Mere Materiality?

Towards an Indian Christian Theology of Nature

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LOUTER MATERIALITEIT?

OP WEG NAAR EEN INDIASE CHRISTELIJKE THEOLOGIE VAN DE NATUUR

(met een samenvatting in het Nederlands)

Proefschrift

ter verkrijging van de graad van doctor
aan de Protestantse Theologische Universiteit te Utrecht,
op gezag van de rector, prof. dr. M.T. Frederiks,
ingevolge het besluit van het college voor promoties
in het openbaar te verdedigen te Utrecht
op maandag 24 november 2025 om
13.00 uur

door

CHARLES SEMUAL CHRISTIAN

geboren op 16 juli 1981 te Ahmedabad

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Acknowledgements

A journey without companions can feel tedious. I was fortunate to be surrounded by people who made it bearable, possible, and joyful.

When I had finished my Master's in Theology, got married, and had two children, pursuing a PhD in theology was not the idea I would allow to intrude into my "settled" life. It was Pieter Kwant who first convinced me that a PhD was worthwhile and that I had what it takes. It took a long time for me to take the plunge, but Pieter stayed on the course. I am thankful to him.

I am grateful to Benno van den Toren for agreeing to supervise my work, despite my doubts about my ability to undertake it. His own work in intercultural theology, insights and guidance have only enriched my research for the better. From generously opening their house to us and later helping us find a house that would become our home for the rest of my PhD studies, Benno and Berdine have been rock-solid support, both professionally and personally. His hospitality, commitment to God and to high academic standards, and love for international students are exemplary. In all this, Benno has truly been a 'doktorvater' to me.

I first met Prof Paul van der Velde, my second supervisor, in his office at the Radboud University, which was then full of books and Indian artefacts. I was immediately impressed with his knowledge of Indian languages, and we soon ended up chatting in Hindi. He combines knowledge and grace effortlessly, which made it easy and hugely productive for me to work under him. I am grateful to him.

I am indebted to Langham International, Protestantse Theologische Universiteit and Stichting Zonneweelde, without whose financial support this research would not have seen the light of day.

I thank the review committee members, Prof. Dr. Maarten Wisse, Prof. Dr. Dorrotya Nagy, Dr. Varughese John, Dr. Atola Longkumer, and Dr. Megan Loumagne Ulishney for sparing their time to read and engage with my work. Their critical feedback and recommendations have immensely benefited this research.

I am grateful to my colleagues in the Intercultural Theology department, with whom I could share my knowledge. You provided me with a structure of accountability and support that I needed. Your constructive feedback, critique, comments, recommendations, and nudges have made this research come a long way. I am particularly thankful to Marten, Jerry, Enrieke and Jonán, with whom I shared an office, and much of my academic life: you have broadened my theological horizons.

I am grateful to Cees Griffioen for his friendship, words of wisdom, generosity and timely encouragement. And to Francina de Pater for her support.

Thank you, Tirtsa, for willingly translating the summary of this work into Dutch.

I recognise the contribution of my friends and well-wishers in India. Johnny and Koki Desai have been lifelong mentors whose impact on my life goes beyond this research. Finny Philip,

you have been exceptionally kind. I also thank countless mentors, friends, relatives and my students in India who have shaped my research and life journey.

My father's constant counsel to keep God's calling first in life, and my mother's selfless service, have been inspirational in leading me towards seeking theological education and persevering through it. I am grateful to my brother, Richard, whose exemplary simplicity and commitment to God and support have been valuable. I also thank my parents-in-law, whose patience and generosity have made this research possible.

I am grateful to my wife, Jacklyn, for trusting me and for agreeing to join me on this adventure, setting aside her plans and dreams. The initial months of our life in the Netherlands were spent in isolation (Covid-19), babysitting our young children. Although there were glimpses of miracles and a growing support from the community of people who knew us and loved us, we know that nothing came easy. You embraced everything that came with my involvement in this research: loneliness, financial insecurity, overlooking of your own needs, being overburdened with tasks, managing expectations, and much more. You did not ask for this life, and yet when the going got tough, you stayed. So, thank you!

I can't be grateful enough to Anaya and Aahan, my two children, who regularly dragged me out of my "ivory tower" to life on this earth. You persisted in achieving your goal, sometimes to my annoyance, until I had once again learnt to set my priorities right. You taught me what it means to relish simpler joys in life. Perhaps one day, you will understand why I took up this research, and when you do, know that there is more than a little bit of you in it.

CHAPTER ONE

Introduction

The natural world has been a source of fascination throughout human history. It has elicited myriads of reactions from charm, curiosity, and fear to wonder. Over centuries, humans have studied its patterns and have organised their lives within it. Cultural traditions, agricultural practices, economies, religious and social rituals, festivals, and lifestyles revolve around the rhythms of nature. However, although human beings are part of one natural world, different civilisations have engaged with the natural world in diverse and sometimes even contrasting ways, depending on their geographical and cultural location in this vast natural world. Take for instance that Indian literature often portrays summer with images of arid landscapes, sweltering temperatures and monsoon anticipations. Western literature, in contrast, typically depicts it as a season of leisure, travel and outdoor activities. The "geographical" and "cultural" location, thus, shapes how one engages with nature; it raises one set of questions to some and another to others, leading them to imagine diverse approaches to answer those questions. This diversity in engaging with nature has been a field of academic observation and interest, particularly the social studies of science.

The seeds of sociology of science were first sown in the famous works of Michael Polanyi, Thomas Kuhn and Robert Merton.[1] These works contended that scientific practice is influenced by the subjective and social aspects of a scientist's life and partly driven by historical, social and cultural processes of its location. Over time, there has been a steady increase in the literature on how society shapes scientific knowledge, practices, institutions, and the dispersion of science among the public.[2]

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[1] Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (London: Routledge & Keagan Paul, 1958); Thomas S. Kuhn, *The Structure of Scientific Revolutions*, 2nd edition (Chicago, IL: University of Chicago Press, 1970), 90; Robert K. Merton, *The Sociology of Science: Theoretical and Empirical Investigations* (Chicago, IL: The University of Chicago Press, 1973).

[2] The literature dealing with the sociology of science is immense and growing. Nevertheless, some important sources are: Bruno Latour and Steve Woolgar, *Laboratory Life: The Construction of Scientific Facts* (Princeton, NJ: Princeton University Press, 1979); Harry Collins and Trevor Pinch, *The Golem: What You Should Know About Science* (Cambridge: Cambridge University Press, 1979); Andrew Pickering, *Constructing Quarks: A Sociological History of Particle Physics* (Chicago: The University of Chicago Press, 1984); Peter Berger and Thomas Luckmann, 'The Social Construction of Reality', in *Social Theory Re-Wired: New Connections to Classical and Contemporary Perspectives* (New York, NY: Routledge, 2023), 92–101.

Further, and particularly under the postmodern turn, there is a growing recognition that the natural world itself is so diversified that our approaches and representations of it are shaped by what is available to us as "nature".[3] Thus, "nature" is plural,[4] and what one understands by it is "constituted in social thought"[5] or "socially mediated."[6] These observations helpfully appreciate the multifaceted and complex reality that the natural world is and the influence one's situatedness has on interpreting it.

However, if one's engagement with nature is decided by one's location and a certain given notion of "nature", will not the knowledge of nature gained from that particular cultural location also be loaded with biases and prejudices? While for the social studies of science, the answer is evidently affirmative, it has had significant implications for diverse fields of knowledge, particularly natural science, as the question raises suspicions over its supposed claim of having access to "pure," "neutral," and "objective" knowledge of nature. Whether natural sciences provide an "objectively" accurate view of the world or not was the bone of contention in what came to be known as the "science wars" in the latter half of the 20th century.

On one side of the battleline were those holding the predominant view of naïve realism, the idea that the natural world is available to human observers in its unfiltered form and that human interpretations of the natural world are free of bias and cultural conditioning. On the other side stood those who challenged it.

Although the intensity of the "science wars" has diminished since the turn of the century, the debates have offered crucial building blocks for the epistemology of human knowledge. Most importantly, it has pushed us to recognise the social situatedness of knowledge, on the one hand, and the desirability of pursuing trustworthy knowledge, on the other. These developments, as we will see, have set up contemporary discourses on nature at the interface of science and religion in a certain way so that a new space has emerged to creatively articulate the Christian theology of nature.

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[3] Sandra G. Harding, *Whose Science? Whose Knowledge?: Thinking from Women's Lives* (Ithaca, NY: Cornell University Press, 1991), 87; Sandra G. Harding, *Is Science Multicultural?: Postcolonialisms, Feminisms, and Epistemologies* (Bloomington, IN: Indiana University Press, 1998), 67.

[4] Frédéric Ducarme and Denis Couvet, 'What Does "Nature" Mean?', *Palgrave Communications* 6, no. 1 (2020): 1.

[5] Harding, *Whose Science? Whose Knoweldge?*, 165.

[6] Alister E. McGrath, *A Scientific Theology: Nature* (Grand Rapids, MI: William B. Eerdmans Publishing, 2001), 1:87, 133.

However, following the lead of sociological approaches, such a theology of nature cannot be created from nowhere. One has to begin from a particular context. In this research, as a Christian theologian from India, I take modern India as my primary context. Nevertheless, my experience of living in the Netherlands and extensive reading on the interface of science and religion in the trans-Atlantic world continues to influence and enrich this research.

To return to my contention, the sociological studies on science and postmodern approaches have created a space to freshly articulate a theology of nature. To chisel out a theology of nature that grows out of the context of India but is in constant conversation with Western debates and is critically informed by the postmodern-postcolonial approaches is the burden of this research.

1.1 Nature in Science and Religion – Situating the Research

In this section, I sketch the contemporary science and religion discourse in Western and Indian settings, particularly under the influence of social studies and postmodern approaches. The purpose is to situate the research in the more extensive discussion of science and religion by elaborating on the new space opened by sociological studies of science and observing the opportunities and challenges it provides for a theology of nature to emerge.

Western Landscape[7]

Although science and religion have shaped each other over centuries, the systematic exploration of this mutual influence has been relatively new. The pioneering works of Ian Barbour and Thomas Torrance are credited with developing a comprehensive study of the interface of science and religion.[8] Over the decades, the field has diversified with different models, voices, and studies that challenge existing paradigms and expand our knowledge about science and religion relations.

First, it has countered the widespread but dubious notion that science and religion are perennially at odds. The relationship between science and religion has been for long presumed to be that of "warfare" or "conflict" in the Western context. The "warfare model" emerged with Andrew White's *A History of the Warfare of Science with Theology in*

[7] I use the word "western" here and henceforth to refer to North-Atlantic countries.
[8] Helen De Cruz, 'Religion and Science', The Stanford Encyclopedia of Philosophy, 2022, https://plato.stanford.edu/archives/fall2022/entries/religion-science/.

Christendom.[9] Similarly, the "conflict model" made its way through William Draper's *History of the Conflict between Religion and Science*[10] and later became one of the well-known models of science and religion relation described in Barbour's typology.[11] Recent historical investigations have found the warfare or conflict model to be simplistic. Instead, they disclose a "complex" and "complementary" relationship between science and religion, particularly Christianity.[12] It is now recognised that the boundaries of what is understood as "science" and "religion" today were sketchy throughout history. Its strict inscription is a "modern construct."[13] What was labelled as a science-religion conflict was often driven by political purposes. Moreover, a clear demarcation of "religion" was underpinned by the motivation to separate it from "science" and frequently carried colonial undertones.[14] Recent studies suggest that the majority of scientists themselves do not see conflict as the only or even the most prominent model in the interface of science and religion.[15]

Secondly, it has opened space for Christian theologians to articulate their understanding of nature concerning natural science afresh. Since "nature" is now admitted to be a plural, dynamic, socially constructed, and metaphysically loaded concept, all attempts to grasp it in a disembodied manner and as a neutral entity are now considered elusive.[16] This has allowed Western Christian theologians of nature to unmask the metaphysical beliefs underlying other conceptions of nature and claim an opportunity to present their view of nature as "creation" at

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[9] Andrew Dickson White, *A History of the Warfare of Science with Theology in Christendom* (New York, NY: Appleton, 1896).

[10] John William Draper, *History of the Conflict between Religion and Science* (London: Henry S. King & Co., 1875).

[11] Ian Barbour, *When Science Meets Religion: Enemies, Strangers Or Partners?* (New York, NY: HarperCollins Publishers, 2000).

[12] Reijer Hooykaas, *Religion and the Rise of Modern Science* (Edinburgh: Regent College Publishing, 1972); Christopher B. Kaiser, *Creational Theology and the History of Physical Science: The Creationist Tradition from Basil to Bohr* (Leiden: Brill, 1997); Peter Harrison, *The Bible, Protestantism, and the Rise of Natural Science* (Cambridge: Cambridge University Press, 1998); Stanley L. Jaki, *The Savior of Science* (Grand Rapids, MI: William B. Eerdmans Publishing, 2000); John Hedley Brooke and Ronald L. Numbers, eds, *Science and Religion Around the World* (Oxford: Oxford University Press, 2011).

[13] M. Despland and G. Vallée, eds, *Religion in History: The Word, the Idea, the Reality* (Waterloo, ON: Wilfied Laurier University Press, 1992); Peter Harrison, *'Religion' and the Religions in the English Enlightenment* (Cambridge: Cambridge University Press, 2002); Peter Harrison, '"Science" and "Religion": Constructing the Boundaries', *The Journal of Religion* 86, no. 1 (2006): 1.

[14] Edward Said, *Orientalism* (New York, NY: Pantheon Books, 1978); Talal Asad, *Genealogies of Religion: Discipline and Reasons of Power in Christianity and Islam* (Baltimore, MD: The John Hopkins University Press, 1993); Richard King, *Orientalism and Religion: Post-Colonial Theory, India and 'The Mystic East'* (London: Routledge, 1999).

[15] Elaine Howard Ecklund, *Science vs. Religion: What Scientists Really Think* (New York, NY: Oxford University Press, 2010).

[16] R. G. Collingwood, *The Idea of Nature* (London: Oxford University Press, 1965); Harding, *Whose Science? Whose Knoweldge?*; Peter Harrison, 'What Is Natural Theology? (And Should We Dispense with It?)', *Zygon* 57, no. 1 (2022): 114–40.

the roundtable of discussion on nature.[17] Simultaneously, there has been a move from "natural theology" to the "theology of nature": while the former advanced from nature to the revelation of God, the latter recognises the impossibility of a neutral way of seeing nature and takes the opposite route of exploring it from an explicitly religious, in this case, Christian, point of view.[18] This move is evident in Ian Barbour,[19] Wolfhart Pannenberg,[20] Colin Gunton,[21] Sally McFague,[22] John Polkinghorne[23] and Alister McGrath,[24] although all of them are not necessarily motivated by the social constructivist analysis.

Thirdly, the plurality of "nature" has created new ground for interreligious dialogue. In fact, since the turn of the century, the field of science and religion has expanded beyond European and Christian "provincialism" to recognise religious pluralism.[25] Literature that engages natural science with non-Christian beliefs, particularly Eastern religions, has increased by leaps and bounds, raising new questions and concerns and adopting new methodologies.[26] The new encyclopedic collections on science and religion increasingly include the dialogue of science with religions other than Christianity.[27] Given this diversification, the question of a dialogue between different readings of nature becomes

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[17] Gordon D. Kaufman, 'A Problem for Theology: The Concept of Nature', *Harvard Theological Review* 65, no. 3 (1972): 337–66; Robert Quam, 'Creation or Nature? A Manner of Speaking', *Word & World* 11 (1991): 2; Alister E. McGrath, *Re-Imagining Nature: The Promise of a Christian Natural Theology* (Chichester, West Sussex: John Wiley & Sons, 2017).

[18] McGrath, *Re-Imaging Nature*, 21.

[19] Ian G. Barbour, *Issues in Science and Religion* (New Jersey, NJ: Prentice-Hall, Inc., 1966), 452ff.

[20] Wolfhart Pannenberg and Ted Peters, *Toward a Theology of Nature: Essays on Science and Faith* (Louisville, KY: Westminster/John Knox Press, 1993).

[21] Colin E. Gunton, *The Triune Creator: A Historical and Systematic Study* (Edinburgh: Edinburgh University Press, 1998).

[22] Sallie McFague, 'Imaging a Theology of Nature: The World as God's Body', in *Liberating Life: Contemporary Approaches to Ecological Theology*, ed. Charles Birch, William Eaken, and Jay B. McDaniel (New York, NY: Orbis Books, 1990), 201–27.

[23] John Polkinghorne, *Science and the Trinity: The Christian Encounter with Reality* (New Haven, CT: Yale University Press, 2004).

[24] McGrath, *Re-Imaging Nature*.

[25] John Hedley Brooke, *Science and Religion: Some Historical Perspectives* (Cambridge: Cambridge University Press, 1991), 1.

[26] B. Alan Wallace, ed., *Buddhism and Science: Breaking New Ground* (Delhi: Motilal Banarasidass Publishers, 2004); Eric R. Dorman, 'Hinduism and Science: The State of the South Asian Science and Religion Discourse', *Zygon* 46, no. 3 (2011): 3; Jonathan B Edelmann, 'The Role of Hindu Theology in the Religion and Science Dialogue', *Zygon* 47, no. 3 (2012): 3. The literature concerning how other religions themselves approach science is profuse and cannot be cited in entirety here. I will engage with some of the sources, particularly those related to modern Hinduism, in the second chapter.

[27] Philip Clayton and Zechary Simpson, eds, *The Oxford Handbook of Religion and Science* (Oxford: Oxford University Press, 2006).

natural. Several Christian thinkers have begun to reflect on the interreligious dialogue on nature and theologising interreligiously.[28]

Thus, the influence of social studies of science has enriched the fields of science and religion, particularly giving a new lease of life to Christian theological voices in the West and opening new possibilities for dialogue on the interpretations of nature with both science and other religions.

Indian Landscape

Like in the West, sociological studies in India with postmodern approaches have significantly influenced contemporary discourses on the natural world. Given India's colonial history, postcolonial approaches have become particularly dominant among contemporary methodologies in the study of science and religion. These approaches have, led to three developments, which are parallel to those explored above in the Western setting, making it possible to have a fresh dialogue on nature in the context of science and religion discussion.

Firstly, the postmodern and postcolonial approaches have offered space to the marginalised voices. For one, if modern science's claim of neutral and, therefore, universal knowledge is not true,, other cultures, too, must have their own knowledge systems and sciences. This has led to the emergence of resources that investigate the history of science in pre-colonial India in fields as diverse as mathematics, metallurgy, astronomy, medicine and alchemy.[29] Other contemporary studies taking postcolonial approaches critique the claim of natural science as a neutral and universal method by exposing the Eurocentric biases inherent in modern science and the perpetuation of colonial hegemony through Western-style institutes, techniques, and practice. They argue that far from being an innocent pursuit of

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[28] Keith Ward, *Religion and Creation* (Oxford: Clarendon Press, 1996); Amos Yong, *The Cosmic Breath: Spirit and Nature in the Christianity-Buddhism-Science Trialogue* (Leiden: Brill, 2012).

[29] D. M. Bose, S. N. Sen, and B. V. Subbarayappa, *A Concise History of Science in India* (New Delhi: Indian National Science Academy, 1971); Arthur L. Basham, 'The Practice of Medicine in Ancient and Medieval India', in *Asian Medical Systems: A Comparative Study*, ed. Charles Leslie (Berkeley, CA: University of California Press, 1976), 18–43; Debiprasad Chattopadhyaya, *Science and Society in Ancient India* (Calcutta: Research India Publications, 1977); Brajendranath Seal, *The Positive Sciences of the Ancient Hindus* (Delhi: Motilal Banarsidass, 1985); George Gheverghese Joseph, *The Crest of the Peacock: Non-European Roots of Mathematics* (Princeton, NJ: Princeton University Press, 2010) A rich collection of literature in this genre is found in the repository of the Indian Journal of History of Science established in 1966. The journal includes works of eminent scientists, mathematicians, and philosophers such as P. C. Ray, Meghnad Saha, Satyendra Natha Bose and Brajendra Nath Seal.

knowledge, modern science has been an extension of the Western colonial project.[30] The field is also now enriched with new resources that compile the contribution of women[31] in the development of modern science in India alongside those that highlight the gender discrimination committed against them.[32] The discrimination against Dalits through the practice of science and their perceptions of nature has just begun to surface and has further contributed to the discussion.[33]

This postmodern space is crucial for Indian Christians to vocalise their view of nature as they have long been doubly marginalised in the science and religion debate. On the one hand, in the global context of science and religion discussion, the Western voices lead the discourse, churning out models, approaches, theories and resources that are considered universal. The voices from other parts of the world are considered "contextual", and the need to engage with them is barely realised. On the other hand, when the discursive space is opened up for Indian voices, it is assumed that genuinely Indian voices are Hindu voices and vice versa. An *Indian Christian* voice, therefore, do not make the cut. Moreover, as most Indian Christians have a Dalit or low-caste identity, their perspectives are considered that of intellectually inferior quality. The postmodern space allows Indian Christians to confidently contribute to the science and religion interface by positing an understanding of nature that emerges from their unique positionality. This research, aimed at exploring an Indian Christian theology of nature, therefore, is also an attempt to create what Bom and Toren call a "more equal debate" in science and religion.[34]

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[30] Claude Alphonso Alvares, *Homo Faber: Technology and Culture in India, China, and the West from 1500 to the Present Day* (The Hague: Martinus Nijhoff Publishers, 1980); Daniel R. Headrick, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century* (New York, NY: Oxford University Press, 1981); Ashis Nandy, ed., *Science, Hegemony and Violence: A Requiem for Modernity* (Tokyo: United Nations University, 1988); Claude Alvares, *Science, Development and Violence: The Revolt against Modernity* (Oxford: Oxford University Press, 1992); Deepak Kumar, *Science and the Raj, 1857-1905* (New Delhi: Oxford University Press, 1997).

[31] Neelam Kumar, ed., *Women and Science in India: A Reader* (New Delhi: Oxford University Press, 2009).

[32] Abha Sur, 'Dispersed Radiance: Women Scientists in CV Raman's Laboratory', *Meridians: Feminism, Race, Transnationalism* 1, no. 2 (2001): 95–127.

[33] Renny Thomas, 'Brahmins as Scientists and Science as Brahmins' Calling: Caste in an Indian Scientific Research Institute', *Public Understanding of Science* 29, no. 3 (February 2020): 3; Mukul Sharma, *Caste and Nature: Dalits and Indian Environmental Politics* (New Delhi: Oxford University Press, 2017); Mukul Sharma, '"My World Is a Different World": Caste and Dalit Eco-Literary Traditions', *South Asia: Journal of South Asian Studies* 42, no. 6 (2019): 1013–30.

[34] Klaas Bom and Benno van den Toren, 'Toward an Intercultural and More Equal Debate on Science and Religion: Insights from French-Speaking Africa', *Philosophy, Theology and the Sciences* 9, no. 2 (2022): 197–216.

Secondly, postmodern and postcolonial approaches have provided a new platform to explore the relation between science and religion in the context of India. If cultural location is central to discourses on nature, it suddenly becomes impossible to ignore the role of religion in relation to science, including promoting or hindering its growth. This is why several scholars of the sociology of science in India, mainly inspired by the works of Joseph Needham, have been curious about the dynamics of religious beliefs and their influence on the development or decline of science.[35] As in the West, this has led to the emergence of "theologies of nature." However, in India's unique context and given the historical contingencies, the Advaitic conception of nature has emerged as the most viable and intellectually dominant paradigm. Several strands of literature, taking diverse approaches, such as historical and philosophical, claims a perfect alignment between a certain Advaitic understanding of nature and the principles of natural sciences, thereby initiating a conversation between science and religion.[36] Other "indic" religions have also joined the conversation.

Thirdly, like in the West, the postmodern space has facilitated new avenues for interreligious dialogue on the nature of nature. As a multi-religious country, interreligious dialogue is natural to India. However, by allowing each religion to claim a stake in science and religion discussion, the postmodern space has also stimulated interreligious apologetics. Several religions not only claim the viability of their faith with science but also point out the incommensurability of other faiths. Such claims are often driven by jingoistic narratives rather than a genuine interest in dialogue. For instance, a strong stream of Vedic science holds sway over the broad culture climate of contemporary India and exerts its influence on the science and religion interface. The distinction between science and pseudoscience is regularly blurred in this stream of relating science and religion by invoking what Banu Subramaniam calls a "mythoscientific" corpus.[37] Natural sciences

[35] Debiprasad Chattopadhyaya, *Lokayata: A Study in Ancient Indian Materialism* (Delhi: People's Publishing House, 1959).

[36] N. C. Panda, *Maya in Physics* (Delhi: Motilal Banarsidass Publishers Pvt. Ltd., 1991); Raja Ram Mohan Roy, *Vedic Physics: Scientific Origin of Hinduism* (Toronto, ON: Golden Egg Publishing, 1999); Amit Goswami, 'Physics within Nondual Consciousness', *Philosophy East and West* 51, no. 4 (2001): 535–44.

[37] Banu Subramaniam, *Holy Science: The Biopolitics of Hindu Nationalism* (Seattle, WA: University of Washington Press, 2019), xi.

here are often claimed for political gain and minority bashing.[38] These realities of Indian context make the subject of the theology of nature not merely alive, but also rather urgent.

Moving Forward

What are the implications of the preceding discussion for our current project? While the postmodern turn offers space for an Indian theology of nature to emerge, what should be its content? Where and how do we locate it? What approach and methodologies are suitable for a task like this. The initial challenge lies in identifying the existing discourses from where crucial themes for a theology of nature can be excavated. The aim here is not to reinvent the wheel but to build on existing discourses and voices.

I argue that at least two discourses in India have explored theological themes related to nature. The first is a series of interreligious exchanges between Advaitic and Indian Christian thinkers at the cusp of modern science in India. Both groups lived in times when modern science held a commanding force and introduced a certain understanding of nature that sparked different reactions from these thinkers. Current Hindu perspectives on nature vis-à-vis modern science derive much of their content and energy from these early Advaitic deliberations. Contemporary Christian engagements with Hinduism similarly draw upon the insights of early modern Indian Christian thinkers. Moreover, as I have argued above, the postmodern space has created new avenues for interreligious dialogue on nature both in the Western and Indian contexts. As the world grows increasingly multi-religious, a perspective informed by interreligious exchange will provide valuable insights and contribute to a deeper understanding of the theology of nature.

The second discourse, referred to as liberative discourse, emerges from Dalit perspectives on nature. Although the Dalit perspective has historically been marginalised in both interreligious and science-religion dialogues, its influence persists in India's broader popular and academic discourse, echoing the voices and struggles of a significant population. Dalit thinkers have made substantial contributions to recent discussions on

[38] Banu Subramaniam, 'Archaic Modernities: Science, Secularism, and Religion in Modern India', *Social Text* 18, no. 3 (2000): 67–86; Meera Nanda, *Prophets Facing Backward: Postmodern Critiques of Science and Hindu Nationalism in India* (New Brunswick, NJ: Rutgers University Press, 2003).

nature that are relevant to the science and religion discussion and can provide us crucial motifs for an Indian Christian theology of nature.

However, I have already indicated above that the Western landscape also faces challenges and opportunities at the postmodern turn that are distinct, but also similar to India. This promises a fruitful intercultural conversation between Indian and Western voices. Therefore, to broaden the conversation beyond the context of India, I add a third discourse to the conversation, namely, the Trinitarian discourse. With that, the research aims to tap into resources that are developed in a different context than India while simultaneously contributing to the Western discourses it engages with. I have further provided the rationale for my selection of discourses at the outset of each chapter that engages with them. In light of the foregoing discussion, we now turn to formulate questions that will guide this research.

1.2. Research Questions

To put the primary concern of this research, therefore, in the form of a question is to ask:

> What contribution can an intercultural theological conversation between interreligious, liberative and trinitarian discourses make to the contextual theology of nature in India and beyond?

To answer this central question, the research aims to take up an in-depth investigation of at least three diverse discourses in the discussion of nature. It will explore theological themes and motifs that emerge in these discourses while paying serious attention to the contexts that shape them. Consequently, it will ask the following secondary questions:

1. What theological debates and motifs emerge in the interreligious dialogue on nature in the context of India?
2. What theological debates and motifs emerge in the liberative discourse on nature in the context of India?
3. What theological debates and motifs emerge in the Trinitarian understanding of nature in the Western context?
4. What theological debates and motifs emerge in the intercultural conversation on nature in the context of science and religion discussion?

Having specified the research questions, we now turn to the approach, methods and methodologies suitable for answering this research's central question.

1.3. Approach, Methods and Methodology

An Exercise in Contextual Theology

The overview of science and religion dialogue in the Indian and Western contexts indicates that they have distinct dynamics, and, therefore, the challenges and opportunities offered by postmodern analysis in the two contexts are also distinct. For instance, of the two contexts, the postcolonial condition is unique to India, which demands a distinct form of dialogue, whereas the Western discourse on science and religion is construed in the shadow of science and religion warfare and secularism as a predominant ideology.

As far as this research is concerned, it follows the lead of the postmodern conclusion concerning the cultural locatedness of all thought. To properly situate it in its own distinct context is to acknowledge that carried out by an Indian Christian and emerging largely from the Indian realities, this research is primarily an exercise in contextual theology of nature. It aligns itself with the conclusion of postmodern analysis that our visions of nature cannot be arrived at by breaking away from our socio-cultural moorings but through them. Rather than being restrictive, recognising the situatedness of this research makes its distinctive contribution to the global discussion on the theology of nature genuine.

Method of Intercultural Theology

Although we just situated this research on the theology of nature in its home context, there are at least three reasons why it cannot remain limited to its primary context but must become intercultural.

Firstly, the fundamental question of the nature of nature makes discussion on nature inter and intra-contextual. If the brief overview above brought forward some distinct themes and contexts in the Western and Indian dialogues on nature, it also pointed to several overlapping concerns underlying their distinctive nature. For instance, the issue underlying the theological discussions on nature in both contexts would be the God-world relationality (as would become increasingly clear during this research). However, whereas in the Western context, the God-world relationality emerges primarily from its conversation with

deist and naturalist models, in the Indian context, the Advaitic model has been the most significant conversation partner. Despite these distinct contexts, God's relation to nature remains an essential issue in both contexts. It shows the fundamental nature of such questions and reveals what is at stake in the discussion on nature. Theology of nature, thus, is essentially a global and ecumenical discourse that brings diverse contextual voices together in a fruitful conversation.

Secondly, the shared fundamental question of the nature of nature makes the mutual exchange between the dialogue partners possible and even desirable. This is because, as placed in different contexts, Indian and Western voices bring their contextual strengths while disclosing the blind spots of the approaches taken by the other. For instance, Western voices may not be able to see the relevance of postcolonial approaches to the study of nature, just as Indian theologians may fail to notice the assumptions underlying the secular take on nature. Indian theology of nature, which, from its beginning, has developed in the interreligious and intercultural context, can contribute to the discourse on nature in the Western world, which is also now becoming increasingly multireligious and multicultural. Intercultural theology can bring diverse voices in a critical engagement for mutual benefit, as Indian theologian Brahmabandhab Upadhyaya puts it: "Let each be its own line, steadied by each other from aberrations."[39]

Thirdly, and from a specific Christian view, intercultural exploration is demanded by the Christian understanding of theological knowledge. Stephen Bevans defines contextual theology as a "mutually critical dialogue" between "the experience of the past, recorded in Scripture and preserved and defended in the church's tradition" and "the experience of the present or a particular context."[40] That these experiences were recorded in a Jewish cultural milieu by Jewish authors and are interpreted for today's context by predominantly non-Jewish readers means that all theological reflection is always inherently intercultural. Moreover, the understanding of the church as a body of Christ and its eschatological presentation as that which comprises people from every tribe and tongue motivate the intercultural engagement taken upon in this study (Rev 7:9). To place this research in the

[39] Brahmachari Rewachand Animananda, *The Blade: Life and Work of Brahmabandhab Upadhyay* (Calcutta: Roy & Son, 1949), 85.

[40] Stephen B. Bevans, 'What Has Contextual Theology to Offer to the Church of the Twenty-First Century?', in *Essays in Contextual Theology*, ed. Stephen B. Bevans and Katalina Tahaafe-Williams (Cambridge: James Clarke & Co., 2019), 3–17.

broader landscape of inter and intra-cultural relations is to merely replicate the multi-cultural heritage of Christian theology.

This project then takes an intercultural approach, following Benno van den Toren's definition of intercultural theology as a discipline that

> orchestrates and studies… [the] conversation between Christian communities from different cultural settings. Contextual theology mainly focuses on the relationship between theology and specific contexts, but intercultural theology enables a critical consideration of that relationship by engaging in a conversation between different contextual theologies.[41]

Because intercultural theology is a conversation between contextual theologies, this research will employ all necessary tools that are equipped for the task of exploring the realities of a given context, such as social and theological analysis, cultural insights, political entanglements and postcolonial approaches.

Although these deliberations offer sufficient justification for taking an intercultural approach for this project, the intercultural framing of the conversation also requires clarity on the place of contextual theologies in their coming together in an intercultural engagement. What opportunities will such an exercise offer, and what limitations will it place on contextual theological expressions? Perhaps this research itself can be a testing ground to help answer these questions.

The fundamental question that raises doubts concerning the sufficiency of intercultural engagement for this project, however, is: can intercultural theology of nature make any truth claim concerning nature, or should it stop at bringing diverse contextual theologies into mutual engagement?

Given the postmodern climate, one may feel hesitant to make any truth claim and rather consider it to be an affront to the global nature of Christianity and the cultural and theological diversity within it. In its attempt to stress the contextual aspects of all theological thinking, the postmodern-postcolonial methods may declare all voices to be mere cultural expressions from their given locations and all truth claims as marks of cultural arrogance. In this way, although the postmodern space opens the discursive arena

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[41] Benno van den Toren, 'Intercultural Theology as a Three-Way Conversation: Beyond the Western Dominance of Intercultural Theology', *Exchange* 44, no. 2 (2015): 125, 2.

to all voices, by the same virtue, it restricts all dialogues. By considering all voices on nature mere cultural constructs and by relativising all truth claims concerning the natural world made in any dialogue on nature, it takes away with another hand what it gives with one. Moreover, since all truth claims for it are just claims for metanarrative and baits for power that it is highly suspicious of, it may reject all truth claims altogether and may rather prefer to maintain a richness of irreducibly different voices.

Additionally, Christianity itself also has a wide spectrum of theological views on nature, which poses a question concerning the normative in the theology of nature. To put it in the context of this research, where God-world relationality is central to the theology of nature, the question is: is there a model of God-world relationality that works as foundational to all Christian theologies of nature and is binding for Christians of all times, cultures, and theological persuasions? Philip Clayton notes that given the diversity of theological views on nature, "consensus on the best overall theological response" has been "rather harder to achieve."[42] If this be the case, which model of God-world relationality be considered normative for the theology of nature? Or should Christians renounce normativity and embrace polycentricity when it comes to God-world relationality?

These questions indicate that, if not properly anchored, intercultural theology itself can oscillate between the universalisation of a certain contextual theology in the name of normativity and the endless pit of relativism. But what is this ground where intercultural theology can be anchored? I argue that Christian revelation itself serves as this foundational ground. Therefore, the crucial question to consider is: Is there a model of God-world relationality that remains faithful to the Christian revelation concerning nature? However, the relationship between Christian revelation and intercultural theology requires further elaboration. I address this by adopting a critical realist approach.

Critical Realism as a Methodology

Natural sciences face a situation similar to intercultural theology, where different hypotheses concerning the investigation of nature are presented and tested not only to confirm "true" theories but also to protect themselves from pseudoscientific theories. Over

[42] Philip Clayton, 'Theology and the Physical Sciences', in *The Modern Theologians: An Introduction to Christian Theology Since 1918*, Third, ed. David F. Ford and Rachel Muers (Maldon: Blackwell Publishing, 2005), 342–56.

the last several decades, particularly in the wake of the social constructivist critique of natural sciences, critical realism has emerged as a "working philosophy of the physical sciences."[43] Developed by Roy Bhaskar, critical realism holds that although reality is always perceived from a certain given cultural location, "the recognition of the role of social factors in the acquisition and representation of knowledge does *not* mean that known is reduced to social determinations."[44] Rather, "ontological finality... rests with nature itself."[45]

Critical realism does not reject social constructivism's contribution but instead builds on it. This is demonstrated by the robust culture of peer review in science, which aims to minimise personal and cultural biases while maintaining the integrity of knowledge gained through rigorous observation, hypothesis formulation, experimentation, and replication. In doing so, it does not undermine the dialogue between peers but rather enhances it. As such, by incorporating the strengths of both realism and social constructivism and avoiding their pitfalls, it promises a third way between them.

Adopting critical realism to a theological project may raise suspicion as it appears to play into the hands of those who ascribe superior status to scientific methods and logic. It may then appear that such a move endangers the independence and authority of theology. This fear is valid, particularly in the Western context, where scientific rationalism is valued above all other epistemological methods and resources. However, to reject critical realism because of its ties with scientific rationality would be to imagine Christian theology as severed from other avenues of knowledge, as if necessarily placed against each other and lapse back into the faith-reason duality. On the other hand, to hold scientific knowledge as exceptional is to have an extremely constrictive view of human knowledge itself. In contrast, sociological studies of science have already busted the myth that science is a unique form of knowledge.[46] Moreover, a common human experience is that we do not employ a single rationality to solve all problems. Humans are generally rather interdisciplinary and pragmatic, employing knowledge from all sorts of fields to deal with

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[43] Alister E. McGrath, *Scientific Theology: Reality* (London: T&T Clark, 2002), 2:123; Delvin Lee Ratzsch, *Science & Its Limits: The Natural Sciences in Christian Perspective*, Contours of Christian Philosophy Contours of Christian Philo (Downers Grove, IL: InterVarsity Press, 2000), 70; Benno van den Toren, *Christian Apologetics as Cross-Cultural Dialogue* (London: T&T Clark International, 2011), 121ff.
[44] McGrath, *Reality*, 2:192 Italics original.
[45] McGrath, *Reality*, 2:17.
[46] Polanyi, *Personal Knowledge*; Toren, *Christian Apologetics*, 131.

the problem at hand and make sense of reality. Critical realism itself has been widely employed as a methodology outside the field of natural sciences.[47]

Thomas Torrance and Alister McGrath, for instance, have advocated for a critical realist approach in science and religion dialogue.[48] For Torrance, theology and natural science are similar in that both are human inquiries, both have high regard for objectivity, both call into question metaphysical assumptions, both recognise their own spheres, and both struggle to relate their language to ordinary language. These parallels make the science-religion dialogue possible.[49] Likewise, the methodology has also been adopted in interreligious dialogue by Benno van den Toren and Kang San Tan,[50] and S. Mark Heim.[51] These works argue that interreligious dialogue assumes a realist understanding, even when it is not clearly acknowledged or articulated and that a realist understanding is required if interreligious dialogue is to propel further than an exchange of perspectives.

However, whether critical realism delivers what it promises is open to investigation. The current research project clearly cannot be a full-fledged critique or a defence of critical realist epistemology. Moreover, assessing the value of the intercultural approach to a particular theological conversation, which is the aim of this project, does not rely on the critical realist methodology as such. That is to say, the two methodologies share a complimentary and synergistic relationship in that both approaches are valuable in themselves, but when combined, they promise to produce an effect that is greater than the sum of their individual effects. Given this promise, in this project, we take critical realism as a working hypothesis and moving beyond the intercultural approach, we use it as a testing ground for the claims of critical realism.

However, employing critical realism in this project requires more clarity, particularly because it includes several fields of inquiry and multiple dialogue partners. To separate and

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[47] Berth Danermark, Mats Ekström, and Jan Ch. Karisson, *Explaining Society: Critical Realism in the Social Sciences* (London: Routledge, 2019); David Pilgrim, *Critical Realism for Psychologists* (London: Routledge, 2019).

[48] Thomas F. Torrance, *Theological Science* (London: Oxford University Press, 1969); Alister E. McGrath, *The Territories of Human Reason: Science and Theology in an Age of Multiple Rationalities* (Oxford: Oxford University Press, 2018).

[49] Thomas F. Torrance, *Theological Science* (London: Oxford University Press, 1969), 286–312.

[50] Benno van den Toren and Kang San Tan, *Humble Confidence: A Model for Interfaith Apologetics* (Downers Grove, IL: InterVarsity Press, 2022).

[51] S. Mark Heim, *Salvations: Truth and Difference in Religion* (Maryknoll, NY: Orbis Books, 1995), 212.

recognise different layers of dialogue, I have employed the triangulation method developed by American philosopher Donald Davidson.

Method of Triangulation

Kathrin Glüer puts the main claim of Davidson's triangulation argument thus: "the content of perceptual belief is determined by a triangle formed by two sentient creatures and an object (or event) in the world."[52] In other words, every conversation has a shared reality, which works as a point of reference for the conversation partners. The method is successfully adopted in systematic theology by Kevin Vanhoozer,[53] as well as by Benno van den Toren, who argues that all intercultural theology should be a Three-Way conversation.[54]

This research identifies triangulation at three levels, which helps us identify distinct layers of conversation as well as imagine the various areas to which this study aims to contribute.

1. The first triangulation is located in the interreligious dialogue between Advaitic thinkers and modern Indian Christian thinkers on the nature of nature. I consider this interreligious dialogue a crucial site to gather Indian Christian theological themes in relation to the natural world. Given that the interlocutors here do not consider nature to be a "godless" realm, the dialogue immediately becomes constrictive and filters out naturalistic visions of nature. The shared reality here, then, is nature as inhabited by God, and the focus turns to the terms in which the God-world relationship should be articulated so that it does justice to the nature of the natural world as well as to the being of God.

2. The second triangulation is an intercultural dialogue between modern Indian Christian theologians and Dalit Christian thinkers on nature. However, given the context, the "materiality" of the natural world and how God relates to it become the points of discussion. As those sharing the same faith commitment, these interlocutors hold that the Christian God is intimately related to the material and the corporeal,

[52] Kathrin Glüer, *Donald Davidson: A Short Introduction* (Oxford: Oxford University Press, 2011), 235.
[53] Kevin J. Vanhoozer, 'On the Very Idea of a Theological System: An Essay in Aid of Triangulating Scripture, Church and World', in *Always Reforming: Explorations in Systematic Theology*, ed. A. T. B. McGowan (Downers Grove, IL: InterVarsity Press, 2006), 125–82.
[54] Toren, 'Intercultural Theology as a Three-Way Conversation'.

although, based on their cultural location, they stress distinct aspects of this relationship.

3. The final triangulation builds upon the intercultural conversation on nature discussed in the third triangulation by including Western Christian theological voices, particularly those espousing a Trinitarian understanding of nature. Here, too, the conversation partners share the Christian belief, but their cultural location influences how they articulate the God-world relationship.

As mentioned earlier, this research brings together several contextual discourses and attempts to initiate an intercultural conversation among them. The triangulation method immediately helps us circumscribe the scope of discussion to a shared reality, that is, nature or the material world. Furthermore, it helps us recognise the cultural constructivist argument that while all dialogue partners may view the natural world as a shared reality and point of reference, they do not possess the same understanding of it. The diversity of interpretations of nature promises a rich intercultural dialogue on nature. At the same time, one also wonders if, given the same shared reality, there are threads of conversation that are common to all discussions. In this sense, the triangulation method further hints at the "contextual" and the "inter-contextual" already present in these conversations. When combined with critical realist methodology, this means that the shared reality, which is the object of the conversation, also has an epistemological priority.

The triangulation method, moreover, identifies several fields and areas to which our present research contributes, such as interreligious dialogue, the science and religion debate, contextual theology and intercultural theological conversations. It also helps us gauge the scope and relevance of critical realist methodology in these various fields.

Of course, the function and advantages of the triangulation method are briefly described here. The details of each triangulation will be progressively filled in during the research. We will revisit the triangulations in a later chapter (6.3) to interpret the data and test the methodology and approaches taken in the research.

1.4. Relevance of the Study

Personal and Social Relevance

"All writing is autobiography," says Donald Murray.[55] I grew up in and around communities that were socially and economically marginalised for generations and had just migrated from villages to urban areas in search of the good life. "Is God interested in my material well-being?" was one of the most ubiquitous questions I faced both personally and from those around me.

Although primarily a theological question, it was also related to science, for science and technology have been the most effective means of procuring material progress. I had known this to be the case with the Western world. Therefore, like several leaders of the new Independent India, I believed that the way out of poverty to prosperity was through science and technology. This is why it was infuriating to see the thresholds of science trampled and exploited for the propagation of superstition and mythology, pushing the impoverished masses further into their poverty. Natural sciences had to have a proper place and function in society if the millions deprived of basic human needs were to have any dignified life.

However, as I became aware of the postmodern and postcolonial approaches the myth of "science as salvation,"[56] was burst. Instead, my conviction that neither the questions of one's material well-being nor the employment of science to achieve that objective can be reached without taking a theological route was further deepened. Of course, one may temporarily bracket all theological discussion and pragmatically prioritise material needs. However, in the long run, the question whether one should seek material well-being requires a careful reflection on what it means to be human and what is meant by human well-being. And what about materiality? Does materiality have a place in human well-being? It also requires an honest reflection on who God is. For can theologies that undermine the materiality of human beings engage with them positively?

Similar reflection is no less crucial for natural science for even before one employs them in the cause of material well-being, one must ask: What is nature? Is nature worth engaging

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[55] Donald M. Murray, 'All Writing Is Autobiography', *College Composition and Communication* 42, no. 1 (February 1991): 66–74.
[56] Mary Midgley, *Science as Salvation: A Modern Myth and Its Meaning* (London: Routledge, 1992).

with? What makes it so? Can theologies that look down upon the material world as secondary to spiritual realities, engage with it properly? These questions and considerations lead us beyond the terrains of physical sciences to metaphysics. However, if one aims to unlock the full potential of science for the benefit of humanity, especially those on the brink of material prosperity, these questions have profound implications and must be investigated.

This research, therefore, aims to explore theological resources to find an appropriate framework to interpret nature so that proper ethics for engaging with it, including through natural sciences, can be derived from it. The motivation underlying this research is the conviction that, if found, such a framework can provide not only a proper approach to nature but also the impetus for correctly engaging with natural sciences for human well-being in the context of India and beyond.

Academic Relevance

This research contributes to several fields of academic interest.

Firstly, by bringing Indian Christian theology of nature in a fresh engagement with social studies on science, it enhances both postcolonial and intercultural approaches. While the Western theological sources have engaged much with postmodern thought, they lack the postcolonial experience to bring to science and religion discussions. Moreover, intercultural theology itself is a modern Western discipline that, in a postcolonial context, is susceptible to being regarded as perpetuating coloniality. Indian voices, on the other hand, in their anti-colonial zest, often fail to see their own biases and overlook the advantages of intercultural theology. As doubly colonised, Indian Christians offer a better view of both approaches: while they share the history of coloniality along with their compatriots, their faith continues to be viewed through the colonial prism in India, although Christianity's existence in India predates Western colonialism. This makes them vulnerable to religious discrimination and majoritarian violence. However, this position also enables them to offer a critique of both intercultural theology from a postcolonial experience and coloniality in its Western as well as native forms. In this sense, using both postcolonial and intercultural approaches, the Indian Christian perspective on nature aims to enhance both.

Secondly, as emerging from the Indian context of religious plurality, this study also contributes to the field of interreligious dialogue. Interreligious dialogue has become a field of academic interest particularly since the Parliament of the World's Religions held in

Chicago in 1893. While the sociology of religion has focused much on the significance of religious practices and rituals, ontological questions, such as the nature of reality and epistemological issues, and the nature and justification of truth claims, continue to remain at the centre of the enterprise of interreligious dialogue and apologetics.

As Alister McGrath acknowledges, a dialogue between different notions of nature could be enriching, [57] but it also raises a question, namely, "given that 'nature' is an interpreted and mediated notion, what interpretation is to be preferred?" [58] Although significant in itself, this question is also entangled with other philosophical questions of our times, such as: Should one interpretation "be preferred"? What is the criterion for deciding a "preferred" interpretation? Is it a matter of personal preference, or is there a claim of exclusivity lurking underneath the question? These questions are "no-go zones" in many interreligious discussions on nature. McGrath's crucial question, however, remains a point of departure for this research. Thus, this research contributes to the field not only by insisting on the need for continual interreligious dialogue for mutual growth but also by probing into epistemological and ontological claims that underlie such a dialogue

Thirdly, this study contributes to the field of science and religion, particularly by introducing an Indian Christian voice to the discussion of the nature of nature. The inclusion of an Indian Christian voice itself is a crucial step because the current crop of literature in the field of science and religion seems oblivious to the need for a distinct Indian Christian voice on nature. Sources that facilitate global discussion of religion and science privilege "Eastern religions", whereas the subfield of science and Christian theology is dominated by Western voices. This parochial view unintentionally reinforces the oriental and now popular perception that anything that is Indian cannot be Christian, and everything that is Christian is essentially Western. An Indian Christian perspective on nature is required to disturb the status quo to enrich the field of science and religion.

Fourthly, this study also contributes to the field of contextual and global theology. Here too, an Indian Christian voice on nature suffers from sins of exclusion and inclusion. On the one hand, contemporary scholarly works on the theology of nature are developed in the Western context, where the Western experience, concerns and methodologies often take

[57] McGrath, *Re-Imaging Nature*, 155.
[58] McGrath, *Nature*, 1:133.

priority and natural science is engaged primarily with the motive of responding to the popular tension between science and theology. An Indian Christian voice is often absent from these platforms, mainly because Indian Christians often do not engage with natural sciences in a straightforward manner, but their voice is to be elicited from their response to their own other immediate needs and concerns. On the other hand, when an Indian voice becomes part of the discussion, the contextual factors that shape it are not paid sufficient attention to. Thus, contemporary theologies of nature and approaches to natural sciences often overlook the influence of Indian realities such as postcoloniality, religious pluralism, economic poverty, social inequality and caste that play constitutive roles in the construction of Indian Christian theology of nature and engagement with natural sciences. Following the constructivist lead, this study aims to situate an Indian Christian theology of nature in its own context and investigate factors that shape it. However, in doing so, the research also recognises the limitations of contextual theological reflection and investigates the possibilities for an Indian Christian voice to rise beyond its own context and contribute to global theological discussions on nature.

Ecclesial Relevance

From an Indian Christian perspective, the engagement with natural science is undertaken from the position of economic disparity and marginalisation. Material poverty itself may be an outcome of external as well as internal pressures, such as unjust social structures and unhealthy theologies, respectively. Protestant evangelical churches in India have long held to largely American, rapture-focused Christianity, which promotes escapism that neglects a positive engagement with the "present" material world and its processes for human well-being in the here and the now. This escapist tendency continues to trickle down to new churches. The Indian church, in general, has also often oscillated between prosperity theology and what I call "poverty" theology—the former seeks God for material blessings, and the latter considers poverty essential for proximity to God. Those who condemn one often end up in the other camp.

Western churches, in their relation to Indian churches, also tend to espouse the "poverty theology" as it allows them to critique the rampant materialism within their own cultural context. Western church is often unaware of its own positionality, which creates a lopsided vision of salvation, in which material development often comes secondary to the spiritual. Consequently, the Western church often romanticises poverty of the "third world" and its

missional efforts are aimed at saving the “souls”. The transfer of the knowledge of the world takes a backseat. These factors act as deterrents to a proper intercultural exchange and constructive usage of natural sciences and unleashing them for the empowerment of the economically marginalised in the context of India.

However, this missional attitude reflects the deeper problem of spirit-matter duality that ails the Western world and theology and which then percolates to other parts of the world.

Therefore, an integral vision of human well-being that encompasses both spiritual and material dimensions and its theological foundation must be articulated for the benefit of both Indian and Western church before they are inspired to live it out. Such a vision should enable both Indian and Western ecclesial communities to develop a proper outlook towards this world and proscribe a legitimate place for materiality. It should further provide both the Indian and the Western churches with an impetus to be a prophetic and empowering community by critically engaging with other visions of human well-being that assign a different place and role to materiality than their own.

This integral vision of spirit-matter relationality fuels the aim of this work captured in its title: “Mere Materiality?” The play on words is a critique of two positions that emerge in this work: that which considers materiality to be the only reality and that which considers materiality to be merely secondary to spirituality.

1.5. Key Terms

As indicated at the beginning of this chapter, recent postmodern and postcolonial approaches have dislodged several notions from the fixed meanings that were ascribed to them. At least three of them have implications for this project and, therefore, need to be clarified at the very outset of this project.

Nature

This study agrees with social constructivist analysis that conceptions of nature do not appear to us like empty containers but are always interpreted from a certain position. From a Christian perspective, nature can never be understood apart from the doctrine of creation. Therefore, along with other Christian theologians, such as McGrath, Polkinghorne and Gunton, this research takes “nature” to mean creation and vice versa. I am aware that the

theology of nature aimed at in this project develops from within the multi-religious context of India and in conversation with scholars of other faiths who do not share my conviction. However, to think of shedding all my beliefs about nature as a precondition to engage in a conversation and to expect them to do the same would be dishonest. Whether they believe such a condition to be a prerequisite for dialogue is itself a matter of discussion and will only become clear in the course of the conversation. Despite different interpretations, however, the conversation partners engaged in this research agree that the term "nature" itself refers to a reality that is commonly available to all human beings, and conversation about nature is possible because of this very accessibility. This aligns with the triangulation method adapted in this study (1.3).

Further, I have used the words "nature" and "material world" interchangeably in this study, as is done by several other writers in the field. This is not to hint at any kind of ontological materialism; I do not believe that everything that exists is necessarily material, but embrace epistemological materialism in the sense that all of one's experiences and knowledge are embodied. Reality cannot be reduced to physicality, but physical reality nonetheless has an important role in how we perceive the world. This conviction is a result of my own Christian position, which proclaims God as the creator of both material and immaterial realities and holds that the Trinitarian God, post-incarnation, remains forever both material and spiritual, a point that I have elaborated towards the end of my research.

Thus, the research also delves into the very notion of materiality.

The use of the term "material world" also shows my location as an Indian Christian theologian, positioned to engage with both materialist and anti-materialist trends within my own setting. As would become clear with the progress of the research, the debate about the nature of nature in the Indian setting is essentially about the materiality of nature and its relationship to the Spirit, or the non-material. Thus, theologies of nature emerge from a framework that articulates a specific understanding of God's relationship with both the material world and materiality itself. This relationship, in turn, informs a religious community's perception of the material and its engagement with the material world, shaping its approach to science. Consequently, the discussion in this research extends beyond the material world as an object of inquiry to encompass the broader concept of materiality itself.

Science

Although I have almost always used the word "science" to refer to natural sciences in this project, I understand science in a broad sense of scholarly knowledge here, or as it is defined by the German word *Wissenschaft*, including all disciplines engaged in creating systematic knowledge about the object of their own study. In fact, during much of history, science has been regarded as an organised body of knowledge.[59] For this project, "science" is understood similarly to how Steve Hansson defines it: "Science in a broad sense seeks knowledge about nature (natural science), about ourselves (psychology and medicine), about our societies (social science and history), about our physical constructions (technological science), and about our thought constructions (linguistics, literary studies, mathematics, and philosophy)."[60]

Following it, and in line with several Christian theologians and natural scientists, I hold that theology, with its distinct models, tools and methods, is a science in its own right.[61] This is because, as Thomas Torrance contends, although "within this world there are different classes of things with their peculiarities providing different subject-matter and therefore requiring different branches of science appropriate to them, each with its own scope and with its distinctive characteristics in method,"[62] they also "have certain fundamental principles in common, for all knowledge as knowledge has a certain structural form in order to be knowledge at all."[63] Moreover, natural science and Christian theology "are not two independent procedures but rather two modes of one scientific procedure which inevitably involves some measure of adaptation to the particular field of knowledge in question."[64] They are two distinct branches of knowledge, sharing certain similarities

[59] Brooke and Numbers, *Science and Religion Around the World*, 4.
[60] Sven Ove Hansson, 'Defining Pseudoscience and Science', in *Philosophy of Pseudoscience: Reconsidering the Demarcation Problem*, ed. Pigliucci Massimo and Maarten Boudry (Chicago, IL: University of Chicago Press, 2013), 64.
[61] Torrance, *Theological Science*; Wolfhart Pannenberg, *Theology and the Philosophy of Science* (London: Darton, Longman & Todd, 1976); McGrath, *Nature*, vol. 1; McGrath, *Reality*, vol. 2; Alister E. McGrath, *A Scientific Theology: Theory*, vol. 3 (London: T&T Clark, 2006).
[62] Torrance, *Theological Science*, 108.
[63] Torrance, *Theological Science*, 112.
[64] Torrance, *Theological Science*, 113.

and differences.[65] Torrance's classification has influenced other Christian theologians and scientists, such as Alister McGrath, who have further expanded his thought.[66]

Neither all philosophers of science nor all theologians agree with Torrance's understanding of theology as science. It is often pointed out that while science studies nature, the object of theological investigation is supernatural, which makes the two antithetical. While this may make the two disciplines distinct, it does not set them against each other. Most of my conversation partners do not consider "science" to be necessarily anti-metaphysical and their theological views "anti-scientific"; rather, they consider discussions about God crucial to the science-religion dialogue.

Religion

As with the notion of "nature" and "science," postmodern and postcolonial studies have recognised that the term "religion" is a modern construct to comprehend the Western experiences of the cultures of Asia.[67] To conceive of "religion" having one central god, dogma or scripture is a generalisation of modern and largely Christian understanding of religion.[68] This is most clearly evident in the Western construction of Hinduism, as Richard King has pointed out that a unified Hinduism is a "modern myth" created initially by Orientalists and later bought, refined and employed by nineteenth-century Indian religious thinkers for various purposes.[69] It is now realised that defining "religion" as a neat category is elusive.

Different approaches, therefore, have been taken in the study of religion. Particularly influential is Ninian Smart's seven dimensions of religion, which include ritual, narrative,

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[65] In terms of similarities, Torrance points out that both are human inquiries, both have high regard for objectivity, both call into question metaphysical assumptions, recognise their limitations, and struggle to relate their language to ordinary language. Torrance, 286–312.

[66] McGrath, *The Territories of Human Reason*.

[67] Said, *Orientalism*; King, *Orientalism and Religion*.

[68] Harrison, *'Religion' and the Religions*; Wilfred Cantwell Smith, *The Meaning and End of Religion: A New Approach to the Religious Traditions of Mankind* (New York: Macmillan, 1963).

[69] King, *Orientalism and Religion*; Gauri Viswanathan, 'Colonialism and the Construction of Hinduism', in *The Blackwell Companion to Hinduism*, ed. Gavin Flood (Oxford: Blackwell Publishing, 2003), 23–44; Heinrich von Stietencron, 'Hinduism: On the Proper Use of a Deceptive Term', in *Hinduism Reconsidered*, ed. Gunther D. Sontheimer and Hermann Kulke (Delhi: Manohar, 1989); David N. Lorenzen, 'Who Invented Hinduism?', *Comparative Studies in Society and History* 41, no. 4 (October 1999): 4; Julius Lipner, 'On Hinduism and Hinduisms: The Way of the Banyan', in *The Hindu World*, ed. Sushil Mittal and G. R. Thursby (New York, NY: Routledge, 2004), 9–34

experiential, social, ethical, doctrinal and material dimensions[70] It is often thought that while Christianity has frequently stressed doctrinal matters, other religions, particularly Eastern ones, focus much on the experiential, social and material dimensions of religion. Such an assumption does not pay attention to the long history of experiential, social and material dimensions of Christianity itself. It also fails to notice the underlying unity between these diverse dimensions and that various beliefs and doctrines play a decisive role in maintaining this unity. In this sense, different dimensions of religion work as "entry points" to frame a discussion about fundamental questions such as the nature of nature.[71] But do other interlocutors consulted in this project also hold to the central role of beliefs? This remains a question that is open to investigation and is part of the dialogue between different conceptions of nature carried out in this research.

1.6. Limitations of the Study

Firstly, while the researcher's positionality makes this contribution valuable, it also sets several limitations. This is a research carried out by an Indian male studying in a Western university. Then there is a question of my positionality as an Indian Christian. After all, what does one mean by "Indian Christian voice"? Who is its representative? Indian Christians come from Dalit as well as caste backgrounds; Christians in many pockets of India share a tribal identity. North Indian Christians differ in their life experiences, and many of their cultural expressions are dissimilar from those of the Christians from the South and North-East of India. Can an individual speak for and represent all Christians from a nation that is so beautifully diverse and a faith that is so distinctly expressed in different parts of this nation? Therefore, I must mention that I use the term "Indian Christian" in a restrictive way to refer to North Indian Christians, mostly those coming from low-caste, Dalit and tribal backgrounds, with whom I have shared most of my life. And yet, not all North Indian Christians share my experience, motivations and aspirations. I also do not suggest that voices from other contexts of India are any less genuine, but that my voice remains "a" voice among many Indian Christian voices.

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[70] Ninian Smart, *The World's Religions: Old Traditions and Modern Transformations* (Cambridge: Cambridge University Press, 1989).
[71] Toren and Tan, *Humble Confidence*, 29–30.

However, engaging with the wider ongoing academic discussions, be it concerning interreligious dialogue in the multi-religious context of India or the liberative discourses, safeguards this research from becoming an autobiography or a pure academic conjecture. Such an engagement also shows that there are similar experiences and traits that Christians in many parts of India share. So, broadly speaking, the wider Indian context with religious pluralism and the experience of socio-economic injustice at its centre, functions as a crucible in which the subject of the material world is discussed in this research. From this particular position, I have engaged with a wide variety of positions in this research. However, this also means that even when I engage with the Western views of nature, it is this Indian context that becomes decisive in the selection of Western voices and the themes for discussion.

