

Quantum Politics

Theodore L. Becker, (New York, Praeger Publishers, 1991).

The theory of quantum mechanics has been of great use lately for all sorts of new world views and paradigms. With its alleged holism, indeterminism and complementarity it has been said to contain great similarities with eastern philosophy, environmentalism and The New Age. According to this book it also happens to have immense and world shaking implications for political science. And why not?

We all know that people's thinking is often influenced by science. Just think of what Copernican astronomy, Newtonian physics, genetics, Darwin, modern ecology and economics have done to our world view. Still, there is room for scepticism when it comes to mixing such diverse fields of knowledge as atoms and politics.

The main thesis of most of the contributors of this volume is that politics and/or political science (it is a bit unclear which is meant) will greatly improve by studying quantum physics. The old politics, and political science, are far too attached to Newtonian physics. And since science has moved from that old mechanistic, atomistic and deterministic paradigm to a new one in physics, then it is high time that political scientists do the same.

There are many arguments along these lines and I will only mention a few to show the general trend:

- (a) The new QM emphasizes *relational* qualities more than atomic properties. This leads to the insight that relation is of greater explanatory and practical value in modern societies, where we cannot view individuals as isolated atoms.
- (b) In QM the state of the system is dependent on how it is observed. In a similar way social facts are dependent on the observer and his, or her, background knowledge.
- (c) QM teaches us that everything is dependent on everything else in the sense that many-particle systems must be viewed as wholes (the wave-function as a superposition of states). This is also what "green" political philosophy tells us.
- (d) The quantum world is chance-like. So are human societies, and we ought therefore to have self-regulating institutions to make them work.

Unfortunately these arguments raise many more objections than they were intended to disarm.

For example, (a) is meant as a criticism against the classical liberal order which the authors see as typical of the Western World. But in order to view this as an argument for a new social order one has to accept 1) that the classical liberal order is "Newtonian" with respect to properties and relations, 2) that there really is such a difference between Newton's mechanics and QM as assumed, and 3) that the QM-revolution in physics has

any implications for what one should, or should not, do in politics. However, both Newtonian and quantum mechanics contain both non-relational properties, such as mass and charge, and relational ones, such as velocity and potential energy. Assumption (3) is of course fundamental to all the arguments (a) to (d), and indeed to the whole project. Seeing the obvious objection to (3) most authors explicitly reject any such normative claims. But if this is so, then why make such a big fuss over the fact that QM is new and Newton's theory is old and rejected?

Argument (b) is partly based on a mix up between the quantum phenomenon that measurement instruments physically interact with the measured system and the old philosophical and psychological insight that all observations are theory-dependent. The quantum world is sometimes said to be holistic as assumed in (c). But so is the Newtonian world since all material bodies are instantly connected with each other through the gravitational force. In this sense, Newton's mechanics is just as "green" as modern physics. In the Copenhagen interpretation, QM is also said to be chance-like as stated in (d). But statistical predictions can be made there with high precision. Besides, do we really need modern atomic theory to come up with the idea that there may be chance phenomena in the social and political spheres?

It might be objected that I do not give due credit to the social and political theories that are actually presented in the book. I agree, I do not do that. But the main theme of the book, and what motivates putting these papers together, is the alleged implications of quantum theory for social science. And that thesis simply does not hold. What may be done, and what in fact has been demonstrated, is that a handful of social scientists have felt inspired by quantum mechanics. Some of them have also been inspired by the theory of relativity and classical thermodynamics. So be it. I have no objections to that. I have even heard of scientists who got their inspiration from looking into the fire or sitting in the garden watching apples falling to the ground.

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