

PSY241 – Causation

After this lecture I hope you will be able to answer these questions:

1. What is kind of event is likely to be seen as a cause of another event?
2. Can you ever directly measure causation?
3. Give an example of a situation where we perceive illusory correlations, and the psychological factors at work to provoke this:
4. Shanks, Pearson and Dickinson (1989) showed that judgements of self-causation are highly sensitive delay, just like direct perception of causation in experiments using Michotte's Launching Paradigm. In what ways is the inference of self-causation different from direct perception of causation?
5. Is there any evolutionary benefit to distinguishing between true causes and reliable correlation?

References

These are the references for the studies mentioned in the lecture. The essential reading is Scholl & Tremoulet (2000). If you read one thing for interest it should be Wegner (2002).

Buehner, M.J. & May, J. (2004). Abolishing the effect of reinforcement delay on human causal judgments. *Quarterly Journal of Experimental Psychology*, 57B (2), 179-191.

Chapman, L. (1967). Illusory correlation in observational report. *Journal of Verbal Learning and Verbal Behavior*, 6(1), 151-155.

Chapman, L. J., & Chapman, J. P. (1967). Genesis of popular but erroneous psychodiagnostic observations. *Journal of Abnormal Psychology*, 72(3), 193.

Hamilton, D. L., & Gifford, R. K. (1976). Illusory correlation in intergroup perception: A cognitive basis of stereotypic judgments. *Journal of Experimental Social Psychology*, 12, 392-407.

Heider, F., & Simmel, M. (1944). An Experimental Study of Apparent Behavior. *The American Journal of Psychology*, 57(2), 243-259.

Michotte, A. (1963). *The perception of causality*. Basic Books

Murphy, R. A., Schmeer, S., Vallée-Tourangeau, F., Mondragón, E., & Hilton, D. (2011). Making the illusory correlation effect appear and then disappear: The effects of increased learning. *The Quarterly Journal of Experimental Psychology*, 64, 24-40

Redelmeier, D. A., & Tibshirani, R. J. (1999). Why cars in the next lane seem to go faster. *Nature*, 401(6748), 35. doi:10.1038/43360

Schlottmann, A., & Shanks, D. R. (1992). Evidence for a distinction between judged and perceived causality. *The Quarterly Journal of Experimental Psychology*, 44(2), 321-342.

Scholl, & Tremoulet. (2000). Perceptual causality and animacy. *Trends in Cognitive Sciences*, 4(8), 299-309.

Shanks, D. R., Pearson, S. M., & Dickinson, A. (1989). Temporal contiguity and the judgement of causality by human subjects. *The Quarterly Journal of Experimental Psychology*, 41(2), 139-159.

Wegner, D. M. (2002). *The illusion of conscious will*. MIT Press