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Štúdie

The Territories of Human Reason: Conversation across Disciplinary Boundaries

Alister E. McGrath

Abstrakt

Článok sa venuje téme vzťahu prírodných vied a náboženstva. Autor ponúka štyri rámce, ktoré napomáhajú v premýšľaní o tom, ako môžeme dať do súladu vedu a náboženstvo, uvažovať o ich výhodách a ich širšom uplatnení. Navrhuje vedu a náboženstvo vnímať nasledovne: po prvé, ako rôzne mapy reality; po druhé, ako poskytovanie rôznych pohľadov na realitu; po tretie, ako mapovanie reality na rôznych úrovniach; a po štvrté, ako odlišné „knihy“, ktoré možno čítať paralelne. Každý z týchto rámcov predpokladá, že máme do činenia s jedinou realitou, ktorá je však komplexná a reprezentatívna, ktorú nemožno selektívne redukovať a zjednodušovať.

Kľúčové slová: veda, náboženstvo, interdisciplinarita

Abstract

The article considers how the natural sciences might relate to religion. The author offers four frameworks to help us think about how we can correlate science and religion, and reflect on their merits and their wider application. Science and religion can be seen as, first, offering different maps of reality; second, as providing different perspectives on reality; third, as engaging reality at different levels; and fourth, as representing distinct ‘books’ that can be read alongside one another. Each of these frameworks assumes that we are dealing with a single reality, but recognizes both the complexity of that reality, and the

need for representations that mirror that complexity, rather than selectively reduce and simplify it.

Keywords: science, religion, interdisciplinarity

It is a great pleasure to be able to speak at this conference on Science, Religion and Humane Philosophy in Slovakia.[1] My theme is the importance of bringing the territories of human reason into conversation with one another to help us in our quest for understanding and wisdom. How can the insights of one intellectual discipline be connected up with those from other disciplines? How can the humanities engage with and enrich the natural sciences? How might the natural sciences relate to religion, and how might this help us develop a humane philosophy? In recent years, there has been growing interest in trying to find some intellectual framework that respects disciplinary diversity on the one hand, while allowing an integration or correlation of their insights on the other.[2]

A coherent world?

So can we think of our universe as a coherent whole, capable of being represented by a single grand theory? Or is it so complex that the most we can hope for is fragmented insights that can only be partially integrated? Was the quantum theorist David Bohm right in suggesting that there is a deeper, hidden 'implicate order' underlying the 'explicate order' of physical appearances? The classic question about the 'wholeness' of nature continues to be debated to this day.

Yet while the pursuit of a unified theory of knowledge remains attractive, one of the most noticeable features of modern academic life is a trend towards the fragmentation of previously unified disciplines.[3] This is often accompanied

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[2] I explore these themes in two recent books: Alister E. McGrath, *The Territories of Human Reason: Science and Theology in an Age of Multiple Rationalities.* Oxford: Oxford University Press, 2019; idem, *Natural Philosophy: On Retrieving a Lost Disciplinary Imaginary*. Oxford: Oxford University Press, 2022.

[3] Timothy A. Robinson, 'Getting It All Together: The Fragmentation of the Disciplines and the Unity of Knowledge.' *Headwaters* 25 (2008): 102–14; McGrath, *Territories of Human Reason*, 203–21.

by a more general sense of disciplinary isolation, in which scholars embedded in one specific field of studies find themselves feeling disengaged from a wider academic culture. Academic researchers often speak of a sense of working in a 'disciplinary silo' or 'intellectual ghetto' which is disconnected from other fields of academic endeavour. Finding a way of respecting the distinctiveness of each academic discipline while believing each is part of a greater whole might reduce a sense of isolation on the part of individual scholars, enable shared approaches to the fostering of wisdom, and help us to regain a sense of coherence within the human quest for knowledge.