Secondly, although this project takes the context of the Anthropocene seriously, it is not aimed to provide a Christian ecological theology. The objective of this research is to provide a theology of the material world in the context of science. Therefore, although environmental discourses are consulted to build a case against the aberrations of modern science, the engagement remains extraneous. Similarly, although the fundamental question of the nature of nature still has immense implications for Christian engagement in environmental care, a full-fledged discussion of such possibilities remains outside the purview of this project.

1.6. Structure of the Study

The project is tied in a composite structure. Each chapter is part of the whole and thus builds upon the arguments developed in the preceding chapter and leads to the following chapter. I have also provided a concise summary of the previous chapter in the introduction of every chapter so that each chapter can be read on its own.

Chapter Two provides an in-depth analysis of contextual aspects that cast their shadow on the science and religion discourse in India, particularly its colonial history and contemporary postmodern, postcolonial approaches. Here, I critically engage with the postcolonial argument, gauging its weaknesses and potential contribution to the science and religion discussion. The arguments developed in this chapter are therefore also critical to developing my own methodology.

Chapter Three dives into the first discourse on nature, namely the historical episode of interreligious apologetics between selected Advaitic and modern Indian Christian thinkers. This chapter aims to explore how these interlocutors navigated power boundaries in a colonial context and found the motivation to meaningfully engage with one another on the subject of the material world at the cusp of modern science.

Chapter Four explores the theme of nature in liberative discourse, more specifically, Dalit reflections in the context of socio-economic marginalisation. This chapter analyses the discourse on nature from the position of Dalits, who are caught up between the politics of development and environmentalism. The objective here is to move beyond simplistic stereotypes, reconsider the debates within the context of Dalit realities, listen to their voice and aspirations, and spell out the ramifications of their reflection for the theology of nature in India and beyond.

Chapter Five transitions to investigate the Trinitarian discourse on nature, particularly in the thought of Colin Gunton. Given that the context of Trinitarian discourse is distinct in its own right, I show its limitations but also explore potential alleys where it can fruitfully meet with the other two foregoing discourses.

Chapter Six juxtaposes the three discourses analysed in the preceding chapters for comparative analysis, leading to the description of major findings. Several sets of dialogue and dialogue partners are identified using the method of triangulation and the possibility of a dialogue on nature within each triangulation from an Indian Christian position is imagined. The chapter also reexamines the critical realist methodology in light of the findings and explores its contribution to the formulations of a theology of nature.

Chapter Seven attempts to formulate a theology of nature from an Indian Christian position that can engage in the diverse sets of dialogue explored through triangulation in the previous chapter. It also argues for the advantages of intercultural theological engagement concerning nature.

Overall, this research is hoped to enrich the field of intercultural theology by providing a distinct Indian Christian voice on the nature of nature and, by the same token, will also broaden and deepen the science and religion interface on a global canvas.

CHAPTER TWO

Science and Religion in Postcolonial India

"Science takes nothing on trust but applies to them all the methods of investigation and criticism. I look forward to the growth of this scientific spirit in our country to liberalise our intellect." These were the words of Praful Chandra Ray (1861-1944), a nationalist and writer of *The History of Hindu Chemistry in India*, in his presidential address at the Indian Science Congress held in 1920.[1] They echo the aspirations of Raja Rammohan Roy (1774-1833), known as the father of Modern India, who requested Lord Amherst not to invest in establishing a Sanskrit seminary that he believed would "load the minds of youth with grammatical niceties and metaphysical distinctions of little or no practical use to the possessors or to the society."[2] Instead, he advocated for a European model of college in English that would "promote a more liberal and enlightened system of instruction, embracing Mathematics, Natural Philosophy, Chemistry, Anatomy, with other useful sciences."[3]

While the reactions of Ray, Roy and others may indicate that the Indian reception of modern science was largely positive, recent studies argue that fascination with modern science was at its peak during the early period of its arrival and was mostly driven by Indian elites. They rather reveal a complex scene with diverse reactions to modern science. In his informative piece, B. V. Subbarayappa claims that Indian reactions to modern science ranged from indifference to active cultivation of it.[4] Modern Indian scientists often differed on the role of religion in scientific practice. Scientists such as C. V. Raman (1888-1970), M. N. Saha (1893-1955), and S. N. Bose (1894-1974) were more interested in

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[1] P. C. Ray, 'Dawn of Science in Modern India', in *The Shaping of Indian Science: Indian Science Congress Association Presidential Addresses: 1914-1947*, vol. 1 (Hyderabad: Universities Press (India) Private Limited, 2003); cited in Subodh Mahanti, 'A Perspective on Scientific Temper in India', *Journal of Scientific Temper* 1 (January 2013): 51.

[2] Raja Rammohun Roy, *The English Works of Raja Rammohun Roy*, ed. Jogendra Chunder Ghose (Calcutta: Srikanta Roy, 1901), 1:325.

[3] Roy, *English Works*, 1:327.

[4] B. V. Subbarayappa, 'Indic Religions', in *Science and Religion Around the World*, ed. Ronald L. Numbers and John Hedley Brooke (New York, NY: Oxford University Press, 2011), 200.

cultivating science for national development and "preferred to maintain silence on issues of religion." Others, such as Srinivasa Ramanujan (1887-1920), attributed his mathematical genius to revelation by a Hindu goddess and J. C. Bose (1858-1937), who researched to detect the transmission and reception of electromagnetic waves in plants, was inspired by the Hindu idea of unity.[5] Modern Hindu leaders themselves elicited diverse responses to scientific ideas. Thus, while Vivekananda and Aurobindo were selective in the application of evolutionary theory, Dayananda Saraswati and Bhaktivedanta Prabhupada were particularly negative towards it.[6]

Contemporary academic discussions on science and religion in India are deeply shaped by the fact that modern science arrived in India in the shadow of colonialism. Therefore, as several studies on science and religion point out, the discussion concerning modern science was enmeshed in larger debates about the incursion of Western ideas into India and their impact on its traditional ways of life. David Gosling's *Science and Religion in India*, a pioneering work in the field, points out three responses to the introduction of Western ideas, including modern science, in nineteenth-century India. These are: a). Total abandonment of Indian beliefs and the acceptance of Western ideas; b). Adapting and strengthening Indian traditions with ideas borrowed from the West; and, c). Attempting to show that Indian thought contained all elements required to cope with the West but that these elements needed to be reasserted.[7] These responses correspond with Kulkarni's three reactions to modern science, namely a). Unqualified acceptance, b). Qualified acceptance; and c). Qualified rejection.[8] For Kulkarni, modern science and colonialism were linked such that Indian responses to modern science were proportional to the experience of coloniality itself.[9]

These and other such crucial insights brought to the fore by recent studies under the influence of social constructive and postcolonial approaches continue to shape contemporary science and religion discourse in India. Contemporary studies on science and religion cannot afford to ignore their key arguments and significant contributions to the field of science and religion.

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[5] Subbarayappa, 'Indic Religions', 203-204. The quote is from p. 203.
[6] Subbarayappa, 'Indic Religions', 203–5; C. Mackenzie Brown, *Hindu Perspectives on Evolution: Darwin, Dharma and Design* (London: Routledge, 2012), 178ff.
[7] David L Gosling, *Science and Religion in India* (Bangalore: Christian Institute for the Study of Religion and Society, 1976), 38ff.
[8] S. G. Kulkarni, 'Philosophy in Colonial India: The Science Question', in *Philosophy in Colonial India*, ed. Sharad Deshpande (New Delhi: Springer India, 2015), 55–66.
[9] Kulkarni also uses other terms to describe the three responses to colonialism, namely, a). A theory of total subjugation; b). A theory of cultural self; and c). A theory of revitalisation.

Therefore, in this chapter, I elaborate on the contribution of postcolonial approaches to the field of science and religion in India by exploring the key trends that emerge, analysing the claims and arguments made, and offering suggestions that strengthen postcolonial analysis by filling in the gaps. The aim is to "get it out of the way" by extensively engaging with it right at the beginning so that, although the influence of postcolonial analysis will remain throughout this research, it does not have to repetitively engage with the arguments. This should also help us to notice the obvious fact that science and religion discussions do not take place in a vacuum but unfold in a network of cultural influences and power dynamics. At the same time, it should equip us to gauge the potential or drawbacks of the postcolonial method for science and religion dialogue.

1.1. Modern Science in India – A Postcolonial Analysis

As mentioned above, contemporary literature on science and religion in India draws much from postcolonial approaches. Central to the postcolonial analysis is the argument that modern science is a colonial enterprise, and as such, it has a streak of violence inherent to it. This is then shown to be the case through historical analysis.

Using George Basalla's oft-cited and equally critiqued model,[10] postcolonial theorists point out that the trajectory of modern science in colonies, such as India, is top-down, from metropolis to periphery, and linked with racism, power and colonial expansion. Basalla noticed that European science was diffused and transplanted into the colonial soil in three chronological stages. In stage one, the non-European, non-scientific societies work largely as a field providing raw material for European science. The second stage, called "colonial science", saw the replication of European science in colonies through the institutionalisation of scientific practice largely led by European scientists. In the third stage, local scientists attempted to construct an independent scientific tradition, which nevertheless remained hybridised. Power dynamics are observed at all three levels of the process of scientific diffusion from metropolis to colony.

[10] George Basalla, 'The Spread of Western Science', *Science* 156, no. 3775 (1967): 3775. Basalla's model often appears in postcolonial writings and is employed for different purposes.

The European origin of modern science and its transfer to modern India, from a postcolonial perspective, raises at least three objections.

First, *it asserts a unique metropolis*. Early historiographers of science often placed modern science as a unique phenomenon in history that traced its history to the Greek impetus that provided raw materials and a fertile ground for it. It gradually grew to project itself as the universal yardstick of knowledge. Such a time and space-bound definition of "science" for postcolonialists is a misnomer that seems to evoke a rather unique enterprise, a Scientific Revolution or Enlightenment, that marks a break from all other previous avenues of knowledge,[11] and, therefore, essentially treated as a Eurocentric claim. To trace science's genealogy from Greece to modern Europe is to eschew scientific milestones set by other civilizations, and therefore, a "technological monism"[12] that is essentially "ethnocentric."[13] Ascribing the success of modern science to its internal features, including its unique method, with a disconnect from colonial expansion, would likewise be "a tragedy" and a "discriminatory exercise that marginalises sciences of other people, their history and achievements."[14] Moreover, such a Eurocentric view of modern science often takes a reactionary turn in regions that were formerly colonised, such as South Asia. As Chattopadhyaya observes "It serves the forces of conservatism…, which in defence of stagnation of status quo prefer to cut off Asian culture from the mainstream of global science."[15]

Second, *it points to the patterns of power in the transfer of science from the metropolis to the periphery*. For one, the transfer of modern science from the metropolis to the periphery indicates its foreignness. Its allocation to the colony includes the transfer and imposition of a particular rationality, which was often violently enforced upon a people that employed "another reason."[16] For Nandy and Alvares, modern science can never become any less

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[11] Cf. Meera Nanda, *Science in Saffron: Skeptical Essays on History of Science* (Gurgaon: Three Essays Collective, 2016), 11. Nanda considers mathematisation of nature, fact-finding experiments in addition to direct observation, development of mechanistic world picture and an uncommon appreciation of manual work as features that marked the birth of modern science.

[12] Alvares, *Homo Faber*, xvi.

[13] Susantha. Goonatilake, *Aborted Discovery: Science and Creativity in the Third World* (London: Zed Books, 1984), 22–25.

[14] Harding, *Is Science Multicultural?*, 6.

[15] Debiprasad Chattopadhyaya, *History of Science and Technology in Ancient India -- The Beginnings* (Calcutta: Firma KLM Private Limited, 1986), 46.

[16] Gyan Prakash, *Another Reason: Science and the Imagination of Modern India* (Princeton, NJ: Princeton University Press, 1999).

oppressive, because it is essentially alien, an outsider.[17] For another, the allocation of modern science was so marked with racism and exploitation that science and technology were "the tools of imperialism."[18] As Pratik Chakrabarti notes, "Science and scientific enterprises have helped colonial expansion, even as such expansion has stretched the boundaries of scientific knowledge."[19] Deepak Kumar further asserts that the colonial science's flight in India begins with abuse. Thus,

> In order to legitimize their own rule, they [the colonisers] first had to delegitimize several pre-colonial structures and texts. For this, the condemnation of the immediate past was considered necessary. Indians were declared unscientific, superstitious and resistant to change; India was identified with dirt and disease. Travellers, scholars and officials of both the Orientalist and Anglicist variety subscribed to this view.[20]

He further notes, "Though appropriation of whatever was found "useful" in the native repertoire was actively encouraged, a syncretic acculturation formed no part of the colonial agenda."[21] Not only were local knowledge and technology delegitimised, but the transfer of new knowledge and technology was selective. In the spirit of racism and scientific arrogance, the colonials constantly pointed the finger at the natives' social structure, religion, or lack of desire to change while the problem all along lay with "transfer mechanisms."[22] With discrimination at every stage, unfair policies, lack of funds, and control over big projects, the colonial authorities, on the one hand, blocked the process of technology's transfer and hindered the rise of self-sustained science and technology in India. On the other hand, they encouraged science and technology that were crucial to colonial expansion. English as the language of instruction played a major role in this suppression. Certainly, there were efforts to appreciate and appropriate the indigenous culture, but even these "largely remained strategies for penetration and control."[23] Because technology-equipped Indians would mean the death of Raj itself, the transfer of knowledge was contrived and selective.

Third, *it argues that colonialism is a continuous process*. This corresponds to the third stage of Basalla's model, wherein the native scientists attempt to build an independent science

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[17] Nandy, *Science, Hegemony and Violence*; Alvares, *Homo Faber*.
[18] Headrick, *The Tools of Empire: Technology and European Imperialism in the Nineteenth Century*.
[19] Pratik Chakrabarti, *Western Science in Modern India: Metropolitan Methods, Colonial Practices* (Delhi: Permanent Black, 2004), 11.
[20] Kumar, *Science and the Raj,* 229.
[21] Kumar, *Science and the Raj,* 230.
[22] Kumar, *Science and the Raj,* 237.
[23] Kumar, *Science and the Raj,* 230.

against the hegemony of colonial or Western science. The metropolis-periphery model asserts that even after colonialism has ended, the metropolis continues its control through several means. For instance, the institutions built in former colonies carry the colonial legacy and standards that stifle native creativity. Moreover, this legacy is espoused by an upwardly mobile middle class in former colonies that constantly apes and opts for Western science and technology over local products. The wide production and consumption of Western technological products are often sustained by draining resources and labour from the "under-developed" nations, which would mean "de-development of the vast majority of the peoples"[24] and a "continuation of colonialism by other means."[25] Ashis Nandy argues that the modern institution of the nation-state is a tool of continuous colonialism. As a colonial institution, it has become an unmatched ally and benefactor in sustaining colonial science. It thrives by grabbing lands, clearing forests, turning the course of rivers, planting new factories, and creating nuclear weapons, all in the name of science, progress and development. With the nation-state as its patron, modern science has been enthroned as the new "god-king" that has ushered in a new era of "institutionalized violence"[26] against the most marginalised – the poor, the women and the environment.[27]

1.2. An Inquiry into Postcolonial Analysis

Describing the ignorance of the social history of science, Joseph Needham once lamented, "Most historians have been prepared to see science having an influence on society, but not to admit that society influenced science."[28] The vast amount of literature churned out since then, including the recent postcolonial literature, has paid sufficient attention to Needham's complaint and positively contributed to the discipline. Considering its impact on the contemporary science and religion dialogue and its implications for this project, it is crucial to evaluate the contributions and drawbacks of the postcolonial analysis.

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[24] Harding, *Is Science Multicultural?*, 7.
[25] Harding, *Is Science Multicultural?*, 37.
[26] Nandy, *Science, Hegemony and Violence*, 8.
[27] Vandana Shiva, *Staying Alive: Women, Ecology, and Survival in India* (New Delhi: Kali for Women, 1988).
[28] Quoted in Debiprasad Chattopadhyaya, 'Introduction', in *Studies in the History of Science in India*, ed. Debiprasad Chattopadhyaya (New Delhi: Editorial Enterprises, n.d.), 1: xxi.

1.2.1 Contributions of Postcolonial Analysis

The postcolonial analysis contributes at least two insights that are helpful for the discussion of science and religion.

a. It has politicised the Science and Religion discourse.

David Livingstone considers that four "hypothetical imperatives"—pluralise, localise, hybridise, and politicise—are required for a fruitful science and religion dialogue.[29] The hypothetical imperatives are meant to stress the importance of situating any science and religion dialogue in its immediate context and investigating the contextual factors that shape it. Postcolonial literature has made a significant contribution in this regard, particularly in politicising the science and religion dialogue.

Since their beginning, social studies of science focused on anchoring modern science in its sociocultural landscape which quickly revealed the "provincialism" inherent in conceptions of "science," "religion," and the relationship between the two. It is now acknowledged that the modern construction of "science" as an objective, value-free, universal and, therefore, the only method of knowledge that offers certainty was carried out in opposition to "religion", particularly Christianity, which was projected to symbolise everything opposite of what "science" stood for: subjective, superstitious and faith-based. Attempts to draw clear-cut boundaries between science and Christianity were motivated by several reasons, including political.[30] Contradictory to this projection, it has now been pointed out that Christianity played a vital role in the development of modern science.[31] Moreover, it has been convincingly argued that modern science's attempt to universalise notions such as "common sense" and "rationality" to establish its superiority as a method of knowledge was actually an extrapolation of local cultural concepts.[32] As such, "science" is a part of the larger cultural space and, therefore, a politicised sphere.

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[29] David N. Livingstone, 'Which Science, Whose Religion?: A Discussion of Key Issues in Science and Religion', in *Science and Religion Around the World*, ed. John Hedley Brooke and Ronald L. Numbers (New York, NY: Oxford University Press, 2011), 282ff.

[30] Harrison, '"Science" and "Religion"'.

[31] Hooykaas, *Religion and the Rise of Modern Science*; Stanley L. Jaki, 'Christology and the Birth of Modern Science', *The Asbury Journal* 45, no. 2 (1990): 2; Peter Harrison, *The Bible, Protestantism, and the Rise of Natural Science* (Cambridge: Cambridge University Press, 1998); Jaki, *Savior of Science*.

[32] Clifford Geertz, *Local Knowledge: Further Essays In Interpretive Anthropology*, in *Basic Books* (New York, NY: Basic Books, 2000), 73–93; McGrath, *The Territories of Human Reason*, 19–49.

Postcolonial analysis has expanded these insights from the sociology of science to argue that the trajectory of modern science cannot be disconnected from power inequalities existing in the larger society. By bringing in the power dynamics, postcolonial analysis asks not merely which science is under discussion but "whose" science it is, how it is diffused, and what motivations spur it. Thus, as Ronald Number points out, a gulf always existed between the science of "experts" and of "laypersons". He calls this gap the "pulpit" and "pew" perspectives on science and goes on to explore what he calls the history of "vulgar" science.[33] Debiprasad Chattopadhyaya, likewise, shows that the manual labourers' understanding of "science" stems from variegated practices of skill and is different from the rather restrictive "science of the aristocrats."[34] Others, through ethnographic research, have shown that the practice of science in India is often a history of male science[35] or Brahminic science.[36] Since every science is someone's science, it is always stained with marks of power.

From a Christian point of view, in exposing power motives, postcolonialism has diagnosed what Christian theology calls "sin" and its permeation through different layers of human relationships, systems and structures of hierarchy. It has exposed the vulnerability of science to human depravity and abuse. With the same stroke, it challenges those who for power grab raise science to the position of a "god-king," to use the phrase of Nandy.[37] The claims of certainty, objectivity and being a saviour of humankind often ascribed to science, for a Christian, belong only to God.[38]

b. It offers possibilities for fresh conversations on science and religion.

By claiming that the history of modern science *is* the history of imperialism,[39] postcolonial scholars not only expose the Euro-centric biases in the history of modern science but also, for the same reason, demand that the search for alternative and native ways of studying nature be

[33] Ronald L. Numbers, *Science and Christianity in Pulpit and Pew* (Oxford: Oxford University Press, 2007).
[34] Chattopadhyaya, *History of Science and Technology*, 102–5; Bose, Sen, and Subbarayappa, *Science in India*, 484–85.
[35] Sur, 'Dispersed Radiance'.
[36] Thomas, 'Brahmins as Scientists'.
[37] Nandy, *Science, Hegemony and Violence*, 8.
[38] Lesslie Newbigin, *Truth and Authority in Modernity* (Pennsylvania, PA: Trinity Press International, 1996), 1–7.
[39] Roy MacLeod, 'On Visiting the'Moving Metropolis': Reflections on the Architecture of Imperial Science.', *Historical Records of Australian Science* 5, no. 3 (1980): 3.

prioritised. The search for alternative sciences, therefore, is a part of the decolonising agenda.[40]

The postcolonial call to do away with understanding of science as a unique development in and by the metropolis broadens the scope of discussion to include the sciences of other people, especially ancient civilisations such as India and China. This postcolonial insight has provided impetus to a stream of literature in India that focuses on investigating and revising the history of pre-colonial science in India, such as the fields of mathematics, metallurgy, astronomy, medicine and alchemy and is populated by both native and Western historians and scientists alike.[41] This stream of literature began contemporaneously with the development of the sociology of science in the West and was particularly influenced by Joseph Needham's monumental work on the history of science in China. Although much of the literature in this stream emerged before the development of postcolonial theory, with the arrival of postmodern and postcolonial approaches, it has found new interest.

The pluralisation of "science" and "religion" under the postmodern and postcolonial turn has also led to the emergence of a new stream of literature that focuses on orchestrating a conversation between natural sciences and what has come to be known as "Indic" religions, as in opposition to "Abrahamic" religions. It is argued that the "Indic" religions have a unique approach to science and that the "Abrahamic" religions have unfairly placed them under the rubric of the New Age for far too long.[42] The focus here is often on relating particular scientific insights from fields such as quantum mechanics or consciousness studies and relating them with Hindu religious beliefs such as the unity of the universe.[43] The literature in this stream often stretches to both academic and popular fields and largely posits Indian/Hindu science as the opposite counterpart of Western science that checks all the boxes that the latter has missed due to its religious baggage.

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[40] Shiv Visvanathan, 'Alternative Science', *Theory, Culture & Society* 23, nos 2–3 (2006): 2–3; Ashis Nandy, *Alternative Sciences: Creativity and Authenticity in Two Indian Scientists* (Oxford: Oxford University Press, 1995); Alvares, *Homo Faber*.

[41] Bose, Sen, and Subbarayappa, *Science in India*; Chattopadhyaya, *Science and Society in Ancient India*; Basham, 'The Practice of Medicine in Ancient and Medieval India'; Seal, *The Positive Sciences of the Ancient Hindus*; George Gheverghese Joseph, *The Crest of the Peacock: Non-European Roots of Mathematics* (Princeton, NJ: Princeton University Press, 2010).

[42] The literature spanning three religions—Hinduism, Buddhism and Jainism is vast and cannot be provided extensively here. Literature related to Hinduism and science will be referred to throughout the study.

[43] Amit Goswami, 'Physics within Nondual Consciousness', *Philosophy East and West* 51, no. 4 (2001): 4.

There is a growing collusion between the two streams of literature—the one that investigates the history of science in India and the other that interfaces science with "Indic" religious beliefs—making the boundary between the two rather porous. Revisionist historiographies using postcolonial theory, for instance, explore the religious perspectives of Indian scientists operating in the pre-colonial or colonial milieu. On the other hand, literature written from religious perspectives may use revisionist works to establish that Indic religions indeed have a unique and more amicable understanding of relating with nature and science than the one advanced by the Abrahamic religions.

Whatever the case, postmodern and postcolonial developments have made it possible to question and suspend previously held cultural and religious assumptions and initiate a fresh dialogue on science and religion. In this new space, it is possible to place different ways of conceiving nature side by side without prescribing priority to any one of them.

From an Indian Christian perspective, it is equally urgent to exploit this new space to engage with the science and religion interface. On the one hand, these developments offer an opportunity for Indian Christians living in the shadow of Western cultural Christianity to rethink the science and religion interface from their unique cultural heritage. On the other hand, Indian Christians grapple with how to sensibly relate to the widespread nostalgia for India's pre-modern times when science and religion are claimed to have existed in unity. In other words, they can neither live with the status quo set by Western assumptions and frameworks nor can they afford to be infatuated with cultural romanticism.

However, further investigation into the adequacy of the postmodern and postcolonial approaches to science and religion dialogue is essential before these avenues are fully exploited.

1.2.2. Critical Investigation into the Postcolonial Analysis

In the following section, I will explore three different approaches to examining postcolonial analyses. Each approach will apply specific criteria to assess postcolonial claims. Ultimately, I aim to demonstrate that despite its numerous contributions, the concerns identified through this investigation highlight the limitations of the applicability of postcolonial approaches in the field of science and religion.

A Historical Investigation

A historical investigation is specifically interested in analysing the postcolonial claim that the trajectory of modern science in India is marked by abuse and exploitation.

To begin with, against the postcolonial claim, recent historical works have pointed out that despite the power relations, both the colonised and colonisers co-created a pool of knowledge unique to the colonial situation and, in many instances, beneficial to both the metropolis and the periphery. C. A. Bayly, for instance, argues that the relationship between colonisers and the native informants was that of "complexity", and their dependence upon each other was such that the knowledge that was generated was crucial not just to the understanding of the native but to the formation of the British identity and modernity itself.[44] In other words, modernity was not a one-way street but co-created. Kapil Raj, likewise, emphasises the role of native informants or "go-betweens"[45] in intelligence gathering. Gyan Prakash argues that modern science in India was a hybrid form of knowledge.[46]

In his *Relocating Modern Science*, Raj focuses on the surveys of India carried out under the colonial administration and the institutions founded under them to suggest that "the construction and spread of scientific knowledge [was] through reciprocal, *albeit asymmetric*, processes of circulation and negotiation."[47] Raj acknowledges the "inherent asymmetry" in the circularity of knowledge but points out that the "indigenous actors played a determinant role in the making and spread of knowledge"[48] and thus were not passive agents of the postcolonial narrative. To quote him at length,

> …despite the asymmetrical relationship between colonizers and colonized, the instruments, procedures, specific human gestures, skills, knowledge (both explicit and tacit), social practices, learning processes, and so on—in short, all that constitutes scientific activity—had to be locally negotiated. The result was necessarily a hybrid culture, similar to the one that emerged in Britain and—

[44] Christopher Alan Bayly, *Empire and Information: Intelligence Gathering and Social Communication in India, 1780–1870* (Cambridge: Cambridge University Press, 1996).
[45] Simon Schaffer, *The Brokered World: Go-Betweens and Global Intelligence 1770-1820*, in *Uppsala Studies in History of Science*, ed. Kapil Raj and James Delbourgo Simon Schaffer, Lisa Roberts (Sagamore Beach, MA: Science History Publications, 2009).
[46] Prakash, *Another Reason*.
[47] Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650-1900* (Hampshire: Palgrave Macmillan, 2007), 13. Emphasis mine.
[48] Raj, *Relocating Modern Science*, 230.

> might one add? —everywhere else in the world: this is just what characterizes the practice of science.[49]

Raj further contends that the transition of knowledge is always influenced by local traditions and dynamics and, therefore, by nature, is impossible to impose.

> Indeed, it is not through deduction from grand ideological positions but rather from multiplying studies of practices and their circulation in specific contexts, and connecting them across contexts, that a clearer picture of the broader history and dynamics of modern science will emerge.[50]

What was included in the transfer of science then was a "complex process of accommodation and negotiation."[51] To place Western science against indigenous science in the postcolonial discourse, for him, discounts "the complex process of negotiation, contestation, cooptation and resistance at work."[52]

In this complex process of negotiations, the natives themselves did not just react to the appeal and authority of modern science but actively employed it to maintain their social position in the newly emerging social realities. Far from being the victims of colonial science, the preference of Bengali elites for modern science over traditional knowledge was part of a strategy to cling to socio-political power amidst the new power dynamic emerging in the colonial situation. Kapil Raj takes the case of the Hindu College of Calcutta, which began to function in 1817 under the financial blessings of the Bengali Hindu elite. The college was "the first of its kind outside Europe and North America, and served as a model for the subsequent creation of schools and colleges elsewhere in the Subcontinent."[53]

Raj notes,

> Far from being forcibly thrust upon them, however, 'European' learning was actively sought by a section of the indigenous population of Bengal…. Indeed, many of the men associated with the Hindu college were, or were descendants of, munshis, banias, or other intermediaries for individual Europeans; or else were functionaries in the colonial administration…. In setting up the Hindu College…, this urban elite was trying to familiarize itself with British knowledge practices…. This was clearly part of the bhadralok's strategy to

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[49] Raj, *Relocating Modern Science*, 94.
[50] Raj, *Relocating Modern Science*, 94.
[51] Raj, *Relocating Modern Science*, 9.
[52] Zaheer. Baber, *The Science of Empire: Scientific Knowledge, Civilization, and Colonial Rule in India* (New York, NY: State University of New York Press, 1996), 251.
[53] Raj, *Relocating Modern Science*, 161.

> establish themselves as the new indigenous elite, with a clear identity as intermediaries… between the European and indigenous populations.[54]

Further, many modern Indian thinkers, such as Mahendra Lal Sircar[55] and P. C. Ray[56] sought Western science to wield it for the cause of forging national identity. Science, for them, provided an opportunity to cast a vision for a different future.[57]

The excitement about science was evident in the establishment of scientific institutes and the diffusion of scientific ideas in the public sphere through newspapers and journals, in which Indians themselves enthusiastically participated.[58] According to Sambit Mallick, Hindu College (1816), Delhi College (1825), Aligarh Scientific Society (1864), Bihar Scientific Society (1868), and the Indian Association for the Cultivation of Science (1876) were some of the institutes established with the aim of "not merely popularizing but also democratizing scientific knowledge in India by creating opportunities for Indians to pursue science education."[59]

Postcolonial theorists rightly assert that the dissemination of scientific knowledge was constrained due to the apprehension that it would result in the death of Raj, which subsequently transpired. Nonetheless, they omit the accounts of Indian agencies active in advancing the propagation of science. In fact, Indians "eagerly sought after modern science"[60] to counter the unjust colonial policies that hindered the spread of science and the employability of scientific rationality for the emancipation of Indians. Ultimately, the

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[54] Raj, *Relocating Modern Science* 164-165. *Munshis* and *banias* refer to the higher business classes here. The word *bhadralok* refers to the group of people from these various classes who became established as mediators and, thus, beneficiaries of the British rule.

[55] Pratik Chakraborty, 'Science, Morality, and Nationalism: The Multifaceted Project of Mahendra Lal Sircar', *Studies in History* 17, no. 2 (2001): 2; John Bosco Lourdusamy, 'The Indian Association for the Cultivation of Science: A Tortuous Tryst with Modern Science', *Journal of Science Education and Technology* 12, no. 4 (2003).

[56] Dhruv Raina, *Images and Contexts: The Historiography of Science and Modernity in India* (New Delhi: Oxford University Press, 2010), 52–54.

[57] Shruti Kapila, 'The Enchantment of Science in India', *ISIS* 101, no. 1 (2010): 1.

[58] J. V. Narlikar, *The Scientific Edge: The Indian Scientist from Vedic to Modern Times* (Gurgaon: Penguin Books India, 2003), 192; S. Irfan Habib and Dhruv Raina, 'The Introduction of Scientific Rationality into India: A Study of Master Ramchandra—Urdu Journalist, Mathematician and Educationalist', *Annals of Science* 46, no. 6 (November 1989): 6.

[59] Sambit Mallick, 'Democratizing Scientific Knowledge through Building Scientific Institutions in Nineteenth Century India: The Sociology of Science Perspective', *Current Science* 90, no. 8 (April 2006): 1140–41.

[60] Mallick, 'Democratizing Scientific Knowledge', 1140

democratisation of knowledge through these institutes "began to occur not because of the colonial government but in spite of the colonial government."[61]

To add, the Serampore College, founded by William Carey, William Ward and Joshua Marshman, did not even prescribe to the metropolis-periphery model. It was rather thoroughly intercultural, teaching Sanskrit astronomical traditions side by side with Copernican models.[62]

These alternative histories highlight several other factors that were crucial for the acceptance, rejection or modification of modern science by the indigenous agency, including the "promise of potential career in the emerging profession of science,"[63] "traditional compulsions and political vicissitude,"[64] "utilitarian requirements and pragmatic considerations,"[65] and theological concepts such as Hindu otherworldliness and asceticism.[66]

These studies indicate that the history of colonial science, both generally and particularly in India, is not homogenous but complex and variegated. However, by assuming a monolithic trajectory of modern science, postcolonial literature not only circumvents the fact that the experiences of science and coloniality are culturally located and therefore dissimilar but also overlooks the diversity of reactions within a single vast colony, such as India. This is further evident in the fact that the postcolonial literature in India has largely excluded voices that have a different understanding of postcoloniality itself.[67] To add, it also does not pay attention to the role colonies like India played in the formation of the culture of the metropolis and, thus, of modernity itself.[68] Contemporary postcolonial literature tends to generalise a particular colonial experience, disregarding alternative narratives that could provide a more comprehensive description of knowledge circulation in modern India. Instead, by ignoring a host of factors that are part of any intercultural encounter, the postcolonial approach

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[61] Mallick, 'Democratizing Scientific Knowledge', 1144.
[62] Sujit Sivasundaram, '"A Christian Benares": Orientalism, Science and the Serampore Mission of Bengal', *Indian Economic and Social History Review* 44, no. 2 (2007): 2.
[63] Baber, *The Science of Empire*, 247.
[64] Bose, Sen, and Subbarayappa, *Science in India*, 484–85.
[65] Ahsan Jan Qaisar, *The Indian Response to European Technology and Culture, A.D. 1498-1707* (Delhi: Oxford University Press, 1982), 3.
[66] Vikas Mishra, *Hinduism and Economic Growth* (Bombay: Oxford University Press, 1962).
[67] Vishal Mangalwadi, *India: The Grand Experiment* (England: Pippa Rann Books, 1997).
[68] Peter van der Veer, *Imperial Encounters: Religion and Modernity in India and Britain* (Princeton, NJ: Princeton University Press, 2001); Lynn Zastoupil, *Rammohun Roy and the Making of Victorian Britain* (New York, NY: Palgrave Macmillan, 2010).

introduces a rupture in the history of modern science, recreating an "Oriental tabula rasa."[69] This, as often is the case, allows native historians free hand to create a rosy picture of thriving pre-colonial scientific activities, which the colonial rule suddenly halted, stifled and finally uprooted. To add, with revisionist historiographies taking postcolonial approaches, the whole question of power in pre-colonial scientific traditions completely disappears. With its exclusive focus on Western colonialism, postcolonialism overlooks all "non-western forms of imperialism,"[70] Thus, the simplistic image of a sudden historical rupture fits neither the complexity of pre-colonial knowledge traditions nor the trajectory of colonial science.[71]

Worse, by suppressing other expressions of colonial experiences, postcolonialism has become the new coloniser. Norbert Peabody, a historian of precolonial India, puts it succinctly when he calls neglect of native voices in postcolonial Indian literature a "critical analytical distortion," which would bring the postcolonial scholarship "closer to success where colonialism itself tried and failed; that is, in suppressing native agency."[72] The literature on the trajectory of modern science is no exception. Thus, Jhanvi Phalkey, having observed the hegemony of postcolonialism over the intersection of science and history in Indian academia, retorts, "In the pursuit of ideological explanation, histories of science in India depart from the preoccupation with microhistory… [to a] certain kind of macrohistorical explanation" and every student of history "is expected to elucidate the colonial or the postcolonial condition."[73]

These deliberations indicate that the postcolonial analysis of the history of modern science in India has several gaps that need to be addressed before the approach is accepted wholesale.

Contextual Investigation

The contextual investigation here is meant to analyse the consequences of postcolonial approaches on India's larger landscape and evaluate their utility in this context.

The postcolonial approach to science, by encouraging nationalistic historiographies, has served the same forces of conservatism that it aimed to defeat in the first place. The new

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[69] Vinoth Ramachandra, *Subverting Global Myths: Theology and the Public Issues Shaping Our World* (Downers Grove, IL: IVP Academic, 2008), 284.
[70] Ramachandra, *Subverting Global Myths*, 238.
[71] Zaheer Baber, 'Colonizing Nature: Scientific Knowledge, Colonial Power and the Incorporation of India into the Modern World-System', *British Journal of Sociology* 52, no. 1 (March 2001): 42, 1.
[72] Norbert Peabody, *Hindu Kingship and Polity in Precolonial India*, Cambridge Studies in Indian History and Society (Cambridge: Cambridge University Press, 2003), 2–3.
[73] Jahnavi Phalkey, 'Introduction (Focus: Science, History and Modern India)', *Isis* 104, no. 2 (2013): 330–36.

historiographies written in the colonies to counter the uniqueness of the metropolis from the beginning faced the uphill task of excavating science from its ancient sources. Many ancient medical treatises such as *Charaka Saṃhitā and Suśruta Saṃhitā*and scientific learnings, such as *Sūrya Siddhānta*in India are written in ancient languages and, therefore, inaccessible to non-experts. For people facing more urgent issues of poverty, illiteracy and corruption in their mundane lives, studying ancient languages to decipher hidden gems of science is neither practical nor affordable. Most importantly, ancient treatises have their own distinct cultural context. Reading modern science into it or deducing scientific ideas from it is never accomplished without projecting today's cultural needs. Resurrecting a national history of science, therefore, as Zaheer Baber says, is always an "unanswerable question of 'what might have been.'"[74]

Therefore, the cultural distance between modern and pre-modern knowledge is filled with constructive histories of constant myth-making for political purposes.[75] The postcolonial critique of Western modernity has provided a fertile ground to revise the history of science in India, but the space is often occupied by agenda-driven historiographies that constantly castigate religious minorities, particularly those of "Abrahamic religions"[76] as outsiders and aliens, responsible for the disruption of Indian scientific traditions. The revival of Indian science, therefore, becomes a resurgence of Hindu or Vedic science[77] and vice versa. Once science is wedded to religious nationalism, it provides a recipe for majoritarian politics and

[74] Baber, 'Colonizing Nature', 41.

[75] Banu Subramaniam, 'Archaic Modernities: Science, Secularism, and Religion in Modern India', *Social Text* 18, no. 3 (2000): 3; Meera Nanda, 'Postmodernism, Hindu Nationalism, and "Vedic Science"', in *Scientific Values and Civic Virtues* (Oxford: Oxford University Press, 2005), 220–36; Nanda, *Science in Saffron*, 93ff.

[76] The category of 'Abrahamic religions' was employed to create positive interreligious relations between Judaism, Islam and Christianity. It has made its way into contemporary science and religion discourse. See, David L. Gosling, *Science and the Indian Tradition: When Einstein Met Tagore*, (London; New York: Routledge, 2007), 149; Varadaraja V Raman, *Indic Visions: In an Age of Science* (New York, NY: Metanexus Institute, 2011), 90; John Hedley Brooke and Ronald L. Numbers, 'Into All the World: Expanding the History of Science and Religion beyond the Abrahamic Faiths', *Almagest* 8, no. 2 (2017): 9–26; John Polkinghorne, *Belief in God in an Age of Science* (New Haven, CT: Yale University Press, 1998), xiii.; For the problematics of using this generalised category, see Adam Dodds, 'The Abrahamic Faiths? Continuity and Discontinuity in Christian and Islamic Doctrine', *Evangelical Quarterly: An International Review of Bible and Theology* 81, no. 3 (2009): 230–53; Samuel L Boyd, 'Judaism, Christianity, and Islam: The Problem of "Abrahamic Religions" and the Possibilities of Comparison', *Religion Compass* 13, no. 10 (2019): e12339 Moreover, in the Indian context, it is often used to contrast the Abrahamic religions against the "dharmic" or "Indic" ones, wherein the former are often considered less scientific and ecologically more exploitative than the latter.

[77] Arvind Sharma, 'On Hindu, Hindustān, Hinduism and Hindutva', *Numen* 49, no. 1 (2002): 1.

minority bashing. Thus, science is no less a tool of exploitation in the hands of nationalistic historians and politicians than it was for their colonial counterparts.

Indian Postcolonialists certainly distance themselves from overtly nationalistic historiographies of Hindutva ideologues, but they still consider them merely "reactionary" to colonial power politics. However, as Meera Nanda observes, India's postcolonial and Hindutva alliance is hard to ignore and would prove costly if disregarded. She finds at least three points where their arguments "converge almost exactly."[78]

Firstly, the *decolonisation* argument. Nanda says that the clarion call of both postcolonialists and Hindutva historians is the same: to decolonise the Indian mind by rethinking progress, science and development from within India's own histories and traditions. Hindutva thinkers employ the postcolonial concepts of "epistemic violence" and call for understanding local or alternative sciences through their own categories and in their own right. This often means that science in India should be studied through "Hindu" categories. Given the unity of their objective, postcolonialists and Hindu historiographers also employ the same symbols from India's past. Thus, for instance, Gandhi is invoked by both postcolonialists and Hindutva historians for precisely the same objective of decolonising science.

Secondly, the *reductionism* argument. Postcolonial vilification of duality and reductionistic approach as exploitative is employed widely by Hindutva thinkers. In several Hindutva writings, reductionism is attributed to Semitic faiths that separate matter from consciousness. In contrast, it is argued that Hinduism has always been "holistic" and therefore provides more wholesome and productive, yet less exploitative and "feminist" science. Nanda suspects a gross misunderstanding and extrapolation of the reductionist approach employed in science. She is outright when she says,

> Most of the claims of greater ecological and feminist sensitivity in the Hindu practice of treating all nature as a sacred and interconnected whole turn out to be empirically false. In fact, quite often the faith in the divine powers of some rivers and plants serves as an excuse not to care for them adequately, precisely because they are considered to share God's miraculous powers to recover and stay pure. For all the falsehoods and obscurantisms, the claims of Hindu (or Eastern, more broadly) holism thrive in the academia because of the radical

[78] Meera Nanda, 'Postmodernism, Hindu Nationalism and `Vedic Science', Part II', 16 January 2004, https://frontline.thehindu.com/the-nation/article30220655.ece.

> academics' own mistaken and overblown critique of the reductionist methodology of science.[79]

Thirdly, the *symmetry* argument. This is the claim that since rationality, coherence and other such concepts are social constructs, "modern science… ought to be treated 'symmetrically' with other ways of knowing." This has set the canon of Hindutva literature on science to lose with

> unabashed and bold defence of Vedic mysticism as a legitimate scientific method within the Vedic-Hindu metaphysical assumptions, as rational and empirically adequate as the best of modern science, and as deserving of the status of universal objective knowledge as the conventionally accepted theories of matter and biological evolution.[80]

According to Nanda, due to these three points of convergence, "Hindutva ideologues see themselves as part and parcel of postcolonial studies."[81]

One may find Nanda's critique of postcolonialism somewhat extravagant and fallacious. It is vulnerable to the fallacy of composition – the abuse of theory does not imply that theory is intrinsically abusive. In fact, postcolonialism itself has resources to guard it against this abuse, which Nanda could have used, such as its concept of intersectionality – the notion that one possesses multiple identities and that while one may share the identity of a subaltern in one context, in another context, the same person can belong to the privileged group. This would mean that to be truly postcolonial, one must address the power dynamics at work on various layers of binary – not just at the level of the East-West binary but also at the Brahmin-Dalit binary, for instance. But then, postcolonial notions such as intersectionality have not found much traction among Indian postcolonialists themselves either, perhaps because one's penchant for postcolonial theory often goes as far as the coloniser is "out" there.

Whatever the case, contemporary usage of postcolonial theory in the Indian context takes away with one hand what it offers with another. On the one hand, by challenging Euro-centric biases in the discourses on science, it welcomes non-European voices and perspectives. On the other hand, by placing the European colonial against the non-European subaltern, it requires that for all voices to be genuinely interested in conversation on science, they must

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[79] Nanda, 'Vedic Science, Part II'.
[80] Nanda, 'Vedic Science, Part II'.
[81] Nanda, 'Vedic Science, Part II'.

hold to anti-Eurocentrism. Thus, by keeping the discussion tied to the European metropolis, postcolonialism perpetuates the Eurocentrism it claims to defy.

This abuse of postcolonial theory has consequences for Indian Christians, as Christianity itself is also viewed through the lens of coloniality. For postcolonial thinkers and Hindutva revisionists, to critique Europe is to critique Christianity and vice versa. This image is reinforced by Western academia, which, in its postcolonial zest, often portrays the West as synonymous with Christianity and India as synonymous with Hinduism. Thus, when Eric Dorman charts the state of the South Asian Science and Religion Discourse, he uses the words Hindu, South Asian and Indian interchangeably. While he admits this to be problematic, the problem lies in the fact that he too fits Hinduism into neat categories of science, philosophy and religion that are Western/Christian.[82] What is not realised is that the essentialisation of binaries such as that of Western/Christian and Indian/South Asian/Hindu is a continuation of the modern tendency to generalise and universalise, and that such images hinder distinct Indian Christian voices from staking their claim in the science and religion discourse.

Philosophical Investigation

Philosophical investigation particularly asks if postcolonial approaches do justice to the way modern science itself functions.

By locating all discussions about science in the power grid, postcolonialism makes science so malleable to the motives of power that the discourse on science eventually becomes the discourse of power. Since science involves a human subject, it will certainly always remain a human and, therefore, a socially embodied endeavour—in that its methods, tools, questions, and consequences are contextually shaped and, therefore, embroiled in power encounters. But is science nothing more than a social construct and a tool of power?

Postcolonial analysis explicates the role of human agents and their power-driven attitudes, but it often comes at the cost of ignoring the role of nature, the very object of scientific exploration. Are our interpretations of nature nothing but our own constructions resulting

[82] Dorman, 'Hinduism and Science', 613–14.

from the power games in which we find ourselves caught? Can or should our images of nature be moulded as per our wishes for the sake of settling those power disputes?

The philosophical problem that we face here is aptly put in Robert Klee's comment. He argues,

> From the fact that our being able to say or to claim that X exists depends on an elaborate and artificial procedure for detecting X, they [Latour and Schaffer] mistakenly think it follows that X's existence itself depends on that elaborate and artificial detection procedure.[83]

The point Klee makes here is that just because our procedures, tools and methodologies can be biased does not suggest that reality itself is biased. Maarten Boudry similarly points out that while theories and truth claims might have been constructed under the influence of intuitions and desire, science gives epistemological priority to nature for "the world out there does not care much about our intuitions and desires..."[84]

In fact, the entire scientific enterprise works on the basis of the fact that there is a reality to be discovered, for "If there was no reality out there, except for what we project ourselves, there would be nothing to discover."[85] Most scientists themselves agree that their theories are geared towards finding the truth about reality and have objective reference.[86] Moreover, scientific theories are remarkably effective in describing the regularities in nature, not because they have constructed those laws by themselves, but because they correspond with the nature of reality or "the way things are."[87] For the same reason, scientific explanations are also restricted by nature itself as it "refuses to be domesticated to our subjectivity."[88] Alister McGrath puts it succinctly when he says that our

> attempt to understand the external world is itself governed by that world, in that we are obliged to be constrained by the way the world is, or is seen to behave, in our explanations. Explanations and analysis are not independent

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[83] Robert Klee, 'The Sociology of Knowledge: Exposition and Critique', in *The Science Wars: Debating Scientific Knowledge and Technology*, ed. Keith Parsons (New York, NY: Prometheus Books, 2003), 61.
[84] Maarten Boudry, Stefaan Blancke, and Massimo Pigliucci, 'What Makes Weird Beliefs Thrive? The Epidemiology of Pseudoscience,' *Philosophical Psychology* 28, no. 8 (2015): 1193.
[85] Toren, *Christian Apologetics*, 124.
[86] John Polkinghorne, *Reason and Reality: The Relationship between Science and Theology* (London: SPCK, 1991); Ratzsch, *Science & Its Limits: The Natural Sciences in Christian Perspective*; Nicholas Rescher, *Scientific Realism: A Critical Reappraisal* (Dordrecht: D. Reidel, 1987).
[87] John Polkinghorne, *One World: The Interaction of Science and Theology* (Princeton, NJ: Princeton University Press, 1986), 22.
[88] Torrance, *Theological Science* (London: Oxford University Press, 1969), 84.

> constructions of the human mind, but are seen to be grounded and responsive to what can be known of reality.[89]

This position, known as critical realism, is one that we have tentatively adopted for this project. Critical realism acknowledges that "scientific understanding is not just read out of nature, but it is attained through a creative interpretative process."[90] In other words, it accepts both epistemic subjectivity and ontological objectivity – that while our interpretations are always socially, historically and culturally situated, reality exists independently of our interpretations.

In the absence of an objective grounding of our theories, as is found in a critical realist understanding of nature, postmodernist and postcolonial approaches are vulnerable to extending what Nanda calls an "epistemic charity"[91] to all claims of knowledge. Taking every truth claim as a mere opinion from a certain contextual position and a result of power games within that context may lead them headlong into the pit of relativism. Worse, in the absence of an objective reference to which all opinions should be held accountable, the very motivation that propels postcolonial theory, namely to address the socio-political inequalities in a given context, is dampened, if not lost altogether—for if all truth claims are mere opinions, why should a power-mongering opinion be considered any less valuable than the one that advances love and service, and why should the latter be wielded to counter the former?

To summarise, a critical investigation into the postcolonial analysis divulges three significant challenges that the theory faces that need to be addressed before it is integrated into this project. These are:

1. Postcolonial theory fails to adequately reflect on the full breadth of historical evidence. Its assumption that the trajectory of modern science in a colony like India has been that of violence and oppression is only partly true. It comes at the cost of neglecting the agency of natives who eagerly sought the benefits of modern science

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[89] Alister E. McGrath, *The Foundations of Dialogue in Science and Religion* (Malden, MA: Blackwell Publishers, 1998), 156–57.
[90] John Polkinghorne, *Faith, Science and Understanding* (New Heaven, CT: Yale University Press, 2000), 79.
[91] Meera Nanda, 'The Epistemic Charity of the Social Constructivist Critics of Science and Why the Third World Should Refuse the Offer', in *A House Built on Sand*, ed. Noretta Koertge (New York, NY: Oxford University Press, 2006), 286–312.

and historical episodes of cooperation among colonial and native individuals and groups.

2. Postcolonial thinkers do not pay sufficient attention to the political ramifications of the theory in a context like India. By overlooking the narratives of its misuse, postcolonial theory not only further pushes away native marginalised voices but, by the same token, also becomes a tool in the hands of native oppressive forces to maintain power.
3. Postcolonial theory fails to do justice to the nature of modern science. By circumscribing all interpretations of nature to cultural constructions, it stifles the voice of nature itself. For the same reason, it also leaves itself unprotected against the lure of relativism.

The investigations conducted above raise concerns about the application of postcolonial theory, particularly in the context of India. It both enlarges and constricts the discursive space for an Indian Christian theology of nature. Given these concerns, one wonders if postcolonial theory is still relevant to a science and religion dialogue. Can the postcolonial theory still be exploited to decolonise the science and religion dialogue and open a space to initiate a fresh dialogue? Or should one turn their ears away from the postcolonial critic and revert to modern assumptions and ways of constructing science and religion dialogue?

1.3 The Way Forward

The investigations carried out above show the ambivalent nature of postcolonial theory. On the one hand, its immense contribution cannot be ignored. Any dialogue between science and religion that claims to remain untouched by the power dynamics of a larger socio-cultural context cannot be genuine. On the other hand, restricting all science-religion dialogue to power dynamics may not take the dialogue beyond power games: for if colonial science was essentially nothing more than a display of power, and postcolonial science is nothing more than a resistance to it, then the trajectory of science is essentially nothing but a dialectics of power. Neither scientists nor postcolonialists themselves would agree to such a radical conclusion.

If the postcolonial theory is to be truly relevant and effective, it will have to be further postcolonised. The task is urgent for the sake of postcolonialism itself, for if not postcolonised, the postcolonial theory too becomes a neo-colonial and oppressive

metanarrative. On the contrary, the postcolonial theory can only remain true to its objective when it is willing to uphold the standards it has set for others.

The most important step in the direction of postcolonising postcolonialism is to require it "to listen even more intently to other and marginal voices and let them speak for themselves."[92] An active inclusion of marginalised voices and perspectives can fill the three gaps we observed in our investigation of the current application of postcolonial theory.

Firstly, since the flight of modern science in colonial India is variegated, all accounts of modern science's trajectory in India need to be further particularised by considering alternative histories and voices. In other words, to be truly postcolonial, the postcolonial theory needs to be open to voices that challenge the conclusions of postcolonial historiographies.

Secondly, to be truly postcolonised, postcolonial theory needs to be open to the voices and narratives that reveal the abuse of postcolonial theory. It must call out those who selectively apply postcolonial theory to maintain and expand their own power.

Thirdly, the postcolonial assumption of modern science's intrinsic relationship with power must be postcolonised. Postcolonialism needs to be open to the possibility that when other voices are allowed to speak for themselves, it may lead the discourse to "move beyond the presupposition that power struggles are the only or most important fact in understanding marginalised discourses."[93]

In a sense, this research itself is a marginalised project and, therefore, a postcolonial venture: It is research by an "Indian" contributing to the science and religion conversations dominated by Western voices, specifically a "Christian" engagement trying to find its place among dominant Hindu voices within India; and it investigates the convergence of science and religion from a "theological" perspective in a predominantly "secular" academia. As such, it is a contribution to postcolonial studies on science and religion.

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[92] Benno van den Toren, 'The Significance of Postcolonial Thinking for Mission Theology', *Interkulturelle Theologie. Zeitschrift Für Missionswissenschaft* 45, nos 2–3 (2019): 221.
[93] Toren, 'The Significance of Postcolonial Thinking', 221.

Conclusion

In this chapter, I argued that science and religion dialogue in India is deeply shaped by postcolonial approaches, which requires a thorough engagement with its main tenets at the outset of the research. This was also required to set the scene for the rest of the research and not repeat the same argument all over again. Accordingly, I explored the chief contributions of postcolonial approaches and critically engaged with its conclusions, particularly the Indian contextual setting. In the end, I argued that in order to fill the gaps existing in the contemporary application of postcolonial theory, it will have to be postcolonised. Moreover, such a move will keep the postcolonial theory true to its tenet of deconstruction and enrich its application.

However, we are yet to explore the potential impact and consequences of decolonising postcolonial theory as the voice of marginalised groups, such as Indian Christians, is included in science and religion dialogue. The next chapters of the research are designed to do just that—actively listen to an Indian Christian voice on nature.

However, that leads us to another pressing question: what constitutes an Indian Christian voice, and where can one find it? I have contended (under 1.1) that the content of Indian Christian theology of nature is found in the already existing interreligious and liberative discourses within India. In the next chapter, we delve into a concrete history of interreligious encounters between Advaitic and Christian intellectuals in order to investigate Indian Christian reflections on the material world. While the primary aim is to analyse the debates concerning nature or the material world in the reflections of early modern Indian Christian thinkers, we will also explore how they, along with their primary interlocutors—the Advaitic thinkers—grappled with power dynamics, the claims of science and their own religious convictions at the cusp of modernity in India, and were able to dialogue on the nature of nature.

CHAPTER THREE

Nature in Interreligious Discourse

On 10 May 1901, Jagdish Chandra Bose, an eminent Indian scientist, performed an interesting experiment at the Royal Society of London. Placing a plant in a poison-filled vessel, he began to record its reaction with the instruments he had developed on his own. In a lecture accompanying it, he claimed that the experiments he had conducted in the previous four years went on to prove that inorganic matter responds to external stimuli as does organic matter. Therefore, he concluded that the living and the non-living are related by the "real" who is "one."[1] This, he further claimed, was "proclaimed by my ancestors on the banks of the Ganges thirty centuries ago – 'They who see but one, in all the changing manifoldness of this universe, unto them belongs Eternal Truth-unto none else, unto none else!'"[2]

Less than a hundred years before Bose's experiment, when the founders of Serampore College—William Carey, William Ward and Joshua Marshman—established Serampore College in 1818, they faced a different challenge: to separate the divine and the material so that the students would investigate it rather than idolise it. "The evangelists called on Indians to change the meanings that they attached to the material world, moving from a confusion of nature with the divine to a referential view of nature, where nature referred to the deity.… The instruments used at Serampore College publicised the mutability of the material world."[3]

The two examples illustrate that for many, such as Bose and the Serampore trio, their religious worldview and approach to natural science are deeply interconnected. In the first instance, science is employed to underscore a religious worldview, and in the latter, a religious worldview is considered a prerequisite to scientific practice. What is different, however, is their understanding of nature: for the former, God and the material world are "one"; for the latter, they cannot be one. This difference in interpretation of nature became a central issue for interreligious discussions between popular modern Hindu and Christian thinkers at the cusp of

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[1] Jagadis Chunder Bose, *Response in the Living and Non-Living* (London: Longmans, Green, and Company, 1902).
[2] Cited in C. Mackenzie Brown, 'Jagadish Chandra Bose and Vedantic Science', in *Science and Religion: East and West*, ed. Yiftach Fehige (New York, NY: Routledge, 2016), 104.
[3] Sivasundaram, 'Christian Benares', 142.

modern science in India. The objective of this chapter is to delve into those episodes of interreligious dialogue with an aim to unearth the Indian Christian voice on the material world and major theological motifs concerning the material world that emerge from it. As a secondary exploration, I will also further test the relevance of postcolonial analysis (which I engaged with in the previous chapter) by investigating factors, in addition to power dynamics that play a key role in such an interreligious dialogue on nature.

Before delving into the interreligious dialogue itself, it is important to examine the historical context that set up the course of dialogue in a certain way so that some voices and perspectives found a more prominent place in it than others.

2.1 Indian Theories of Nature

Indian speculations about nature and the creation of the material world go back centuries and are diverse in their explication of the relationship between God and nature. For example, the famous and thought-provoking Nasadiya Sukta or "Hymn of Creation hymn" recorded in Rig Veda 10:129 ends as:

Whence all creation had its origin,
the creator, whether he fashioned it or whether he did not,
the creator, who surveys it all from highest heaven,
he knows — or maybe even he does not know.[4]

According to Basham, creation in Hindu mythology has been imagined through a diverse variety of analogies, such as the effect of a primaeval sacrifice (*Prajāpati*), or as a sexual act, or to have originated in a "golden embryo" or cosmic egg (*Hiraṇyagarbha*).[5] However, more systematic speculations around the relation of material reality with the Brahman are articulated in six major and distinct philosophical schools of Vedic Hinduism: Sāṃkhya, Yoga,[6] Nyāya, Vaiśeṣika, Pūrva Mīmāṃsā and Uttara Mīmāṃsā or Vedānta. Vedānta further

[4] A. L. Basham, *The Wonder That Was India: A Survey of the History and Culture of the Indian Sub-Continent before the Coming of the Muslims* (New York, NY: Taplinger Publishing Company, 1967), 250. Basham calls this 'the oldest surviving records of philosophical doubt in the history of the world' (p. 249).
[5] Basham, *The Wonder That Was India: A Survey of the History and Culture of the Indian Sub-Continent before the Coming of the Muslims*, 249–51.
[6] Yoga here as a school of philosophy is different from the contemporary method of physical exercise.

has three sub-schools: Advaita, Dvaita and Vishisht Advaita, commonly translated as monist, dualist and qualified monist respectively.

These schools discussed and, at times, fiercely defended their position on how the universe was created and the relationship between material reality and the Ultimate following the creation of the world. Both Samkhya and Yoga believe in the dualism of *Prakṛti* or *prakriti* (nature) and *Puruṣa* or *purusha* (Brahman) and argue that the world was manifested by a disturbance in the balance of *prakṛti* caused by the gaze of *puruṣa*. Nyaya and Vaisheshika espouse that the world came into being by the self-organisation of atoms that are themselves eternal. Purva-Mimansa considers the world to be existing forever, which does not require invoking a Creator God. Among the sub-schools under Vedānta, both Advaita and Vishishtadvaita believe that the world is the manifestation of Brahman, although they differ on how the world manifests itself and its relation to Brahman. Advaita holds that the material reality, being *vivarta* (an illusory manifestation), does not affect Brahman in any way, whereas Vishishtadvaita believes that the world came into being as a *parināma* (consequence) of the transformation of the energies latent within Brahman, and thus affected Brahman. The Dvaita sub-school of Vedānta, believes in three realities, that of Brahman, *Ātman* (souls) and *prakṛti* (nature), while postulating Brahman to be the only independent reality.

Despite this diversity, due to historical contingencies that I will explain later (2.2), Advaita Vedānta emerged as the most prominent school of Hinduism during modernity. Consequently, when the dialogue between modern science and Hinduism was considered, Advaita Vedānta received the most attention. This also remained the case for Hindu-Christian interreligious dialogue, as modern Indian Christians were obliged to devote most of their intellectual energy to engaging in dialogue with Advaita Vedānta. One of the reasons for Advaita Vedānta's popularity was the contentious assumption that the findings of modern science had established the Advaitic tenet concerning the material world. A brief detour in modern history that explores the forces and circumstances that fuelled this assumption and the debates surrounding it, may help to fully comprehend the issues at stake in interreligious dialogue on the nature of the material world.

