

## Unifying Theories of Journalism through the Principles of Quantum Physics

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*Journalism theories are more alike than they appear. Deep down, at a quantum-like scale, they are interconnected as emanations of the same fundamental oneness. This paper explores that concept in two ways. It first develops the concept by comparing Kholod's "quantum journalism" with two quantized perspectives of mass media. Then it seeks proof of the concept in quantizing critiques of two dissimilar theories of journalism. It finds an inherent unity between the theories.*

**Keywords:** *journalism theory, quantum journalism, quantizing critique, quantum social science*

### Introduction

Journalism theories are not as independent from each other as they seem. We observe each one as being tangibly unique in how it conceives of and knows the slice of journalism that concerns it. Yet at a deeper level, they all are emanations of an intangible whole. They are waves of the same ocean. Dancers in Bohm's (1990) ballet of electrons, separate yet moving together, "guided by a common pool of information in the form of a score" (p. 281).

Bohm used the "dance" as an analogy for the concept that incredibly tiny electrons and the human mind behave with a "basic similarity." That is because they are aspects of the same fundamental essence. "In some way, and to some degree,

everything [in the universe] enfolds or implicates everything. ... [T]his enfolding relationship is not merely passive or superficial. Rather, it is active and essential to what each thing is. It follows that each thing is internally related to the whole, and therefore, to everything else ... in the primary reality of the implicate order. (Bohm, 1990)

The implicate "everything" unfolds into infinite "many things" in the shared social reality that is the explicate order. So, too, would it be for journalism theories. They are cognitive artifacts of the mind that unfold as (seemingly) discrete intellectual proffers to explain something about journalism. Yet, they all are connected; they are of the same whole.

Pulling the curtain back on that is this paper's purpose. To be clear, the goal is not to stir all existing journalism theories into a "theory of everything" but to introduce the concept of interconnectedness into journalism studies.<sup>1</sup> Quantum social theory (QST), from the interdisciplinary field of quantum social science, is an apt framework for the task.

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<sup>1</sup>The phrasing is borrowed from Scolari (2012).

QST holds that unlike planets, intergalactic dust and other large bodies in the universe, human activity is not neatly explained by the orderly, mechanistic rules of classical Newtonian physics. Instead, the theory says, the ways of we humans make a better fit with the odd and probabilistic behavior that quantum physics ascribes to subatomic particles (Barad, 2007; Holtfort & Horsch, 2023; Zohar & Marshall, 1994; Wendt, 2015). Humans are not particles, of course, but the gist of QST is that the same quantum theory that explains them also explains us and our social systems.

As its toolkit, this paper takes up Murphy's (2021a) "strategy of quantizing critique . . . through translation" (p. 10). It involves acknowledging the Newtonian underpinnings of existing theory and replacing that with a new "physical imaginary" (p. 3) fashioned out of the vernacular of quantum physics. Clothe it, if you will, with a "new set of assumptions that sketches the contours of the possible within which a theory can operate" (p. 8). Open a new door for it. Enable it to explore new questions.

To open journalism theory to new possibilities by revealing their deeper holism, that is the paper's importance and contribution to the literature. First, it develops proof for the concept of theory interconnectedness by standing up Kholod's (2021) quantized journalism against two other expressions of quantizing mediated communication. One is Myers's (2025) Quantum Media Theory, and the other is Bhadra's (2024) quantized framework for interpreting digital media content.

Next, the paper moves to its core task: testing the concept on two existing theories of seemingly irreconcilable approaches to journalism. One is news ecology, which, as a theoretical framework, likens news and journalism to the workings of natural ecosystems. The other is field theory, which turns journalism into a conceptual arena of competition for symbolic power.

## **Proof of Concept**

Kholod, Myers and Bhadra do not describe it this way, but their work fits the strategy of quantizing critic through translation. They each recast non-quantum aspects of their subjects into the language and physical imaginary of quantum physics. Each of them, in some way, and to some degree, moves into the next step of quantizing through application (Murphy, 2021a) by fashioning their subjects into quantum versions of themselves. Only Myers reworks an existing theory.