In recent years, there has been growing interest in trying to find some intellectual framework that would respect disciplinary diversity on the one hand, while permitting some degree or form of integration or correlation of their insights on the other. But let me begin by acknowledging that some people argue that conversations of this kind are not possible or appropriate. Let me note two particularly important criticisms of interdisciplinary dialogue. Both of these reflect the deeply questionable belief that it is necessary to 'demarcate' the natural sciences as favoured rigorous disciplines, distinguishing them from their supposedly less competent disciplinary rivals in the humanities, and thus protect them from the risk of intellectual contamination.[4]

First, some would argue that any attempt at engaging in a constructive interdisciplinary dialogue is impossible or pointless. This often reflects a pragmatic judgement that such conversations are likely to be sterile, or a more dogmatic refusal to engage in conversation on account of a belief that our own disciplinary commitments make such dialogue professionally illegitimate or intellectually invalid. The biologist Stephen Jay Gould's concept of 'non-overlapping magisteria (NOMA)' is an example of such an approach, developed with debates concerning the field of science and religion in mind.[5] Although framed in terms of maintaining and respecting intellectual and professional integrity in both of these intellectual fields, Gould's approach in effect makes dialogue pointless. These disciplines are totally separate enterprises, and they cannot interact meaningfully with each other.

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[4] Sven O. HANSSON, 'Cutting the Gordian Knot of Demarcation.' *International Studies in the Philosophy of Science* 23 (2009): 237–43; Massimo PIGLIUCCI, 'The Demarcation Problem: A (Belated) Response to Laudan,' in Massimo Pigliucci and Maarten Boudry (eds.), *Philosophy of Pseudoscience: Reconsidering the Demarcation Problem*. Chicago: University of Chicago Press, 2013, 9–28.

[5] Stephen Jay GOULD, 'Nonoverlapping Magisteria.' *Natural History* 106 (1997): 16–22. Gould's more recent writings show a significant move towards a more interdisciplinary and integrative approach: see Alister E. MCGRATH, 'A Consilience of Equal Regard: Stephen Jay Gould on the Relation of Science and Religion.' *Zygon* 56, no. 3 (2021): 547–65.

Second, some argue that their own specific discipline can answer all meaningful questions about life. There is therefore no point in consulting other disciplines. This view is often found within the forms of scientific populism developed by Richard Dawkins and others, which generally involve the assertion that science has made philosophy redundant. Steven Hawking, for example, declared that philosophy is a waste of time and philosophers are a waste of space. Science can answer all our meaningful questions far more effectively and reliably than philosophy or theology.

At a more academic level, this attitude is encountered within the movement now known as 'scientism', which can be defined as 'a totalizing attitude' that regards the natural sciences as offering the only reliable form of human knowledge.[6] It's a problematic statement, as many have pointed out. Scientism actually makes second-order philosophical claims about science, which cannot be verified empirically – and hence, by scientism's own standards, it cannot be regarded as reliable knowledge.

Scientism has become the philosophical basis of the 'New Atheism', a populist atheist movement that flourished from 2006 to about 2018, given intellectual leadership by Richard Dawkins and Sam Harris. Yet humane philosophers such as Roger Scruton have pointed out how scientism suppresses the subjective aspects of human existence.[7] Scientism thus offers a reduced and diminished account of what it means to be human, which cannot sustain a meaningful life. The intellectual over-reach of the 'New Atheism,' which eventually led to its unravelling in the late 2010s, was mainly the result of its unwise embrace of 'scientism', which turned out to be vulnerable to charges of superficiality and intellectual circularity.

In what follows, I shall make the case for dialogue across disciplinary boundaries, and explain how this can take place, and how this might lead to the flourishing of human wisdom and understanding. Let me begin my reflections with a comment from Iain McGilchrist, author of the highly influential work *The Master and His Emissary*. As a psychiatrist and philosopher, McGilchrist makes the point that human beings seem to want to take our world to pieces so we can understand how it works, and then put it back together again so that we can see what it means. There is a complex interaction between our inclination to dissect and our desire to make whole. Here's what McGilchrist says: 'Our talent for division, for seeing the parts, is of staggering importance – second only to our

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[6] Massimo PIGLIUCCI, 'New Atheism and the Scientistic Turn in the Atheism Movement.' *Midwest Studies in Philosophy* 37, no. 1 (2013): 142–53; quote at 144.

