Relational Integrity: A Third Way Beyond Sacred and Secular

This paper reviews a framework for a variant of the Meta-relational Philosophy described by Vanessa Machado de Oliveira in her book, *Hospicing Modernity* (2021). It is described in two documents; "*Secular Leadership and Spiritual Responsibility*" (Cooke-Davies, 2025a) and "*Field Note 022: Spirals, Praxis, and the Shape of Wisdom*" (Cooke-Davies, 2025b). The proposed philosophical schema represents a profound alternative to the false dichotomy between supernatural spirituality and mechanistic secularism that has dominated Western thought for centuries. This approach offers a scientifically grounded yet spiritually meaningful worldview that neither retreats into supernatural explanations nor reduces reality to purely mechanistic processes. Relational integrity emerges as particularly crucial for addressing twenty-first century ecological and social challenges that require both rigorous rational analysis and meaning-making frameworks that transcend instrumental thinking.

The framework rests on five interconnected principles: the "spiral never reverses" concept showing 13.8 billion years of irreversible cosmic complexification; the distinction between legitimate mystery and unsupported supernatural claims; relational knowing that operates where empirical testing is impossible but consequential action is required; treating science as "powerful servants but dangerous masters" rather than ultimate arbiters of reality; and praxis as the creative intersection where experience and theory generate emergent wisdom through reflection. Rather than representing eccentric speculation, this position finds robust support in contemporary philosophy of science, complexity theory, embodied cognition research, and the practices of leading scientists who embrace both empirical rigor and relational understanding.

The urgency of this framework becomes clear when examining how our most pressing challenges—climate change, biodiversity loss, social fragmentation, meaning crisis—resist purely technical solutions while simultaneously demanding scientific literacy. These complex problems require what philosopher John Dewey called "experimental intelligence" that integrates multiple ways of knowing without abandoning critical thinking or empirical grounding.

The inadequacy of binary thinking

Western intellectual culture has long been trapped in what sociologist Nancy Ammerman calls the "empirical failure" of secular-spiritual binaries that "fail to capture the empirical reality" of how humans actually relate to ultimate questions. On one side, supernatural spirituality offers meaning and purpose but often conflicts with scientific understanding, leading to anti-intellectual tendencies and denial of empirical evidence. On the other side, mechanistic secularism provides powerful analytical tools but

struggles with questions of meaning, purpose, and value that fall outside empirical verification yet remain existentially crucial.

This binary creates a false choice between intellectual integrity and spiritual depth. Environmental philosopher Holmes Rolston III demonstrates how purely instrumental approaches to nature—treating it as mere resource for human use—contribute directly to ecological destruction, while supernatural approaches often promote otherworldly escapism that abandons care for the material world. Neither framework adequately addresses what complexity theorist Jean Boulton calls our need for approaches that recognise reality as "inherently complex, systemic, processual and emerging."

The limitations become particularly acute in addressing what philosophers call "wicked problems"—challenges like climate change that involve multiple interacting systems, uncertain outcomes, contested values, and no clear endpoints. These problems require both scientific understanding and what Raymond Tallis calls "knowledge of facts" that emerge through embodied engagement with the world, not just computational analysis of data.

Contemporary academic discourse increasingly recognises these limitations. The journal Secular Studies publishes extensive research examining how strict secular/religious binaries fail to capture the complexity of human meaning-making, while environmental philosophy programs explicitly integrate scientific analysis with frameworks that acknowledge intrinsic value and meaning in natural systems. This scholarly recognition creates space for alternatives like relational integrity that transcend traditional categories.

The architecture of relational integrity

The foundational insight of relational integrity lies in recognizing what Cooke-Davies calls the "spiral never reverses"—that 13.8 billion years of cosmic evolution demonstrate irreversible movement toward greater complexity and emergence. This observation, supported by extensive research from institutions like the Santa Fe Institute, suggests that reality exhibits a directional arrow from simple to complex, from isolated to interconnected, from mechanical to organic (Chaisson, 2001; Santa Fe Institute, 2024).

