

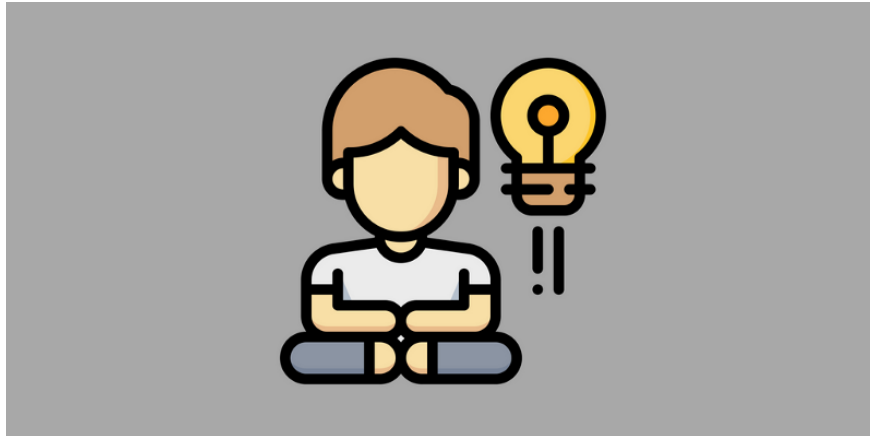


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## A Few Principles for Thinking Clearly



One of my favorite essays I wrote this year was *A Few Principles for Intellectual Freedom*.

In that piece, I took scenes from the life of the scientist James Lovelock to illustrate some principles for pursuing a life of intellectual freedom. In this essay, I'd like to do something similar with another inspirational character—the Czech-Canadian polymath Vaclav Smil.



Yea, he does kinda look like a superhero.

Smil was a little-known academic until he rose into public awareness thanks to Bill Gates. Gates has read all of Smil's books (there are over 30 of them) and goes as far as to say, "I learn more by reading Vaclav Smil than just about anyone."

Many of Smil's books focus on environmental themes such as population growth, climate change, and energy transitions. These fields are rife with political bias and emotional reasoning, but Smil manages to say important, interesting things in a way that is neither deluded nor dogmatic.

Here are a few things I'm learning from him on how to think clearly.

## Read widely, with maximum curiosity

As Philip Tetlock has shown in his book *Superforecasting*, the clearest thinkers tend to be those that draw from multiple disciplines. I call these people dragonfloxes—they can do many things (like a fox) and also see the world in many ways (like dragonflies, which have many eyes).

Smil is a dragonflox. At age 74, he continues to read 80+ books a year (while still finding the time to write up to 3 books in a single year):

*"I've read about 80 books a year for the past 50 years. I come from cultural breeding. I don't have a cellphone. When you spend all your time checking your cellphone messages, or updating your Facebook (of course I don't have a Facebook page) then you don't have any time for reading."*

This habit of learning, it seems, started when Smil was still a student:

*"Smil completed his undergraduate studies at the Faculty of Natural Sciences of Charles University in Prague, where he took 35 classes a week, 10 months a year, for 5 years. "They taught me nature, from geology to clouds," Smil said. After graduation he refused to join the Communist party, undermining his job prospects, though he found employment at a regional planning office." (Wikipedia)*

## Put reality first and theory last

Though I don't know the details, I find it interesting that Smil refused to join the Communist party as a student. One problem with Marxism is that it puts too much faith in its model of how history works. Marx

thought that history moved in predictable phases, converging on a paradise in the future where humans lived as equals.

Confusing models with reality is a cardinal sin of clear thinking. If you believe too strongly in your models of the world, you can start to ignore evidence that your model is wrong.

Smil is not a fan of models. When, in the 1870s, the influential book *The Limits to Growth* used a computer model to predict impending doom, Smil was skeptical.

From an article in Science magazine:

*“Smil was intrigued and taught himself programming to re-create the model for himself. ‘I saw it was utter nonsense,’ he recalls; the model was far too simple and easily skewed by initial assumptions. He constructed a similar model of how carbon dioxide emissions affect climate and found it similarly wanting. He understood the physics of the greenhouse effect and the potential for a carbon dioxide buildup to warm Earth, but models seemed too dependent on assumptions about things like clouds. **Ever since, he’s held models of all kinds in contempt. ‘I have too much respect for reality,’ he says.**”*

If you look at history, it becomes clear how easy it is for humans to fool themselves with faulty forecasts and myth-driven theories. In the face of that, the only proper stance, I think, is intellectual humility.