[7] Roger SCRUTON, 'Scientism in the Arts and Humanities.' *The New Atlantis* 40, no. 33-46 (2013): 33–46.

capacity to transcend it, in order to see the whole.'[8] We need to hold together the objective and subjective aspects of human existence

There are two points here, both of which I shall engage in this lecture. First, we desire to see the individual parts of our world, and respect and celebrate them. And second, we try to find some way of bringing these individual parts back together again, so that we can see the whole in a new and more appreciative way. In this lecture I shall celebrate and encourage interdisciplinary collaboration, while at the same time exploring how some of the challenges arising from this disciplinary focus might be engaged, based on the belief that some form of unification (or at least coordination) of knowledge is a desirable outcome.

There is growing interest in interdisciplinarity as an important strategy for engaging these concerns about disciplinary fragmentation, and encouraging a grand quest for unified knowledge.[9] The interface of science and religion – which is my specialist area of teaching and research at Oxford University – is an ideal case study to consider for these purposes, both in terms of the intellectual challenges that it raises, and the potential benefits that it offers. But let me begin by considering why we need to use multiple methods and approaches to make sense of our world – including, but not limited to, those of the natural sciences.

Why we need multiple intellectual toolboxes

There are many practical and theoretical problems associated with inter-disciplinary or cross-disciplinary research or conversations. Yet perhaps one of the most significant of those difficulties is theoretical: namely that different epistemic communities have their own distinct views on how to secure reliable knowledge about their specific research objects. Any attempt to bridge disciplines – such as science and religion – has to begin from the explicit recognition of the role of discipline-specific research methodologies in human knowledge production, which has strongly negative implications for universalizing accounts of human knowledge using a single principle of knowledge[10] – one of the leading themes of the eighteenth-century Enlightenment, which is now widely regarded as deeply problematic.

It is widely agreed that the natural sciences use a plurality of methods, each of which has been developed for a specific scientific task. Ontology determines epistemology. In order words, the distinct nature of an object determines how we investigate it, and the form of knowledge that results from

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[8] Iain MCGILCHRIST, *The Master and His Emissary: The Divided Brain and the Making of the Western World.* New Haven, CT: Yale University Press, 2012, 93.
[9] MCGRATH, *Natural Philosophy*, 113–84.
[10] MCGRATH, *Territories of Human Reason*, 19–92.

this investigation. The biologist Steven Rose, reflecting on the complexity of the scientific task of engaging and explaining the world, drew a conclusion he believed to be widely shared among reflective scientists. Let me quote what he says, as it is an important point. 'As a materialist, as all biologists must be, I am committed to the view that we live in a world that is an ontological unity, but I must also accept an epistemological pluralism.'[11]

Rose argues that we cannot reduce all cognitive activity to 'a single fundamental method,' as some scientists suggest, but have to use a range of conceptual tool-boxes, adapted to specific tasks and situations, to give as complete an account as possible of our world. We may live in a world that is an ontological unity, but this world is investigated and represented on the basis of an epistemological pluralism, offering us a bricolage of unintegrated insights and perceptions arising from different disciplinary or cultural perspectives on our world, or scientific engagement with its different levels.

Most scholars now argue that reality is so complex that we need different research methods to investigate it properly. No single research method is good enough to do justice to the complexity of the natural world, or to the world of human thought and social relationships. There is no universal sovereign 'republic of reason' – rather, there is an array of distinct epistemic territories and communities. So are these totally independent and isolated? Or can they collaborate with each other? Is there some way in which we can hold their different perspectives together in a richer whole?

Some philosophers of science tell us that we have to live with a plurality of insights concerning our world. For example, Nancy Cartwright invites us to think of a patchwork quilt of knowledge, made up of different individual local 'patches' of insight which cannot be integrated.[12] But most feel that while individual disciplines offer us their own distinct insights into our world, there has to be a way of weaving these insights together.

One of the most interesting attempts to engage this point is due to the philosopher Mary Midgley, whose strongly anti-reductionist agenda leads her to affirm the integrity of individual disciplines, while nevertheless holding that their outcomes could somehow be combined or correlated.[13] Midgley studied

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[11] Steven ROSE, 'The Biology of the Future and the Future of Biology,' in John Cornwell (ed.), *Explanations: Styles of Explanation in Science*. Oxford: Oxford University Press, 2004, 125–42, especially 128–9.