2.2 Oriental Interventions and Hinduism's "Otherworldliness"

Advaita's rise to prominence was forged in the intercultural encounter facilitated by the "Age of Discovery." The numerous voyages to other parts of the world exposed Europe to the rest

of the world. In the 17th century, Europe's focus in Asia was mostly on China, which began to change by the 1760s when the literature about India's language, philosophy, social organisation and ethos began to steadily appear,[7] first with the reports of Franciscan, Dominican and Jesuit missionaries and later also by other explorers.[8] This early contact created diverse reactions among Europeans regarding India and its religion.

Several categories are employed to describe Western reaction to India in this intercultural encounter; one of the most common being the Orientalist-Anglicist category. The category gained popularity in debates concerning the nature of the policies to be implemented in the educational institutions run by the British East India Company to equip native Indians. Since then, it has become a trademark categorisation to refer to two different cultural attitudes of those who come in contact with India from outside. David Kopf describes the difference between the two attitudes thus:

> The well-meaning Orientalist type tended to be sympathetic to Indian traditions, and went so far as to engage himself in academic research to rediscovering the Hindu past or to sysmatizing available knowledge of Indian civilization. As a social reformer he started many projects designed to update Indian traditions and institutions by fusing them with modern values from the contemporary West. He fashioned himself as a syncretistic modernizer of the Hindu traditions. The well-meaning Westernizer, on the other hand, who tended to downgrade Indian traditions as dead and useless, urged instead complete assimilation to Western cultural traditions, which were in his mind increasingly equated with modernization.[9]

Although not watertight, these categories can be used as a heuristic device to understand the basic attitudes involved in this intercultural encounter.

William Jones, Charles Wilkins and Henry Thomas Colebrooke were some of the first British Orientalists who made immense contributions to informing Europe about India and are now also credited with "discovering" the repository of Sanskrit literature, which later came to be known as Hindu literature.[10] Charles Wilkins' translation of Bhagavadgita in 1784, and Abraham Hyacinthe Anquetil-Duperron's translation of Upanishads (known as Oupnek'hat)

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[7] P. J. Marshall, ed., *The British Discovery of Hinduism in the Eighteenth Century* (Cambridge: Cambridge University Press, 1970), 2; Harry Oldmeadow, *Journeys East: 20th Century Western Encounters with Eastern Religious Traditions* (Indiana: World Wisdom, Inc., 2004), 4.

[8] Wilhelm Halbfass, *India and Europe: An Essay in Philosophical Understanding* (Delhi: Motilal Banarsidass Publishers Pvt. Ltd., 1990), 37.

[9] David Kopf, *The Brahmo Samaj and the Shaping of the Modern Indian Mind* (Princeton, NJ: Princeton University Press, 1979), 10.

[10] Marshall, *The British Discovery of Hinduism*, 2.

became crucial resources for the European perception of the religious beliefs of India. This led to wider and gradually formalised intellectual engagement with Eastern philosophy, most evident in the translation projects and wide distribution of its literature, and the establishment of Indology as a new field of research in many European universities.[11] While Jones' Asiatic Society was instrumental in translating and wider distribution of knowledge regarding India and Hinduism, Max Muller's magnum opus and colossal 50-volume set of *The Sacred Books of the East*, was a product of systematic scholarly and institutionalised engagement with the Eastern philosophy.

2.2.1 Between Orientalist and Anglicist Views of Hinduism

The philological research of the Orientalists often resulted in a claim that Sanskrit was related to or even preceded most ancient languages. Despite the variegated views and critical attitude that the Orientalists themselves had towards the culture and philosophy of India,[12] Jones, Wilkins, and Colebrooke were "advocates of the view that the mythological, religious and philosophical tradition of India was especially ancient and pristine."[13] Moreover, Wilkins, "tried to show that… Europeans and Asians shared a common past, from which similarity of language and even of philosophical schools sprang."[14] Voltaire, having read the Oriental work believed that "other people had both older and more refined civilisations"[15] than the Europeans. According to Marshall, most early Orientalists were Deists, and their infatuation with Eastern religion was driven by an ambition to find a Universal Religion outside the walls of Christianity – "a religion based on monotheism with a concept of the immortality of the soul and an acceptable moral code, which owed nothing to contact with either Jews of Christians."[16] Their search ended in Hinduism as "Hindus emerged from their work as adhering to something akin to *undogmatic Protestantism*."[17]

However, for those of the Anglicist persuasion (both European and Indian), India was "in a state of intellectual stagnation."[18] Georg Hegel, Karl Marx, and Max Weber pointed to India's

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[11] Halbfass, *India and Europe*, 63; J. J. Clarke, *Oriental Enlightenment: The Encounter between Asian and Western Thought* (London: Routledge, 1997), 71.
[12] For instance, Colebrooke's assessment of the Tantras was generally pejorative. Halbfass, *India and Europe*, 205.
[13] Halbfass, *India and Europe*, 63.
[14] Marshall, *The British Discovery of Hinduism*, 37.
[15] Marshall, *The British Discovery of Hinduism*, 26.
[16] Marshall, *The British Discovery of Hinduism*, 27.
[17] Marshall, *The British Discovery of Hinduism*, 43. Italics mine.
[18] Marshall, *The British Discovery of Hinduism*, 3.

"other-worldly" metaphysics to explain its slow material progress.[19] Hegel called Hinduism "The Religion of Phantasy"[20] and famously said, "… in India we see God in the delirium of his dreaming"[21] Marx, who considered village communities the archetype of Indian identity, believed that "Hindu religion… was a primitive worship of Nature and reflected man's *non-rational* attitude to Nature."[22] Max Weber likewise argued that Hinduism "entailed a devaluation of the world and an absolute flight from the world. Whatever the means adopted for reaching the holy goal of salvation, all these Indian cults alike were characterised… by irrationality."[23]

At the centre of the Anglicist attack on India's lack of scientific attitude was its otherworldliness prescribed by its religion, more specifically the Advaitic doctrine of *māyā*. The word Advaita, which literally means "not two", is generally translated as monism, whereas *māyā* refers to the belief that the material world is an appearance or, popularly translated, an illusion.

That monism inspired otherworldly lifestyle was not merely a Western remark; several Indian thinkers also believed it to be the case. Debiprasad Chattopadhyaya, an Indian and Marxist historian of science, believed that Hindu monism produced "lofty contempt for nature or material world."[24] P. C. Ray, likewise, observed that in addition to the "disastrous degradation of the social status of technicians, craftsmen and other manual workers…. ideological and philosophical factors, like the world-denying *Mayabad* [meaning the doctrine of māyā] preached by Sankara, contributed to the decay of scientific temper."[25]

2.2.2. From Orientalism to Romanticism

Oriental images of India took an extravagant turn when they met the romantic movement, particularly of the German variety, which in turn augmented Orientalism.

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[19] Ursula King, *Indian Spirituality and Western Materialism: An Image and Its Function in the Reinterpretation of Modern Hinduism* (New Delhi: Indian Social Institute, 1985), 4.
[20] Stewart Jon, 'Hegel's Criticism of Hinduism', *Hegel Bulletin* 37, no. 2 (2016): 2.
[21] Vittorio Hösle, 'The Search for the Orient in German Idealism', *Zeitschrift Der Deutschen Morgenländischen Gesellschaft* 163, no. 2 (2013): 433, 2.
[22] Trevor Oswald Ling, *Karl Marx and Religion: In Europe and India* (London: Macmillan, 1980), 76.
[23] Ling, *Karl Marx and Religion*, 89.
[24] Chattopadhyaya, *History of Science and Technology*, 281.
[25] Amitabha Ghosh, 'Popularisation of Science in Bengal: The Pioneering Role of Rajendralal Mitra In', *Uncharted Terrains: Essays on Science Popularisation in Pre-Independence India*, Vigyan Prasar, New Delhi, 2000, 69–70; cited in Mahanti, 'Scientific Temper in India'.

According to Halbfass, India occupied a space of "mythical proportions" in German Romantic literature. Johann Gottfried von Herder, considered the pioneer of the Romantic movement, compared India to the childhood of humanity, where innocence and wholeness reigned. The Schlegel brothers, Friedrich and Wilhelm, continued to project India as a place of pristine religiosity and wholeness that was endangered by the onslaught of modernity. Max Muller, the most celebrated German Indologist, often claimed, in most striking terms, that India was humanity's original home.[26]

The search for original humanity where life was more integrated and wholesome was an indicator of a general mood of dissatisfaction that prevailed in 18th-century Europe as a consequence of abrupt changes brought by modernity. These included a sudden break from the traditional way of life, economic upheavals, social adjustments, belief in progress, and a gradual demise of religious authority. It was felt that the West's own indigenous resources were failing, and the quest for alternatives required going beyond it.[27] While the general call was to return to the ancient Esoteric Christian traditions, many Romanticists also abhorred Christianity for birthing the secular age through the Reformation and the French Revolution, which disconnected life from its spiritual roots.[28] However, the turn to the East was still limited in its appeal and primarily Euro-centric. Growing acceptance of Evolutionary theory made it possible for both Anglicists and Romantics to view history as gradually "progressing" from the least to a more advanced way of life, the former signified by India and the latter by Europe.[29]

It was Arthur Schopenhauer, however, who turned the tables in favour of India and placed it at the centre of civilisation. Stephen Cross points out the difference when he says

> They [other Oriental writers] had been attracted to Indian thought in part because they believed or imagined it harmonized with the esoteric truths of Christianity as they understood these to be. With Schopenhauer the position is reversed: what is true and great in Christianity results from its having 'Indian blood in its veins,' and where it differs from the Indian standpoint… it is Christianity that is in error.[30]

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[26] Halbfass, *India and Europe*, 82.
[27] Clarke, *Oriental Enlightenment*, 96.
[28] Halbfass, *India and Europe*, 73.
[29] King, *Orientalism and Religion*, 118.
[30] Stephen Cross, *Schopenhauer's Encounter with Indian Thought: Representation and Will and Their Indian Parallels* (Honolulu: University of Hawai Press, 2013), 14.

At the centre of Schopenhauer's fascination with India was the Vedantic conception *māyā*. Clarke comments,

> Especially important for Schopenhauer was the Hindu concept of *maya* which for him indicated the illusoriness of the phenomenal world of multiplicity, and the Upanishadic teaching that all things are ultimately one appealed to him as the precise equivalent of his notion that the apparent separateness and individuality of things is a mind-made illusion.[31]

The doctrine of *māyā* fitted so well with the then popular German idealism of Schopenhauer and Kant, that Paul Deussen, a German Indologist influenced by Kant and Schopenhauer commented that Indians

> Will be greatly astonished to find in Germany the scientific substruction of their own philosophy, of Advaita Vedanta! For Kant has demonstrated, that space, time and causality are not objective realities, but only subjective forms of our intellect, and the unavoidable conclusion is this, that the world, as far as it is extended in space, running on in time, ruled throughout by causality, in so far is merely a representation of my mind and nothing beyond it.[32]

For European thinkers trying to combat the materialism that had followed the Industrial Revolution, the concept of *māyā*, or the illusoriness of the world, proved to be a useful tool. The message of the impermanence of the world in their own context served as a reminder to renounce worldly pleasures and seek what is lasting and real. Modern Hindu thinkers themselves also thought that Vedānta's message of *māyā* was essential to correct the materialism of Western society. The parallels between German idealism and Advaita so striking that several Indian thinkers referred to Advaita as "Indian Idealism."[33]

But does this mean that the interpretation of *māyā* as an illusion was an Oriental projection or an Anglican conspiracy? Nicholson explains that the emergence of *māyā* as a quintessential Hindu teaching was the result of an intercultural encounter, which benefited both parties involved in it.

> In the case of the history of Indian philosophy, the Orientalists' primary living interlocutors were Brahmin pundits, who themselves had a particular understanding of their own intellectual traditions and who did their best to portray themselves as essential to any Orientalist project to govern according

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[31] Clarke, *Oriental Enlightenment*, 68.
[32] Paul Deussen, *Outlines of Indian Philosophy* (Berlin: Karl Curtius, 1907), 57.
[33] Ripusudan Prasad Srivastava, *Contemporary Indian Idealism: With Special Reference to Swami Vivekananda, Sri Aurobindo and Sarvepalli Radhakrishnan* (Delhi: Motilal Banarsidass, 1973); Sarvepalli Radhakrishnan, *An Idealist View of Life* (London: George Allen & Unwin Ltd., 1932).

> to native customs and laws. They were also eager to give these Western scholars of Indian philosophy what they wanted, specifically to point them to the types of texts that would confirm the European stereotype of Indians as quietistic, impractical idealists who doubted or denied the very existence of the physical world. It is in this way that Vedanta, especially the 'idealist' Advaita Vedanta, gained its modern reputation as the essence of the Indian mind.[34]

Śaṅkara (also spelt Shankara), an 8th- or 9th-century Hindu saint, is credited for popularising Advaita, although the philosophy itself predates him.[35] Śaṅkara's teachings, particularly his views of *māyā*, experienced a revival due to the intercultural encounter at the cusp of modernity, as we noticed above.

However, as the Oriental construction of Hinduism as an "otherworldly" religion was taking firm roots, it raised several questions. For one, despite its appeal of idealism, several Orientalists and Romanticists remained dissatisfied and in practice, Advaita was often regarded as leading to world resignation and quietism. For instance, the American transcendentalist Ralph Emerson Waldo, who borrowed much from Advaita in developing his idea of the world-soul, was averse to "Hindu quietism and resignation."[36] Indian thinkers tried to distance themselves from the kind of world-denying tones that Advaita was getting associated with.[37]

For these critics of Advaita Vedānta, the idealism inherent to it was gradually crumbling under the pressures of the modern age. This was particularly true for evolutionary theory which was perceived to be raising new challenges for Advaita's doctrine of *māyā*.

According to Ripusudan Srivastava, an Indian philosopher with a focus on Indian idealism, Advaita's struggle to clearly explicate the doctrine of *māyā* only increased with the conclusions of the evolutionary theory that stressed the realistic understanding of nature. This is because evolution established that

> Man [sic] is a complex being and that all his ingredients are equally real and important. When life was first introduced, it did not throw away matter but chose to transform it into the body of plants. Similarly, mind appeared at the stage and was introduced to the living human body which contains matter and life, of course in a transformed state. Thus one should not assume that the

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[34] Andrew Nicholson, *Unifying Hinduism* (New York, NY: Columbia University Press, 2010), 17; Cf. Ronald B. Inden, *Imagining India* (Oxford: Basil Blackwell, 1990).
[35] Mysore Hiriyanna, *The Essentials of Indian Philosophy* (London: George Allen & Unwin, 1985), 155ff.
[36] Clarke, *Oriental Enlightenment*, 86.
[37] Roy, *English Works*, 1:211–25; Hiriyanna, *The Essentials*, 154.

> body is the lower element from which evil arises. Here a marked departure from illusionistic philosophy is obvious.[38]

To summarise, then, the contentions around the nature of the material world at the cusp of modern science in India emerged from an intercultural encounter. With the rise of Advaita and the increasing popularity of evolutionary theory, modern Hindu thinkers faced the urgent task of articulating God's relationship with the material world in a way that acknowledges the reality of the material world without abandoning the Advaitic doctrine of *māyā*.

2.3. Interreligious Dialogue on Material World

The Intercultural encounter between Europe and India, Advaita's entanglement with Romantic ideas, and increasing realism had several consequences for interreligious exchange between Advaitic thinkers and modern Indian Christian interlocutors for the years to come.

Firstly, the intercultural encounters circumstantially positioned Advaita as the dominant Hindu and Indian voice in the field of religion. Oriental imagination had essentialised India and Hinduism in several ways. The Upanishads became the Hindu scriptures, "mysticism" was perceived as the nature of Hinduism, and Vedānta, by which most scholars meant Advaita, was firmly established as the culminating point of all Hindu thought.[39] Consequently, other Hindu schools of philosophy were drowned out from conversation and engagement with Advaita became a natural priority for interreligious dialogue. Followers of other religions, including Indian Christians, had to navigate within this cultural milieu. This means that although Christians engaged with other schools of Hinduism,[40] the territory in which the interreligious apologetics could take place, especially that on material reality, remained thoroughly permeated by Advaita.

Secondly, intercultural encounters allowed Advaita also to become a dominant voice in Indian engagement with natural science. Scientisation of Advaita took a giant leap when the correlation between science and Advaita-German idealism found its way into quantum physics via Wolfgang Pauli, Niels Bohr, and Erwin Schrödinger, who read not only Paul

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[38] Srivastava, *Contemporary Indian Idealism*, 180.
[39] King, *Orientalism and Religion*, 119, 128.
[40] James R. Ballantyne, *Christianity Contrasted with Hindū Philosophy* (London: James Madden, 1859); K. M. Banerjea, *Dialogues on the Hindu Philosophy* (Calcutta: Thacker Spink and Co., 1861); Nehemiah Nilkaṇṭha Śāstri Goreh, *A Mirror of the Hindu Philosophical Systems*, Third, trans. Fitz-Edward Hall (London: The Christian Literature Society, 1911).

Duessen and Schopenhauer but also the Vedas and the Upanishads.[41] Their observation of subject-object non-duality in quantum mechanics led them to opt for Advaitic holism over reductionism, so associated with Western science. The same correlation was later etched into popular imagination through the writings of Fritjof Capra[42] and Gary Zukav.[43] The parallels between the non-duality of quantum mechanics and Advaita contributed to the inflation of the latter as a scientific doctrine, an image that remains popular to date.[44] Thus, Varadaraja Raman, an Advaitic believer and scientist himself, opines that when physicists such as Schrodinger, Eugene Wigner, and David Bohm saw "more than parallels between the collapse of the quantum mechanical wave function and the intertwining of *purusha* [consciousness] and *prakriti* [nature]… it reflects as much the open-mindedness of the thinkers *as the intrinsic truth content of the matter interpreted*."[45]

Thirdly, intercultural encounters led to the production of several binaries that would influence science and religion dialogue for the years to come. Both Anglicists and Orientalists, particularly Romanticists, juxtaposed India and the West against each other by drawing sharp contrasts between them. Between the two sat the "integrationists" who too often maintained that the two were unlike each other. Albert Schweitzer, for example, found the West and India "entirely different" in that while the West is life and world-affirming, the latter is life and world-negating. However, as an integrationist, he believed that these different strengths were required to lead to a synthesis towards "the attainment of a mysticism of ethical world and life affirmation."[46] According to Partridge, "Vivekananda was perhaps the first to argue that the East and the West have distinct strengths to offer humanity, an argument which subsequently entered Western consciousness and became the conviction of many during the 1960s: a key feature of progress will be the combining of Western technology with Eastern spirituality."[47] Aurobindo Ghose believed that "it may well be that both tendencies, the mental and the vital

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[41] Erwin Schrödinger, *My View of the World* (Cambridge: Cambridge University Press, 2008).
[42] Fritjof Capra, 'The New Vision of Reality: Parallels between Modern Physics and Eastern Mysticism', *India International Centre Quarterly* 9, no. 1 (1982): 1.
[43] Gary. Zukav, *The Dancing Wu Li Masters: An Overview of the New Physics* (London: Fontana Paperbacks, 1984); for a brief and sharp critique of Capra and Zukav, see B. T. Smith, 'Indeterministic Metaphors: The Popular Science Books of Fritjof Capra and Gary Zukav', *Public Understanding of Science* 22, no. 5 (2013): 5.
[44] Pavan K. Varma, *The Great Hindu Civilisation: Achievement, Neglect, Bias and the Way Forward* (Chennai: Westland Publications, 2021), 155.
[45] Varadaraja V. Raman, 'Science and the Spiritual Vision', *Zygon* 37, no. 1 (2002): 89., 1 Italics mine.
[46] Albert Schweitzer, *Indian Thought and Its Development*, in *Wilco Books* (Bombay: Wilco Publishing House, 1960), 18.
[47] Christopher Partridge, *The Re-Enchantment of the West* (London: T&T Clark International, 2004), 1:91.

and physical stress of Europe and the spiritual and psychic impulse of India, are needed for the completeness of human movement."[48] A related but more popular binary in the integrationist approach is that of the Materialistic West and the Spiritual East. Given that India's "otherworldliness" was considered both its vice and virtue: a vice as per the Anglicists and a virtue as per the Romanticists, these binaries were sustained, however unhelpful they were for India's scientific development.[49] Although created to emphasise the synthesis between East and West, in most Neo-Hindu "complementarian" writings, Indian spirituality almost always trumped Western materialism.[50] On the other hand, for those with Anglicist leanings, it fostered the contrast between the dynamic West and static East, thereby validating modernity, and sometimes even colonialism, as a just means to introduce progress from outside India.[51] "Indian spirituality" functioned at many levels: it offered resistance to the idea of progress and colonial dominance that came with it, corrected the misrepresentation of India as mystical and backward,[52] and was presented as an antidote to materialism and reductionism of science while also allowing Neo-Hindu intelligentsia to claim the best of science, and critique the dogmatism of revelation-based religion, particularly Christianity. The binary between Western materialism and Indian spirituality remains a dominating trope in contemporary Indian as well as intercultural approaches to science and religion discourse, despite being grossly oversimplified and practically unhealthy. Not only does it unfairly paint Westerners as more materialistic than Indians and romanticise the Indian victims of economic injustice as gipsies in search of mystical experiences through voluntary poverty, but in doing so, it also wrongly prescribes spiritual impoverishment as necessary to material progress and material poverty as essential to spiritual well-being.

Fourthly, intercultural encounters facilitated scientised Advaita's critical engagement with Christianity. From its very inception, the science-religion discussion in India was an interreligious conversation due to its religiously plural context. Moreover, as Hinduism was emerging as a national religion that would unify India against colonial powers, it had to be

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[48] Aurobindo Ghose, 'Is India Civilised? -2', in *Foundations of Indian Culture and the Renaissaince in India*, vol. 14 (Pondicherry: Sri Aurobindo Birth Centenary Library, 1972); cited in A Raghuramaraju, 'Sri Aurobindo and Krishnachandra Bhattacharyya: Relation between Science and Spiritualism', in *Debates in Indian Philosophy: Classical, Colonial, and Contemporary.*, ed. A. Raghuramaraju (New Delhi: Oxford University Press., 2006), 103.
[49] Kumar, *Science and the Raj*, 229.
[50] King, *Indian Spirituality and Western Materialism*, 22.
[51] King, *Orientalism and Religion*, 228; Inden, *Imagining India*, 89–96.
[52] King, *Indian Spirituality and Western Materialism*, 24

contrasted against other religions, particularly Christianity, which was perceived as a religion of the colonisers. The perceived "Western"ness of both science and Christianity bolstered this image, as the locals often "saw the two as one package,"[53] and often thought accepting one would lead to the other.

The presence of Western missionaries and their polemics against Hinduism also played a role in reinforcing this image. To many missionaries, the findings of science worked as *preparation evangelica* for the Hindus. Famous Indologist John Muir, for instance, in his *Matapariksha* put both Hinduism and Christianity to the "test of reason", hoping to discredit the former and affirm the latter. [54] Commenting on Muir's work, Richard Young points out that although it should be viewed individually and not be generalised to establish a certain form of relationship between Hindus and Christians, broadly, "Evangelicals… were influenced by the Enlightenment, and their dependence on rational argumentation was more conspicuous in Muir's time than today."[55] To many Hindus, on the other hand, it seemed that champions of modern science and Christian missionaries worked hand in glove to criticise the idolatry and other superstitious practices witnessed in India. Both were suspected of working towards keeping India colonised. Thus, Makarand Paranjape, although overstating the case, opines, "Scientific evangelism, along with Christian evangelism, became the battering ram that tried to destroy the traditional cultures of India."[56]

What came to the aid of Neo-Hindu thinkers against missionary polemics was the Western critique of modernity and religion, particularly Christianity, by Romantic and other thinkers. By the time of Vivekananda, Romantic ideas had become widespread through popular movements such as theosophy, which were critical of both Western science and Christianity.[57] Schopenhauer often condemned Christianity and found it inferior to Hinduism and Buddhism

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[53] Sujit Sivasundaram, 'A Global History of Science and Religion', in *Science and Religion: New Historical Perspectives*, ed. Thomas Dixon, Geoffrey Cantor, and Stephen Pumfrey (Cambridge: Cambridge University Press, 2010), 187.

[54] Richard Fox Young, *Resistant Hinduism: Sanskrit Sources on Anti-Christian Apologetics in Early Nineteenth-Century India* (Vienna: Institut für Indologie der Universität Wien, 1981), 54. Though Young warns that such debates "must be viewed individually rather than merely labelled as a Christian or Hindu" (p. 49), he also points out that "Evangelicals… were influenced by the Enlightenment, and their dependence on rational argumentation was more conspicuous in Muir's time then today." (p. 54).

[55] Young, *Resistant Hinduism*, 54.

[56] Makarand Paranjape, 'Science, Spirituality and Modernity in India', in *Science, Spirituality and the Modernisation of India*, ed. Makarand Paranjape (New Delhi: Anthem Press, 2009), 8.

[57] Edward C. Moulton, 'The Beginnings of Theosophical Movement in India: Conversion and Non-Conversion Experiences', in *Religious Conversion Movements in South Asia: Continuities and Change, 1800-1990*, ed. Geoffrey A. Oddie (Surrey: Curzon Press, 1997), 112

at many points, such as its insistence on *creatio ex nihilo*, belief in heaven and hell, the doctrine of a personal God, violence in the Old Testament, perceived "burden" of history and dogmas, a hierarchy between humans and animals, its history of bloodshed and recourse to revelation. [58] Eastern philosophy, in contrast, was seen as a natural religion—ancient, free from dogmas, based on personal experience, rational and tolerant. Helena Blavatsky, the founder of Theosophy, regularly condemned the "theological dogmatism"[59] of Christianity and the "narrowness of spirit… rigid materialism… [and] sectarian dogmatism of modern science."[60] Indian modern thinkers were avid readers of Western philosophy and literature, acquainted with the works of David Hume, George Hegel, Immanuel Kant, Arthur Schopenhauer, Charles Darwin, Baruch Spinoza, John Mill, August Comte and Herbert Spencer. These critical works made them aware of Christianity's struggle with growing rationalism in the West and realise, in the words of Dermot Killingley: "Christianity's difficulty was Hinduism's opportunity"[61] The West was seeking a religion compatible with findings of modern science, and Hinduism, particularly Advaitic Hinduism, fit the bill. This led Vivekananda to boldly proclaim the missionary challenge, "Modern science has undermined the basis of religions like Christianity…. Europe and America are now looking towards India with expectant eyes: this is the time for philanthropy, this is the time to occupy the hostile strongholds."[62] On another occasion, he claimed**,** "The salvation of Europe depends on a *rationalistic religion*, and Advaita—the non-duality, the Oneness, the idea of the Impersonal God—is the only religion that can have any hold on any intellectual people."[63] Many of these motifs would become common in Neo-Hindu apologetics for the years to come.

Dialogue between science and religion in India was formed against the backdrop of this colonial and interreligious context. Neo-Hindu intellectuals were not merely arguing that Advaita is compatible with science but also that, for the same reason, it was also superior to

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[58] Arthur Schopenhauer, *Religion: A Dialogue, and Other Essays*, ed. T. Bailey Saunders (London: George Allen & Unwin Ltd, 1915), 105–17.
[59] H. P. Blavatsky, *Isis Unveiled: A Master-Key to the Mysteries of Ancient and Modern Science and Theology* (Los Angeles, CA: The Theosophy Company, 1931), 152.
[60] Blavatsky, *Isis Unveiled*, 20, 84; Moulton, 'The Beginnings of Theosophical Movement in India,' 112.
[61] D. H. Killingley, '"Yoga-Sutra" IV, 2-3 and Vivekananda's Interpretation of Evolution', *Journal of Indian Philosophy* 18, no. 2 (June 1990): 155, 2.
[62] Swami Vivekananda, *The Complete Works of Swami Vivekananda*, Mayavati Memorial Edition, IV (Calcutta: Advaita Ashrama, 1972), 485. For repeated references to *The Complete Works of Swami Vivekananda*, I will use the abbreviation CW from here onwards.
[63] Swami Vivekananda, *The Complete Works of Swami Vivekananda*, Mayavati Memorial Edition, II (Calcutta: Advaita Ashrama, 1976), 139. Italics mine.

Christianity. So acute was the urge that Lynette Thistlethwayte remarks that in India, the issue was

> not so much a matter of reconciling religion and science, as it was of using what advantages they could find in Hinduism's adaptability to combat the arguments of Christianity and Islam. Their real theological problem was not so much against the inroads of Western science, as against the possible inroads of other religions.[64]

The scientisation of Advaita, thus, became a useful tool not only to turn the tables against Christian missionary arguments but also to buttress the identity of Hinduism as a missionary religion.

Finally, the intercultural encounter made it possible for Indian Christians to critically engage with Neo-Hinduism. Although Hindu-Christian relations predate modernity, the emergence of modern science raised new discussions about the nature of reality in the colonial and multireligious context of India. In the religious milieu dominated by Advaitic Hinduism, modern Indian Christian theologians were expected to engage with it. Modern Indian Christian thinkers observed that in the wake of growing realism, the doctrine of *māyā* had turned out to be a contentious issue. They used these developments within Hinduism to initiate an interreligious dialogue with modern Hindu thinkers on the nature of the material world. If Neo-Hindus were forced to reinterpret *māyā* for modern times using resources from within their traditions, Indian Christians engaged with Neo-Hindus and with evolutionary theory by harnessing their own theological resources.

Thus, the intercultural encounter, India's colonial and multi-religious setting, and the arrival of natural science all cumulatively prepared the ground for an interreligious exchange on the theme of the material world. Several key themes were highlighted in the Science-Advaita-Indian Christian trialogue, to which we turn now.

2.4. Nature and Science in Advaitic Thinkers

In this section, I engage with a few Neo-Hindu thinkers who were at the forefront in reflecting on the nature of material reality in the context of modern science. Among them, I have largely

[64]Lynette E. L. Thistlethwayte, 'The Role of Science in the Hindu-Christian Encounter', in *Religious Traditions of South Asia: Interaction and Change*, ed. Geoffrey A. Oddie (Surrey: Curzon Press, 1998), 88.

focused on Raja Rammohan Roy (1772-1833), Swami Vivekananda (1863-1902), Sri Aurobindo (1872-1950), and Sarvepalli Radhakrishnan (1888-1975).

While Roy is remembered for his social, political and religious reforms, he was also extensively engaged in debates with the Serampore missionaries, particularly Joshua Marshman, on several Christian doctrines. While his Brahmo Samaj rejected revelation in favour of rationalism, he was also one of the first to argue that ancient India sat at the pinnacle of knowledge.[65]

Swami Vivekananda, born Narendranath Datta, played a key role in both negotiating the space of modernity in Hindu life and in taking Advaitic Hinduism to Western shores. His grandest achievement is still considered to be the electrifying speeches he delivered at the Parliament of the World"s Religions in 1893, which impressed everyone, but especially "neo-Romantics" who "welcomed and absorbed their Eastern counterparts as exalted and exotic versions of themselves."[66] This catapulted him to fame as a modern voice of Advaita Vedānta, especially in the West, and he ultimately became what Benjamin Walker calls "the most zealous of Hindu missionaries."[67] As one convinced of the complementary relationship between Vedānta and modern science, Vivekananda planned to write a book on the subject. He once said, "I intend to write a book later on in the form of questions and answers. The first chapter will be on cosmology, showing the harmony between Vedantic theories and modern science."[68] Vivekananda's ambition did not fructify due to his untimely death at the young age of 39. However, he left several thoughts in his collected works on the harmony of science and Vedānta.

Aurobindo was born in Calcutta, India, but received his early education in England between 1879 and 1893, "when the question of evolution dominated British scholarly and popular discourse."[69] He joined the Indian independence movement against colonial rule but later

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[65] C. Mackenzie Brown, 'Three Historical Probes: The Western Roots of Avataric Evolutionism in Colonial India' 42, no. 2 (2007): 443. See note 11 on page 443.
[66] Partridge, *The Re-Enchantment of the West*, 1:93.
[67] Benjamin Walker, 'Vivekananda', in *Hindu World: An Encylopedic Survey of Hinduism* (London: George Allen & Unwin Ltd, 1968), 50.
[68] Swami Vivekananda, *The Complete Works of Swami Vivekananda*, Mayavati Memorial Edition, V (Calcutta: Advaita Ashrama, 1973), 102.
[69] Peter Heehs, 'Sri Aurobindo's Theory of Spiritual Evolution', in *Asian Religious Responses to Darwinism: Evolutionary Theories in Middle Eastern, South Asian, and East Asian Cultural Contexts*, ed. Cheever Mackenzie Brown (Cham, Switzerland: Springer International Publishing, 2020), 167.

became a spiritual reformer, a philosopher, and a yogi. He developed integral yoga, a philosophy that combined material science with spiritual wisdom.

Sarvepalli Radhakrishnan was a towering philosopher and statesman. He consecutively served as the vice president and president of India from 1949 to 1962. He possessed impeccable knowledge of Hindu intellectual traditions and was inspired by Vivekananda's eloquence to study Hindu philosophy and a desire to counter the Christian missionary critics.[70] Through extensive research and writing, Radhakrishnan engaged with both Western critics and admirers, all the while trying to provide a clearer exposition of Vedānta that would be relevant for modern times.

As the Father of Modern India, Roy is considered to be at the forefront of the Indian Renaissance, whereas the latter three thinkers are credited with having established an "apologetic pattern" that was seminal to the Hindu Renaissance as well as Hinduism's relationship with science.[71]

These intellectuals have produced an extensive amount of literature, and it is not possible to comprehensively engage with all of their ideas. In the following, I will point out a few themes that emerge in their conversation with modern science and are particularly relevant to dialogue with Christianity. Later, I will engage with modern Indian Christian thinkers who responded to the changes Hinduism, especially Advaita, was experiencing due to its contact with modern ideas under the influence of Neo-Hindu leaders. The aim is to trace motifs that became central to the interreligious conversation and gauge if they are still relevant to formulate a theology of nature today.

Cycles of Evolution and Involution

In Vivekananda, the parallel between science and religion runs on two important themes, namely unity and progress. It was the common search for unity that connected the sages and the scientists. Just as science was occupied with discovering and formulating natural laws by studying phenomena common in nature, the sages went behind the multiplicity of experiences

[70] D. Mackenzie Brown, *The Nationalist Movement: Indian Political Thought from Ranade to Bhave* (Berkeley, CA: University of California Press, 1970), 152–54.

[71] Agehananda Bharati, 'The Hindu Renaissance and Its Apologetic Patterns', *The Journal of Asian Studies* 29, no. 2 (June 1970): 2.

to seek the nature of what was common in humanity – consciousness. Modern science, he claimed, recognised that behind all forms and shapes lay

> one substance, manifesting in different ways and various forms; the one life that runs through all like a continuous chain, of which all these various forms represent the links, link after link, extending almost infinitely, but of the same one chain. This is what is called evolution. It is an old, old idea, as old as human society, only it is getting fresher and fresher as human knowledge is progressing.[72]

This parallelism does not mean that the sages knew scientific ideas, such as the theory of evolution in all its details, as the scientists would. They were instead more interested in generalisations and did not have time for details. In fact, in this, they provided broad outlines and left it for the scientists to work out the details.

The second theme of linear progress or growth, propounded by evolutionary theory, according to Vivekananda, was well acknowledged in Hinduism. "The idea of evolution was to be found in the Vedas long before the Christian era; but until Darwin said it was true, it was regarded as a mere Hindu superstition."[73]

The sages, however, reached where evolutionists cannot, because while the latter can observe only the physical phenomena, the former knew the stages of life beyond evolution. This process Vivekananda calls involution, a concept that, according to Peter Heehs was first introduced by Gerald Massey in his book *Concerning Spiritualism*, and disseminated among Eastern thinkers by Helena Blavatsky.[74] If evolution explains how, to use Vivekananda's phraseology, the gross matter becomes fine; involution describes how we had a gross matter in the first place or how finer matters had become gross before beginning to become finer again. Involution and evolution, for him, together form an eternal cycle, the former signifying the transformation of subtle matter into gross form and the latter of gross into subtle.

Vivekananda bases his case for involution on at least two premises.

1. Involution is demanded by our common human experience.

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[72] Vivekananda, *CW*, II, 227.
[73] Swami Vivekananda, *The Complete Works of Swami Vivekananda*, Mayavati Memorial Edition, VIII (Calcutta: Advaita Ashrama, 1971), 25.
[74] Heehs, 'Sri Aurobindo's Theory of Spiritual Evolution' 170.

Here Vivekananda calls our attention to the cyclic process of growth and destruction witnessed in our daily experience.

> The plant comes out of the seed, grows into the tree, completes the circle, and comes back to the seed. The animal comes, lives a certain time, dies, and completes the circle. So does man. The mountains slowly but surely crumble away, the rivers slowly but surely dry up, rains come out of the sea, and go back to the sea. Everywhere circles are being completed, birth, growth, development, and decay following each other with mathematical precision. This is our everyday experience.[75]

This analogy of tree and seed would attract many to the Eastern philosophical notion of cycles, including the famous Quantum physicist Erwin Schrödinger.[76] For Vivekananda, the fact of cycles is also found in history, which is replete with the rising and falling of powers, incessantly one after another.[77] Observations by evolutionists explain merely half of the cycle—how a seed grows into a tree or how powers rise—but fall short of explaining the other half. Involution stretches past evolution and allows the latter's restricted picture to be complete and fully consonant with our everyday experience. In this sense, "Every evolution presupposes an involution."[78]

2. Involution is demanded by modern science.

According to Vivekananda, disbelief in involution is contrary to the spirit of science. This is because, though evolution cannot account for the emergence of consciousness, it does feel constrained to explain the phenomenon. However, consciousness cannot emerge by itself, as that would be contrary to the law of the conservation of energy. Consciousness, therefore, had to be present in the chain of evolution all along. So, he argues,

> You know by mathematical reasoning that the sum total of the energy that is displayed in the universe is the same throughout. You cannot take away one atom of matter or one foot-pound of force. You cannot add to the universe one atom of matter or one foot-pound of force. As such, evolution does not come out of zero; then where does it come from? From previous involution. The child is the man involved, and the man is the child evolved. The seed is the tree involved, and the tree is the seed evolved.[79]

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[75] Vivekananda, *CW*, II, 226–27.
[76] Schrödinger, *My View of the World*.
[77] Vivekananda, *CW*, IV, 120.
[78] Vivekananda, *CW*, II, 75. 208; Vivekananda, *CW*, V, 255.
[79] Vivekananda, *CW*, II, 227.

In addition to evolution, modern cosmology too supports the cyclic process. Thus, he says again,

> We know through modern science and astronomy that this earth is cooling down, and in course of time it will become very cold, and then it will break to pieces and become finer and finer until it becomes ether once more. Yet the particles will all remain to form the material out of which another earth will be projected. Again that will disappear, and another will come out. So this universe will go back to its causes, and again its materials will come together and take form, like the wave that goes down, rises again, and takes shape. The acts of going back to causes and coming out again, taking form, are called in Sanskrit Sankocha and Vikâsha, which mean shrinking and expanding.[80]

Vivekananda's acceptance of evolutionary theory was not wholesale, however. He had lamented the theory's limitation in recognising involution and thereby neglecting man's spiritual nature.

Aurobindo agreed with Vivekananda that evolutionary theory had failed to give an account of the soul's origin, which required involution as a necessary precursor to evolution. For him, moreover, Western views on evolution "are existential, intellectual and cosmic in outlook, but they lack the requisite spiritual standpoint… [whereas] the Indian views are thoroughly spiritual. But their main defect is that they have an individualistic outlook, and they are static in character."[81] Following this, Aurobindo further adds several layers within the cycle of evolution and involution. Peter Heehs explores selective writings of Aurobindo and helpfully summarises Aurobindo's integral theory of evolution-involution in seven stages thus:

> (1) the One Being and Consciousness; (2) its involution into unconscious matter; (3) the evolution of consciousness in life and mind; (4) the parallel evolution of the soul through the process of rebirth; (5) a further spiritual evolution, leading to (6) the emergence of a spiritual and supramental consciousness, and (7) the eventual transformation and divinization of life.[82]

Heehs notes that Aurobindo's philosophy, in its emphasis on the this-worldly process of evolution, is more world-affirming than his predecessors.[83] Similarly, Srivastava notes, "This higher, inert matter, life or consciousness… when it appears does not reject the lower but takes it up as it were and transforms it radically."[84] Moreover, in Aurobindo's eschatology,

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[80] Vivekananda, *CW*, II, 426–27.
[81] R. S. Srivastava, 'The Integralist Theory of Evolution', in *The Integral Philosophy of Sri Aurobindo*, ed. Haridas Chaudhuri and Frederic Spiegelberg (London: George Allen & Unwin Ltd., 1960), 133.
[82] Heehs, 'Sri Aurobindo's Theory of Evolution', 169.
[83] Brown, *Hindu Perspectives on Evolution*, 78.
[84] Srivastava, *Contemporary Indian Idealism*, 82.

when the evolution has reached its zenith, the world will not disappear but will be transformed and be part of "The Life Divine."[85] This is why Aurobindo calls his philosophy realistic Advaita.[86]

Although Radhakrishnan does not use the word "involution" often, he takes the evolutionary theory further by synthesising Advaita with Hegel's idea of the Absolute Spirit. As in Aurobindo, the world is the manifestation of one of the many possibilities in Brahman. However, since its existence is by differentiation, a process of evolution begins that which culminates in its return to the Absolute. The Absolute is consubstantial with the *ātman* (spirit) in an individual being and constantly pulls him towards the Self.[87]

Radhakrishnan considers that "If the world is saṁsāra, movement, we must find in physical nature also transition and gradation."[88] He further engages with Henri Bergman's creative or emergent evolution and argues concerning evolution in nature that "If evolution means an unfolding of what is already in being, emergence can only be the emerging or the coming into view of what is already contained in it, though hidden."[89]

In response to the objection that Advaita places mind before matter in suggesting the beginning of the cosmic process from the Absolute to Its descent into matter, he explains, "The philosophy of idealism does not deny the facts of evolution. It does not say that human beings were found before the earth was. When the idealist affirms the primacy of mind, it is not the mind of this or that individual that is so posited, but the supreme mind."[90]

However, while the attempt to synthesise evolution with Advaita by these and other Neo-Hindu thinkers looks straightforward, it ignores several points of tension that emerge from the synthesis. Dermot Killingley points out a few contrasts: while "evolution" in the popular accounts of the evolutionary theory would mean "progress", in Hindu mythology, the increasing difference between Brahman and Prakṛti was considered decline; progress towards

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[85] Heehs notices that the idea of Life Divine had Christian roots, though the idea itself was popularised by writers such as Annie Besant and Madame Blavatsky. Aurobindo might have picked it up during his time in England. Peter Heehs, 'Sri Aurobindo's Theory of Spiritual Evolution', 177.

[86] Sri Aurobindo, 'Letters of Sri Aurobindo: Integral Yoga and Other Paths', accessed 4 March 2021, https://www.aurobindo.ru/workings/letters/0001/000057_e.htm.

[87] This is summarised well in K C Mathew, 'Radhakrishnan's and Brunner's Anthropologies: A Comparison', *Indian Journal of Theology* 6, no. 2 (1957): 29, 2.

[88] Radhakrishnan, *An Idealist View*, 226.

[89] Radhakrishnan, *An Idealist View*, 240.

[90] Radhakrishnan, *An Idealist View*, 320.

mokṣa (generally translated salvation) in Hindu understanding is made by "the rare individual", and not the entire cosmos; likewise in Hindu mythology one cannot receive *mokṣa* unless reborn as a human being, unlike evolutionary theory, which does not ascribe any special role to humans.[91] Moreover, Hindu accounts of evolution often explain away the struggle for survival that is part and parcel of natural selection.

In addition to arguing for Advaita's compatibility with science, Neo-Hindu adoption of evolution also helped them develop an anti-Christian polemic. Vivekananda particularly argued that longer periods of evolutionary progress are consistent with Hinduism's belief in *yuga* or *kalpa*[92] but contradicts the Christian belief of a 6000-year-old universe. More than once, he retorted, "Six thousand years ago God woke up from His dream and created the world, before that there was nothing? What was God doing then, taking a good nap?"[93] Likewise, he argued that while evolution, by establishing an inseparable link between all life, supports the Hindu view of transmigration between different bodies, the Christian worldview supposes a radical distinction between the animal world and the human world. Additionally, by positing a personal God who works from outside nature, Christians violate the very nature of scientific explanation which is an attempt to explain nature from nature—"based upon the nature of the thing itself,"—and therefore theirs is a "very unscientific theory."[94]

Diverse Meanings of Māyā

As we noticed earlier, at the centre of the charges of "otherworldliness" of Hinduism lie the Advaitic theory of *māyā*. However, Roy, Vivekananda and Radhakrishnan all concluded that the illusory nature of the material universe attributed to Advaita was "Crypto-Buddhistic" and an Oriental mistake of neglecting the difference between Hinduism and Buddhism.[95] Neo-Hindu thinkers, therefore, endowed the term with meanings, many of which were not entirely alien to Hindu theology.

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[91] Killingley, '"Yoga-Sutra" IV, 2-3 and Vivekananda's Interpretation of Evolution', 153–54.

[92] In Puranic mythology, each day of Brahman is known as Kalpa and night is known as Pralaya, each is equivalent to 4.32 billion human years. Each kalpa is made of thousand yuga cycles. One yuga cycle marks completion of four yugas, namely: Satya yuga, Treta yuga, Dvapar yuga and Kali yuga. Each yuga is shorter than the preceding one, and is marked by steady decline in morality, until finally God intervenes and restores the earth to Satya-yuga, which is of 1,728,000 human years and longest of all. The durations of other years follow the pattern of 4:3:2:1.

[93] Vivekananda, *CW*, IV, 55.

[94] Vivekananda, *CW*, II, 330.

[95] Roy, *English Works*, 1:219; S Radhakrishnan, 'The Vedanta Philosophy and the Doctrine of Maya', *International Journal of Ethics* 24, no. 4 (1914): 433–4.

For Roy, *māyā* implied, "primarily, the power of creation, and secondarily, its effect, which is the Universe." Moreover, as a manifestation of God, the world is contingent in that "it has no independent existence, that it receives from the existence from the Supreme Being."[96]

For Vivekananda, *māyā* could have meant magic or illusion in the past, he said, but now it has evolved into its fuller meaning, which, according to Advaita, is rather a "statement of facts,"[97] a blunt acknowledgement of the contradictoriness evidenced in the human experience of the world – the inexplicable difference between the poor and the rich, life and death, justice and injustice to name a few. Vivekananda said Advaita's call is to embrace *māyā* in all its contradictoriness and, in doing so, rise beyond it to reach out to the "One running through all."[98] When asked about the reality of the world, he acknowledged, "In my opinion external world is certainly an entity and has an existence outside of our mental conceptions."[99]

Although Aurobindo, too, lamented Advaita's association with illusionism and blamed Buddhistic influences for it, he also agreed that Śaṅkara's one-sided picture of a static God led him to negation or struggle with explaining creation. Instead, he found Śaṅkara's two-tiered bifurcation of reality into *vyavahāra* (commonly translated as "practical") and the Ultimate Reality of Brahman known as *Paramārthika* (literally meaning "that of ultimate meaning") levels problematic and his efforts to isolate God from any action dissatisfying both to reason and experience.[100]

In one of his letters, he said,

> … it is hardly reasonable to suppose that the eternal Reality allows the existence of an eternal illusion with which it has nothing to do or that it supports and enforces on being a vain cosmic illusion and has no power for any other and real action…. It is hardly possible to suppose that the Divine Reality has no power or force or that its only power is to create a universal falsehood, a cosmic lie – *mithyā*.[101]

Aurobindo himself, therefore, turned to the *Śākta* tradition, which stressed God's nature as dynamic and *māyā* as the power through which the Divine manifests himself in the material world. In his Advaitic scheme, the reality of the world lay in the reality of Brahman who is at

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[96] Roy, *English Works 1*, 1:219.
[97] Vivekananda, *CW*, II, 88-89. 105.
[98] Vivekananda, *CW*, II, 117.
[99] Vivekananda, *CW*, V, 312.
[100] Sri Aurobindo, *Letters of Sri Aurobindo* (Bombay: Sri Aurobindo Circle, 1950).
[101] Sri Aurobindo, *Letters on Yoga*, vol. II (Pondicherry: Sri Aurobindo Ashram Publication Department, 2024), 394.

the root of the process of evolution-involution. Moreover, *māyā*, for him, refers to Brahman's power through which the Divine manifests Itself in the material world but also conceals Itself in time and evolution only to gradually find Itself back.

Similarly, Radhakrishnan distanced himself from theories that held that the world did not exist apart from the human mind. Such an interpretation of *māyā*, for him, was a later growth and not integral to Vedānta.[102] Arguing from the scientific method, he says, "There is an ultimate decency in things. Even as scientific understanding starts with the assumption that our powers are trustworthy, and will lead to a system of truth which will make the universe intelligible…."[103] Moreover, "The human mind is responsible for the concept of matter, but it is not the creator of the matter as well."[104] His idealism was based on the fact that "The world is the product of Brahman, and, therefore, Brahman. Hence, instead of being an illusion, the world is the sole reality."[105] However, it has a "dependent reality" in that it is "not absolutely real, for it demands something else on which it depends. It is Brahman that imparts its being to the world."[106]

Thus, although Radhakrishnan pays more attention to the philosophical details of his explanations, two motifs stand prominent among all thinkers – *māyā* as the creative power of God and the natural world as a dependent reality, bringing it closer to Thomas Aquinas' contingency argument. Whether these were new developments or reformulations of old ideas remains a point of discussion. Donald Braue, for instance, has argued that Radhakrishnan developed six meanings of *māyā* that are different from its traditional understanding as an illusion. These are māyā as the inexplicable mystery of the relationship between real and unreal, as the power of self-becoming, as the duality of consciousness and matter, as primal matter, as concealment and as one-sided dependence.[107]

Satkāryavāda and Creatio ex Nihilo

Creatio ex nihilo from the beginning was a stumbling block for Neo-Hindu thinkers. Writing in 1821, as a response to the critique of Hinduism that had appeared in *Samachar Darpan*, a

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[102] Radhakrishnan, 'The Vedanta Philosophy', 451.
[103] Radhakrishnan, *An Idealist View*, 155.
[104] Radhakrishnan, *An Idealist View*, 245.
[105] Radhakrishnan, 'The Vedanta Philosophy', 437.
[106] Radhakrishnan, 'The Vedanta Philosophy', 441–44.
[107] Donald A. Braue, *Māyā in Radhakrishnan's Thought: Six Meanings Other Than Illusion* (Delhi: Motilal Banarsidass, 1984), 13–15.

magazine run by the Baptist Missionary Society at Serampore, Roy argued that *creatio ex nihilo* was illogical and unreasonable. Moreover, accepting it would mean against the design argument, the end of natural theology and a turn to atheism.[108]

Vivekananda, however, was the most outspoken critic of *creatio ex nihilo*. For him, it contradicted evolutionary theory which had established that cause and effect are not separate. In fact, Hindu and Christian theologies have different "theories of originative causality."[109] All Hindu schools of philosophy hold to the doctrine of Satkāryavāda, originally espoused by Samkhya, the earliest school of Indian philosophy. Renowned Indian philosopher Bimal Krishna Matilal explains Satkāryavāda thus:

> The doctrine means that the so-called effect preexists in its cause, causation being merely a change of transformation from one state to another while the original 'thing'… remains constant and unchanging. An effect means a change in only the attributes or characteristics of the thing, a new state of affairs means manifestation of what was potentially present… in the early state of affairs, that is, in its so-called cause.[110]

A standard example of a cause-effect relationship is a sesame seed—which, when pressed, produces oil, an effect that lays as potential in the seed; this is not the case with sand, which does not have oil as its potential property.[111]

Vivekananda believed the evolutionary theory and the first law of the conservation of energy had, beyond doubt, established that nothing new can come into existence because "effect is cause in another form, a readjustment of the cause, and the cause takes the form of the effect."[112] If there was a time when the effect did not exist, it followed that the cause did not exist either.[113] Consciousness, for him, could not emerge from matter either, as that would

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[108] Brown, *Hindu Perspectives on Evolution*, 85.
[109] J. J. Lipner, 'The Christian and Vedāntic Theories of Originative Causality: A Study in Transcendence and Immanence', *Philosophy East and West* 28, no. 1 (1978): 1.
[110] Bimal Krishna Matilal, 'Causality in the Nyāya-Vaiśeṣika School', *Philosophy East and West* 25, no. 1 (1975): 43, 1.
[111] Dermot Killingley, 'Hinduism, Darwinism and Evolution in Late Nineteenth-Century India', in *Charles Darwin's The Origin of Species: New Interdisciplinary Essays*, ed. David Amigoni and Jeff Wallace (Manchester: Manchester University Press, 1995), 187. Samkhya itself does not posit a God for the creation of the world, rather assumes an eternal duality between purusha (pure consciousness or self) and prakṛti (nature). The latter is made of three gunas (qualities): sattva (goodness), tamas (passion) and rajas (darkness) that exist in a perfect equilibrium. The universe springs forth as this balance is disturbed for some inexplicable reasons. The purusha, however, has no role in creation; it is entangled with prakṛti post-creation, ultimately rendering it to be in need of liberation.
[112] Vivekananda, *CW*, II, 331.
[113] Vivekananda, *CW*, II, 428.

contradict *ex nihilo nihil fit*—nothing comes out of nothing—the fact commonly accepted by both modern science and almost all Hindu *darśanas*.[114] Whatever is, has already existed in one form or another, just as effect exists in cause. This is why then *creatio ex nihilo* is not merely unscientific but the "fearful.. most crude idea"[115] that has "disgusted all the educated"[116] was rejected early by Indian thinkers and is now rightly "laughed at by modern scientists."[117]

Aurobindo too rules out *creatio ex nihilo* because, though

> It is not possible that they [real creations] are made out of a Nothing, a Non-existence other than the Absolute; for that will erect a new dualism, a great positive Zero over against the greater indeterminable x we have supposed to be the one Reality.[118]

Purpose in Creation

Another point of discussion, particularly keeping Christian interlocutors in mind, was that the illusory nature of the world in Advaita deprived creation of a purpose. Most Neo-Hindu thinkers thought that the search for the purpose was predicated upon the argument from design, which the evolutionary theory had destabilised. Vivekananda argued that having a purpose would make God bound by something greater than It, namely purpose, and make It no better than human. God rather plays with nature, just as some great "emperors sometimes play with dolls."[119] Looking for design in nature violates God's omnipotence by restricting him both to a design and pre-existing material.[120] For Vivekananda, therefore, the design theory was childish and illogical.

Aurobindo considered it crucial to comprehend the divine intention underlying the creation of the material world. He agreed that both the materialistic explanation of evolutionary theory and the illusory tones so inseparable from the notion of *māyā* failed to properly convey this relationship. He found Śaṅkara's notion of *līlā* helpful in this regard. For Śaṅkara, since the

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[114] *Darśana* literally means to see. It is used to refer to schools of philosophy. Hindu *Darśanas* include six schools, also known as *āstika* for their belief in the authority of the Vedas. These are: Samkhya, Yoga, Nyaya, Vaisheshika, Mimamsa and Vedanta. Nyaya and Vaisheshika do not acknowledge *ex nihilo nihil fit* in relation to creation.

[115] Swami Vivekananda, *The Complete Works of Swami Vivekananda*, Mayavati Memorial Edition, III (Calcutta: Advaita Ashrama, 1973), 123.

[116] Vivekananda, *CW*, IV, 362.

[117] Vivekananda, *CW*, II, 331.

[118] Sri Aurobindo, *The Life Divine* (Wall Street: The Sri Aurobindo Library, Inc., 1949), 284.

[119] Vivekananda, *CW*, V, 288.

[120] Swami Vivekananda, *The Complete Works of Swami Vivekananda*, Mayavati Memorial Edition, VII (Calcutta: Advaita Ashrama, 1958), 97.

idea of purpose in creation would presuppose a need, an attribute of an imperfect God, the solution was to describe creation as *līlā* – a mere sport or play of God. This, in Nalini Bhushan's words, would mean that "these acts [creation] are not purposeful but are yet intentional; not necessary, but good fun. They are represented as the overflowing into the action of divine joy."[121]

Creation is a cosmic *līlā*, a world-play. This, for Aurobindo, not only solves a metaphysical problem but also adds an aesthetic shade to the act of creation, which became an important thread in the philosophy of Rabindranath Tagore, a Nobel laureate and a great poet and artist himself. Both Aurobindo's and Tagore's writings are beset with images that compare God as an artist or a painter engaged in the play of creation.

Radhakrishnan agrees that "The argument from design is profoundly affected by the development of the theory of biological evolution" and further considers that "The question of the purpose of human life is irrelevant."[122] As an Idealist, he disputes "its practical value and efficacy."[123]

The impermanence of the material world and the lack of a personal God hindered these Neo-Hindu intellectuals from developing a purpose for the material world as it is understood in Christian theology. However, by reviving notions such as *līlā*, they avoided the materialistic interpretations of evolutionary theory on the one hand and distanced themselves from their Christian interlocutors on the other.

2.5 Indian Christian Rejoinder

Indian Christians shared the intercultural and interreligious context of their Advaitic compatriots. They observed the revival of Advaita during modernity under several Neo-Hindu popular leaders and joined the conversation on nature. For many of them, modern context had forced Neo-Hindu intellectuals to re-articulate Advaitic tenets such as the doctrine of *māyā* and *līlā*. These developments had opened frontiers for interreligious dialogue and apologetics.

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[121] 'Bringing Brahman Down to Earth: Līlāvāda in Colonial India', in *Indian Philosophy in English: From Renaissance to Independence*, ed. Nalini Bhushan and Jay L. Garfield (New York: Oxford Academic, 2011), 437, https://academic.oup.com/book/27652/chapter/197765369.
[122] Radhakrishnan, *An Idealist View*, 40.
[123] Radhakrishnan, *An Idealist View*, 41.

In their apologetics, they both defended several tenets of the Christian faith while also pointing to areas where they saw the tension between modernity and Advaita.

Evolutionary Theory

Several Indian Christian thinkers, following Neo-Hindu thinkers, made creative use of evolution theory. Foremost among them was Pandipelli Chenchiah (1886–1959), whose employment of evolutionary theory was inspired by the Aurobindo and Teilhard de Chardin. However, in his Christo-centric scheme, evolution is related to and begins with new creation. This is because Christ, for him, as God-man is a new creation and those who experience new birth through him become part of an evolutionary journey towards the ideal of becoming like him. The new creation is a gift of God, and Jesus Christ is its harbinger. As Sumithra remarks, "For Chenchiah, the only ground of certainty that the new creation must take place is that it has already happened in Christ."[124] The incarnation, thus, introduces a new force that breaks into the horizontal flow of life and raises it to a new height, making evolutionary trajectory possible. The Gospel, therefore, is not a mere matter of individual salvation but "a further stage in the planetary life of mankind brought about by the release of fresh energy through a new tremendous creative act of God."[125] Brahmabandhab Upadhyaya (1861-1907), a former classmate of Vivekananda, on the other hand, noted that although there was not "any incompatibility between the evolution hypothesis and the Christian religion," it had led several people away from the faith, which is why "it is but reasonable to insist that a hypothesis should not be asserted as a fact, until it is thoroughly proved as such."[126]

The idea of a dynamic God active in history and drawing the world towards the fulfilment of his purposes would become more evident among liberation theologians, whom we will meet in the next chapter.

Creatio Ex Nihilo

For early modern Indian Christian thinkers such as Krishna Mohan Banerjea (1813-1885) and Nehemiah Goreh (1825-1895), *creatio ex nihilo* is a distinct Christian doctrine. Creation, for

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[124] Sunand Sumithra, *Christian Theologies from an Indian Perspective* (Bangalore: Theological Book Trust, 1990), 131.
[125] Sumithra, *Christian Theologies*, 129.
[126] Brahmabandhab Upadhyay, *The Writings of Brahmabandhab Upadhyay*, ed. Julius. Lipner and George Gispert-Sauch (Bangalore: The United Theological College, 1991), 1:217.

them, “means calling things into existence out of nothing”. One of the main arguments in its support is that *creatio ex nihilo* is more reasonable to explain the power of God than other Hindu theories of creation.[127]

Banerjea argues that *creatio ex nihilo* implied a personal God. He attributes the lack of *creatio ex nihilo* in Hindu philosophical schools to their undue obsession with the question of the material cause of the universe rather than the efficient cause. Śaṅkara, he says, was right in critiquing Samkhya and Nyaya for not considering Brahma as the efficient cause of the universe, but rather than pursuing it himself, the idea of material causation became “uppermost in Śankara’s mind.”[128] This was one of the most “dangerous” theological errors for two reasons. Firstly, because it eclipses the glory of God by diverting our attention and energies to explore what is least important. Secondly, it goes against our moral intuition. Here, he uses the watchmaker argument and argues that when a complex watch or a piece of art is found, the first question asked intuitively is not what material is used to create it but who created it. Therefore, to imagine God as a human artist in need of material to create something is to restrict God.[129]

While this early criticism of the lack of *creatio ex nihilo* in Hinduism was based on theological concerns, it was soon realised that it also has moral implications. We will encounter many of these later, and the importance of this doctrine will remain with us throughout this project (7.4.4).

