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THE QUANTUM WORLD AND CUBISM

by

Christopher Billmyer

A thesis submitted in partial fulfillment of the requirements
for graduation with Honors in the Art, Studio

Ron Rozencohn
Thesis Mentor

Spring 2019

All requirements for graduation with Honors in the
Art, Studio have been completed.

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Ron Rozencohn

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The Quantum World's counter-intuitive characteristics are absent from our everyday routines. For my honors project, I will be exploring the Quantum World and building off cubism to create a new visual language which is an extension of cubism.

I started off by watching a video from The Royal Institution about the Double Slit experiment, explained by Professor Jim Al-Khalili. The experiment demonstrated particles behave differently when being observed. I feel cubism parallels this idea of change, which is why I chose to use Picasso's "A girl with a mandolin" painting as the reference because it has characteristics of different observational outcomes. The painting is rendered with a mixture of muted browns, whites, blacks and blues. I changed the outfit and added color to bring the painting closer to our everyday observation environs. After this, I followed up with geometric shapes using the referenced painting as an indicator of where to place the shapes. After painting in all the outlines, I started to volumize the schematic, but after filling in a portion of the painting, I decided to breakdown and flatten the shapes more to better depict the idea of the observational collapsing. Additionally, I painted in 3-Dimensional tubes and tunnels to show information movement in the Quantum World. The contrast of the painting breaking down and the tightly rendered tubes creates a visual tension on the painting.

I was fascinated and surprised with the idea of the observer in the Quantum World. The notion of observing and object can change how that object behaves is something that I can't help but think about when it comes to humans interacting with the world. Our conversations, our gaze, and body language can all affect each other and our environments. Additionally, the thought that when someone views my painting, they are changing the painting at a quantum level, and they themselves are being changed by looking at the painting. I'm confident that continual research and exploration of the Quantum World can help me create new visual languages.

R. M. Rozencohn

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