[12] Nancy CARTWRIGHT, *The Dappled World: A Study of the Boundaries of Science.* Cambridge: Cambridge University Press, 1999.

[13] For my own assessment of Midgley's importance for a humane philosophy and theology, see Alister E. MCGRATH, 'The Owl of Minerva: Reflections on the Theological Significance of Mary Midgley.' *Heythrop Journal* 61, no. 5 (2020): 852–64.

philosophy at Oxford after the Second World War, and rose to become one of Britain's most respected public philosophers.

Midgley highlights the intellectual impoverishment and distortion which will inevitably result from attempting to limit our knowledge and understanding of the world to that which arises from a single disciplinary approach. Listen to what Midgley has to say on this: 'No one pattern of thought – not even in physics – is so "fundamental" that all others will eventually be reduced to it. Instead, for most important questions in human life, a number of different conceptual tool-boxes always have to be used together.'[14]

Midgley's method of 'mapping' reality recognizes that that we have to face up to the fact that the many levels and aspects of our world can never be completely captured by any single research methodology. She offers us a plausible visible framework for holding together a plurality of partial insights from different disciplines – namely, using multiple maps to represent a complex reality. Midgley seems to have borrowed this idea from the British physicist John Ziman, who she knew well. Let me quote from one of her articles on this point:

> *[Ziman developed the] metaphor of knowledge as the use of maps – not of one map but of a collection of maps, all of them incomplete, which together gradually shape our understanding of a new piece of country. By bringing those maps together and constantly improving them (he said), in time we build up a composite picture which brings us closer and closer to what the outside world is actually telling us.*[15]

While Midgley is aware of a legitimate use of reductionist strategies in the natural sciences, she resists any attempt to reduce reality to what any single research method can disclose.

For Midgley, our research methods must be adapted to cope with the vast world that we are attempting to understand. No single research method or 'way of thinking' will be able to do justice to the complexity of reality. Her point is fair, and would be endorsed by most natural scientists. As we noted earlier, the biologist Steven Rose holds that while the natural sciences explore a world that represents an 'ontological unity,' they must adopt 'an epistemological pluralism' in investigating it. Different research tasks thus demand different tool-boxes, each adapted to the task in question. They yield a plurality of different (though not for that reason inconsistent or incompatible) outcomes.

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[14] Mary MIDGLEY, 'Dover Beach: Understanding the Pains of Bereavement.' *Philosophy* 81, no. 316 (2006): 209–30; quote at p. 219.

[15] Mary MIDGLEY, 'Mapping Science: In Memory of John Ziman.' *Interdisciplinary Science Reviews* 30, no. 3 (2005): 195–7.

Midgley is clear that we must use different methods to attain a meaningful understanding of our world. But how do we weave these outcomes into a single whole? Are we limited to a simple pluralism – the recognition of multiple accounts of the world – or is there some plausible means of achieving some degree of unification or coordination of these accounts? She summed up this dilemma well in her final book, *What is Philosophy for?*, published in 2018. Let me quote a few sentences from this book, as I think they are very helpful.

On the one hand, I want to emphasize that there really is only one world, but also – on the other – that this world is so complex, so various that we need dozens of distinct thought-patterns to understand it. We can't reduce all these ways of thinking to any single model. Instead, we have to use all our philosophical tools to bring these distinct kinds of thought together.[16]

For these reasons, Midgley suggests that we should use multiple maps, each of which is incomplete in itself, in our attempts to make as much sense as we can of our world, and live meaningfully within it. Consider an atlas, which provides us with many maps of a region - for example, North America or Europe. But why do we need multiple maps of such landscapes in the first place? Midgley, in dealing with this objection, points out that different maps provide different information about the same reality. We need multiple mappings of reality because each such mapping is incomplete, and focusses on some specific question that is being asked. This extract from Midgley makes this point clear.

