## Annotated Bibliography Model

1. "Steps Towards Artificial Intelligence" - Marvin Minsky - 1960 https://web.media.mit.edu/~minsky/papers/steps.html

One of the most famous early AI papers. Minsky talks about a great many things, including heuristic problem solving, and learning systems. It might be fun to reference Minsky in a GOFAI paper that incorporates both heuristics and learning.

2. "Introduction to Artificial Intelligence" - Philip C. Jackson - 1974/1985 - Dover

One of my favorite early books on AI. Lots of basic information on classic knowledge representations, game playing, and learning.

3. "Artificial Intelligence" - Rich (and Knight on the second edition) - 1983/1991 - MacGraw Hill

A clear, accessible, language independent text on AI. The bits on knowledge representation, rules, and/or trees, and learning are relevant to my work on the heuristic Dobo learning machine.

4. "Computers and Thought: A Practical Introduction to Artificial Intelligence" - Sharples, Hogg, Hutchison, Torrance, Young - 1989 - The MIT Press

Chapter 7 on rule-based knowledge will be very helpful to me as I write about rule-based systems for knowledge representation and reasoning.

5. "Monte-Carlo Tree Search: A New Framework for Game AI" - Chaslot, Bakkes ... - 2008 https://ojs.aaai.org/index.php/AIIDE/article/view/18700/18475

I plan to generate heuristics from complete game trees corresponding to moves near the end of the game. It might be fun to generate some heuristics from monte-carl search trees for earlier moves. This little paper provides a clear, simple introduction to Monte-Carlo search trees in the contet of games.

6. "Categorization and Construction of Rule Based Systems" - Liu, Gegov, Stahl - 2014 https://www.cs.oswego.edu/~blue/ai\_articles/CC\_RBS.pdf

This paper talks about the construction of rule based systems for classification from a variety of perspectives. Among other things, it discusses the idea of learning rules from data. In a very general way, this unsupervised mode of learning rules relates to the approach of learning rules that I am incorporating into the heuristic Dobo learning machine that I am developing.

7. "Symbolic Vs Sub-symbolic AI Methods: Friends or Enemies?" - Ilkou, Koutraki - 2020 https://www.cs.oswego.edu/~blue/ai\_articles/Symbolic\_v\_Subsymbolic.pdf

This paper discusses symbolic, subsymbolic, and in-between methods in AI. The latter possess a number of interesting properties that I will be exploring in my heuristic Dobo machine learning project, including the the ability to learn from the environment (a subsymbolic trait) and the ability to reason with the knowledge (a symbolic trait). I am thinking of relating my work to the in-between methods, mostly to get acquainted with the concept.

8. "A Case for Heuristics: Why Simple Solutions Often Win in Data Science" - Holly Emblem - 2022 - https://www.cs.oswego.edu/~blue/ai\_articles/Case\_for\_Heuristics.pdf

This is a very readable paper which presents a "defense" for heuristics grounded in an argument based on value of simple solutions to complex problems. Moreover, the paper nicely relates heuristic problem solving to other methods commonly employed in data science applications. I plan to try out some of the author's ideas as I present my approach to building the heuristic Dobo learning machine.

9. "Symbolic Behaviour in Artificial Intelligence" - "DeepMind" - 2022 https://www.cs.oswego.edu/~blue/ai\_articles/deepmind\_symbols.pdf

A paper on symbol systems from the DeepMind people! Fun! I want to read it! Doing so with an eye towards seeing if it has anything to say that might possibly relate to my work will be an interesting exercise.

10. "A brief history of heuristics: how did research on heuristics evolve?" - Hjeij, Vilks - 2023 https://www.cs.oswego.edu/~blue/ai\_articles/history\_of\_heuristics.pdf

This article goes both wide and deep in discussing heuristics from a historical perspective. Since I am always interested in making a case for the importance of explicit rule-based heuristics in AI, I plan to contexualize my work in some of the big ideas about heuristics presented in this paper. Doing so may well help me to become more skilled at articulating rationales for incorporating rule-based heuristics in AI systems.