

## We Need a Philosophy of Engagement

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I assume many of you have heard this before: if you click on the first substantive link in any wikipedia article (not in italics, not in parentheses), and keep repeating, you will end up at the wikipedia article on philosophy.

justin bieber -> talent manager -> entertainment -> amusement -> experience -> concept -> idea -> mental representation -> philosophy of mind -> philosophy

A different way to arrive at this is to keep asking why. If you keep asking about the material world, you end up at physics. If you keep asking why about human experience, you end up with philosophy.

I would like to speak to you today as a scientist from industry, and as an ordinary citizen of a multicultural society. I am NOT speaking as an academic, much less a philosopher. Why does society need philosophers? It is my experience that the answers to many hard questions in science and in society are really philosophical questions.

Philosophy tells us how to think of stuff, provides us frameworks within which to frame our questions, expect our responses. This has been going on for a long time, and so different philosophical traditions have emerged over the millennia, each with its own appeal and applicability.

It therefore behooves society to invest in this activity, just as we do in people looking for cures to diseases, or finding out about human origins. We need some group of committed people to devote full time to studying these questions and report back to us their findings, because many others care about the answers but don't have the skills, training, the depth of interest or have other callings. You guys are our Louis & Clarks sent out to map the territories.

Us non-philosophers aren't usually qualified to judge the rigor of your answers, so we need you guys to keep each other honest. It may take generations of philosophers, centuries of philosophy to answer the questions posed. But I assert that the questions arose from everyday people like me or from our ancestors and it is us and our progeny who are the ultimate recipients of your findings, and to whom you should eventually address yourself.

I'd like to give you two layperson views on the need for philosophy in society.

First is from my own line of work. I work for Google. Google has many great products but most of that is supported by my department, Search Ads. When you type a query into the Google search box, it is my team's job to decide which ads to show on which query at what price. At base is a very large prediction system, most likely the largest in the world when it comes to the numbers of machines employed or the number of individual decisions it makes every second. Pretty practical stuff, and yet philosophy is relevant here as well.

The main thing we need to predict is the probability that a user will find a particular ad result useful. Since users don't explicitly tell us what they think of each ad, this becomes a question of modeling user behavior with an uncertain ground truth. We are forced to rely on indirect measurements: either seeing how the users interact with the page of results we produce; or asking groups of human raters to compare alternative results; or asking individuals to go back and annotate their own results with how well they were satisfied. None of these is what we really want, so we have to create statistical models for each ground truth, and have to figure out how to integrate these individual models into a single fuller picture, maybe even an uber model.

Guided by some human intuition, our models are based on integrating diverse facts. In a sense, you can call every model an attempt to integrate facts, for the purposes of explanation and prediction. Often our users react to various changes we make in our algorithms in ways that we didn't expect. So our models have to keep evolving. Prediction relies on the correlation between the quantities we know and the quantities we wish to predict. But to be robust to changing conditions, we would prefer to model causality rather than mere correlation. In truth, we use some combination of causal and non-causal models.

Questions of modeling, causality, prediction and explanation are fundamentally problems of philosophy. I don't expect philosophy to prescribe a particular modeling strategy but I'd like to know what my options are, and what tradeoffs I'll have to make between various qualities. How do we posit concepts? How do we validate them if they are never observed? What are we committing to? How will all this affect our ability to evolve models over time?

At the end of the day, Google runs a search engine and for some things we can measure how well our modeling decisions worked in aggregate. But for the majority of decisions, we cannot easily separate conception from implementation. This is where I believe Philosophy of Science can help us make wise choices.

Allow me now to switch gears, and give you a different perspective: as one of the many naturalized American citizens working in the Bay Area. My story is much the same as that of so many others, even if it has its own unique inflections. I happened to have been raised in England and Pakistan, and then came the Bay Area to study Engineering. Everywhere around me I see ideas and people floating unmoored from their social, cultural and historical context. If immigration has largely moved in one direction, the internet moves in all directions, making the spread of ideas and images a phenomenon to which very little of the

world is impervious. And then there is geopolitics and its blowback which make far away places seem very close indeed.

In other words, there is no “outside” anymore. It seems people, ideas, values and cultural artifacts from all over the world are fated to bump into each other, either physically or virtually. In such a society, treading softly around divergent values, or keeping respectfully aloof is no longer possible. The scale of these changes no longer permit the kind of compartmentalization implied by “tolerance”. We are all forced to engage. Engage with each others looks, odors, germs, values and views. Increasingly, we mix bloodlines, giving rise to a generation with multiple cultural inheritances. All this kind of multiculturalism is here to stay, and we need help to make sense of it.

What I am looking primarily towards philosophers for are philosophies of engagement. We are now exposed to different value systems, each born from different historical circumstances and underpinned by its own philosophical traditions. How does each of us pick and choose? How do we combine? We need not all come to the same conclusion on everything, but we all need a framework for evaluating and integrating. Cleaving to ideas merely out of loyalty to our ancestors and own cultural origins seems weak, not least because our ancestors may have themselves chosen differently if presented with the same choices. We’ve heard talk of plurality today, which is great. But as individuals we often have to pick and choose.

Furthermore, when it comes to living together in a global society, we are often forced to arrive at a common set of rules. Due to recent violence in the Middle East, we’ve heard a lot about blasphemy laws. At the UN, President Obama has argued for freedom of speech largely because it is increasingly impossible for nation states to control it thanks to the internet. Curiously, he didn’t make the same impassioned appeal for laws against the spread of state secrets via the website Wikileaks thanks to the same internet. In a world of weakening state control over the flow of information, what frameworks allows us to make sense of both blasphemy laws and state secrets?

These are hard problems and lurking under them are philosophical questions. Very often, there are competing philosophical traditions behind these philosophical questions. I want these to be explored and contrasted, cognizant of their origins and of the fact that discussions around them are likely taking place in English. But I urge you to evaluate them on their own merits regardless of origin. We don’t speak of “German chemistry” or “Islamic algebra” except in a historical terms. If ideas are useful to a community, they stand on their own merit, without qualification or exoticification. Unless talking explicitly of provenance, any adjective of origin applied to the word “logic” makes it seem less logical: “Latin American logic” or “Wall Street logic”.

I urge you to critical engagement. I urge you to communicate your findings, your frameworks to the general public in terms we can understand. It isn’t as if most of us aren’t making value judgments on such matters every day of our multicultural lives.