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Reuben M. Haas Dr. Matt Henry Honors Colloquium I 7 November 2021

## Twos and Threes or Duality begets Trinity

Jesus Christ and Satan in a Sunday hat. Two-Face from Batman. Matter and antimatter. Peace and war, love and hate, up and down, and black and white. Even the Holy Trinity is nothing but three co-related dualities. We see things easiest in black and white, and we even choose to live some aspects of our lives through such dualistic lenses (modern American politics being one example, which will not escape this parenthetical). Even as far back in time as some ancient Greek thinkers, this phenomenon is understood. That is that the universe is built entirely upon such dualities. Approach life from any perspective, and one concept balancing out another can be found, whether that's in the obvious light of science or in the dark grey corners of morality. However—this simple view of existence may not be all there is, and two may not be the universal quantity.

The renowned physicist Carlo Rovelli outlines two aspects of human life in his book Seven Brief Lessons on Physics—the art of storytelling and the art of the hunt. Rovelli caught the most of my attention using antelope. "When we talk about the big bang or the fabric of space, what we are doing is not a continuation of the free and fantastic stories that humans have told nightly around campfires for hundreds of thousands of years. It is the continuation of something else: of the gaze of those same men in the first light of day looking at tracks left by antelope in the dust of the savannah – scrutinizing and deducting from the details of reality in order to

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pursue something that we can't see directly but can follow the traces of" (Rovelli 69). We already know that there are many ways to observe this duality, but a surprising number of perspectives can be had just form the realm of theoretical physics, and Rovelli's storytelling/hunt duality is just one (albeit more artistic than average) view. We in the twenty-first century are currently experiencing the convergence of the art of storytelling and the art of the hunt, rather than their continuation down two diverging paths. The art of storytelling as we knew it is certainly dying, or changing at any rate. Recently, every fresh and new story we tell must be based in the details of the hunt—meaning real world consequences and stakes—to gain any traction, and almost everything fantastic and campfire-worthy seems to have already been written, told, and often overused. Myth indeed gave way to science (through the origins of the original science: philosophy) but is now being consumed and destroyed by its own distant ancestor. And still, this duality exists, and at the very least the idea of myth will forever contrast that of science, even if all that remains of myth is a ghost of a story.

Science, in a behavior learned from its forefather philosophy, is in pursuit of one thing alone: the right answer. But is there ever a final, most right answer? Isn't believing in such a thing taking the leap of faith towards science? Doubt is exactly what fuels the fire of science, while doubt erodes away the basis of myths. Science only survives as well as it does because it is strengthened by doubt, that is its one evolutionary advantage. Accepting the fact that the prey may never be caught would, in terms of our metaphor, be the end of the hunt. And yet it is not. Possibly the greatest figurehead of science was as much creative as he was scientific. Albert Einstein, who is (unsurprisingly) the central character of Alan Lightman's novel *Einstein's Dreams*, achieved the title of genius because of his apparent ability to balance creativity and scientific ability. The more I see of the world, the clearer it becomes to me that what we call

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genius is really the realm that occupies the border of insanity; much like Chile is naught but a strip of land between the Andes and the Pacific. Genius is a fine balancing act, just like all things great. The finer the balancing act, the better the reward for maintaining said balance. Scientific prowess alone is unlikely to drive one to the edges of one's sanity, but creativity-that is an entirely different goose. To be creative is to see the world in ways few have seen it before, or at least apply someone else's unique worldview in a manner that is original. The Oxford Dictionary defines creativity as follows: "the use of imagination or original ideas, especially in the production of an artistic work." And yet, most would not even consider calling Einstein's work "artistic" (the concept of mathematical beauty is one I'd love to get into, but I digress). However, it is exactly the same unknown factor at play in art that is at work at the forefront of groundbreaking science. The unknown factor that allows static paintings to conjure oceans and music played over a thousand times to cause a wellspring of tears even upon the thousand-and fist listen; it is also the key to unlocking an understanding of our universe unlike any we've held before. I would argue that every figure who has earned the title of true genius throughout history has, at the very least, operated under this duality, if not understood it entirely.

