

Quantum economics from the perspective of quantum biology: the prologue

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This is the first of a new series that will be published daily during the rest of this week.

The first quantum economics series and then the resulting quantum essays [can be found here](#), but from the outset, whilst we knew the original ten-part series that laid the foundation for ideas on this issue was a starting point, there was always going to be a second series of essays, based on concepts in quantum biology, which is how and why Jacqueline, my wife and co-creator of these ideas, had become interested in these issues in the first place.

This post includes the prologue to that series, which will provide a deeper reasoning for our thinking on what we think is a key issue with the potential to deliver a new understanding of the economy.

Quantum economics from the perspective of quantum biology: the prologue

Economics, like physics before Einstein, has long believed the world behaves according to simple, linear rules. It assumes equilibrium, perfect information, and frictionless exchange. But life is not like that, and neither are economies. They are open, unstable systems through which energy flows, sometimes creatively, sometimes destructively.

When Einstein proposed that light was made of photons, which are discrete packets of energy, he changed how we understood the physical world. Energy was no longer an abstract wave; it was embodied, indivisible, and capable of transformation only when absorbed by something receptive. The same is true of human economies. The real energy within them is not capital or land or money, but labour in the form of human effort, intelligence, and care.

In what follows, I borrow metaphors from physics and biology to explore this idea. Labour is treated as the photon; value as the electron; society as the surface that must absorb both if life is to flow. When that absorption fails, energy is wasted, as in light

reflected from a mirror. When institutions malfunction or power is hoarded, value leaks away like electrons escaping from a broken chain. When oxygen - represented in this metaphor as ecology, trust, democracy - is withdrawn, the system suffocates.

This is not science pretending to explain society. It is science used as an analogy to illuminate the living, energetic character of economic life and to show how our current system squanders it.

The metaphors matter because they reveal what mainstream economics hides: that energy and purpose, not equilibrium, make life possible; that value depends on absorption, not extraction; and that waste, when it comes to human labour, is not just inefficiency but moral failure.

The chapters that follow trace this story: from the release of energy through work, to its diversion into mirrors of speculation, to the institutional circuits that sustain or poison the flow, and finally to the oxygen that allows renewal. The question running through it all is simple but decisive: are we using our energy to sustain life, or to destroy it?

The first full chapter in this series will be published tomorrow.