### *Starting Points*

Kholod approaches his quantizing of journalism through "monistic idealism" (2021, p. 1). It is an amalgam of ancient transcultural philosophies of oneness: that "reality is, in some fundamental sense, one rather than irreducibly many" (Phiolopedia, 2026). It is upon monism that Kholod erects his focal argument that journalism is best understood not by its many parts but by the unity of them. To actualize that, he turns to quantum physics, which itself is embedded with elements of monism (Päs, 2023). The outcome is a reworking of normative journalism into a "social institution, [meaning] a theoretical and practical form of social activity of specialists in social

communications and based on ideas that are hypothetically formulated in mathematics and quantum mechanics”<sup>2</sup> (2021, p. 1).

Myers frames “quantum media theory” (QMT) as an “emerging field” (2025, p. 25) and quantized variant of the media ecology theorizing that began with McLuhan (1964) and Postman (1970). Myers’s focal argument is that media ecology theory is self-constrained by its *raison d’être* focus on the technologies of mass communication—the proverbial “medium”—as being far more impactful than any content they deliver to audiences. That, he finds, leaves media ecology conceptually ill-equipped for the dawning “Quantum Era,” where AI “blur[s] the lines between technology and the message it delivers” (2025, pp. 13-14) by functioning as both medium and content co-creator. He describes QMT as a “dynamic model of media as nonlinear, entangled systems operating across dimensions of time, identity, and information” (p. 24).

Bhadra’s focal argument is that the classical way to interpret legacy, or linear, media content is not up to the task of taking on multimodal digital content. Compared to “old media” content, he says, digitally delivered content is embedded with far more linguistic, visual and auditory complexity. It speeds across networks of digital platforms. It gets remixed and recontextualized into “divergent meanings” (2024, p. 6056) and re-distributed by audience members. Bhadra’s solution is a quantized reworking of the “old” interpretive frameworks.

### *Seeking Unity in Translation*

Despite their different starting points and subjects, Kholod, Myers and Bhadra each find parallel translations in the quantum principles of *superposition* and the *observer effect*. They each, in some way, conceive of “meaning” vis-à-vis “information” as existing in a superposed-like state of all probable meanings. They each, in some way, define “audience” as a collective observer who discerns a meaning from the possible many. With Kholod, the journalist is also an observer.

To the layperson, superposition no doubt seems bizarre. To the physicist, it is a state of existence where subatomic particles are anywhere at any momentum (Huges et al., 2021, p. 4). The observer effect is the phenomenon of observation changing reality. Social scientists know it as the Hawthorne effect, whereby people behave differently when they know they are being studied (Spencer & Mahtini, 2017). In quantum physics the effect manifests as the concept of wave-particle duality.

In its wave form, the particle is in a *superposition*—it is not directly observable because it is “flowing” as a probability of all positions and momenta (Ananthaswamy, 2023; Caltech Science Exchange, n.d.-a; Fortier, 2025). Observation changes that. When the wave is put under measurement, it reveals itself as its visible particle form. In that moment, it “fixes” into one of many probable positions or momenta. Physicists call the reveal a “wavefunction collapse.” A wave function is a mathematical expression of the probability of any superposed particle becoming visible at a singular position or momentum. To catch sight of a particle is to actualize one of the probabilities. With that, the job is done for the probability-prediction math, and it “collapses.”

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<sup>2</sup>“Quantum mechanics” and “quantum physics” are often used interchangeable to mean the theories and study of the behavior of matter and energy at the scales of atoms and subatomic particles. Technically, quantum physics is the broad *study of*; quantum mechanics is a facet of that. It provides the math.

