

# Fostering Innovation





Sid Meier's Civilization series of games uses a technology tree as a simplistic model of innovation. One cannot obtain, say, electronics without first researching electricity and the telegraph.



The general theory is known as the Adjacent Possible, by the biologist Stuart Kauffman.

The Adjacent Possible relates to every system from technology to the origin of life itself; nothing can happen without its necessary preconditions. **The more preconditions we have, the more combinations we can have.**

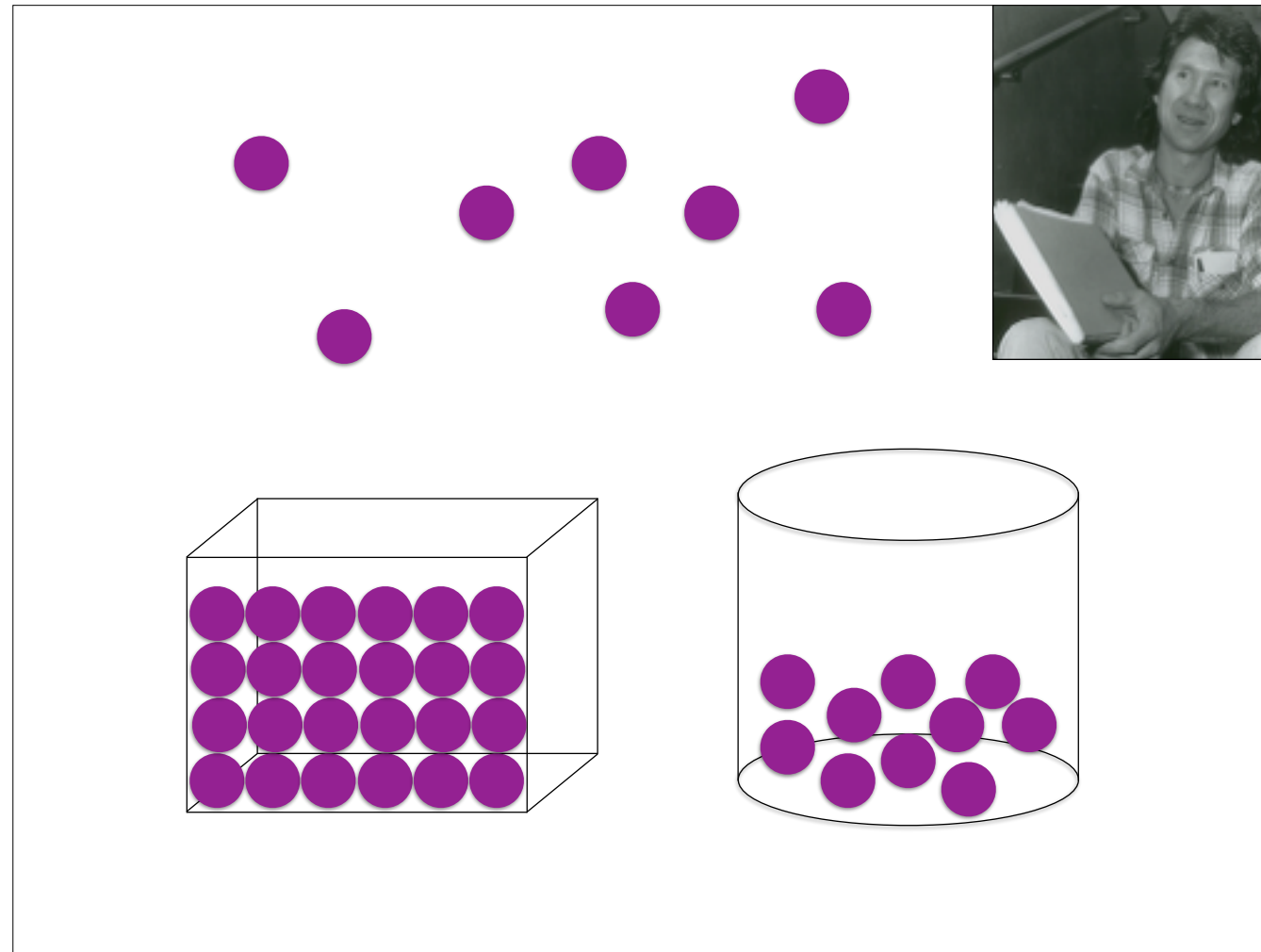


If you read one book this year, make it this one.

To make your mind more innovative, you have to place it inside environments that share the same network signature: networks of ideas or people that mimic the neural networks of a mind exploring the adjacent possible.

Steven Johnson (2010). Where Good Ideas Come From - The Natural History of Innovation. Riverhead Books, NY, pp. 47.

He continues, “Certain environments enhance the brain’s natural capacity to make new links of association. But those patterns of connections are much older than the human brain, older than neurons even. They take us back, once again, to the origin of life itself.”



The computer scientist Christopher Langton noticed in the 1980s that innovative systems operated at “the edge of chaos” (Johnson, pp. 52); **not too much order and not too much anarchy.**

Networks of people, or ideas, can be thought of as “solid” where stability is the norm, “gaseous” where chaos rules, or “liquid” where random connections can both form and break away again, thus exploring the adjacent possible. Liquid networks are the goal for fostering innovation.

“Ideas rose in crowds. I felt them collide until  
pairs interlocked, so to speak, making a stable  
combination.”

–Henri Poincaré, *The Foundations of Science*

“Go for a walk; cultivate hunches; write everything down, but keep your folders messy; embrace serendipity; make generative mistakes; take on multiple hobbies; frequent coffeehouses and other liquid networks; follow the links; let others build on your ideas; borrow, recycle, reinvent.”

–Steven Johnson

Where Good Ideas Come From, from his conclusion on pp. 246.