Diverse Meanings of Māyā

Banerjea and Goreh, both Hindu converts, considered *māyā* to be a great difference between Christianity and Hinduism. Under *māyā*, they thought, “We are supposed to be like men who dream, to whom all things appear real so long as they dream. Christianity, on the other hand, affirms the reality of the universe, and the trustworthiness of our senses.”[130] They give four arguments against *māyā*: 1). The testimony of our sense, which bears witness to the reality of the objects around us; 2). The incapability of proving *māyā*; 3). If the whole world is an

[127] Robert Caldwell, Nehemiah Goreh, and Krishna Mohun Banerjea, *Christianity Explained to a Hindu or Christianity and Hinduism Compared*, Second (Madras: The Christian Literature Society, 1893), 11.
[128] Banerjea, *Dialogues on the Hindu Philosophy*, 130.
[129] Banerjea, *Dialogues on the Hindu Philosophy*, 133–34.
[130] Caldwell, Goreh, and Banerjea, *Christianity Explained* 12.

illusion, so are the Hindu Scriptures; 4). It gives a most dishonouring idea of God as one who projects a distorted picture of himself for "divine amusement."[131]

Moreover, while for Vivekananda, the Christian problem was invoking a God from outside nature, for Banerjee and Goreh, the absence of a personal creation in Hinduism leads to the denial of its government by God and the relegation of nature to the laws of karma.[132] Although conveying genuine theological concerns, these early interpretations of *māyā* do not consider the new interpretations that Neo-Hindu thinkers themselves were to later provide.

Upadhyaya was more positive in his engagement with the theory of *māyā*. He realised that the notion of *māyā* has a plurality of meanings in the history of Hindu theology, which makes it open to new interpretations. Under the influence of Thomas Aquinas, Upadhyaya related his theory of contingent creation to the doctrine of *māyā*. Thus, he said,

> Maya is what St. Thomas calls 'creatio passiva'—Passive Creation. It is a quality of all that is not Brahman, and is defined by the Angelic Doctor as 'the habitude of having *'being'* from another and resulting from the operation of God… The Vedantists affirms all that is not Brahman to be *Maya*, in the sense of illusion, and they are right, because creatures, in themselves, apart from Brahman, are indeed darkness, falsity and nothingness."[133]

Over time, Upadhyaya joined with Neo-Hindu attempts to reinterpret māyā as referring to Śakti (dynamic energy) or to Aquinas' idea of a contingent universe and used this leeway to translate Christian doctrines to his compatriots.

The other theologian who extensively explored the doctrine of *māyā* was Paul David Devanandan (1901-1962). Devanandan investigated the history of the notion as his doctoral study and pointed out that the word *māyā* was indeed a plural notion for Gaudapada, a 6th-century Hindu saint and precursor of Śaṅkara. Its several meanings included the power of God, individual illusion and a sense of wonder at the mystery of creation, but it had no connotation of cosmic illusion. He agreed with neo-Hindu thinkers that the idea of cosmic illusion resulted from Buddhist influences and the Advaita conflict with the Vishnuvite Bhakti movement. Śaṅkara, in contrast, he says, "is very insistent that empirically the world is real."[134] However, he argues, Sanakara's own agnosticism regarding God's relationship with

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[131] Caldwell, Goreh, and Banerjea, *Christianity Explained*, 12–13.
[132] Caldwell, Goreh, and Banerjea, *Christianity Explained*, 13.
[133] Animananda, *The Blade*, 85.
[134] P. D. Devanandan, *The Concept of Maya* (Calcutta· YMCA Publishing House, 1954), 219.

the world and his debates with other schools, particularly Vishnuite Bhakti cults, increasingly related Advaita with illusionism. Therefore, he concluded, “The doctrine of Māyā may not necessarily mean that the world is an "illusion". But it is obvious that the nearer it approaches such an assertion, the more devitalizing is its effect upon activity and, therefore, upon progress.”[135] And again, it would “appear that the whole attitude which is associated with the word māyā is unfavourable to any vigorous belief in conditions of progress, and the goal is conceived in such a way as to diminish the importance of the process towards it.”[136] To add, Devanandan argued that even though māyā may be rescued from its association with illusionism, Hinduism lacked resources to fill the concept with positive content that would catalyse progress. This is why for him, the Neo-Hindu approaches, particularly that of Radhakrishnan, to infuse *māyā* with positive meaning in order to affirm human personality, purposive history and the goal of the human community lacked foundation in classical Hindu theology.[137] *Līla*, for instance, shows a turn to realistic attitudes in Neo-Vedānta, but even that “is hardly likely to increase the importance of the conception of progress.”[138]

History, Purpose and Cycles

Although these modern Indian Christians diversely utilised the ideas emerging from the churning within Hinduism, many of them were also convinced that there was a fundamental difference concerning the nature of reality between Hindu and Christian perspectives on nature.

It is important to remind here that Advaita conceives of the God-world relationship in terms of emanation, thus imagining God as always immanent in the world. Regardless of the diverse meanings of *māyā*, Neo-Hindu thinkers still think of nature as a “manifestation” of God. This results in the lack of a personal God and the absence of a purposeful history in Hindu cosmology, which modern Indian Christians think would always remain a predicament for the Neo-Hindu ambition to relate their theology to the needs of nation-building and engagement with modern science.

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[135] Devanandan, *The Concept of Maya*, 218–19.
[136] Devanandan, *The Concept of Maya*, 219.
[137] M. M. Thomas, *The Acknowledged Christ of the Indian Renaissance* (London: SCM Press Ltd, 1969), 165.
[138] Devanandan, *The Concept of Maya*, 221.

Thus Joshua Russel Chandran, who engaged with Vivekananda's works, contends that the lack of *creatio ex nihilo* means the lack of a personal God who can willingly choose to create the world. As a result, Chandran observes that Hindu theology, including that of Ramanuja, who believed in a personal God, is so entrenched in an understanding of eternal cycles of involution and evolution in nature that "the beginning of the world can only mean the beginning of a cycle and not the whole cosmos."[139] This suggests, he argues further, that

> …'there is a fundamental conflict' between the Hebraic-Christian and the Hindu and Greek apprehensions of religious reality, which cannot be bridged. This is expressed in the differences between the understanding of 'man as a creature and the object of God's love, and as a sinner who cannot be redeemed except through God's grace', and history as 'a real and purposive unity in the hands of God' on the one hand, and on the other the view of 'the essential divinity of the soul and the interpretation of history in terms of meaningless repetition of cycles.[140]

The link between Hindu theology and Greek ideas of nature that Chandran points out is also recognised by the British Orientalist Samuel Taylor Coleridge[141] and Anglican priest and writer W. R. Inge, who dubs Radhakrishnan's idealism as "Platonism seen through Indian spectacles."[142] German Romanticist Paul Deusen[143] and Dutch Indologist Fritz Staal[144] found that the Advaitic view of the God-world relation had striking parallels with Neoplatonic conceptions. Similarly, Peter Heehs thinks that Aurobindo's ideas were inspired by Gnosticism and notes that Plato was Aurobindo's favourite philosophical author.[145]

Late modern theologian and prolific writer Madathilparampil Mammen Thomas (1916—1996), commenting on Vivekananda's involution-evolution cycles, agreed that nature supports a cyclic understanding of life and argues that Christian thought does not deny this. In fact,

> The Christian view of history need not be crudely linear because it conceives of the fulfilment of the goal of history as having happened not at the end but in the middle of the movement so that it is possible to conceive this purpose

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[139] Cited in Thomas, *The Acknowledged Christ*, 134.
[140] Cited in Thomas, *The Acknowledged Christ*, 133–34.
[141] Natalie Tal Harries, '"The One Life Within Us and Abroad": Coleridge and Hinduism', in *Cultural, Romanticism and the Orient: Cultural Negotiations*, ed. David Vallins, Kaz Oishi, and Seamus Perry (Bloomsbury Publishing, 2013), 131–44.
[142] W. R. Inge, *Review of An Idealist View of Life by S. Radhakrishnan*, no. 28, 7, no. 28 (1932): 28.
[143] Paul Deussen, *The Philosophy of the Vedanta in Its Relations to the Occidental Metaphysics*, no. 136 (Bombay: The Education Society, 1893), 136.
[144] Josephus Franciscus Staal, *Advaita and Neoplatonism: A Critical Study in Comparative Philosophy* (Madras: University of Madras, 1961).
[145] Peter Heehs, 'Aurobindo and Supermind', in *The Gnostic World*, ed. Garry W. Trompe (London: Routledge, 2018), 603.

> either as the Beyond (Transcendence) or the End (Eschatology) in real relation with the empirical self and the process in which it is involved, cutting across its cycles and bringing into being spiritually purposeful persons realizing themselves in an ultimately meaningful history. It is only within such framework of understanding that we can speak intelligently of a unique revelation of the divine purpose of the world.[146]

The issue, therefore, for Thomas was, as it was for Chandran and Devanandan, how the two religious traditions relate to the moral regeneration of the society. For Indian Christian thinkers, the lack of a personal God and purpose in history and a proper view of God's relationship to the material world were some of the primary reasons that hindered Hinduism from sparking a moral revolution. As such, these points also provided a reason and a ground for an interreligious dialogue.

Orders of Reality

Regardless of the Neo-Hindu efforts, Christian intellectuals, particularly Devanandan, argued that Advaita's struggle to accommodate a certain degree of realism into its vision of God-world relation was due to Śaṅkara's division of reality into two spheres: the provisional reality of the material world called *vyāvahārika*, (commonly translated "practical") and the Ultimate Reality of Brahman known as *Paramārthika* (literally meaning "that of ultimate meaning"). What makes *Paramārthika* "real" and *vyāvahārika* "unreal" is their relationship to time: the former is eternal, while the latter is time-bound. Traditionally, this two-tier reality has been reified into a diversity of epistemic methods: knowledge of the natural or *vyāvahārika* world known as *aparā vidyā* (literally knowledge of the mundane world), and knowledge of Brahman or *Paramārthika* reality as *parā vidyā* (literally knowledge of the Ultimate). This division is taken from Mundaka Upanishad 1.1.4, wherein Śaṅkara defines *parā vidyā* as the knowledge of absolute truth, and *aparā vidyā* as "the means and the results of good and bad actions." Importantly, a few verses later, Śaṅkara calls *aparā Vidyā* an "ignorance that ought to be dispelled."[147]

On a side note, it must be mentioned that epistemic dualism was employed in relation to science as early as Debendranath Tagore.[148] In recent times, Varadaraja Raman has suggested

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[146] Thomas, *The Acknowledged Christ*, 147.
[147] Sitaram Sastri, 'Mundaka Upanishad with Shankara's Commentary', 1905, https://www.wisdomlib.org/hinduism/book/mundaka-upanishad-shankara-bhashya/d/doc145078.html.
[148] Brown, *Hindu Perspectives on Evolution*, 98.

that such diversification helps maintain science and religion as two distinct fields with their own objectives and methods.[149]

Devanandan is aware of the scientific usage of the categories and argues that in "admitting that the vyavahārika knowledge is inclusive of the modern scientific attitude, we should all agree that scientific categories are insufficient for the interpretation of reality." However,

> If we think of the two orders as separate in the same way as dreams are different from facts, and if the transition from the one to the other is so abrupt, the danger is always there of our being tempted to leave unsolved the difficulties which arise in the lower sphere. This is specially so where human values are concerned. All history would become meaningless.[150]

Further, he implies that the complete cut-off between the two divisions leads to the lack of stress on reasoning activities and eventually to the decline of science and progress.

> if the higher view of reality be so completely detached from the lower as to be altogether at variance, we are not in a position, through the insistent truth of God's abiding nature, to force the world of our day-to-day life to surrender its inconsistencies. Hindu thought, right through the centuries, has suffered from this handicap. The minds of men become oppressed by a general distrust of experiential facts and a lack of faith in the activity of reason as a possible means of progressive perfection. Consequently, the only solution seems to be to adopt an attitude of passivity and indifference.

Recently, Eric Dorman has suggested that concepts such as *māyā* "must receive better treatment in translation in order to facilitate a more accurate exchange of ideas across cultural boundaries,"[151] and their inclusion in science and religion discussions. Thus, he corrects,

> Maya, as I discussed above, is commonly translated as "illusion." However, when used in conjunction with Ultimate Reality, as is the case in advaita Vedanta, this translation invites the mistaken assumption that since the manifest world is illusion, it is not real. This assumption quickly slips into the incorrect notion that the material world does not matter and should shift to the back of one's mind. However, in truth, maya, even as illusion, is still part of the lila, divine play, of Ultimate Reality. Thus, a better translation of maya would be "appearance." Therefore, instead of forsaking the world or attempting to ignore it as illusion, one should seek to know the nature of appearance as experienced in the world. Then, following the concept of true

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[149] Varadaraja V. Raman, 'Quantum Mechanics and Some Hindu Perspectives', in *The Routledge Companion to Religion and Science*, ed. James W. Haag, Gregory R. Peterson, and Michael L. Spezio (Abingdon, Oxon: Routledge, 2012), 156–68.
[150] Devanandan, *The Concept of Maya*, 219.
[151] Dorman, 'Hinduism and Science', 593.

> knowledge, vidya, one can identify the nature of appearance as part of Ultimate Reality.[152]

However, for Devanandan, regardless of the positive meanings ascribed to *māyā*, the fundamental question remains whether that answer is sufficient to eliminate the purposelessness that comes from the two-tiered understanding of reality. More importantly, as Vishal Mangalwadi has pointed out, although modern interpretations of *māyā* "may account for the harmony and integrity of creation… [they] cannot explain the obvious disharmony and alienation in creation." [153]

Growing Realism and Place for Dialogue

Despite the criticism of Neo-Hindu developments, Indian Christian thinkers, particularly Devanandan, saw them as an opportunity for interreligious dialogue. He considered that a "silent revolution" has made its way into Hinduism, whose preoccupation with the ideal and the timeless is now confronted with the interest in the present world history,[154] most clearly observed in India's struggle for independence and the moral vision of its early leaders. These experiences, Devanandan believed, have created a "divergence" in Hindu theology.

> The main doctrine of Hinduism with regard to the nature of God is that the Ultimate Reality is essentially impersonal. As such it is absolute, apart from the world, untouched by the happening of the universe, in quiescent, eternal rest. But the religious practice of the present times definitely posits a theism where God is conceived of as a personal Reality striving to fulfill His eternal purpose in this universe. The postulate, however, is neither framed nor recognized.[155]

Devanandan believed that these changes should be of concern to a Christian as well as to a Hindu and should lead to a richer interreligious dialogue.

Conclusion

This chapter began with an aim to explore the debates and uncover the motifs for Indian Christian theology of nature by engaging with an episode of interreligious discourse on nature between Advaitic and Indian Christian thinkers at the arrival of Western modernity to India.

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[152] Dorman, 'Hinduism and Science', 615.
[153] Vishal Mangalwadi, *When the New Age Gets Old* (Downers Grove, IL: IVP, 1992), 106.
[154] Devanandan, *The Concept of Maya*, 222.
[155] Devanandan, *The Concept of Maya*, 226–27.

Considering the vast body of literature produced by Neo-Hindu and Indian Christian thinkers, we have barely scratched the surface. The discussion about *māyā* itself is ongoing. The thread found in Upadhyaya and Radhakrishnan that translates the notion of *māyā* as "contingency" of the universe is also seen in contemporary Advaitic scholar Anantananda Rambachan, who attempts to carve a liberation theology from the Advaitic framework.[156] Many other creative voices remain outside the scope of conversation here. However, this brief sketch of themes that were at the centre of interreligious dialogue helps us make several observations helpful to construct a theology of the material world.

Firstly, the observations made above reveal the socio-cultural embeddedness of all science and religion dialogue. When the interreligious discourse investigated in this chapter is located in its own historical setting—that of colonial conquest, the orientalisation of Hinduism and the growing authority of science—its trajectory is properly understood. The context, by and large, determines the questions, reactions and approaches that the advent of modern science raises.

Secondly, the interreligious exchange explored above goes to demonstrates that although shaped by its socio-cultural environment, interreligious dialogue often transcends it. This is indicated by the fact that, regardless of being influenced by power dynamics at different levels, both Neo-Hindu and Christian thinkers considered their beliefs about nature, not mere cultural constructions, but the result of their metaphysical commitments. The force of this commitment was such that they did not remain passive onlookers but resisted the Anglicist, Oriental and Romanticist constructions of Hinduism, particularly the doctrine of *māyā*, and in the process, created some monumental works on Advaitic theology. In turn, the churning within Hinduism provided a crucible for Indian Christians, who, despite being a minority religious group, took it as an opportunity to engage with their Advaitic compatriots and clarify their own position on the theology of the material world. In addition, they were able to engage not just with science but also with each other by "indwelling" these frameworks. Thus, while for Neo-Hindus, evolution repudiated *creatio ex nihilo*, established the cyclic view of nature and pointed to an old universe, for Indian Christians, the evolutionary thrust of progress had

[156] Anantanand Rambachan, *A Hindu Theology of Liberation : Not-Two Is Not One* (Albany, NY: SUNY Press, 2015).

created "divergence" in Hinduism, exposing the purposelessness that comes from the eternal cycles inherent to it.

Thirdly, the metaphysical framework that one holds works like a complex with many related beliefs integrated in it. For Neo-Hindus, their view of creation, history, God and time all cumulatively prepared them to take a certain stance towards science. Likewise, for Christians, as Thomas puts it, "The significance of historicity, the revelation, the realities of creation and New Creation, the hope of consummation and other truths of Christian Faith form one complex with the fundamental apprehension of God as personal."[157] For most Indian Christian theologians, Christ was the key to this complex. Although motifs such as *creatio ex nihilo*, purposiveness of creation, and reality of the material world were all a part of the discussion about nature, it was the incarnation that, by integrating the spirit and matter, had provided history with meaning and bolstered the worth of the material world. Appasamy, Chakkarai, Chenchiah, Thomas and others stood true to V. P. Thomas' observation that "The Christian thinkers in India are inclined to take Christ as the starting point of Christian Theology."[158] Thus, when Chenchiah adopts Aurobindo's evolutionary scheme, it is Christ who, as New Creation, inaugurates the next stage in the evolutionary process, leading the entire cosmos to become a new creation. However, by rejecting involution, Chenchiah refutes the cyclic understanding of time.

Fourthly, beyond the power dynamics and force of metaphysical commitments, interreligious dialogue presumes the primary role of reality in matters of truth. This is why the interlocutors in the science and religion interface consider the authority of science as an enterprise that reveals the truth about the world. They also hold that their metaphysical framework provides a picture of the world that is closer to how the world really is than other competing frameworks. This belief provides them motivation to stay abreast with the discoveries of science and explain how their metaphysical beliefs are in sync with scientific insights. The same belief also provides them motivation to discuss their metaphysical beliefs with others in the hope that the other will be persuaded by the power of truth.

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[157] Thomas, *The Acknowledged Christ*, 170.
[158] V. P. Thomas, 'Indian Christian Approaches to the Knowledge of Christ', *Indian Journal of Theology* 18, no. 1 (1969): 98, 1.

These findings will stay with us in the next chapters, and we will return to many of them in the chapter where we bring threads from all discourses together (Chapter 6). For now, it is vital to point out that despite these crucial insights, the interreligious discourse faces two constraints.

Firstly, the earlier interreligious dialogue between proponents of Advaita and Indian Christian theologians vis-à-vis the material world took place within the context of science's ascent, where India had tested the fruit of science and found it impossible not to desire it. In recent decades, the world has come to experience the consequences of scientific progress and models of development following it. Many of the fruits have now turned sour. This makes approaches such as that of Devananandan, whose criticism of Neo-Vedānta is based on the modern idea of "progress," highly susceptible to postmodernist-postcolonial critique.[159] Moreover, as these new approaches become critical of science, and its consequences for the environment and for communities that depend upon them, the loci of interreligious dialogue on nature have moved towards ecological concerns, birthing myriad resources that offer religious insights on environmental care and conservation. This has generated new questions and thrown new challenges to age-old beliefs and traditions within major religions, even as they try to maintain the relevance amidst a changing ecological landscape. This does not mean all debates about science have ceased, but they have become so intertwined with ecological concerns that it has become impossible to discuss one without invoking the other. Full implications of the theological motifs emerging from the interreligious discourses, such as Creator-creation distinction, *creatio ex nihilo*, purposiveness of history and more, may have implications for the contemporary context, but they are not engaged in this chapter.

Secondly, a rather bigger vacuum in the interreligious discourse with Advaita was the stark absence of the majority of Indians who neither had access to the education of the Vedas nor the luxury of contemplating the nature of material reality for philosophical discussions. These groups, hailing from communities known as "Dalits" remained outside these ontological discussions, though the fact of their absence in theological conversation had begun to raise its head by the time of Devanandan and M. M. Thomas. But until then, those well-versed in Vedantic philosophy occupied the helm. This was the case for both the Hindu and Christian sides of the discourse. The frustration was expressed by bishop Azariah in the complaint that

[159] Although Devanandan's critique is that Neo-Hindus have embraced the Western understanding of progress and are without success trying to find its basis in Advaita. Devanandan, *The Concept of Maya*, 203.

though the “Dialogue theologians” (referring to thinkers such as Devanandan and Thomas) used Indian categories, they were largely Brahminic, and their philosophical method Western. “It is not realised,” he lamented, “that the concern for dialogue with people of other faiths and ideologies cannot and does not entrust or benefit as many as 75% of the Indian Christian community.”[160]

If this complaint is valid, it becomes a theological and moral imperative to pay heed to the reflections of Dalit Christians and include their voice in the science and religion discourse. Including their perspective will certainly enrich the discussion. Furthermore, it may turn out that the themes and concerns that emerge from Dalit discourses on nature overlap with those in interreligious discourse. Such an interaction also provides an opportunity to construct an intercultural dialogue within the context of India itself. The next chapter, therefore, moves to exploring Dalit theologies of nature.

[160] M. Azariah, ‘Doing Theology in India Today’, in *A Reader in Dalit Theology*, ed. Arvind P. Nirmal (Bangalore: Gurukul Lutheran Theological College & Research Institute, 1990), 86.

CHAPTER FOUR

Nature in Liberative Discourse

In the previous chapter of this study, I located some of the critical themes of the theology of nature in the interreligious apologetics between Advaitic and Indian Christian interlocutors in modern India. The interreligious discourse also provided us with insights into the nature of science and religion discussion in India. However, I also pointed out that one of the drawbacks of exclusively focusing on interreligious discourse was that it marginalised the voice of communities such as the Dalits. In this chapter, therefore, I deliberately move from the context of interreligious discourse to "liberative discourse", where concerns of justice and liberation take priority. I call it "liberative" due to its nature as that for which socio-economic justice is the driving force for theological reflection. Moreover, it is led by communities that are generally pushed away from the discursive space, for whom to have a discourse is itself a liberative act.

Therefore, the aim of this chapter remains to explore critical themes in the theology of the material world, but this time by focusing on Dalit experiences of nature, as articulated in their aspirations and reflections on the material world. However, before taking on that task, it would help to briefly describe who the Dalits are and what shapes their theology of nature.

3.1. Dalits and Dalit Theology – A Brief Overview

Who are the Dalits?

A Dalit is a person who falls outside the four *varna*s or castes in the Hindu system of social stratification.[1] Etymologically the word Dalit comes from the root word *dal* in Sanskrit, which as an adjective means split, broken, crushed or cracked. Its usage has evolved over time and now has come to mean oppressed, exploited and downtrodden, referring to the

[1] The Hindu caste system contains four castes: Brahmin (the priestly caste), Kshatriya (the warrior caste), Vaishya (the business caste) and Shudra (the caste assigned to perform menial tasks).

condition of Dalits, especially in and through the work of the 19th-century social reformer Mahatma Jotirao Phule (1826-1890).[2] Since then, Dalit has become an overriding term of identity for those outside the Hindu caste system, also called by several other names such as outcastes, scheduled castes, depressed castes, *panchamas* ('the fifth ones' referring to their status as those below the four castes), *achhut* (untouchables), *bahujan* ('majority people') and *mulnivasi* (meaning 'the original inhabitants' often used in opposition to Aryan outsiders).[3] The term Dalit is greatly politicised and is used differently by different people and for different purposes. For example, some argue that Dalits have experienced significant financial and social mobility since India's modernisation. They claim that the previous connection between Dalit identity and poverty has been severed, and thus, the term Dalit should be redefined based on the social class one belongs to rather than one's caste. Others, including the government of India, consider caste a strictly religious category, a feature of 'Indic' religions, and therefore, exclude those who would identify themselves as Muslim or Christian Dalits. However, as Webster rightly argues, despite these redefinitions, it is the factor of caste that promulgates discrimination; it is also the one that continues to determine who is a Dalit.[4]

The exact number of Dalits is often contested, primarily because, as stated above, Dalit identity is so conflated with religious identity that the latter becomes decisive for the former, whereby Hindu, Jain and Buddhist Dalits are accepted as such, but not Christian and Muslim Dalits. According to the 2011 census, there are estimated to be 201.4 million Schedule Castes (the official term for Hindu, Sikh and Buddhist Dalits).[5] According to Teltumbde, a scholar of caste and Dalit studies, this amounts to 16.6 per cent of the population, but if Christian and Muslim Dalits are added to the lot, their total number may well swell beyond 320 million, making them more than a quarter of the total population.[6] Despite this number, Dalits have been marginalised from every aspect of life for generations. The issues faced by Dalits are so diverse and vast that their everyday life could revolve around that single

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[2] Anand Teltumbde, *Dalits: Past, Present and Future* (London: Routledge, 2020), 6.
[3] Teltumbde, *Dalits*, 10.
[4] John C. Webster, 'Who Is a Dalit?', in *Untouchable: Dalits in Modern India*, ed. S. M. Michael (Boulder, CO: Lynne Rienner Publishers, Inc., 1999), 19; Cf. Paulson Pulikottil, *Beyond Dalit Theology: Searching for New Frontiers* (Minneapolis, MN: Fortress Press, 2022), https://www.perlego.com/book/2944268/beyond-dalit-theology-searching-for-new-frontiers.
[5] International Dalit Solidarity Network, 'India: Official Dalit Population Exceeds 200 Million - International Dalit Solidarity Network', 29 May 2013, https://idsn.org/india-official-dalit-population-exceeds-200-million/.
[6] Teltumbde, *Dalits*, 3.

identity – stretching from problems as basic as lack of access to clean water, sanitation facilities, health amenities, and housing facilities to persistent poverty, unemployment, disparity in land ownership, routine atrocities and consistent political marginalisation.[7] The Dalit vision of nature takes its shape within this context of generational oppression, socio-economic injustices and systemic perpetuation of inequality and discrimination.

What is Dalit Theology?

Though a large portion of Dalits converted to Christianity during the phase of 'mass movements' in several parts of India,[8] Dalits argue that the socio-political realities they face, including discrimination shown to them in places of worship and practice of religion, have not changed much.[9] Dalit theologians contend that the discrimination they encounter also extends to ignoring their theological contribution that emerges from the lived realities of their lives. Sathianathan Clarke, thus, contends that since the reins of theological enterprise were in the hands of Brahmin converts, in its early phase, Indian Christian theology acquired an apologetic tone constrained to neo-Vedantic concerns, employing neo-Vedantic categories, concepts and symbols, a process that was further aided by the need for a unified national identity in the wake of emerging nationalism. Moreover, to distance itself from European expansionism, including theological ones, these theologians projected a complete harmony between Hindu and Christian themes, while Dalit concerns remained outside of their purview. Clarke further argues that such framing of conversation was triply discriminatory towards Dalit communities: Theology was done from the perspective of the elite minority caste Hindus and Christians; it kept the Dalits out of the discursive arena; and, the concern for nationalism took priority over Dalit experiences and liberation.[10] Given these circumstances, Dalit theology was required, not just to bring the

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[7] Subhadra Mitra Channa and Joan P. Mencher, *Life as a Dalit: Views from the Bottom on Caste in India* (Los Angeles, CA: Sage, 2013); Sukhadeo Thorat, *Dalits in India: Search for a Common Destiny* (New Delhi: Sage Publications India, 2009).

[8] John C. B. Webster, 'From Indian Church to Indian Theology: An Attempt at Theological Construction', in *A Reader in Dalit Theology*, ed. Arvind P. Nirmal (Madras: Gurukul Lutheran Theological College & Research Institute, 1990), 93.

[9] Jebamalai Raja, 'The Problem of Caste Within the Church', *Journal of Dharma* XXIV, no. 1 (1999): 28–39; David Mosse, 'Caste and Christianity', *Seminar* 633 (2012); Although the discrimination to Dalits has traditionally been considered a more visible phenomenon in the Roman Catholic Church, Protestant churches are no different. Rowena Robinson, *Christians of India* (New Delhi: Sage Publications India, 2003).

[10] Sathianathan Clarke, *Dalits and Christianity: Subaltern Religion and Liberation Theology in India* (Delhi: Oxford University Press, 1998), 37–40.

focus on Dalits but also to balance the course that modern Indian Christian theology had taken.

Arvind P. Nirmal, the Father of Dalit Theology, inks out the manifesto of Dalit theology thus:

> a Christian Dalit Theology will be produced by Dalits. It will be based on their own dalit experiences, their own sufferings, their own aspirations and their own hope. It will narrate the story of their pathos and their protest against the socioeconomic injustices they have been subjected to throughout history. It will anticipate liberation which is meaningful to them. It will represent a radical discontinuity with the classical Indian Christian Theology of the Brahminic tradition. This Brahminic tradition in the classical Indian Christian Theology needs to be challenged by the emerging Dalit theology.[11]

As Nirmal indicates, from its very inception, Dalit theology was meant to be a counter-theology. As such, it has naturally found an ally in the postmodernist and postcolonial suspicion of power and their stress on deconstruction. Thus, Clarke argues,

> Indian-Christian theology by excluding and ignoring the voice of the majority, who testify to centuries of oppression and marginalization, has been an ideological vehicle in the hands of the status quo. It could be said that theology sustained a process of hegemony by which the interests of the caste communities were espoused, strengthened and furthered in India.[12]

Paulson Pulikottil, in his recent work, has argued that 'Though it is true that converts from high castes dominated the scene, imagining a Brahmanical conspiracy against the Dalits or Dalit Christians is unfounded.'[13] However, for postcolonial Dalit theology, the very act of 'dominating the scene' can be considered that which 'invalidates and repudiates the culture and religion of the Dalits.'[14] Dalit theology, as a counter-theology, has brought to light several biases inherent in modern Indian Christian theology monopolised by the cultural and caste elites. I will highlight some of them, particularly those that relate Dalit theology to the subject of the material world. However, prior to that, I aim to underscore the critical themes in the discourse surrounding the subject of nature within contemporary Dalit scholarship.

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[11] Arvind P. Nirmal, 'Towards a Christian Dalit Theology', in *A Reader in Dalit Theology*, ed. Arvind P. Nirmal (Bangalore: Gurukul Lutheran Theological College & Research Institute, 1990), 58–59.
[12] Clarke, *Dalits and Christianity*, 41.
[13] Pulikottil, *Beyond Dalit Theology*.
[14] Clarke, *Dalits and Christianity*, 40.

3.2. Dalits and Nature – A Reassessment?

Contemporary Dalit attitudes to nature are entangled in two different but related discourses: science or developmental discourse and environmental discourse. Though related to nature, both discourses have different aims and concerns and make distinct claims, often bringing them into conflict. Moreover, these discourses themselves are further interlaced by their advocates with binary frameworks such as colonial-postcolonial, modern-postmodern, and male-female to derive the legitimacy of their perspectives or de-legitimise the other. While such framing immediately makes Dalit discourse a part of a global conversation on nature, it unwittingly assumes that the Dalits have a unified position that places them on one side of those binaries. But do Dalits have a singular understanding of nature that lands them either in the camp of those seeking development or those seeking preservation of the environment? Do Dalits, like other marginalised groups in India, disparage science and development because a higher ecological consciousness drives them? In what follows, with the help of several contemporary works from social sciences, I attempt to explore contemporary Dalit discourses on science and environment to problematise the narrative of a clear-cut trajectory of 'the' Dalit voice on nature and consider the implications of these Dalit ambiguities for Indian Christian theology of nature.

Indian Environmentalism

Soon after independence from British rule, under the leadership of Jawaharlal Nehru, its first prime minister, industrialisation and economic progress became a focal point for the young India. Science was seen as the new saviour that would pull the Indian masses out of the pit of poverty. However, the consequences of human greed masquerading as science soon became apparent as it began to create havoc on the environment and displace those who lived close to nature. The need for a strong environmental movement that would protect both was felt. Three episodes of rebellion against the march of development are considered watershed moments in the history of Indian environmentalism. First, the Chipko movement of 1973 was a non-violent agitation in which women from a local community in the foothills of the Himalayas protested against the felling of trees by hugging them. The second development was the implementation of the Environmental Protection Act, passed in the wake of the Bhopal gas tragedy of 1984, which remains a haunting memory in Indian

conscience.[15] The third movement was Narmada Bachao Andolan (Save Narmada Movement), which began in 1985 in protest against the large-scale construction of dams on the Narmada River in central India, displacing about 250,000 people. These developments have brought the issue of environmental degradation and the displacement of those close to nature to the forefront of ecological discussions in India. The unique entanglement of ecological degradation and the poor in India also sets it apart from Western discussions on nature.

Guha, for instance, helpfully contrasts Indian environmentalism with Western environmentalism. For him, while the latter's focus is maintaining cleanliness and beauty in the environment for a better quality of life, for the former, it is an 'environmentalism of survival and subsistence'[16] since nature's manipulation has consequences for communities depending on it. Nature and the poor often stand powerless in front of dominant agencies, such as a lobby of industrialists or a nation-state bent on changing natural landscapes to their choosing, while minting money no matter the cost. Nature's survival is a matter of survival of the poor and vice versa since both depend upon each other, and one is affected by what is done to the other. Indian environmental movement, therefore, is not a mere call for justice for climate, but from its very beginning, it has been an 'environmentalism of the poor'[17] and for the poor.

Indian environmentalism has taken different forms since its first steps and has been classified in various ways. Guha categorises three strands: Crusading Gandhian, which places native against foreign, stressing the need to preserve the former and resist the latter; Appropriate Technology, which looks for a synthesis of native and foreign or agriculture and industry; and Ecological Marxism, which emphasises economic socialism over ecological balance.[18] N. Patrick Peritore's survey of government, business and NGO personnel divides them among Greens, Ecodevelopers and Managers and further complexifies the environmental attitudes of Indian elites by casting them into the attitudinal

[15] The Bhopal disaster was caused by the leakage of methyl isocyanate gas from a pesticide plant in Bhopal, a city in Central India, killing about 3800 people immediately and around 10,000 people in the next few days. The victims who survived it continued to experience symptoms of several diseases and disabilities for decades to come.

[16] Ramachandra Guha, 'Ideological Trends in Indian Environmentalism', *Economic and Political Weekly* 23, no. 49 (1988): 2578–81.

[17] Ramachandra Guha, 'The Past & Present of Indian Environmentalism', *The Hindu*, 24 May 2023, https://www.thehindu.com/opinion/lead/the-past-present-of-indian-environmentalism/article4551665.ece.

[18] Guha, 'Ideological Trends', 2580.

matrix of Dharmic, Colonial, Community Development, and Gandhian.[19] Chapple, on the other hand, intending to bring ecological concerns in dialogue with religion, employs a different classification: Brahminical models that search for ecological insights in Indian religious sources; Tribal models that explore tribal life and traditions to find ecological ethics; post-Gandhian models that contest Western models of development and look to indigenous sources for more holistic approaches, and Renouncer models that relate ecologically ethical life with the ascetic traditions of India.[20] Though diverse, these classifications provide a reasonably fair picture of environmental discourse in India.

All classifications, however, acknowledge that the Gandhian paradigm inspired earlier phases of the Indian environmental movement and continues to have traction in Indian life and polity.[21] The Gandhian paradigm places the ecological discourse in the crucible of the Western-native or foreign-local binary. It critiques all Western interventions permitted by the liberalisation policies of the earlier Nehruvian regime in the name of science and development. Instead, it calls for a return to the native models of human-nature harmony found in the local traditions of India as a panacea for all ecological disasters. In the post-colonial climate of India, this model has found renewed interest.

Vandana Shiva's work is often held as the prime example of the "Crusading Gandhian" model of environmentalism, to use Guha's classification. Shiva, a world-famous feminist ecologist who came to the limelight with her *Staying Alive*,[22] has been a passionate critic of Western, modern notions of development and progress propagated and pursued by the nation-state. She has crusaded against biopiracy and remains a mascot of the Green movement, biodiversity, seed sovereignty and earth democracy.[23] Shiva's work globally appears alongside other ecofeminist thinkers, such as Rosemary Radford Reuther, Carolyn Merchant and Maria Mies, and those who employ post-colonial approaches to environmental discourses.
Shiva correlates the destruction of biodiversity and the demolition of traditional communities. She argues that an indelible link exists between nature and these communities, particularly women, whose ecologically sensitive knowledge and gentle

[19] N. Patrick Peritore, 'Environmental Attitudes of Indian Elites: Challenging Western Postmodernist Models', *Source: Asian Survey* 33, no. 8 (1993): 804–18.
[20] Christopher Key Chapple, 'Toward an Indigenous Indian Environmentalism', in *Purifying the Earthly Body of God* (Albany, NY: State University of New York Press, 1998), 13–38.
[21] Peritore, 'Environmental Attitudes', 817.
[22] Shiva, *Staying Alive*.
[23] Vandana Shiva, *Earth Democracy: Justice, Sustainability and Peace* (London: Zed Books, 2005).

practices she contrasts with the Western, rational, patriarchal science and the consumerist West. She also invokes the notion of *Prakṛti* as a feminine principle from Indian philosophy[24] that can correct the Western tendency of dominating nature. *Prakṛti*, for Shiva, like the Greek Gaia, is an active, creative force. It is *Terra Mater* and not mere matter, and by the same token, it is also self-regulating and sacred. So she says, "In the world-view personified by the Chipko women, nature is Prakṛti, the creator and source of wealth, and rural women, peasants and tribals who live in, and derive sustenance from nature, have a systematic and deep knowledge of nature's processes of reproducing wealth."[25] It is this understanding of nature as a sacred mother that, in Shiva's view, makes the native approaches to nature gentler and kinder and their lifestyle naturally green.

While Shiva's contribution to ecological discussion has found favour in both India and the West, it raises several concerns. To begin with, Shiva's Gandhian approach rather simplistically poses the Western, male, science against the native, feminine, *Prakṛti*. In fact, by relating maleness with Westernness, Shiva dodges the issue of patriarchy in India. The matters of caste and class are likewise pushed under the rug. In addition, the historicity of the romantic picture of human-nature and male-female relations in pre-colonial India that Shiva raises to counter Western science is questionable. From the theological point of view, however, Shiva's attempt to correlate ecological conservation and religious worldview is of particular interest. Shiva is not alone in the conviction that the nature-centric Eastern worldviews are more eco-friendly than the anthropocentric and dualistic Western ones.

Religion in Indian Environmentalism

The discussion on whether 'Eastern holism' is more effective in dealing with environmental problems has been around since Lynn White Jr.'s influential piece. Lynn blamed Judeo-Christian belief that places humanity above nature as the chief reason behind ecological crises.[26] To counter the dualistic modes of Western and Christian thinking in their own context, Western thinkers and environmentalists have since then been attracted to Eastern worldviews in which the God-human-nature boundaries are fluid. For instance, Arne Naess,

[24] For more on *Prakṛti* in Indian philosophy, see 2.1.
[25] Shiva, *Staying Alive*, 219.
[26] Lynn White Jr, 'The Historical Roots of Our Ecologic Crisis', *Science* 155, no. 3767 (1967): 1203–7.

the father of Deep Ecology, turned to Vedānta to develop his idea of an "ecological self" that is in harmony with nature.[27]

In India, the dominant Gandhian approach that holds modern development as a continuous form of colonialism and traditional communities and their practices as deeply ecologically sensitive has essentially become a "new traditionalist" discourse.[28] The neo-traditionalists reject the Western-Christian dualistic approaches to nature and demand that contemporary environmental ethos be founded on "native" traditions, particularly Hinduism. The efforts to relate Hinduism to ecological concerns began in the 1980s but found a new impetus in the 1990s. Gavin van Horn's informative article helpfully surveys the literature that locates attempts to relate Hindu traditions to nature.[29] These developments have, on the one hand, led to exciting conversations about the role of religion in mitigating ongoing environmental problems.[30] In doing so, they also provide a space and context for interreligious dialogue. On the other hand, they divulge the politics of nature in contemporary India.

The Politics of Nature

The neo-traditionalist discourse on nature in India is deeply politicised as it has several parallels with the Hindu nationalist movement. Emma Mawdsley points out at least four parallels: gendered and social conservatism; superficial hermeneutic analyses of ancient texts, partial and 'romantic' histories; and the essentialisation of science and East and West.[31] In an earlier chapter, we saw that the essentialisation of the East-West binary, which continues to be an influential binary in contemporary science and religion dialogue in India, has its roots in Oriental entanglements.[32] This remains the case in environmental discourses, too. Thus, Georgina Drew, with her study on projects to dam Ganga, exposes how engineer-turned-activists such as G. D. Agarwal based their environmentalism on

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[27] Arne Naess, 'Self-Realization: An Ecological Approach to Being in the World', *The Trumpeter* 4, no. 3 (1987): 3; Martin Haigh, 'Deep Ecology Education: Learning from Its Vaisnava Roots', *Canadian Journal of Environmental Education* 11 (2006): 43–56; Knut A. Jacobsen, 'Bhagavadgitā, Ecosophy T, and Deep Ecology', *Inquiry* 39, no. 2 (1996): 2.

[28] Subir Sinha, Shubhra Gururani, and Brian Greenberg, 'The "New Traditionalist" Discourse of Indian Environmentalism', *The Journal of Peasant Studies* 24, no. 3 (1997): 3.

[29] Gavin Van Horn, 'Hindu Traditions and Nature: Survey Article', *Worldviews* 10, no. 1 (2006): 5–39.

[30] Willis Jenkins, Mary Evelyn Tucker, and John Grim, eds., *Routledge Handbook of Religion and Ecology* (London: Routledge, 2017); Roger S. Gottlieb, *The Oxford Handbook of Religion and Ecology* (Oxford: Oxford University Press, 2006) Both these sources provide a good overview of how different worldviews attempt to relate their religious beliefs to contemporary ecological challenges.

[31] Emma Mawdsley, 'Hindu Nationalism, Neo-Traditionalism and Environmental Discourses in India', *Geoforum* 37, no. 3 (2006): 3.

[32] See earlier discussion in 2.2.

Hindu traditions and values by contrasting them against Western technologies.[33] Moreover, as she argues elsewhere, contemporary environmental discourse in India has become a hotbed of "dangerous and divisive religious politics."[34] Similarly, Mukul Sharma shows that the contemporary ecological narrative in India is immersed in nationalism.[35] In the highly sensitive anti-colonial environment, the roots of ecological corruption are traced to "outside" influences and the images of the ancient, glorious past are employed to foster the need for Hindu unity. Rana P. B. Singh, who has made an immense contribution to founding environmental concerns on the Indian ethos, says,

> The disappearing presence of Hindu thinking about the man–nature–cosmos relationship is one of the basic causes for the present environmental crisis that India is facing today…. During the past 700 years of foreign cultural domination—beginning with Islam and followed by European Christianity—the ancient Hindu value system has lost many of its facets.[36]

Such a framing of discourse is then used to lump together and homogenise all Indian expressions relating to nature as "Hindu." The tendency for Hindu nationalist voices to hijack the ecological discourse is so pervasive that while Chappel differentiates between diverse Indian traditions such as tribal, Brahminic and ascetic, G. van Horn contends that "it is often difficult to distinguish, perhaps especially because of contemporary nationalistic Indian efforts toward unification, where 'Hinduism' ends and 'tribal' traditions begin." The Brahminic hegemony does not merely drown out other voices from the discussion on nature, but its attempt to marry ecology with Hindu themes is also often motivated by cultural pride that fuels intolerance towards religious minorities. This is why, while Eastern religions may have appealed to ecologically sensitive individuals living in the West, for Indian religious and caste minorities, it continues to be a source of oppression.

A widely shared Dalit reaction to the Gandhian style of environmentalism is summed up in Gail Omvedt's short but influential piece, *Why Dalits Dislike Environmentalists*. For Omvedt, Indian Environmentalism is led by high castes who want to found ecological

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[33] Georgina Drew, *River Dialogues: Hindu Faith and the Political Ecology of Dams on the Sacred Ganga* (Tucson, AZ: University of Arizona Press, 2017), 130–35.

[34] Emma Mawdsley, 'The Abuse of Religion and Ecology: The Visha Hindu Parishad and Tehri Dam', *Worldviews* 9, no. 1 (2005): 1–24.

[35] Mukul Sharma, 'Hindu Nationalism and Right-Wing Ecology: RSS, Modi and Motherland Post-2014', *Studies in Indian Politics* 11, no. 1 (2023): 1.

[36] Rana P. B. Singh, 'Ecological Cosmology in Hindu Tradition for the 21st Century', in *Asian Perspectives on the World's Religions after September 11*, ed. Arvind Sharma and Madhu Khanna (Santa Barbara, CA: Praeger, 2013), 233–50.

discourse on Hindu *shastras* (Scriptures) whose authority Dalits have been defying for ages.[37] Mukul Sharma, in a similar vein, critiques earlier environmentalists such as Shiva for being "romantic proponents of caste and community" that valorise the organisation of caste-based community as an effective way of distributing natural resources and preserving its sanctity.[38] Several contemporary Dalit writers charge Indian environmentalists of ignoring Dalit insights on nature and harbouring "strong Brahmanical undercurrents."[39] In his other work, based on a case study of three environmentalist projects, Mukul Sharma contends that modern Indian environmentalism is married to Hindu nationalism in two ways: Environmentalist agenda takes the Hindu nationalist worldview as its guiding principle (Saffronising of the Green), and Hindu nationalists have taken environmentalism as an article of faith in its vision (Greening of the Saffron).[40]

The Dalit critique of contemporary environmental discourse divulges the power dimensions that the Gandhian approach tends to ignore, namely its own hegemony. By employing postcolonial theory exclusively to the binary of East-West, Gandhian models neglect the "native" hegemonies. Contemporary Dalit works not only highlight the power dynamics in native approaches to ecological concerns, but by demanding that caste become an integral part of Indian environmental discourse, they also take the postcolonial approach a step further. Moreover, these works raise initial doubts concerning the romantic notion that Eastern religious worldviews, in contrast to Western ones, are nature-friendly *in se*. From a theological perspective, this is an interesting point to which we will return later. For now, we ask what the hegemony of the Gandhian model has meant for theological reflection on nature in India.

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[37] Gail Omvedt, 'Why Dalits Dislike Enviromentalists', *The Hindu*, 24 June 1997.

[38] Sharma, *Caste and Nature*, 115.

[39] Riya Mukherjee and Smita Jha, '"Live Simply That All May Simply Live": Rethinking the Environmental Paradigms through Select Dalit Autobiographies', *Sociological Bulletin* 65, no. 2 (2016): 181, 2; Indulata Prasad, 'Towards Dalit Ecologies', *Environment and Society* 13, no. 1 (September 2022): 1; Mukul Sharma, 'Dalits and Indian Environmental Politics', *Economic and Political Weekly* 47, no. 23 (2019): 23; Shubham Pandey and Priyanshi Nagarkoti, 'An Anthropological Analysis of the Invisibility of Dalits of India in the Environmental Discourse: A Tale of Subjugation, Alienation and Resistance', *Contemporary Voice of Dalit* 13, no. 2 (2021): 2. For similar trends in Nepal, see Seira Tamang, 'The Politics of Conflict and Difference or the Difference of Conflict in Politics: The Women's Movement in Nepal', *Feminist Review* 91, no. 1 (2009): 1.

[40] Mukul Sharma, *Green and Saffron: Hindu Nationalism and Indian Environmental Politics* (Ranikhet: Permanent Black, 2012).

Theological Engagement

Indian Christian ecotheologians, ecofeminist theologians, and tribal theologians have largely followed the lead of Gandhian environmentalists and the postmodern and postcolonial critiques of dualistic modes of thinking in positing that, as holistic and porous, the Indian worldview is authentically nature-centric.

Considering the impact of natural degradation on indigenous communities such as Tribals and Adivasis,[41] theological reflection on nature in India has remained primarily centred around them. Theological strands such as ecotheology and ecofeminism have taken the postmodern and postcolonial critique of Western dualism into their stride. Ecofeminist theologians, such as Aruna Gnanadason, highlight how the ecological destruction committed by rapid industrialisation under colonial power and its continuation under native government impacts marginalised communities, particularly women and children. In line with Shiva, she considers the "western patriarchal paradigm of development... at the root of the degradation of the earth."[42] Taking from Sallie McFague, Gnanadason highlights the place of women as "bearers of traditions of prudence" in indigenous communities.[43] George Zachariah and Lily Mendoza argue that ecotheology itself needs decolonisation, which means reflecting upon the "ecotheological visions, practices, ethics, resilience, and praxis of Indigenous and subaltern communities" which "offer us non-dualistic and relational worldviews which are antithetical to the logic of conquest and '|thingication'."[44] In another place, Zachariah exhorts to develop "Earth ethics from the grassroots"[45] by employing approaches that are caste-sensitive, as contemporary dominant ecotheological reflections in India are caste-blind, exposing the caste privilege of dominant voices.[46] As in Shiva's work, there is a clear recognition to pay heed to the marginalised voices that share a

[41] Adivasis, literally meaning 'first dwellers' refers to the indigenous communities of India. However, it has become a politicised term and an indication of the assertion of identity of the original inhabitants against the Aryans who arrived later.

[42] Aruna Gnanadason, 'Response to Elisabetta Donini', *Journal of the European Society of Women in Theological Research* 2 (1994): 77.

[43] Aruna Gnanadason, 'Yes, Creator God, Transform the Earth! The Earth as God's Body in an Age of Environmental Violence', *The Ecumenical Review* 57, no. 2 (2005): 163, 2.

[44] S. L. Mendoza and G. Zachariah, 'Introduction,' in *Decolonizing Ecotheology: Indigenous and Subaltern Challenges* (Oregon: Wipf and Stock Publishers, 2022).

[45] George Zachariah, *Alternatives Unincorporated: Earth Ethics from the Grassroots* (London: Equinox Publishing Ltd., 2011).

[46] Mendoza and Zachariah, *Decolonizing Ecotheology*

closer connection with nature than those who, from a distance, instrumentalise it for consumption.

Since its very beginning, Dalit theology's immediate concerns have revolved around resisting socioeconomic marginalisation, a priority that ecotheology has not yet overtaken. However, ecofeminist discourses often place Dalits, Adivasis, women, and nature *en bloc* as common victims of ecological degradation.[47] It is then assumed that Dalits share the same experience of being in harmony with nature and possess the same traits in connecting with nature as the other groups living close to nature.

But what native practices do ecofeminists and other ecotheological voices bring to the discussion of nature that are crucial for a theological project such as this? Drawing much from Shiva here, ecofeminist theologian Gnanadason considers female principles such as *Śakti* and *Prakṛti* that place women and nature side by side in their resistance against oppression. These, they claim, have provided impetus to their struggle for liberation since ancient times. Similarly, the idea of local goddesses that guarded forests is prevalent in many indigenous societies. In many Indian languages, concepts such as *bhudevi* (goddess earth) and *bhumata* (mother earth) are common.[48] These notions, for Gnanadason, go to show "the spiritual bond between humanity and nature" which is "at the core of our cultures,"[49] but alien to modernity. She is aware that these insights can be (mis)understood as a plea to return to an esoteric past, but she chooses to employ them "to draw strength from the role that nature plays in the lives of our people."[50]

These convictions have theological implications. The power of this indigenous conception of human-nature interconnectedness cannot be fully unleashed until prevalent theological notions that place the two against each other are rearticulated or renounced. Accordingly, both Zachariah and Gnanadason raise suspicion about Christian theology's role in exacerbating ecological crises. For Zachariah, theology as a God-talk has often functioned as a "sacred canopy" to facilitate the "colonisation of the lifeworld" (the term that he picks from Jürgen Habermas).[51] Gnanadason, likewise, contests Christian notions that

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[47] Gnanadason, 'Yes, Creator God', 163–64.
[48] Aruna Gnanadason, 'Women, Economy and Ecology', in *Ecotheology Voices from South and North*, ed. David G Hallman (Eugene, OR: Wipf and Stock Publishers, 1994), 183.
[49] Gnanadason, 'Response', 77.
[50] Gnanadason, 'Response', 76.
[51] Zachariah, *Alternatives Unincorporated*, 6, 13.

promulgate anthropocentrism, such as dominion over and stewardship of nature which are held responsible for the colonisation of lands and nature.[52] These notions provide "biblical sanction for the extraction of more and more from the life-giving mother earth."[53] They are destructive not just to the environment but also to indigenous environmental practices that "have earth at its centre."[54] The analysis of Zechariah and Gnanadason resonates with a broader criticism of Christian theological notions such as stewardship and, particularly, dominion due to the undertones of anthropocentrism they carry.[55] Kwok Pui-lan, for instance, considers exploitation of nature as its "colonisation".[56]

These authors argue that the abuse of the environment in the name of scientific development cannot be challenged until the theological language of dominion and dualistic models of God-world relationship are renounced. It is a task of theology, therefore, to articulate God-human-nature interconnection in an ecologically sensitive and holistic way. Thus, for Gnanadason, Christianity's need to "reconstruct the language of God" is a 'corollary' to the necessity of constructing a more earthloving faith."[57] Following Sallie McFague again here, she calls for "reclaiming the earth as the body of God" for "If the earth is the body of God, then we cannot but recognize the earth's sacredness."[58] Gnanadason's ecofeminist vision emphasises the givenness and sacredness of life in everything, poses a radical challenge to Aristotelian dualisms and stresses connectedness between humanity and nature.[59] A similar argument is also noticed in Rosemary Radford Reuther, who contends that the biblical concept of the cosmos as the body of Christ (in addition to the concept of covenant) corrects the degradation of women and nature.[60] In contemporary times, Catherine Keller is particularly influential in propagating panentheistic images of God, where God and the world share a material bond.

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[52] Gnanadason, 'Yes, Creator God', 166–68.
[53] Gnanadason, 'Women, Economy and Ecology', 184.
[54] Gnanadason, 'Yes, Creator God', 163.
[55] White Jr, 'Historical Roots'; Rosemary Radford Ruether, *Gaia and God: An Ecofeminist Theology of Earth Healing* (San Francisco, CA: HarperCollins, 1992), 45.
[56] Kwok Pui-lan, *Postcolonial Imagination and Feminist Theolog* (Louisville, KY: Westminster John Knox Press, 2005), 162.
[57] Gnanadason, 'Yes, Creator God', 166.
[58] Gnanadason, 'Yes, Creator God', 167.
[59] Gnanadason, 'Women, Economy and Ecology', 184.
[60] Rosemary Radford Ruether, 'Eco-Feminism and Theology', in *Ecotheology: Voices from South and North*, ed. David G Hallman (Eugene, OR: Wipf and Stock Publishers, 1994), 202–4.

The postmodern, postcolonial approaches taken by ecotheologians and ecofeminists provide an apt analysis of dualistic thinking that posits humans as masters of nature and opens the latter for exploitation. Their stress on closer connections between God, humans, and nature is a positive aspect for the theology of the material world that we want to carry forward with us. However, in the process, their approach raises several questions that must be addressed.

Both Gandhian and postmodern-postcolonial approaches take it for granted that holistic and porous worldviews are eco-friendly. There is an uncritical acceptance of the neo-traditionalist, Hindu and Hindutva criticism of the modern/Western/Christian model of relating to nature, contrasting the two in a way that the former is considered holistic and the latter dualistic.

In ecofeminist narratives, it is often assumed that women and nature share a unique and natural solidarity. Images pointing to parallel experiences, such as the organic nature of the womb and the earth, are employed to provide a helpful picture to imagine earth-women solidarity. The Bible itself imagines nature as groaning in the pain of childbirth (Rom. 8:22). The parallelism is further extended in that both have been victims of the reckless "dominion" of the more powerful. However, the conclusion that these images imply a special connection between women and nature, whereby they are better equipped to understand environmental crises than men, is questionable. In fact, several recent ethnographic studies in India make such a deduction contentious.[61] Instead, they indicate that women have diverse urgent concerns that often override ecological interests and that when push comes to shove, women can be as ruthless towards nature as men. Nature itself remains impartial in how it treats humans – it is as painful for women as for the men labouring in it; natural disasters affect men as much as they do women.

However, what is even more contentious is the ecofeminist attempt to employ Eastern models of God-world interrelationality wherein God is corporeally related to the material world. Besides the theological questions it raises, it is a question of purpose. In other words, if the objective of employing the corporeal model of God-nature interrelationality is

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[61] Deepa Joshi, 'Feminist Solidarity? Women's Engagement in Politics and the Implications for Water Management in the Darjeeling Himalaya', *Mountain Research and Development* 34, no. 3 (August 2014): 243–54; Cecile Jackson, 'Women/Nature or Gender/History?: A Critique of Ecofeminist "Development"', *The Journal of Peasant Studies* 20, no. 3 (1993): 3; Shubhra Gururani, 'Forests of Pleasure and Pain: Gendered Practices of Labor and Livelihood in the Forests of the Kumaon Himalayas, India', *Gender, Place and Culture: A Journal of Feminist Geography* 9, no. 3 (2002): 3.

to provide ecological ethics for our times, can regarding the material world as the body of God achieve that objective? This corollary not only remains ahistoric, but as is often the case in the Indian context, the corporeal understanding of the God-world relationship promulgates a careless attitude towards nature.

For example, Kelly Alley, in her ethnographic research on Namami Gange, a project designed to clean up the Ganges, asked why, despite its sacred status, the Ganges remains one of the most polluted rivers in the world. Alley found that the natives who often celebrate its divine origin see her as a sacred mother who cleans up the mess created by her ignorant children, but does not require them to return the favour.[62] Consequently, the natives pollute the environment without any guilt. In this, as Mangalwadi observes, a 'goddess-worshipping Indian village whose world-view is not mechanistic but organic and animistic is often just as anti-ecological as the mechanistic.'[63]

To add, in much of the native worldviews that ecotheology literature places against Western reductionism, nature is considered indwelt by spirits and, therefore, feared and worshipped. While for the anti-modern theologians, this may point to ecological consciousness, for many indigenous people themselves, nature holds the status of a reality that is infused with divinity, which, if not appeased, can inflict calamities on humans. Since humans are powerless before nature, which is considered the abode of the divine, all human intervention in it, even for its conservation, is pointless. Thus, the corporeal image of the God-world relationship achieves the exact opposite of what it aimed to – by making humans powerless in the hands of nature and depriving the latter of human intervention, it discourages the development of ecological ethics.

Indian ecofeminist and ecotheological voices, in their search for "native" foundations for ecological concerns, do not pay sufficient attention to these realities. As influenced by Gandhian and postcolonial environmental discourses, their focus remains limited to confronting the "external" incursions while overlooking indigenous practices and traditions that harm the well-being of humans and the environment.

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[62] Kelly D. Alley, 'The Goddess Ganga: Her Power, Mythos, and Worldly Challenges', in *Goddesses in World Culture*, ed. Patricia Monaghan, 1: Asia and Africa (Westport, CT: Greenwood Publishing Group, 2010), 33–48.

[63] Mangalwadi, *When the New Age Gets Old*, 106.

In their zest to critique Western modernity, these dominant approaches restrict Dalit views of nature from emerging in two ways. Firstly, they do not sufficiently address the issues of caste and its entanglement with nature in their discourses on the environment, and, secondly, they do not pay ample attention to the diversity of Dalit views on modernity, particularly their engagement with modern science. The current crop of Dalit writers and the churning within Dalit studies have problematised both these constraints put on them. They urge Dalit views on nature to be allowed the space to articulate themselves. Dalit theology can benefit much from those articulations.

Reassessing Caste and Nature

As seen above, contemporary Dalit thinkers argue that their voices are overlooked in contemporary environmental discourse in India. But what new insights can caste bring to the discussion of nature?

Dalit articulations of nature derive their legitimacy from the fact that Dalits, like the Adivasis, as poor and disadvantaged, live "earthy" lives in proximity to nature. As such, they are assumed to be able to offer a more nuanced and balanced appraisal of nature than other similar formulations. Dalit perspectives on nature are deeply informed by their own raw experiences in nature. Since their very survival depends upon the survival of nature around them, their experiences challenge dominant notions of progress and development and the dualistic worldview that promulgates the abuse of nature. Conversely, it holds the potential to correct the romantic tendencies of human-nature harmony that have become a hallmark of much of the contemporary literature on nature, such as the Gandhian literature observed above. With this dual contribution, the Dalit voice on nature can be a significant conversation partner for a theology of nature.

The new crop of Dalit writers, Sharma in particular, attempts to show what nature looks like to Dalits from this proximity. Sharma argues that caste and nature are "deeply intertwined."[64] He interrogates various Dalit sources – songs, myths, memories, narratives and writings by Dalit ideologues, leaders and writers to argue that to the Dalits, nature does not come as an empty container, but a thoroughly "caste-ized" reality. Natural spaces and landscapes stand to them as reminders of constraints placed by the

[64] Sharma, *Caste and Nature*, xiv–xv.

caste identity imposed upon them – for instance, having no access to ponds, wells, mountains and sacred spaces. As Dalit thinkers have argued, caste operates, spreads and reproduces itself through a set of cultural norms defined according to rituals of purity and pollution. The Dalit body as a dwelling place and a carrier of pollution is restricted to the spaces designated to it. When it transgresses its boundaries, the sacred is polluted. Dalit entry is, therefore, monitored and banned in sacred spaces such as many Hindu temples. Thus, Dalits experience an "otherisation" in nature, which shapes their lives and identity.[65]

This is why although Dalit songs, myths, stories and literature have vivid, rich, inspirational and colourful images of nature, as Sharma notes, nature is also

> an exercise in power in the hands of the powerful, and is entangled in the politics of belonging and alienation, exclusion and inclusion.... nature can become a medium and message of the expression of power. Here power flows through an overlapping of caste and nature. It creates, appropriates, dominates, and subjugates spaces, places, and identities in different ways across the length and breadth of the country. Power acquired on the basis of nature and caste is exceedingly repressive. At the same time, it creates a ground from where questions against power are also raised. In the process, power is often revisited and reconstructed in the sphere of nature, caste, and culture.[66]

Thus, while natural spaces become sites that foster and reproduce social hierarchies, it is also in and through these spaces that Dalits articulate their hopes and aspirations and give concrete shape to their political contestations. Dalit perceptions of nature, therefore, are heterogeneous: soaked in the haunting memories of discrimination, pain and violence on the one hand and with echoes of courage, bravery and resistance on the other.

