

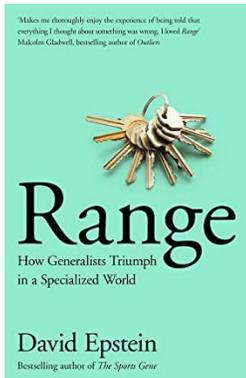


#EconReads



Range: How Generalists Triumph in a Specialized World

By David Epstein



Introduction: Roger vs. Tiger

1. Why does Epstein start with the story of "Roger v Tiger?" Do you relate more to Tiger's Dad or Roger's Mom? Why?
2. On page 11, Epstein says, "the most effective learning looks inefficient; it looks like falling behind." What does he mean by this? How does this suggest we should structure workplace education programs? Internships? SCHOOLS?
3. Have YOU ever engaged in "deliberate practice"? What sort of results did you achieve?
4. Did you experience a "sampling period" on the way to your current career or similar level of expertise? How do you think it affected your trajectory?

Chapter 1: The Cult of the Head Start

5. What do you think about Laszlo Polgar's parenting experiment? Was it net positive or negative for the children? (Isn't ALL parenting somewhat experimental? How much do Polgar's intentions count?)
6. What does "chunking" mean, and how can its practice improve performance? How might you employ chunking in YOUR line of work and/or learning?
7. On page 28, Epstein writes, "the more a task shifts to an open world of big-picture strategy, the more humans have to add." What does he mean by this? How does this explain the lack of progress achieved through AI?
8. What is Moravec's paradox (p. 22)? What situations (besides chess) do you think this paradox might apply to, and why?

9. What is cognitive entrenchment" (p. 32)? Have YOU ever fallen victim to it? If so, why do you think it happened? If not, why do you think you've been able to avoid it?
10. What does Epstein mean when he says, "The most successful experts also belong to the wider world." (p. 33) To what extent does his description of such experts inspire you to make any changes in your life? Explain.

Chapter 2: How the Wicked World Was Made

11. What's the difference between "kind" and "wicked" learning environments? Again, how does this distinction affect the way you think about work and/or school environments?
12. On page 47, Epstein effuses that "modern minds are comparatively free." What does he mean by this? To what extent is Epstein in danger of confusing modernity with schooling in this discussion?
13. What did Flynn's tests on college students reveal about critical thinking skills and GPA? College major? (Note what he found about majoring in economics!) How does this align with your own experience?
14. What does Epstein mean when he says we see the world today through "scientific spectacles"? How do they help us identify "conceptual schemes," and how do these in turn make us more adept at modern work?
15. What is the Flynn Effect, and what does it purport to describe? To what extent are people today REALLY smarter than previous generations?
16. Here's a different sort of question... Which person featured in Chapter 2 would you most like to meet, and why?

Chapter 3: When Less of the Same is More

17. What is the real lesson of the "figlie del coro?" How might you apply their story to YOUR life? Explain.
18. What lessons are we to take about creativity and learning from Epstein's description of great jazz musicians, like Dave Brubeck, Django Reinhardt, and Duke Ellington?

19. What does Epstein mean by the following (p. 76): "breadth of training predicts breadth of transfer?"
20. What's the difference between "using procedures" and "making connections?" In what ways does each help us learn? When is each desirable, and when not? How have YOU experienced this distinction in your own education? How can the aforementioned distinction (using procedures v making connections) help us make sense of varying levels of academic achievement among different nations?

Chapter 4: Learning, Fast and Slow

21. On reading the description of the 8th grade math class that starts the chapter, the class- and especially the teacher- sounds amazing. What's WRONG with what's happening in this class?
22. Explain the meaning behind the following (p. 85) "What you want is to make it easy to make it hard." What does this suggest about the way we learn best?
23. How SHOULD we think about testing? Why do you think testing has come to have such a negative connotation, as compared to the way Epstein presents it in the context of distributed practice?

Chapter 5: Thinking Outside Experience

24. How would you describe "deep analogical thinking," (p.102) and why is Kepler such a good example of it? How might you employ this kind of thinking in YOUR work/study?
25. Describe the experiment involving the "Ambiguous Sorting Task" (p. 113) What does this research tell us about successful problem-solving? How does it affect the way our schools and universities are structured?
26. How could you apply the research findings of Kevin Dunbar (starting p. 117) to YOUR professional environment?
27. What are we to learn from the story of Van Gogh as told by Epstein? What of the insertion of the sand storm within this story- what work does this piece do in the larger story?

