

# Quantum Relationality: A New Source of Wisdom

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We have gained a radically different picture of how the future comes into being through understanding quantum theory. My paper on quantum evocation (<https://dtnetwork.org/wp-content/uploads/2022/07/Quantum-Evocation-PDF.pdf>) showed how the future is not so much caused but evoked. It is evoked by the presence of possibilities. The likelihood of each possibility depends on a particle's interactions with its environment. Which possibility gets realized cannot be predicted from our knowledge of past or present. *Quantum theory speaks to likelihoods of events, not to their certainties. The "likelihoods" are evoked into reality, i.e. realized.*

We are presented with a new paradigm through quantum theory. This paradigm derives its power from the cosmic story of our origin. Quantum wisdom is about the universe revealing to us how its original creative impulse is continuing to work through us even today. Letting yourself be drawn into future possibility instead of reacting to what is currently weighing on us is a powerful metaphor we can incorporate into our lives. *In this paper we look at the wisdom that emerges from what quantum theory tells us about how entities relate to each other.*

## **What is Wave-Particle Duality?**

Before it is *evoked* into reality, a particle can be thought of as *a pattern of unrealized future possibilities*. This pattern develops with time very much like how a water wave ripples across a pond. *This is why in quantum theory we say that a particle behaves like a wave until it is observed.*

What is it that evokes the realization of one of a particle's many possibilities? It is a special interaction with its environment, which we call making-an-observation, or detection. Whether an entity demonstrates wave or particle like behavior depends on the instrument (and thus the interaction) used to probe its properties. *In quantum theory this is called the wave-particle duality.*

## **Is Quantum Reality Objective?**

The reality that exists at the quantum level is not unique. It depends on the interaction used to probe it. Not only can an entity show up as a wave or a particle, but even its wave pattern or particle properties can depend on the nature of the interaction used to study it.

An entity's interaction with its environment springs from all the other entities that make up the environment. *Thus, quantum reality manifests itself differently to different entities! Quantum reality is not objective.* And since our perception of everyday reality springs from quantum level events, it too has an element of subjectivity to it. An eye sensitive to one wavelength of light will see something quite different from one sensitive to another. A bee may perceive a very different reality than a dog does. *Since we all possess the same kind of "seeing" organ, the world appears objective to us, humans.*

This brings to mind a beautiful quote by Wayne Dyer: *When you change the way you look at things, the things you look at change.* Quantum reality does not work for everyday objects but it seems to work for the reality in which thoughts live.

## **How does everyday reality emerge from quantum reality?**

Interactions between two entities at the quantum level can be broken up into a series of very short duration events. Each interaction can be thought of as one ball bouncing off against another. Some of a particle's momentary interactions can snap its possibility pattern into realization, while others simply modify the pattern. Immediately after realization, the particle dissolves back into a pattern of possibilities. Gone is the picture of a particle moving along a well-defined smooth trajectory. Instead, a quantum particle shows up here and there every now and then depending on the nature of its interactions. *If such interactions happen rapidly enough then, to our eyes, the particle will appear to move in the smooth and continuous way described by Newtonian physics.*

*A particle's existence, then, is a series of momentary events.* What about solid objects that seem to have permanence? It turns out that every atom in an object is being *observed* (interacted upon) by its neighboring atoms all the time, which brings it into reality again and again. An object's existence looks continuous in the same way as movie frames look continuous when rolled at high speed. *The reality*

*we perceive was first created 14 billion years ago but it is also being created under our very noses, every moment, out of nothing but possibilities!*

### **What is the universe made of?**

*A particle has no identity of its own; each interaction bestows a new identity on it. A particle with no interactions can never be observed and hence, for all practical purposes, it does not exist. This is profound. For thousands of years, we have searched for the fundamental constituents of the universe with the assumption that things are primary; they come together to build wholes. Quantum theory tells us interactions are primary. Things are just what lie at the nodes of a network of interactions. Connections are unique; things are not. *The universe is more like a web of relationships than a collection of parts.**



### **How do parts relate to the whole?**

An interaction between two particles results in changing the possibility pattern of each in a way that their possibilities become correlated with each other. When one particle's possibilities are realized the others get realized simultaneously, and with related values. The correlation holds no matter how far the particles have traveled apart. *We say the two particles are **entangled**.*

