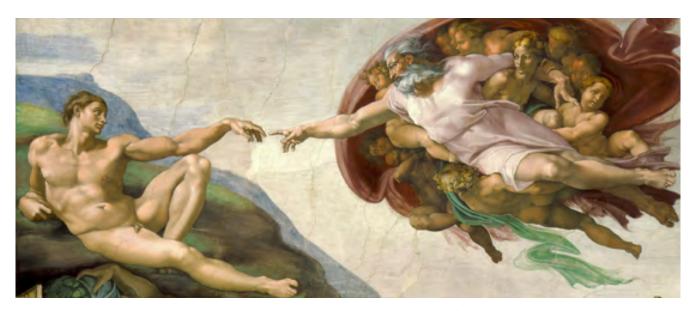
The Science of Synchronicity: Can We Quantify the Numinous?

BETHANY BUTZER

n January 2020 I wrote an essay about the science of synchronicity for a course that I was taking on approaches to studying consciousness. In the final paragraph of the essay, I compared synchronicity to Michelangelo's painting of Adam and God in the Sistine Chapel. I proposed that synchronicity might be '...a hand reaching toward us, beckoning us to bridge the gap between Adam and God as depicted by Michelangelo. And perhaps, in bridging that gap, we momentarily experience an underlying domain of reality in which mind and

matter are one' (Butzer, 2021, p. 48). A few weeks later, one of my classmates asked to read my essay, because she wanted to see an example of my writing. We decided to exchange essays, so that I could read hers as well. Within hours of the exchange, she sent an excited email, asking me to look at Appendix A of her essay. Her essay was about a completely different topic than mine (neither of us was aware of each other's topic beforehand), but there, in Appendix A, was a picture of Adam and God from the Sistine Chapel. I felt goosebumps rise along my arms, as a sense of awe and wonder filled my heart. What are the



The Creation of Adam, Michelangelo, c. 1511

odds that two students who did not know each other, who wrote essays about different topics, in a course that had nothing to do with art history, would happen to exchange essays that referenced the same piece of art?

I thought it was beautiful that an essay about synchronicity led to such a lovely synchronicity. But the synchronicities didn't end there. A few months later, I submitted my essay to an academic journal for publication. One of the anonymous peer reviewers noted that five days before receiving my article for review, he experienced a strong mental image of Michelangelo's painting of God and Adam. He had been contemplating his interest in the science of synchronicity and was wondering how he came to study this topic. Michelangelo's painting appeared in his mind's eye, and the image helped him realize that it is a combination of his humanity and divinity that led him to study synchronicity. Five days later, he received my paper as a confirmation of his contemplation.

One year later, in March 2021, my paper was published in the Journal of Consciousness Studies (Butzer, 2021). I was invited to discuss the article on a podcast about synchronicity (Derisz & Butzer, 2021), which evolved into an in-depth conversation about Michelangelo's painting of God and Adam. Our discussion focused on Michelangelo's painting as a symbol of the idea that synchronicity is a bridge that connects us with the unseen world. After we finished recording the podcast, we said our good-byes, and the host decided to take a break by checking the BBC news website. He went to the BBC homepage, which to his great surprise featured a picture of Michelangelo's painting with the tagline, 'The Overlooked Factor in Michelangelo's Sistine Chapel' (BBC, 2021). Later, through another synchronicity related to an article about astrology, we found out that we released the podcast the day after Michelangelo's birthday. The astrologer mentioned that during his lifetime, Michelangelo was known as Il Divino (The Divine One) (AstroTwins, 2021).

This series of synchronicities has carried with it a feeling of numinosity for all involved. One can't help but wonder whether the divinity that was channeled through Michelangelo is somehow continuing to communicate with us hundreds of years later. These synchronicities evoke a feeling of interconnection that transcends space and time. Each person who was involved has experienced a sense of transcendent meaning and connection between the seen and the unseen. The question becomes, how is this possible? How can a painting travel through space and time to appear for multiple people at exactly the right moments? Is it simply random chance occurring in a group of individuals who are seeing connections where none exist? Or, if there are in fact 'real' connections underlying these synchronicities, how do these connections operate? Can we study them empirically? In other words, can we quantify the numinous?