Chapter 6: The Trouble with Too Much Grit

28. On page 127, Epstein notes the value of Van Gogh's discarded sketches. Why does Epstein suppose they have such value? Are there similar artifacts from other's lives that have accrued such value? What would the artifacts of YOUR success be???
29. What does Epstein mean when he says, "If we treated careers more like dating, nobody would settle down so quickly." (p. 131) What does this tell us about the concept of "match quality"?
30. Why was the U.S. Army having a hard time keeping officers in service the MORE scholarship money they were granted? What does this tell us about the nature and importance of "grit"?
31. What is a "multi-armed bandit process?" (p. 135) What does this analogy have to tell us about the way people make decisions? About ideal choice-making environments? How has the transition to the knowledge economy since the 1980s affected individuals' ability to make life choices that capitalize on match quality?
32. On page 143, Epstein relates part of the problem in finding high match quality is that "humans are bedeviled by the 'sunk cost fallacy'." Don't economists constantly tell us that sunk costs don't matter? What's going on here? To what extent does this describe your own experience?

Chapter 7: Flirting with Your Possible Selves

33. What is the "Dark Horse Project" (p. 154) and what does it tell us about Range? Who are some other examples of Dark Horses, besides Hesselbein, Knight, and Darwin? Why might short-term planning beat long-term planning in life?
34. What is "the end of history illusion?" (p. 156) What does this suggest about the link between brain and personality development and match quality?
35. What's the USUAL lesson we hear about the "marshmallow test?" How does Epstein upend this usual narrative? (Hint: your answer should include SOMETHING about context...)
36. What does it mean to "be a flirt with your possible selves?" How might YOU incorporate this advice in your own life?

Chapter 8: The Outsider Advantage

37. What is "outside-in" thinking, and how does InnoCentive illustrate this principle? What are some other examples of organizations working in a similar fashion? How might you employ this thinking in YOUR field?
38. What is "the outsider advantage," according to Epstein, and how why are these sorts of opportunities continuing to grow? (Hint: think about the nature of "undiscovered public knowledge.")

Chapter 9: Lateral Thinking with Withered Technology

39. How does the story of Nintendo illustrate the principle of lateral thinking? What does this story tell us about the ways in which we might leverage technology?
40. What is "functional fixedness?" (p. 198) What are some examples, like the 'candle problem,' YOU have encountered? Were you able to solve these problems? If so, how? If not, how might you approach such a challenge now?
41. Epstein notes that inventions by specialists 'skyrocketed' during and after World War II, but have since declined. (p. 205) Why does he posit that this is the case? Can you imagine a scenario in which this trend might REVERSE?
42. What's the lesson of the study "Superman or the Fantastic Four"? (Hint: It's about more than *just* teamwork...) How do you build a "fantastic" team, according to Epstein? Again, how might you apply this in YOUR life?

Chapter 10: Fooled by Expertise

43. You've probably heard about the famous Paul Ehrlich-Julian Simon bet... So why does Epstein say they were BOTH wrong???
44. What are the characteristics of a "superforecaster?" (p 220) Do you think such masters are born or created? Explain.
45. What's the difference between a fox and hedgehog? (p. 221) Who has the advantage in decision-making and forecasting, and why?
46. Why do we have such an aversion to contrary ideas? How can we practice "active open-mindedness? (p. 227)

Chapter 11: Learning to Drop Your Familiar Tools

47. What's the REAL lesson of the Space Shuttle Challenger, according to Epstein? What does it tell us about learning? Specialization? Process?
48. Tools may not be physical assets, as we learn in the related stories of NASA and smokejumpers. What is an example of a tool in YOUR line of work that you can't imagine giving up? When might it be important to do so?
49. What are some other examples of "overlearned behavior" you can think of? (p. 248) How have they proven to be detrimental in their specific arenas?
50. What's the difference between decision-making and "sense-making" (p. 250) How might you put more emphasis on the latter in YOUR life?
51. What is congruence? (p. 255) Why has been so popular in social science over the past several decades? And why does Epstein suggest it's WRONG?
52. What would YOU do to build a problem-solving culture in your own area of work?
53. What does Epstein mean by the following (p. 264): "...there is a difference between the chain of command and the chain of communication, and that difference represents a healthy cross-pressure." How can such cross-pressure be maintained?

Chapter 12: Deliberate Amateurs

54. What is a "deliberate amateur" (p. 269), according to Epstein? Who are some other examples of deliberate amateurs from history? Your own experience?
55. Epstein notes (p. 275) that "protection from the cult of the head start" is increasingly rare. What can we do to STRENGTHEN and INCREASE such protection? How can you find such protection in YOUR work?
56. What would "despecialized learning" (p 276) look like in YOUR area?
57. What does Epstein mean when he calls human creativity an "import-export business of ideas?" (p 280)