Einstein's imagination and thought process is, and forever will remain, a realm of mystery. Lightman, however, reveals to us some of his own imaginings and asks us to believe that they could be from the mind of Einstein. Many of them center around the idea of either knowing or not knowing, but interestingly produce three possible outcomes. One of Lightman's proposed scenarios of time, in the chapter dated to "8 May 1905," suggests a world where everyone knows that the world will end on September 26<sup>th</sup>, 1907 (Lightman 42). In this world, knowing makes all the difference as the inhabitants make the most of their lives based upon what time they know they have left. In another scenario, dated "20 May 1905," no one knows

anything. Facts of life must be learned anew each day, and many record what they learn in notebooks as they go, "[f]or in this world, people have no memories" (Lightman 62). As with many of the worlds presented by Lightman in *Einstein's Dreams*, this state of being has multiple ways of being dealt with by the people who live therein. Interestingly, many of Lightman's scenarios see three categorizes of responses to the varying natures of time. In a world where people occasionally are gifted glimpses of the future, ("22 May 1905," Lightman 65) for example, three possible responses are presented. "For those who have had their vision, this is a world of guaranteed success... For those who have not had their vision, this is a world of inactive suspense... Some few who have witnessed the future do all they can to refute it" (Lightman 67). While these three options for living within the dream of May 22<sup>nd</sup> may seem to be as far from a duality as possible, I would like to ask the reader to recall the Father, Son, and Holy Ghost from the initial paragraph of this essay, and more specifically the claim that such triads are simple three interrelated dualistic relationships. A prime example—which also happens to be my wise father's favorite relationship advice—is the idea that a relationship between two people is comprised of three entities: the one, the other, and the actual relationship (in a quantum sense) between the two. This is an idea that Rovelli touches on in his lesson concerning quantum physics; that "the 'quantum leaps' from one orbit to another are the only means they [electrons] have of being 'real': an electron is a set of jumps from one interaction to another" (Rovelli 17). This massively intertangled train of spaghetti-noodle thoughts is all meant to lead to one conclusion: whenever a duality exists, when viewed through the accepted quantum model of the universe, that duality becomes a trinity.

While this fact may seem trivial, or even a subjective observation based entirely upon perspective, the reader may find that accepting dualities as the building blocks of the universe, and the relationships of those dualities as the mortar of equal importance, then a widely applicable model of basic understanding will have been constructed. One final example will hopefully serve as a hardener for this metaphorical mortar I have presented, and will lead rather nicely into further topics of conversation I have in mind. The importance of dualities and their relationships is emphasized rather brilliantly by Robert M. Pirsig in his popular philosophy book, Zen and the Art of Motorcycle Maintenance. A full reading of the book is highly recommended to whoever may come across this essay, but it's most prominent ideas can be summarized by a nice, clean trinity (or more accurately, a duality and it's relationship): "classical" values, "romantic" values, and their common root in "Quality." Pirsig uses the backdrop of a crosscountry motorcycle trip to explore these ideas, and delves mainly into the idea of his "Quality," but I would like to take the simple fact of its existence as enough for this essay's argument. I am far from the first person to see reality this way. Everything—from quantum physics at the leading edge of science, to the infinite dreamscapes of time, to my father at the trailing edge of romance—points to the truth of dualities, which in turn points to a truer reality of trinities. This is the scaffolding upon which my worldview is built, as well as that of many others, whether they see it clearly or not. There are infinitely many examples in our existence which could be pointed to as supporting this idea, and therefore infinitely many relationships between dualities. These ideas in turn have relationships between themselves, and so an uncountably infinite web of ideas becomes what we know as existence. Some give this web a name, some wish to map it in its entirety. As for me, I am content believing in its existence, and content with the simple numbers of twos and threes.

## **Works Cited**

Lightman, Alan P. Einstein's Dreams. New York: Pantheon Books, 1993. Print.

- Pirsig, Robert M. Zen and the Art of Motorcycle Maintenance. Toronto; New York: Bantam, 1975. Print.
- Rovelli, Carlo, Simon Carnell, and Erica Segre. Seven Brief Lessons on Physics. First American edition. New York, New York: Riverhead Books, 2016. Print.