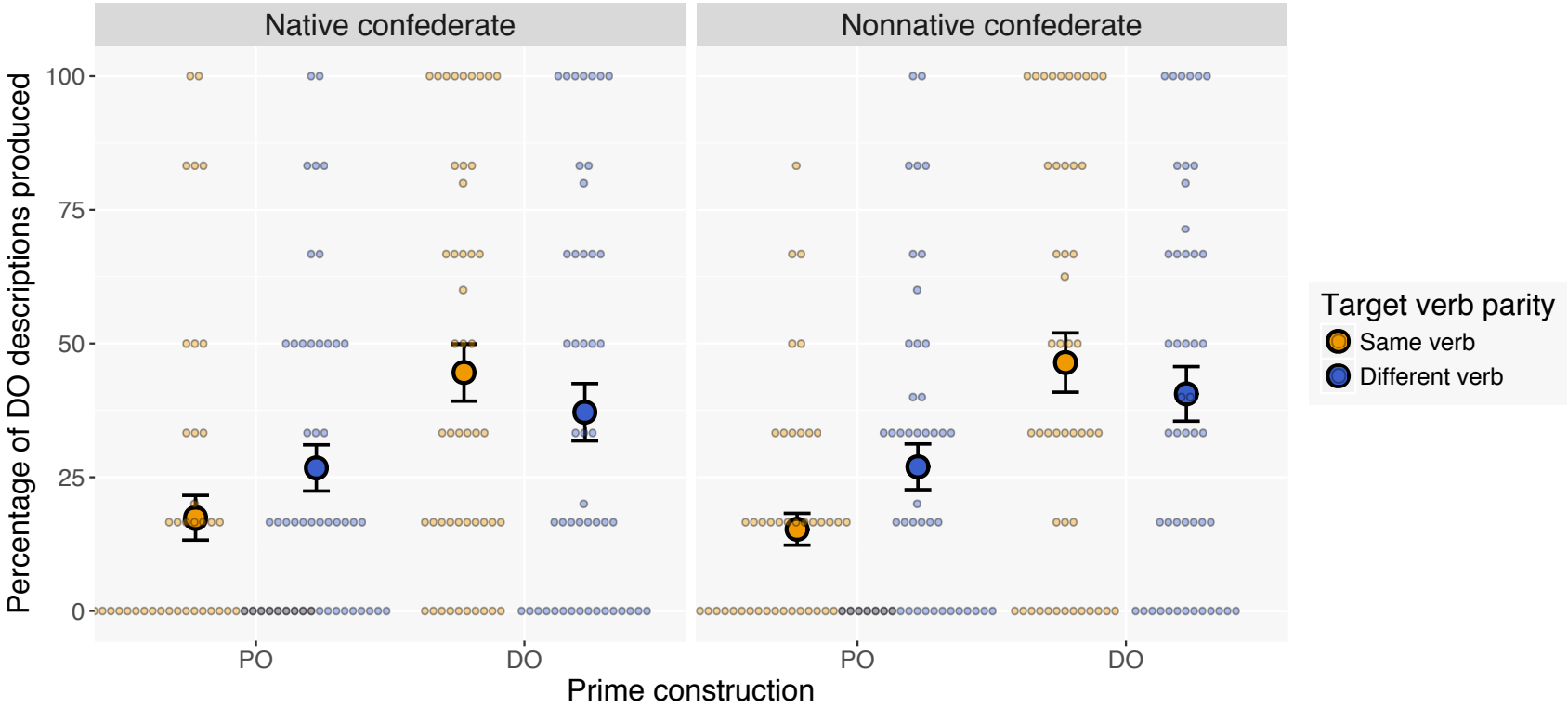
- N=48 per condition
- Average duration 27 minutes, paid $6



