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Ask What the Boys in the Sandpit Will Have

Economics as a field of study has a problem nowadays. The problem is that its methods are wrong, and produce wrong results. The methods claim to implement Francis Bacon's new science of 1620, in which "the mind itself is from the very outset not left to take its own course, but guided at every step, and the business be done as if by machinery."

The three methods that dominate modern, mainstream, "neoclassical" economics were invented by three men of the 1940s, the Americans Lawrence Klein and Paul Samuelson, and the Dutchman Jan Tinbergen.

They are,

- The Kleinian notion that "statistical significance," using the phrase in its technical sense, is the same as scientific significance.
- The Samuelsonian notion that blackboard "proofs of existence" are scientific.
- And, most important for practical affairs, and justifying the other two, the Tinbergean notion that these first and second pieces of pseudo-science--statistical significance and blackboard proofs--can be applied to the making of economic policy, in a sort of social engineering.

Klein, Samuelson, and Tinbergen, these three. But the greatest is Tinbergen. Statistical significance, blackboard economics, and social engineering, these three. But the greatest is social engineering.

I do not sneer. The three men were geniuses, honored with the Nobel Memorial Prize in Economic Science in the 12th, the 2nd, and the very first years in which it was awarded. They are connected in the history of economics during the 1940s. Klein was then Samuelson's student. Tinbergen inspired the approach that Klein took to statistical fitting of macroeconomic models, a program, Klein relates, that Samuelson himself suggested. It is wonderful stuff. I was dazzled when I first came upon it in graduate school in the 1960s.

But in the hands of some of the less sophisticated disciples, such as I was for so long, the brilliant ideas of the 1940s have ended as boys games in a sandpit. The boys (women are not so interested in the game) are the intellectual sons or grandsons or even now great-grandsons of Klein, Samuelson, and Tinbergen. By now the sandcastles are very tall, and many careers have been spent building them, though strictly within the sandpit. The games are a sad parody of the science of Smith, Mill, Keynes, or even of Klein, Samuelson, and Tinbergen.

No economist who understands statistical theory believes that a narrow "statistical" significance is the same thing as quantitative, scientific significance. Likewise, no economist acquainted with other sciences believes that searching through all conceivable axioms is science. And no economist who has paid attention to the revolution in thinking about expectations--summarizable in the American Question: "If you're so smart, why aren't you rich?"--believes it is possible to predict profitably, in aid of social engineering. Yet the three self-contradictory attempts to mechanize economics have come to dominate the output of the field. Half the high-science articles in economics mistake "statistical" for actual significance and the other half ring the changes on the infinitude of axioms undisciplined by fact. The low-science articles consist of using these two sandpit games to recommend steering the economy this way or that. It's a scandal.

And sad. The sadness is that the economists, mainly men, are confident that their mechanical methods are correct and produce correct results. The men stride around offering advice to governments and criticisms of each other's work as though they were doing real science. They are so happy, and so proud of their masculine achievements. Their business suits are impressive, their reports fluent, their numbers weighty. Lord, Lord, one would like them to be right! They are intelligent and hard working. They have followed the rules for machine-minding produced by the best men among them. They are of good will and good minds. They do not deserve to have a science lacking scientific findings. No one with an ounce of human pity would be happy that such a good group of men are so wrong.

The scene is like an aunt watching her three-year old nephew and his friends playing in a sandpit. They are so earnest in their play, so full of confidence and life, so sure that what they are playing is reality. The aunt would have to be a monster to be happy they are wrong. She indulges them, and tells them all is well. Yes, David, you are building a great fort in the sand. My, how wonderful. Yes, Gerard my dearest, yes.

It is the essential sadness of boys' games. Unlike the games of girls, which so often have a human point, the boys' games in the sandpit are pointless. The sad, unspeakably sad fact about modern economics is that much of what it claims to have accomplished since 1945 is a game in a sandpit.

A surprising feature of this sad fact is that it is easy to show from within economics. What's wrong with the Three Methods is not hard to understand. The criticisms are not original with me. And they are not controversial among economists. Well, that last is not quite right. It is controversial to conclude as one must that nothing can be salvaged from the three wrong methods. Most of economics since the War has to be done over again. Literally, most of allegedly "scientific" findings of economics have to be redone with another method before anyone should believe them. That's very controversial, and me saying it in so many words will drive up the blood pressure of most economists. You can see why a man would get agitated by some woman claiming that his life's work has been pointless.