Eric Chaisson's quantitative analysis of cosmic evolution shows measurable increases in complexity through time: from particle formation after the Big Bang, to atomic structure, stellar formation, planetary systems, biological evolution, and consciousness itself. This trajectory appears irreversible not because local systems cannot become simpler—they clearly can—but because the overall cosmic tendency demonstrates what complexity theorists call "strong emergence," where higher-level phenomena exhibit genuinely novel properties not predictable from lower-level components alone.

The crucial distinction emerges between the sacred/mysterious and the supernatural. The mysterious encompasses aspects of reality that inspire awe, wonder, and meaning—the emergence of consciousness from matter, the creative advance of evolution, the interconnectedness revealed by quantum mechanics and ecological science. These phenomena remain scientifically legitimate while transcending purely mechanistic explanation. Supernatural claims, by contrast, invoke disembodied agents or substances that violate known physical principles without empirical support.

This distinction allows for what physicist Carlo Rovelli calls "permanent doubt, the deep source of science" combined with recognition that reality consists of relationships rather than independent objects (Rovelli, 2016). Rovelli's relational interpretation of quantum mechanics demonstrates how observer-independent states—the assumption underlying mechanistic worldviews—represent incorrect notions that generate conceptual problems. Instead, all physical properties emerge from interactions and relationships, making relationality fundamental rather than derivative.

The epistemological center of this framework lies in recognizing relational knowing—understanding that arises through embodied engagement with circumstances that do not allow empirical testing but nonetheless require consequential action. Unlike supernatural revelation or pure intuition, relational knowing emerges through what John Dewey called the integration of experience and reflection, generating practical wisdom for navigating complex situations where standard empirical approaches reach their limits.

Finally, the framework positions science as "powerful servants but dangerous masters." Scientific methods provide extraordinarily valuable tools for understanding natural processes, but become dangerous when treated as the sole arbiters of meaning, value, and purpose. This perspective echoes Dewey's instrumentalism, which treats scientific knowledge as tools for "predicting, controlling, guiding future experience" rather than mirrors of absolute reality.

Philosophical foundations in pragmatism and quantum relationality

John Dewey's pragmatism provides crucial philosophical architecture for relational integrity through its sophisticated alternative to both supernatural and mechanistic approaches. Dewey's cultural naturalism rejects traditional dualisms—mind/body, nature/culture, theory/practice—in favour of what he calls "larger continuities" that recognise knowing as "one among many ways organisms with evolved capacities for thought and language cope with problems" (Dewey, 1925).

Rather than treating minds as passive observers of independent reality, Dewey positions them as "engines of active adaptation, experimentation, and innovation" where "ideas and theories are not rational fulcrums to transcend culture, but rather function within culture, adjudged on situated, pragmatic grounds." This approach supports relational

knowing by showing how understanding emerges through embodied interaction with environments rather than through abstract reasoning alone.

Dewey's experimentalism demonstrates how knowledge develops through what he calls "dramatic rehearsal"—imaginative enactment of possible scenarios that illuminates "the emotional weight and colour of potential ethical choices." This process supports practical wisdom in domains where empirical testing remains impossible but consequential decisions are unavoidable. His integration formula—experience plus reflection equals learning—provides a naturalistic account of how wisdom develops without requiring supernatural revelation or purely rational calculation.

The experimental approach "installs doing as the heart of knowing," making action and understanding inseparable rather than sequential. This supports the praxis emphasis in relational integrity by showing how theory and practice generate emergent insights through reflective engagement with complex situations.

Carlo Rovelli's relational interpretation of quantum mechanics provides complementary support from contemporary physics. His core insight—that "quantum mechanics is a theory about the physical description of physical systems relative to other systems, and this is a complete description of the world"—leads to a radical reconception where "it isn't things that enter into relations but, rather, relations that ground the notion of 'thing.'"