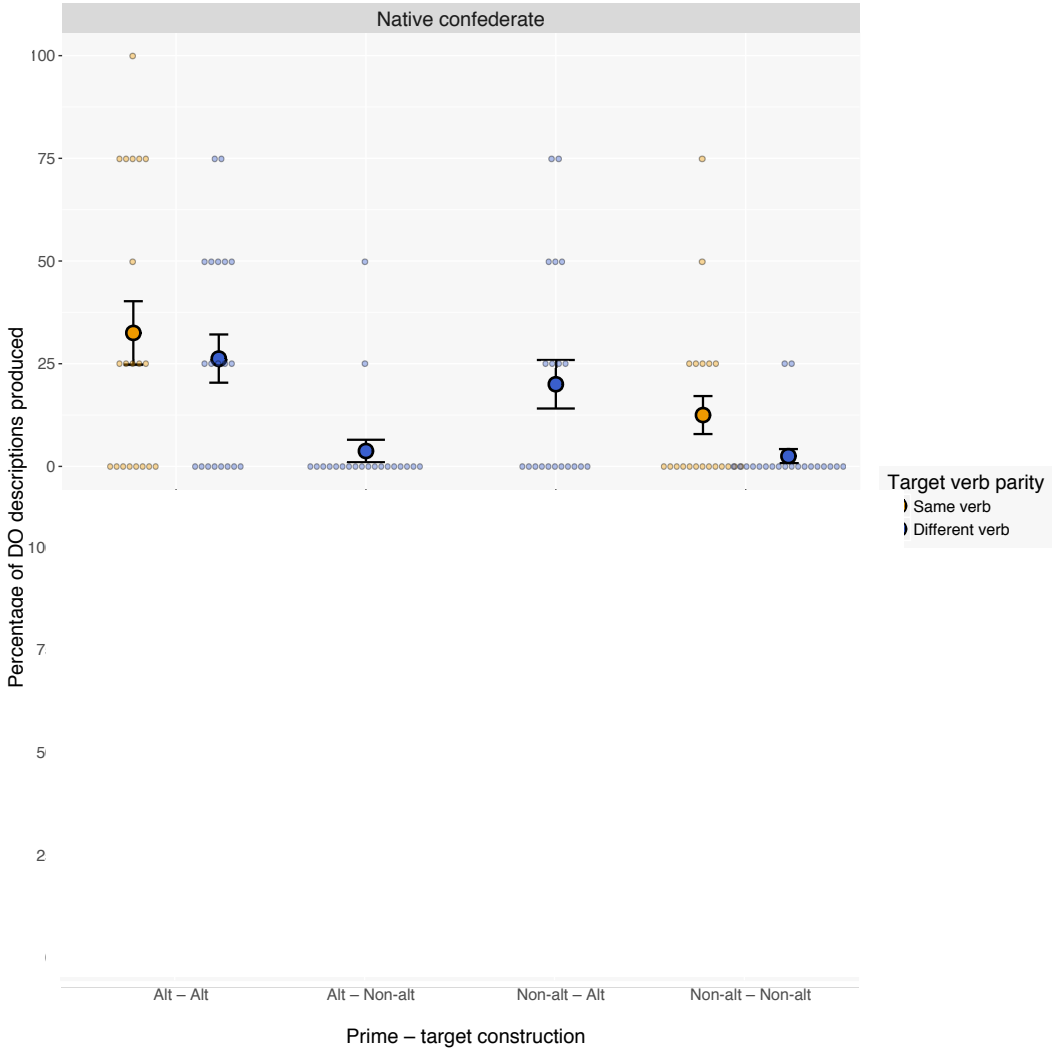
Exps 1, 3: lab, alternating verbs, alternating confederate