Toward a Science of Synchronicity

The original intention of my article was to argue for a thoughtful consideration of how one might design empirical studies of synchronicity by approaching this topic from a post-materialist perspective (Butzer, 2021). Traditional materialist science tends to focus on explaining the universe by reducing all phenomena to physical matter, whereas the post-materialist perspective asks us to go beyond this approach. Indeed, researchers from a variety of disciplines have recently argued that in order to truly innovate, science needs to break free from outdated materialist paradigms (Beauregard et al., 2018; Beauregard et al., 2020). I am a supporter of this 'post-materialist movement,' yet, at the same time, I have difficulty conceptualizing what a post-materialist science would look like in actual practice, particularly with regard to studying synchronicity.

On the one hand, there are innovative approaches that we can take when doing research on synchronicity. For example, mixed-method approaches that combine quantitative, numeric data with qualitative interviews and case studies could hold promise (Creswell, 2014). Another promising avenue involves transpersonal research methods (Anderson & Braud, 2011). Transpersonal methods encourage data collection that harnesses multiple ways of knowing, such as knowledge gained through embodied experience, meditation, gnosis, and dreamwork. Transpersonal methods also focus on how research leads to transformation in the scientist, participants, and readers of research (Anderson, 2020). Additional options include attempts to explain synchronicity through mathematical models and complexity theory (Sacco, 2016; 2018; 2019), as well as Alfred North Whitehead's organismic philosophy (Haule, 2011) and dual-aspect monism (Atmanspacher, 2018; Atmanspacher & Fach, 2013) (see Main, 2018 for a review of these approaches).

As one example, according to dual-aspect monism, the mental and material are aspects of an underlying



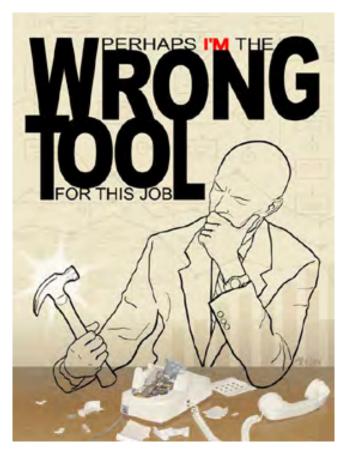
Alfred North Whitehead 1861-1947, English mathematician and philosopher



Abraham Maslow 1908-70, American psychologist

neutral domain of reality that can only be perceived indirectly, through manifestations such as synchronicity (Atmanspacher & Fach, 2013). Dual-aspect monism is similar to David Bohm's (1980) argument that the physical world that we see (the 'explicate order') first exists as a potentiality in an unseen, undivided whole (the 'implicate order'). Along the same lines, David Peat suggested that both mind and matter emerge from the implicate order, and are thus inseparable (Peat, 1987; 2014). When considering these perspectives in relation to synchronicity, Frentz (2011) suggests that, '...when someone has a synchronistic experience, the non-causally related events give that person a momentary glimpse into the essential unity of the implicate order' (p. 122).

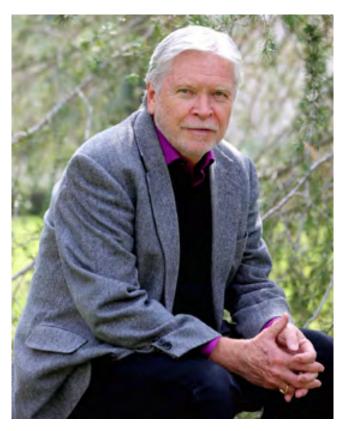
Taken together, these perspectives and research methods suggest that we might be able to study synchronicity using some form of traditional science and/or post-materialist science. These ideas have value, and I have given them much consideration in my article and in the months since writing it. However, as I continue to contemplate these perspectives, I can't help but feel that we might be trying to fit a square peg into a round hole. I'm reminded of Abraham Maslow's (1966) book The Psychology of Science, where he critiqued modern approaches to science by describing a cognitive bias that occurs when we over-rely on a familiar tool. This bias became known as 'Maslow's Hammer,' and it suggests that if the only tool you have is a hammer, you will treat everything like a nail. In my opinion, our tool is science, and we are trying to hammer synchronicity into it. I have recently come to a place where I am asking myself, why? Why do I feel so compelled to create a science of synchronicity? Why do I want to prove that synchronistic experiences are 'real?' Why do I feel such an impetus to get other scientists to take synchronicity seriously?



