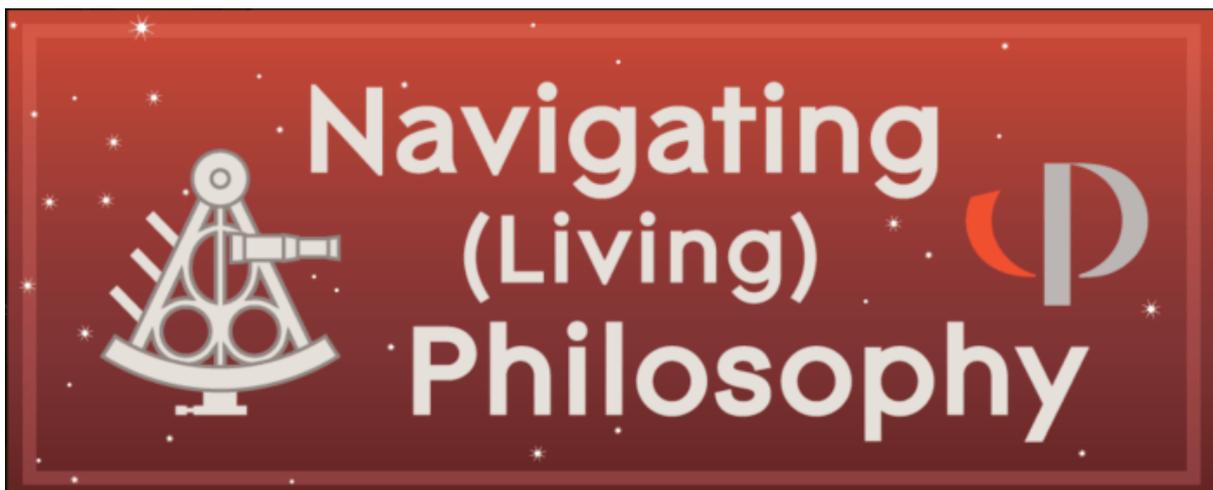




Navigating (Living) Philosophy: An Unconventional Journey—My Ode to Transdisciplinary Philosophy

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Credit: Mike Morris

This series invites seasoned philosophers to share critical reflections on emergent and institutionalised shapes of and encounters within philosophy. The series collects experience-based explorations of philosophy's personal, institutional, and disciplinary evolution that will also help young academics and students navigate philosophy today.

I should start with a disclaimer: my scholarly journey as a philosopher has not been a conventional one. After all, I began my career as a neurosurgeon and experimental neuroscientist, and entered the world of philosophy as a man of science, scalpel in hand. For some, my career trajectory as a neuroscientist would have been sufficiently rewarding; I always think back to Bertrand Russell's words in [The Conquest for Happiness](#): "all the conditions of happiness are realized in the life of the man of science, as he has an activity which utilizes his abilities to the full." This was—and continues to be—true for many of my fellow neuroscientists and doctors, who do incredible work. But my thirst for knowledge, my boundless curiosity about the human condition, and my longing to bridge

the worlds of science, philosophy, applied history, strategic culture, future studies, and international relations led me to new academic pastures. In this APA article, I intend to show—by way of my own personal experience—that the worlds of neuroscience, philosophy, and other disciplines are very much complementary and are all essential pieces to the same puzzle explaining human experience. With an eye on both the present and the future, I look at how transdisciplinary approaches to philosophy can help young philosophers find a more even footing in the field. I also seek to equip established philosophers with additional insights from exponential innovations in related disciplines, in the belief that a transdisciplinary approach is a prerequisite to untangling intractable philosophical problems.

I was inspired to go into neuroscience by the renowned—and sadly late—neurologist, [Lord John Walton of Detchant](#). Lord Walton, who would have turned 100 this year, dedicated much of his 70-year career to revolutionizing academic and clinical neurology. For me, as an impressionable young medical student, Lord Walton was an inspiring mentor and talented bridge-builder who encouraged me to pursue neurosurgery while keeping an open mind to philosophy, culture, and the arts. Lord Walton's innovative transdisciplinary approach to medicine, and life more broadly, helped steer my academic career in neurosurgery in the U.S. at the Mayo Clinic, Yale, and Harvard. He was also a guiding light for me as I shifted my intellectual focus from academic neuroscience and clinical neurosurgery to the interplay between neuroscience and philosophy.

