Theorizing Human Information Systems through the Postmodern Juxtaposition of Quantum Entanglements

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Abstract

We argue that there is no singular way to understand our own reality because we are constantly entangled in a juxtaposed plurality of postmodern information systems. This is particularly apparent in the "new normal" of the COVID induced virtual environment. With this context, we explored some of the key ideas of entanglement through a comparison of multiple information systems that are concurrently realized by the digital person in a complex society of infinite information. We compared human information systems entanglement to general systems theory, systems inquiry and critical thinking, human physiology, behavioral psychology, language and linguistics systems, human-computer interaction, and the physical phenomenon of quantum mechanics. The quantum state of plural human information systems may occur concurrently and be superpositioned or juxtaposed; but the real human dilemma is which reality (understanding or interpretation) to select and act upon at any given time.

Humans define their own reality and worldviews through culture, ethnicity, language, semiotics, systems of meanings, communities of practice, and other physical and sensory interpretations as information systems. But since multiple factors in time and space define one's information systems, interpretive models exist for applications of the same situations when perceived by others. Therefore, since all human information systems are dependent upon the understandings and meanings of the individual experiencing the situation, they may be matrixed and overlapped with multiple information systems; and because they can exist alone, apart, together, concurrently, or at different times and places and still survive, they are entangled.

From our perspective, we suggest that similar to a movable quantum particle, human information systems can also be entangled, superpositioned, and juxtaposed in two or more states concurrently. Our theory proposes that information can be interpreted and applied pluralistically with multiple meanings in multiple communities of practice, in multiple times, spaces, and places, concurrently, thereby creating an infinite number of nested and layered human information systems. We reside within these complex information systems, are reliant and dependent upon them, and when one component or subsystem fails we do our best to mitigate the failure with memories of lived experiences, prior education, subject matter experts, communities of practice, social-cultural mores, language, common-sense, instinct, and the utilization of the constant bombardment of new information.

We realize that there are vast dimensions of human information systems in our Digital Age, and they all deserve further research and discussion. We intend to further explore our information systems entanglement theory by interviewing subjects and observing their behavior within formal Case Studies and Ethnographies. Descartes (1644) summed up his wondrous theory of knowledge with: "Cogito ergo sum." We agree with Descartes, but we want to know if there may be entangled human information systems behind that thought.