This relational ontology parallels Dewey's critique of substance metaphysics while maintaining scientific rigour. Rovelli demonstrates how the measurement problem in quantum mechanics arises from incorrect assumptions about observer-independent states, much as Dewey showed how philosophical problems arise from false separations between knowing and doing.

Both thinkers maintain what could be called "fallibilistic naturalism"—approaches that reject supernatural explanations while acknowledging fundamental limitations in human understanding. Rovelli writes: "For my part, I prefer to look our ignorance in the face, accept it, and seek to look just a bit further: to try to understand that which we are able to understand." This intellectual humility combined with scientific commitment provides ideal grounding for relational integrity's approach to mystery and meaning.

Scientific validation through embodied cognition and complexity science

Contemporary cognitive science provides robust empirical support for relational knowing through research on embodied cognition that demonstrates how understanding emerges through bodily interaction with environments rather than abstract information processing. This research challenges traditional cognitive science by showing that "mental processes are not, or not only, computational processes" and

“the brain is not a computer, or not the seat of cognition” (Stanford Encyclopedia of Philosophy, 2021).

Studies reveal that concepts are “modal” rather than “amodal”—containing sensorimotor information from embodied experience rather than consisting of arbitrary symbolic representations. Research on action-sentence compatibility effects shows that comprehending language like “open the drawer” activates motor cortex areas associated with the physical actions, demonstrating embodied foundations of understanding that extend beyond mechanistic information processing.

Enactivism theory, developed by Francisco Varela, Evan Thompson, and Eleanor Rosch, argues that cognition involves “enaction”—the “bringing forth” of domains of significance through organismic activity conditioned by historical interactions with environment (Varela et al., 1991). This framework shows how organisms “enact” or “bring forth” their worlds through autonomous sense-making activities, supporting relational knowing while maintaining naturalistic explanations.

Raymond Tallis’s critique of scientism provides philosophical integration for this research by arguing that knowledge arises because humans are “embodied subjects and not just organisms” (Tallis, 2011). His work demonstrates that knowing subjects understand both material world events and non-material “facts” through embodied engagement that remains “relatively uncoupled from the material world,” enabling active inquiry beyond mechanistic reduction.

Complexity science provides additional validation through research on emergence and systems thinking. Jean Boulton’s concept of “process complexity” recognises reality as “inherently complex, systemic, processual and emerging,” challenging mechanistic approaches while maintaining scientific rigour (Boulton, 2018). Her framework integrates complexity science with practical wisdom traditions, showing how seemingly spiritual insights about interconnectedness and emergence find robust scientific support.

Contemporary research on strong versus weak emergence demonstrates how higher-level phenomena can exhibit genuinely novel properties not predictable from lower-level components alone. While consciousness represents the clearest case of strong emergence, complex systems research reveals emergent properties throughout nature—from flocking behaviour in birds to superconductivity in physics—that require understanding relationships and interactions rather than just individual components.

This scientific validation supports what philosopher Philip Anderson called the insight that “more is different”—understanding emerges from studying relationships and interactions, not just individual components. Santa Fe Institute research demonstrates mathematical principles governing how evolution tends toward increased complexity through species diversity, structural sophistication, and what researchers call “software capture.”

Exemplars of relational knowing in scientific practice

The most compelling evidence for relational integrity comes from leading scientists whose relational approaches have generated breakthrough empirical discoveries that traditional reductionist methods missed. Suzanne Simard's revolutionary forest ecology research exemplifies how relational knowing enhances rather than compromises scientific rigour.

Simard's 1997 Nature paper demonstrated bidirectional carbon transfer between different tree species through underground fungal networks—the "wood wide web"—by thinking relationally about forest systems rather than studying individual trees in isolation (Simard et al., 1997). Her discoveries of "mother trees" that act as network hubs, trees that recognise their offspring and preferentially share carbon with relatives, and interspecies cooperation through mycorrhizal networks emerged from what she calls questioning "the interconnectedness of the forest."

