

Exercise 6, due January 9, 2019 (essay exercise for triple points!)

This exercise still builds on Chapter 2 "Dynamic Field Theory" by Gregor Schöner, and Anne Schutte from the book "Dynamic Thinking". The chapter is available on the course web page (near exercise 4).

This is an essay exercise. In response to each question, write a self-contained text that can be read without having read the question. Make sure you deliver to the reader all information necessary to appreciate the point you are making. Take the reader step by step through your argument. Use illustrations that you label and explain so that they can be understood without going back to the source. If you use illustrations from the chapter or other sources, acknowledge that fact. Cite references and do not use literal quotes unless there is a specific reason for that and you attribute the quotes appropriately.

1. Describe what categorical responding means, building on the text around Figure 2.13. Think of an example for such categorical responding and describe a reaction time study that would probe the decision making underlying categorical responding. Inspired by the discussion of reaction times in the lecture and in Erlhagen/Schöner (2002) (which you read for Exercise 5), can you make a prediction for how the time course of maximal activation depends on the metric distance of the localized input to the location of the preshape in Figure 2.13? Illustrate...
2. The last paragraph of the chapter (before the discussion) around Figure 2.18 talks about the sandbox version of the A not B experiment in which younger toddlers show more attraction to A than older toddlers. Explain the experiment and the theoretical model. Explain how attraction arises in the model. How are younger vs. older children modeled? How does the experiment and the model differ from the regular A not B experiment? Relate this paradigm to the issue of "categorical" vs. "continuous" responding that was touched upon in the first task.