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HOW TO BE AN EXPERT IN A CHANGING WORLD

December 2014

If the world were static, we could have monotonically increasing confidence in our beliefs. The more (and more varied) experience a belief survived, the less likely it would be false. Most people implicitly believe something like this about their opinions. And they're justified in doing so with opinions about things that don't change much, like human nature. But you can't trust your opinions in the same way about things that change, which could include practically everything else.

When experts are wrong, it's often because they're experts on an earlier version of the world.

Is it possible to avoid that? Can you protect yourself against obsolete beliefs? To some extent, yes. I spent almost a decade investing in early stage startups, and curiously enough protecting yourself against obsolete beliefs is exactly what you have to do to succeed as a startup investor. Most really good startup ideas look like bad ideas at first, and many of those look bad specifically because some change in the world just switched them from bad to good. I spent a lot of time learning to recognize such ideas, and the techniques I used may be applicable to ideas in general.

The first step is to have an explicit belief in change. People who fall victim to a monotonically increasing confidence in their opinions are implicitly concluding the world is static. If you consciously remind yourself it isn't, you start to look for change.

Where should one look for it? Beyond the moderately useful generalization that human nature doesn't change much, the unfortunate fact is that change is hard to predict. This is largely a tautology but worth remembering all the same: change that matters usually comes from an unforeseen quarter.

So I don't even try to predict it. When I get asked in interviews to predict the future, I always have to struggle to come up with something plausible-sounding on the fly, like a student who hasn't prepared for an exam. ^[1] But it's not out of laziness that I haven't prepared. It seems to me that beliefs about the future are so rarely correct that they usually aren't worth the extra rigidity they impose, and that the best strategy is simply to be aggressively open-minded. Instead of trying to point yourself in the right direction, admit you have no idea what the right direction is, and try instead to be super sensitive to the winds of change.

It's ok to have working hypotheses, even though they may constrain you a bit, because they also motivate you. It's exciting to chase things and exciting to try to guess answers. But you

have to be disciplined about not letting your hypotheses harden into anything more. [2]

I believe this passive m.o. works not just for evaluating new ideas but also for having them. The way to come up with new ideas is not to try explicitly to, but to try to solve problems and simply not discount weird hunches you have in the process.

The winds of change originate in the unconscious minds of domain experts. If you're sufficiently expert in a field, any weird idea or apparently irrelevant question that occurs to you is ipso facto worth exploring. [3] Within Y Combinator, when an idea is described as crazy, it's a compliment—in fact, on average probably a higher compliment than when an idea is described as good.

Startup investors have extraordinary incentives for correcting obsolete beliefs. If they can realize before other investors that some apparently unpromising startup isn't, they can make a huge amount of money. But the incentives are more than just financial. Investors' opinions are explicitly tested: startups come to them and they have to say yes or no, and then, fairly quickly, they learn whether they guessed right. The investors who say no to a Google (and there were several) will remember it for the rest of their lives.

Anyone who must in some sense bet on ideas rather than merely commenting on them has similar incentives. Which means anyone who wants such incentives can have them, by turning their comments into bets: if you write about a topic in some fairly durable and public form, you'll find you worry much more about getting things right than most people would in a casual conversation. [4]

Another trick I've found to protect myself against obsolete beliefs is to focus initially on people rather than ideas. Though the nature of future discoveries is hard to predict, I've found I can predict quite well what sort of people will make them. Good new ideas come from earnest, energetic, independent-minded people.

Betting on people over ideas saved me countless times as an investor. We thought Airbnb was a bad idea, for example. But we could tell the founders were earnest, energetic, and independent-minded. (Indeed, almost pathologically so.) So we suspended disbelief and funded them.

This too seems a technique that should be generally applicable. Surround yourself with the sort of people new ideas come from. If you want to notice quickly when your beliefs become obsolete, you can't do better than to be friends with the people whose discoveries will make them so.

It's hard enough already not to become the prisoner of your own expertise, but it will only get harder, because change is accelerating. That's not a recent trend; change has been accelerating since the paleolithic era. Ideas beget ideas. I don't expect that to change. But I could be wrong.

Notes

[1] My usual trick is to talk about aspects of the present that most people haven't noticed yet.

[2] Especially if they become well enough known that people start to identify them with you. You have to be extra skeptical about things you want to believe, and once a hypothesis starts to be identified with you, it will almost certainly start to be in that category.

[3] In practice "sufficiently expert" doesn't require one to be recognized as an expert—which is a trailing indicator in any case. In many fields a year of focused work plus caring a lot would be enough.

[4] Though they are public and persist indefinitely, comments on e.g. forums and places like Twitter seem empirically to work like casual conversation. The threshold may be whether what you write has a title.

Thanks to Sam Altman, Patrick Collison, and Robert Morris for reading drafts of this.

■ [Spanish Translation](#)

■ [Arabic Translation](#)