

December 23, 2013

Goodwill to Man

By pure coincidence, two interviews with Pennsylvania State University professor Neil Wallace have been published in recent weeks. One is [in the December issue of the Federal Reserve Bank of Minneapolis' excellent *Region* magazine](#). The other, conducted by Chicago Fed economist Ed Nosal and yours truly, is slated for the journal *Macroeconomic Dynamics* and is now [available as a Federal Reserve Bank of Chicago working paper](#).

If you have any interest at all in the history of monetary theory over the past 40 years or so, I highly recommend to you these conversations. As Ed and I note of Professor Wallace in our introductory comments, very few people have such a coherent view of their own intellectual history, and fewer still have lived that history in such a remarkably consequential period for their chosen field.

Perhaps my favorite part of our interview was the following, where Professor Wallace reveals how he thinks about teaching economics, and macroeconomics specifically (link added):

If we were to construct an economics curriculum, independent of where we've come from, then what would it look like? The first physics I ever saw was in high school... I can vaguely remember something about frictionless inclined planes, and stuff like that. So that is what a first physics course is; it is Newtonian mechanics. So what do we have in economics that is the analogue of Newtonian mechanics? I would say it is [the Arrow-Debreu general competitive model](#). So that might be a starting point. At the undergraduate level, do we ever actually teach that model?

[Interviewers] *That means that you would not talk about money in your first course.*

That is right. Suppose we taught the Arrow-Debreu model. Then at the end we'd have to say that this model has certain shortcomings. First of all, the equilibrium concept is a little hokey. It's not a game, which is to say there are no outcomes associated with other than equilibrium choices. And second, where do the prices come from? You'd want to point out that the prices in the Arrow-Debreu model are not the prices you see in the supermarket because there's no one in the model writing down the prices. That might take you to strategic models of trade. You would also want to point out that there are a lot of serious things in the world that we think we see that aren't in the model: unemployment, money, and [an interesting notion of] firms aren't in the Arrow-Debreu model. What else? Investing in innovation, which is critical to growth, isn't in that model. Neither is asymmetric information. The curriculum, after this grounding in the analogue of Newtonian mechanics, which is the Arrow-Debreu model, would go into these other things. It would talk about departures from that theory to deal with such things; and it would describe unsolved problems.

So that's a vision of a curriculum. Where would macro be? One way to think about macro is in terms of substantive issues. From that point of view, most of us would say macro is about business cycles and growth. Viewed in terms of the curriculum I outlined, business cycles and growth would be among the areas that are not in the Arrow-Debreu model. You can talk about attempts to shove them in the model, and why they fall short, and what else you can do.

Of the many things that I have learned from Professor Wallace, this one comes back to me again and again: *Talk* about how to get the things in the model that are essential to dealing with the unsolved problems, honestly assess why they fall short, and explore what else you can do. To me, this is not only a message of good science. It is one of intellectual generosity, the currency of good citizenship.

I was recently asked whether I align with "freshwater" or "saltwater" economics (roughly, I guess, whether I think of myself as an Arrow-Debreu type or a [New Keynesian](#) type). There are many similar questions that come up. Are you [a policy "hawk" or a policy "dove"](#)? Do you believe in old monetarism (willing to write papers with reduced-form models of money demand) or [new monetarism](#) (requiring, for example, some explicit statement about the frictions, or deviations from Arrow-Debreu, that give rise to money's existence)?

What I appreciate about the Wallace formulation is that it asks us to avoid thinking in these terms. There are problems to solve. The models that we bring to those problems are not true or false. They are all false, and we—in the academic world and in the policy world—are on a common journey to figure out what we are missing and what else we can do.

It is deeply misguided to treat models as if they are immutable truths. All good economists appreciate this intellectually. And yet there is an awful lot of energy wasted, especially in the blogosphere, on casting aspersions at those who are perceived to be seeking answers within other theoretical tribes.

Some problems are well-suited to Newtonian mechanics, some are not. Some amendments to Arrow-Debreu are useful; some are not. And what is well-suited or useful in some circumstances may well be ill-suited or even harmful in others. Perhaps if we all acknowledge that none of us knows which is which 100 percent of the time, we can make just a little more progress on all those

unsolved problems in the coming year. At a minimum, we would air our disagreements with a lot more civility.

Happy holidays.

By [Dave Altig](#), executive vice president and research director at the Atlanta Fed

December 23, 2013 in [Economics](#), [Education](#), [Monetary Policy](#) | [Permalink](#)