Explicitly critiquing Western reductionism, Simard notes: "We don't ask good questions about the interconnectedness of the forest, because we're all trained as reductionists. We pick it apart and study one process at a time, even though we know these processes don't happen in isolation." Her approach maintains rigorous empirical methods—isotope tracing, controlled field experiments, peer-reviewed publication of over 170 scientific articles—while embracing mystery and interconnectedness.

Robin Wall Kimmerer demonstrates similar integration through "braiding" indigenous traditional ecological knowledge with Western scientific approaches (Kimmerer, 2013). As both a botanist at SUNY Environmental Science and Forestry and enrolled member of the Citizen Potawatomi Nation, Kimmerer shows how indigenous reciprocal relationships with plants reveal ecological insights missed by purely reductionist approaches. Her research on moss ecology, plant communication, and restoration ecology maintains full scientific rigour while integrating what she calls "powerful ways of knowing" that honour relationships and reciprocity.

Carlo Rovelli's physics research exemplifies how relational thinking generates new understanding within rigorous scientific frameworks. His relational interpretation of quantum mechanics addresses fundamental problems in quantum theory by recognizing that relationships rather than independent properties constitute reality. Published in prestigious physics journals and maintaining full mathematical rigour, Rovelli's work demonstrates how acknowledging the relational nature of reality leads to deeper understanding rather than mystification.

The embodied cognition movement provides additional examples through researchers like Andy Clark, whose extended mind thesis shows how cognition spans brain, body, and environment, and Francisco Varela, whose enactive approaches demonstrate how perception emerges from sensorimotor interactions. These scientists maintain strict

experimental protocols while revealing phenomena invisible to purely mechanistic approaches.

Common elements across these examples include rigorous empirical methods combined with systems perspectives, acknowledgment of mystery alongside pursuit of understanding, interdisciplinary integration, and focus on relationships and emergent properties rather than isolated components. These scientists demonstrate that embracing mystery and working relationally enhances scientific discovery by opening new research questions, revealing previously invisible phenomena, enabling interdisciplinary insights, and generating practical solutions for complex challenges.

Addressing ecological and social challenges through relational frameworks

The practical urgency of relational integrity becomes clear when examining how contemporary ecological and social challenges resist purely technical solutions while simultaneously demanding scientific literacy. Climate change, biodiversity loss, social fragmentation, and meaning crisis represent what complexity theorists call "wicked problems" that require integration of multiple ways of knowing.

Environmental challenges exemplify this integration requirement. Climate science provides crucial empirical understanding of atmospheric chemistry, energy systems, and ecological processes, but addressing climate change requires transformation of economic systems, political structures, and cultural values that extend far beyond technical implementation. Purely instrumental approaches that treat nature as resource for human use contribute directly to ecological destruction, while supernatural approaches often promote otherworldly escapism that abandons material engagement.

Relational integrity offers an alternative by recognizing what environmental philosopher Holmes Rolston III calls the "intrinsic value" of natural systems while maintaining scientific understanding of ecological processes. This approach supports what Suzanne Simard calls "forest-first" management that works with natural systems rather than imposing external control, generating more effective restoration outcomes than conventional forestry approaches.

Social challenges similarly require frameworks that integrate rational analysis with meaning-making that transcends purely instrumental thinking. Research on social fragmentation and meaning crisis shows how purely secular approaches often fail to provide sufficient frameworks for purpose and community, while supernatural approaches frequently conflict with scientific understanding and democratic values.

Robin Wall Kimmerer's indigenous science integration demonstrates practical alternatives through what she calls "braiding" different knowledge systems. Her work shows how traditional ecological knowledge about reciprocal relationships with natural

systems generates both more effective land management and more meaningful human engagement with environment. This approach maintains scientific rigour while incorporating wisdom traditions that address questions of purpose, value, and relationship that extend beyond empirical verification.

The framework supports what John Dewey called “experimental democracy”—approaches to social challenges that integrate scientific understanding with practical wisdom developed through embodied engagement with complex situations. Rather than relying on either technocratic expertise or traditional authority, this approach generates solutions through what Dewey calls “dramatic rehearsal” of alternative possibilities combined with empirical assessment of outcomes.

