

# Mouse-tracking in the browser

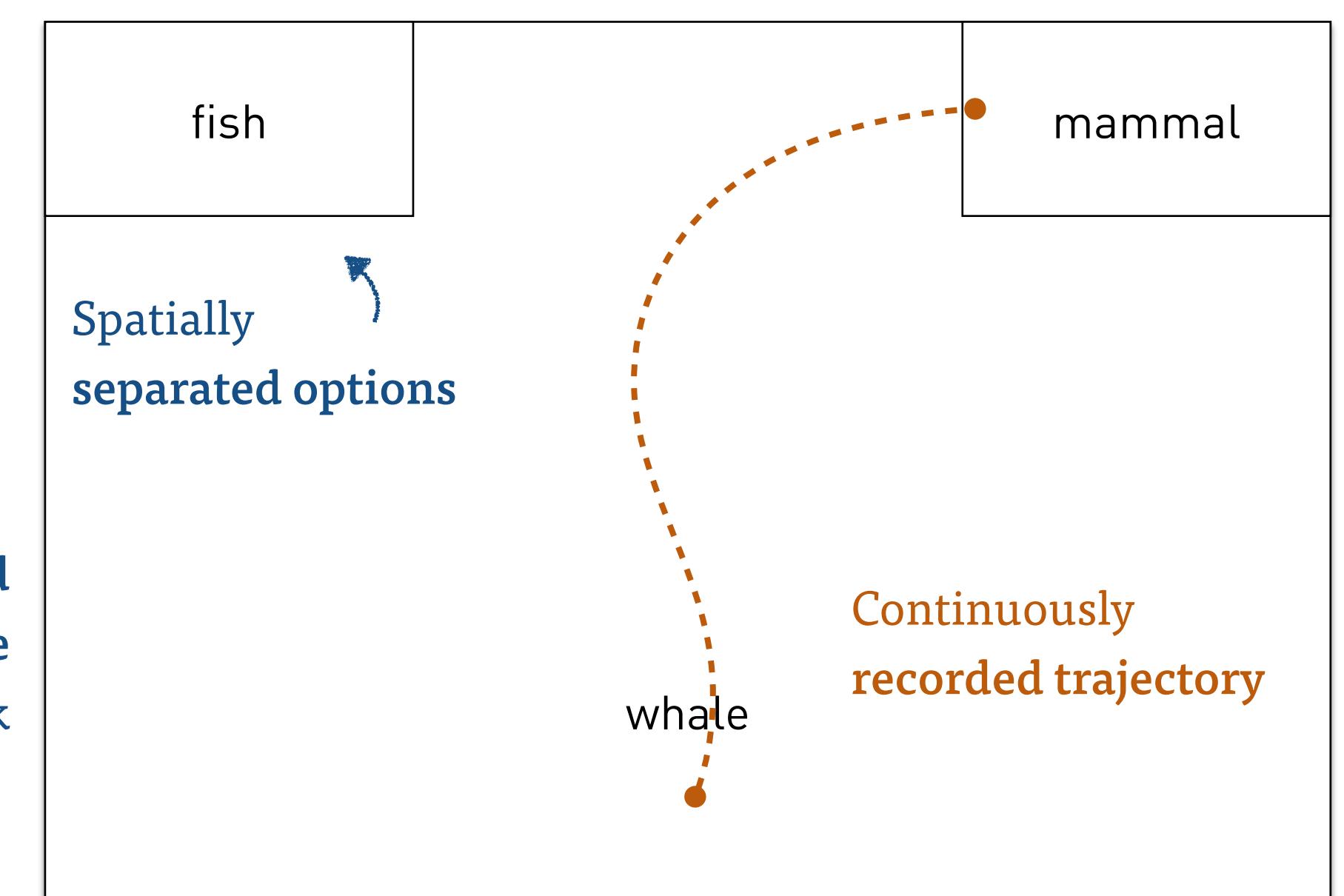
## with lab.js and mousetrap-web

Felix Henninger & Pascal J. Kieslich

### Mouse-tracking

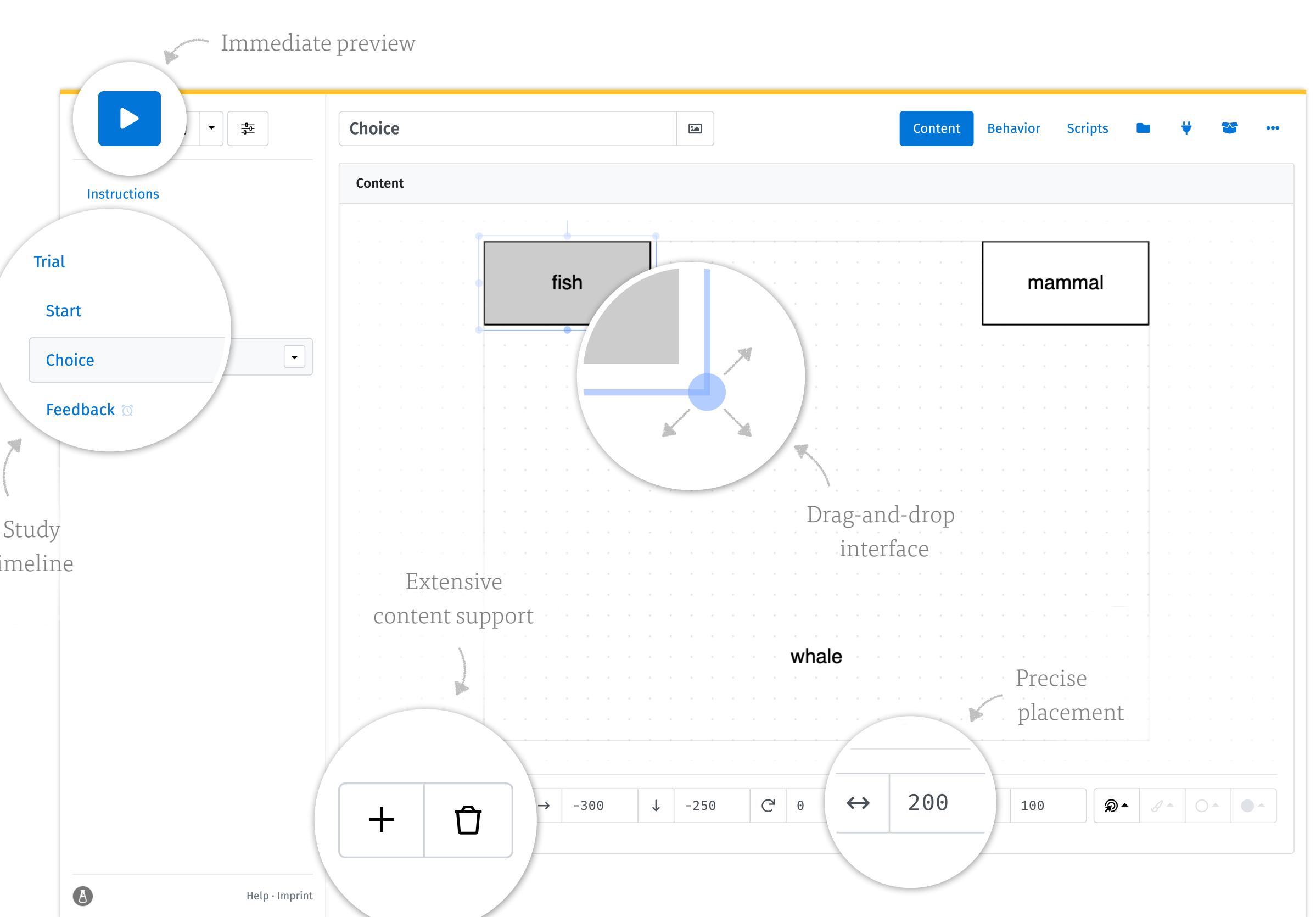
- Continuously records mouse movements while participants decide between options
- Assumes that cursor trajectories reveal tentative commitments to options as the decision emerges
- Successfully applied across many domains, including language, memory, decision making and more

(e.g. Freeman et al., 2011)



### Implementing a mouse-tracking study

- Mousetrap-Web adds mouse-tracking support to the lab.js experimental software (Henninger et al., in Press)
- The graphical interface and screen builder make stimulus design easy
- Mousetrap-Web works as a plugin that can be added to any existing stimulus
- Studies can be launched in full-screen mode, with automatic scaling to users' display resolution
- Resulting data are compatible with the Mousetrap R package for analysis (Kieslich & Henninger, 2017)
- All software is freely available as open source from <https://lab.js.org>, and runs directly in the browser

