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Waking Space: The Emerging Art Object, Quantum Theory, and Algorithmic Art

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Abstract text

This paper concerns my investigations into the analogous relationship between the art-making process and the scientific method as process with a focus on quantum mechanics and theory. In particular, aspects of the infamous double slit experiment are compared to the art-object-making process revealing connections between the emergence and the nature of the electron, matter, and the role that consciousness plays in that event (according to several eminent quantum physicists), and the emergence of the object of art. My writings suggest that aspects of the traditional processes of art making (painting, for example) reveal a method useful to explore and comprehend reality through experiential, subjective means that expands the nature of the art object and thus distinguishes the traditional art object from algorithmic art. Though quantum physicists strive toward the explication of the physical world some of their experiments and interpretations, including their mathematical functions are edging toward a definition of the nonphysical, un-manifested aspects of existence - intruding into the "subjective" - using however, the tools and mindset of the "objective." A lack of insight into the traditional artistic process has contributed to relegating artistic discovery and exploration to the margins of relevancy. For convenience consider the traditional artistic process as a conventional painting on stretched canvas as compared to a digital, computer image. In the face of increased availability of computer applications and technology to artists, who can use these applications off the shelf with little comprehension of the underlying code or operation, this lack of insight has led to a tacit concession as to their equivalence and relevance. An intrinsic difference between them exists, I suggest, that can be illuminated with a comparative understanding of certain quantum mechanical processes and a refocusing of the artistic process in light of the revelations of quantum theory. I propose that the qualitative state of consciousness of the observer in the double slit experiment affects aspects of the results in the same way that the state of consciousness of the artist affects the final object of art. This paper originates from my art practice as a visual artist, personally illuminating the object making process and expanding its potentialities in light of quantum mechanics. I do not define the artistic process within the scientific milieu. By focusing on the processes of object making and a quantum physics experiment my work advocates that the

process of object making illuminates the nature of reality in a way that expands the ramifications of the artistic medium and quantum physics. My approach situates the qualitative expressive aspects, the arena of the artist (the Subjective) as parallel to the quantitative, mathematical expressions and arena of the physicist (the Objective) and vice versa, as each exemplify and elucidate different aspects of a whole. The act of creating an art object is an event similar to a quantum physics experiment in which the act of measurement and the collapsing wave function is determined by a qualitative focusing of consciousness.