

Why I do what I do

The purpose of my life is to be happy. Towards that end, I have desires which give me indications of the things I want. Fortunately, most of these things are taken care of for me almost subconsciously: For instance, I breathe, walk, talk, eat, drink, smile, etc, with very little effort whatsoever. If I had to think about every step involved in getting a cup, walking over to the fridge, pouring myself some orange juice, drinking it, and smiling, I'd explode.

So, that's nice. But unfortunately, there are a lot of desires I have which cannot be fulfilled in this way. For instance, I may want to learn a difficult piano piece, or learn how to interact with people more enjoyably, or start a homeschool business, or afford four children and a home in Colorado.

I am endowed, however, with the faculty of thought and reason, which allows me to achieve these larger goals in an organized way. (And if you are too, then perhaps you will enjoy this note.) I consider the problem at hand, and design, as carefully and consciously as possible, a solution to that problem.

So, that's nice. But unfortunately, thinking is difficult. Sometimes when I apply thought to a situation, I get an incorrect solution, or maybe no solution at all. Maybe I lose my focus, or go around in circles. Or maybe I take weeks and weeks to solve a simple problem that has a simple solution.

And there are more difficulties: Not only should a solution be correct, but it should be nicely implementable and adaptable. I don't want to spend my whole life thinking, I want to spend it reaping the rewards of that thought! So it is essential that a solution is simple enough that it can be taught and learned, and eventually become almost subconscious, just like the act of pouring and drinking orange juice. And if the problem changes slightly, I don't want to start the thought process over again from scratch: I'd like to be able to build off my previous solution.

Yet sometimes I come up with a solution so complex that I can barely understand it myself, much less explain it to another person. There is little hope of implementing such solutions, or adapting them to new problems.

What's going on? Simply put: Thinking is difficult! How could it not be, when most of the things we do are, and need to be, subconscious and unthinking?

That is why discipline in thought is so important. It is not enough to formulate the principles of thought —be organized; be as explicit as is beneficial; be aware of the choices you make; separate concerns wherever possible; don't draw needless distinctions; take care in naming and forming interfaces; form abstractions; use knowledge sparingly and only as necessary; etc— , but we also have to train ourselves to use these principles efficiently and effectively.

A cute aside. Frisbee is often a microcosm for the world: When someone first learns to throw a frisbee, they know exactly what movements they need to make. Yet they still throw terribly, because their bodies are not used to being moved in that way. Eventually,

with enough focus and training, they manage to get some good throws in. But the motions are stiff and unnatural: Over time, and with practice, the movements become fluid and subconscious. One “natural” way of living has supplanted another “natural” way, and the new way has an advantage in that it allows you to look really cool.

(End of **A cute aside** .)

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The final question to be answered is: How do we discipline ourselves? Well, it helps to think out loud, with a partner. It can be hard to catch your own mistakes, but other people can sometimes spot them more easily. It pays for the partner to be as skeptical as possible, and this is why it can sometimes be beneficial to run your reasoning by a 5-year-old.

But there is a point beyond which even a partner can't help. How do we develop our skills then? How can we practice disciplined thinking?

Well, one thing is for certain: It is no use training our thought on a problem we can barely get our heads around. It would be a terrible idea to try to learn to think by, for instance, solving the problem of world hunger. That would be like trying to learn to swim in a tidal wave: you will be drowned.

We have to simplify the sort of problems we look at, abstract away from fuzzy human notions, which are inherently hard to deal with, and focus instead on simple, yet completely precise concepts. These are the concepts of mathematics. When you do mathematics, you're just about as close as you can be to pure reason, whatever that may be. (Even within math, there has been a sort of correlation: the simpler the problem, the more general the lessons I learn.) Mathematics is the perfect playground in which to hone the raw skills of thought.

I'm not really interested in math per se. I'm not even interested in applications of math to “the real world” . And yet the discipline in thought I have developed by working carefully on math problems has helped me to become a better pianist, lover, teacher, and friend.

And that is why I do what I do.

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