Research as Tending a Wound

In his book *The Wounded Researcher*, Robert Romanyshyn (2013) argues that most scientists choose research topics based on unhealed wounds within themselves. According to Romanyshyn, these unhealed wounds come not only from our life experiences, but also from the experiences of our ancestors. Romanyshyn conceptualizes research as a vocation that:

...puts one in service to those unfinished stories that weigh down upon us individually and collectively as the wait and weight of history. [Research] is what the word itself indicates. It is re-search, a searching again for what has already made its claim upon us and is making its claim upon the future. The topics that we think we choose in fact choose us as much as, and probably more than, we chose them, and the intentions that the researcher has for the work are ensorcelled by the dreams of the soul in the work (p. 113).



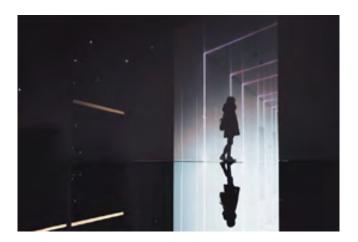
Robert Romanyshyn, Emeritus Professor of Clinical Psychology at Pacifica Graduate Institute

When considering research in this way, I must ask myself, what is my wound? Why are the wait and weight of history asking me to tend this wound in relation to synchronicity?

I am still in the beginning stages of this exploration, but my initial answers are related to a re-enchantment of science and an acknowledgement of the humanity of the researcher. On a professional level, my wound comes from being trained in a mainstream, materialist setting that offered me a PhD in psychology by reducing the human mind to the basic functions of the brain. This felt inadequate, but when I tried to raise alternative views or evidence from fields such as parapsychology, I risked my professional reputation, and my ideas were often dismissed. Yet in my day-to-day life, I have experienced numerous unexplainable synchronicities and parapsychological phenomena. The scientific model that I was trained in provided no explanation for these experiences, and instead suggested that they were due to random chance, or due to me seeking meaning where none existed. In a sense, my professional life 'gaslighted' my personal life, by convincing me that my experiences were not real.

This professional 'trauma' led to me taking a multiyear break from academia after finishing my PhD. It is only in the last few years that I have returned, taking it upon myself to learn about topics that I was never taught in university, like parapsychology and transpersonal psychology. After learning more about the evidence and usefulness of these approaches, I've felt that it is somehow my mission to prove that phenomena such as synchronicity are real and can be explored within an expanded framework of science. But when I feel deeply into it, and am honest with myself, there is a pushing, a forcing to this initiative that comes from a wounded place within me.

My wound has a noble intention, which is to re-enchant science and the academy, and to bring our humanity back into science. I am not alone in this intention, as others hold it as well (Harrington, 1999; Maslow, 1966; Voss & Wilson, 2017). This intention involves bringing a sense of awe, wonder, open-mindedness, and humility back into scientific pursuits. Instead of approaching research from a reductionist, materialist, positivist perspective, re-enchantment asks us to bring our humanity back into scientific endeavours. This perspective holds that the idea of a completely unbiased, objective researcher is a myth. Matter and humanity are not inert machines that can be understood by reducing them to their smallest components. Instead, we are complex, living systems that can potentially access information that transcends our current notions of space and time (Cardeña, 2018). There is no doubt that quantitative research methods and materialist science have led to many discoveries and innovations. But these methods can only take us so far. The wait and weight of history are using my wound to explore and promote the worthwhile cause of expanding science (Beauregard et al., 2020). In short, the wound is not the problem. But the ways in which I act from the wound might be.





Stop Trying So Hard

In February 2018 I gave a TEDx talk called, Stop Trying So Hard: Achieve More by Doing Less (Butzer, 2018). The talk went viral and has been viewed almost 2 million times. In the talk, I suggest that there are two forms of effort that we can engage in. Upstream effort involves working very hard to force or push an outcome into being, like rowing a boat upstream, against the current of the water. In contrast, downstream effort involves having a goal, but maintaining a loose grip or attachment to that goal, like rowing a boat downstream, with the current of the water. Most of us are taught that upstream effort is the best way to achieve our goals. We need to work hard and keep pushing through, regardless of what obstacles get in our way. Downstream effort, on the other hand, encourages us to move with the flow of life, allowing our path to unfold in its own divine timing. From this perspective, obstacles are not obstacles at all, they are simply part of the path. Sometimes these obstacles might send us in a different direction, but this is part of trusting the inherent intelligence of the universe. Downstream effort is similar to David Peat's concept of Gentle Action (Peat, 2008) and the Taoist notion of wu-wei, which can be translated as 'effortless effort.' In other words, we paradoxically try without trying (Slingerland, 2015).