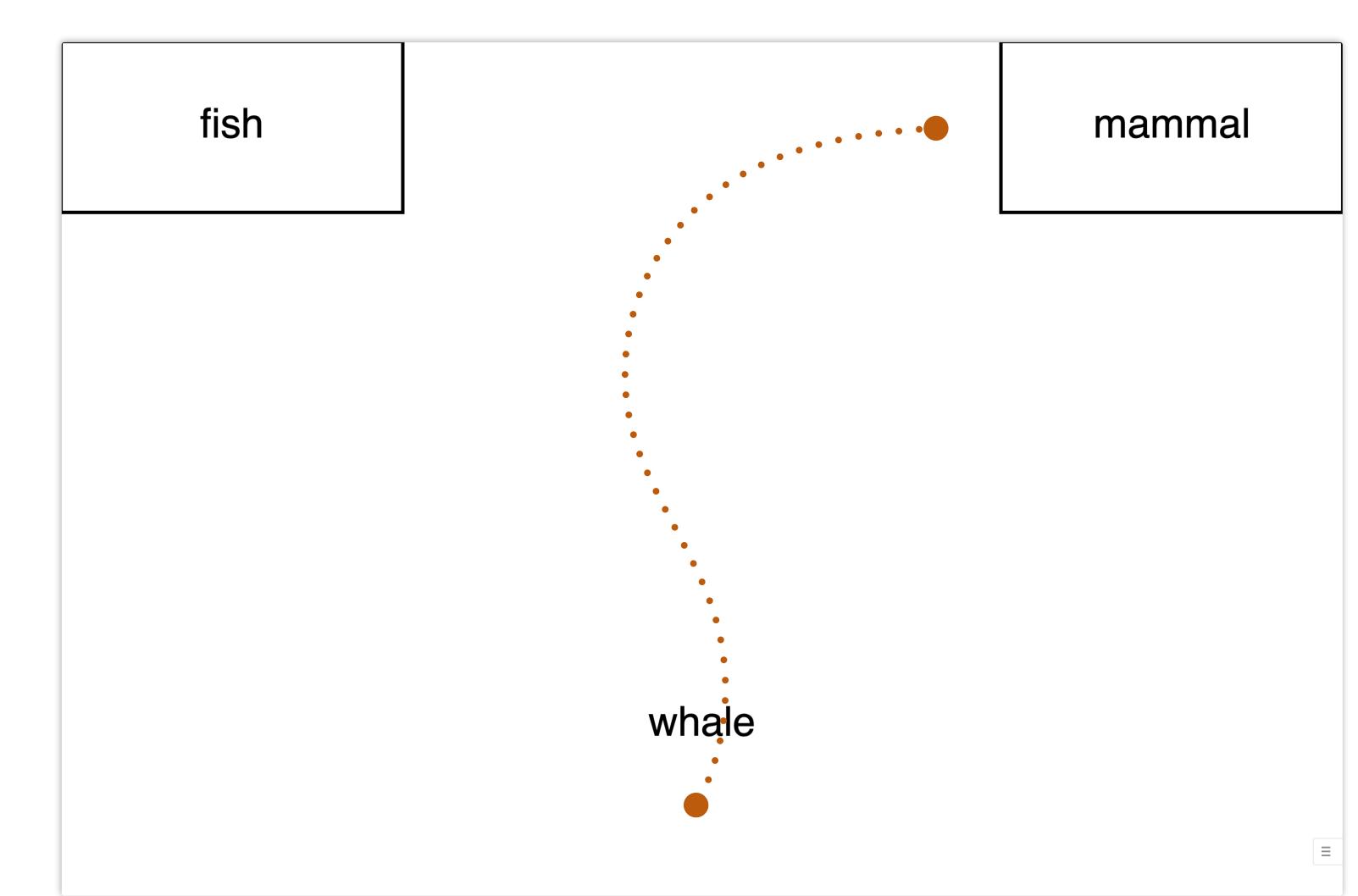


Graphical screen design

The what-you-see-is-what-you-get stimulus editor makes it easy to construct stimuli and screens

Setting up the experimental design

Adding the mousetrap plugin



Mouse data are automatically collected and stored alongside other results

### Contact information

Felix Henninger — [mailbox@felixhenninger.com](mailto:mailbox@felixhenninger.com)

Pascal J. Kieslich — [kieslich@psychologie.uni-mannheim.de](mailto:kieslich@psychologie.uni-mannheim.de)

### References

- Freeman, J., Dale, R., & Farmer, T. (2011). Hand in motion reveals mind in motion. *Cognition*, 2, 59. <https://doi.org/10.3389/fpsyg.2011.00059>
- Henninger, F., Mertens, U. K., Shevchenko, Y., Kieslich, P. J., & Hilbig, B. E. (in Press). lab.js: A free, open, online experiment builder. *Behavior Research Methods*.
- Kieslich, P. J., & Henninger, F. (2017). Mousetrap: An integrated, open-source mouse-tracking package. *Behavior Research Methods*, 49(5), 1652-1667. <https://doi.org/10.3758/s13428-017-0900-z>