But if you sit down with an economist in his study and talk quietly about the three mistaken methods he'll come to agree to each one, if you speak softly and reasonably. (He'll agree, I should say, unless he realizes what the consequence is going to be and wants to save his job; but I can't imagine anyone being so craven and unscientific.)

I sincerely do not want to infuriate my colleagues in economics, mainly beause I want them to listen, really listen, for their own good, to what Aunt Deirdre is saying. But I want to be clear to everyone, including non-economists. So I'll say it again in stark and I am afraid infuriating form. No economist can answer the three criticisms. That is not because I am especially clever or the criticisms are especially subtle. The economists already know them, and know they are correct. They only have to look candidly at what they are doing and it dissolves into a sandpit game.

There's a woman's point here. What grates on women is male pomposity. I was talking in Holland with some other women economists and we were trying to think how we could bring economics back to the world. Someone came up with the idea of womanly sarcasm. It always terrifies the men, this laughter of women. If you could get a critical mass of women in a seminar--three times the current number, say--we could in a few minutes shame the men into a less pompous attitude towards their intellectual games. The man presenting the latest misuse of statistical significance or the latest set of axioms or the latest "policy implication" from a blackboard would get the embarrassing praise an aunt showers on her three-year old nephew: "O, Paul, what a <u>wonderful</u> sandcastle you have. It's <u>so</u> much better than anyone else's!" I am not going to use such womanly sarcasm on economics. But, Lord, it would be easy.

The sadness is deepened by a lost opportunity for actual science. Economics really is the queen of the social sciences. It is an amazing and wonderful set of intellectual tools, the study of prudence. Any economist can give hundreds of examples of its fruitfulness. I myself once wrote a book called <u>The Applied Theory of Price</u> which does so, and I and other economic historians have shown how prudence works as a way of telling history. You can see how wonderful economics is by the worshipful way that other scientists who study politics or sociology or law approach it. Economics has had a great influence in these other fields during the very period that it went into the sandpit. Law schools now hire economists; departments of politics, especially in the United States, have transformed themselves into imitations of economics departments; sociologists are properly impressed by rational choice models; philosophers use them to solve age-old questions of justice. John Rawls, Robert

Bates, Richard Posner, Robert Putnam, Robert Nozick, Jon Elster are not fools. Economics is impressive. It really is.

In other words, I'm not trying to tear down the field. I do not want anyone to conclude, "Well, thank God I don't need to learn any economics, if it's such a great mess!" A student of society who took that view would be making a mistake. Prudence is too important a motive for human behavior for the science of prudence to be simply ignored, as most intellectuals have ignored it since the late 19th century. And capitalism is too successful an economic system to leave its analysis in the hands of non-economists. I love economics and sincerely admire its intellectual traditions. I do not want merely to end the conversation.

On the contrary, I am trying like a concerned aunt to correct a nephew with great potential who has fallen recently into bad habits. She indulges his fantasies in the sandpit at age 3, but at age 13 or 30 he's got to get over them if he's going to have a worthwhile life. If she loves him for his own sake she wants passionately for him to grow up. If I thought that economics was a silly subject, or that markets and capitalism were evil, or that economists were stupid, even as an aunt I might not bother.

So I don't want you non-economists to be happy that this strange and arrogant field called economics is not perfect. "Not perfect" is an understatement if the three methods are as wrong as I say they are, which I am afraid they are. Most of the allegedly scientific "output" of economics, most of what appears in the scientific journals these days, is not just trivial--after all, most normal science is trivial, or else science would advance by Newtonian or Einsteinian leaps every day. It is wrong. The findings, assurances, recommendations: wrong.

That's surprising: a scientific field can be shown to be wrong from arguments everyone in the field would agree to. And yet the solution is obvious. An economics that got out of the sandpit would look seriously at magnitudes, would theorize sparingly, and would recommend policies cautiously. It would resemble geology or history or other real sciences. Or an economics with three times more women than it now has.