The relational web implies that a whole is what lends meaning to its parts. Entanglement extends relationality to particles that interacted billions of years ago and that may now be as far apart as two galaxies. Since interactions confer identity to particles and since the whole universe is entangled together, it follows that *the whole universe is involved in describing what a particle is.* Quantum

theory blows away the principal reductionist idea that parts are just building blocks of the whole. *Without the whole, parts lose meaning and evaporate out of reality. In quantum theory, parts and whole are united in a relational web.*

### **Is the observer separate from the observed?**

Quantum theory leaves no room for Cartesian duality between mind and matter. In the web of relationality, every connection is an observer, and every node is being observed. Human interactions with entities are treated in the same way by quantum theory as interactions between entities. The idea that mind is the observer and matter the observed must be rejected. As the great physicist Archibald Wheeler put it, *“To describe what has happened, one has to cross out the old word ‘observer’ and put in its place the new word ‘participator’.”* We find ourselves to be an integral part of the nature we are trying to make sense of.



### **Summary**

Quantum theory paints a radically different picture of an underlying reality than the one we encounter in our daily lives. A moving particle is a pattern of future possibilities, spreading gradually like a wave. It becomes real for a brief moment, after which it dissolves into possibilities again. All objects and each of us are made of trillions of momentary events; each event is an evocation into reality of what was just a possibility a moment earlier. Objects appear solid to us only because our senses are not fine enough to probe reality at the quantum level.

Each entity at the quantum level can only be viewed in terms of its relationship to another entity; otherwise, its properties have no meaning. Relationships are more

fundamental than entities. A whole is a web of relationships, which bestows an identity to the parts. Entanglement extends the web to cover the whole universe. It's the whole that gives meaning to its parts. Finally, the web is egalitarian; there is no place for observers in it, only for participants.

*Our everyday physical reality is hard and unforgiving, governed by unrelenting causal relationships. Underneath it all is a quantum reality that is soft, subjective, and spontaneous. It is also transient and fleeting; it can be recreated from mere possibility, not once but again and again.*

### **Why can we draw wisdom from quantum theory?**

It is important to understand that quantum laws do not govern our actions and thoughts in everyday life. Much of the so-called “quantum spirituality” you may have come across does not make this distinction very clear. This leads to claims that are both incorrect and also confusing for those that do not understand the physics so well. Evolution is a spiral process. Quantum theory provides a framework for modeling the themes that repeatedly show up in cosmic development. The way humans commune is similar to the way atoms condense, or stars cluster or living cells link up. *This is the reason why what we learn from quantum science is applicable to human psyches.*

### **What's the mystery at the heart of the universe?**

Quantum laws did govern the origin of our universe and its early development. Our universe was not caused by an external agency; it was evoked into existence by the presence of future possibilities that sprang from an organizing principle whose existence cannot be explained by science because science needs an ordering principle as a starting point to make sense of anything. *Why there exists such a principle is a profound mystery at the heart of our universe.*

### **What is the quantum paradigm?**

The cosmic story is about the coming together of entities (i.e., communing) at an ever-increasing level of complexity. The organizing principle got the universe started with a small set of communing powers (sometimes called fundamental forces) and a few categories of entities (sometimes called kinds of particles).

Entities interact to create possibilities for communion. The set of interactions (which we will call allurements since their purpose is to bring things together)

create *a web of relationality*. Entities derive their purpose and power from this web. The whole formed by the web evokes more allurements from the entities giving rise to more possibilities of communion. *Communion is a self-empowering dynamics between wholes and their parts, not a gluing of pieces to make a whole.*

If the fields of allurements strengthen and support each other, the whole perseveres and becomes the launching pad for another layer of evolution. If the web fails to cohere, then there is no communion. *Success is never guaranteed in evolution.* However, the richness of the possibilities emerging from each layer of communing power maximizes the likelihood of progress. Evolution is a messy affair, but the organizing principle is set up to help move it towards greater communion and oneness. *The quantum paradigm is random and uncertain in the details of its evolution but directed and purposeful in the way in which the arch of its longer journey bends.*

### **How does the quantum paradigm show up in the cosmic story?**

We can see the quantum paradigm repeat itself at all levels of evolution. An atom is a stable pattern of possibilities held together by a complex web of allurements. Protons and neutrons commune to form a nucleus, which creates the possibility of electrons communing with the nucleus to form an atom. Atoms develop their own alluring power to commune into molecules. *Atomic entities are a glob of possibilities held together by a bevy of allurements.*

Gravitational forces commune a galaxy into being. Galaxies recycle gas through the stars they produce. Stars make new atoms in their cores and return them to the galaxy. From stardust, planets are shaped. A galaxy is a relational web of these interactions. An isolated star has no purpose; in a galaxy, it has a possibility to become a fountain of LIFE. Galaxies that cannot produce stars continuously will die. *It is the dynamics between parts and whole that keeps our universe going.*