Kholod conceives of information as being in superposition. But we can directly see “information” as a tangible event, activity, facts and figures. Meaning is probabilistic; it is superposed as all possible probabilities of it. As Kholod describes it, information is “a portion of energy (quantum)” (2021, p. 6). In physics, “quantum” denotes the smallest unit of energy. While he does not use the word “meaning,” Kholod connects it to what he calls the “‘charge’ of information” (p. 6). As Kholod describes it, the quantum journalist-observer actualizes one of many possible (energetic) meanings for a unit of information and embeds it into a unit of news content that is disseminated to an audience. Members of the audience download their own probability meanings for the news content. Different journalists, different audiences, different meaning-interpretations.

By comparison, QMT, as Myers describes it, sees the way media operate as being in a “state of superposition—where multiple meanings, interpretations, and realities exist simultaneously until observed and engaged by an audience” (2025, p. 26). That is, audience members discern the medium’s effect on them by actualizing one of many superposed probabilities of it. Bhadra, like Kholod, sees content as tangible and meaning as superposed probabilities.

### *Divergences*

Kholod alone invokes the principle of uncertainty. It holds that the observer can measure either the particle’s position or momentum with the greater precision. It is a tradeoff: the more certainty about position, the more uncertainty about momentum and vice versa (Hilgevoord & Uffink, 2024). The quantum journalism parallel is the “journalistic product” (Kholod, 2021, p. 5), presumably the day’s newspaper, broadcast or website, or any of the individual units of news, opinion and advertising content the product contains. He defines uncertainty as product quality, and he argues that one can precisely know it for either the product or a content unit.

Myers writes that besides superposition, QMT also parallels “entanglement, and uncertainty” (2025, p. 24), but does not explicitly address the latter. He and Bhadra both discuss quantum entanglement, which NASA Science (2025) calls “one of the most far-out phenomena of quantum theory.” Entanglement is an interconnection between two or more particles that lets them influence each other no matter how far apart they are in spacetime. It is like “observing one dancer and finding them in a pirouette, then automatically knowing the other dancer must also be performing a pirouette” (Caltech Science Exchange, n.d.-b). Myers describes “media entanglement” as a principle of QMT. He defines it as “digital information ... [being] instantaneously interconnected across platforms and geographies” (2025, p. 26). Bhadra (2024) discerns entanglement in the “synchronized reactions” (p. 6057) of social media audiences to trending or viral content.

### **Quantizing to find Unity**

Kholod’s quantized version of journalism stood up well in comparison to Myers’ and Bhadra’s quantized approaches to mass media. Unity in theory came as parallel translations of quantum superposition and the observer effect. The question

now is whether the concept of theory interconnectedness will hold up when it is applied to the non-quantum aspects of two very different approaches to journalism. It turns out that by inheritance from their “parents,” the two approaches already share elements of the quantum.

### *Origins*

**Ecological perspectives.** News ecology and the construct of a news ecosystem are offspring of media ecology (Wiard, 2019), which itself is a reimagining of the basics of ecology, the academic discipline. Ecology is the *study of* “natural organisms, their relationships with their physical environment and the interactions among them” (Hellenic Ecological Society, n.d.). The *place of study* is the ecosystem. In Odum’s (1953) foundational definition, the ecosystem is a place of energy flows that make the circle of life. Flora, fauna, microbiota and their environment are “inseparably interrelated and interact upon each other” (p. 9) in the ecosystem. Sunlight, soil and rain sustain the plants, which sustain the herbivores, which sustain the carnivores, and in time, they all feed nature’s cleanup crew, the decomposers.

There are undertones of quantum entanglement in the definition. By the 1971 third edition of his book, *Fundamentals of Ecology*, “the principle of ‘wholeness’” in nature (p. 8) had joined the definition. So did the “idea of the unity of organisms and environment (as well as the oneness of man and nature)” (pp. 8-9).

