

# Noticings: The Art And Science Of Social Invention

December 16, 2009

**By KC Cole**

The last place I expected to find insights into how to make the world a better place (or have a deliciously good time) was the universe of science. (As a political science major and idealistic world peace advocate, I cut most of high school to hang out at the United Nations.) And the most unlikely mentor I could have imagined was a physicist. I was someone who thought "accelerator" was the gas pedal on a car, that science was abstract nerd stuff unrelated to anything human or remotely artistic or even particularly useful.

These days, I'll stop total strangers not only to point out beautiful interference patterns, but also to talk about how ideas such as symmetry -- the basis of the Golden Rule -- not only underlie all modern physics, but have a lot to tell us about fairness, and how we might discover which things are fundamental to all people, and therefore worth fighting for, and which are relative to history and culture. (It is the same notion of symmetry that Einstein used to show that the fundamental nature of the speed of light makes space and time secondary and elastic.)

[My latest book](#) is a biography/memoir about the late Frank Oppenheimer, my unlikely mentor and the younger brother of Robert (making him the "uncle of the atom bomb") -- someone who thought deeply about the kinds of "social inventions" we need help us make a decent society and not destroy ourselves, as we are all too capable of doing. These social inventions -- the current Copenhagen conference on climate change is a good example -- arise from an understanding of nature and also human nature. In other words, from science, but also art and other ways of finding out what's true.

Most people know Frank through the "[Exploratorium](#)" he founded 40 years ago in San Francisco as a "museum of awareness" -- a delightful amalgam of art and science and play that's been copied all over the world. But his creation had a political purpose: artists and scientists, as he said, were the official "noticers" of society -- those who notice things that other people either have never learned to see, or learned to ignore.

I like to think of this blog -- certainly a "social invention" -- as being about "noticings," especially of connections between science and the rest of culture. Over the years, I've written many books, magazine articles, newspaper columns and public radio commentaries playing with these ideas. I run a series of [art/science/politics/whatnot events](#) based on them, and I teach them in my classes at [USC](#).

Because the discoveries of science do change the way we feel about things, and therefore influence what we do. It makes a difference to understand that every human being on the planet is closely related not just to all other people, but also to all living things; to know that nature -- at least as it looks to us -- is full of dualities, that deep truths often contain contradictory aspects; to know that everything in the universe is changing and therefore progress is possible.

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