Contemporary research on “post-secular” approaches in academic institutions demonstrates growing recognition that addressing complex challenges requires frameworks that transcend traditional secular-religious binaries. Universities increasingly offer programs that integrate scientific understanding with meaning-making approaches, recognizing that sustainability challenges require both technical solutions and cultural transformation that addresses questions of purpose and value.

The relational integrity framework particularly supports what environmental philosophers call “ecologies of hope”—approaches that maintain both realistic assessment of ecological challenges and frameworks for meaningful engagement that sustain long-term commitment to solutions. By recognizing both the scientific reality of ecological crisis and the legitimate human need for purpose and meaning, this approach avoids both denial and despair while supporting sustained engagement with complex challenges.

Emergence of wisdom through praxis

The synthesis of relational integrity occurs through what Cooke-Davies identifies as praxis—the creative intersection where experience and theory generate emergent wisdom through reflection. This concept, rooted in Dewey’s experimentalism and supported by contemporary research on embodied cognition, shows how understanding develops through engaged interaction with complex situations rather than through abstract reasoning or passive observation alone.

Praxis differs from both technical application of predetermined principles and uncritical acceptance of immediate experience. Instead, it involves what Dewey calls the integration of “primary experience”—direct, felt engagement with situations—and “secondary experience”—reflective, analytical understanding that abstracts from immediate engagement. This integration generates what he calls “experimental intelligence” that can navigate novel situations without requiring either supernatural guidance or purely rational deduction.

Contemporary research on “situated cognition” demonstrates how knowledge emerges through embodied engagement with contextual elements including tools, language, and social relationships. Studies show that understanding develops through what researchers call “dynamic construction” through ongoing engagement rather than passive reception of information. This research validates praxis as a legitimate epistemological approach that generates reliable knowledge for action while acknowledging fundamental limitations in human understanding.

The practical operation of praxis appears clearly in the work of scientists like Suzanne Simard, whose forest research emerges through integration of empirical observation, indigenous knowledge, personal experience, and reflective analysis. Her discoveries about mycorrhizal networks required not just technical measurement but what she calls “listening to the forest” through embodied engagement that revealed patterns invisible to purely mechanistic approaches.

Similarly, Carlo Rovelli’s relational quantum mechanics emerged through integration of mathematical analysis, experimental evidence, philosophical reflection, and what he calls “looking our ignorance in the face” with intellectual humility. His breakthrough insights required moving beyond purely technical calculation to engage relationally with fundamental questions about the nature of reality and measurement.

The praxis approach supports what complexity theorist Jean Boulton calls “process complexity”—recognition that reality consists of ongoing, creative processes rather than static entities or predetermined outcomes. This perspective supports practical wisdom for navigating uncertainty without requiring either supernatural certainty or purely rational control.

Through praxis, relational integrity generates what could be called “embodied naturalism”—an approach that maintains scientific naturalism while acknowledging that human understanding emerges through embodied, relational engagement with reality rather than through abstract computation alone. This framework provides resources for addressing complex challenges that require both empirical understanding and practical wisdom about questions of meaning, purpose, and value that extend beyond purely technical solutions.

Conclusion: toward post-binary wisdom

Relational integrity represents more than academic philosophy—it offers a framework for navigating twenty-first century challenges that require both scientific rigour and meaning-making that transcends purely instrumental approaches. The evidence demonstrates that this represents a legitimate “third way” that neither retreats into supernatural explanations nor reduces reality to purely mechanistic processes.

The framework’s strength lies in its integration of contemporary scientific understanding with recognition of phenomena—consciousness, purpose, meaning, value—that

emerge from but cannot be reduced to purely physical processes. By distinguishing between legitimate mystery and unsupported supernatural claims, relational integrity maintains intellectual integrity while acknowledging aspects of reality that inspire awe and wonder.