Ecologists operationalize “ecosystem to be a “geographic area ... [such as] a natural wilderness area, a suburban lake or forest, or a heavily used area such as a city” (Ecological Society of America, n.d.). Likewise, media ecologists see media ecosystems as spaces of interactions that interconnect the technologies of mass communication and human perceptions, behaviors and organizations. Wahl-Jorgensen (2016) takes it full circle by tying media ecology back to the emergence of the concept of “urban ecology” in the 1920s.

**Field theory.** Journalism field theory derives from Bourdieu’s (1993)<sup>3</sup> field theory. Thousands upon thousands of words have already been spent on interpreting the thoughts of Bourdieu. This paper takes the summarizer’s path. To no doubt over-simply, a “field” is a theoretical space of competition for the power to determine the legitimacy of a social domain. Law, politics, education, the arts, the sciences, they and more are social domains. Within domains, human activity creates cultural goods: a dance, song, government policy, toy, car, research paper, news story. They inherently carry intangible meanings and in that sense, they become what Bourdieu calls “symbolic goods ... a two-faced reality, [as] a commodity and a symbolic object: Their specifically cultural value and their commercial value remain relatively independent” (p. 113).

The competition is waged within and among fields, and it basically is a struggle over who gets to hold the reins of “cultural consecration.” That is Bourdieusian shorthand for the power to confer recognition and legitimacy upon a symbolic good or social domain. The struggle itself involves hierarchies of actors within a field and among different fields. Relationality is an organizing feature. As Bourdieu explains,

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<sup>3</sup>The book is a compilation of Bourdieu’s seminal works dating back to 1968.

one cannot fully comprehend the functioning of the field . . . as a scene of competition for properly cultural consecration—i.e., legitimacy—and for the power to grant it unless one analyzes the relationships between the various institutions. (p. 116).

Relationality, networks of relationships, parallels quantum entanglement. Superposition and the observer effect are implicit in the nested constructs of symbolic goods, value and capital. Symbolic *goods* are metaphorical vessels of symbolic *value*, which can be built up into symbolic *capital* as prestige, reputation, power or authority (see, Bourdieu, 1970/1984; Ihlen, 2018; Southernton, n.d.-a,b). Or perhaps not. It depends on which meaning an observer downloads from the “cloud” of all probabilities of meaning for the constructs. It is the observer who “means” the symbolic things into existence.

### *Quantizing Critique*

**To the ecological.** News ecology is the study of the effects on audience and society from the technologies of news distribution and consumption. Wiard (2019) defines news ecology as “an approach, a process” for investigating “how citizens get acquainted with the news as well as the diversity of technologies involved in news use.” Wahl-Jorgensen finds that scholars tend to invoke “ecological metaphors . . . as a sensitizing concept; a ubiquitous and general shorthand for the complexities of the technological, social, and legal environment in which we now communicate (2016, p. 15).

Wiard (2019) defines the news ecosystem as “an actual condition of news . . . a given, something that is there.” It is the place of study—and the terrain for quantizing critique through translation. Monism runs through notions of a news ecosystem. A oneness is implicit in Nielsen’s (2015, p. 27) depiction of the news ecosystem as “individual actors [who are] parts of a wider environment.” It is apparent in the proposition that Wahl-Jorgensen (2016) discerns from studies in the news ecology genre. “[I]n the era of a networked and highly diverse media landscape,” she writes, “we can no longer study individual media organizations, texts, and practices in isolation” (pp. 15-16). Morgan (2019) makes the monism clear: “A news ecosystem, like a natural ecosystem, is made of networks of interdependent parts.”

Morgan does something else in that single sentence. She implies parallels to quantum entanglement (interdependency). The entangled parts manifest as “ensemble[s] of individuals, organizations, and technologies” gathered as a geographic community or “around a particular issue,” and engaged in the production and consumption of news (Anderson, 2016, p. 412). They present as audience interactions with news platforms and cultural influences on news production (Boyles, 2017), and as “24/7 news outlets, different news platforms and diverse production arrangements” (Cottle, 2007, p. 2).<sup>4</sup>

Superposition comes into the news ecosystem as the being and knowing of the medium’s effects on those that inhabit a news ecosystem. Any “effect” is an interpretation by meaning-making. And meaning is superposed in a state of all probabilities of it. Journalist, audience member or researcher, each can realize a different probability of meaning.