Smil has humility. He refuses to make long-term forecasts (because he knows they are useless) and instead focuses only on saying what is worth saying:

*“I never push anything hard because I do not believe that any individual has all the solutions... I try to illuminate complexities, raise concerns, and suggest some desirable tools and sensible outcomes.”*

This is the opposite of what many pundits and political commentators do. People will always need certainty where no certainty exists. In this sense, pundits and long-term forecasters are the priests and faith healers of our time.

Those interested in the truth, though, will have to learn to live with uncertainty.

## Keep money and status out of it

Another interesting thing about Smil is that he has principles. In particular, you can tell he that he values intellectual honesty far more than he values fame or material wealth.

Smil lives very simply, hates interviews, and does not own a smartphone. And, despite his friendship with Gates, Smil hasn't done anything to, as marketers would say, to "leverage the relationship":

*"...Gates has opened doors for Smil: Swiss banks weren't calling for his advice before. But they keep the relationship pure. 'I would never ask him for any favor—never ever,' Smil says. 'As simple as that.'"*

In economics, there's something called Campbell's law. The basic idea is that, when you reward people for a particular measure—clicks, dollars, likes, etc.—people will find a way to "game" the system.

The classic example of this happened in India. The government offered rewards to people who caught and killed snakes. Unexpected result: People started to breed *more* snakes in order to get the rewards.

If college admissions require essays, rich parents will pay essay-writers to write those essays. If journalism is fueled by clicks, journalists are going to write sensationalist clickbait. Of course, scientists and academics are in no way exempt.

This is the danger of getting paid for your ideas: It's easy to sell out or self-censor because you're afraid of (a) financial or (b) status pushback.

The cure—as far as I can tell—is to hold fame and financial success in low regard. In fact, it might actually help to look *down* on people who are interested in getting rich and getting ahead.

I don't know if Smil does this intentionally, but his intense privacy and frugal lifestyle seem to me like signs that he is trying to protect his ability to think clearly.

Lately, I am trying to modify my life in the same way. Until recently, I accepted monthly contributions of \$100 on [my Patreon page](#) in exchange for a monthly phone call. The money was nice, but I started to feel pressured to cater to these donors. It found it hard to disagree with them or write things that they might not like.

## Manage your identity

Y Combinator's Paul Graham has an excellent essay titled *Keep Your Identity Small*. The key idea is that the more a particular issue is wrapped up in your identity, the harder it is for you to think clearly about it.

It gets worse. When people are exposed to evidence that contradicts their identities or tribal affiliations, they'll actually double down and become *more* confident in whatever they believed. This is why it's important, when trying to think clearly, to avoid identifying with any particular tribe.

Take dietary advice. I find it hilarious how the paleo, primal, keto, vegan, and vegetarian diet camps are always quibbling about minor things when they share so many similarities (avoid processed foods, eat vegetables, etc.).

Smil has a book titled *Should We Eat Meat?*. In it, he refuses to identify with any tribe and instead says that (a) it's fine to eat meat but (b) we shouldn't eat too much of it.

Here he is in an interview:

*"Meat eaters don't like me because I call for moderation, and vegetarians don't like me because I say there's nothing wrong with eating meat. It's part of our evolutionary heritage! Meat has helped to make us what we are. Meat helps to make our big brains. The problem is with eating 200 pounds of meat per capita per year. Eating hamburgers every day. And steak. You know, you take some chicken breast, cut it up into little cubes, and make a Chinese stew—three people can eat one chicken breast. When you cut meat into little pieces, as they do in India, China, and Malaysia, all you need to eat is maybe like 40 pounds a year."*

Humans are tribal creatures, and I don't think we can fully escape the need to identify with a group.

If you have to choose a group, though, I think the best thing to do is what Annie Duke suggests in her book *Thinking in Bets*: Identify with a group that values the truth.

## Skin in the game

I'm not sure how related this is to "clear thinking", but another thing I find inspirational about Smil is how he lives in accordance with the advice that he gives.

Some examples:

- Smil lives in a modest home, which he built to have 50% more insulation than your average home. The furnace uses natural gas, and it is 97% efficient.
- He eats meat, but only an average of once a week, usually Asian-style in stir fried dishes.
- He drives a Honda civic, which he calls “the most reliable, most efficient, most miraculously designed car.”

I suppose it’s like that old saying of how chefs should eat their own cooking and architects should live in the houses they build. If you’re going to give advice, then you better make sure you live by it.

## Some final thoughts

Somehow, I don’t think that Smil would be happy to know that I wrote this essay. I probably got some things wrong, and maybe he doesn’t see things the way that I see them.

Still, I think that this was worth writing. Reading about Smil has encouraged me to re-organize my life. Perhaps it provides some hints for you as well.

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