But the Dalit perspective of nature is not just about nature's caste-isation, nature itself is not always experienced as tranquil and romantic. Sharma notes again,

> Dalit autobiographies starkly question the dominant romanticism of nature, as they regard violence and discrimination as parts of malignant 'natural order'.... For Dalit writers, considering nature as some kind of superior entity cannot be more wrong. After all, nature also brings decay, sickness and death. Nothing can be more disturbing than to make nature an object of reverence and

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[65] Mukul Sharma, '"My World Is a Different World": Caste and Dalit Eco-Literary Traditions', *South Asia: Journal of South Asia Studies* 42, no. 6 (November 2019): 6.
[66] Sharma, *Caste and Nature*, xviii.

> worship, even before one starts to address the monstrous social injustices that are accepted as a consequence of blind faith in nature.[67]

To add, unlike Western environmentalism, which wilfully divorces work and nature and makes the latter a place of pristine beauty, recreation and leisure,[68] Dalits engage with nature through work, which they experience as laborious, tedious and necessary for survival. Their proximity to nature, which is so romanticised in dominant discourses, has saved them neither from their cumbersome labour nor from their dire poverty. If anything, the romanticisation of their labour and poverty is often used as an excuse to leave them in the deplorable conditions of life. Moreover, as those living close to nature, they also remain most vulnerable to disasters in nature, undoubtedly human-made, but also natural. These Dalit experiences and expressions must be considered to balance the romantic representation of Dalits by Gandhian narratives constructed under postcolonial influences. They also offer significant and realistic signposts that remain a crucial Dalit contribution to a theology of nature in the Indian context and beyond.

However, Dalit view of nature is not found in the context of environmental discussions alone, but also in their relation to modern science, as a discipline engaged in studying nature, which too requires a reassessment.

3.3. Dalits and Science – Another Reassessment?

Strangely, modern science has not typically been considered a forte of Dalit engagement by others. This discriminatory treatment is due to several reasons. Firstly, there is a popular but constraining perception of science as a uniquely modern, Western discipline with a unique set of practices, methods, tools and aims that marginalises other ways of doing science. Dalit systems of knowledge production are thought to have no stake in scientific enterprise. Recent postmodern and postcolonial studies have brought to light the Eurocentrism evident in historiographies of science, as was observed in the earlier chapter of this research. To add, the marginalisation is more acute within the Indian context, where rigid caste stratification does not allocate any intellectual activity to Dalits. This is evident in the composition of Indian scientific institutes, which, as Renny Thomas's ethnographic

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[67] Sharma, 'My World Is a Different World', 1025.
[68] Richard White, '"Are You an Environmentalist or Do You Work for a Living?": Work and Nature', in *Uncommon Ground: Rethinking the Human Place in Nature*, ed. William Cronon (New York, NY: Norton, 1996).

research shows, not only have a clear-cut Brahminic identity but also those engaged in scientific activity consider themselves "natural inheritors of scientific practice."[69]

Conversely, postcolonial discussions often project modern science as modernity's pet child that gatecrashes into former colonies as an uninvited guest to harm the indigenous way of life, a goal to which it is supported by powerful colonial institutions such as the nation-state. It is then claimed that owing to modern science's violent trajectory, Dalits are suspicious of and disinterested in modern science. But have Dalits always resisted modern science because they found it oppressive and destructive to their traditions? Contemporary Dalit literature questions such assumptions by offering variegated Dalit views on modern science.

For clarity, I divide Dalit engagement with modern science here through two different reactions: asserting Dalit epistemology of labour for producing scientific knowledge and claiming Enlightenment rationality for Dalit liberation. Both these reactions converge on the Dalit desire to stake a claim in scientific knowledge and to counter the exploitative, superstitious practices promulgated by religions in general, and Brahminic Hinduism in particular.

The Science of Dalit Labour

The first reaction is to claim Dalit contributions to the development of science. The approach here is historical and, once again, follows the lead of Joseph Needham, a British biochemist and historian of science whom we met in earlier chapters. Needham's research, which focused on the development of science in China, began by asking (what is now known as "Needham's Grand Question"): Why did the scientific revolution occur in the West and not in China, although the latter had made great advances in science centuries before the West? Among other things, Needham famously argued that Taoism, as a widespread, naturalist, magical/mystical, feminine and anti-feudal organised system and philosophy, stimulated the Chinese scientific revolution.[70]

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[69] Thomas, 'Brahmins as Scientists'.

[70] Shigeru Nakayama, 'Joseph Needham and Taoism', in *Science, Religion and Society: An Encyclopedia of History, Culture and Controversy*, ed. Arri Eisen and Gary Laderman, vol. 1–2 (London: Routledge, 2015), 193–95. Needham's work has been published in seven volumes now and remains popular among the non-Eurocentric historiographers of science. It must be mentioned here that Nakayama questions Needham's conclusion of the straightforward connection between Taoism and the development of scientific knowledge.

Debiprasad Chattopadhaya, an Indian historian of science, finds several similarities between Needham's description of Taoism and India's Lokāyata – a worldview held by ancient masses of India.[71] Both were naturalists, anti-feudal, proto-scientific and anti-ritual. According to Chattopadhyaya, the magical/mystical elements among Taoists find parallels and even connections in Indian Tantrism.[72] Moreover, as Needham placed proto-scientific Taoism against ritualistic Confucianism, Chattopadhyaya also positions his own Lokāyata against Hindu and Buddhist idealism. One of the reasons, he contends, that made these ancient societies, both Taoists and Indian materialists, proto-scientific was their attitude to manual labour and the marrying of theory and practice, of mental and manual labour, which was devalued in both Hindu and Buddhist traditions.[73]

Contemporary Dalit thinker-activist Kancha Ilaiah further links manual labour with science to assert the Dalit contribution to science. Taking the case of the Madigas from Andhra Pradesh, who were traditionally confined to skinning dead animals, Ilaiah argues that they pioneered the leather industry in India. Leather-making, Ilaiah contends, was a "techno-economic, proto-scientific process and creative philosophy" requiring both knowledge and skill.[74]

While this route of argument helps Dalits engage in creative dialogue with science and assert their contribution to the accumulation of natural knowledge, one may argue that it romanticises the Dalit way of life, particularly its labour. This can be instrumentalised to reinforce the lower space allocated to Dalits in the caste-hierarchy, as is the case in the Neo-Hindu narrative. However, Sharma distinguishes the romanticisation of Ilaiah and the

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[71] Lokāyata is attributed to Charvaka and is often used synonymously with his name. Charvaka's historicity is contested, but the school is popular for its anti-metaphysical and empiricist stance.

[72] Debiprasad Chattopadhyaya, *Lokayata: A Study in Ancient Indian Materialism* (Delhi: People's Publishing House, 1959), 333–52; Tantra broadly refers to a first century Indian esoteric system that brings together ideas from Hinduism and Buddhism. About the contentious nature of the term, see, André Padoux, 'What Do We Mean by Tantrism?', in *The Roots of Tantra*, ed. Katherine Anne Harper and Robert L. Brown (Albany, NY: State University of New York, 2002), 17–24.

[73] Chattopadhyaya, *Lokayata*, 349-350.; That positive appreciation of manual labour was fundamental to the growth modern science is recognised by several historians of science. See, Hooykaas, *Religion and the Rise of Modern Science*, 75–97; Vishal Mangalwadi, *The Book That Made Your World: How the Bible Created the Soul of Western Civilization* (Nashville, TN: Thomas Nelson, 2011), 92–115; Peter Harrison, 'The Natural Philosopher and the Virtues', in *The Philosopher in Early Modern Europe: The Nature of a Contested Identity*, ed. Conal Condren, Stephen Gaukroger, and Ian Hunter (Cambridge: Cambridge University Press, 2006), 202--228 Harrison argues that the shift from personal authority to method of science that led to the development of science emerged from the Protestant critique of the Ariestotelian veneration of contemplative life and a new emphasis on priesthood of all believers and their view of vocation.

[74] Kancha Ilaiah, *Post-Hindu India: A Discourse in Dalit-Bahujan, Socio-Spiritual and Scientific Revolution* (New Delhi: Sage Publications India, 2009), 31.

neo-Hindu environmentalists. The latter, he says, maintain caste as a positive source for the Dalit-labour connection and the science that emerged following it. He further contends,

> Ilaiah explicitly links Dalit ecological understandings with their physical labour, instruments, and objects of labour and work experience, which are based on caste exploitation, while neo-Hindus believe that nature has naturally and intrinsically connected Dalits to labour. In other words, Ilaiah's perspective functions on the plane of the social and the historical, material realities of Dalit life, and processes of endless reproduction; while the neo–Hindu perspective bases itself on the 'natural', given, and innate, with hierarchies of mind over body.[75]

For thinkers such as Chattopadhyaya and Ilaiah, the distinctiveness of their traditions in the production of scientific knowledge, in contrast to those native "religious" traditions that value intellectual gymnastics over manual labour, is an extremely important theme in the discourse on science. For the same reason, they do not critique modern science as such, but reclaim the legacy of challenging religious superstitions as common to both modern science and Dalit schools of thought.[76]

Reclaiming Modern Science

The second course is to problematise and denounce the postcolonial framework altogether and instead assert modern science as a source of liberation for Dalits. This view is taken by Meera Nanda, a philosopher of science and prolific writer, whose contribution to the science and religion dialogue in India demands an elaborated engagement.

Nanda has been a fierce critic of Hindu nationalism and its abduction of science in the form of Vedic science or Hindu science–a movement that claims that modern scientific discoveries were foreshadowed in the Vedas and that the Hindu/Advaitic worldview is a source of science that is superior to the reductionist and naturalistic modern science.[77] However, placing the contextual debate on science, culture and religion on a global canvas, she has also turned her canon against the social or cultural constructivists–postmodernists, feminists and postcolonialists, who she argues, "often find themselves in the same political camp occupied by the home-bred religious fundamentalists."[78] In her several works then she takes upon herself the three-pronged task of responding to the constructivist critique of

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[75] Sharma, *Caste and Nature*, 64.
[76] See, for instance, the introduction in Ilaiah, *Post-Hindu India*, ix–xxvi.
[77] Nanda, *Science in Saffron*; Nanda, 'Vedic Science'.
[78] Meera Nanda, 'The Science Question in Post-Colonial Feminism', *Annals of the New York Academy of Sciences* 775, no. 1 (1995): 1; Nanda, 'Vedic Science'

science, of liberating science from its abuse by religion, and restoring it to its original task of liberating the downtrodden.

According to Nanda, Hinduism has been scientised since the last decade of the 20th century, when the claims of the adumbration of the scientific discoveries from evolution (the trend noticed earlier in Vivekananda) to aeroplanes, stem cell technology, the internet,[79] plastic surgery and test-tube babies[80] in the sacred Hindu scriptures began to appear. There are also more sophisticated assertions of posing Eastern consciousness studies as a counterpart of Western cognitive science.[81] Nanda holds cultural constructivists and postcolonialists responsible for the rise in pseudoscience in India.

Cultural constructivists, according to Nanda, have created a crisis of truth by destabilising all our notions of truth, but failing to answer whether all truths are nothing more than social constructs, and leaving us without any source of justification for the veracity of our claims.[82] Moreover, their unhealthy and unreasonable critique of Western science and the "epistemic charity" extended to all ways of knowing as equally valid has emboldened the proponents of pseudo-scientific movements, providing them "philosophical respectability."[83] This relativism of truth and suspicion of modern science has opened a new discursive space, which is not occupied by marginalised voices as was expected, but by postcolonialists and Hindu nationalists. These she calls the "prophets facing backwards,"[84] who by vehemently rejecting modern science are bent on returning India to traditionalism.

Nanda is aware that the postmodernists and Indian postcolonialists have distanced themselves from Hindu nationalists but complains that "their deference to tradition as the only legitimate source of knowledge keeps these critics tethered to the same ideological

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[79] See, for instance, Sanjay Kumar, 'Hindu Nationalists Claim That Ancient Indians Had Airplanes, Stem Cell Technology, and the Internet', Science, 13 February 2019, https://www.science.org/content/article/hindu-nationalists-claim-ancient-indians-had-airplanes-stem-cell-technology-and.

[80] For example, Kritika Sharma, 'Vedic Plastic Surgery to Test-Tube Karna — Non-Science Claims Flowed from Modi Downwards', 9 January 2019, https://theprint.in/science/vedic-plastic-surgery-to-test-tube-karna-non-science-claims-flowed-from-modi-downwards/174757/.

[81] Nanda, *Science in Saffron*.

[82] Meera Nanda, 'Reclaiming Modern Science for Third World Progressive Social Movements', *Economic and Political Weekly* 33, no. 16 (1998): 920, 16.

[83] Nanda, 'Vedic Science', 220.

[84] Nanda, *Prophets Facing Backward*.

grazing grounds as the herd of hindutvawadis."[85] There is a wrong assumption common to all three, she opines, that "an indigenous science will reflect the traditional and putatively kinder, gentler ways of relating to each other and nature and thus will not be as arrogant as western science."[86]

Nanda further argues that cultural constructivists and postcolonialists misconstrue science and its global trajectory in three ways. Firstly, they do not take into account the nature of science, whose aim and inquiry cannot take shape without giving priority to the way the world is, as it exists independently of us.[87] Accordingly, although she distances herself from scientism and applauds the critique of social constructivists in exposing ideological biases in science, she does not consider those ideological biases "constitutive of science."[88] In this, Nanda accepts the critical realist methodology, one that we have tentatively adopted for this project. Moreover, modern science, she argues, has sufficient checkpoints to analyse and filter cultural and personal biases.[89] Secondly, they deny the possibility of transcultural knowledge. Nanda here argues that far from being constrained to certain cultures, science has a universal appeal. It is not a science of prefixes – Western, Islamic or Indian science. Ordinary people, instead of considering it violent, demand its fruit, even as Third World societies often try to emulate the technological success of advanced societies.[90] Thirdly, they do not recognise the "emancipatory impulse" of science. Here Nanda draws attention to the historical fact that science has often freed people from fear of supernatural forces and allowed them to take control of their own lives.[91] Traditionalists' stress on the local both hinders people from participating in the global knowledge systems,[92] and robs them of the motivation to challenge the sources of oppression in their own settings,[93] as now they have lost ground for resisting the oppression within indigenous culture.[94] Further, she says, "The subjugated need to overcome the duality between the

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[85] Meera Nanda, 'Debate over Science: Moving Past Politics of Nostalgia', *Economic and Political Weekly* 34, no. 18 (1999): 1066. The word "Hindutvawadis" refers to the followers of Hindu nationalist movement.
[86] Nanda, 'Reclaiming Modern Science', 918.
[87] Nanda, 920. Nanda here refers to critical realism the methodology most working scientists hold, which recognises the situatedness of scientific knowledge without giving up the primacy given to the independent reality under investigation. We have already noted that this is a working methodology of scientific practice that we have adopted in this project.
[88] Nanda, 'Reclaiming Modern Science', 915, 918–19.
[89] Nanda, *Science in Saffron*, 428; Nanda, 'Reclaiming Modern Science', 918.
[90] Nanda, 'The Science Question', 426–27.
[91] Nanda, 'Reclaiming Modern Science', 922.
[92] Nanda, 'The Science Question', 422.
[93] Nanda, 'Debate over Science', 1066.
[94] Nanda, 'Reclaiming Modern Science', 918.

local traditions of knowledge and the 'Western' scientific rationality that has become nearly universal in its reach: they need to appropriate the latter in order to have a creative dialogue with the former."[95] Thus, for Nanda, "Modern science *is* the standpoint of the oppressed."[96]

Nanda's positive view of modern science has bearings on her view of religion's role in the public square. She calls for the resumption of the "Enlightenment Quest" – an active promotion of naturalism, secularism, empiricism and other values that are considered hallmarks of the Enlightenment. Citing Dalit histories and the example of the United States, she argues that whenever science and religion are allowed to intermingle and trade upon each other's boundaries, religion often becomes the dictator and impedes the progress of science.[97] Religion, for her, slows down human progress and discourages honest human inquiry.

This leads her to call for "a desacralisation of consciousness and secularisation of social relationships,"[98] if the boundary between science and religion is to be preserved and a democratic society is to emerge. An uneven secularisation results in what she calls "reactionary modernism"–an enthusiastic embrace of modern technology, but vehement rejection of Enlightenment values, as is the case with India.[99] A critical and scientific engagement with religion is crucial, but such a dialogue is only possible when faith and reason recognise and respect each other's boundaries.[100] But Nanda also takes away with one hand what she gives with the other because, for her, science-religion dialogue must take place under the authority of reason. So, she says,

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[95] Nanda, 'The Science Question', 420.

[96] Meera Nanda, 'A "Broken People" Defend Science: Reconstructing the Deweyan Buddha of India's Dalits', *Social Epistemology* 15, no. 4 (2001): 360, 4.

[97] However, she recognises the role religion, particularly Christianity, played in providing 'theological justification for empiricism, though she considers it a one-off happy co-incidence in history of otherwise tumultuous relationship between science and religion, where the church often resisted change. The struggle between science and religion in the Indian scenario however, she argues, is worst because Indian scientists could never question the religious authorities of their days as their counterparts in the West did; instead, they mostly bought into the dominant Hindu worldview at their own peril. Nanda, *Science in Saffron*, 12–13.

[98] Nanda, 'Reclaiming Modern Science', 922.

[99] Nanda, *Prophets Facing Backward*, 2. Nanda borrows the term 'reactionary modernism' from Jeffery Herf. For more, see, Meera Nanda, 'How Modern Are We? Cultural Contradictions of India's Modernity', *Economic and Political Weekly* 41, no. 6 (2006): 494., 6; Banu Subramaniam similarly calls Indian modernity in its relation with science and technology as 'archaic modernity' - the infusion and use of modernity with the vision of future rooted in glorious past and its current employment for identity politics. Subramaniam, 'Archaic Modernities'.

[100] Nanda, 'Reclaiming Modern Science'; Nanda, 'The Science Question'; Meera Nanda, 'Secularism without Secularisation: Reflections on God and Politics in US and India', *Economic and Political Weekly* 42, no. 1 (2007): 1.

> As long as the god of religions is supposed to be present in the world of space and time accessible to ordinary human senses, he/she/it has to be able to stand up to the same level of scrutiny as any other claim about empirical phenomena like chairs, or DNA or atoms.[101]

Believers should not fear it, for "secularization has never meant death of God. It is a demand for God to vacate those areas of life... where He/She does not belong. Secularization is a matter of delimiting, but not eliminating God's province."[102]

What would a religion within the bounds of reason look like? Here, Nanda turns to Ambedkar's Neo-Buddhism or what Christopher Queen calls "Engaged Buddhism,"[103] which, she opines, emerged as the combination of the teachings of Buddha and John Dewey, the American pragmatic philosopher. During his young years, Ambedkar was attracted by Buddha's questioning attitude and his stand against Brahminic, ritualistic religion. He was also particularly influenced by Buddha's theory of *prajñā*, which refers to "mindful contemplations." Since reality, for Buddha, is in constant flux and continuously changing, he asked his disciples to renounce the quest for certain knowledge and instead question everything from their experience. Both Ambedkar and Nanda understand *prajñā* to mean to reason, to seek proof and evidence, the attitude associated with modern science. Ambedkar's Neo-Buddhism was further refined after his time in America under Dewey. Like Buddha, Dewey believed that "Values... are not given to us by gods, nor are they mere individual whims or social conventions. Rather values are ideas that guide conduct... and in that capacity, they are means to solving a problem."[104]

Nanda is perhaps aware that Ambedkar's demythologised, rational, moral and scientific Buddha was a departure from the traditional Buddha.[105] However, she counters it by saying,

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[101] Nanda, 'Secularism without Secularisation', 45.
[102] Nanda, *Prophets Facing Backward*, 267.
[103] Christopher S. Queen, 'Ambedkar's Dhamma: Source and Method in the Construction of Engaged Buddhism', in *Reconstructing the World: B. R. Ambedkar and Buddhism in India*, ed. Surendra Jondhale and Johannes Beltz (New Delhi: Oxford University Press, 2004), 132–50.
[104] Nanda, 'Broken People', 347.
[105] Ambedkar's Buddha was also inspired by what Donald Lopez calls, 'an Oriental Buddha.' Donald S. Jr. Lopez, 'Buddhism', in *Science and Religion Around the World*, ed. John Hedley Brooke and Ronald L. Numbers (New York, NY: Oxford University Press, 2011), 210–28; Ambedkar's departure from traditional Buddhism included rejection of four noble truths corresponding to Buddha's renunciation of his family, doctrine of karma and rebirth, and social role of Bhikkhus, which found to be hindrance to 'right action' and 'engagement' in the world. See, Queen, 'Ambedkar's Dhamma'.

> one could argue that Ambedkar had applied the Buddha's injunction–to treat nothing as infallible and eternal–to the Buddha's own teachings and reinterpreted them for the contemporary world.[106]

Nanda finds such pragmatic reasoning regarding religion equally rooted in ancient Indian materialistic schools such as Lokāyata and Samkhya, which Nanda wants to recover.

In addition to revealing the precariousness of social constructivist and postcolonial theories in India, Nanda raises the question that is at the heart of the practice of science itself, namely, if all knowledge is socially constructed and has epistemic equality, why should one claim of knowledge have more warrant than another? The postmodernist-postcolonial approaches face a conundrum here that they are not equipped to resolve. This is why she turns to "critical realism," the methodology that she is aware of and holds dearly as a scientist herself. Critical realism believes that the world exists as an independent entity and, therefore, cannot be moulded according to one's desires. Nanda confirms the need for a strict epistemological criterion to protect scientific knowledge from the "epistemic charity" extended to all views of knowledge, which would breed pseudoscience, and in that sense, affirms the methodology this project has adopted as a working hypothesis.

However, she renounces that very criterion when it comes to religious knowledge. Her pragmatic view of religion does not require any strict criterion to save her from "pseudo-theologies" because, for her, religious truth can be moulded and "constructed" in the service of liberation. But do religious believers hold this to be true concerning their religious beliefs? It was already noted in the second chapter that neither Advaitic nor Indian Christian intellectuals believed that their views of nature were mere "constructions." In a Christian understanding, moreover, Christian theology can be lost in a sea of speculations unless guided, corrected and preserved from error through God's self-revelation. That is, just as critical realism saves science from pseudo-sciences, the "givenness" of God, particularly in Christ, saves Christian theology from pseudo-theologies, which was precisely the argument of Thomas Torrance.[107]

In fact, giving up critical realism in relation to religious truth can be self-defeating for Nanda's project of liberation, for what is "liberation"? From where does one derive the idea that a Dalit and a Brahmin, should be treated as possessing equal value? Can it be

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[106] Nanda, 'Broken People', 354.
[107] Thomas F. Torrance, *Space, Time and Incarnation* (London: Oxford University Press, 1969), viii.

constructed at one's convenience? Such notions are certainly not derivative of natural sciences, and for the same reason, to hold natural science to be the sole criterion in one's understanding of "liberation" is a case of misplaced expectation. Perhaps there are intonations of beliefs underlying Nanda's notion of liberation that she has overlooked in her zest to discredit all claims of religious truth. In fact, there is a growing recognition in interreligious dialogue that our notions of liberation or "salvation" are shaped by our cultural as well as religious locatedness and warrants a dialogue in its own right. When ideologies that appear "secular" construct notions of "liberation," they assume them to be based on a neutral foundation. However, as it turns out, these notions are often borrowed from religious frameworks and discourses. In that sense, "secular" theories undergirded by notions of salvation have been and are what Toren and Tan call "quasi-religious."[108] However, far from being a hindrance, these discussions could well be the entry points for a Christian theological engagement with Nanda and others of similar persuasion.[109]

The foregoing discussion problematises the oversimplified assumption that Dalit understanding of nature is based on holism in which all ontological boundaries between God, humans and nature are obliterated and that such a view of reality is liberating. I have argued that such a misreading of the Dalit view of nature comes from uncritical acceptance of the contemporary postcolonial views that thrive on East-West binaries and propagate the idealisation of nature. Instead, Dalit discourses on environment and modern science indicate the opposite to be true, that is, nature becomes a tool of oppression when it is divinised; it neither inculcates ecological sensitivity nor promotes its scientific investigation. Dalits who have lived in extreme generational poverty are eager to employ global scientific knowledge for their own liberation from socio-economic backwardness and religious exploitation, which flourish when nature is divinised. This does not mean that the Dalit views consider humans and nature unrelated.

The key to a proper understanding of relationality in the Dalit view seems to be the material bond between humans and nature. This is observed in the Dalit stress on bodily labour as an epistemological tool for the knowledge of nature, as is emphasised by Chattopadhyaya and Ilaiah. Sharma adds that Dalit imageries of nature come out of the

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[108] Toren and Tan, *Humble Confidence*, 210–13.

[109] Among other things, I also find Nanda's scheme of positioning science against religion historically problematic and perpetuating the "conflict" model that the works of Brooke and Harrison have already dispelled.

experience of bodily labour in it, which are both painful and beautiful, as much as they show nature to be simultaneously majestic and hostile. In other words, Dalit experiences of nature posit it to be interrelated to them through material bonds with it, but not as something infused with divinity.

However, we still need to explore if the Dalit theological enterprise has paid any attention to the material connection between the Dalit body and nature. What does this connection look like when seen through a theological lens? What insights does a Dalit vision of God-human-nature relationality contribute to the global theological enterprise? These are the questions I turn to now.

3.4. Dalit Theology and the Material Turn

While introducing Dalit theology, it was briefly noted that, as a counter-theology, Dalit theology has divulged several blind spots in the so-called classical Indian Christian Theology. It is time to take up that loose thread here now.

According to Sathianathan Clarke, one of the blind spots is the disregard of materiality. In his well-argued article, Clarke studies the depictions of Jesus in the work of two high-caste converts: Krishna Mohan Banerjee and Brahmabandhab Upadhyaya, with whom we briefly engaged in the previous chapter. He argues that both "Banerjee and Upadhyaya severely downplay the human Jesus even as they inordinately accent the Divine Jesus."[110] According to Clarke, this was because Jesus had to fit into the *apriori* philosophical conception of Brahman, but also because of the Advaitic bias against the material reality that obscured the historical Jesus in all his socioeconomic locatedness and his concrete praxis.[111] Dalit theology, on the contrary, Clarke claims, ascribes greater value to materiality than Advaitic theology, as it does not carry the same bias against matter. The material body is central to Dalit existence and expression. The centrality of the material body and its implications for theological reflection are further explored by Y. T. Vinayaraj, who attempts to re-imagine Dalit theology using postmodern and postcolonial approaches to his advantage.

[110] Sathianathan Clarke, 'The Jesus of Nineteenth Century Indian Christian Theology: An Indian Inculturation with Continuing Problems and Prospects', *Studies in World Christianity* 5, no. 1 (1999): 1.
[111] Clarke, 'The Jesus of Nineteenth Century', 39–40.

The starting point of Vinayaraj's theology is his vision to re-imagine Dalit theology in the wake of the epistemological shift introduced by postmodernity and postcoloniality.[112] However, to creatively and courageously claim its place in the new discursive arena, Dalit theology, he believes, has to shed much of its modern clothing, particularly its infatuation with the "transcendent" God. A transcendent God, for Vinayaraj, is an othering God. Taking help from postmodern theologians, he argues that the transcendent God of dualistic theologies such as Advaita and Dvaita postulate a "fake univocity" between God and the material" and "legitimizes the asymmetrical relationship between God and the world."[113] Moreover, as postcolonial analysis show, otherising God resembles Western tendency to otherise, dominate and colonise the other. Even incarnational theology, which "is the theological strive to make sovereign God *condescend*" places God "outside" or "beyond" and thus merely reformulates the Western self in relationship with the other in a way that reinforces itself as a 'charity oriented self' in dialectical relationship with the other that can be colonised.[114] The re-imagined Dalit theology, therefore, has to be a "de-transcendentalized," radically immanent and ethico-political.[115]

A postmodern Dalit theology sabotages notions of meta-narrative, foundationalism and neutrality and rather considers subjectivity as a strength. Hence, the material body that has often been degraded as a carrier of pollution by theologies of dualism is, for Vinayaraj's re-imagined Dalit theology, posited as a 'hermeneutical tool'[116] and a site of theologising.[117]

Following Gayatri Chakravorty Spivak, Vinayaraj argues that despite their contribution, Western postmodern approaches have been unable to break free from colonial concepts such as subalternity and marginality, which still imagine a periphery only in reference to the metropolis. Further, Spivak invokes a notion of "planetarity," – a "sheer space of alterity" where one's difference is maintained, and the other is engaged with a "planetary love". It "is a mentality in which we revisit the constitutive other and the self in the context

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[112] Y. T. Vinayaraj, 'Envisioning a Postmodern Method of Doing Dalit Theology', in *Dalit Theology in the Twenty-First Century : Discordant Voices, Discerning Pathways*, ed. Sathianathan Clarke, Deenabandhu Manchala, and Philip Vinod Peacock (New Delhi: Oxford University Press, 2011), 91–101.
[113] Y. T. Vinayaraj, *Dalit Theology after Continental Philosophy*, in *Dalit Theology after Continental Philosophy* (Switzerland: Palgrave, Macmillan, 2016), 7.
[114] Y. T. Vinayaraj, 'Dalit Body without God: Challenges for Epistemology and Theology', in *Body, Emotion and Mind: Embodying the Experiences in Indo-European Encounters*, ed. Martin Martin Tamcke and Gladson Jathanna (Germany: Lit Verlag, 2013), 31.
[115] Vinayaraj, *Dalit Theology*, 70.
[116] Vinayaraj, 'Envisioning Postmodern Method', 97.
[117] Vinayaraj, *Dalit Theology*, 48ff.

of globalization and envisage a 'radical relationality' that extends to the whole system of life on the planet."[118] This radical relationality is visualised in a *deconstructive embrace*, which "requires the suspension of the hegemonic language and the institutional practices that cauterize the other" and the other is "conceived not as an absolutely exterior other, rather; it is relational and, at the same time, a differentiated one."[119] Spivakian "radical relationality" has had a follow-up from postcolonial theologies of God that reimagine and re-articulate God's relationship with humans and the world.[120]

Vinayaraj himself turns to locate his Christian theology of "immanence" in Charvaka (also spelt as *Cārvāka*) or Lokāyata, introduced earlier.[121] He argues that Christian theology needs to take a "material turn" to engage with Charvaka and resist the references to a disembodied, transcendent God. Vinayaraj agrees that "the fundamental question before us is: How can there be a Dalit theology of God without having any Christian philosophical baggage of transcendentalism?"[122] In answer to this, he suggests that "The Materialism of the Lokāyata is not a closed materialism; rather it is open. The materiality of the body is not an end in itself, rather, it is open to its own eternity."[123]

As was the case with ecotheology and ecofeminist theologies, God-nature relationality becomes a central problem in Vinayaraj's Dalit theology too, as he argues that the otherising God of dualistic theologies needs to be replaced by a theology of a de-othering God. Thus,

> The Dalit theology of de-othering God neither negates God, as in atheism, nor affirms God, as in theism: rather it redefines God as an imminent political experience of becoming.... Here, God has to deny its transcendentalism and become part of immanence, which is internally open and multiple. The Dalit theology of a de-othering God, or an immanent God wants to avoid the seduction of power, hierarchy, and representation.[124]

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[118] Vinayaraj, *Dalit Theology*, 49.
[119] Vinayaraj, *Dalit Theology*, 51.
[120] See, for instance, Stephen D. Moore and Mayra Rivera, *Planetary Loves: Spivak, Postcoloniality, and Theology* (New York, NY: Fordham University Press, 2011).
[121] See footnote 71.
[122] Vinayaraj, *Dalit Theology*, 10.
[123] Vinayaraj, *Dalit Theology*, 107.
[124] Vinayaraj, *Dalit Theology*, 106.

This de-othering God is also an enmattered God, "an embodied God who is intrinsically connected to matter. It is an enmattered God in which the becoming of being, or the body, is envisaged within, not in terms of the dialectics between self and the other."[125]

Thinking from within the world of Dalit life, Vinayaraj's works bring attention back to the centrality of the material body as an epistemological locus for Dalit theology. The materialistic vision has always posited challenges to the otherworldly metaphysics and has functioned as a launching pad for what Terry Eagleton calls "politics of matter."[126] Vinayaraj likewise finds Charvaka's materialism as a fitting vehicle to rethink theology that is immanent, theopolitical and polydoxical.[127]

It was noted earlier that Debiprasad Chattopadhyaya and Nanda too invoked Charvaka, also known as Lokāyata, for their own purposes. For Chattopadhayaya, Charvaka philosophy can be referred to as proto-spiritualistic and primitive proto-materialism in that it represents "a stage of consciousness yet to witness the birth of the spiritualistic concepts like God, Soul and the Other World."[128] For Nanda, on the other hand, Charvaka represents her pragmatistic view of life, whereas for Vinayaraj, Charvaka's is an open materialism. This can make one wonder what exactly Lokāyata or Charvaka believed.

Part of the difficulty here is the ambiguity involved in the history of Charvaka itself. Though it presented the most substantial challenge to different metaphysical schools of Hinduism, the reconstruction of Charvaka beliefs is based on fragmentary historical records, written mainly by those trying to refute them–including Buddhist and Jain sources. It is often argued that this lack of historicity raises doubts about the authenticity of their presentation of Charvaka's views.[129] The efforts to reconstruct and employ Charvaka as a "this-worldly" philosophy by the proponents of rationalism and materialism are due to its stress on material reality as the sole reality and *pratyakṣa* (perception) as the only valid source of knowledge. Mittal argues that Charvaka itself allows a diversity of interpretations

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[125] Vinayaraj, *Dalit Theology*, 106.
[126] Terry Eagleton, *Materialism* (New Haven, CT: Yale University Press, 2017), 4.
[127] Vinayaraj, *Dalit Theology*, 112 The word 'polydoxy' is used in contrast to 'orthdoxy' and refers to being open to multiplicity of views and beliefs. He takes this notion from Keller and Schneider. Catherine Keller and Laurel Schneider, *Polydoxy: Theology of Multiplicity and Relation* (New York, NY: Routledge, 2011).
[128] Chattopadhyaya, *Lokayata*, xvii.
[129] Chattopadhyaya, *Lokayata*, 4–22; Ramkrishna Bhattacharya, *Studies on the Carvaka/Lokayata* (London: Anthem Press, 2011), 33–44; Kewal Krishan Mittal, *Materialism in Indian Thought* (New Delhi: Munshiram Manoharlal Publishers, 1974), 22–60.

that suit a variety of philosophical positions, including atheism, pragmatism, humanism, hedonism and utilitarianism.[130] Vinayaraj's assertion that Charvaka's is an open materialism is based on the fact that, for Charvaka, perception is the most elementary epistemological tool. It does not reject all knowledge based on reason and inference but argues that reason and logic can be used to build up on what is already gained through perception.[131]

This focus on materiality leads Vinayaraj to closely align himself with what, following Gilles Deleuze's work, has become known as New Materialism, and process theology, particularly that of Catherine Keller.

New materialism, according to Nick Fox and Pam Alldred, "is a term ascribed to a range of contemporary perspectives in the arts, humanities and social sciences that have in common a theoretical and practical 'turn to matter'."[132] Here, materialism does not refer to the Marxist insistence on socio-economic relations as the centrepiece of human affairs; instead, it refers to materiality that is common to the world and everything in it. New materialism developed in reaction to spirit-matter duality that stigmatised matter as inert and passive and, in contrast, recognises the plurality, openness, vitality and self-organising ability of matter. For New Materialism, matter is not static but emergent and constantly becoming through interaction between different forces and actions.[133]

In Christian theology, the material turn is observed in process theology, particularly in the works of Catherine Keller, which provides an impetus and a milieu for Vinayaraj's theology. Process theology, in line with Alred North Whitehead, Charles Hartshorne and Arthur Peacocke, rejects the idea that matter and the processes of the world are external to God but unites the two in the image of the universe as the body of God. Like New Materialism, it repudiates traditional Christian theology for brandishing dualistic

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[130] Mittal, *Materialism in Indian Thought*, 15–16.

[131] So Mittal states, "A Cārvāka need not deny that reason in its ratiocinative function is useful for practical life. What he denies is that reason may give us knowledge unaided by and non-obtainable through perception. While reasoning, we must start with the observed and pass on to the observable (though not yet observed). The ultimate test and verification of any piece of knowledge is to be through direct experience." Mittal, *Materialism in Indian Thought*, 42.

[132] Nick J. Fox and Pam Alldred, *Sociology and the New Materialism: Theory, Research, Action* (London: Sage Publications, 2017), 3. For a short introduction on New Materialism, see, Nicholas J. Fox and Pam Alldred, 'New Materialism', in *Sage Research Methods Foundations*, ed. Paul Atkinson et al. (London: Sage Publications, 2022).

[133] Some famous advocates of New Materialism are: Karen Barad, Rosi Braidotti, Jane Bannett and William Connolly.

tendencies and creating a false understanding of relationality. It argues that spirit-matter duality has particularly dire consequences for material life, for it encourages neglect of the material – both material bodies and the material world. It separates God from the material world and its affairs, promotes other-worldly salvation and instils an anthropocentrism that accentuates the exploitation of nature. For Process theology, this duality is overcome by imagining matter as the body of God.

Charvaka itself sees a two-fold corollary between the material body and the material world that Chattopadhyaya highlights,

> First, it should be possible to understand the mystery of nature if we can understand the mystery of the human body – the *deha* or the material human body is the microcosm of the universe. Secondly, the birth of the universe is the result of the same or a similar process as the birth of the human beings.[134]

Such analogies were common to Greek views of nature too, as Collingwood has pointed out.[135] As Vinayaraj recognises, such insights form natural links between Charvaka, new materialism and process theology. However, Vinayaraj himself does not take a strict theological position of process theology or new materialism. Instead, based on the postmodern-postcolonial analysis and the critique of dualistic theologies by New Materialism and process theology, he agrees that God cannot be imagined to be outside the world but as radically immanent. These developments and the contemporary stress on materiality in Dalit theology call for Christian theology to spell out its vision of God-human-nature relationality afresh, where the material bond between the three is given priority.

3.5. Evaluation and Reflections

Dalit views on science and nature studied in this chapter supply an agenda for Dalit theology, for which God-world-humanity relationality is the fundamental issue.

Ecotheologians, ecofeminists and Dalit theologians engaged in this chapter point to spirit-matter and God-nature dualism as a problem for the theology of the material world. These voices rightly dispute traditional images that make God distant from the world and resist the portrayals of a deistic God and a mechanistic nature. They also oppose reductionist

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[134] Chattopadhyaya, *Lokayata*, xxi.
[135] Collingwood, *The Idea of Nature*, 8.

approaches to knowledge that drive too deep a wedge between spirit and matter. The postcolonial analysis, by further placing these dualisms onto the power grid, problematises all dualisms as devices for control and subjugation. Thus, if, for ecofeminists and ecotheologians, spirit-matter duality results in the exploitation of nature, for Dalit theology, it leads to the devaluation of the material itself. Joining the lead of new materialism and process theology, then both ecotheologies and materialistic Dalit theology elevate the place of matter by calling for a "radical relationality" that is rooted in deep interconnections between God, humans and nature.

The appeal of process theology is natural here, given the emphasis on the material bond between God and the world in its panentheistic vision. The image of the material world as God's body does much to restore the vitality and significance of matter. Panentheism's vision of God-world interconnectedness and Vinayaraj's vision of de-othering and enmattered God fit seamlessly to counter dualistic visions of God-world relationality. This stress on an enmattered God, the sanctity of matter, and radical interconnectedness between God, humans, and nature remain significant contributions of Dalit, eco and process theologies. It also aligns with the picture of the biblical God of love who refuses to remain distant from his creation.

However, this vision of radical relationality, particularly the turn towards panentheism, raises several new questions for a theology of nature in the context of India and in dialogue with natural sciences. Conceiving God and creation as so close that one does not exist apart from the other may be advantageous to challenge the dualism of modernity, but how exactly is one to understand the radical relationality remains unclear. This is evident in that the need for radical relationality leads different thinkers to different visions of God-world relationality: for Spivak, it leads to monism; for Catherine Keller, it leads to panentheism. As regards Christian theology, radical relationality between God and the world based on material bonds raises several questions. Are God and the material world to be considered "ontologically" related? Do they exist at the same ontological level?

But leaving the ontological questions aside, do theologies that consider nature as God's body sufficiently engage with problems that emerge from fusing God and nature together, as our analysis of contemporary Dalit voices consulted earlier in this chapter indicates? One does not have to go all the way Nanda does to recognise that the so-called holistic and organic relationality projected against modernity's reductionism is often the birthplace of

pseudo-scientific movements that exploit Dalits and other poor communities of India. In fact, a relationality where God and nature are ontologically one frequently leads to pollution and idolatry of nature. Moreover, it discourages science, as the missionaries teaching science at the Serampore College realised: one cannot worship nature and dissect it for material benefit at the same time.[136] Given these consequences that the diminishing of the distance between nature and God has for nature and natural science, and thereby for the poor and the marginalised in South Asia, the relevance of the model of radical relationality postulated in ecotheological and Dalit theological discourses is debatable. In this, approaches that vilify Western science's duality and posit radical interconnectivity between God, humans and nature as a panacea to its ills could be as oppressive as the dualism they try to counter.

Radical relationality based on deep interconnections also raises new issues that challenge several notions related to the Christian understanding of nature articulated in the traditional doctrine of creation. Of particular interest (also in relation to the previous chapter on interreligious dialogue) may be the deconstruction, decolonisation and dismissal of *creatio ex nihilo* as a notion that grounds spirit-matter dualism and gives rise to the devaluation and colonisation of matter. The importance of *creatio ex nihilo* in an interreligious setting was discussed in an earlier chapter, where it was indicated that the early Indian Christian theologians regarded the doctrine as a uniquely Christian contribution and a crucial building block in their theology of nature. In contrast, this chapter highlights the problem that the doctrine faces in the postcolonial context. Against *creatio ex nihilo*, therefore, Catherine Keller proposes *creatio ex profundis,* where creation emerges from *Tehom* or "deep" that is marked by infinite rationalities and is pulsating with new possibilities.[137] Likewise, in Whitney Bauman's *creatio continua*, the matter is neither mute nor static but emergent and open-ended.[138] Can *creatio ex nihilo* withstand this theological criticism? The place of *creatio ex nihilo* in the theology of nature will remain a subject of investigation in the following chapters. However, drawing from past chapters, it suffices to mention here that the contemporary argument that *creatio ex nihilo* devalues matter is the

[136] Sivasundaram, 'Christian Benares'; Mangalwadi, *The Book That Made Your World*, 225.
[137] Catherine Keller, *Face of the Deep: A Theology of Becoming* (London: Routledge, 2003).
[138] Whitney Bauman, *Theology, Creation, and Environmental Ethics: From Creatio Ex Nihilo to Terra Nullius* (New York, NY: Routledge, 2009); Vinayaraj, *Dalit Theology*, 71–82.

exact opposite of what the modern Indian Christian theologians believed the doctrine's most significant contribution to be.

Conclusion

Among other things, this chapter traced a shift in Indian Christian theology under the influence of Dalit theology. In the early phase of Indian Christian theology, the theology of the material world could be derived from the doctrine of creation. We also noticed an emphasis on incarnation as that which liberated history from its meaninglessness and gave a new direction to creation. Incarnation, in particular, asserted God's involvement in the processes of the world, which in turn legitimised Christian involvement in "this-worldly" affairs. Dalit theology, however, moved beyond the interreligious dialogue with Advaita to initiate a dialogue with Indian materialist schools. The welcome outcome of this engagement is the emphasis on the material dimension of God's relationship to the world. The image of the world as God's body in ecotheological, ecofeminist and process theologies and Vinayaraj's notion of "enmattered God" will remain with us as crucial building blocks from this chapter.

However, we also noted that despite a valid critique of dualisms, the inclination of ecofeminist and Dalit theologies towards process theology's vision of God-world relationality is not entirely satisfactory. This is because by diminishing any ontological distinction between God and nature, it leans towards the divinising nature. Contemporary Dalit literature on environment and science indicates that infusing nature with some divinity has been an oppressive experience for the Dalits. It delegitimises Dalit aspirations for natural science, which require nature to be taken as a 'secular' fact and not some form of a divinised entity.

For this reason, while taking its positive contribution in stride, in the next chapter, I move beyond Dalit theology and turn to a Trinitarian model of relationality, particularly developed in the works of Colin Gunton. The aim is to investigate if the Trinitarian model of God-world relationality can rise beyond the weaknesses of both radial dualism and radical interconnectedness, as it claims to, and if it does, how so.

CHAPTER FIVE

Nature in Trinitarian Discourse

In the last two chapters, I located several themes concerning the theology of nature in two distinct discourses in India, namely the interreligious discourse and the liberative discourse. Both discourses were shaped by the contexts in which they emerged. The interreligious discourse emerged in the context of modernity's ascendence and Advaita's dominance. Liberative discourse, on the other hand, grew out of the context of oppression and politicisation of nature. Christian theologians took different points of departure and employed distinct methodologies suitable to address the issues relevant to the contexts in which they were placed. However, God's relation to the material world remained a central issue in both discourses, although different contextual factors played their role in advancing a certain shape of the God-world relationality.

By locating the subject of materiality in the interreligious discourse and liberative discourse, we have gathered several questions, themes and issues that are crucial for the theology of nature in the context of India, such as the place of incarnation in relation to history, the agency of matter, an embodied interconnectedness between God-human-material world and the problematics of *creatio ex nihilo*. We still need to reflectively tie these threads together for a fuller picture of a theology of nature in the context of India to emerge.

Previous chapters have also indicated that the two discourses are deeply rooted in and influenced by their distinct cultural landscapes. By placing them next to each other, this research has adhered to the intercultural approach it adopted at the beginning. In this chapter, I want to further broaden the scope of the intercultural approach by including a voice from the Western hemisphere.

In a postcolonial climate, including a Western voice may immediately raise suspicion concerning its biases against non-Western voices and its tendency to hijack the discourse. While such suspicions are natural, there are several reasons why such a move should be preferred.

Firstly, although our previous points of interlocution have been immersed in the context of India, the concerns evident in those conversations easily place them in a global conversation concerning the theology of the material world. The diverse voices represented in this study regard the subject of God's relation to the material world of global importance. This is why they find it natural to both exchange ideas with thinkers from outside their own contexts and hold their perspectives as relevant and meaningful contributions to the global discussion.

Secondly, contemporary discussions related to modern science are profoundly shaped by the Western context and its spread through globalisation. Western Christians themselves have responded to the challenges thrown at them by modern science in diverse ways, and engaging with them could enrich the conversation. In addition, the Indian-Western exchange may, in the process, expose the cultural locatedness of Western voices, thereby reinforcing the postmodern conclusion that no narrative is culturally value-free.

Accordingly, in this chapter, I transit from the context of India to some recent Western discussions on the nature of nature, precisely what has come to be known as the Trinitarian theology of creation.

4.1. The Trinitarian Renaissance

But why resort to the concept of the Trinity to explain nature? Historically, employing the doctrine of the Trinity to address human concerns has not been appreciated much. Immanuel Kant argued that since it is based solely on faith, the Trinity is an *adiaphoron* – that which lies outside the scope of the Christian faith and therefore irrelevant.[1] Friedrich Schleiermacher is assumed to have viewed the doctrine of the Trinity as belonging to the appendix of the Christian faith.[2] Such remarks give the impression that the Trinity is inconsequential for life on earth. Furthermore, for a lay Christian, as Leonardo Boff puts it, "it has been hard enough to believe in a single God," let alone comprehend the Trinity.[3]

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[1] Cyril O'Regan, 'The Trinity in Kant, Hegel, and Schelling', in *The Oxford Handbook of the Trinity*, ed. Gilles Emergy and Matthew Levering (Oxford: Oxford University Press, 2011), 255.

[2] Whether Schleiermacher really assumed this has been debated. See, Francis Schüssler Fiorenza, 'Schleiermacher's Understanding of God as Triune', in *The Cambridge Companion to Friedrich Schleiermacher*, ed. Jacqueline Mariña, Cambridge Companions to Religion (Cambridge University Press, 2005); Stephen R. Holmes, *The Quest for the Trinity: The Doctrine of God in Scripture, History and Modernity* (IVP Academic, 2012).

[3] Leonardo Boff, *Holy Trinity, Perfect Community* (New York, NY: Orbis Books, 2000), xv.

The notion that the doctrine of the Trinity is irrelevant to life on earth was challenged by a 20th-century movement known as the "Trinitarian Renaissance."[4] It is argued that the doctrine of the Trinity, as a uniquely Christian belief, has significant implications for the life of the world. The trinitarian renaissance was also a response to the charges that monotheistic strands in Christian theology were responsible for cultural imperialism,[5] abusive ecclesial hierarchy and exploitation of nature.[6] Notable names leading the trinitarian renaissance are Karl Barth, Jürgen Moltmann, John Zizoulas, Stanley Grenz, Colin Gunton, Wolfhart Pannenberg, Catherine Mowry LaCugna, Leonardo Boff, Miroslav Volf and others.[7] However, when it comes to relating the Trinity to the doctrine of creation, Jürgen Moltmann,[8] Colin Gunton, Wolfhart Pannenberg,[9] John Polkinghorne,[10] and Keith Ward[11] occupy the forefront. Among its other achievements, and particularly interesting for this research, Trinitarian theology attempts to reimagine the God-world relationship through a Trinitarian lens so that notions that are critiqued as being antithetical or irrelevant in an age of science can be reformulated using the Trinity as a model.

This claim of postulating a uniquely Christian way of conceiving a God-world relationship naturally makes the Trinitarian theology of nature a desirable conversation partner in this research. It is all the more the case because, as argued earlier, other models of God-world relationship considered in previous chapters are found wanting in providing a satisfactory account of how God, humans and nature can interrelate. The dualistic model has had far-reaching consequences for human life and nature, as is aptly disclosed by postmodern analyses. On the other hand, a reactionary turn to pan(en)theistic models, even when they come wrapped in a new and fancy package of "holism," can be equally harmful to our

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[4] Whether the recent phenomenon is a 'renaissance' due to Trinity's alleged eclipse during the Middle Ages or a modern development is a subject of debate. See, Rian Venter, 'Taking Stock of the Trinitarian Renaissance: What Have We Learnt?', *HTS Teologiese Studies/Theological Studies* 75, no. 1 (2019): 1.

[5] Bruce D. Marshall, 'Trinity', in *The Blackwell Companion to Modern Theology*, ed. Gareth Jones (Malden, MA: Blackwell Publishers, 2004), 183–203.

[6] Grace M. Jantzen, *God's World, God's Body* (Philadelphia, PA: The Westminster Press, 1984).

[7] For a good overview of the Trinitarian Renaissance and the issues it has brought to the fore, see, Venter, 'Taking Stock of the Trinitarian Renaissance'; Gijsbert van den Brink, 'Social Trinitarianism: A Discussion of Some Recent Theological Criticisms', *International Journal of Systematic Theology* 16, no. 3 (2014): 3.

[8] Jürgen Moltmann, *God in Creation: A New Theology of Creation and the Spirit of God* (Minneapolis, MN: Fortress Press, 1993); For the relation between Trinity and creation in Moltmann, see, Steven C Bouma-Prediger, *The Greening of Theology: The Ecological Models of Rosemary Radford Ruether, Joseph Sittler, and Jürgen Moltmann* (Atlanta, GA: Scholars Press, 1995); Paul D Molnar, 'The Function of the Trinity in Moltmann's Ecological Doctrine of Creation', *Theological Studies* 51, no. 4 (1990): 4.

[9] Roger Olson, 'Wolfhart Pannenberg's Doctrine of the Trinity', *Scottish Journal of Theology* 43, no. 2 (1990): 2.

[10] Polkinghorne, *Science and the Trinity*.

[11] Keith Ward, *Religion and Creation* (Oxford: Clarendon Press, 1996).

understanding of both God and nature. Although atheism and deism are the most obvious dialogue partners for Christians in the West, the issue of God's relationship with the material world is also central to their discussions. Trinitarian theology of nature claims to avoid the pitfalls of a mechanistic universe of deism, where God and nature are divorced, as well as the monistic and panentheistic conceptions of the universe wherein God and nature become indistinguishable. But does Trinitarian theology of nature hold up to its assertions and pave a third way of conceiving the God-world relationship between dualism and holism? Can it provide an impetus for this-worldly praxis in the socio-political and multi-religious context of India? We seek to answer these questions by interlacing the Trinitarian theology of nature with the conversation partners consulted earlier in this study.

As mentioned earlier, several Christian theologians, including Moltmann, Gunton, Pannenberg and Ward, have taken a trinitarian turn in relation to creation. However, given the limits of this research, I will focus on Colin Gunton's trinitarian theology of creation, the reasons for which I provide below.

4.2. Colin Gunton's Trinitarian Theology of Creation

Colin Gunton (1941-2003) was a British theologian, former Professor of Christian Doctrine at King's College, London, and an ordained minister of the United Reformed Church. Gunton, along with Thomas Torrance, held a prime position among British systematic theologians of the last three decades of the twentieth century.

Gunton's work features prominently in this section because the doctrine of creation is central to Gunton's work, so much so that, as Christoph Schwöbel notices, Gunton turns to it "in almost every context of theological thinking."[12] Moreover, as John Webster comments, "Gunton was one of the few theologians... to devote serious thought to theological description of the created order, and to believe that any such description must be undergirded by trinitarian teaching."[13] Gunton's reflections on nature and God's relationship with it emerged in the context of the hubris of modern science, where the need and the role of God

[12] Christoph Schwöbel, 'Gunton on Creation', in *T&T Clark Handbook of Colin Gunton*, ed. Andrew Picard, Myk Habets, and Murray Rae (London: Bloomsbury Publishing, 2020).
[13] John Webster, 'Systematic Theology after Barth: Jüngel, Jenson, and Gunton', in *The Modern Theologians: An Introduction to Christian Theology since 1918*, ed. David F Ford and Rachel Muers (Malden, MA: Blackwell Publishing, 2005), 261.

in the world were being questioned. Gunton navigated between materialistic, deistic, mechanistic and other concepts of God-nature relations and developed his trinitarian view of nature in a way that a sufficient distance between God and the world was maintained, tying them into a relationship without letting them collapse into a unified reality. From within this relationship, other points of reflection, such as divine providence, nature's freedom and its past, present and future destiny, were chiselled out. Gunton's contribution to rethinking God's relationship with the material world in the context of science and religion makes him an indispensable voice in this research. More importantly, Gunton's contribution transcends the Western science and religion discourse to elucidate the foundational Christian understanding of the Trinitarian God's relationship with the material world. He does not just answer the questions brought to the fore by contemporary scientific discoveries, but the pivotal question of the place of the material world in the salvation scheme of God. As noticed in preceding chapters, the conversation on science and religion in the Indian context is also anchored in the more fundamental question about the place of the material world in a given metaphysical framework. Gunton's Trinitarian theology, therefore, provides an exciting locus for continuous dialogue with other metaphysical frameworks as well as with diverse expressions of Christian theology that reflect on God's relationship with the material world. One may, of course, argue, and is noticed in the critique mentioned above, that "abstract" theologies such as Gunton's trinitarian theology do not have the edge they need to be relevant in the socio-political and ecological context, like that of India. However, this would be a flimsy argument, for trinitarian theology can very well be a "political theology of nature," as Peter Scott has shown.[14]

In what follows, I aim to cover a few major themes from Gunton's Trinitarian theology of nature and later engage them in dialogue with other voices in this research.

4.2.1. Relationality as a Cultural Problem

For Gunton, the core crisis of Western theology, epistemology and culture at large is the problem of relationality, the roots of which lie in Greek dualism. As a result, Western theology has falsely pitted against each other temporality and eternity, the one and the many, transcendence and immanence, sense and reason, science and theology and so on. In his various works, Gunton details the history of the rise and survival of Greek dualism and its

[14] Peter Scott, *A Political Theology of Nature* (Cambridge: Cambridge University Press, 2003).

impact on Western culture at large and Western theology in particular. Against it, he proposes his own version of relationality, which he claims to be founded upon a trinitarian understanding of God.

Gunton's historical sketch begins with a tussle between two Greek philosophers – Heraclitus and Parmenides – the former being the philosopher of plurality and the latter, the philosopher of unity.[15] Parmenides, who contended against the Heraclitan idea that everything is in flux, considered nature permanent, unchanging and unified. Further, he introduced a two-layered reality – a divide between what eternally is and what is subject to decay, and a related epistemological division - between sense (as that which gives humans access to the world and is thus unreliable) and reason (that which provides us with access to things as they really are). Plato modified the Parmenidean reality into three hierarchical layers: the eternal and immaterial forms, their material realisation, and their artistic representation. Plato's theory of creation is threefold: the eternal form, which serves as a model for the world; the receptacle or the chaotic matter used to recreate the model; and the demiurge or the divine entity who shapes that material/receptacle and remains eternal alongside it. Material things in Plato's conception were considered half-real, and those who took them to be real were regarded as "imprisoned in a world of illusion."[16] Among later Greek philosophers, Plotinus, whose ideas on the God-world relationship held sway in his days, took inspiration from the Stoics to reinforce the idea of the eternal cycles of the universe. He argued for the emanation of matter and questioned "the reality and status of matter."[17] Gnosticism likewise attributed creation to a lower deity, mediated through intermediate agencies and considered it a source of evil. According to Gunton, among most Greek philosophers, the material world receives "just as much reality as can be mediated to it through the higher realms of being."[18]

The Hellenistic disregard for the material stood in stark contrast to the Christian understanding of the material world as a good creation of a personal God. However, as early Christian theology of nature, says Gunton, was hammered out in the context of the Greek cultural milieu, it could not entirely unhitch itself from Greek concepts and notions. Many

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[15] Colin E. Gunton, *The One, the Three and the Many: God, Creation and the Culture of Modernity* (Cambridge: Cambridge University Press, 1993).
[16] Gunton, *The One, the Three and the Many*, 29.
[17] Gunton, *The One, the Three and the Many*, 33.
[18] Gunton, *The One, the Three and the Many*, 35.

church fathers, including Origen and especially Augustine, whom Gunton critiques much,[19] continued to reveal deep Hellenistic tendencies and brought dualism into their reading of the Scripture. One visible indication of this tendency was the unhealthy and exclusive attachment of the Christian doctrine of creation to the Genesis account. Although several Church fathers, particularly Irenaeus, had countered it with robust trinitarian theology, the spirit-matter dualism continued to survive in whatever residual form it could, and every time Christian theology lost sight of its trinitarian moorings, Greek ontologies resurfaced and took the spotlight, eventually to reintroduce the dualism. However, it was modernity's disengagement from God that provided an abundantly fertile ground for Greek dualism to re-emerge. The dualistic understanding of relationality ultimately led to the instrumentalisation of God, the world and the other.[20] The crises of relationality merely extended with postmodernity, which Gunton calls "late modernity," since it enhances modernity's driving features, such as the displacement of and disengagement with God, rendering the other as irrelevant and the lack of substantiality in the material things.[21]

4.2.2. Creation and Trinitarian Relationality

As an antidote to Greek dualisms, Gunton offers a relationality that is thoroughly entrenched in the Trinitarian understanding of God. The trinitarian God, for Gunton, is essentially relational, as explained by the terms perichoresis, substantiality, and relationality.[22] Perichoresis is "a way of articulating the oneness of things without derogating from their particularity."[23] Substantiality refers to the concreteness of particularity, whereas relationality refers to the fact that particular becomes particular only in relations and not despite them. This relationality can further be described as "free relatedness," a "relationality in freedom," or "free relation-in-otherness."[24] For Gunton, these three notions are fundamental to a correct and trinitarian understanding of relationality and ignoring them leads to crises of relationality, as is the case with Western culture in general.

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[19] A caveat may be necessary here. In this research, I have narrated the history of Western Christian theology through Gunton's eyes. I am aware that his critique of Augustine and Aquinas has been questioned, but that hardly takes away anything from what Gunton has to offer to this project. For more on the critique of Gunton's analysis, see, Bradley G. Green, *Colin Gunton and the Failure of Augustine: The Theology of Colin Gunton in the Light of Augustine* (Cambridge: The Lutteworth Press, 2012); William B. Whitney, *Problem and Promise in Colin E. Gunton's Doctrine of Creation* (Leiden: Brill, 2013), 29–37.

[20] Gunton, *The Triune Creator*, 13–16.

[21] Gunton, *The One, the Three and the Many*, 12, 69–70, 201.

[22] Gunton, *The One, the Three and the Many*, 229–30.

[23] Gunton, *The One, the Three and the Many*, 212.

