

Please answer the following questions in 1-2 short, thoughtful paragraphs. What you turn in should not exceed 3 pages (approximately 750 words). I recommend doing all the reading first before answering any questions as some readings may reinforce others.

1. Heinz and Idsardi 2017.

- (a) Heinz and Idsardi introduce Bradfield's article with the question "What can one conclude from a simulation?" Without reading Bradfield or anything else, how do you answer this question?
- (b) In your own words, explain the issue Heinz and Idsardi raise about equating probability and well-formedness.
- (c) In section 5, Ed Stabler is quoted. What is his point? Can you think of an example which illustrates it? Can you think of an a case where "running programs on particular examples to see what they do" is more valuable than his alternative?

2. Cormen 2016, Chapter 1.

- (a) Cormen writes "In this book, we will focus on computer algorithms that have knowable solutions." We don't know how humans learn language. Does this mean algorithms are irrelevant to the study of the learnability of language? Explain why or why not.
- (b) What are the two aspects of algorithms that are important? Explain them briefly in your own words.

3. Osherson, Stob, and Weinstein 1986, Introduction.

- (a) In the preface, OSW write

...learning theory is the study of systems that map evidence into hypotheses. Of special interest are the circumstances under which these hypotheses stabilize to an accurate representation of the environment from which the evidence is drawn. Such stability and accuracy are conceived as the hallmarks of learning. Within learning theory, the concepts "evidence," "stabilization," "accuracy," and so on, give way to precise definitions.

Thinking about some aspect of language learning, give one example of what "evidence," "stabilization," and "accuracy," could mean. I do not want a mathematical formulation here; please use plain English.

- (b) Play the guessing game on page 1. Answer the second, third, fourth, and fifth questions.
- (c) Is the guessing game anything like language-learning? Say why or why not.