My interest in philosophy dates back to my childhood. In my adolescence, I devoured books by Bertrand Russell, Immanuel Kant, John Rawls, Averroes (Ibn Rushd), Thomas Hobbes, and John Locke. These philosophers continue to inspire me to this day, and through them I developed my initial thoughts about human nature, global justice, the dignity of man, and global order. I grew up in a family that instilled in me the belief that for humanity to triumph, everyone needs to play their part, and everyone must succeed in a symbiotic and collective way. This has always stayed with me. My upbringing and my experiences as a neurosurgeon instilled in me a deep desire to enhance collective (non-reductionist) insights into the fragility and malleability of human nature and its role in improving governance paradigms. In doing so, I hope to mitigate human misery and insecurity while doing my modest part, however small, to promote human, national, economic, and transcultural peace, prosperity, dignity, and respect for all. This reaches across all areas of my work, and my transdisciplinarity affords fortuitous connections that support my mission.

Neuroscience is often associated with brain scans, synaptic spaces, and stroke patients, but it is much more than that. In recent decades, new neuroimaging techniques have emerged, such as functional magnetic resonance imaging technology (fMRI), which can identify and record brain activity in real-time. Along with intra- and intercellular studies, these tools and other imaging and recording techniques have helped provide fresh insight into human cognition, emotionality, and morality. These elements of human behavior form the essence of many long-standing philosophical debates. I felt so drawn to neurophilosophy because it marries neuroscience-based evidence and philosophical inquiry to further our understanding of human nature and the implications of these forays for societies and humanity at large. At its core, neurophilosophy opens new avenues in the philosophy of mind and human existence, and furthers our understanding of what drives and motivates human behavior. The practical implications of the discipline are also beneficial in a global, transcultural, and humanistic sense. By understanding the neurochemical foundations underpinning states that we recognize as amorality, egoism, fear, and greed, we can be better placed to navigate the challenges posed by contemporary geopolitics and global security. Neurophilosophy teaches us a lot about human frailty and malleability. These insights are

critical for constructing and fine-tuning governance paradigms so that they correspond directly to our understandings of our neurological natures. They can be of pivotal significance.

The dominant 'Western' philosophical tradition, strongly influenced by Plato and Kant, held that emotions preclude rational decision-making and our ability for ethical thinking. However, human experience is mediated by emotions, and these emotions, in turn, are mediated by neurochemistry. [Neuroscientific research](#) has shown that the neuronal mechanisms underpinning cognition and moral decision-making are closely connected to emotional processing in the brain. For example, when parts of the brain—particularly the prefrontal cortex—are underdeveloped or damaged, the emotions associated with sociality are either severely truncated or absent altogether. Therefore, over the years, I have drawn on a wide range of philosophical approaches to human nature, as well as neuroscientific research, to make the case for a new neurophilosophical theory of human nature that I call "Emotional Amoral Egoism". At the heart of this theory is my belief that we are amoral creatures at best, more emotional than rational, and that our moral compass is malleable and governed primarily by our 'perceived emotional self-interest.' Amoralism implies that while we have the capacity to develop a moral compass, that compass is heavily influenced by our personal and political circumstances. I also believe that moral conduct is unlikely to persist or be dependable when conditions of fear, alienation, and insecurity abound, and we possess a hardwired predisposition for survival. It follows that morality, altruism, and pro-social behavior are not ingrained in human nature. While it is possible to cultivate such predispositions in all circumstances, it is more likely that morality and other core behaviors take a back seat when our survival instincts kick in.

This is in part because fear is expressed in neurochemical terms in our amygdala, the almond-shaped structure on the medial temporal lobe. The amygdala is critical in the acquisition, storage, and expression of [conditioned fear responses](#). It follows that morality, altruism, and pro-social behavior are not ingrained in human nature. They are cultivated within circumstances that guarantee basic security and dignity. Within this framework, I have also suggested five critical motivators of human behavior which I have termed the *NeuroP5*. These motivators are: power (personal and political), profit (primarily monetary but also includes wider material gains), pleasure (physical, sensual, and aesthetic, as found in art, poetry, music, nature, and sports), pride, and permanency (signifying longevity and legacy).