[24] Gunton, *The One, the Three and the Many*, 229.

Gunton explicates throughout his various writings what exactly is entailed in the notion of "relatedness in otherness" and how it is derived from the theological basis of the trinitarian God. In the following, I curate at least five themes that shape Gunton's notion of relationality vis-à-vis the theme of creation.

Creatio Ex Nihilo

For Gunton, although the Greek context influenced Christian understanding of the material world, the latter also initiated a change that would gradually dispute the dualisms so inherent to Greek thinking. This was partly done through the development of the *creatio ex nihilo*, the idea that God created the world out of nothing. *Creatio ex nihilo* was first anticipated by Theophilus of Antioch and appeared among other church fathers such as Tertullian, but was fully chiselled out by Irenaeus, who contended that God created and is engaged with the material world with His two hands, the Son and the Spirit. While simply meaning "God created the world from nothing," *creatio ex nihilo* actually implied a range of things: that God is a Person, with no need to create the world, and yet freely willed the creation as something other than Himself, that creation is grounded in God's act of free love, and for the same reasons, it has a purpose.[25] This flew in the face of the pantheistic belief in Greek philosophy that implied the necessity and eternity of the material world, on the one hand, and its inferiority, on the other – both contentious from the Christian point of view as they challenge the Christian perception of a free and sovereign God and the inherent goodness of the material world. By arguing that God created the material world out of nothing, early Christian theology liberated both God from the necessity to create and the world from the fate and inferiority prescribed to it by Greek metaphysics. God was the only sovereign, infinite and eternal and the creation, as created by a loving God, remained in a close relationship with him and held a purpose.[26] Thus, as a voluntary act of God and ontologically distinct from Him, creation had its own beginning, relative independence and an eschatology – its past, present and future, hinging on God's mediation through Christ and the Holy Spirit.

Creatio ex nihilo establishes a God-world relationality in which the material world has relative independence or is freely related to God. This relationship, also known as the

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[25] Gunton, *The One, the Three and the Many*, 141–42; For a helpful brief description of what it implied, see, Ian A. McFarland, *From Nothing: A Theology of Creation* (Louisville, KY: Westminster John Knox Press, 2014).

[26] Colin Gunton, 'The Doctrine of Creation', in *The Cambridge Companion to Christian Doctrine*, ed. Colin E. Gunton (Cambridge: Cambridge University Press 1997), 142–43.

doctrine of "contingence," among other things, signifies "an absolute ontological distinction"[27] between God and the world. Such an understanding of relationality is not only crucial for theological reasons in that it keeps God and the material world distinct, but also for the sake of the world. The relative independence of the material world is also foundational to the development of science, for it respects the processes of the natural world and opens them for human investigation.[28] In this, *creatio ex nihilo* remains "one of the most momentous developments in all history of thought," says Gunton.[29]

However, the doctrine itself did not have a smooth sail through history. Gunton, in fact, alleges that despite the challenge they posed to the Greek patterns, both *creatio ex nihilo* and Trinitarian mediation in Christ went through a long "Babylonian captivity" during the Middle Ages.[30] The accounts of the created order were then provided "not by the one who became incarnate, *Christus creator*, but by *intellectual* forms or patterns"[31] dominated by Aristotelian (which considers the universe to be eternal) and Neo-Platonic models under the heavy influence of Thomas Aquinas. According to Gunton, Aquinas displayed a "Christianised neoplatonism" which bore the Greek marks of a strong unitary conception of divine action, emanation, necessitarianism,[32] and the instrumentalisation of the material universe. Glossing over the historical details that Gunton so diligently provides, his argument can be summarised in that it took questioning and renunciation of neo-Platonic and Aristotelian patterns and the revival of *creatio ex nihilo* by Christian scientists such as Duns Scotus and William of Ockham that affirmed the independence or distinct reality of the material world and thus opened the way for modern science to emerge.

However, this recognition of the relative independence of the material world was not based on the Trinitarian mediation, and thus, consequently, under the influence of modernity, it returned to a dualism wherein "God and the world come adrift."[33] This dualism eventually led to a mechanistic view of nature and a deistic view of God, buttressed through the works

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[27] Absolute ontological distinction' is the term Gunton prefers over the expression 'infinite qualitative difference' which he finds misleading, Gunton, *The Triune Creator*, 67. For more on what he means by 'contingence,' see pg. 113.
[28] For a similar conclusion regarding the relationship between 'creation out of nothing' and the development of science, see Jaki, 'Christology', 6.
[29] Gunton, *The Triune Creator*, 65.
[30] Gunton, *The Triune Creator*, 96–97.
[31] Gunton, *The Triune Creator*, 98.
[32] Implying that creation is necessary to God's being.
[33] Gunton, 'The Doctrine of Creation', 151.

of Descartes, Kant and Newton, in which "the only believable God is one discovered by reason alone, and whose relation to the world can be none other than that of machine-maker to machine."[34] Continuous involvement of God within the natural world became problematic; even Christian theologians, in all their sincerity, defended miracles as intermittent interventions by an external God, thus lapsing back into the dualism of God and matter.

There were some important changes in the theology of creation under Luther and Calvin such as the stress on creation as a personal action of God, but their accounts, argues Gunton, "were less successful in developing an account of the world's relation with God the creator."[35] Following them, there was a return to the Thomistic stress on causality and power of God, and even pantheism in and through the work of Jonathan Edwards and Schleiermacher. It was Barth who Gunton credits as the one who, by attempting "to integrate creation and salvation,"[36] argued that the goodness of creation cannot be understood apart from revelation. However, Gunton critiques that despite his emphasis on mediation, Barth subordinated the doctrine of creation to that of salvation, showing a tendency to instrumentalise the material for the realisation of the spiritual.

Gunton agrees that the development of *creatio ex nihilo* is not as straightforward as his account may suggest, but it does signify the push and pull the doctrine experienced, with "incalculable effects" throughout history.[37]

Gunton's sketch and critique of the Greek theories of nature resemble the remarks of early modern Indian Christian theologians, such as Chandran, concerning Hindu theologies of creation that similarly perpetuate dualism and devalue the material world. It is important to recall here that it was for the same reasons that *creatio ex nihilo* remained a contentious issue for Advaitic and Christian interlocutors. Moreover, the ontological discontinuity between God and nature that *Creatio ex nihilo* was initially carved out to generate is also the one that will appeal to Dalit voices that consider the ontological separation of God and matter as liberating and a prerequisite to claiming the benefits of natural science. Gunton's historical investigation into the doctrine of *creatio ex nihilo* and its association with the development of science

[34] Gunton, *The Triune Creator*, 133.
[35] Gunton, *The Triune Creator*, 153.
[36] Gunton, *The Triune Creator*, 157.
[37] Gunton, 'The Doctrine of Creation', 148.

reinforces the convictions of the early Indian Christian theologians as well as the Dalit search for science for liberation, and therefore, are significantly relevant for the science and religion discourse in India.

It must also be noted, however, that *creatio ex nihilo* has come under much pressure in recent times, with a growing volume of literature that critiques it wholesale – from its historical and biblical roots and its place in the Christian dogmatics to its implications for God and life in the world.[38] Gunton does not show awareness of many of these critiques as they are relatively recent, though he responds to a few, such as the criticism that it is postbiblical. However, the doctrine has also experienced a revival in its relevance for both Christian theology and the science and religion dialogue.[39] Despite this, whether *creatio ex nihilo* is an essential part of the Christian creed continues to be debated.

Gunton agrees that *creatio ex nihilo* is not clearly spelt out in the Scriptures. However, he considers the development of such doctrines a consequence of the very nature of theology. Christian theology is an "abstractive discipline" that allows the Christian theologian relative freedom to derive doctrines from other truths that are more fundamental to faith and seek ways and means to speak truth into the world.[40] *Creatio ex nihilo* is one such doctrine anchored in other beliefs of the Christian faith. Whether it appears in the Bible or is a late development is, therefore, not the question that impacts the relevance of the doctrine.[41] What is further helpful and historically substantiated in Gunton's argument is that, although not

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[38] Gerhard May, *Creatio Ex Nihilo: The Doctrine of `Creation out of Nothing in Early Christian Thought* (London: T&T Clarke, 2004); Gary A. Anderson, 'Creatio Ex Nihilo and the Bible', in *Creation Ex Nihilo: Origins, Development, Contemporary Challenges*, ed. Gary A. Anderson and Markus Bockmuehl (Notre Dame: University of Notre Dame Press, 2018), 15–36; Keller, *Face of the Deep*; Bauman, *Theology, Creation, and Environmental Ethics*; Thomas Jay Oord, *Theologies of Creation: Creatio Ex Nihilo and Its New Rivals* (New York, NY: Routledge, 2015).

[39] William Lane Craig, 'Philosophical and Scientific Pointers to Creatio Ex Nihilo', *Journal of the American Scientific Affiliation* 32, no. 1 (March 1980): 5–13; Paul Copan and William Lane Craig, *Creation out of Nothing: A Biblical, Philosophical, and Scientific Exploration* (Grand Rapids, MI: Baker Academic, 2004); David B. Burrell, 'Creatio Ex Nihilo Recovered', *Modern Theology* 29, no. 2 (2013): 2; McFarland, *From Nothing*; Janet Martin Soskice, 'Why Creatio Ex Nihilo for Theology Today?', in *Creation Ex Nihilo: Origins, Development, Contemporary Challenges*, ed. Gary A. Anderson and Markus Bockmuehl (Notre Dame: University of Notre Dame Press, 2018), 37–54; William Lane Craig, 'Creation Ex Nihilo: Theology and Science', Reasonable Faith, accessed 28 February 2024, https://www.reasonablefaith.org/writings/popular-writings/existence-nature-of-god/creation-ex-nihilo-theology-and-science.

[40] Gunton, *The Triune Creator*, 41–42.

[41] For the debates on creatio ex nihilo's place in early Christianity, see, Markus Bockmuehl, 'Creatio Ex Nihilo in Palestinian Judaism and Early Christianity', *Scottish Journal of Theology* 65, no. 3 (2012): 3; May, *Creatio Ex Nihilo*.

based on creation accounts of the Scripture, *creatio ex nihilo* was developed based on Christology or the divine action of God through Jesus Christ, which had begun to reorient the thinking of the early Christian scholars operating in the Greek milieu. The creation accounts themselves were now reinterpreted "in the light of God's involvement in the material historicity of Jesus of Nazareth."[42] In other words, *creatio ex nihilo* is a later development derived from the fact of incarnation. This is a particularly constructive insight for interreligious dialogue in the Indian context, where, as was earlier observed, *creatio ex nihilo* often remained embroiled in the endless cosmological debates but was largely dislodged from Christological concerns around which early Indian Christian theological reflections otherwise revolved.

For Gunton, *creatio ex nihilo* also depicts how God related to nature in its first instance of creation so that the material world retained its freedom in its relation to God – it neither became God because it did not emanate from God nor did it become entirely dislocated from God since, as "contingent," creation depends on God. God and nature are thus "freely related." God created the world freely out of nothing, and as such, God relates to it as the "other."

Gunton contends that *creatio ex nihilo* further sets a pattern for God's present and future actions in and towards creation. From this vantage point, then, Gunton etches out his doctrines of "conservation", "preservation", "providence", "redemption", and "eschatology" of creation as ways in which God engages with and towards creation. All this is achieved by "the characteristic forms of action of the Son and the Spirit."[43]

Creation as a Project of the Triune God

Gunton argues that the concept of mediation developed mainly by Irenaeus lay behind the emergence of *Creatio ex nihilo*. In Irenaeus' analogy, the Father engages with creation through his two hands: the Son and the Spirit. Thus, the Son and the Spirit are co-agents of creation. The Son's role in creation is outlined in passages such as 1 Corinthians 8:6 and the epilogue in John's gospel.[44]

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[42] Gunton, *The Triune Creator*, 63.
[43] Gunton, 'The Doctrine of Creation', 143.
[44] Gunton draws much here form the exegetical works of John G. Gibbs. Colin E. Gunton, *Christ and Creation* (Grand Rapids, MI: William B. Eerdmans Publishing, 1992), 21–25.

In Gunton's theology, the Spirit is particularly stressed as an agent of otherisation or particularisation. As such, the Spirit brings into relation realms thought to be opposite or seen as separate and moves them into relation with one another. As such, the Spirit maintains and even strengthens particularity since it is not the Spirit of assimilation or homogenisation. The Spirit fosters a "relation in otherness, relation which does not subvert but establishes the other in its true reality."[45] In the contemporary postcolonial climate where all forms of "otherisation" raise suspicion of domination, Gunton's insight seems counterintuitive. On the other hand, Gunton's lack of engagement with postcolonial theory appears unusual, especially considering that his writings emerged during the heydays of the theory. As a result, although intriguing, the engagement of postcolonial theory with his perspective on "otherisation" remains unexplored.

However, and to return to the point, when it comes to creation, the Spirit's specific task is to relate it to God in a way that it continues to be itself.[46] One particular aspect of the Spirit's work in relation to creation is to carry it towards its desired end, for the Spirit "is the perfecting cause, the true source of dynamic of the forward movement of the cosmos."[47]

For Gunton, as a creation of the triune God, creation is perfect. But for that very reason, it also has a particular direction and destiny because "To be creature means to be a being called and directed to a future perfection."[48] But how can a perfect creation move towards perfection?

Here, Gunton differentiates between created perfection and futuristic perfection. So, he explains,

> Creation is a project. As created, it is perfect, because it is God's project: what he purposes for that which is not God but creation, and therefore intrinsically finite and temporal. But it is not perfect in the sense of complete. It has somewhere to go...[49]

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[45] Gunton, *The One, the Three and the Many*, 181–82.
[46] Gunton, *Christ and Creation*, 59.
[47] Colin E. Gunton, 'Relation and Relativity: The Trinity and the Created World', in *Trinitarian Theology Today: Essays on Divine Being and Act*, ed. Christoph Schwöbel (Edinburgh: T&T Clark, 1995), 153.
[48] Gunton, *Christ and Creation*, 45–46, 57.
[49] Gunton, *The Triune Creator*, 202.

Perfection, for Gunton, is not a static concept. It can include the potential to grow, which he explains by giving an analogy of a newborn baby born perfect yet growing to become a mature human being. Creation, likewise, is established not as a machine but as that which can be perfected towards its end, which is God's glory. This is partly achieved by *creatio ex nihilo*, which establishes creation in its distinct identity from God so that it is what it is and yet can be perfected in its free relatedness to God. Human agency has its own part in leading creation towards its *telos*. Creation, therefore, from its very beginning, has an eschatological orientation. This helps Gunton achieve several things, namely, procure the goodness for the original creation, deal with the problem of evil, particularly raised by evolutionary theory and yet open it up for the eschatological ends so that divine and human activity can be purposed towards it.

For Gunton, the disease, death, and waste on the earth that the evolutionary theory describes do not affect the biblical account of creation. Firstly, because this depends on what one means by "waste" and what is meant by the generosity of God. But more importantly, if creation is conceived as a project, then "There is at the very least a struggle to be waged from the beginning on behalf of the perfecting of creation."[50] For Gunton, the evolutionary theory does not present a challenge to the creation account; instead it "establishes the absolute ontological distinction between creator and creation – that the world is to an extent left, or, better, enabled, to be itself, while at the same time being drawn, contingently, to its proper end by the work of the Son and the Spirit."[51] This is another interesting insight considering that while the neo-Hindus engaged in the earlier chapter employ evolutionary theory to argue for God-world unity, albeit *à la* Advaita, Gunton uses the same here to prove the otherness of creation.

But if the perfect world had "waste" from the beginning, no matter what one means by it, how is one to understand the Fall? Does it mark a new phase in creation, or does it merely stretch and worsen the effects of "waste" already present since the beginning? For Gunton, creation's journey from one perfection to another has been thwarted by the Fall, because of which it has "lost its integration", "its directedness to perfection," and is "fallen into

[50] Gunton, *The Triune Creator*, 189. For Gunton, the fact that Eden is a garden situated in the wider creation shows that the rest of the creation is not really ready for human habitation. The call to subdue the earth is part of the call to perfecting the creation.
[51] Gunton, *The Triune Creator*, 88.

disorder,"[52] so that it now suffers with a proclivity to return to nothingness.[53] Jesus's miracles, such as the stilling of the waters in Mark 4:41 and the healing of the demoniac in Mark 8:27, on one hand, provide "the most potent signs of the bondage of the created order to decay" while also establishing "Christ's redeeming action of perfecting nature as her Lord," on the other.[54]

This derailment, and here Gunton follows in the footsteps of Irenaeus and Barth, necessarily intertwines the creation with redemption, so much so that they cannot be separated any longer. For Gunton, however, creation is not a stepping stone to redemption (as he critiques Barth's tendency to be), nor is redemption to be subsumed by creation. Instead, they are to be conceived as counterparts—creation without redemption would mean to let sin and evil that ails the world go unchecked and thereby deprive it of its *telos*, whereas redemption without creation divorces human beings from the creation they are part of and are entrusted to care for.[55] The Fall also necessitates that the one through whom the world was created would now come to it to redeem it.

But does this not make incarnation dependent upon the Fall? In other words, would incarnation still be a reality had creation not experienced the Fall? Gunton agrees that asking such hypothetical questions is "dangerous in theology" but opines that, in this case, given what is at stake, it is required. Hence, he answers,

> The ways of God for his creation involve Christ, the one through whom he created and continues to uphold the universe *in any case*, and therefore he would have come – even had sin not dictated the *form* of his coming. Sin and evil are, then, in Edward Irving's words, the *formal* cause of the incarnation, determining the shape it takes, in the suffering and death of Jesus. But the efficient cause, that which gives it its point, is the love of God for his creature, a love rooted in his being, and begun, continued and ended in Christ.[56]

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[52] Gunton, *Christ and Creation*, 57.
[53] Gunton, 'The Doctrine of Creation', 143.
[54] Gunton, *Christ and Creation*, 16–20 The quote is from pg. 20.
[55] Colin E. Gunton, *The Promise of Trinitarian Theology* (London: A&C Black, 2003), 156; Taking from the works of H. H. Schmid, Gunton also points out that in many parts of the world, salvation is often tied with how the world is created, and thus the link between creation and redemption in not unnatural. Gunton, *Christ and Creation*, 20.
[56] Colin E. Gunton, *The Christian Faith: An Introduction to Christian Doctrine* (Oxford: Blackwell Publishing, 2002), 67–68. All italics are original. Also see, Gunton, *Christ and Creation*, 96.

Stated differently, the Fall would not have prevented Christ from becoming human, because the incarnation is a manifestation of God's desire to have a personal relation with human beings and not a reaction to the Fall. However, since the Fall has occurred, it now determines the structure and shape of the incarnation. According to Gunton, the possibility of incarnation is conceivable even in the absence of the Fall because creation is fundamentally a pre-Fall project of God. But now that the Fall has occurred, it has become a decisive factor for *how* God must use his two hands–the Son and the Spirit–to participate in the redemption of creation.

From the point of God-world relationship, for Gunton, the Fall and redemption of creation are possible only because creation exists as a free reality with a propensity to fall, and yet, as related to God, it can be redeemed. The reality of the Fall and redemption, however, leads Gunton to delve deep into the divine action in which the Father, through the Son and the Spirit, are engaged in reversing creation's trajectory towards perfection, which, for him, is the doctrine of recapitulation. However, here too, as it will be noticed, the theme of "free relatedness" forms the background of how the Son and the Spirit work together towards the redemption of creation.

Creaturely Christ and the Divine Spirit

In this scheme of restoring creation's trajectory to perfection, the Son takes upon himself creatureliness, though he is the co-creator and Lord of the creation. Gunton foregrounds five episodes from the life of Jesus that demonstrate the creatureliness of Jesus, on the one hand, and divine initiative through the Spirit, on the other, coming together for the redemption of the cosmos, in which incarnation becomes the central scene of human-divine interaction. These five events are his virgin birth, baptism and temptation, death, resurrection, and ascension. Gunton's explanation of these events needs some unpacking here since they are crucial episodes that show the authenticity of the material-historical Jesus and his openness to the Spirit, which, by extension, becomes a paradigm for the spirit-matter relationship.

The virgin birth, for Gunton, was not to shield Jesus from human frailties as is often thought; instead, it is to show that Jesus was indeed "a part of the network of creation, in all its fallenness", "not merely the passive object of the eternal Son's determination... [but] also

flesh of our flesh and bone of our bone."[57] The birth of Jesus is also an act of God mediated through the Spirit, who forms the human body of Jesus in the womb of the virgin. Baptism, likewise, brings Jesus into a special relationship of ministry to Israel, whereas his temptations show his "obedience to the guidance of the Spirit."[58] His death "is the shape that obedience must necessarily take in a fallen world," but it is also a "renewed and cleansed sample of the life in the flesh" offered to the Father through the Spirit.[59] Since the Holy Spirit is the agent of perfecting the creation in Gunton's schema, Jesus' bodily resurrection is essentially a sample of the work of the Spirit. It is the Spirit that performs "the eschatological act of resurrection... in the midst of time."[60] Through the resurrection, the Holy Spirit "universalizes the relation of the historical Jesus of Nazareth to world" in that now the whole cosmos is promised renewal and perfection through the work of the Spirit.[61] Finally, ascension, as the telos of incarnation, "establishes Jesus as the central mediator between heaven and earth, by the virtue of that which he did and suffered as a man,"[62] metaphorically speaking, a "bridge between heaven and earth, a ladder to heaven."[63]

In all these events, Gunton observes in Jesus a "horizontality" (that which relates him to other human beings and nature) that is coupled with a "verticality" seen in his constant dependence upon the Holy Spirit to achieve the redemption of creation.[64] The Spirit, on the other hand, as the dynamic agent of forward movement, carries Jesus to fulfil his mission. Similarly, the Holy Spirit draws and directs the entire creation as a project of God. The forward movement, however, functions within the crucible of redemption provided by the death and resurrection of Jesus[65] – if the death of Christ makes creation's trajectory to perfection possible, it is his resurrection that makes it palpable. "The cosmos hereafter achieves its destiny in so far as it is gathered to him." In this sense, Christ, as the first fruit of the resurrection, signals the redemption of creation, and the Spirit its *arrhabon* (2 Cor 1:22).[66]

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[57] Gunton, 52. For this insight, Gunton depends much on Edward Irving, a minister of the Church of Scotland.
[58] Gunton, *Christ and Creation*, 54.
[59] Gunton, *Christ and Creation*, 58–59.
[60] Gunton, *Christ and Creation*, 63.
[61] Gunton, *Christ and Creation*, 60–61.
[62] Gunton, *Christ and Creation*, 67.
[63] Gunton, *Christ and Creation*, 66.
[64] Gunton uses these labels merely metaphorically and even anticipates that in resurrection and ascension, such spatial categories are ended.
[65] Gunton, *The Triune Creator*, 192.
[66] Gunton, *Christ and Creation*, 63.

Gunton finds some similarities between how the Spirit works with the creaturely Jesus and his work with creation, which makes the extrapolation from the former to the latter is possible. To summarise it in his own words,

> The Holy Spirit represents God's otherness to Jesus: his allowing and enabling him to be himself, free and truly human. He is personally alongside Jesus, present to him as another. He it is who raises from the tomb the body of the crucified Lord and makes him to be eternal mediator between eternity and time. So it is with God's relation to the world. The Spirit sets the creation free to be itself, and so directs it as God's other to yet find its perfection in the fulfilment of its relation to God. God's power, and that is a concept frequently used of the action of the Spirit, consists in enabling, in directing the creation to perfectedness in freedom.[67]

Thus, Gunton's Christology is thoroughly pneumatological and his pneumatology is thoroughly Christological. In fact, for Gunton, when it comes to the theology of nature, not relating the work of the Spirit to that of the Son can lead, on the one hand, to a "kind of pneumatology of creation which attributes to the natural order itself... some power to save itself apart from the incarnation," or, on the other hand, to a form of anthropomorphism in which the Spirit becomes "a kind of individual agent" in relation to creation.[68]

The implications of Gunton's thinking are evident. The Trinitarian framing of the God-world relationship allows Gunton to tear down spirit-matter opposition. Spirit and matter are not merely open to each other but are rather deeply interrelated and interdependent, as seen in the action of the Father through the Son and the Spirit.

So far, I have described theological themes crucial to Gunton's understanding of trinitarian relationality, captured in the notion of "free relatedness." However, Gunton further argues that such "free relatedness" is evident in nature itself.

Nature as Relational

Gunton argues that as a creation of God, creation reflects God's Trinitarian nature. To elaborate on it, Gunton develops the concept of "open transcendentals," which he derives from Samuel Coleridge's notion of *idea.* Thus, he explains,

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[67] Gunton, *Christ and Creation*, 91.
[68] Colin Gunton, 'The Spirit Moved Over the Face of the Waters: The Holy Spirit and the Created Order', *International Journal of Systematic Theology* 4, no. 2 (July 2002): 195, 2.

> An open transcendental is a notion, in some way basic to the human thinking process, which empowers a continuing and in principle unfinished exploration of the universal marks of being. The quest is indeed a universal one, to find concepts which do succeed in some way or other in representing or echoing the universal marks of being. But it is also to find concepts whose value will be found not primarily in their clarity and certainty, but in their suggestiveness and potentiality for being deepened and enriched, during the continuing process of thought, from a wide range of sources in human life and culture.[69]

They are "marks of all beings" and "ways of looking at universal features of the world."[70] While Trinity, following Coleridge, is *Idea Idearum*, "generates transcendentals," with the expectation that "if the triune God is the source of all being, meaning and truth, we must suppose that all being will in some way reflect the being of the one who made it and holds it in being."[71]

Gunton argues that there are at least three "open transcendentals" ("open" because more can be observed and added to the list) common to the Trinitarian understanding of God, and as created by him, to his creation, both human and non-human. These are perichoresis, substantiality and relationality, terms that were explained at the beginning of this chapter. To briefly restate, perichoresis refers to the oneness of things, substantiality to their particularity and relationality to that which relates the one and the many.

Drawing much from contemporary scientific discoveries, Gunton then argues that nature, as a handiwork of God, reveals at least three "conceptual parallels... in which the being of God is expressed and the ways in which we may conceive of the world."[72] These are relationality, freedom and energy. The trinitarian God is relational and free because in the perichoretic understanding of God, the freedom of God is not arbitrary or overbearing but "a function of relations between persons and between persons and their world."[73] Moreover, the trinitarian God, by virtue of his free relationality, is also dynamic.

The contemporary scientific picture, argues Gunton, likewise, reveals nature that is free, relational, and dynamic. It is free in that it is contingent, a notion that, for Gunton, carries at

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[69] Gunton, *The One, the Three and the Many*, 142–43.
[70] Gunton, *The One, the Three and the Many*, 145.
[71] Gunton, *The One, the Three and the Many*, 145.
[72] Gunton, *The Promise of Trinitarian Theology*, 141. The same chapter also appears as Gunton, 'Relation and Relativity'.
[73] Gunton, *The Promise of Trinitarian Theology*, 144.

least two important meanings: it is dependent on God, and it is the kind of world that "does not *have* to be what or as it is." Nature has a "distinctive form of being" and a rational structure that makes it possible to recognise the pattern underlying its workings.[74] Taking insights from the process theology of Arthur Peacocke, the contingency argument of Thomas Torrance, chaos theory[75] and relativity theory, Gunton argues that these accounts of nature, both from science and theology, show it to be dynamic, open and yet not without causality or entirely indeterministic. These transcendentals all point to the "character of the universe as a *perichoresis* of the interrelated dynamic systems."[76]

Gunton is not alone in this conviction. In his *Demise of Democritus*, John Polkighorne, a Christian theologian and a physicist, investigates relationality in nature by highlighting the "mysterious" connection found between particles and fields, the dynamic relation between space and time, EPR effect,[77] chaos theory, emergence (of terrestrial life, organisms possessing consciousness, self-consciousness and such revealing relational subtlety and intricacy) and the cosmic effect (the relationship between the local and the whole). He then argues that these insights "illustrate the way in which exploration of the physical world has revealed the presence in it of a remarkable degree of intrinsic relationality."[78] He then concludes that "Nature is intrinsically relational,"[79] reflecting the trinitarian reality of God. Polkinghorne is aware that it might be "absurd" to read the discoveries of science into the trinitarian nature of God, "Yet a cautiously expressed theology of nature might be expected to offer some insight into the manner in which the divine creation reflects, however palely, the character of its Creator."[80] The relation between God and nature, for him, is not that of logical necessity but that of "consonance" and is based on a "degree of conceptual congruity."[81]

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[74] Gunton, *The Promise of Trinitarian Theology*, 148-149. Italics original.
[75] Chaos theory has become popular among both scientists and theologians (used by both Gunton and John Polkinghorne) to postulate the relatedness within the natural world. A rather standard way of explaining it is through the aphorism that the world is so interconnected that the flapping of wings by a butterfly in Brazil can cause a tornado in Texas– or name whatever place you will.
[76] Gunton, *The Promise of Trinitarian Theology*, 151. Italics original.
[77] EPR is an acronym of the first letter of the last names of Albert Einstein, Boris Podolsky and Nathan Rosen. EPR theory demonstrates that once particles become entangled, their quantum status becomes interdependent regardless of their distance.
[78] John Polkinghorne, 'The Demise of Democritus', in *The Trinity and an Entangled World: Relationality in Physical Science and Theology*, ed. John Polkinghorne (Grand Rapids, MI: William B. Eerdmans Publishing, 2010), 1–14; Polkinghorne, *Science and the Trinity*.
[79] Polkinghorne, 'The Demise of Democritus', 6.
[80] Polkinghorne, 'The Demise of Democritus', 11.
[81] Polkinghorne, 'The Demise of Democritus', 12.

As is for Polkinghorne, for Gunton too these insights into the relational nature of nature are a reflection of the intra-Trinitarian relationality. Relationality, in that sense, is a prime example of "open transcendentals." Moreover, based on the Trinitarian understanding of nature, it is also a "relatedness in otherness." Gunton further provides a template for Christian ethics based on his understanding of relationality as "free relatedness."

Creaturely Ethics

For Gunton, all that is created shares a "horizontality" – the commonality of being created, and of "verticality" (I continue to use Gunton's metaphors here) that opens them at once to both the Creator and others thus created. The horizontality and the verticality are meditated through the notion of the "image of God," the doctrine traditionally held as pivotal to articulating Christian anthropology, or the place of humans in relation to God and to human and non-human creation.

However, what exactly does the image of God refer to is an unsettled question, fraught with different and diverse meanings, such as reason, freedom, creativity and more. Gunton particularly critiques interpretations that favour reason as the fundamental trait of the image of God. This is because, for Gunton, this conclusion is reached by asking the wrong question, that is, instead of asking what is the relationship between God and human beings, it asks what is distinctive about human beings in relation to non-human beings. Moreover, it mistakenly presupposes that the primary characteristic of God is reason and thereby neglects the body.[82]

Gunton, instead, argues that when the interpretation of doctrine is based solely on the Genesis account, we are prone to essentialising the meaning of the image of God. One, therefore, must construct its meaning in the light of the whole teaching of the Scripture. Following Barth, Kenneth Paul Wesche, and Francis Watson, Gunton here argues that the doctrine cannot be adequately understood unless it is founded, as the Scripture does, on the life and work of Christ.[83] From Colossians 1:15 and Romans 8:29, Gunton argues that Christ "is not only the true image of God, but also the source of human renewal in it,"[84] because though indelible,

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[82] Gunton, *The Triune Creator*, 193–94.

[83] Wesche's argument is that the only way to avoid Greek dualism is by deriving anthropology from Christology, while Watson argues that the Old Testament teaching on the image of God cannot stand on its own, but must be interpreted Christologically. Gunton, 198–200.

[84] Gunton bases his idea of Christ as a source of human renewal on Irenaeus's notion of recapitulation. Gunton, *Christ and Creation*, 100. Recapitulation in Irenaeus' theology refers to the biblical idea that Christ as Second Adam succeeded where the first Adam did not and thereby became the ideal human creature.

the image of God in humans is distorted and its soteriological and eschatological destiny is tied to the work of Christ, the true image of God. Moreover, when the concept of the image of God is looked through the person of Christ, it is found to be a triune act, for "the Son images that Father as through the Spirit he realises a particular pattern of life on earth."[85]

Further, Gunton draws out several themes underlying the biblical notion of the image of God. Accordingly, to be in the image of God means: 1). To be in an inescapable relation to God the Father through his two hands; 2). To be in relations with them as a project – with an eschatological aim to bring God glory; 3). To be personal – having a relationship with God in Jesus, with one another and for the good ordering of the creation; 4). To live according to an ethic that is a consequence of being in the image of God.[86]

While the image of God relates humans to God in a certain way, it also relates them horizontally to other creations. However, this relation, too, is a "relatedness in freedom." As such, it reflects both unity and otherness. The horizontal unity is based on the fact that human and non-human creation share an "ontological homogeneity"– the phrase that Gunton borrows from Athanasius. However, what sets the human creation apart from the non-human is its createdness in the image of God. So, he says, "To be made in the image of God is to be endowed with a particular kind of personal reality. To be a person is to be made in the image of God: that is the heart of the matter."[87] As a non-personal entity, on the other hand, creation "is unable to realise its destiny, the praise of its creator, apart from persons. It is not personal, but requires persons in order to be itself."[88] For Gunton, to forget the distinction between human and non-human creation would be to downplay the image of God in humans and inadequately conceive the character of the non-human creation[89] as that which can realise its destiny on its own. In several places, he repudiates creation-centred spiritualities that resemble Pan(en)theism for neglecting this important distinction between personal and non-personal creation. For Gunton, the blurring of the line between the two leads to "dehumanizing effects."[90] The image of God as a distinct trait in humans, on the other hand, provides a template for human and non-human creation to relate adequately.

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[85] Gunton, *Christ and Creation*, 101.
[86] Gunton, *The Triune Creator*, 210.
[87] Gunton, *The Promise of Trinitarian Theology*, 113.
[88] Gunton, *The Promise of Trinitarian Theology*, 111.
[89] Gunton, *The Promise of Trinitarian Theology*, 141.
[90] Gunton, *Christ and Creation*, 32–33.

For Gunton, there is "a necessary relation between being in the image of God and a calling to dominion of the remainder of the created order."[91] Gunton is aware that there is a history of abuse of this concept leading to ecological degradation, but he traces its roots to human self-idolatry, which is a marked characteristic of the Enlightenment, and not to the notion itself. To the contrary, and as far as science is concerned, the contested notion of dominion has been foundational to its development, as Peter Harrison has recently shown.[92]

For Gunton, rather than giving up the notion of dominion altogether, the call is to exercise a "right dominion"[93] or a "loving dominion".[94] However, since all forms of dominating nature, including right and loving forms, include altering nature, there will always be ecological problems.[95] Sin, too, has distorted our understanding of dominion, causing crises in rightly relating to non-human creation and leading to ecological catastrophes. Dominion, however, remains a contested notion, particularly for those who criticise it for being anthropocentric. For its critics, dominion introduces a hierarchy between human and non-human creation and leaves the latter vulnerable to abuse. Such hierarchies are seen suspiciously, particularly by postcolonial critics. However, whether renouncing all forms of anthropocentrism will lead to harmony between human and non-human creation is a question that has not received adequate consideration. Will nature become egalitarian once humans are moved out of its centre? Can humans be held accountable for ecological abuse if they are just a cog in the wheel of nature, impotent to intervene in it? Contrary to the critics of anthropocentrism, the fact that humans are central to causing ecological crises and are constantly held responsible for it reinforces anthropocentrism rather than arguing against it. A "healthy" form of anthropocentrism can, in fact, provide impetus for what Gunton calls tending and perfecting of creation.

Gunton also calls attention to considering Jesus' relation to creation as the model for our relation to it, which includes the proper exercise of dominion. Since Jesus is the true image-bearer of God, our relationship with non-human creation "takes shape through him."[96] Christ also recapitulates, to use the phrase of Irenaeus, creation through his "kingly and prophetic

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[91] Gunton, *The Triune Creator*, 209.
[92] Peter Harrison, 'Subduing the Earth: Genesis 1, Early Modern Science, and the Exploitation of Nature', *Journal of Religion* 79, no. 1 (1999): 1.
[93] Gunton, *The Triune Creator*, 211.
[94] Gunton, *The Promise of Trinitarian Theology*, 192.
[95] Gunton, *Christ and Creation*, 105.
[96] Gunton, 'The Doctrine of Creation', 144.

work... in teaching and miracle alike, in terms of a reestablishing and perfecting of the dominion given to the first human creatures."[97]

The central role of humans in creation, or biblical anthropocentrism, endows them with the position of being priests of nature, an image that Gunton borrows from Thomas Torrance. The priestly duty is required because creation needs a "world of persons if it is to be truly itself."[98] In other words, non-human creation cannot fulfil its calling to glorify God without the mediation by a human being. Take, for instance, Psalm 19:3-4, wherein nature is depicted as praising God, but without the personal agency of the psalmist, one could not have known this to be the case.[99] In Gunton's scheme, the priesthood also extends to participating with God in drawing the creation project to its God-appointed eschatological aim, which is the glory of God. "*To be in the image of God is therefore to be called to represent God to the creation and the creation to God*, so enabling it to reach its perfection."[100] Therefore, Gunton's environmental ethics are not merely anthropocentric but "theocentric" in that they are derived from the "divine creating and providing action."[101]

Thus, according to Gunton, our ecological ethics flow from the conviction that, as made in the image of God and following Jesus, the true image of God, human beings are to engage in renewing creation and leading it to its proper end. This cannot be achieved without a proper understanding of relationality, in this case, between human and non-human creation. Proper relationality neither mitigates the distinction between human and non-human creation nor disconnects them. It presumes the distinctiveness of each subject that is related. It is a "relationship in otherness" that preserves the particularity of each subject in relations. In this sense, particular becomes particular only by being related to the other. Human and non-human creations, therefore, can only retain their distinctiveness when they are related. In this case, it is the notion of the image of God that both separates and relates them.

To summarise, then, for Gunton, Western culture suffers from various fragmentations, the roots of which lie in a faulty understanding of relationality inherited from its Greek heritage. These fragmentations reveal themselves through several dualisms, such as the one and the

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[97] Gunton, *Christ and Creation*, 19.
[98] Gunton, *Christ and Creation*, 73.
[99] Gunton, *The Triune Creator*, 198.
[100] Gunton, *The Triune Creator*, 102-103. Italics original.
[101] Gunton, *The Triune Creator*, 197.

many, faith and reason, theology and science, monism and deism, and so on. Gunton finds Trinitarian relationality, which respects both unity and diversity, as an antidote to the crises of relationality. Concerning God's relationship with the material world, he draws from Irenaeus' analogy of God relating to the world through his two hands, namely, the Son and the Spirit. The relationship between the Son and the Spirit, particularly during the incarnation, becomes a blueprint of God's relationship to the material world. Gunton explicates this relation from the five episodes of Jesus' life: virgin birth, baptism and temptation, death, resurrection, and ascension. Thus, Gunton not only offers Trinitarian relationality as the foundation of all proper relationality but also carves out a political theology that flows from this foundation. Human engagement with the material world, whether through natural sciences or arts, derives its motivation from proper relationality founded on the Trinity.

However, despite the crucial insights it offers, the relevance of Gunton's work for an Indian Christian theology of nature cannot be straightforward. A critical engagement with his work will require not only examining Gunton's locatedness and the contextual limitations that come with it, but also listening to other voices that have conversed with him. Therefore, in the following pages, I appraise Gunton's work, particularly his notion of relationality, and evaluate its relevance for an Indian Christian theology of nature.

4.3. Evaluation

Summarising his theology of creation, Gunton says, "The advantage of a trinitarian approach to the theology of creation is that it enables us to say a number of important things, chief among them that the world is 'good', a distinct reality with its own being, and yet only so by virtue of its dependence upon and directedness to God."[102] As far as this objective is concerned, Gunton seems to have achieved his aim. In the process, he raises several points that require elaboration.

[102] Gunton, *The Triune Creator*, 142.

4.3.1. Gunton and Social Trinitarianism

Gunton's work has been categorised as what is broadly known as "social trinitarianism" or "relational trinitarianism," although Gunton himself does not endorse such a label.[103] Social trinitarianism emphasises the social or relational life within the Trinity over the individuality of each person. Of course, Gunton himself sparsely uses the word "sociality," nor does he consider "sociality" an open transcendental. Instead, he stresses "relationality," perhaps because while "sociality" refers to relation among persons, relationality allows him to include the whole universe as reflecting God's triune nature.[104] However, this is insufficient to exclude his work from the critique brought against social trinitarianism, as will be seen below. In the following, I highlight some arguments raised against social Trinitarianism and explain their implications for Gunton's work.

Social Trinitarianism as a Modern Development

Several recent works have argued that though social or relational analogies have been employed since the time of the Fathers,[105] social trinitarianism itself is a modern development. Thus, Stephen Holmes argues that the body of theological works generated under the Trinitarian revival "in fact misunderstands and distorts the traditional doctrine so badly that it is unreconizable" and that "methodologically and materially, they are thoroughgoing departures from the older tradition, rather than revivals of it."[106] Maarten

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[103] The two terms often employed to refer to trinitarian theologies that stress relationality and perichoresis among the persons of the Trinity are "relational trinitarianism" and "social trinitarianism". Whether they refer to the same understanding of relationship within the trinity is not very clear. For instance, Jason Sexton considers "social trinitarianism" an "unfortunate term" and separates it from "relational trinitarianism," and draws the difference between the two based on the factors that influenced their development. Thus, while the development of the former was "based deeply in anthropological or socio-political concerns" the latter was inspired by other concerns such as "revisionist reading of patristic sources" as in Zizioulas, stress on futuristic theology as in Pannenberg and the concerns in systematic theology seen in Barth. However, it is not very clear whether tracing the difference to diverse emphases in the development of an idea makes the difference a matter of context and preference or also of substance. Jason S. Sexton, 'Introduction', in *Two Views on the Doctrine of the Trinity*, ed. Jason S. Sexton (Grand Rapids, MI: Zondervan Academic, 2014), 13–23. Van den Brink considers the difference between the two as a matter of semantics, and considers Gunton's trinitarian account "a socially conceived doctrine of the Trinity" (note 13 on pg. 334), van Den Brink, 'Social Trinitarianism'. Coakley, likewise, considers Gunton inspired by Zizioulas and puts him among "social trinitarians." Sarah Coakley, 'Afterword: "Relational Ontology," Trinity, and Science', in *The Trinity and an Entangled World: Relationality in Physical Science and Theology*, ed. John Polkinghorne (Grand Rapids, MI: William B. Eerdmans Publishing, 2010), 184–99.

[104] Gunton, *The One, the Three and the Many*, 229.

[105] John L. Gresham, 'The Social Model of the Trinity and Its Critics', *Scottish Journal of Theology* 46, no. 3 (1993): 3.

[106] Holmes, *The Quest for the Trinity*, xv–xvi.

Wisse, for example, traces the roots of the emergent interest in relational ontology to the desire to be relevant in dominant Western society when he says that the logic

> seems to be that if Christianity can be understood in terms of what is most fundamental to the way the world is, and if this Christian interpretation of the world can be made comprehensible and persuasive over a secular worldview, then Christianity may again recover some of its previous credibility as a conversational partner for a secular society, including, perhaps, even the secular sciences that dominate the Western university.[107]

According to F. LeRon Shults, what is particularly new in this modern stress on sociality within the Trinity is an "insertion of the category of relation into the heart of metaphysical discourse."[108] This has invited some theological critique.

Charges of Tritheism

It is crucial to mention here that, for Gunton, the Trinitarian God is "essentially" relational. As such, "there is no being of God underlying what the persons are to and from each other. God's being is a being in relation, without remainder relational."[109] Relationality is intrinsic to God's being, for to imagine a God that stands behind the relational God would return one to the problem of dualism.

While this move helps Gunton derive theological legitimacy for his notion of relationality, it also exposes his work to the same criticism that social trinitarianism generally faces, namely, that it places relations between Trinitarian entities ontologically prior to their hypostases or particularity.[110] Sarah Coakley, therefore, shows "some skepticism that a *choice* between Trinitarian 'hypostatization' and 'relationality'(in terms of ontological priority) is either desirable theologically, or indeed mandated by our authoritative Patristic sources."[111] Critics of social trinitarianism further argue that to give such a "fundamental" space to relationality

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[107] Maarten Wisse, *Trinitarian Theology Beyond Participation: Augustine's De Trinitate and Contemporary Theology* (London: T&T Clark International, 2011), 3.
[108] F. LeRon Shults, *Reforming Theological Anthropology: After the Philosophical Turn to Relationality* (Grand Rapids, MI: William B. Eerdmans Publishing, 2003), 12.
[109] Gunton, *The Promise of Trinitarian Theology*, 143.
[110] Or as Wildman puts it: "The basic contention of relational ontology is simply that the relations between entities are ontologically more fundamental than the entities themselves." Wesley J. Wildman, 'An Introduction to Relational Ontology', in *The Trinity and An Entangled World: Relationality in Physical Science and Theology*, ed. John Polkinghorne (Grand Rapids, MI: William B. Eerdmans Publishing, 2010), 55–73.
[111] Coakley, 'Afterword', 194.

among the three persons of the Trinity needlessly places the plurality of God against unity,[112] or worse, smuggles "incipient tritheism,"[113] and subordinationism.[114] In the same line, Holmes argues that if the totality of the scripture is considered, and not just episodes that suit the social trinitarian narrative, it becomes evident that the Scriptures stress the oneness of God as much as it does the Trinitarian relations.[115] Moreover, the oneness of God in the polytheistic context of the Old Testament was as liberating as is the sociality within the Trinity today.

Further, drawing from Augustine, Wisse argues that social trinitarianism robs the Trinity of its incomprehensibility and fails to acknowledge the "otherness" of the Trinity.[116] Similarly, for Keith Ward, social trinitarianism is "an independent hypothesis" and "a speculative theory of the divine being in itself which makes human history and divine relation to it virtually irrelevant. [For] God is what God is in relation to creation..." In other words, that God is relational is only experienced by observing his acts in the salvation history from within, and not outside it; how God *in se* is still and should remain a mystery.[117]

However, as both advocates and dissidents of social trinitarianism agree, central to the discussion is the fact of incarnation: that is to say since the incarnate Son provides us with the clearest view of who God is, it is only through Him that we have access to the knowledge concerning trinitarian relations. Following this, then the question becomes: does the incarnation suggest the kind of intra-trinitarian relations that social Trinitarians point to, or do they go too far in their attempt to decode the mystery of God? Social Trinitarians argue that the historical-material Jesus discloses the triune nature of God by constantly depending on the Father and the Spirit, the revelation that theologians have called "economic trinity." It is impossible not to meet in Christ, a God who is also not trinitarian. To this revelation of God

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[112] Stephen R. Holmes, 'Three Versus One? Some Problems of Social Trinitarianism', *Journal of Reformed Th Eology* 3 (2009): 77–89; Bernhard Nausner, 'The Failure of a Laudable Project: Gunton, the Trinity and Human Self-Understanding', *Scottish Journal of Theology* 62, no. 4 (2009): 4.
[113] Cf. Cornelius Plantinga Jr., 'Social Trinity and Tritheism', in *Trinity, Incarnation and Atonement*, ed. Ronald J. Feenstra (Notre Dame: University of Notre Dame Press, 1989), 21–47.
[114] Ward, *Religion and Creation* (Oxford: Clarendon Press, 1996), 321–29.
[115] Holmes, 'Three Versus One?', 86–88.
[116] Wisse, *Trinitarian Theology Beyond Participation*, 11–12.
[117] Ward, *Religion and Creation* (Oxford: Clarendon Press, 1996), 329.

in Christ, Social Trinitarians apply Rahner's Rule, namely, that the economic Trinity is the immanent Trinity.[118]

For Ward, however, even Rahner's Rule can be endorsed only in a "restricted sense," implying

> It is not that there is no more to God than what is revealed to us, nor that we know exactly what God's inner being is like when we speak of the Trinity. It is rather that God is essentially such as to be authentically revealed as a Trinitarian God.[119]

In other words, for Ward, the purpose of Rahner's Rule is indeed to show that there are no two kinds of trinities, that the economic trinity is the immanent trinity, and that in that sense, the account of the Trinity provided by incarnation is indeed trustworthy. However, the critique here is that the Social Trinitarianism that Zizoulous, and via him Gunton, propounds assumes the Trinity to be *essentially* a community of three persons.[120]

Charges of Projectionism

Several others have argued that the focus on "relation in otherness" at the expense of the oneness of God is due to Gunton's projection of his own cultural anxieties into the Trinitarian God. Thus, Bernhard Nausner argues that a relational trinity is no doubt a helpful device to wield against reductionism and individualism or Enlightenment, but considering it a universal mark of being is a projection of "social criticism on a metaphysical level" that leads to loss of singularity and individuality.[121] Karen Kilbey goes a step further to argue that projectionism is "built into the nature of the social theorists" approach: and though this may be true of all theology, here it plays a "distinctive, and a distinctively problematic" role.[122]

These critics point out that the central issue in Gunton's relational theology is not his nuanced understanding of intra-personal relations where true relationality should mean embracing the other, but the absence of the one. They rather argue that Gunton's relational ontology is a projection of his desire to heal the Western culture of its individualism and disengagement

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[118] Brink, 'Social Trinitarianism', 349–50.
[119] Ward, *Religion and Creation* (Oxford: Clarendon Press, 1996), 329.
[120] I owe this clarifying insight to Maarten Wisse who shared it in a personal interview.
[121] Nausner, 'The Failure of a Laudable Project', 451.
[122] Karen Kilby, 'Perichoresis and Projection: Problems with Social Doctrines of the Trinity', *New Blackfriars* 81, no. 957 (November 2000): 439, 957.

from God. If this be the case, a charge of projectionism merely reveals Gunton's cultural locatedness, which is further disclosed when juxtaposed with Indian realities.

As in the case of social trinitarianism, the notion of community is increasingly employed by Indian social scientists who are critical of Western categories, particularly that of a "rational individual," and pit the communitarian lifestyle of Eastern societies against it. This means that the way the questions of environment, displacement, ethnicity, diaspora, human rights, caste politics and even health are being articulated today "reveal a communitarian agenda."[123]

Unfortunately, far from providing a correction to the pitfalls of Western rational individualism, the communitarian agenda has been used by native scholars to revive old concepts of community where the individual disappears for good. By positing a return to the old life of the community as the only viable option to escape Western individualism, these influencers have further inflated the Orientalist tendency to consider India as an ideal communitarian civilisation, *sans* all problems generally attributed to communitarianism. The "communitarian logic" has been harmful to those seeking individual freedoms, particularly Dalits, for whom the call to return to the old way of organising society *tout de suite* reminds them of the oppressive caste system. Dalit scholar Gopal Guru gives at least four counts on which the communitarian push is "dangerous" for Dalits: 1). By ghettoising Dalits, it allows upper castes/classes a monopoly over all kinds of resources; 2). Restricting Dalits to their own community weakens Dalit presence in civil society and the market; 3). It renders Dalits politically helpless as they would be led to believe that nothing can be done about this structure of community-based occupation; 4). The Dalits will have "no chance of forging a subaltern solidarity and collective resistance" as all resistance will be localised.[124] In a similar vein, Kyung-Sup has argued in the context of South Korea that much cost is extracted from the individual members of a family and their welfare is often invisible to prefer and maintain the ideals of community life.[125]

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[123] Surinder S. Jodhka, 'Community and Identities: Interrogating Contemporary Discourses on India', *Economic and Political Weekly* 34, no. 41 (1999): 2957, 41.

[124] Gopal Guru, 'Dalits in Pursuit of Modernity', in *India: Another Millennium?*, ed. Romila Thapar (New Delhi: Penguin Books, 2000), 123-137.

[125] Chang Kyung-Sup, 'The Anti-Communitarian Family? Everyday Conditions of Authoritarian Politics in South Korea', in *Communitarian Politics in Asia* (London: Routledge, 2004), 71–91.

Thus, if relational ontology is a panacea for the fragmentation in Western society, many living in the deeply communitarian context of South Asia and seeking individual freedoms may find the oneness of God more liberative than a socially Trinitarian God. In this case, the social trinity becomes as open to abuse as Moltmann and Zizioulas have charged monotheism with, making one suspect the straightforward relevance of relational trinitarianism in South Asia. Emphasising community, even within Trinity, can come at the cost of the loss of individuality in society, although this does not always need to be the case. In fact, the Trinitarian stress on the one and the three makes it a unique paradigm for challenging both individualism and communitarianism. Moreover, the call of the Trinitarian God involves a unique relationship involving individual response and accountability,[126] often setting individuals free and even against communitarian values that resist God.

4.3.2. Ambiguity about Relationality

When juxtaposed against the Indian setting, another distinct but related issue crops up: the ambiguity surrounding the notion of "relationality." In response to the efforts of finding a conceptual parallel between the relationality in the universe and the social trinitarian God, Sarah Coakley asks, "But what does one mean by 'relationality'?" She points out that Social Trinitarians often do not describe what relationality entails, the answer to which is required before it is claimed that the relationality in the universe, as the creation of God, points to relationality within God. Instead, they often take relationality to mean causality.[127] For Gunton, of course, relationality is conceived in a way that avoids relation without otherness and otherness without relation.[128] It sits like a "golden mean" between Heraclitus and Parmenides, between Pan(en)theism and deism. However, not everyone agrees that this is how relationality in nature should be explained.

As was already seen in the works of Nanda, in the context of India, the mechanistic and reductionist science of the dualistic Western/Christian and the ecological catastrophe it has led to is often pitted against the "holistic" Eastern worldview, and the wholeness is usually

[126] Toren, *Christian Apologetics*, 106–13.
[127] Coakley, 'Afterword', 195–98.
[128] Gunton, *The Promise of Trinitarian Theology*, 203

conceived by assimilating particularity.[129] For Advaitic thinkers, relation-in-otherness itself could be a temporary phenomenon – to use Vivekananda's analogy, the waves may exist for a time-being before disappearing into ocean once again. In addition, as is glaringly visible in India's multireligious context, different religious traditions can deploy the relationality of the universe to garner scientific endorsement of their own religious beliefs. Thus, not just Advaitic Hinduism,[130] but also Buddhism[131] and Jainism[132] employ the same scientific insight concerning the interconnectedness of the universe to legitimise their religious worldviews. Even within a single religious tradition, relationality can be used with different motives. For instance, while for Gunton and Polkinghorne, relationality in the universe points to the Trinity, for Mayra Rivera, it establishes that far from being inert, the matter is alive with "forces and energies in complex network of relations,"[133] whereas for Clayton, it leads to panentheism.[134]

Interestingly, although Social Trinitarians and Indian theorists converge in maintaining wholeness through relationality, they diverge on how that relationality should be understood. Thus, and generally speaking, while for Gunton, relationality is required to relate two opposing realms, such as spirit and matter, for Eastern and especially Advaitic theorists as well as for the body of God theologies, it is the notion of the underlying unity that "relationality" of the universe invokes. This raises the question of whether one's view of relationality influences one's interpretation of the universe or vice versa. From what has preceded, it seems to be the case that the understanding of relationality in the universe depends much on the *apriori* commitment to a particular view of relationality. We will return to this trait within the science and religion dialogue in the next chapter.

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[129] The word 'holistic' and 'holism' are particularly applied in the context of medicine. Its meaning remains ambiguous, but it is often used to contrast holistic Indian medicine such as homeopathy and ayurveda against the reductionist Western allopathy. Joshua Freeman, 'Towards a Definition of Holism', *British Journal of General Practice* 55, no. 511 (February 2005): 154–55.

[130] Amit Goswami, *The Physicists' View of Nature* (New York: Kluwer Academic/Plenum Publishers, 2000).

[131] David Landis Barnhill, 'Relational Holism: Huayan Buddhism and Deep Ecology', in *Deep Ecology and World Religions, New Essays on Sacred Ground*, ed. David Landis Barnhill and S Gottlieb Roger (Albany: State University of New York Press, 2001), 77–106.

[132] Kantilal Vardichand Mardia, *The Scientific Foundations of Jainism*, vol. 5 (New Delhi: Motilal Banarsidass Publications, 1990).

[133] Mayra Rivera, *Poetics of the Flesh* (Durham, NC: Duke University Press, 2015), 9.

[134] Philip Clayton, *Adventures in the Spirit: God, World, Divine Action* (Minneapolis, MN: Fortress Press, 2008), 182–84.

4.3.4. Gunton's Spirit Christology

Gunton's understanding of relationality as a "relation-in-otherness" influences not only his view of relationality in the universe but also his Spirit Christology. The Spirit in Gunton's thought is the dynamic agent of forward movement. On the other hand, Christ seems to suffer from Ebionite tendencies, wherein all that Christ achieves is through the energetic presence of the Holy Spirit, as the other. This, for Gunton, is a paradigm of spirit-matter relationality. This is perhaps because, as John Webster has argued, Gunton was troubled by the Barthian stress on the divinity of Jesus and thus might have emphasised his humanity and the role of the Spirit in the incarnation, death and resurrection of the Son.[135] However, from what has been observed under the previous point, it seems that Gunton's stress on the obedience of Jesus to the Spirit's dynamic role might have also been influenced by his understanding of relationality as that which relates the two opposing spheres, a relation-in-otherness. Thus, the human Jesus has to be 'other' to the dynamic spirit, if the two are to properly related. Similarly, the dialectic between humans and the material world is mediated through the concept of the image of God that separates the two, while Gunton pays little attention to aspects that relate them or bring them on the same plane. In postulating a relationality understood as "relation-in-otherness," Gunton's work is susceptible to reproducing the Hegelian dialectic between spirit and matter and may well end up perpetuating the dualism that Gunton wanted to avoid in the first place.

Such an understanding of relationality raises questions about the straightforward application of Gunton's view in a context like that of India. Of course, the observation gathered above reveals that Gunton's notion of relationality is influenced by his desire to heal the cultural fragmentation in the West, pointing to the cultural locatedness of his thought. Gunton's theology, based in the Western setting, is, thus, as contextual as any non-Western theology. But it also raises a question we encountered in earlier chapters: is Gunton's view of relationality a mere cultural construct? As such, can it contribute anything to the context of India? Moreover, in the postcolonial context of India, can his relationality based on otherisation pass the suspicion of being exploitative? Despite these limitations, Gunton offers several insights that can be relevant to the context of India.

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[135] Webster, 'Systematic Theology after Barth', 259.

4.4. The Way Forward

The following themes from Gunton's theological thought are particularly pertinent for articulating a theology of the material world in the context of India.

Return to the Trinity

Firstly, it was observed that the critics of Social Trinitarianism do not critique the relationality in the Trinity per se but its ontological priority over the hypostases, its omission of the *ousia*, and the ambiguity regarding the term "relationality." They insist that the Trinity maintains hypostases and ousia in a unique balance, which, for the same reason, remains the paragon for holding the one and many in balance. This means we can still employ Gunton's understanding of relationality in this project while guarding ourselves against the drawbacks of Social Trinitarianism.

Relating Gunton's work to this project can provide important avenues for intercultural cross-pollination in developing the theology of the material world. His emphasis on relating two spheres by recognising their "otherness" can correct the Indian tendencies that often dissolve all "otherness" or render them insignificant in the ocean of unity. These tendencies collapse the difference between spirit and matter, leading the material world to be imbued with divinity, and yet impermanent and purposeless. As was observed under the Dalit views on nature, the lack of the ontological distinction between God and the material world often leads to the divinisation of nature and eventually to the exploitation of humans, who are not encouraged to study it but to worship it. Similarly, when the distinction between human and non-human creation, which is negotiated by the image of God, is blurred, it leads to the neglect of the roles given to both – humans develop pessimism that emerges from their lack of ability to intervene in nature, and nature faces apathy by humans who are called to redeem it.

However, while Gunton's relation-in-otherness recognises the difference between the spirit and matter, this relation is based on what "otherises" them rather than a common ground that can relate them, for there seems to be no such common ground. Of course, Gunton finds patterns in the material world that reflect the nature of God. He sees relationality, for instance, as a reflection of the Trinitarian God. However, these parallels do not suggest any ontological continuity between God and the material world. Since relationality in Gunton is

based on "otherness," he does much to preserve the "ontological otherness" of God. Although helpful, this tendency in Gunton does not allow him to unpack other themes that bring God and the material world ontologically closer without collapsing them into singularity. My contention here is that the stress on ontological relations between God and the material world found in the ecotheologies, ecofeminist and Dalit theology can enhance Gunton's work by balancing his emphasis on ontological otherness. Gunton himself provides clues to finding the locus of the God-world relationship through his notion of "ontological homogeneity," which he takes from Athanasius but does not fully explore.

Return to the Incarnation

Following Irenaeus and Barth, Gunton argues that creation and redemption are intimately linked, and the hinge that holds them together is the Father's relating with the material world through the Son and the Spirit. Creation and redemption cannot be divorced because creation's past, present and future are all tied to Christ—that is to say that Christ is the co-creator as well as the redeemer of the world. He achieves the redemption of the world by being obedient to the Father through the Holy Spirit. By linking creation and redemption, Gunton releases the Christian doctrine of creation from the creation account in Genesis, where it is often rather restrictively tied. Instead, he links it to a trinitarian divine action in and toward creation, where incarnation becomes the central episode of the God-world relationship. Both advocates and critics of social trinitarianism, as well as Gunton, agree that all talk about relationality needs to be grounded in the incarnation of the Son since in him is God revealed to us. As a result, for Gunton, as it was for modern Indian Christian theologians, Christ becomes the "linchpin" in the Christian theology of the material world.[136]

The focus on the incarnation provides the key to reconciling two contrasting stresses we have encountered in this project: the emphasis on the ontological connection between God and the material world found in ecotheologies, ecofeminist, Dalit, and panentheistic theologies, and the emphasis on ontological otherness in Gunton and early modern Indian Christian thinkers. Through incarnation, Christ does not merely represent how God acts towards the material world, but by becoming part of the material world, he establishes an "ontological homogeneity" with his creation. Incarnation meets the longing for an ontological relation

[136] I take the image of 'linchpin' from Toren and Tan, *Humble Confidence*, 117.

with God found in ecotheologies, ecofeminist, Dalit and panentheistic theologies, while maintaining ontological otherness between God and creation. God and creation are not reduced to being one and the same, but creation is shown its present status and its destiny. How does this tie in with other insights explored in this project, and what this means for the theology of the material world is the subject of our final chapter.