Planets hold the possibility for life to emerge. Their communing power lies in the ecosystems enabled by rocks, oceans and an atmosphere. If the environment is right molecules will commune into life forms. Predator-prey interactions add to an ecosystem's relational web enabling an ever-increasing diversity of life. *Life draws meaning from its ecosystem.* Separate life from its whole and both will soon disappear. *Parts and its whole grow together to enable evolution.*

## **What are the communing possibilities for humanity?**

What possibilities exist for our own species and is there a communing power that brings them into being? If greater communion is an evolutionary goal, then our possibilities lie in the overcoming of deep divisions that separate us today and stop us from feeling a greater connection to our planetary home. To understand the communing power that generates these possibilities, all we have to do is look back to see what has brought communities together in the past. *It is a faculty we have that makes us rally around narratives that give us the feeling of belonging.* Stories that address our purpose and place in the universe have the highest communing power. *Such narratives are called cosmologies.* Science has revealed a new cosmology that embraces our whole species and ties us firmly to our planet and the universe. *It is our cosmic origin story, and it holds the possibility for the creation of a new whole – an Earth community.*

A whole emerges from a relational web created by allurements between parts. The whole evokes meaning and purpose in the parts, which further strengthens the bonds of allurement bringing the whole into higher levels of coherence. *The whole and its parts become co-creators in the unfolding of the universe.* Stars co-create with their galaxies; life co-creates with its ecosystems. *Humans co-create with their planet and, equipped with the cosmic narrative, they can now co-create with the whole universe.*

## **How can quantum wisdom help humanity?**

*Which allurements will move us towards the greater whole we seek?* Not the superficial ones elicited by those that stand to gain from our indulgence in them. Authentic allurements lie within us and are a continuation of the creative impulse that gave rise to our universe. They emerge from the silence of our interiority, a place within that connects us to our origin. External noises can often stop them from rising to the surface. *As co-creators of our future, it is our choice and our actions that can help connect them to the relational web of a communing whole.*

Our communing powers too are fragile. Our innate tendency to rally around narratives makes us vulnerable to the divisive narratives fed to us by those that stand to profit by separating us. The same power that communes us can sabotage its own progress. A divisive narrative stops a more inclusive one from taking root. *It is quantum wisdom that we need to counter the false narratives.* Divisive forces

and material allurements work through our primal urges, much like Newton's forces pushing a particle forward. *Our interiority follows a quantum paradigm*, luring us into a future with possibilities of a prospering Earth community! It is up to us to allow the communing powers of a universal cosmic narrative to evoke these possibilities. *It is our permission the powers await. Nothing else!*

### **Can we make the leap from Newtonian to quantum paradigm?**

*Why do we find giving permission so hard?* It is because we are firmly tuned into a Newtonian paradigm, which makes our reality hard and unforgiving and where any shift requires force and effort. It is the only reality we know and one that we practice everyday. It is a reality which imprisons us in unrelenting causal chains and which makes us feel helpless. *But narratives and allurements do not live in this reality. They are cosmic evolutionary powers and they follow a quantum paradigm.* They live in the conceptual reality of our interiority. Conceptual reality is soft and subjective. It can be changed by simply presenting a different interaction or allurement to it. The difference between encountering an entity as a wave or a particle is how you look at it. We must take Wayne Dyer's quote to heart: *When you change the way you look at things, the things you look at change.*

The quantum paradigm tells us that we are defined by nothing other than the future possibilities we hold in our heads. Our true identities spring from our allurements and dreams, not from our physiologies, allegiances or traditions. If we simply allow those dreams to flood our consciousness than we will come to know what the whole is asking of us. As the links entangle and align, the relational web congeals and coheres. We start to draw our meaning and purpose from the whole to which we belong. New possibilities emerge. The parts and whole grow as one. *This is the oneness that mystics have been talking about for centuries.*

As has happened many times before in cosmic evolution we find ourselves faced today with what feels like a dead end. Powers of communion from the past are sabotaging the ones that want to move us forward. However the richness of cosmic allurements must not be underestimated. Breakthroughs, like the one that happened after the great oxygenation event and also when the first fish ventured on to a piece of land, are what keep evolution chugging on. *Revelation of the new cosmic story and our growing understanding of the quantum paradigm during the*



*last century might be the catalysts we need for a breakthrough during this era of a growing crisis.*