No map shows everything. Each map concentrates on answering a particular set of questions. Each map 'explains' the whole only in the sense of answering certain given questions about it – not others. Each set of questions arises out of its own particular background in life – out of its own specific set of problems, and needs answers relevant to those problems.[17]

Midgley's point is that there is only 'one world, but a big one.' It needs many maps to do justice to its vast scope and range, and to the multiple interests and concerns of the people who will use these maps. So a physical map of Europe shows us the features of its landscapes. A political map shows the borders of its nation states. The first might be useful to a tourist interested in mountain scenes, the second to a refugee seeking asylum.

For Midgley, each map makes sense of the whole landscape only by answering certain questions about it – and not others. To get an overall view of this complex reality, we refuse to depend solely on any single map, which is necessarily incomplete in itself. Instead, we try to find some way of bringing such maps together, so that their information can be harvested and used. A

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[16] Mary MIDGLEY, *What is Philosophy for?* London: Bloomsbury Academic, 2018, 193.

[17] Mary MIDGLEY, 'Pluralism: The Many Maps Model.' *Philosophy Now* 35 (2002): 10–11. For a fuller discussion, see Mary MIDGLEY, *Science and Poetry.* London: Routledge, 2001, 170–213.

physical map of North America does not make a political map of that same region irrelevant, in that we need to map both physical and social realities. Each map answers different questions - and each of those questions is important to different groups of users. And perhaps most importantly, these maps can be laid over each other, so that they cumulatively disclose more information than they can individually.

So how does Midgley's approach help us to bridge intellectual disciplines? There are two main points here. First, this way of thinking about disciplines – or, more accurately, of visualizing their relationship – respects the individual integrity of each discipline. It does not require that we see one discipline or conversation partner as having a dominant or privileged role, nor does it demand that we accommodate one discipline to fit the needs of another. Politically, Midgley has displaced an authoritarian intellectual monarchy ruled by a single discipline with a confederation of distinct yet coordinated disciplines. The map generated by each of these disciplines is to be taken with the greatest respect, and treated with integrity; it is, however, assumed to be incomplete. It is part of a greater picture of reality, and does not define that larger picture in itself. It can, however, be laid over other discipline-specific maps, which result from different questions being asked, and different information being provided.

Midgley thus offers us an intellectual framework which informs and encourages interdisciplinary conversations. But what outcomes are to be expected from such discussions? In the final section of this lecture, I shall consider the benefits that arise from such interdisciplinarity, focusing especially on the relation of science and religion.

Why have I chosen to speak about science and religion as a specific example of interdisciplinary dialogue and reflection? First, because it is my own specialist field at Oxford University, and I hope that I may be able to offer some helpful insights about this dialogue in particular, and interdisciplinary dialogue in general. And second, because many find reflecting on the relation of the natural sciences and religious belief important personally. So let's turn to explore this question.

On Science and Religion: Some Reflections

The natural sciences and religion use quite different methods in their production of knowledge.[18] While this has often been asserted by dogmatic rationalists to demonstrate that they are incompatible, they are in fact merely different. Every intellectual discipline develops its own distinct method of engagement and criteria of evaluation, developed specifically to deal with its own area of research. Yet these disciplines may subsequently be brought into

[18] See MCGRATH, *The Territories of Science and Religion,* especially 95–226.

conversation with each other, on the working assumption that their insights, though derived in different manners and relating to different aspects of our world, might lead to an enriched understanding of our world life as a whole.

Albert Einstein is an excellent example of a reflective thinker who affirms the importance of science, religion, ethics and politics to human existence. Each of these are *different* – but that does not mean that they are *incompatible*. Einstein affirms the importance of science, but makes it clear that we need more than science to live authentic and fulfilled human lives. Science, he suggests, is not able to engage ethical and existential matters. Let me quote from a famous lecture on the relation of science and religion that he gave in 1939:

> *The scientific method can teach us nothing beyond how facts are related to, and conditioned by, each other. … The knowledge of what is does not open the door directly to what should be. One can have the clearest and most complete knowledge of what is, and yet not be able to deduce from that what should be the goal of our human aspirations.*[19]

For Einstein, we need a 'big picture' of life, of which science is an important part – but *only* a part. Einstein's remarks help us to articulate the importance of interdisciplinarity in allowing us to develop the 'big picture' of life which many psychologists consider to be important to human wellbeing and proper functionality. Yet while empirical sciences may show us the importance of developing an integrated view of life, they cannot determine what specific form this may take.

