## The Conscience of a Liberal Paul Krugman

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## **Memories of the Carter Administration**

One of John Updike's novels was titled Memories of the Ford Administration; needless to say, it wasn't about Gerald Ford — basically it was about sex, because Updike remembered the Carter years as the golden age of extramarital affairs. Similarly, this post isn't about Jimmy Carter – it's about macroeconomic theory. (Sorry.)

For the late 1970s was when macroeconomics experienced its great divide. It's a period engrained in the memory of those of us who were young economists at the time, trying to find our own paths. Yet I haven't seen a clear explanation of what went down at the time. So here's a sketch, which I hope a serious intellectual historian will fill in someday.

As I remember it, it all began with the Phelps volume: Microeconomic Foundations of Employment and Inflation Theory. The issue these papers tried to resolve is nicely summarized here. Keynes (and, for that matter, Milton Friedman) argued that a decline in aggregate demand due to, say, a fall in the money supply would lead to a fall in employment and output – and experience showed that they were right. Yet standard microeconomic theory implies that production should respond only to changes in relative prices, not changes in the overall level of prices – and this in turn implies that money should be "neutral": a 20 percent fall in the money supply should lead to a 20 percent fall in the overall price level, but no change in output or employment.

Phelps and others tried to explain why the economy looks so Keynesian in terms of imperfect information: workers and firms respond to a change in the price level as if it were a change in relative prices, because they can't at first tell the difference. Over time, however, they will realize their mistake – so that, for example, a rise in the inflation rate will reduce unemployment at first, but won't do so on a sustained basis, because eventually inflation will get built into expectations. So the new theory predicted the emergence of stagflation, a prediction that was duly confirmed.

But where do expectations come from? Robert Lucas married Phelps-type models of employment with rational expectations, the view that people in the economy use all available information to make predictions. And this led to a startling conclusion: anticipated policies have no effect on employment. Only surprise changes in, say, the money supply matter – which means that you can't use monetary or fiscal policy to stabilize the economy.

The Lucas view took the economics profession by storm – not because there was any solid evidence for it, but because it was so clever, because it led to nice math, because it let macroeconomists give in to their inner neoclassicists.

But by the late 70s it was already clear that rational expectations macro didn't work. Why?

Because people have too much information.

Think about the story of unemployment I've just described. It's a story in which a contraction in the money supply can produce a recession – but only as long as people don't know that there's a recession! You see, if people do know that there's a recession, they know that the low prices they're being offered reflect low overall demand, not specifically low demand for their products.

In Lucas-type models, people were supposed to look at the prices they received, and optimally extract the "signal" from the "noise". The models broke down, however, as soon as you let people have access to any other information – say, by looking at interest rates, or reading a newspaper. And the reality, of course, is that recessions persist long after everyone knows that there's a recession, so that the confusion required by Lucas-type models is long since gone.

I recall a seminar, I think in 1980, in which Robert Barro was presenting a rational-expectations business cycle model. Someone asked him how he could reconcile his model with the severe recession taking place as he spoke. "I'm not interested in the latest residual," Barro snapped.

But by 1980 or 1981 it was basically clear to everyone that the Lucas project – the attempt to explain the evidently Keynesian behavior of the economy in terms of nothing but imperfect information – had failed. So what were macroeconomic theorists supposed to do?

The answer was that they split. One faction said, in effect, "OK: we can't explain what we think we see in terms of full maximization. So we have to assume that there are some limits to maximization – costs of changing prices, bounded rationality, whatever." That faction became New Keynesian, saltwater economics.

The other faction said, in effect, "OK: we can't explain what we think we see in terms of full maximization. So we must be interpreting the data wrong – things like changes in the money supply must not be driving recessions, because theory says they can't." That faction became real business cycle, freshwater economics.

But here's the thing: at this point, the freshwater school no longer remembers any of that – largely because they purged Keynesian and even monetarist thought from their classes. All they know is that Keynesianism was "disproved", and that none of it – not even New Keynesian models with rational expectations (an approach which, as Greg Mankiw says, "provides a rationale for government intervention in the economy, such as countercyclical monetary or FISCAL POLICY.") – is worth listening to.

So that's how we got to where we are today.

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