

Causal graphs for life problems and values

Choose one tricky problem in your life that you want to sort out. It could be anything from "What do I want in life?" to "How can I become a more successful researcher?" to "How can I get my housemate to be less passive aggressive with me?" The goal of this exercise is to practice using causal diagrams to help us think about the causal relationships between things that matter to us.

Suggested steps (try these, but find what works best for you):

- 1) **List:** Start brainstorming a written list of relevant factors or variables.
- 2) **Graph:** Once you find the list settling into a roughly steady state, start drawing a causal graph --- a bunch of nodes (dots) and edges (arrows) --- where the nodes represent *relevant variables* (situational factors), and the edges represent *direct causal influence*. Give yourself *lots of space*; use big paper or a whiteboard if you have it. Start with the variables that feel important, and annotate the graph however you like.
- 3) **Revise:** As you draw the graph, new variables will probably come to mind. Try to find a balance between including new ideas and overwhelming yourself with too many nodes. Don't be afraid to start over, but maybe don't overwhelm yourself by starting over more than 20 times. Also, don't expect the graph to represent everything you know: it's a tool to help you organize your thoughts, not limit them to paper.

Think locally-- If a node seems important, focus on it for a while, and ask about its relationship to each other node.

Think globally-- Every 15 minutes or so, look at the big picture to see if you're off track, so you don't get stuck on the wrong details.

Take breaks-- After taking a break your focus will probably change, and different things will seem important. Take note of these changes, and try to settle your disagreements with yourself over time.

Be creative, be skeptical, be curious, be strategic, but not all at the same time, and try Edward de Bono's Six Thinking Hats, too!

How do you know if you've drawn a "good" diagram? It's "good" if drawing the diagram helps you do any of the following:

- * Notice an important causal mechanism you hadn't thought of before.
- * Realize some causal mechanism is more important than you thought.
- * Realize some causal mechanism is less important than you thought.
- * Realize that you have an opportunity to change something that you hadn't noticed before.
- * Benefit in any other way you like.

Six Thinking Hats

These thinking hats were popularized by Edward de Bono as useful but fairly mutually exclusive modes of thinking. Consciously focusing on one of them at a time is supposed to be easier than trying to do them all at once.

1) **Being creative.** What variables might matter in this situation? Am I leaving anything out? Who can I ask for suggestions?

2) **Noting basic facts.** Pick *one* node. Patiently give yourself time to ask:

What affects this node? What does it affect? [draw edges] How much do I care about this node? [denote this somehow, e.g. circle it multiple times if you care a lot]

Do this for each node. Then pick *one* edge. Patiently give yourself time to ask:

How strong is this effect? [denote this somehow] How sure am I about how it works? [write question marks where most uncertain]

3) **Being optimistic.** What's good about this? What advantages do I see?

4) **Being pessimistic.** What's bad about this? What problems do I see?

5) **Considering emotions.** What emotions do I feel about this in everyday life?

[denote at least some of these; **please consider making emotions their own nodes!**]

What does that emotion feel like physically? What thoughts do I have with that emotion?

Ask these same questions about other people's thoughts and emotions!

6) **Thinking about thinking.** Is there anything about how I'm thinking right now that is helping or making this difficult?