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# Quantum Social Theory for Critical International Relations Theorists Quantizing Critique

Michael P. A. Murphy

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Theory for Critical  
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Quantizing Critique

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## CHAPTER 1

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# Introduction: Uncertainty, Paradoxes, and Critical Intuition

**Abstract** In this introductory chapter, I make the case for an alliance between quantum social theory and critical approaches to International Relations. I outline key concepts for the remainder of the book, including the notion of critique, the importance of a physical imaginary in social science, and outline the structure of the book. I suggest how the book can be used as a guidebook, toolbox, and reference work and introduce the “Further Reading” sections appearing in all subsequent chapters.

**Keywords** Quantum social theory · Critical International Relations · Critique

## INTRODUCTION

The research community of quantum social theory has grown rapidly in the last decade and a half with the publication of books by Karen Barad (2007), Emmanuel Haven and Andrei Khrennikov (2013, 2017), Alexander Wendt (2015), and Laura Zanutti (2019). While the two earliest interventions noted here come from the disciplines of philosophy of science and finance, respectively, the latter two projects emerge from the growing “quantum community” within the discipline of International

Relations (IR). Recent regional and annual conventions of the International Studies Association have seen a plethora of panel discussions and roundtables, alongside the Project Q symposia series at the University of Sydney and other events at the Ohio State University's Mershon Centre and OP Jindal Global University's Centre for Complexity Economics, Applied Spirituality, and Public Policy (CEASP). While much of the early attention in International Relations has been paid particularly to Wendt's *Quantum Mind and Social Science*, the quantum IR community in fact includes a diverse set of approaches to the quantum question.<sup>1</sup> Wendt's pitch is grounded in what I will later call "quantum realism," and he argues that there is a quantum *reality* to the social world, scaling quantum coherence from the smallest (panpsychist) subatomic particles in our brain neurons to the largest social phenomena. From this point, Wendt's quantum social theory proceeds as a positivist enterprise that reports the world as it is actually constructed through quantum processes and interactions. Wendt's compelling book and the sustained attention it has received in the half-decade since its release means that when people hear about quantum IR, there is sometimes an assumption that one is speaking of a Wendtian quantum realism—but as Wendt himself acknowledges, there are multiple approaches to quantum thinking.

The strong association of "quantum IR" with Wendt's hard pitch for quantum realism has led many critical IR scholars to view the whole project with scepticism. Frequently, panels are questioned if the quantum project is but mere fetishism of science, a positivist project lacking in laboratory evidence, or an unnecessary import of complicated terminology to describe mechanisms and relations that can be adequately described in more established social-scientific or -theoretic language. While scepticism is encouraged and concerns about scientific fetishism and other issues are valid, it is my hope that the simultaneous recognition of the pluralism of quantum IR (on the part of new readers) and clearer articulation of the value of quantum social theory for existing research communities (on the part of quantum social theorists) would serve to assuage many concerns that critical IR scholars may have about quantum approaches. There is no one way to bring quantum thinking into International Relations, and just because one pathway appears problematic does

<sup>1</sup>This point is made directly by James Der Derian and Alexander Wendt (2020) in their introduction to a special issue of *Security Dialogue* on "Quantum Approaches to International Theory and Security Practice."

not mean that any kind of quantum journey is similarly fraught. Just as critical scholars of International Relations do not assess the critical utility of IR theory *writ large* through an evaluation of political realism alone, the reluctance to accept a hard pitch of *quantum* realism should not dissuade engagement with similarly critical approaches to quantum social theory.<sup>2</sup> This is not to say that a hearty dose of scepticism is unwarranted, but that dialogue with friendly interlocutors will prove most welcoming for critical IR scholars. I will focus in this book on how quantum social theory presents an intuitive vocabulary for scholars of critical IR.

This introductory discussion will briefly explore how quantum mechanics and critical IR remain open to uncertainty and paradox and introduce the concept of the “Newtonian imaginary” before explaining the structure of the main text. Identifying the common ground between quantum mechanics (or quantum social theory) and critical IR serves to foreground why “quantizing critique” through translation and application of core concepts in quantum social theory will in fact present an intuitive vocabulary for many critical IR scholars. Both quantum mechanics and critical IR interrogate rather than gloss uncertain and paradoxical elements of reality. The preliminary exploration of the common ground shared by what we might call the quantum and critical dispositions offers encouragement for future engagement with the topic. The discussion turns to a consideration of a core idea that appears throughout the book—the *physical imaginary*. Given the importance of language and thinking in structuring our range of experience with the world as researchers,<sup>3</sup> I argue that an important part of quantizing critique consists of interrogating how Newtonian assumptions are embedded in social science. As will be discussed below, moving from a Newtonian to a quantum physical imaginary is a key step on the journey to realizing the new questions that open up when we quantize our modes of critique.

<sup>2</sup>For example, see how Mathias Albert and Felix Bathon engage with particular elements of quantum social theory in comparison with systems theory, investigating “overlaps and similarities that could be put to complementary analytical use” (2020, 1).

<sup>3</sup>For example, Carol Cohn’s (1987a, b) work on the limits of nuclear strategy language in evaluating the human costs of nuclear war is discussed later in this introduction in Chapter 4.