My theory of human nature challenges the views of Hobbes and Rousseau, and in doing so lays the foundation for a more hopeful and pragmatic approach. It advocates that the moral compasses of humans can be influenced positively by constructive behaviors of society and its various mechanisms and frameworks. I believe that my theoretical framework—which is rooted in neuroscientific research—could go a long way in developing sustainable, inclusive, innovative, peaceful, and prosperous governance structures, both domestically and internationally. It could have profound implications for the re-ordering of governance mechanisms at all levels, with a positive knock-on effect for human security, cooperation, identity construction, and the mitigation of ethnocentrism and xenophobia. Neurophilosophy has a lot to contribute to underlying structural and pressing ethical philosophy.

In a similar vein, I have also dedicated a lot of time to studying the central, critical nature of dignity. By dignity, I mean much more than the absence of humiliation, and rather the proactive attainment of nine fundamental human needs: reason, security, human rights, justice, accountability, transparency, opportunity, innovation, and inclusiveness. I have theorized that the sustainability of human history and civilization is premised on sustainable governance that balances the ever-present tension between our human nature attributes (emotionality, amorality, and egoism) and our

critical [human dignity needs](#). Using a neurophilosophical lens, I have argued that the attainment of dignity for all, at all times and under all circumstances, nudges human history forward and ensures its sustainability, in terms of good governance, dignity needs as well as a peaceful and prosperous future. How dignity is secured in the first place is a separate, thorny question. At the bare minimum, we need to limit the excesses of human nature and ensure an atmosphere of happiness and productivity by promoting reason and dignity.

We are entering a new era marked by a multitude of frontier risks which include disruptive and runaway technologies and multiple geopolitical crises. To remain on the front foot, the world requires urgent foresight in public policy as well as highly trained thinkers and philosophers who can connect the dots between various academic disciplines. To navigate this uncertain future, young philosophers will need to add transdisciplinary tools to their intellectual armory. Young and established philosophers who wish to tackle intractable philosophical problems and influence public discourse and policies will need to engage in issues that lie on the cusp of (neuro)science, technology, and philosophy (an area I have termed [Neuro-Techno-Philosophy](#)). Rapid technological advances have rewired the relationship between philosophy and science. While processes such as human enhancement are likely to irreversibly change what it means to be human, disruptive technologies might lead to the emergence of artificially intelligent agents and human-machine hybrids. This will impact how we view ourselves and the world, as well as our place in it. To understand the changes taking place around us, philosophers should acquaint themselves with transdisciplinary frameworks such as Neuro-Techno-Philosophy to get to grips with scientific and technological developments. Transdisciplinarity is a two-way street: these developments help ground philosophers' pursuit of meaning, just as philosophical reflection enriches the empirical investigation of scientists.

On a broader level, young philosophers should remember that philosophy, technological innovations, the arts, and science have always tried to make sense of the world, continuously influencing and learning from each other in the process. For example, just think how creative geniuses such as the artist Paul Cezanne and writer Marcel Proust contributed to our understanding of the human experience. In his writing, Proust revealed the fallibility of memory and showed us, by way of little unassuming cakes called madeleines, that our sense of smell and taste are uniquely sentimental. Neuroscientists would later prove him right. Cezanne, one of the leading post-impressionist painters, taught us a lot about the subjectivity of vision and the process of seeing. In philosophy today, there is an increased realization of the critical value of transdisciplinary approaches to problem-solving and scholarly innovation, but we still have a way to go. Young philosophers should have the courage to follow their passion, seeking out unusual fields of knowledge and transcultural synergies—and they should not fear changing course if they deem this necessary. Above all, young philosophers should root their work in integrity and goodwill, and always aim to make a positive impact far beyond their own personal needs and ambitions. These qualities will be invaluable as the world tackles so many burning human, societal, and global challenges.