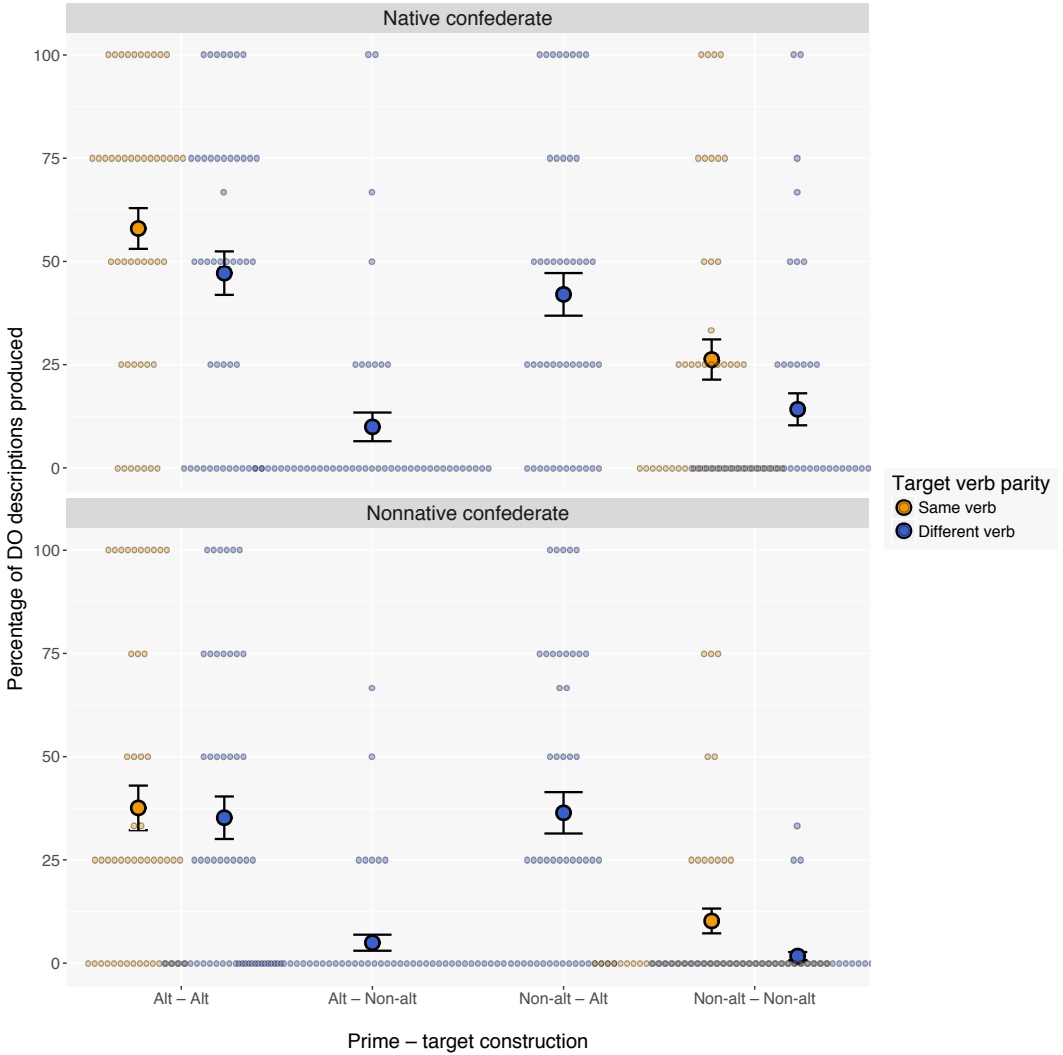
Exp 4: **online**, alternating verbs, alternating confederate



Exp 2: lab, alternating or PO-only verbs, DO-only confederate



Exp 5: **online**, alternating or PO-only verbs, DO-only confederate



Loy & Smith's conclusions

Perceived nativeness of a dialogue partner **does** affect adaptation

- It interacts with their actual linguistic behaviour (no effect of native/non-native when the confederate uses both PO & DO)
- The effect is in opposite directions in the lab and online?? Was the lab result a fluke? Or do the populations or the mode of interaction account for this difference?

Demo using our code