A 'big picture' approach seeks to do justice to the complexity and interconnectedness of our world, without being overwhelmed by its details. It is about discerning patterns and structures, allowing the underlying coherence and order of our world to be grasped. It is about the integration, not simply the accumulation, of multiple insights. The French mathematician and philosopher of science Henri Poincaré points out that 'science is made with facts, like a house is made with stones, but an accumulation of facts is no more a science than a pile of stones is a house.'[20] It is not enough to pile up observations and ideas; they need to be held together in a coherent whole. A 'big picture' gathers, coordinates, and synthesizes multiple aspects of life, so that we can see the wholeness of our world, without losing sight of its individual details.

Most would argue that the deepest questions about human life cannot be answered using a single disciplinary perspective or research method. It is

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[19] Albert EINSTEIN, *Ideas and Opinions.* New York: Crown Publishers, 1954, 41–2.
[20] Henri POINCARÉ, *Science and Hypothesis.* London: Bloomsbury Academic, 2018, 103.

certainly true that writers such as Sam Harris and Richard Dawkins argue that science can provide meaningful and reliable answers to ethical and existential questions; both these, however, have faced considerable criticism, not least on account of the circularity of their arguments and their obviously reductive agendas. The position I take is that these questions are properly answered by the natural sciences, moral philosophy, and theology, while allowing for some degree of interaction across disciplinary boundaries. This highlights the importance, not merely of the correlation of disciplinary insights, but of developing a conceptual framework that underlies and gives legitimacy to this process.

On correlating science and religion

In bringing this lecture to a close, let me briefly consider four frameworks that might help us think about how we can correlate science and religion, and reflect on their merits and their wider application.[21] Science and religion can be seen as, first, offering different maps of reality; second, as providing different perspectives on reality; third, as engaging reality at different levels; and fourth, as representing distinct 'books' that can be read alongside one another. Each of these frameworks assumes that we are dealing with a single reality, but recognizes both the complexity of that reality, and the need for representations that mirror that complexity, rather than selectively reduce and simplify it. Ontological economy may have some virtues; unfortunately, it also has many flaws.

This process of grasping the complex interconnected structure of our scientific and spiritual worlds clearly lies beyond the capacity of any one discipline. It involves the creation of a mental map of reality which enables us to imagine such a complex yet coordinated reality, and thus explore the nature and implications of its interconnections. We need to generate a 'big picture' of reality, which is capable of coordinating its multiple aspects. My own understanding of how we can correlate science and religion rests partly on what I would describe as a 'classical ontology,' which includes the following ideas. Reality is one and truth indivisible. Each individual science or discipline aims at truth, seeking to portray accurately some part of reality. But these multiple representations of reality must, if they are all to be true, fit together to give a 'big picture' which is true of reality as a whole. No individual discipline can do this on its own; we need a metaphysical framework or ontology to hold everything together. No single 'portrayal' or theory of reality is good enough in itself; it is a snapshot that needs to be added to others to allow us to have a panoramic vision of reality.

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[21] MCGRATH, *Territories of Human Reason*, 50–74.

Now the four imaginative frameworks I shall explore in what follows are best seen not as precise accounts of this relationship, but rather ways of envisaging it, allowing possible modes of interaction and correlation to be grasped and pursued. None of them is 'right', in that these are imaginative frameworks that have been developed to help us grasp and understand a complex intellectual landscape. Each has its merits; they are all compatible, so that there is no obligation to choose only one of these approaches, and discard or disregard the others. From a religious standpoint, each allows the natural sciences to be treated as a potential dialogue partner, without becoming ensnared in the reductionist and colonialist agendas of scientism. So let us consider each of these four approaches.