Conclusion

I began this chapter by justifying the possibility and desirability of broadening the intercultural dialogue to include Colin Gunton's trinitarian theology in the foregoing discourses on nature. Gunton promised a third possibility of conceiving a God-world relationship that avoided the pitfalls of setting God and nature too far from each other and/or fusing them into one unified whole. Gunton's relational theology of nature, wherein God and nature are freely related or related in otherness, indeed provides an interesting third way that preserves both God's otherness and nature's freedom. As related to nature, God is able to freely work within it. However, Gunton's work remains exposed to the critics of Social Trinitarianism who charge that the ontological priority offered to relationality in intra-trinitarian relations jeopardises or at least overlooks the oneness of God. Moreover, Gunton's understanding of relationality as "relatedness-in-otherness" hinders him from noticing the "homogeneity" that may undergird relationality. As a result, though Gunton relates God and the world, the relationship is based on the ontological difference between the two. I further argued that while Gunton's stress on the ontological distinction between God and the material world is helpful, his contribution can be enhanced when tempered with the stress on ontological connection between God and the material world as found in various ecotheologies, ecofeminist, Dalit and Panentheistic perspectives. An intercultural dialogue that draws insights from the earlier chapters and interlaces them with Gunton's thoughts is, therefore, desired. A theology of the material world that emerges from the confluence of these thoughts will be Trinitarian and have incarnation at its centre.

CHAPTER SIX

Dimensions of Intercultural Dialogue on Nature

This study began with the aim of constructing a theology of the material world that is both Indian and global and takes science and religion as the field of its conversation. To locate some themes and debates, we examined at least three different discourses on nature: interreligious, liberative, and trinitarian.

The preceding discussions have both broadened and deepened the scope of our knowledge of the theological conversations on the material world. It has broadened it in that we now know about the discussions on the material world in more than one context. It has deepened in that we now have a better grasp of the contextual realities that influence each discourse.

In this chapter, I aim to place the three discourses side by side and initiate a systematic gathering of some crucial threads. This move should achieve at least three objectives. Firstly, as we highlight some common and unique, acknowledged and unidentified convictions, traits, and biases, we may further observe the contextual dimension of the dialogue on nature. My assumption is that this will strengthen the constructivist insight that each discourse on nature arises from within its contextual grid. However, we may also encounter themes that challenge the approach of reducing all dialogues to contextual factors. Secondly, we will investigate if there are threads and traits in these discourses themselves that take them beyond their contextual grid and provide openings for a critical dialogue between diverse voices on nature. This should help us gauge not only whether intercultural dialogue on nature is possible but also what is involved in such a dialogue. Thirdly, as a by-product, and specifically from the perspective of Christian theology, we will explore the contribution of an intercultural approach in bringing to light the aspects of Christian theology of the material world that makes it globally relevant.

For now, to help us visualise our findings, I have summarised them in the following table.

Discourses on Nature	Interreligious Discourse		Liberative Discourse		Trinitarian Discourse	
Central Question	What is the nature of nature?					
Interlocutors	Advaita	Early Indian Christian theologies largely non-Dalit	Modern Western-Indian Christian theologies	Ecotheologies, ecofeminist theologies, some strands of Dalit (and other Marginalised) theologies	Greek Dualist, Non-dualist	Trinitarian
Answer	A view of the nature of nature is derived from our model of relationality between God and nature					
Specific Solution	Monism	Classical Theism[1] with focus on the incarnation	Classical Theism with focus on the incarnation	Panentheistic or moving towards it	Pantheism, panentheism	Trinitarian

The table above points out that the three discourses examined in this study relate to the single question: What is the nature of nature? However, they originate around a specific context and are motivated by the pressures and needs of that context. They agree that having a proper model of the God-human-nature relationship is foundational to understanding and articulating the theology of nature. However, their selection of the model is, at least partly, driven by their own contextual needs. But do these contextual aspects of these discourses make them trapped within their context? Is a dialogue between these discourses possible and if so, what does it look like? Using this table, in the following, I investigate the contextual dimension of the dialogue on nature while also keeping an eye on the possibilities that each discourse opens for a fruitful dialogue on the material world.

6.1. Cultural Embeddedness of the Discourses/ Science in Context

In recent decades, sociological approaches to natural science have revealed how social realities shape the trajectory of science and how social and cultural complexities of a context can generate an ambiguous relationship with science. In the initial chapter of this

[1] In the context of this research, I use the term "classical theism" to particularly refer to the belief that God is a necessary being and creation is distinct from him and is contingent upon him.

study, it was observed that the early reception of modern science in India was largely positive, given the practical benefits it provided. For many modern Indian elites, natural science symbolised progress and infused an optimistic vision that the nation required during the transition to Independence and immediately afterwards. The image of science as the liberator of the masses is most clearly exemplified in Roy's preference for a modern English-style college that would teach mathematics and science over a Sanskrit seminary and Nehru's vision of progress for Independent India, founded on science and technology. Therefore, in the development discourses, engagement with science remained focused on the material benefits and economic empowerment it can bring. Early modern Indian Christian thinkers themselves were not exempt from this optimism. The jubilant celebration of science as a tool of liberation of the masses continues, particularly as explored in the works of Meera Nanda in this study (Chapter 4). The pragmatic appeal of modern science continues despite the vehement criticism it has faced recently. These reactions reinforce the insights of the sociological approaches that scientific knowledge stimulates variegated responses depending on myriads of cultural factors, including immediate needs and wants, *apriori* metaphysical and ideological commitments, pressures and cross-pressures, presuppositions and predispositions.

6.1.1. The Role of Power Dynamics

Postcolonial analysis has added a power dimension to the list of cultural factors, particularly stressing Eurocentrism in modern science and its diffusion in colonies such as India. It has been shown that using science as a tool of power-grabbing and oppression can lead to "modern" science's rejection or scaffolding of the "local" sciences as a tool to counter the "colonial" sciences. Similarly, under the influence of power dynamics, science can be viewed through the binary of East-West. In such a context, the aversion to science emerges not only from the ecological havoc it has wreaked on the seemingly benign nature and the spirit-matter rift it promulgates on the broader culture, as is generally the case in the West, but from the very foreignness of modern science and the destruction it causes to other knowledge systems of the world.

However, this research observed that power dynamics may also spark interest in science and stimulate a fruitful engagement with it. This is evident in several Neo-Hindu religious thinkers and scientists, such as Jagdish Chandra Bose, who began his book by quoting the

Rig Veda and dedicated it “To my countrymen.”[2] The desire to beat the West at its own game provides an impetus to engage with science in the colonial and postcolonial environment. Similarly, for Neo-Hindu apologists living in the context of colonialism, the primary concern to engage with science is for interreligious apologetics. Evolutionary theory naturally becomes more than a new knowledge about life forms; it becomes a means to confront the coloniser's religion and to turn the tables against those criticising one’s religion.

At another level of the power grid, Christian apologists living as a minority religion and desiring to dialogue with the majority religion find the “this-worldliness” of modern science as an entry point to engage with the “other-worldliness” of Eastern religions. What emerges is an enriched field of interreligious apologetics with variegated stresses, themes, and methodologies.

At yet another level, Dalits employ science to carve their place in the hierarchy of knowledge against the one they are assigned by birth, which has excluded them from all avenues of knowledge production for generations. They do it either by staking a claim in the history of scientific development or by embracing modern scientific epistemology. Thus, it was observed (chapter 4) that the caste structures are maintained and perpetuated by the divinisation of nature. The demand for the ontological segregation of the divine and nature is a reaction to the narratives that constrict the study of nature to its worship. Science is naturally perceived as an ally in “exorcising” nature. The experience that nature, whenever infused with the supernatural, can never be a source of liberation leans them towards defending the sacred-secular boundary that is often tied to the arrival of modern science itself. Modern science is, therefore, argued to be the “epistemology of a ‘broken people.’” This does not make all Dalit voices embrace modern science. Other voices construct the binary of power by placing the abuse of modern science against the Dalit-nature solidarity. Thus, Dalits taking postcolonial approaches consider modernity and coloniality to lie at the root of politicisation and exploitation of nature. Against this, other Dalit thinkers argue that by placing nature on the axis of a power struggle between natives and outsiders, the postcolonial framework deprives Dalits of the material welfare

[2] Bose, *Response in the Living and Non-Living*.

they can achieve by utilising modern scientific knowledge about nature. In this sense, Dalit voices on nature remain heterogeneous and complexify the politicisation of nature.

Power dynamics (as well as other contextual pressures) play a crucial role in the way different interlocutors foreground their concerns about engaging with natural sciences. In such a context, the decisive question in the science-religion conversation is "whose science, whose religion?" This question is not posed here, as it is often done in the Western context,[3] to expose the singular understanding of science and religion as Western and Christian categories and to emphasise the need for being inclusive of diverse experiences, but rather to stress the power dimension – the question being, "whether the categories of science and religion being employed in the conversation are those of the powerful or the powerless?"

Moving beyond the context of India, Gunton's trinitarian theology of nature is also influenced by power dynamics, but of a different sort. It is situated in a context where the dualism that underpins Western society manifests itself in the fragmentation of different kinds, such as the widespread opposition between science and Christian theology. The dualism is fuelled and perpetuated by the advocates of the conflict model that declare science as a source of liberation from the superstition of religion. For them, the historical trajectory of modern science grew out of a rebellion against the power of religion; therefore, a dialogue between science and religion is frowned upon. In the contemporary context, however, Christian engagement with natural science is often motivated by the desire to resist such narratives that further widen the gulf between science and religion and marginalise the Christian theological contributions to sciences in particular and society in general.

Thus, as this brief analysis indicates, power structures both restrict and provide the impetus for a fruitful engagement with science, thereby shaping its trajectory. This postcolonial insight into power dynamics is critical to developing a perspective on science. However, to take a cynical view and place the science and religion discourse exclusively in the power

[3] Stuart Glennan, for example, uses the same question as the title of his article. For him, what is implied in this question is that science and religion are cultural phenomena too diverse to be conceived as a unified worldview. Stuart Glennan, 'Whose Science and Whose Religion? Reflections on the Relations between Scientific and Religious Worldviews', in *Science, Worldviews and Education*, ed. M. R. Matthews (Dodrecht: Springer, 2009), 149–64.

grid renders the engagement a sheer play of powers, in which both science and religion become mere tools to either sustain power or challenge it.

But is engagement with modern science all about power? This study rather indicates that despite the asymmetrical power relations in all discourses, all the interlocutors themselves hold their views on modern science to be more than products of mere power pressures. This includes the postcolonialists, too, who, although rightly exposing the power dimensions in diverse discourses, often forget to place their own views within the power grid, for they do not hold their own beliefs to be emerging from sheer power pressures. Moreover, as this research has argued earlier, considering all engagement with modern science as driven by power motifs is to have a skewed vision of the otherwise diverse history of science and religion relations (chapter 2). In addition, one may wonder if the high value attributed to modern science is itself also a result of mere power pressures. In fact, the eagerness with which the interlocutors approach science seems to indicate that the appeal of science lies in its practical usefulness, which is further based on science's ability to disclose the inherent structures of nature. Like scientists, they expect natural science to provide a truthful picture of how the world actually is. The postcolonial critics are, therefore, only partially correct in their insight concerning the influence of power dynamics because, as the discourses in this research suggest, one's approach to scientific knowledge depends upon a host of factors, including power, but not limited to it. Ideological commitments, metaphysical frameworks, pragmatic needs, cultural presuppositions, personal predispositions, the ability of natural science to reveal truth about nature and other known and unknown pressures and cross-pressures all play their role in how science is approached.

This requires a closer relook at the foregone discourses and inquiring what, for our interlocutors themselves, are some of the most decisive pressures that stimulate their engagement with or disengagement from science.

6.1.2. The Role of Idioms

The interlocutors engaged in this research are convinced that, despite their appeal and practical usefulness, natural sciences themselves need a broader conceptual framework or a "comprehensive idiom" in which they must be situated.

The concept of "idiom" in relation to natural science was used by Michael Polanyi, who explains it as an "interpretative framework" that one indwells and employs to engage with new knowledge.[4] The concept refers to a range of resources one possesses due to one's cultural embeddedness, which aids one in relating to the new information in a certain way. The word "idiom" helps clarify at least two things. Firstly, it points to the fact and the process of one's cultural situatedness: one is trained to grasp certain knowledge using a certain given language and to communicate it to others by using that language, by virtue of being culturally located in a certain context. Secondly, it refers to the fact that idioms often are not self-explanatory to those not trained to communicate in the same language. It takes openness and practice to understand and use the idiom of the other. Only in this limited sense does the notion of "idiom" share "family resemblance" with Wittgenstein's concept of "language games" and the cultural-linguistic framework of George Lindbeck. My aim in employing the notion of "idiom" here is to particularly explore the entanglement of the metaphysical framework in which one is embedded and its influence on the reception of new knowledge.[5]

Our interlocutors find the discussion about the idioms crucial because, while impressed with the achievements of natural sciences, they hold that natural sciences are limited in their answers to the kind of questions human beings face. This was precisely one of the central arguments of modern movements such as Neo-Vedānta and Theosophy – that modern science of the "Materialistic West" is not sufficient to satisfy the spiritual longing of a human soul, which can be met only by turning to the "Spiritual East," and remains an influential trope within intercultural approaches to science and religion discussion in postcolonial India.

Further, as cultural constructivist critics of modern science have shown, natural sciences cannot operate in a *tabula rasa* but depend upon a fertile socio-cultural landscape to flourish. For one, scientists themselves are embedded in a larger society, bringing their personal history, experiences, language and interpretive frameworks to the lab. Moreover, beliefs about nature and attitudes towards manual labour also play their role in the development of science. Similarly, historical studies indicate that theological revisions and

[4] Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (London: Routledge & Keagan Paul, 1958), 47,105.

[5] For the same reason, I use the words "metaphysical frameworks," "idiom" and "religious idiom" synonymously from here onwards.

social changes went hand-in-hand to spark the emergence of the natural sciences.[6] All our interlocutors, therefore, steadfastly hold that natural sciences themselves need to be firmly predicated upon a larger conceptual framework if they are to truly flourish, and that it is *their* framework that rightly facilitates the habitation of natural sciences. It is also from within this comprehensive idiom that they engage with the findings of natural science.

Therefore, engagement with natural science, for them, is essentially a dialogue about conceptual frameworks or idioms that the interlocutors believe to have the potential to sustain natural science itself. But what are these idioms and how do they inform and shape one's understanding of the relationship between science and religion requires further explanation.

One observation that stands out in the previous interlocutors is the explicit or implicit belief of all interlocutors that the conception of relationality between God-human-nature is decisive to any discussion on nature and has direct consequences for how human and non-human flourishing is envisioned. This conception is derived from an idiom where a particular understanding of God-human-nature relationality works as a "given." The question of natural science appears only as a secondary concern and is accordingly traced back to this more fundamental structure. This is why engagement with scientific insights, as well as the place of natural science itself, is negotiated via the vision of God-human-nature relationality provided by the idiom.

Thus, one significant trope that emerges in these conversations is the perpetual critique of the dualisms that place God and nature and humans and nature against each other. Advaitic intellectuals, post-colonial critics of modernity, eco/ecofeminist/Dalit theologians and Gunton all reprimand modernity's dualisms. They are wary of scientific dogmatism that promotes dry rationalism, reductionism, scientism and theological dualism that drives too deep a wedge between God, humans, and nature. Operating in a postcolonial milieu, Advaitic thinkers, postmodernist and postcolonial critics of modernity and Dalit theologians, therefore, fall back on Eastern and contextual ways of reasoning and living that do not recognise such clear-cut boundaries between God, humans, and nature and promote a holistic attitude to life. In addition, Advaitic critics and Christian theologians

[6] Jaki, *Savior of Science*; Peter Harrison, 'Science and Secularization', *Intellectual History Review* 27, no. 1 (January 2017): 1; Mangalwadi, *The Book That Made Your World*.

inspired by ecotheologies mistakenly lump modernity's sacred-secular divide and (Western) Christian theology's tripartite and hierarchical arrangement of God-human-nature as twin expressions of a dualistic way of thinking that leads to otherisation and domination of nature. In the liberative discourse, voices from ecotheologies and ecofeminist theologies rightly stress the picture of a relational universe to critique the oppression inherent in the dualistic framework espoused by modern science that sets both God and humans against nature.

Contemporary Dalit voices on science, however, point to the fact that ecotheologians and ecofeminist thinkers are only partly correct, for the response to the God-nature divide is not to obliterate boundaries between the two, for a step in that direction merely empowers the oppressive forces that infuse nature with religious meanings. Nanda, therefore, holds holism, driven by nationalist and post-colonial narratives, responsible for the rise in pseudo-scientific practices in the contemporary Indian context. Modern Indian Christian thinkers such as Devanandan, Chandran and Thomas constantly guard themselves against the consequences of lumping God and nature together too closely as in monism, for that leads to the neglect of the material world and the absence of a concrete ethical response to its wellbeing. Although their lack of awareness of the recent postmodern-postcolonial critics of dualism, modern Indian Christian thinkers were clear that an alternative faulty understanding of God-human-nature relationality can be as harmful as dualism if not more. Gunton agrees with these modern Indian Christian thinkers that monism is neither healthy for science nor for human development. Furthermore, he also shows greater awareness of the pitfalls of modernity and contends that a better understanding of relationality that avoids the pitfalls of both Heraclitus and Parmenides needs to be creatively articulated.

However, when it comes to solving the crises of dualism or holism, all critics of duality posit their own view of what a "proper" account of God-human-nature interrelationality should entail, a view that they hold *a priori* to be true so as to be able to critique other conceptions of relationality. Thus, although nearly all our interlocutors cite scientific discoveries to argue for the relational view of the universe, a range of different answers appear when inquired about how this "relationality" is to be understood. For Advaitic thinkers, it points to the oneness of matter and spirit where the material relates to the immaterial as a temporary phenomenon; the search for relationality in nature guides the environmentalists, ecofeminists, ecotheologians and process theologians to the metaphors

of a closer ontological bond between God, humans and nature; while for Gunton, relationality in nature points to the Trinitarian relationality in which God and creation are both related and distinct. Even Nanda's pragmatic appeal to push God out of nature divulges her presupposition concerning how God-world relationships should be conceived.

These accounts of a "proper" relationality in our interlocutors emerge from the idiom or the interpretative framework they hold to be true and more fundamental to other concerns. Thus, questions such as, "What is nature?", "Why investigate nature?" "How does one engage with nature?" excite interest among the interlocutors. They hold them as fundamental for the development of natural sciences but also believe that natural sciences themselves cannot answer these questions. Therefore, they turn to their own idioms, which provide them with elaborated theories about nature—its past, present, and future, the place of humans in nature, and nature's relationship to God—all woven together as a fabric. These threads are further related to other concerns, some of which are taken to be principal threads in the fabric of the idiom. Thus, for instance, the main thread in the liberative discourse is the theme of the emancipation of the powerless, while other threads—such as the relationality of the universe—relate to it only as secondary because nature is primarily engaged through the lens of liberation motif.

However, these are not the perspectives that the interlocutors hold from outside in a disembodied manner. Our interlocutors rather "indwell" them, for as socially located beings, they also inherit and are inculcated into them, as in an idiom. In this sense, an idiom is similar to what George Lindbeck calls a "cultural-linguistic framework."[7] Idioms exercise tremendous power on those who indwell them and how they approach natural sciences and thus shape science-religion discourse in a specific way. Thus, although interconnectivity and "secularity" of the universe are both scientific, in the sense that the former is a scientific conclusion via quantum mechanics and the latter a premise for science to take off, Neo-Hindu Advaitic thinkers only leverage its interconnectivity while thinkers such as Nanda, its "secularity". Gunton, on the other hand, uses both, but for a different purpose: "secularity" or an ontological distinction between God and the world, as well as interconnectivity in the world, are both required to establish "relation-in-otherness."

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[7] George Lindbeck proposes to view religion as a cultural-linguistic framework, as a phenomenon around which life is organised and experiences are interpreted. George A Lindbeck, *The Nature of Doctrine: Religion and Theology in a Postliberal Age* (Louisville, KY: Westminster John Knox Press, 1984), 32–41.

Moreover, idioms also dictate how the new knowledge offered by natural science can be received, interpreted, and assimilated to reinforce the basic structure of the idiom and further posit it as a competent whole to answer the most fundamental questions of life. The same knowledge is later used to engage with science. A typical example of this is Vivekananda, who engages with evolution from within an idiom that is based on a cyclic view of time but also considers an evolutionary understanding of nature to be affirming the same cyclic view. To take another example, several scientists, including Schrödinger, are drawn towards Advaita due to the interconnectivity of the universe postulated by quantum findings. They also employ Advaita to interpret the quantum reality they have encountered. Gunton and Polkinghorne, on the other hand, interpret quantum relatedness as pointing to the Trinitarian conception of reality as well as find the interrelatedness of the universe pointing to the intra-Trinitarian relationality.

Polanyi finds such a "circularity" in approaching scientific knowledge common and explains it as

> convincing power possessed by the interpretation of any particular new topic in terms of such a conceptual framework is based on past applications of the same framework to a great number of other topics not now under consideration, while if any of these other topics were questioned now, their interpretation in its turn would similarly rely for support on the interpretation of all the others.[8]

Thus, to repeat the example, the Neo-Hindu emphasis on the cyclic view of time and its relation to evolution is rooted in other concerns. Accordingly, Neo-Hindu thinkers, particularly Radhakrishnan, find the basis for the cyclic universe not in science itself but in the theory of karma, which, to them, provides a trustworthy solution to the problems of injustice in the world. The engagement with science happens once again from within an idiom.

The decisive role of idiom can be stated using Polanyi's valuable insight once again, "Our most deeply ingrained convictions are determined by the idiom in which we interpret our experience and in terms of which we erect our articulate systems."[9] This study confirms the Polanyian analysis that the scope, purpose and limitation of natural sciences and the nature of our interaction with them are profoundly shaped by the comprehensive idiom our

[8] Polanyi, *Personal Knowledge*, 289.
[9] Polanyi, *Personal Knowledge*, 287.

interlocutors indwell, which explains to them what nature is and how one is to relate to it, even through natural science. This once again demonstrates that the dialogue on idioms underpins and is determinative in developing one's approach to natural science and consequently to science-religion dialogue. It is natural, then, that all the intellectuals consulted in this study, intentionally or otherwise, regularly move beyond the boundaries of their expertise and enter into deeper discussions about how God, humans and nature interact or should interact.

These observations further clarify the cultural embeddedness of science and religion discourse by highlighting the significant role of power dynamics and religious idioms in approaching natural sciences. However, they also lead to some new questions that must be answered here.

Given that idioms exercise such a comprehensive grip on one's approach to science, are our interlocutors forever trapped within their own idioms? Can natural science bring anything new to their idioms? If not, is it even worth dialoguing on the nature of nature? One option moving further is to regard all these idioms as different and equally valid approaches to reality, as the religious pluralism model in interreligious studies proposes. This would then mean, as Mark Heim interestingly describes, to think of the interlocutors as "faced with a number of different tickets (train, boat, plane, bus), each with distinctive maps and itineraries attached."[10] In this case, the purpose of dialogue, be it interreligious, intercultural or between science and religion, is to foster mutual enrichment. This approach has its benefits. Moreover, it seems generous and suits the postmodern mood, especially if served with a pragmatic flavour, where all are encouraged to merely eclectically select what seems relevant and helpful in solving the problems of one's own context and leave the rest. But does such a view accurately represent the perspective of the interlocutors consulted in this study? On the contrary, the description of each discourse indicates that the interlocutors are highly motivated to engage in dialogue with both science and other idioms. But what motivates them to do so?

[10] Heim, *Salvations*, 219.

6.2. The Impulse for Dialogue

The three discourses undertaken in this study indicate several reasons why the interlocutors think dialogue between different idioms and science is both possible and desirable.

6.2.1. The Appeal of Science

The fact that religion and natural sciences operate in the same world, from within which they also make claims about this world, makes the dialogue between science and religion inevitable. However, our interlocutors engage with modern science also for different reasons and purposes. As was observed, the initial awe of science, among both the elites and the masses alike, was due to the possibility of its applications for material gain and to transform their lives. Their desire could have been driven by imitating the coloniser, practical usefulness and much more. However, regardless of the power asymmetries and strong metaphysical convictions, for most interlocutors, the lure of natural science lies in natural science itself.

Science's receptivity among all interlocutors reveals the curiosity that science itself raises among religious thinkers. Underlying this curiosity and enthusiasm to engage with science is an implicit belief that natural science has offered a window into the nature of reality, the depiction of nature as it is. This is why the interlocutors can, without hesitation, call upon science's authority to solve the crises of truth engendered by the multiplicity of contradictory explanations about a natural phenomenon or settle interreligious disputes. They take the authority of science for granted as they posit their idiom in the public arena as viable alternatives. In the interreligious discourse, for instance, both Neo-Hindu and Christian thinkers confidently employ scientific insights for apologetic purposes. While harnessing the power of the law of thermodynamics and the evolutionary theory to advance their apologetic goals, several Neo-Hindu thinkers accept the status of the evolutionary theories as being a scientific theory and, therefore, a trustworthy account of nature's pattern. For the critics of Advaita, natural sciences, with their ability to explain nature, have brought to attention the intricacies of the material world and, for the same reason, repudiated the illusory worldview of Advaita. Christian thinkers find the basis of the affirmation of the material world in their own worldview, more precisely in the incarnation of Jesus Christ. History for them is not only real but, for the same reason, also purposeful. Critics of the dualism in science, seen in all three discourses, such as proponents of Vedic science, eco and ecofeminist theologians, as

well as Gunton, unquestionably employ the insights of natural sciences, most notably concerning the relationality in the universe. They agree that modern science has revealed a world that is deeply interconnected, where the dualism of spirit and matter has collapsed, and that such a picture of the universe is trustworthy and, therefore, demands a change in our previous beliefs about the natural world. For pragmatic thinkers such as Nanda, science is not merely liberating but even holds the flag of a truth-bearer; science, unlike religion, liberates because it offers truth. Whatever the criterion, religion should engage and reckon with science, for the lack of such a discussion quickly leads to the burgeoning of pseudosciences. In the trinitarian discourses on nature, that of Gunton, as well as that of Moltmann, Pannenberg, and Polkinghorne, a critical dialogue between science and theology is required because science is a partner in seeking the truth about reality. They agree that natural sciences expose truths about the natural world that can be ignored only at the cost of human peril.

Thus, although different reasons and purposes drove the engagement of interlocutors consulted in this project, the appeal of natural sciences also stems from the fact that science works, indicating its trustworthiness in postulating theories about nature. It reveals the patterns of nature that offer a trustworthy picture of nature that cannot be overlooked in the discourse on nature.

Scientists themselves also recognise the authority of natural sciences to rest on their ability to observe and predict patterns in the world and consider it their work to produce reliable knowledge about the world by investigating these patterns. This ability of natural sciences, they hold, is a result of scientific methodology that gives epistemological priority to the subject under investigation. We hinted at this dimension of scientific methodology in our section on critical realism, which we have adopted in this research tentatively (Chapter 1). The critical realist approach is often contested by extreme forms of postmodernism and postcolonialism that reduce all conversation about the "real" to the result of cultural positionality and power dynamics. We have already pointed out that neither our interlocutors nor the postmodern/postcolonial critics themselves believe their views to be the consequences of power struggles. However, when it comes to scientific enterprise, this extreme postmodern/postcolonial conclusion has proved to be particularly implausible.

Alister McGrath points out how scientific theories about the natural world cannot simply be a consequence of power issues. He explains that natural sciences employ two criteria for any theory to be considered scientific, namely coherence and correspondence. The criterion

of coherence requires that it has a logical structure and fits with other data, whereas the correspondence criterion requires that it must be "grounded in real world." This is because theories "are accountable to the reality they purport to represent."[11] The authority of nature itself is so decisive that it is the core requirement for any hypothesis to be considered seriously. Thus, he further says,

> It is perfectly possible to postulate an internally consistent system which has no adequate grounding in reality. To be taken seriously, a theory must resonate with what may be observed, and be internally consistent.[12]

This commitment to the authority of nature itself is decisive for natural sciences to function and progress. While scientific theories, like truth claims, might have been constructed under cultural pressures and personal inclinations, it is the core requirement for any theory to be commensurate with reality, for, as Maarten Boudry puts it, "the world out there does not care much about our intuitions and desires..."[13] Therefore, scientists are obligated to prioritise nature in their investigation.

Moreover, scientists are convinced that through scientific investigation, they have uncovered nature itself however "stained" are their scientific theories by their cultural locatedness. This conviction is often so strong that the scientific conclusion about nature frequently influences their view of God and their religious practices. Thus, Philip Clayton, having interviewed sixteen scientists about their spiritual quest, notes a common concern among them: "being religious can never be pursued at the expense of high-quality science; it can never mean ignoring the best of what humans know about the natural world."[14]

Thus, all interlocutors consulted in this study agree, however tacitly, that beyond its pragmatic value and contextual pressures, modern science is an authoritative enterprise in providing truthful and trustworthy information about the natural world. Therefore, a critical engagement with it is, for better, desirable and fruitful, or for worse, unavoidable.

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[11] McGrath, *Reality*, 2:17.
[12] McGrath, *Reality*, 2:17.
[13] Maarten Boudry, Stefaan Blancke, and Massimo Pigliucci, 'What Makes Weird Beliefs Thrive? The Epidemiology of Pseudoscience,' *Philosophical Psychology* 28, no. 8 (2015): 1193.
[14] Phillip Clayton, *Science and the Spiritual Quest: New Essays by Leading Scientists* (London: Routledge, 2002), 258.

6.2.2. Universal Intent in the Idioms

Our interlocutors also maintain that far from being constrictive, their idiom about how God, humans, and nature interrelate has a universal significance for the flourishing of natural sciences and human and non-human life. This conviction motivates them to engage with natural sciences and others holding a different idiom about God-human-nature interrelationality.

The claim of universal intent certainly goes against the postcolonial ideas, which suspect all narratives that make universal claims. In an earlier chapter of this study, we observed that contexts such as that of India reveal that postmodern-postcolonial approaches themselves can implicitly offer a universalised meta-narrative that could be as hegemonic as the ones they critique. Besides, the interlocutors in this study are indeed driven by the conviction that their idiom has a universal application and that those holding other idioms should acquire it if they are to make proper sense of reality.

For Polanyi, however, to claim universal significance for an idiom is natural. All claims to knowledge, according to him, have a personal pole and a universal pole because

> By trying to say something that is true about a reality to be existing independently of our knowing it, all assertions of fact necessarily carry *universal intent. Our claim to speak of reality serves thus as the external anchoring of our commitment in making a factual statement.*[15]

Again, he says,

> Any presumed contact with reality inevitably claims universality. If I, left alone in the world, and knowing myself to be alone, should believe in a fact, I would still claim universal acceptance for it.[16]

Further, since all acts of knowing involve commitment, one cannot commit to their beliefs without holding that they have a universal significance.[17] This is as true of religious extremists as of cultural relativists. The question, therefore, is not whether there should be metanarratives but which metanarrative, first of all, makes sense of reality and, secondly, is life-giving.

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[15] Polanyi, *Personal Knowledge*, 311. Italics original.
[16] Polanyi, *Personal Knowledge*, 313.
[17] Polanyi, *Personal Knowledge*, 303–4.

The universal intent inherent in every claim of knowledge makes dialogue not only possible but also sincere. The interlocutors consulted here do not agree that their views are only good for themselves. To the contrary, they propose their idioms with universal intent, with confidence and as a meta-narrative. Thus, for instance, Nanda holds her conviction of a sacred-secular divide as a trans-cultural truth, although she argues for it from the Dalit point of view. Similarly, Neo-Hindu thinkers propose their understanding of the God-world relationship as a panacea to problems facing the West.

Further, as Polanyi opines in his previous quote, the universal intent comes from one's conviction of having been in "contact with reality." No interlocutors hold that their idioms about God-human-nature relationality are culturally constructed. In postulating their theory of relationality as universally valid, the interlocutors, whether Neo-Hindu Advaitic, modern Indian Christian, Dalit or Trinitarian, all believe that they have got hold of reality as it is and that their explanations concerning it are truthful to the nature of reality, just as they believe that science provides accurate depictions of reality.

The universal intent inherent in their claims further indicates that they see other claims also as having a universal intent, which naturally leads them to engage in dialogue with them.

6.2.3. The Possibility of Divergence

Our interlocutors also believe that the ability of science to provide true and trustworthy depictions of nature means that they can create, what Devanandan calls "divergence" in the idioms. Devanandan uses the term in the context of interreligious dialogue to refer to a new knowledge or experience that may raise questions concerning the adequacy and sufficiency of an idiom that one indwells.

For one, in considering natural sciences as a trustworthy enterprise and in engaging with them, all idioms are also required to constantly clarify their position about the material world itself. This is because there is always a possibility that the natural sciences may uncover something new about nature that may challenge the implicit beliefs about nature underpinning an idiom one indwells.

The episode of interreligious dialogue analysed in this study indicates that those involved in it are often convinced and motivated by the awareness that natural science has caused a divergence in the idiom of the other. Therefore, our interlocutors do not merely show the

commensurability of their religious idiom with natural sciences but, in the same breath, also point out the incommensurability of other idioms. This makes interreligious dialogue and apologetics possible.

However, it is possible that those indwelling an idiom may not recognise the "divergence" that natural science may create in their own idiom. It requires an openness to other religious idioms and a continuous exchange of ideas to notice the "divergence" in one's idiom. Thus, while Vivekananda attempted to establish the cyclic nature of nature through evolution, Devanandan could see the futility that a cyclic worldview can engender. Likewise, Vivekananda saw evolution as a divergence in Christianity's understanding of nature as a closed system into which God had to intervene from the outside.

In this sense, interreligious dialogue is analogous to the scientific enterprise, just as Devanandan's notion of "divergence" is akin to Thomas Kuhn's notion of 'anomaly' in natural sciences. According to Kuhn, anomalies are difficult to discern because scientists work within the paradigm they are passed on and are embedded in. It takes the weight of anomalies accumulated over a period that may lead to a "paradigm shift" that changes fundamental assumptions considered 'given' within an idiom. For Neo-Hindu thinkers, for instance, *creatio ex nihilo* was a divergence that needed to go, whereas, for several Indian Christian thinkers, the new stress on the meaningfulness of history in the Neo-Hindu movement was a "paradigm shift".

One may also completely turn away from the new knowledge provided by scientific theories, citing other potential areas of conflict between scientific knowledge and their religious idiom, leading to diverse reactions to the same scientific theory, such as evolution. For instance, while Vivekananda was highly positive in engaging with evolution, both Dayananda Saraswati and Bhaktivedanta Prabhupada completely rejected it due to their stress on creationism and the merely materialistic explanation of evolutionary theory. Indian Christian Brahmabandhab Upadhyaya, likewise, rejected it on the basis that it was not commensurate with the doctrine of the image of God.

It is not difficult to notice here that the "divergence" shown by a dialogue partner in an interreligious setting is an observation made from within a different idiom. Therefore, it may or may not be taken as a "divergence" by the one indwelling it; instead, other resources can be harnessed to show that it is merely misunderstood as such. Far from being a drawback, the

ability to observe a divergence could be advantageous in fostering dialogue between religious idioms.

Beyond the authority of science and its ability to create divergence, all interlocutors also believe that the new knowledge, whether through natural science or other means, brings with it the possibility of conversion.

This study has not cited instances of religious conversion so far, although it was passingly mentioned that several modern Indian Christian thinkers, including Banerjea, Goreh, and Upadhyaya, did experience a huge shift in their faith convictions. Although conversion is not a unidirectional process, nor is it based on scientific evidence alone, instances of conversion suggest that natural science has its role in conversion.

A good example is Sy Garte, a research biochemist who began as an anti-theist and converted to Christianity via the findings of natural sciences.[18] George Sudarshan, an Indian scientist, on the other hand, finds the Indian traditions that unite God and the world more satisfying than his Christian faith, which places God "out there".[19] These conversion stories of scientists themselves suggest that though individuals indwell the idiom, they are not imprisoned by it[20] but hold the potential to rise beyond it.

One can certainly point to different motivations and pressures in these conversion stories. Whatever the reason for the conversion, at least for the convertee, it seems to stem from the desire to have a greater grasp of reality. Once again, Polanyi puts it aptly when he says, "The modification of our intellectual identity is entered upon in the hope of thereby achieving closer contact with reality. We take a plunge only in order to gain a firmer foothold."[21]

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[18] Sy Garte, *The Works of His Hands: A Scientist's Journey from Atheism to Faith* (Grand Rapids, Michigan: Kregel Publications, 2019). For similar stories of the conversion of several scientists, see Robert James Berry, ed., *True Scientists, True Faith* (Oxford: Monarch Books, 2014).

[19] Philip Clayton, 'George Sudarshan: Interview by Philip Clayton', in *Science and the Spiritual Quest: New Essays by Leading Scientists*, ed. Robert John Russell, Philip Clayton, and Kirk Wegter-McNelly (London: Routledge, 2002), 243.

[20] Toren, *Christian Apologetics*, 26, 54.

[21] Polanyi, *Personal Knowledge*, 106.

6.2.4. The Relation between Idioms

The interlocutors consulted in this research do not consider their idioms completely unrelated. This is observed in the fact that some idioms about nature share more similarities with certain idioms than others. This offers different common grounds and points of discussion for idioms to engage on science, nature and much more. Hence, while the "secularity" of nature can become a point of conversation between Nanda and modern Christian theologians, the interconnectivity in nature is a potential common ground between Advaita and ecotheologians. Other Indian Christian theologians, such as Chenchiah, do not find it difficult to join with Aurobindo in his usage of evolutionary theory. Similarly, Upadhyaya finds the echoes of the Advaitic doctrine of *māyā* in the wisdom of Ecclesiastes, which portrays the pleasures of the world as fleeting.

The relatedness of idioms is also observed in the cases of divergence and conversions observed above. The relatedness of idioms helps those who adopt a new idiom as their primary locale navigate the tension created by the transition. The convertee does not cut loose from her former idiom but begins to engage with both her former idiom and natural science through the lens provided by the new idiom.

This is again analogous to the "paradigm shift" in science, which is often built on the previously held paradigm and provides a better understanding of it. The convertee does not reject the former paradigm in its entirety. A case in point is the shift from Newtonian physics to quantum physics. Though there is an apparent movement from one to another, no serious scientist would entirely renounce Newtonian physics.[22] This is because, like scientific paradigms, our idioms are not wholly unrelated, and adopting a new idiom merely helps us see its relation with the other idioms, including the one earlier held, in a new way.[23]

[22] Toren, *Christian Apologetics*, 130.

[23] That convertees often stand on the 'point of tangency' is seen in the case of Nehemiah Goreh. Richard Fox Young, 'Enabling Encounters: The Case of Nilakanth-Nehemiah Goreh, Brahmin Convert', *International Bulletin of Missionary Research* 29, no. 1 (January 2005): 14–20.

6.2.5. The Problem of Pseudosciences

This review of the preceding discourses has so far divulged why the interlocutors are motivated to dialogue with natural science as well as other idioms.

However, Meera Nanda is a unique voice in this study in contending that a deeper dialogue between science and religion should take place for the sake of preserving the boundaries of science in the wake of pseudosciences. This is because, despite their enthusiasm for dialogue, our interlocutors may merely cherry-pick scientific insights, leading to the promulgation of pseudosciences that Nanda rightly fears and so fiercely argues against. Modern science is then employed to establish myths and generate pseudohistory.[24] For Nanda, since religious thinkers bring the baggage of their religious idiom to their engagement with science, giving too much weight to religious idioms will always promulgate pseudosciences. Preceding discourses have indeed shown this to be the case often.

The solution for Nanda is a dialogue where science is the judge, and idioms can engage with it only under the terms dictated by it. But would eliminating all fundamental beliefs about nature that emerge from religious idioms serve natural sciences? For *one*, and as has already been pointed out, this disregards the history of the development of natural sciences, wherein religious idioms played a crucial role. The endeavour to demarcate science from pseudo-science itself is recent and is often "closely connected to the preservation of scientific boundaries and the protection of scientific orthodoxy."[25] *Secondly*, Nanda's proposal divulges her own metaphysical frames that advance a particular view of God and its relationship with the world, and as such, it is no different from other idioms that conceive God-human-nature relations encountered in this project. In this sense, a dialogue is required to discuss the philosophical presupposition inherent in Nanda's idiom without a straightforward acceptance of it as the only true and neutral idiom validated by the natural sciences.

These observations further reinforce the influence of idioms, suggesting that even the question of pseudosciences cannot be addressed without taking the idioms and the

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[24] See, for example, Maseeh Rahman, 'Indian Prime Minister Claims Genetic Science Existed in Ancient Times', World News, *The Guardian*, 28 October 2014, https://www.theguardian.com/world/2014/oct/28/indian-prime-minister-genetic-science-existed-ancient-times.

[25] Daniel P. Thurs and Ronald L. Numbers, 'Science, Pseudoscience, and Science Falsely So-Called', in *Wrestling with Nature: From Omens to Science*, ed. Peter Harrison, Ronald L. Numbers, and Michael H. Shank (Chicago, IL: The University of Chicago Press, 2011), 301.

cultural embeddedness of the interlocutors seriously. However, we have still not responded to Nanda's concern regarding pseudosciences: will natural sciences always be "exploited" by religious idioms for apologetic purposes and thus promulgate pseudosciences or can natural sciences guard themselves against pseudosciences without resorting to a neutral criterion?

The question of a clear demarcation between science and pseudoscience is itself replete with a lack of clarity. The history of science indicates an evolving meaning prescribed to the terms "science" and "pseudoscience" under social influences.[26] Hansson, in his informative piece on the question, argues that a clear consensus on the criterion for demarcation between the two has not been reached among the scientists yet. Most consider pseudo-sciences as "failed versions of science" and their boundary from the "real" science as a matter of tacit knowledge.[27] However, this does not mean that science and pseudoscience are merely cultural constructions. Thus, Hanson suggests that what makes some scientific discoveries "failed versions" is their lack of ability to meet three basic criteria: reliability, scientific fruitfulness and practical usefulness. While the three are interconnected, "reliability is a necessary prerequisite for the other two."[28] He further adds, "An investigation does not qualify as pseudoscience merely by lacking in scientific fruitfulness and practical usefulness. It has to fail in terms of reliability (epistemic warrant), the most basic of the three quality criteria."[29] What makes a theory reliable is its ability to accurately describe the object it is directed towards.

We have already noticed that critical realism, which prioritises the role of nature itself in scientific investigation, is necessary for natural sciences to function. It is also the one that enables science to winnow legitimate truth claims from pseudoscience.[30] Thus, the method of critical realism, adopted in natural science and tentatively employed in this project, aids in sifting sciences from pseudosciences.

The observations so far demonstrate that the interlocutors consulted in this project neither feel trapped by their idiom nor hold it as one of equally valid opinions. Instead, their

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[26] Thurs and Numbers, 'Science, Pseudoscience and Science Falsely So-Called'.
[27] Hansson, 'Defining Pseudoscience', 66–67.
[28] Hansson, 'Defining Pseudoscience', 66–67.
[29] Hansson, 'Defining Pseudoscience', 67.
[30] Hansson, 'Defining Pseudoscience'; Lee McIntyre, *The Scientific Attitude: Defending Science from Denial, Fraud, and Pseudoscience* (Cambridge: The MIT Press, 2019).

enthusiasm for engaging with natural science, the universal intent inherent in their idiom, the possibility of divergence, the relatedness of the idioms, and the need to address the problem of pseudosciences all cumulatively indicate a strong desire to contribute to discourses on God, nature, truth, science, and humanity that are common to human existence. They indwell their idiom, but the idiom itself is never static. Those who indwell it constantly relate it to the newly available knowledge, reinterpret it, question it and even renounce it when they find the weight of anomalies on it to become unbearable. Idioms are dynamic in response to the experiences and new knowledge that they receive. People are not only deeply anchored in them but also consider them to have a decisive role in how new knowledge about nature is viewed and interpreted, or how life should be lived. They consider their theories about nature as truth claims and desire to be considered as such. This also motivates them to engage with other idioms.

The preceding part of this chapter has mainly been retrospective. We have made progress by placing the foregoing discourses side by side and collecting valuable threads that emerge. We have also observed our cultural embeddedness through the image of idiom and the influence the idioms exercise on our understanding of nature. We have noted clues that make it possible for the interlocutors to rise above their idioms and engage in dialogue. However, we have yet to elaborate on how these clues can be employed to further a dialogue between idioms, particularly from a Christian position.

6.3. Return to Critical Realism

The fact that our interlocutors are socially embedded and yet desire dialogue raises a question of methodology if such a dialogue is to be pursued.

On the one hand, the discussion on the nature of nature cannot be framed by suspending all idioms under the garb of adopting a “neutral” criterion. For one, the cultural situatedness of voices and how idioms function in their lives indicates that searching for a “neutral” point of view is futile. In fact, the claim of starting from a “neutral” point may show one’s lack of self-awareness or a covert attempt to grab power or both. Therefore, the dialogue on nature cannot be achieved by evading the idioms but through them. This means that the dialogue on nature is, in fact, a dialogue about the idioms of nature. As such, it is also a form of dialogue where one is invited to observe reality through the idiom of the other.

On the other hand, the conversation between science and religion or between idioms of nature cannot be a free arena where all voices are declared beforehand to have equal validity and authority. That would be a breeding place for pseudosciences and "pseudotheologies" that hamper the progress of science and religion. Indian masses facing the issues of economic inequality and injustices, in particular, have much to lose if the thresholds of science are not protected from its distortion for political gain. This demands that both science and theology have a stringent point of reference.

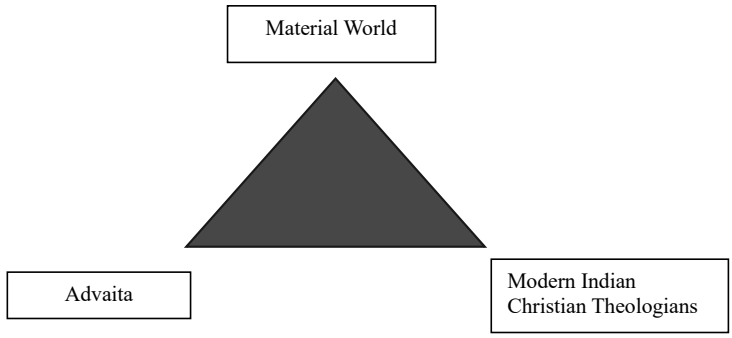
As we argued earlier, the methodology of critical realism promises recognition of both these factors: the cultural embeddedness of each view and a stringent point of reference that has epistemological priority. It is an approach wherein the idioms of nature are taken seriously, yet those indwelling them must remain open and, therefore, humble, knowing that nature can always surprise them. This means that Christians engaging in a dialogue on nature do not need to bypass their idiom. Instead, they are to both confidently present their idioms and remain open to other interpretations of nature, while constantly checking their conclusions in light of nature itself.

However, at this point, we require further elaboration on how various idioms of nature can interact and what should be the point of reference in these discourses. Given that this study includes several idioms of nature and that a dialogue between them can occur on several distinct grounds, we need to identify different layers of dialogue. To aid us, I employ the method of triangulation developed by Donald Davidson, which I briefly explained in the introductory chapter. This should help us identify distinct forms of dialogue evident in the discourses and explore the application of critical realist theory to them.

6.3.1. Dialogues on Nature through Triangulation

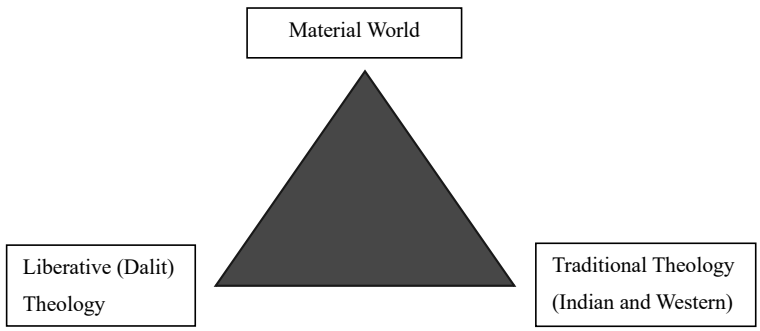
To remind ourselves, Davidson contends that every dialogue includes two dialoguing partners and a third reality about which the dialogue is. From this angle, this research provides at least three triangulations (which also relate to the table I provided in the beginning on of this chapter).

1. The Interreligious Triangulation



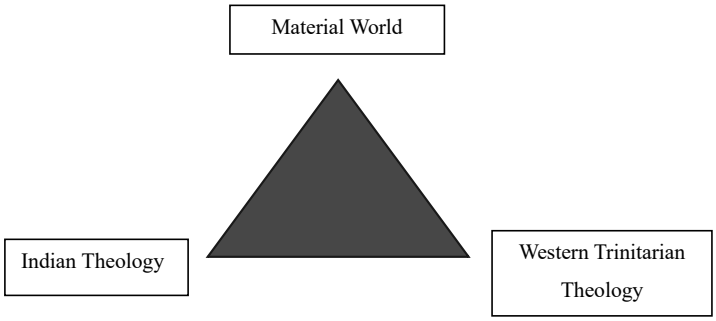
The *first* triangulation is formed between Advaitic thinkers and modern Indian Christian theology on the nature of nature. This dialogue is interreligious, and followers of both religions work from within their idiom about nature based on a certain given narrative or theory about the God-human-world relationship. Whether nature should be understood from a monistic and Christian perspective is a central point of debate here. Issues such as whether nature is cyclic, illusory, eternal or linear, real and created out of nothing occupy the central stage. From within their own idioms, the interlocutors both defend their own positions and critique the weaknesses of the other position. As far as the modern Indian Christian position is concerned, we concluded that nature, for Christians, is understood as creation and that incarnation plays a central role in comprehending the God-world relationship. Incarnation, however, is firmly related to other beliefs in the mosaic of Christian beliefs.

2. The Liberative-Modern Theology Triangulation



The *second* triangulation is an intercultural dialogue within the context of India, where the marginalised theological voices on nature, such as Dalit and feminist theologies, critique the traditional theology of nature held by both modern Indian Christian theologians and Western theology *en bloc*. Postmodern and postcolonial methodologies appear as essential tools to critique the latter. We also observed that the stress on God's material relationship with the world is the critical argument in this triangulation. Accordingly, although both the interlocutors indwell the same Christian idiom, there is a gradual movement from traditional, modern theology's stress on the distinction between God and the world to more organic models of God-world relationship, particularly panentheism. Once again, issues such as creatio ex nihilo and holism are vital points of discussion in these debates.

3. The Indian-Western Trinitarian Theologies Triangulation



The *third* triangle, which we have not explored in detail yet, builds upon the second triangle and attempts to initiate an intercultural conversation between Indian Christian theologies, including modern and postmodern theologies, with the Trinitarian theology of Gunton. The second and third triangulations are both intercultural, but they also indicate distinct forms of dialogue that hold the potential to contribute to each other.

These triangulations help us see the different levels of dialogue in this research and what is at stake in each. They also provide a context in which the theology of the material world is to be pursued in this project – all triangulations set restrictions and offer leeways to guide it.

However, this also poses a problem: is there *the* Christian view of nature within which all Christian interlocutors can locate themselves and engage with other idioms of nature? From what has been observed, particularly in the second and third triangulations, even within the Christian tradition, there has always existed a plurality of interpretations concerning God-

world relation, that is to say, that a Christian form of panentheism has always been a readily available alternative in understanding God-world relationality. We also discovered that God-world relationality could be a projection of how relationality itself is grasped through one's cultural lenses. Thus, a material bond between God-world relation conceived in Panentheistic terms could be liberating in some cultures, whereas the same could be oppressive in other contexts. From the previous chapters, even within a single context of Dalit thinking, the panentheistic model is found to be liberating to some and oppressive to others. Should we then conclude that God-world relationality, whether perceived in panentheistic or trinitarian terms, is ultimately a cultural construct? Should one choose a model because it works in one's context? This is a crucial question particularly relevant in the interreligious setting of Indian Christians, where they must confidently and clearly engage with other models of the God-world relationship, such as Advaita. Can critical realism provide any help here in choosing between the two models of God-world relationality, or does this conundrum reveal the limits of critical realist epistemology? To answer these questions, we turn to what critical realist understanding means for the theological investigation of the God-world relationship.

6.3.2. Theology as a Starting Point

The application of critical realism in Christian theology has been explored by Thomas Torrance, Alister McGrath and Benno van den Toren. Thomas Torrance draws parallels between natural sciences and Christian theology and notes the place of reality in theological thinking most succinctly when he says,

> Theological thinking is theo-logical, thinking not just from our own centres, but from a centre in God, from a divine ground. It is essentially theo-nomous thinking. It pivots upon the fact that God has made Himself known and continues to make Himself known, that He objectifies Himself for us, so that our knowledge is a fulfilled meeting with objective reality. Apart from that, theological thinking is objectless, meaningless, and, as it were, 'in the air'. Theology does not have its meaning, therefore, in its self-articulation, in its symbolism, in its form or its beauty, that is to say, in aesthetic or poetic, in emotional or even ethical overtones to real knowledge. It is itself real knowledge working with a given factual reality, and it will not concede anything as genuine knowledge that does not arise out of the given or is not bound to what is given.[31]

[31] Torrance, *Theological Science* (London: Oxford University Press, 1969), 29.

In other words, theological language can claim a force of truth when and because it is rooted in the reality of God. Apart from that, it remains an opinion. Certain theological models can meet the needs of one's context more than other, but that does not render them true; to be considered trustworthy, they must be founded on God's self-revelation. This implies that a proper model of God-world relationship can only be taken as "proper" when drawn from God's revelation of himself and his relationship to the world.

For Christians, nature or the material world is creation. The Genesis account of creation begins with the declaratory "In the beginning God created," which takes it for granted that in the Christian vision, God and the world are tied together in a certain way. Theological motifs concerning creation that run through the Bible further reveal God's continuing relationship with his creation. God is not merely a creator but also in a constant relationship with his creation. He chooses Israel to be a light to the nations and enters a covenant with them. He reveals his will through prophets and finally and decisively in the person of Jesus Christ. Although God's engagement with the world is from its creation, Christ's incarnation, death and resurrection ties its destiny to the incarnation. This is where Gunton's trinitarian theology is particularly helpful.

Christian theologians, particularly since Barth, have rightly and increasingly recognised that Christ should be essential in formulating the doctrine of creation.[32] In the same line, Gunton relates redemption in Christ to creation.[33] For Gunton, the Son's relationship to creation is explicated from his three designations as the Lord, God and Man of creation. Having witnessed the miraculous events of the calming of the sea and the turning of water into wine, the disciples were compelled to acknowledge Christ's Lordship over creation (Matt 8:27; Mark 4:41). Their experiences of Christ, especially his resurrection, led them to firmly conclude that they had encountered the Creator God in Jesus (John 1:3; 1 Cor 8:6; Col 1:16; Heb 1:1-2). But Christ is also "man" and thus of "one substance with ourselves."[34] As we noticed earlier, for Gunton, Christ's virgin birth, the baptism and temptation, death, resurrection and ascension all point to his "creatureliness." Through his creatureliness, the Son redeems the creation and provides a glimpse of the destiny of the cosmos. In this way,

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[32] Torrance, *Space, Time and Incarnation*; Ernst Conradie, 'On Jesus Christ as Mediator of Creation', *NGTT Deel* 54, nos 3 & 4 (September 2013): Supp 2; Rowan Williams, *Christ the Heart of Creation* (London: Bloomsbury Continuum, 2018); Ian A. McFarland, *`Creation'*, ed. Brendan N. Wolfe (University of St. Andrews, 2022), https://www.saet.ac.uk/Christianity/Creation.

[33] For instance, Gunton, *Christ and Creation*, 11–12.

[34] Gunton, *Christ and Creation*, 41.

creation's past, present and future are all intertwined with the incarnated Son. Like Gunton, modern Indian Christians, too, found that incarnation was a decisive event in providing a purpose, meaning and destiny to creation. Their participation in interreligious dialogue on the nature of nature was dominated by Christo-centric theology.

However, in Gunton's trinitarian scheme, the Son only achieves redemption for the whole world by being related to the Father through the Holy Spirit. The Holy Spirit propels the entire cosmos towards God's purposes within the structure provided by the Son's redemptive action. In this way, the Spirit's relation to the Son is a paradigm of God-world relationship wherein both are distinct yet "freely related."

While the panentheistic model may also claim some support from biblical revelation (Acts 17:28 for instance), it raises several theological problems regarding the nature of God that we observed in an earlier chapter (3.5). Moreover, the realist outlook inspired by the Christian understanding of the ontological distinction between God and the natural world has been crucial to the development of modern science itself. As the research of Bom and Toren among French-speaking African students of science indicates, the natural world's relatively independent status is foundational to their understanding of reality.[35] However, we also noticed that the panentheistic and Dalit stress on a deeper material connection between God and creation is a crucial theological motif that can benefit the conversation on the theology of nature.

In the next chapter, I will argue that the trinitarian theology of the material world has the potential to contribute to all three layers of triangulations. It not only enables Indian Christians to converse with Advaitic and pragmatic perspectives of God-world relationships but also satisfies the Dalit longing for material connection with God. This, however, cannot be achieved by the straightforward implementation of Gunton's model in the Indian context. It will have to be assessed in the light of Indian realities.

[35] Bom and Toren, 'Toward an Intercultural and More Equal Debate on Science and Religion: Insights from French-Speaking Africa', 207–9.

Conclusion

At the end of this chapter, several things have become apparent.

Firstly, it was identified that all discourses were situated in a particular location. As such, personal ambitions, power structures, and commitment to religious idioms one grows up in all influence the way discourses are constructed in the context of science. It was further recognised that the interlocutors indwell the idiom in a way that comprehending reality is never by bypassing them but through them. This recognition releases the search for the Indian Christian theology of nature that this research aims to formulate from the futile attempts to dislocate itself from its contexts.

Secondly, the exploration in this chapter affirmed that despite its recognition of the cultural locatedness, the formulation of any theology of nature could not be entirely restricted to discussing cultural factors, for theology is a *sine qua non* response to God's doing. This is the sense in which critical realist methodology, which was tentatively adopted, is now confirmed and firmly adhered to. Consequently, though cultural influences may shape the theology of the material world, God's revelation is decisive for theological formulations. Toward the end, we noticed that Gunton's trinitarian theology, as one rooted in the revelation of God, has the potential to contribute to the formulation of Indian Christian theology of nature, albeit when tempered with realities of the Indian Christian context. In the next chapter, we will discuss how these two recognitions can help us formulate a theology of nature that can engage all three layers of the triangulation.

CHAPTER SEVEN

Towards a Trinitarian Theology of the Material World: A Constructive Proposal

The trajectory of this study began with the aim of formulating an intercultural theology of the material world. The central question was: What contribution can an intercultural theology of nature make to the contemporary discussion of science and religion in India and beyond? By locating discourses on nature in several different cultural contexts, we observed that each discourse is shaped by its cultural location, and that intercultural conversation on nature goes beyond contextual discussions by bringing to the fore new insights that make the conversation richer and more insightful.

In the previous chapter, I showed that God-world relation is a central point of discussion in all the discourses examined in this research. Using Polanyi's notion of idiom, I argued that although the reality of the material world is accessible to all, our interpretations of it are deeply shaped by our cultural location. However, the interlocutors of each discourse themselves do not consider their views of nature as a result of cultural location alone. They firmly hold that their views of nature reveal what nature actually is and, therefore, have a basis in reality itself. This conviction helps them not only make sense of new knowledge about nature but also hold their idiom of God-world relationship with universal intent. However, despite such a firm hold of idiom over their life, the interlocutors are not trapped within it. Different factors, including a new understanding of reality, can cause divergence in their idiom, often leading to their conversion to a new paradigm. This means that a dialogue about the idioms of nature is both crucial and desirable.

We also concluded that for Christian idiom to be trustworthy, it has to be rooted in God's self-revelation, which leaned us toward Gunton's Trinitarian theology. However, I also argued that Gunton's trinitarian theology of nature has its own cultural limitations, which can be broadened by incorporating the Dalit and ecofeminist emphasis on material bonds. In this chapter, I want to show how this is the case and thereby argue that the intercultural approach to the theology of the material world offers an advantage over contextual theology. To do so, I will creatively build on previous insights and bring them together to

respond to a contextual need, but also in a way that contributes to the global heritage of Christian theology.[1]

7.1. Anchor Points for the Theology of the Material World

The Cultural Embeddedness of the Theology of the Material World

If Indian Christian theology wants to be properly socially, culturally, and religiously located, its concerns must resonate with those who articulate it but also those for whom it is articulated.