My explorations into the science of synchronicity have shown me that in some ways, I am approaching this topic from a place of upstream effort. I am trying to gather empirical evidence on synchronicity to force other scientists to believe me and take this topic seriously. As most of us know, trying to force someone to see your point of view rarely works, no matter how much evidence you have. Indeed, as Charles Eisenstein (2005) shares, 'a state of belief is a state of being' (p. 385). In other words, our beliefs cause us to exist in the world in specific ways, so that we see what we believe. My own research supports

this idea. For example, I conducted an experiment showing that participants with a background in psychology rated a neuroscience study as having stronger findings and being more reliable and valid than a parapsychology study, even though the statistical results and description of both studies were identical (Butzer, 2020).

This gives an interesting perspective on the adage, 'I'll believe it when I see it,' which is often implicitly present in materialist science. Yes, of course you will believe it when you see it, because what you believe causes what you see. Where I see numinous interconnection in relation to Michelangelo's painting, a materialist scientist will see random, chance occurrences and some sense of illusion, or perhaps even delusion, on my part for connecting these occurrences with each other. Psychologists have even created a label for people who see connections where none exist: apophenia (Blain et al., 2020). According to this





line of thinking, apophenia can range from seeing small, harmless connections, such as my Michelangelo example, to a full psychotic episode where a person experiences a dysfunctional break from reality.

If my materialist colleagues are never going to 'believe' in a science of synchronicity, then what is the point of pursuing it? This is where I need to let go, travel downstream, and trust that my wound is serving its purpose, even if I don't see the results in my lifetime. I need to release my attachment to proving that synchronicity is 'real' within the confines of materialist science, and trust that synchronicity will reveal herself in her own divine timing. I can be part of that timing, but I can't force it to happen. I need to remind myself to embody what was perhaps the original intention of science: to adopt a stance of humble not-knowing in the face of the Mystery. Put simply, I need to stop trying so hard.

You Can't Control the Mystery

In one of my first undergraduate psychology classes, my professor stated that one of the main purposes of psychology is to predict and control human behavior. I found this statement odd, because this was not my intention at all. Instead, my goal was to research, explore and (if I'm lucky) perhaps begin to understand the human mind and its place in the universe. Yet in my explorations of synchronicity, I realize that I am, in fact, trying to predict and control it. What if synchronicity is not amenable to this approach? What if there is some other way that we need to explore this topic? I have come to liken synchronicity to a deer in the forest. She is light, delicate, and easily spooked. We need to approach her gently, with a friendly eye, knowing that no matter how much we want to touch her, she might always elude our grasp.

What does all of this mean for creating a science of synchronicity? It doesn't mean that I will do nothing, or that I will give up on trying to study this topic. It means that I need to loosen my grip on the outcome, and trust that I will be guided toward how, when and whether to study synchronicity. I need to inhabit the space between Adam and God's fingers, waiting patiently (or perhaps not so patiently) for the rare sparks of connection. Perhaps my efforts will lead to synchronicity being more widely accepted by the scientific community, or perhaps not. I trust that my wound will lead me in the direction where I am most needed, and that synchronicity will guide me along the way. As for the outcome, I will approach it like a deer in the forest. Gently, with open hands and an acceptance of the great Mystery of our existence.

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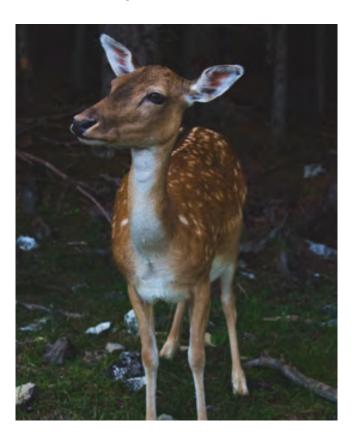
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