

Quantum mind and social science: unifying physical and social ontology. By **Alexander Wendt**. Cambridge: Cambridge University Press. 2015. 354pp. Index. £54.90. ISBN 978 1 107 08254 0. Available as e-book.

While written by one of the leading scholars in the field, at first glance this is not a book about International Relations (IR). It certainly is a book about almost everything else, including definitions of life, will, subjectivity and consciousness. Particularly, a quantum-based theory of the latter is a cornerstone of the book, as it is seen to provide nothing less than a solution for—or better, to do away with—the ‘mind–body problem’ in philosophy and beyond.

While this might sound strange to most students of International Relations, there are good reasons why they should read *Quantum mind and social science*. In addition, and contrary to first impressions, the book’s basic question is quite simple: given that even social scientists agree that the social world cannot somehow ‘escape’ the physical world and its laws, and given that physicists have agreed, for a long time, that the world is not made up of material ‘things’ such as ‘particles’, but, at its quantum mechanical base, needs to be seen as

made up of wave functions, what does it mean to think about the social world in terms of quantum theory? The book is based on this question and on the rejection of one orthodox assumption in physics, namely that quantum theory appropriately describes reality on the sub-atomic scale but quantum effects ‘wash out’ beyond that, giving way to a world that is ‘classical’—and in which the laws of Newton and Einstein prevail.

In rejecting this orthodoxy, and in thinking about the social world in terms of quantum theory, Alexander Wendt is not alone. In fact, in an extremely demanding intellectual journey, he enlists the help of an enormous body of literature and many—often thus far unrelated—debates across a wide range of disciplines to make his point. The highly complex arguments made during this journey are almost impossible to summarize briefly, but they build on the claim that the brain and mind can sustain quantum coherence at the macro level. Put in very simple terms and building on the basic insights and experiments of quantum theory: while on the sub-atomic level there are only wave functions and as the collapse of the wave function—and the appearance of light as particle—occurs only when the wave function is *measured*, Wendt claims that the brain and mind function in a similar way, for which he enlists versions of quantum brain theory and panpsychism. This leads him to a ‘quantum model of man’ (man as a ‘walking wave function’). ‘Cognition’, ‘will’ and ‘experience’ are given a quantum theory reading, leading to arguments about ‘will’ being inherently free, and particularly the ‘experience’ of time being something that does not happen in an absolute, linear way (in fact, within limits, the past *is* actually changed over and over again).

The social ontology that emerges from this is a holism of a world in which basically everything is connected. However, physical connection is not material connection (indeed, the whole point is that while everything is physical, not everything is material); it is not local connection; and it is not diachronic, but synchronic connection—all this in ‘quantum states’ of coherent wave functions, in the realm of possibility and probability, before the collapse into actuality. In this world of sociological vitalism, there is direct perception between minds, and language serves a function like light.

The overall argumentative strategy of the book is to take specific quantum theory-related debates in turn, opt for one position in these debates and move on from there, thus weaving together a highly coherent story. The shortcomings are obvious, in that at every turn the adoption of a competing position in highly contentious but specialist debates would have collapsed the book’s overall argument. However, Wendt is outspoken about this, and the main aim of the book might not actually be to convince too many people of this specific coherent story, but, at each and every argumentative turn, to reverse the burden of proof and put it on positions that are orthodox and taken for granted, yet seem to rest on dubious (materialist) assumptions (or on debates that have not made any real progress for the last three hundred years or so).

The main weakness of this book comes at the end, in its first attempts to link quantum man to quantum social world. Despite a highly insightful new reading of the agent–structure issue through the observation that parts and whole are co-emerging in a ‘flat ontology’, the book here fails to connect to some of the debates that have, for quite a while, given up parts/whole distinctions in the social sciences (and replaced them, most notably, with system/environment distinctions). However, for Wendt, connecting his ‘quantum mind’ to the broader (macro-scale) social world is the exploratory part of the book and more a preview of future work.

This book is ground-breaking and foundational. It makes for challenging, yet rewarding reading, even for those who find themselves disagreeing with most of it in the end. Is it

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about IR? Certainly not in the sense of International Relations as more than a marginal theme, used for illustrative purposes here and there. Nonetheless, this book will be of interest to anybody studying IR, if that is a scientific endeavour, and given that truly *basic research* such as Alexander Wendt's book remains an indispensable part of every science.

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