The philosophical foundations provided by Dewey's pragmatism and Rovelli's relational quantum mechanics demonstrate sophisticated alternatives to both supernatural spirituality and mechanistic secularism. Scientific validation through embodied cognition research and complexity science shows how relational approaches enhance rather than compromise empirical understanding. Examples from leading scientists demonstrate that embracing mystery and working relationally generates breakthrough discoveries impossible through purely reductionist approaches.

Perhaps most significantly, relational integrity addresses the practical urgency of contemporary challenges that resist purely technical solutions while demanding scientific literacy. Climate change, biodiversity loss, social fragmentation, and meaning crisis represent complex problems that require what environmental philosophers call "ecologies of hope"—frameworks that integrate rational analysis with meaning-making that sustains long-term engagement with difficult challenges.

The emergence of this framework within legitimate academic discourse—through post-secular philosophy, environmental ethics, complexity science, and embodied cognition research—suggests a broader cultural shift toward approaches that transcend traditional binary thinking. Rather than choosing between intellectual integrity and spiritual depth, relational integrity demonstrates how scientific understanding and meaning-making can enhance each other through what Dewey called "experimental intelligence."

The implications extend beyond academic philosophy to practical frameworks for education, environmental stewardship, social organisation, and individual meaning-making that honour both empirical understanding and relational wisdom. As Jean Boulton notes, this approach supports seeing reality as "alive, messy, organic, and ever in progress" rather than as either divine creation or mechanical system (Boulton, 2018).

Ultimately, relational integrity suggests that the spiral of cosmic complexity continues through human consciousness and culture, generating new possibilities for understanding and action that require neither supernatural intervention nor purely mechanistic control. Through praxis—the creative integration of experience and reflection—humans can participate in the ongoing creative advance of reality while maintaining both intellectual honesty and spiritual depth. This represents not compromise between incompatible worldviews, but synthesis that transcends traditional limitations through embodied engagement with the mystery and wonder that scientific understanding reveals rather than eliminates.

Terry Cooke-Davies, assisted by Claude from Anthropic AI
3rd August 2025

References

Ammerman, N. T. (2013). Spiritual but not religious?: Beyond binary choices in the study of religion. Journal for the Scientific Study of Religion, 52(2), 258-278.

Boulton, J. G. (2018). Systems thinking, spirituality and wisdom: Perspectives on Ken Wilber. Kybernetes, 47(2), 336-355.

Chaisson, E. J. (2001). Cosmic evolution: The rise of complexity in nature. Harvard University Press.

Cooke-Davies, T. J. (2025a) Secular Leadership and Spiritual Responsibility. Downloaded from https://insearchofwisdom.online/wp-content/uploads/2025/06/Secular-Leadership-v3.4.pdf on 3rd August 2025

Cooke-Davies, T. J. (2025b) Field Note 022: Spirals, Praxis, and the Shape of Wisdom. Downloaded from https://insearchofwisdom.online/wp-content/uploads/2025/08/Field-Note-022.pdf on 3rd August 2025.

Dewey, J. (1925). Experience and nature. Open Court Publishing.

Kimmerer, R. W. (2013). Braiding sweetgrass: Indigenous wisdom, scientific knowledge and the teachings of plants. Milkweed Editions.

Machado de Oliveira (2021). Hospicing Modernity. North Atlantic Books.

Rovelli, C. (2016). Reality is not what it seems: The journey to quantum gravity. Penguin Press.

Santa Fe Institute. (2024). On the evolution of complexity. Working Papers Series.

Simard, S. W., Perry, D. A., Jones, M. D., Myrold, D. D., Durall, D. M., & Molina, R. (1997). Net transfer of carbon between ectomycorrhizal tree species in the field. Nature, 388(6642), 579-582.

Stanford Encyclopedia of Philosophy. (2021). Embodied cognition. Retrieved from https://plato.stanford.edu/entries/embodied-cognition/

Tallis, R. (2011). Aping mankind: Neuromania, Darwinitis and the misrepresentation of humanity. Acumen Publishing.

Varela, F. J., Thompson, E., & Rosch, E. (1991). The embodied mind: Cognitive science and human experience. MIT Press.