1. *Different Perspectives*. This approach invites us to imagine how a complex structure appears from different angles. The Oxford theoretical chemist Charles A. Coulson, for example, invited his readers to imagine walking round the Scottish mountain Ben Nevis, which looks very different when seen from different angles.[22] A total account of the structure requires the integration of multiple perspectives, in that all are significant elements of the greater whole. This approach stresses the importance of offering a comprehensive account of reality, and notes the danger of reductive elimination by focusing only on one perspective, one way of looking at a complex structure.

2. *Different Levels*. A second approach recognizes that both the natural sciences and religion are stratified – that is, that they are multilayered, and can be engaged at different levels. In recent years, much attention has been paid to the different 'levels' at which scientific explanation functions.[23] Physics deals with one level of reality, chemistry with another, and biology with a third – yet these are all different levels of the same universe. This approach treats both scientific and religious realities as multi-levelled, with each layer or stratum requiring its own distinct form of investigation, and encouraging reflection on how these insights might be correlated to give a larger overall account of reality.

3. *Different Maps*. As we noted earlier in this lecture, Mary Midgley developed the notion of 'mapping' reality as a means of confronting a tendency towards inappropriate reductionism. Science and religion can both be thought of

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[22] Charles A. COULSON, *Christianity in an Age of Science*. London: Oxford University Press, 1953, 20–1.

[23] Aku VISALA, 'Explaining Religion at Different Levels: From Fundamentalism to Pluralism,' in Roger Trigg and Justin L. Barrett (eds.), *The Roots of Religion: Exploring the Cognitive Science of Religion*. London: Routledge, 2016, 55–74.

as mapping their distinct territories, and allowing their key ideas and themes to be identified and correlated. Just as the superimposition of maps can allow the correlation of physical and political realities, mapping the domains of science and religion both preserves their essential features, while facilitating their colligation.

4. *The Two Books*. Finally, we should note the great Renaissance metaphor of the natural world and the Christian Bible as 'God's Two Books' - distinct in character, yet sharing the same author, and capable of being read side by side to yield mutual illumination.[24] The metaphor of the 'Two Books of God' is grounded in the belief that the God who created the world is also the God who is disclosed in and through the Christian Bible, thus encouraging the idea that the scientific study of nature would enrich the believer's appreciation of the beauty and wisdom of God as creator.

Each of these imaginative frameworks helps us explain the successes of the natural sciences, while helping us understand the limits of science, and how we might develop a richer and deeper account of humanity. Each has its own distinct identity and strengths. They are best understood as ways of imagining this relationship, rather than as offering a precise rational or logical account of its multiple aspects. For example, the boundary between 'perspectives' and 'levels' is more fluid than is sometimes appreciated. It is helpful to remember that the origins of linear perspective at the time of the Renaissance arose from an artistic desire to be able to convey depth in drawings, thus enabling a two-dimensional representation of a three-dimensional reality.

Conclusion

I need to conclude, not because I have resolved these questions, but because I have run out of time! This lecture has mapped out some issues and approaches relating to interdisciplinary dialogue and discussion, focusing on the field of science and religion. Although I am critical of Edward O. Wilson's influential work *Consilience: The Unity of Knowledge*, I entirely agree with him that we need to be able to make connections across disciplines in the quest for meaning and a proper understanding of the human situation. Let me quote what I think is the best sentence in this work: 'We are drowning in information, while starving for wisdom.'[25]

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[24] Giuseppe TANZELLA-NITTI, 'The Two Books Prior to the Scientific Revolution.' *Annales Theologici* 18 (2004): 51–83.

[25] Edward O. WILSON, *Consilience: The Unity of Knowledge.* New York: Vintage, 1999, 294.

We need wisdom today – and science offers us knowledge, where we really need understanding and wisdom. As the great German philosopher Wilhelm Dilthey famously remarked, 'we *explain* nature, but we *understand* the life of the soul.'[26] For me, understanding is about seeing the relation of parts to other parts, and to the greater whole, reassuring us that they are in some way interconnected in a coherent 'big picture.' In this lecture, I have tried to provide a modest yet workable intellectual framework to encourage and enable a productive conversation across disciplines to help us gain both understanding and wisdom, and I hope that you may find this helpful in your own situations as you aim to develop a truly humane philosophy.

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