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<sup>4</sup>Cottle calls it “news ecology,” but the description fits the news ecosystem.

**To the field.** From the view of field theory, journalism is a sphere of cultural activity, which makes it a social domain and a field of competition for symbolic capital. It is an intra- and inter-field competition for control over the normative journalistic task of defining which events, issues and social actors are legitimately “newsworthy.” To be judged newsworthy is to be judged as meriting recognition and attention, first, by journalists, broadly defined (see Basinée & Nollet, 2019), and second, by the public as audiences of the symbolic goods of journalism. Those who control the judging are engaged in a journalistic version of Bourdieusian cultural consecration. Journalism’s main competitors are the fields of economics and politics, as Swartz (2019) sees it, or politics and science, as Benson (2019) sees it. To the victors go the “symbolic power ... to impose a viewpoint as the legitimate one, the true one” (Benson, 2019, p. 36).

Competitors are inherently entangled through their interrelatedness as contestants vying for symbolic power as “the” dominant arbiter of what is and is not a legitimate news reality. Benson (2019) invites the analogy of hierarchical “many-body” entanglement by mapping journalism as a field within fields. He nests journalism within a “field of cultural production,” which is nested within a “field of power,” which is nested within a far larger and “all-encompassing field of social classes” (p. 465-466).

There are echoes many-body entanglement in Maares and Hanusch’s (2022, p. 737) depiction of journalism field theory as the study of “social structures and power relations.” Willig, Waltrip, and Hartley (2015) implicitly depict news reception, content and production as entangled arenas for the competition for symbolic capital. Couldry (2003, p. 657) affords journalism a competitive advantage as a “pivotal” field that passes the “knowledges of other, more specialized fields” to “wider audiences.”

Likening the sociological concept of “field” to philosophical concepts of “oneness” is an easy reach. Waging power struggles within and across fields culminates in a singularity of purpose. Superposition is an easy reach too. Newsworthiness, symbolic value and symbolic capital cannot self-create. They cannot unfold out of the implicate order of their own accord. They are meanings, indeterminate and superposed until an observer downloads one probability out of the many.

## **Conclusion**

Murphy (2021a) argues that when we translate the non-quantum “core concepts” of theory into the vernacular and physical imaginaries of quantum physics, we create a “common parlance for [expressing] their complexity” (p. 66). Quantizing is a standardizing tool, in other words. It renders theories and theoretical perspectives comparable, by taking them back to their fundamental unity of oneness. Quantizing opens the door to a new ontological perspective of journalism theories as interconnected on a fundamental scale.

At its core, journalism is a quantum-like macrosocial system of superposed meanings and entangled actors and activities. At their core, each theoretical conception of journalism is an enfoldment of them all. They are like stem cells: an undifferentiated “one” in the implicate order but capable of differentiating into varied intellectual proffers in the explicate. To put it into a quantum vernacular, journalism theories look different because scholars “mean” them that way. Each theory is the manifestation of the

probability-meaning scholars downloaded from the superposed cloud of all possible meanings of “theory.”

Nadler (2019) offers a reminder that finding the interconnectedness among theories is a necessary beginning step. The “ecosystem metaphor,” he writes, “pushes us towards thinking of news media [as] self-organizing structures ruled by an order of intelligence more complex than human planning” (p. 834). The same can be said of the constructs of field theory and Kholod’s quantized reimaging of normative journalism. The next step, and all that follow, put us on a quest for the “common pool of information” (Bohm, 1990, p. 281) that synchronizes music and movement into a ballet—and probabilistic meaning into a unity of varied forms of journalism theory.

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