Assessing embodiment with visual priming tasks

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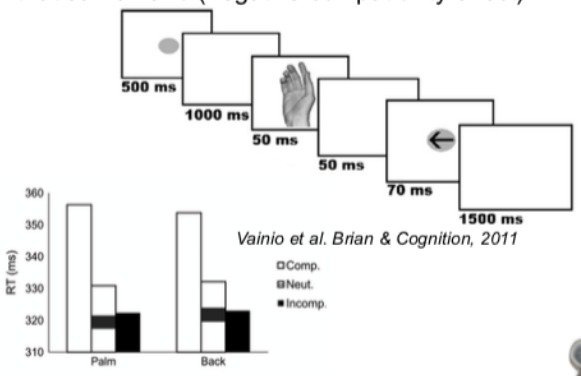
Introduction

- Seeing a right or left hand prime image slows down your response time when you need to respond with that same hand (negative compatibility effect).



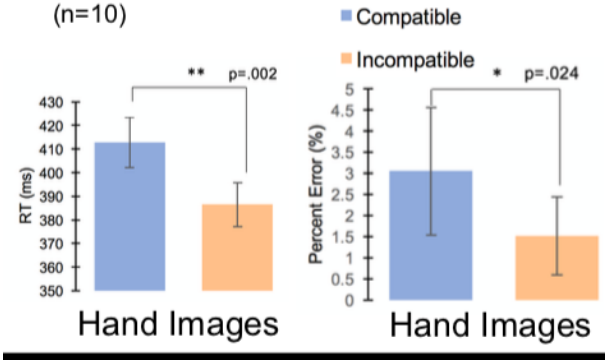
- Research question: Is the negative compatibility effect specific to the shown effector?

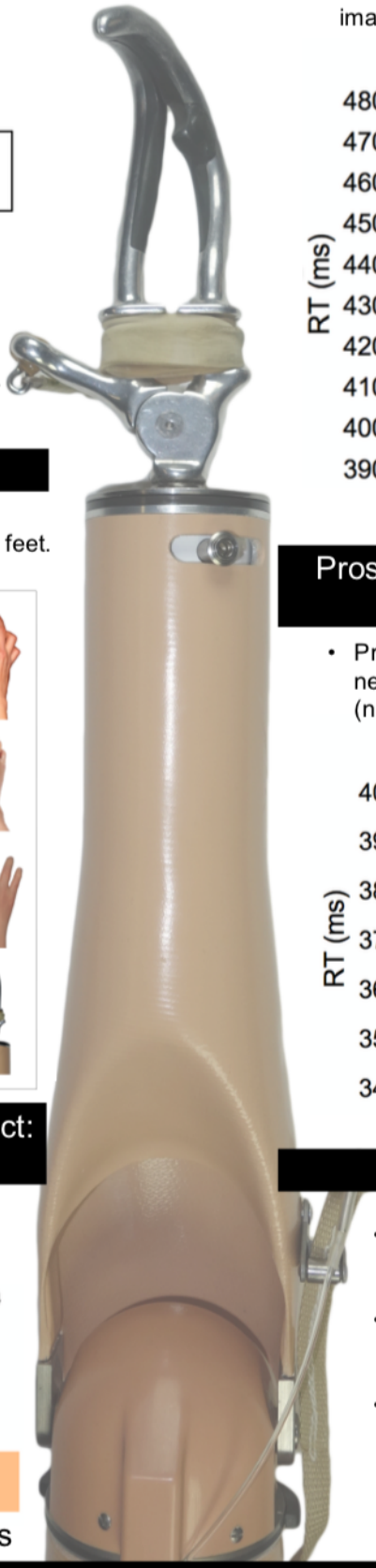
Methods

- Visual priming tasks, (n=8-10; all right handed)
- Button response with their left and right hands or feet.
- Priming image categories:

Replicating negative compatibility effect: Hand responses

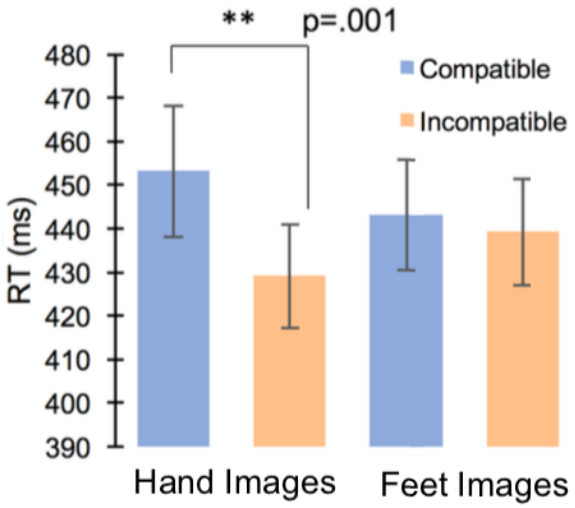
- Replication of the negative compatibility effect (n=10)





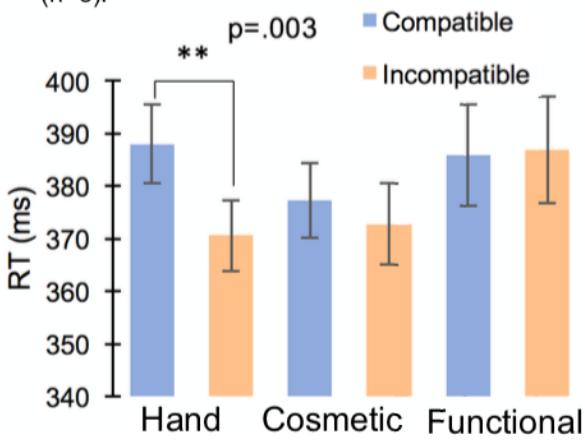
Feet images don't elicit priming effect: Feet Responses

- Feet responses elicit priming effects for hand images but not for feet (n=8)



Prosthetics don't elicit priming effect: Hand Responses

- Prosthetic prime images do not elicit a negative compatibility effect in 2-handers (n=8).



Conclusion

- Negative compatibility effect is elicited for hand images independent of the effector
- Non-hand images do not elicit negative compatibility effect
- Although this visual priming task would not necessarily assess embodiment, testing hand and prosthetic prime images in amputees might allow for a better understanding of prosthesis representation.