Since the majority of Indians and Indian Christians live in a socio-economically marginalised space, their emancipation should be one of the priorities for any theological thinking. The concern for socio-economic upliftment is so urgent that, as the Dalit deliberations on nature reveal, they are intertwined with, and at times even more urgent than, the liberation of nature. Therefore, the conversation on liberation in India is concurrent with the conversation on nature and vice versa. Consequently, any Indian Christian reflection on nature that omits the motif of human liberation would risk being socially dislocated and dysfunctional in the context of India. This recognition is of utmost importance for any conversation, be it on science, ecology or an interreligious discourse. In fact, the motifs of the liberation of the Dalits and of nature often inform and provide impetus for these discourses, as this study shows, and as Indian Christian theology has increasingly recognised and highlighted.

However, Indian Christians are also Dalits and non-Dalits living in an interreligious setting. They are located in a context where Advaita as a religious philosophy still holds sway. With the popularity of holism, Advaita has emerged as a viable option. In the absence of a positive engagement with Advaita, Dalit theology may remain only a theology of resistance. On the other hand, without a positive engagement with Dalit realities of "bodily" oppression, interreligious dialogue with Advaita may be reduced to an ivory-tower spiritual discourse, deflating the moral force required to fight socio-economic injustices.

These contextual realities call Indian Christian theology of nature to be a "third place" from where it can engage with both Advaitic ideas and Dalit realities. We have already observed the Advaitic emphasis on the spiritual behind the material and the Dalit stress on the latter.

[1] It is only in this sense that I call my proposal "constructive".

We have also pointed out in this research that Dalit theology's "materialistic" tendencies offer a corrective to theologians operating under the influence of Advaita. However, we also noticed that Dalit deliberations themselves also face a temptation to reduce all realities to their materiality. Can Advaita's stress on the "spiritual" help guard Dalit theology from giving in to narrow materialism? That is something for Dalit theologians to consider. It is, likewise, for those enamoured by Advaita's stress on the spiritual to pay attention to the Dalit longing for material liberation. The question for the project at hand, therefore, is: Does Christian theology operating in a context where both Dalit realities and Advaitic thinking call for engagement have sources to engage with both? Can Trinitarian theology provide any help in relating to both spiritual and material longing, emphasised respectively in Advaita and Dalit streams of thinking?

Reality in the Theology of the Material World

It is crucial to clarify at this point that the claim of Trinitarian theology's relevance to the Indian context should not merely be a matter of convenience or pragmatism—as if it were carved out to meet the weaknesses in Advaitic and Dalit thought. Instead, the argument here is that what makes it relevant is that it is derived from the self-revelation of the Trinitarian God and not vice versa.

In the previous chapter, we observed that although all theologies are shaped by their cultural location, the theology of the material world must also be properly committed to its subject if it is to have any warrant. We borrowed this insight from natural science, where a theory must be anchored in reality if it needs to be accepted. We noticed that this is also true for theological thought and that, therefore, it has to find its legitimacy in the revelation of God. The logic of Trinitarian theology is rooted in God's self-revelation.

As anchored in the reality of the Triune God, Christians also hold their theology of the material world with "universal intent." Christians assert that their perspective on nature as creation is liberating for the entire material world and, therefore, "good news" for the *whole* creation. This is because the material world is a creation of the Triune God, who is the origin of all goodness and love. This conviction also makes the Trinitarian theology of the material world political – it calls for human action against everything that takes creation further away from fulfilling the purposes of God.

7.2. A Constructive Proposal

Now that we have provided the context of Indian Christian theology concerning the material world and the crucible from which it emerges, we can delve into a detailed exploration of what such a theology may entail.

Trinitarian theology of nature ties the material world, its past, present, and future, to the work of the Trinitarian God. This means that while the debates around the creation account in the book of Genesis are crucial to human understanding, God's overall purposes for creation cannot be limited to it. Trinitarian theology of nature, therefore, investigates how the Trinitarian God engages with the material world and what this implies. In Gunton's trinitarian theology, this is achieved in a certain way. Given our discussion of Gunton's Trinitarian theology in chapter five, there is no need to revisit the details here. However, a summary of basic ideas on which we can later build further arguments may help.

For Gunton, Western civilisation's persistent malady is its infatuation with Greek dualism, which manifests itself in false notions of relationality. He finds Trinitarian relationality a panacea for it and an end to all dualisms. Gunton depends on Irenaeus's image of God engaging with the world using his two hands – the Son and the Spirit. Although his theology is drawn from different portions of the Bible, the relationship between the Spirit and the incarnated Christ becomes a framework for explicating God's relationship to the material world. In the incarnation, the Father relates to the Son through the Holy Spirit. The material Christ was always in a relationship of dependence on the Spirit – he was conceived, sustained, and resurrected by the ministry of the Holy Spirit, which establishes the point that "the kingdom of God realised in the ministry, death and resurrection of Jesus does not distinguish as we sometimes between spirit and matter."[2] The Spirit, in relating to the incarnate Son, reveals God's desire to relate to the whole material world, giving direction and meaning to the history and material processes of the world, as the modern Indian Christian theologians had also recognised.

However, in the same chapter, we also observed that while Gunton's understanding of relationality was helpful, it was carved out in the Western context, where "relation" was primarily conceived as based on "otherness." Therefore, the "I" and the "thou" often appear

[2] Gunton, *Christ and Creation*, 18.

as two different entities altogether. We also observed that the language of "otherisation" raises suspicion in India's postcolonial climate. We did not respond to these blind spots in Gunton's theology then. However, we take them up in this chapter, as I argue that the stress on relationality based on material bonds found in ecotheologies, ecofeminist theologies, and Dalit theology can strengthen Gunton's Trinitarian theology of nature against these drawbacks. To achieve this, I will assert that the materiality of the incarnation provides clues for the theology of the material world, which responds well to contextual challenges in India. At the same time, it also enhances Gunton's Trinitarian theology and thus contributes to the global conversation on the material world we inhabit.

Jesus as God's Body

Brazillian theologian Rubem Alves calls Jesus God's body,[3] stressing the materiality of God. This focus on the materiality of God aligns with the recognition of certain contextual aspects, particularly the Dalit, ecofeminist and the New Materialist accentuation of the material bonds as crucial markers of relationality, which have emerged as prominent concerns in this project. These include the longing for an embodied God who corporeally relates to his creation and the priority of a material connection between God, humanity and the rest of the creation. As discussed in our previous chapter, given that the knowledge of reality is always personal and theology is always an endeavour taken up by culturally situated beings, such an emphasis on a particular aspect of the incarnation should not be surprising. However, it must be noted that what is being highlighted here is not an alternative understanding of the incarnation but an emphasis on a particular aspect of the creatureliness or humanity of Jesus from the multi-faceted reality that it is.

Two claims are made by emphasising the materiality of the incarnation. Firstly, God's relation to the incarnated Son is the paradigmatic expression of God's relation to creation. We observed this in Gunton's elaboration of five episodes of the incarnated Son's life and the Father's relationship with him through the Spirit. This is not entirely a new claim. According to Rowan Williams, the fact that "Creation's relation to God... is grounded in the Son's relation to the Father" is found in patristic writings, though the difference between the two is that the

[3] Rubem A. Alves, *I Believe in the Resurrection of the Body*, trans. L. M. McCoy (Philadelphia, PA: Fortress Press, 1986), 52.

> relational complex in the case of the Father and Son is eternal, entirely reciprocal, and not conceivable as the result of an act of self-determination, whereas in the case of creation, it has a beginning, it must be thought of as a free act of divine determination, and is asymmetrical: God would be God without the world.[4]

Similarly, Pannenberg has argued that "The creation of creatures distinct from God rests on the self-distinction of the eternal Son."[5]

The second claim is that the materiality of the incarnation is the model of proper materiality itself. In other words, by placing the incarnation at the centre of the theology of nature, what I am proposing is to turn the panentheistic formula of nature as God's body on its head to God's body as nature – the materiality of the incarnated Son becomes here the locus for the theology of nature. This move, I will argue, is sufficient to address the Dalit/eco/ecofeminist emphasis on materiality without turning to panentheism. Incarnation explicates God's relation to creation in the past, present and future in a way that recognises the struggles and enlivens the aspirations of the Dalits.[6] In other words, not just what Christians believe about the material world but also its liberation is concretely articulated from the standpoint of the reality of the incarnation. Thus, for Christians, as Wolfhart Pannenberg puts it, "Soteriology must follow from Christology, and not vice versa. Otherwise, faith in salvation loses any real foundation."[7]

Accordingly, in the following, I propose some critical implications for situating incarnation at the heart of the Indian Christian theology of the material world relevant to the present-day context of India.

7.2.1. Incarnation as a paradigm of wholeness

As observed in the interreligious discourse, in the Indian context, spirit-matter duality, which is a modern dogma, is seen by Hindu apologists as indistinguishable from, and even the fruit of, the Christian belief in a God who is positioned in opposition to the natural world. This gives the impression, seen in Vivekananda's complaint, that the Christian God

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[4] Williams, *Heart of Creation*, 221–22.
[5] Wolfhart Pannenberg, *Systematic Theology*, II (Grand Rapids, MI: William. B. Eerdmans Publishing, 1994), 63.
[6] Peter Scott makes a similar argument in *A Political Theology of Nature* (Cambridge: Cambridge University Press, 2003), 234.
[7] Wolfhart Pannenberg, *Jesus-God and man*, trans. Lewis L. Wilkins and Duane A. Priebe (Philadelphia: Westminster Press, 1968), 48.

relates to nature from outside the world. On the other hand, Advaita proposes its own understanding of holism, which, as modern Indian Christians and Dalit theologians have argued, fails to acknowledge the reality of the material creation.

A struggle between developmental and ecological models was highlighted in liberative discourses on nature, which were traced to their visions of relationality. Several voices recognised a clear-cut boundary between God and the material world as a prerequisite to human development. However, the critique by ecotheology that such models are susceptible to ecological abuse was well-founded. In contrast, the Dalit, eco and ecofeminist models of relationality highlighted the primacy of matter in relationships.

Gunton addressed the problem of relationality in his own context and proposed Trinitarian theology as a panacea. However, it was found that his relationality rested primarily on "otherness."

These discourses foster the need for a model of relationality in which spirit and matter are neither placed against each other nor become indistinguishable. Reverting to incarnation as Godbody provides a proper ground for conceiving such a relationality. The term Godbody is similar to God-man in that it explains the two natures of Christ. However, the term body is meant here to prioritise the material bonds between God and creation and thereby attempt to overcome the problem of spirit-matter duality.[8]

From this position, the emphasis on the materiality of Christ dovetails with the liberative stress of material connections in relationality. As such, it continues to challenge other models of God-world relationality, including the Advaitic model, and the pragmatic model of development that attempts to push God out of nature. It also challenges Gunton's Trinitarian model, where "otherness" is the dominant aspect of relationality. The holistic nature of the incarnation also recognises the goodness inherent to matter and thereby offers Christian theology a starting point for a conversation with the materialist schools in India, where there is "an instinctive acceptance of the primacy of the material human body and the material earth on which it lives."[9]

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[8] Peter Scott, from whom I have borrowed this term, uses it with a hyphen as in God-body. However, I have omitted the hyphen to prevent any indication of lingering dualism. Scott, *Political Theology*, 233.
[9] Chattopadhyaya, *Lokayata*, xxi.

However, relationality based on similarities, such as materiality, can also be as oppressive as the ones based on otherness, as it may drive out the distinctions altogether and push for uniformity. This is particularly the case in contemporary discussions about holism in the postcolonial climate of India. The individual distinctions are often blurred in the name of preserving the community or the whole. Similarly, the environmental discourses tend to go to a point where all distinctions between humans and nature are obliterated.

In contrast, the material Christ provides a basis of relationality that takes both similarity with and distinction from nature seriously. As fully God, he shares divinity with the Spirit and yet relates to the latter as a distinct person. Similarly, while he shares his humanity with us, he also stands apart from us so that he can relate to us as those distinct from him. We will examine the implications of this understanding of relationality in the following points. For now, it suffices to reiterate that in a postmodern and postcolonial context, where non-duality has emerged as a new benchmark in interreligious apologetics, the material Christ stands as a paradigmatic expression of the wholeness promised by the Christian gospel.

7.2.2. Incarnation as a Search for Embodied Relationality

Further, the centrality of incarnation aligns with the desire of ecofeminist, ecotheologians and Dalit thinkers and theologians to conceive of God and nature relationality in an embodied fashion. Many reasons attract thinkers to these embodied images.

In the chapter on liberative discourse, it was noted that new materialism accentuates the emphasis on the materialistic connection between the body and the material world. On the one hand, this development follows from the scientific picture of the material world discovered by evolutionary theory and quantum mechanics that depict matter as teeming with life and interconnections. On the other hand, it is a consequence of the recognition, particularly from the "Third World," that theology cannot exclusively focus on "the soul" in a context where the material body is the victim of poverty, malnutrition and violent discrimination.

Indian materialistic schools, including Charvaka, acknowledge the link between the body and the earth. Chattopadhyaya argues that in Charvaka, one observes

> an instinctive groping at a theory according to which the human body and the earth are assumed to have the same nature, the two being taken as interacting and inter-dependent… it should not be possible to understand the mystery of

> nature if we can understand the mystery of the human body – the *deha* or the material human body is the microcosm of the universe.[10]

These images that tie material bodies with creation are reflected in the Dalit stress on the body as an epistemological tool in which the knowledge of the world is embodied and relational, brought about by human labour in nature. Similarly, the central concern in the ecological stress on the corporeal image of God seems to be based on the assumption that one with a corporeal relation shares a deeper bond of empathy with the pain of the other. It is natural for a mother to love her own children more than the children of her neighbour. In other words, corporeality is a mark of affinity. Due to this desire, environmentalists and ecotheologians, both Hindu and Christian, turn to embodied images of nature.

Although I find many of these analogies restrictive in explaining God-world relationality (the reasons for which I explain in later points), their continual usage in the material cultures points to a longing for an embodied, "enmattered God" that is fulfilled in the incarnation. With the incarnation, God opens himself to relate to humanity in their world of space and time and makes himself available for others to gain an embodied knowledge of him. The early disciples' knowledge of the incarnated Son was based on their having "seen", "heard", and "touched" the Word of life (1 John 1:1-3), for he had become like them "fully human in every way" (Heb 2:17).

As I had indicated earlier, while the material oneness of Christ with creation provides a basis for relationality, including the fulfilment of the longing for embodied relationality, it also raises an issue concerning the distinction between the two.

7.2.3. Incarnation and the Ambivalent Nature of Creation

At one level, Christ's incarnation fosters the Christian belief that nature, as the creation of God, is good, so good that the Son could take upon creatureliness. And yet, Christ's suffering as a human – his pain, tiredness, thirst and hunger, and the journey towards death on the cross, echo the sighs and groans of creation (Rom 8:19-22).

[10] Chattopadhyaya, *Lokayata*, xxi.

The stress on the goodness and groaning of nature is decisive in engaging with both interreligious and liberative discourses.[11] Since the material world is a creation of a good and loving God, it is inherently good, and its goodness and integrity need to be preserved. Advaita, ecofeminists and ecotheologians are accurate in attributing the destruction of nature to the dualism and the avarice of modernity and in exposing the narratives that legitimise the illegitimate expressions of human dominion over nature. They appropriately emphasise the suffering of the natural world due to human abuse of it. The context of the Anthropocene poses fresh challenges for both the religious and non-religious idioms on nature, particularly concerning their views on humanity and its place within the natural world. Despite the urgency, a systematic response to these challenges from within the Christian idiom cannot be explored further in this research. For now, it can be argued (albeit superficially) that Christian understanding of creation is rooted in the tripartite framework of the relationship between God, humanity and nature. Human autonomy that is behind the abuse of nature is a consequence of the disengagement from God, under whose tutelage humans were to relate rightly to nature. This disengagement has led to the collapse of the tripartite structure, unrestricted human domination over nature and the exacerbation of ecological crises. Thus, ecological sin ultimately stems from human denial that the world belongs to God (Psa 24:1).[12]

Gunton contends that Christ's obedience to God through the Spirit enables him to relate rightly to nature. As the incarnated Son and, therefore, a part of creation, he experiences and shares in the pain and brokenness that the material world endures, causing him to groan along with it. He identifies with the world as an enfleshed "man" and son of Adam, made from the clay of the world and thus part of the natural world. His human experiences not only authenticate his humanity but also reveal the brokenness of the creation that he so willingly became part of. This understanding of nature's groaning should propel the church's prophetic ministry in the context of the Anthropocene.

Nonetheless, from a Christian point of view, the origins of groaning in nature extend beyond the pollution caused by humans since the Industrial Revolution of the late 18th

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[11] The dual nature of creation as good and groaning, particularly in the context of science is explored in Christopher Southgate, *The Groaning of Creation: God, Evolution, and the Problem of Evil* (Louisville, KY: Westminster John Knox Press, 2008).

[12] Gunton says, "Reconciliation with God... is the necessary condition for reconciliation between people and peace with the environment. without putting that right, the rest will not happen either." Gunton, *The Christian Faith*, 72.

century. The incarnation rather exposes what Gunton calls the derailment of creation from the purposes of God and its proclivity to revert to nothingness, to death. Thus, when Christ, as the "Lord" of creation, quells the storm and raises the dead, he both exposes creation's rebellion against God and establishes his authority over it.

This proclivity of nature aligns with Dalit experiences in nature. Against the idealistic tendencies inherent in Indian ecological discourses, Dalit experiences assert that far from being a space of adulation, nature is indeed "red in tooth and claw." Contemporary environmental and ecological discourses seem to imply that nature, if left free of human intervention, will exhibit a gentle character. On the contrary, experiences of Dalit, Adivasi and other communities living close to nature suggest that without proper human intervention, nature can become tyrannical and the labour in it agonising. What is often not realised is that in the primitive societies that the environmentalists and the ecotheologians turn to for inspiration, the lack of human intervention in nature was not motivated by environmental concerns but by the need to appease nature deities, whose favour they were to curry in order to avoid natural disasters, which they considered visible signs of divine displeasure. Hermen Kroesbergen and Johanneke Kroesbergen-Kamps show this to be the case in the Zambian context, where "nature is hardly considered a friendly partner, nature is terrifying and dangerous. It is the bush where the spirit world is close, too close for comfort."[13]

Nature, in this sense, has a degree of ambiguity – it stands as both a co-sufferer and co-rebel alongside humans. As much as it is destroyed by humans, so can it be liberated only by human intervention under divine direction. Incarnation shows that the destiny of creation is intertwined with the obedience, death and resurrection of one "man", the Son. The Son is a co-sufferer with creation but chooses not to become its co-rebel, and in doing so becomes a priest of creation (a term that both Gunton and Torrance employ) – as "man", he presents creation before God and as its "Lord", he presents God to creation. He beckons other humans to become "new creation" and engage with creation as its priests. When the human relationship with nature takes a priestly role like Christ, it safeguards creation against human exploitation while also opening it up for scientific investigation.

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[13] Hermen Kroesbergen and Johanneke Kroesbergen- Kamps, 'The Non-Romantic Idea of Nature in African Theology', *HTS Teologiese Studies / Theological Studies* 77, no. 3 (August 2021): 8, 3, https:// /www.ajol.infoindex.php/hts/article/view/212154

The ambivalent nature of creation is also one reason why a certain otherness between God and creation needs to be maintained.

7.2.4. Incarnation and the Otherness of Creation

We already noted in the preceding chapters that ecologically motivated Advaitic and panentheistic models of God-world relations are correct in bemoaning modernity's disengagement from God and the desacralisation of the world. However, taking a reactionary course, they often turn to the local models of God-human-nature harmony, which they maintain to be sources for nature's healing.[14] Consequently, models that offer a unified vision of God-world relationship, such as monism and panentheism, are putatively favoured and uncritically embraced. All conversations about holism, relationality and spirit-matter non-duality follow from this idiom about God-world relationship.

However, although helpful to conceive a closeness between God and the world, as I hinted above, these models also jeopardise the "otherness" of each distinct reality within the God-human-nature relationality by diminishing the boundaries between them. Therefore, the issue in ecologically motivated discourses in the Indian context is not their critique of the dualism that has come to undergird much of modern science today, but the solution that follows that critique. In other words, what is the nature of relationality between God and the world: should it be considered in the dominant Advaitic, monistic tradition, or panentheistic sense? Although Christian theology has always resisted the monistic vision of unity between God and the world, panentheism has frequently been an attractive option in its history.

Like Gunton, I find the panentheistic model unsatisfying for several reasons. For one, even when panentheism is posited as a solution, as R. T. Mullins argues, a lack of clarity exists regarding what the "en" in panentheism stands for and what kind of relationality it postulates.[15]

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[14] This research is limited in its investigation of the panentheistic model of God-world relationship in the Indian context of the science-religion discussion. The liberative discourse in the Indian context, no doubt, opens up space for an in-depth conversation with the Western panentheistic schools. However, due to various limitations, they cannot be pursued here.

[15] R. T. Mullins, 'The Difficulty with Demarcating Panentheism', *Sophia* 55, no. 3 (September 2016): 3.

Further, and drawing from the Dalit experiences in nature, it is natural to ask what the place of the painful and groaning aspects of nature – the death and decay it experiences – is in the panentheistic model of the body of God. If these aspects of nature are part of God, what does this mean for the being of God? Panentheism seems to suggest that considering nature as God's body ensures that God has embodied experiences of the material world, which will lead to a deeper sense of empathy for what happens to creation happens to God. But does that mean that God needs to experience all experiences of all finite beings and the entire creation to be affective towards those through whom God experiences them?

Ward's objection against panentheism in this regard is helpful. Although it is made concerning the experiences that free human agents bring to the body of God, it can also be applied in the context of dealing with anomalies in nature. Ward argues that

> ... God cannot experience things exactly as finite persons do. The experience of a murderer has in murdering a victim is not an experience God could actually have, as the murderer has it. So one might wish to say that God knows what it is like to have such an experience. God feels its affective tone. But God also reacts negatively to such experiences, and that is an essential part of how God experiences them. God's perfection distances the experiences of sinful and ignorant beings from God, makes them not really 'part' of God, but rather causes of affective representation in God of finite experiences.[16]

The blurred distinction between God and the world has consequences for nature, too. Once it becomes part of God, it is robbed of its own objective reality that God and humans can relate to. The Dalit experiences of exploitation through the divinisation of nature show that when nature is not respected for what it is and made to be part of God, what follows is not higher ecological consciousness but the idolatry of nature and a refusal to interfere in its anomalies, even for nature's sake. The nature that is divinised is worshipped, neither studied nor cared for. Of course, nature can be considered "sacred," but its sacredness does not follow from or imply its divinisation.[17]

For these reasons and against the abuse of humans and nature through its divinisation, a theology of the material world based on the incarnation upholds that although God does not

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[16] Keith Ward, 'The World as the Body of God: A Panentheistic Metaphor', in *In Whom We Live and Move and Have Our Being: Panentheistic Reflections on God's Presence in a Scientific World*, ed. Philip Clayton and Arthur Peacocke (Grand Rapids, MI: William B. Eerdmans Publishing, 2004), 70.

[17] As is the case in some Western writings such as that of Wirzba. However, they are based on Christian insights and do not operate against the cultural backdrop where the God-nature unity is a widely embraced phenomenon. Norman Wirzba, *This Sacred Life: Humanity's Place in a Wounded World* (Cambridge: Cambridge University Press, 2021), 125–75.

gatecrash the natural world from the outside, God maintains a clear distinction from the natural world.

For Gunton, the free movement of God in nature and his distinction from it can be held together by his notion of relationality. This means that although the Christian understanding of the God-world relationship based on the incarnation repudiates Greek dualisms, it does not lead to an ontological collapse of God and creation, for there is a certain duality in the world. He further clarifies the difference between the two, saying

> this duality of God and the world is not a dualism of the kind that divides one sector of created reality from another – body from soul, mind from matter. There are two realities, God and the world he has made, each what they are in their proper sphere. Looking forward, we can see that the basis for this duality-in-relation is to be found in the fact that in Jesus Christ the creator and the created meet without any subversion of the being of the other.[18]

In another place, he further explains,

> The doctrine of the absolute qualitative distinction between God and the created order depends upon an apprehension of the personal action of God in time and space. The reason... is that without a personal relation centred on God's free involvement in the world in Jesus Christ, some logical or ontological – and hence necessitarian – link tends to be made between God and the world.[19]

As far as the stress on non-duality and holism is concerned, Christian theologians agree with Advaitic and other voices that a strict separation between God and nature is against the nature of nature. In fact, given the contingent status of creation in Christian idiom, it is never regarded as cut loose from God but dependent entirely on God. It is only in this sense that Christian theology of creation can be considered non-dualistic. The Christian understanding of "creation" means that there cannot be creation without the Creator, while creation remains distinct from the Creator due to its createdness. Following this conviction, Christian theology of creation sits between Advaita and the pragmatism of Nanda, concurring with the former on the non-duality of the Creator and creation and with the latter on the non-identity of the two. With Advaita, it recognises that as a contingent creation, nature is never shut to the movement of God; with Nanda, it recognises that nature is nonidentical with God, for failing to distinguish between the two can lead to the idolatry of

[18] Gunton, *The Christian Faith*, 11. Italics original.
[19] Gunton, *The Triune Creator*, 95.

nature and may even result in the oppression of human beings. A proper understanding of relationality recognises the distinction not only between God and the world but also between humanity and the rest of creation. That this is required for natural science is aptly pointed out by Thomas Torrance, though in a different context, who quotes John Macmurray saying, "If we are to know the world, we must see to it that it really is an external world. That means not merely that the world must remain external to us but that we must remain external to it."[20]

In this context of maintaining an ontological distinction between God and nature, the doctrine of *creatio ex nihilo* becomes decisive. Early Indian Christians such as Nehemiah Goreh and Brahmabandhab Upadhyaya were in unison with Gunton in believing that *creatio ex nihilo* is a uniquely Christian doctrine, but they thought about it largely to guard the freedom and sovereignty of God. For Gunton, the logic of *creatio ex nihilo* is thoroughly Christological. Summarising Augustine's view on *creatio ex nihilo* (*Confessions* 12.7), Gunton comments that Augustine,

> argues that if creation is made out of God's own substance–which Augustine rightly sees to be the only alternative to creation out of nothing–then it would be equal to God's only-begotten Son. This is an interesting and important point, for it distinguishes creation from emanation for *christological* reasons. If creation is the imparting to the world of something from the being of God, then it has a measure of divinity in it, and Augustine realises that it would then in that respected *homoousios*, of one substance, with God the Father. The doctrine of the eternal Son prevents this, because the Son's ontological but necessary relation to the Father grounds the world's contingency.[21]

Despite its recent criticism by the panentheistic model of the God-world relationship,[22] *creatio ex nihilo* continues to remain relevant to the discussion about God-world relation and to maintaining a healthy distinction between God and the world.[23] In the contemporary Indian context, Dalit experiences of oppression through the sacralisation of nature and their search for modern science offer a positive starting point for the discussion on *creatio ex nihilo*. The primary conversation here need not be about the relevance of *creatio ex nihilo* to uphold the sovereignty of God, although that would be part of the discourse. Instead, its

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[20] John Macmurray, *The Boundaries of Science: A Study in the Philosophy of Psychology* (London: Faber & Faber, 1939), 85; cited in Torrance, *Theological Science* (London: Oxford University Press, 1969), 35.
[21] Gunton, 'The Doctrine of Creation', 75.
[22] We encountered them in See 3.5 and 4.2.2.
[23] For a good defense of creatio ex nihilo against panentheism, see Soskice, 'Why Creatio Ex Nihilo'.

achievement in fostering an ontological distinction from God needs to be upheld so that its potential to open creation for investigation can be realised for the sake of human liberation.

On the other hand, since the doctrine evolved from Christological rather than cosmological concerns, it should also be relevant for interreligious dialogue, wherein its logic does not always need to be derived from the cosmological debates, but from the incarnation. Gunton is again helpful here since, for him, the whole edifice of God's relationship with the material world can be understood by his relationship with the world in history and not otherwise. In fact, in his doctoral work, he claims that the lack of appreciation for history in the panentheistic model of Charles Hartshorne led Gunton to lean towards the Barthian model.[24] Thus, Gunton reaches the conclusion of the otherness of nature, most explicitly addressed in *creatio ex nihilo* via the incarnation of the Son. These links should be exploited in conversations with Neo-Hindu apologists who object to *creatio ex nihilo* on the basis of natural law to guide it back to where it grew from – the reality of the incarnation.

However, at least two objections against the otherisation of creation from God, particularly through *creatio ex nihilo*, emerge from the preceding discourses themselves.

Firstly, given the postcolonial setting of contemporary India, where all forms of otherisation are laced with motives of power, can the otherisation of God and creation (or human and creation) be maintained? As Regina Schwartz charges, "Violence is not only what we do to the Other. It is prior to that. Violence is the very construction of the Other."[25] In contemporary experiences, the otherisation of nature has often led to its exploitation, but whether there is a causal link between the two is not tenable. For one, all forms of otherisation need not be exploitative. In fact, Gunton calls the Holy Spirit an agent of otherisation, who otherises not to subjugate, but to engage the otherised as the truly other. Further, it also raises a question as to whether otherisation should be rejected because of the experience of coloniality or should otherisation by God be a model of properly relating to the other in their otherness and challenge coloniality. Given that forms of relationality that reject otherisation can be as exploitative as those that otherise, it seems viable that relating properly requires a certain kind of otherness in relation.

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[24] Colin E. Gunton, *Becoming and Being: The Doctrine of God in Charles Hartshorne and Karl Barth* (Oxford: Oxford University Press, 1978).
[25] Regina M. Schwartz, *The Curse of Cain: The Violent Legacy of Monotheism* (Chicago, IL: University of Chicago Press, 1997), 5.

Secondly, although *creatio ex nihilo* was logically reached from incarnation, both doctrines serve different purposes. For instance, while I have used incarnation here to foster material unity between God and creation, *creatio ex nihilo* was carved out to do the exact opposite—to maintain a healthy distinction between God and the material world. What is also to be understood here is that *creatio ex nihilo* was not imagined to devalue the material world but to uphold its distinct, but not opposite, identity. Through incarnation, as an "enfleshed" being, God establishes with the rest of the creation an "ontological homogeneity," the notion that Gunton invokes from Athanasius but does not explore further. The "ontological homogeneity" of incarnation does not destroy the layers of relations, as the incarnated Son relates to creation as both "man" and "Lord" of creation. In this sense, the incarnated Son maintains both ontological homogeneity and distinction from the material world. Thus, both incarnation and *ex nihilo* reveal the love of God for creation, in his otherness from creation and in his oneness to it.

7.2.5. Crucifixion and Creation

In Gunton's Trinitarian theology, creation and redemption are interlinked. He is supralapsarian, maintaining that Christ would have incarnated regardless of the Fall. However, Gunton believes that the Fall had tied creation in a way that the cross became "the hinge on which all salvation turns."[26]

In other words, although God had purpose for creation, which involves Christ, the Fall becomes decisive for the shape that the incarnation would take. God redeems creation through the cross of Christ so that it is delivered from its movement backwards into dissolution and restored in the trajectory of its perfection to the praise and glory of God. Thus, the implications of the cross are not merely for individual souls to be saved out of the world but for the entire cosmos. In another sense, the cross is where Jesus perfects obedience through the Spirit and becomes "a representative sample of fallen flesh purified and presented to God the Father."[27]

In our earlier discussion (Creation as a Project under 4.2.2), we noticed that, for Gunton, what ails nature is not only the pollution caused by human beings but also, under the effects

[26] Gunton, *The Christian Faith*, 17.
[27] Gunton, *Christ and Creation*, 59.

of the Fall, its own tendency to move backwards into dissolution and its desire to be delivered from it, signified by its groaning. The incarnated Son experiences this groaning due to the material fabric he shares with the whole of creation. Dalit and Adivasi bodies recognise the groaning of the creation as those living close to it, but also due to their materialistic epistemology. The linking of creation and the cross at once implies both the goodness of the matter and the love God has for His creation: As God's "good" creation, the material world and material bodies are already objects of God's love, but the cross exhibits the extent of God's love for human beings in all their materiality, and through the same material bond, the redemption of the entire cosmos.

7.2.6. Resurrection and the Destiny of Creation

The gospel message from its beginning tied the resurrection of Christ to the resurrection of humankind and the latter to the renewal of all creation, which is why, in the Christian idiom, the hope for the renewal of the material world has its most fundamental foundation in Jesus's bodily resurrection.

In Gunton's doctrine of resurrection and owing to his dependence on Irenaeus' understanding of God relating to the world through His two hands, the emphasis is that it is the act of the triune God. Consequently, he concentrates on the role of the Spirit in resurrection. As an agent of forward movement and transformation, it is the Holy Spirit who raises Christ, opening the door to transformation not only of our bodies but also of the entire material world. This pneumatological stress in resurrection provides Gunton with an ethic wherein human endeavours such as arts and sciences are a means of transforming creation with the help of the Spirit to the glory of God. Thus, resurrection through the Spirit provides Gunton with both a hope for the future and a rationale for "this-worldly" pursuits and cultural engagement in the here and now.

However, because Gunton's relationality is based on the account of the Spirit's relationship with material Christ, he does not explore the links between the resurrected body of Christ and its implications for materiality. In the context of India, where matter is often regarded as secondary to the soul and salvation is conceived in a disembodied manner, the eschatological hope of material transformation foretold in the resurrection of Christ remains one of the most potent messages. Its relevance lies in the continuity of the material bond

between the two stages of Jesus' career, namely the historical Jesus and the resurrected Christ.

Torrance's articulation in this regard is helpful,

> ... nothing that Jesus Christ was, taught and did is to be understood and interpreted through any kind of abstraction from the spatio-temporal structures and conditions of concrete human existence. Cut away from Jesus Christ the fact of the incarnation of the Son of God in this world, and everything becomes fragmented, and paradoxical, and empty of decisive significance. This applies above all to the resurrection of Jesus Christ from the dead, for it would be quite unintelligible and nonsensical if the consummation of God's work in space and time were not of the same tissue as all the rest of it. However difficult it may be for us, the message of the resurrection is inseparably bound up with the objective structures of space and time of the created cosmos, but the fundamental reality inherent in it all, which the resurrection itself unveiled, is that in Jesus Christ God himself has come person into our world and manifested himself in the body, in the wholeness and undiminished integrity of human being, yet in such a way as to redeem and transform what he has assumed through the birth, life, passion and resurrection of Jesus.[28]

What happens in the resurrection of Christ is not the reception of a new spiritual body devoid of all corporeality. Instead, the empty grave is an affirmation that "To be a spiritual body is not to be less body but more truly and completely body."[29]

7.2.7. Ascension and the Incarnation

As Gunton rightly says, ascension is often understood as nothing more than "an appendix to talk of the resurrection."[30] One of the reasons why the doctrine is frequently disregarded is the speculative conclusions it can lead to about the material nature of the ascended Christ.

Gunton accepts that the ascension is as historical as the resurrection and, therefore, part of the continuum of the "career" of Jesus, and "clearly involves... the taking up of his humanity into God."[31] However, Gunton wonders if "should we not understand this chiefly in terms of the economy of salvation, of the ways of God to the world, rather than in some way that might appear to suggest a change in the inner being of God?"[32] This is why, for

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[28] Thomas F. Torrance, *Space, Time and Resurrection* (London: T&T Clark, 2019), 178–79.
[29] Torrance, *Space, Time and Resurrection*, 141.
[30] Gunton, *Christ and Creation*, 66.
[31] Gunton, *Christ and Creation*, 65.
[32] Gunton, *Christ and Creation*, 66.

Gunton, the primary focus of the ascension event is to establish the function of Christ "as the eternal mediator between heaven and earth."[33]

However, Torrance goes a step further and offers more clarity on what ascension means for the "man" Christ and, thereby, for all those who share the bond of flesh with him. For Torrance,

> The ascension means the exaltation of man into the life of God and on to the throne of God. In the ascension, the Son of Man, New Man in Christ, is given to partake of divine nature. There we reach the goal of incarnation, in our great Prodomos or Forerunner at the right hand of God. We are with Jesus beside God, for we are gathered up in him and included in his own self-presentation before the Father.[34]

However, partaking of the divine nature in Christ does not mean that all distinctions between God and human beings are obliterated. In fact,

> This would be the exact anti-thesis of what the Christian Gospel teaches, for the exaltation of man into sharing the divine life and love, affirms the reality of his humble creaturely being, by making him live out of the transcendence of God in and through Jesus alone. The hypostatic union of the divine and human natures in Jesus preserves the human and creaturely being he took from us, and it is in and through our sharing in that human and creaturely being, sanctified and blessed in him, that we share in the life of God while remaining what we were made to be, men and not gods.[35]

These points indicate that the Trinitarian God is both otherising God – in that he regards us as the other to whom we can relate, while the Holy Spirit is an agent of otherisation – and non-otherising God – in Jesus, God shares a material connection with creation. The intercultural theology of the material world considers both oneness and otherness, as observed in the incarnation, as crucial markers of relationality and, therefore, foundational to our knowledge of the God-world relationship.

Conclusion

We began this chapter by drawing upon two crucial conclusions from the previous chapter concerning the nature of theology: the self-revelation of God and the cultural locatedness of theological reflections. For the theology of the material world, this meant that while we

[33] Gunton, *Christ and Creation*, 67.
[34] Torrance, *Space, Time and Resurrection*, 135.
[35] Torrance, *Space, Time and Resurrection*, 136.

could reflect on the material world from our position, the self-revelation of God provided the crucible within which such a reflection could take shape. Although this leaned us toward Gunton's Trinitarian theology of nature, we decided to gauge its relevance from within the Indian context of interreligious apologetics and socio-economic injustice. This allowed us to both adopt critical insights from Gunton and disclose their contextual limitations.

Further, I built upon my earlier critique of Gunton's work (chapter 5), namely, that his understanding of relationality as based on otherisation is influenced by his cultural location. I argued that this lop-sided picture could be corrected by paying heed to ecofeminist, ecotheological and Dalit understanding of relationality based on material bonds rather than just otherisation. It was also hoped that ecofeminist, ecotheological and Dalit voices would better understand "otherisation" by engaging with Gunton.

Consequently, we looked at the material Christ, the Godbody, as the locus for the theology of the material world. This led to drawing out of several implications, including an understanding of relationality that has a place for the recognition of both otherness and oneness. The intercultural approach developed in this chapter elucidates that God's relationship with the material world includes both oneness and otherness.

To assess the value of this conclusion reached by taking an intercultural approach to the theology of the material world, we can return to the image of triangulations (6.3.1). We observed three triangulations with the material world as an object of inquiry: Advaita-modern Indian Christian, Liberative- modern, and Indian-Western. These triangulations have guided the research by providing restrictions and leeways in its trajectory. The conclusion reached by intercultural theology places us within all three triangulations in a way that the theology of the material world with Christ at its centre can contribute to them all.

In the conversation with Advaita, for instance, the intercultural theology of the material world agrees that reality cannot be reduced to materiality. However, given that the material Christ is at the centre of such a theology, it also critiques the Advaitic subjugation of materiality or its focus on disembodied salvation.

In the triangulation between the liberative and most Christian understanding of relationality too, intercultural theology finds a middle ground. It agrees with the contextual theological argument that modern theology has often been a source of otherisation and subjugation.

However, it also finds the non-otherising models of Eastern thought dissatisfactory. Therefore, it calls for a relationality that incorporates both otherisation and non-otherisation as crucial aspects of the God-world relationship.

Similarly, in the final triangulation of the Indian-Western exchange, intercultural theology of the material world argues that proper relationality includes both otherisation and non-otherisation, thereby offering correction to both Indian and Western understanding of relationality.

Thus, the intercultural theology of the material world offers us a space to engage with diverse discourses on the nature of nature and with those holding different perspectives on the God-world relationship.

CONCLUSION

This research has come a long way, traversing fields as diverse as science and religion, contextual theology, interreligious dialogue, and intercultural theology. It has addressed a range of issues relevant to various fields of knowledge. In this chapter, I will offer an overview of the trajectory of this research, summarise the key research findings vis-à-vis the research question, and demonstrate their contribution to the global discussion on science and religion. At the same time, I will also highlight the limitations of this research and identify potential areas for further research.

Tracing the Trajectory, Observing the Milestones

The need for this study emerged from various experiences and contexts that increasingly posed the question of God's relationship with the material world.

My early dabbling in science and religion was by reading literature surrounding the development of Vedic science, a movement that claimed that several discoveries of modern science were foreshadowed in the Vedas. This conclusion was not merely a matter of theological reflection; in the multireligious context of India, it also had socio-political consequences. Upon closer examination, I discovered that a critical argument in the claims of Vedic science, and much of the Hindu engagement with science in general, was their critique of modern science as reductionist and their understanding of Hindu science as holistic. Furthermore, holism in these conversations often referred to a spirit-matter relationality conceived in the Advaitic or monistic way.

The other direction from where the question of God-world relationality reached me was the context of socio-economic inequality and injustice in which I grew up. Those I lived with often asked me, “Does God care about my material well-being?” The question pointed to the need to explore the Christian understanding of God’s relationship to materiality itself. Was there a framework of God-world relationality that could provide hope and impetus for liberation in the here-and-now context of socioeconomic inequality?

These questions are not novel, and Christians have contemplated them for centuries. In the Indian context, to understand how Christians engaged in the theme of God’s relationship with the material world, I investigated interreligious apologetics between Indian Christian and Advaitic thinkers against the backdrop of modernity. In their exchange, I traced significant

themes, points of agreement and contentions. The second location where the issue of the God-world relationship could be tracked was the liberative context, where Dalit realities and theology were the prime interlocutors here. Natural science was considered to have a critical role in the liberation of the downtrodden. Given that modern science emerged in the Western context, I also decided to investigate Western approaches to the God-world relationality, particularly the Trinitarian theology of nature. A systematic investigation of these three discourses forms a significant part of the study. However, from the beginning, the project also intended to bring these various discourses into dialogue, leading to the research question: "What contribution can an intercultural theological conversation between interreligious, liberative and trinitarian discourses make to the contextual theology of nature in India and beyond?"

From here, the trajectory to explore the answer to this research can be narrated by describing three crucial milestones.

The *first* milestone concerns the recognition of the contextual nature of theology. We began by acknowledging postmodern approaches that propel the exploration of discourses and narratives in their own contextual setting. This approach disclosed the themes and patterns in the discourses that one could have missed otherwise. Given India's colonial past, the popularity of postcolonial methods was apparent and particularly interesting. It became evident that modern assumptions and anti-colonial spirit shaped the interreligious exchange between the Advaitic and early modern Indian Christian thinkers. Similarly, the liberative discourse was articulated in the language of resistance to the Brahminical, colonial and neo-colonial forces. However, the historical, cultural, and philosophical investigation into postcolonialism found it wanting. It was also critiqued for its tendency to fit all knowledge, including theology, into the power grid and for marginalising other factors, such as practical needs and the role of reality that is crucial to our approach to knowledge. However, the postcolonial emphasis on power dynamics was acknowledged. In the absence of postcolonial context, other contextual factors were influential, such as a specific understanding of relationality that shaped the Western Trinitarian discourse. Thus, all discourses affirmed the postmodern insight that our context profoundly influences our preference for certain theories and models. On the other hand, it was also recognised that too strict a focus on contextual embeddedness can create a bias that may hinder one's view of the complete picture or reality. The discourses on the material world themselves provided several clues that would raise them beyond the contextual grid.

The *second* milestone, therefore, was to investigate these clues. Our exploration revealed that although they grow in distinct cultural soils, pursue different aims and follow diverse methodologies, these discourses are not entirely unrelated. Firstly, they are united in their search for a model of God-world relationality that makes sense of their experiences of the material world and the new knowledge that natural sciences bring. Moreover, they are united by the object of their conversation, in this case, the material world, which is available to all and acts as a point of reference. They also hold that their theological theories have significant implications for science and humanity, which is why they hold them with "universal intent." As a result, they are eager to engage in dialogue with those with differing idioms of nature. This is as true for interreligious dialogue as it is for intercultural theological exchange. However, in addition to all factors mentioned above, the latter is also necessitated by the global identity of the Christian faith and a shared heritage of Christian theology. These findings make interreligious and intercultural dialogue both possible and desirable.

The *third* milestone brought the point home that the intercultural approach enriches both the contextual and the global theological conversation. We have already observed that contextual dynamics are crucial in developing theological theories and statements. Investigating discourses on nature within their immediate context is like placing them under a microscope to observe the details we would have otherwise missed. This approach adds depth to the global discussion on a theological issue and helps avoid unhealthy generalisations and assumptions.

On the other hand, an intercultural approach informed by contextual realities is better positioned to engage with theological issues than contextual theologies themselves are. An example from the research may help here. During the study, we observed that while several Indian ecofeminist, ecotheological and Dalit voices consider the ontological connection as the ground of relationality between God and the material world, for Gunton, relationality is based on otherness. These distinct understandings are shaped by their cultural location; however, an intercultural exchange leads to an understanding of relationality that is cross-culturally informed. Thus, we concluded that both oneness and otherness are to be recognised as crucial markers of relationality. In this research, I have argued that the Trinitarian God offers a paradigm where both the needs of ontological connection with God, as well as otherness from him, meet – the Spirit's relation to the material indicates God's otherness from the material world, whereas the materiality of the incarnated Son signifies God's ontological connection with his creation. This conclusion provides a ground to fruitfully

engage with contextual issues. Thus, for instance, while Trinitarian theology agrees with the emphasis on ontological connections between God and the world found in ecofeminist, ecotheological and Dalit theologies, it also saves them from losing sight of the ontological distinction. Conversely, the ontological homogeneity of the material Son with creation discloses the cultural bias in Gunton's understanding of relationality as based solely on otherness.

To take another example, an intercultural theology of nature that upholds spirit and matter can fruitfully engage with both Advaita and materialistic strands in India. On the one hand, the Advaitic stress on the real behind the illusion of the world resonates with the role of the Spirit as one who envelopes the creation and engages with it, leading it to the purposes of God. Similarly, the emphasis on bodily experiences in the materialistic schools resonates with the material Christ. On the other hand, with its understanding of relationality that emphasises both spirit and matter, the intercultural theology of nature can critique both the Advaitic tendency to subjugate matter and the materialistic tendency to reduce existence to materiality.

The theology of the material world that emerges from the intercultural exchange thus points to what Hendrik Kraemer has called the "subversive fulfilment" aspect of the Christian gospel.[1] As such, it meets the longing in other idioms of God-world relationship while subverting notions that undermine either the spiritual or material or both.

These findings, then, aid in formulating a response to our research question: The intercultural approach adopted in this project serves and enhances contextual and global theological discussions on the material world and its relationship with God in the context of science.

Contribution Beyond Intercultural Theology

In addition to its field, the interculturally informed Trinitarian theology of the material world pursued in this project also significantly contributes to several other fields of knowledge.

[1] Hendrik Kraemer, 'Continuity or Discontinuity', in *The Authority of the Faith*, ed. William Paton (Oxford: Oxford University Press, 1939), 1–23. Also, Benno Van den Toren and Kang San Tan, *Humble Confidence: A Model for Interfaith Apologetics* (Downers Grove, IL: InterVarsity Press, 2022), 164–69.

Science and Religion

Intercultural theology and interreligious dialogue share several traits with science and religion dialogue. All three are initiated from a given context and are dialogues about a third reality or a point of reference.

This research has focused on the contextual realities that frame the science and religion dialogue in a particular way. In the Western context, the dialogue between science and religion is often assumed to work like a meeting between two individuals or entities. Their relationship is also described, as in Ian Barbour's famous typology, in terms of conflict, independence, dialogue, and integration. However, the interlocutors in this project do not see the dialogue between science and religion in the same way. Instead, they consistently connect the insights about nature offered by science to other concerns in their context. This research indicates that science and religion are rather related, as in a web, to several contextual concerns, such as the colonial past, religious pluralism, economic poverty, and social inequalities. Therefore, although the typologies are helpful to understand the relationship between science and religion, it is often not straightforward but complex and intertwined with other concerns, as this research has shown. By laying open the contextual pressures, this research contributes to the sociology of science and enhances the field of science and religion.

Moreover, this research also highlights the critical role of God-world relationality. We noticed that not only religious thinkers but also pragmatic thinkers, such as Nanda, consider it to be at the centre of the science-religion relationship. The voices in this research indicate that having a proper understanding of God-world relationality is foundational for science to prosper. This is because engaging with natural sciences becomes meaningful when the material world has significance. Metaphysical frameworks contribute to creating a particular perception of the natural and material world, facilitating or hindering the progress of natural science. In this sense and given what is at stake, this research argues for the need for a dynamic exchange between idioms of nature.

Interreligious Dialogue

The interreligious dialogue explored in this study shows the scope and influence of idioms in which the interlocutors are embedded. It indicates that interreligious dialogue cannot be orchestrated by assuming that two religious idioms are entirely different or essentially the same. Both approaches harm the possibility of interreligious dialogue: the former by rejecting any common ground between them and the latter by downplaying the differences between

them. On the contrary, the interlocutors in this project are both embedded in their idiom and yet are eagerly and enthusiastically engaged in dialogue with science and each other. The way to interreligious dialogue, therefore, is not by bypassing the idioms but through them. Christians should expect other interlocutors to present their idioms sincerely while always being ready to explain their idiom about the material world to those who ask (1 Pet. 3:15).

Political Theology

Trinitarian theology is often accused of being idealistic and irrelevant. Far from it, the Trinitarian theology of the material world pursued in this project provides robust foundations for political action and an impetus for engaging in "this-worldly" affairs. By emphasising both materiality and spirituality, it calls out ideologies and theologies that overlook material needs or disparage spiritual longings. Instead, it provides a template for pursuing justice for those whose material bodies are objects of subjugation and whose spiritual longings are brushed aside. In doing so, it also enhances Christian understanding of mission that is integral, involving both spiritual and material dimensions of human existence.

Limitations and Further Research

Despite the valuable insights this research has provided in the subject of science and religion, it is crucial to acknowledge its limitations. They also reveal my own constraints and biases that influenced this study in various ways.

The observation that the sociocultural context influences science and religion discourse is, first of all, equally applicable to the researcher of this study. I have engaged with this study as a male, Indian, Christian, theologian. All these and many more aspects of my identity provide me with some strengths and some limitations. It has influenced my choice of subject, voices, methodologies and more. Though I have tried to mitigate many of my prejudices through the texts that I engaged with, dialogues and discussions that I was part of, and personal interaction with friends and critics, many of the biases are hard to see, let alone acknowledge. Moreover, the constraints of time and financial resources also posed different challenges, particularly in exploring certain facets of the subject in greater detail than other. Regardless of these limitations, I have tried to maximise the usage of the resources at my disposal effectively and contribute to the field of science and religion.

There are also other limitations that open avenues for further research.

Firstly, this study has been limited in exploring the conversation on nature between Advaita thinkers and their Christian counterparts. As previously stated, this restriction is a result of historical contingencies. Advaita is one of the six schools within Hinduism, each of which differs in its understanding of how God relates to nature. Christian intellectuals have engaged with other schools of Hinduism, which can be explored in a separate study.

Secondly, this study has engaged with panentheism to a limited extent, focusing primarily on the Indian voices. Western panentheistic voices, such as Philip Clayton and Catherine Keller, can be included to broaden the scope of this engagement. Although my assessment of panentheism may still apply, my hunch is that the factors driving the popularity of panentheism in the West and India differ, even if they lead to the same conclusions about God-human-nature interrelationality. This should present a more nuanced picture of panentheism's beliefs about nature and facilitate a more robust engagement.

Thirdly, for the past few decades, ecological discussions have dominated the conversation on nature for valid reasons. Although ecological concerns have been considered in this study, the primary focus has been on natural sciences. However, if metaphysical frameworks are crucial to our idioms of nature, as this research indicates, they should also shape our approach to the environmental crisis. Future studies can, therefore, explore the potential role of metaphysical frameworks in responding to ecological crises.

Fourthly, the intercultural exchange in this research has been limited to India and the Anglo-Saxon theologians. Including other Christian traditions in a similar study would enhance the discourse on science and religion. Likewise, expanding the geographical scope to other non-Western contexts, such as African or South American, would enrich the global discourse on science and religion.

To Conclude

The intercultural theology of the material world pursued in this research stems from the Trinitarian God we encounter in the Bible. As such, this is a specifically Christian understanding of nature. However, can it be relevant to those who do not share this understanding?

In fact, like all interlocutors encountered in the research, Christians hold their idiom about nature with "universal intent." This means that they hold with confidence that the Trinitarian framework explored in this research meets the human quest for spirituality and materiality,

everywhere and for everyone. We have already noticed that the desire to be universal is natural to all perspectives. Yet, the “universal intent” in Christian theology does not stem from its wish to be universally applicable alone but from the conviction that in Christ, the reality of God has confronted humanity. This reality has shaped the Christian understanding of the material world. Such a critical realist understanding is fundamental to the Christian faith itself and should motivate Christians to confidently present their view of the material world as one that is anchored in the reality of God. It should also keep a Christian perspective on the material world open to other interpretations of reality, as well as the findings of science that offer a window to the nature of nature. Therefore, engagement with science and other idioms of nature is inherent to the Christian understanding of reality.

As such, the Trinitarian theology of nature explored in this research is also an invitation to others who do not share the same idiom. However, the invitation is not based solely on the claim that the Christian idiom is a better story but that it is so because of its object, the God by and through whom all things were created (John 1:3; 1 Cor. 8:6; Col. 1:16; Heb. 1:3).

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Curriculum Vitae

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Experience

Lecturer, 2011-2019, Head of Department, Theology, 2015-2019, Filadelfia Bible College

- Taught subjects related to theology, ethics and religion to Bachelor of Theology and Master of Divinity students.
- Engaged in professional development activities, research projects, and scholarly contributions to the field of theology, enriching the academic environment and advancing knowledge
- Cultivated relationships with students, alumni, and external partners to promote engagement, collaboration, and community involvement in theological education and ministry
- Represented the Department of Theology in institutional committees, meetings and events
- Developed and implemented departmental policies, procedures, and initiatives to enhance the quality of theological education and promote academic excellence
- Provided mentorship, guidance, and resources to foster growth

Associate Editor, 2011-2019, Consultant Editor, 2019-present, Open Door Publications

- Coordinated editorial processes, including brainstorming for theme, article selection, manuscript review and publication scheduling to ensure timely delivery of high-quality content
- Managed a team of writers, editors and contributors, providing guidance and feedback to enhance the overall quality and coherence of publications
- Oversaw the development and implementation of editorial policies and guidelines to maintain consistency and adherence to public standards
- Conducted thorough editing and proofreading of articles, manuscripts and other written materials to ensure accuracy, clarity and grammatical integrity.
- Collaborated with graphic designers, photographers, and other multimedia professionals to enhance the visual appeal and presentation of publications.

State Coordinator, 2008-2010, Evangelical Fellowship of India

- Successfully managing day-to-day operations for the organisation in the region
- Managed human resources functions, including recruitment, performance management and employee relations, fostering a positive and inclusive work environment
- Effectively communicated with stakeholders at all levels, including board members, volunteers, and external partners, through written reports, presentations, and verbal exchanges
- Provided leadership and direction, inspiring and motivating team members to achieve organisational objectives and uphold the values and mission of the organisation
- Coordinated training, socio-economic development, distribution, research and communication activities.

Education

Master of Theology, South Asia Institute of Advanced Christian Studies, Bangalore	2006-2008
Master of Divinity, Trivandrum Bible College, Trivandrum, Kerala	2003-2005
Bachelor of Theology, Bethel Bible College, Chandigarh	1999-2002
Bachelor of Arts in English Literature (extension), Gujarat University	2009-2012

Publications

Academic Publications

Christian, Charles and Benno van den Toren. "The Nature of Material Reality: Interreligious Conversations at the Cusp of Modern Science in India," *Philosophy, Theology and the Sciences* 9, No.2 (2022): 173-196.

Contributions to Bible Commentary

'Holy Place and Pilgrimage,' *South Asia Bible Commentary*, 2015.
'Interreligious Marriage,' *South Asia Bible Commentary*, 2015.
'Human Sexuality,' *South Asia Bible Commentary*, 2015.

Contribution in Books

Jesus, God's New Way: A Study of the Book of Hebrews, with Kuruvilla Chandy, 2017.

Great Awakening: The Influence of the Bible on Hindu Conception of Scripture, Community and Mission during the Indian Renaissance, 2017.

Scholarly Presentations

"*Great Awakening: The Influence of the Bible on Hindu Conception of Scripture, Community and Mission during the Indian Renaissance*." A paper presented at Sam Higginbottom University of Agriculture, Technology and Sciences, Allahabad, India, November 2017.

"The Place of Marginal Voices in the Science-Religion Discourse: An Indian Experience." A paper presented at Wycliffe Hall, Oxford, April-May, 2019.

"The Nature of Material Reality: Interreligious Conversations at the Cusp of Modern Science in India." A paper presented at the European Academy of Religion Conference, August 2021.

"To be God-like?: 'createdness' in the Age of Enhanced Technology." A paper presented at the University of Pretoria, Pretoria, November 2022.

Teaching

Guest Lecture on *Christianity in India* for the students of Intercultural Theology, BA (December 2020 and December 2022)

Co-teaching *Theology of Interreligious Encounter and Witness* with Benno van den Toren (November 2021-January 2022, November 2022-January 2023) and with Bosco Bangura (November 2024-January 2025)

Co-teaching *The Gospel and Pluralism* to students of MA in Intercultural Theology at Asia Gateway Training, Malaysia, with Benno van den Toren (online classes on 19 and 26 August, 2024)

Other Experiences and Language Skills

- Student Assistant responsible for managing the Centre for Theology and Christianity Worldwide website.
- Assisting in organising "Where is God in Lived Religion?" conference at Protestant Theological University (2025)
- Member of the editorial team for the upcoming volume, "How to do Your PhD in Theology?"
- Fluency in English, Hindi and Gujarati. Basic proficiency in Dutch

Summary

The burden of this research was to explore the potential contribution of an intercultural theological conversation to the contextual theology of nature in India and beyond. To achieve this, I orchestrated a dialogue between three distinct discourses – interreligious, liberative and Trinitarian – and situated the research in the domain of science and religion.

In the introduction, I analysed the recent sociological studies and postmodern approaches to science, and argued that they open a fertile space to creatively articulate a theology of nature. This new space is not burdened by old stereotypes, such as conflict between science and religion, is open to the marginalised voices, and holds the potential to catalyse interreligious dialogue on nature. That this is the case both in India and the wider Western context sets the stage for a meaningful intercultural dialogue on nature. Moving forward, I argued that in the Indian context, there are at least two discourses wherein the deliberations on nature can be found. The first is a series of interreligious exchanges between Advaitic and Indian Christian thinkers at the cusp of modern science in India. The second discourse emerges from Dalit perspectives on nature. Further, I added the Trinitarian discourse on nature, particularly found in the works of Colin Gunton, in the context of science and religion in the West. The following chapters then explore themes and motifs concerning nature that emerge in each of these discourses, before I interlace them to answer our main research question. In the same introductory chapter, I also introduced the research as a subject of contextual theology, the method of triangulation, and justified the methodology of intercultural theology and critical realism that I have followed in the project. Subsequently, I described the relevance of the subject, key terms, limitations of the study and the structure of the study.

In Chapter Two, I further analysed the postmodern approaches and argued that science and religion dialogue in India is deeply shaped by postcolonial approaches, which required a thorough engagement with its main tenets at the outset of the research. Accordingly, I engaged with its claims and critically tested its conclusions in the Indian setting. I presented the postcolonial diagnosis of modern science as a violent and oppressive mechanism that, from its beginning in the metropolis till its transfer to colonies and now through the native institutions, remains a tool of the empire to control and to exploit. Postcolonial conclusions had both politicised and pluralised discussion on science, thereby opening up new possibilities for science and religion dialogue. However, using several recent studies, I initiated a historical, contextual and philosophical investigation into postcolonial conclusions.

The investigation revealed the ambivalent nature of postcolonial theory and the urgent need to further postcolonise it for it to be relevant and effective. I have pursued this by including other marginalised voices, including those that challenge the postcolonial conclusions, thus providing a more nuanced picture of the Indian realities and the dialogue on nature shaped by them.

In Chapter Three, I delved into a concrete history of interreligious encounters between Advaitic and modern Indian Christian thinkers at the cusp of modernity. The chapter begins with a historical examination of the rise of Advaita in a colonial context, its entanglements with the scientific discoveries, and its implications for interreligious dialogue. We notice that growing realism, particularly under the shadow of evolutionary theory, influences the interreligious dialogue. Themes such as the reality of the material world, its purpose, cyclic time and *creatio ex nihilo*, become central issues in the dialogue between Advaitic and modern Indian Christian interlocutors. The analysis reveals how both dialogue partners grappled with power dynamics as well as with reconciling scientific claims with the teachings of their own religious traditions. It confirmed the social embeddedness of all science and religion dialogue. However, it also pointed out that interreligious dialogue cannot be reduced to power dynamics, but religious commitment and the reception of science as a window to truth about nature also play a significant role in motivation for dialogue. A proper understanding of the interlocutors' beliefs about nature, therefore, requires a more comprehensive view of the factors than mere power struggles. On the other hand, I also excavated several themes and motifs that emerged from this episode of interreligious dialogue on nature and would be crucial to develop an Indian Christian perspective on nature. Despite this contribution, the fact that this interreligious dialogue on the nature of nature took place during the heyday of modern science and was limited to a select group of people meant that the conversation needed to be expanded to include other marginalised voices who may have responded to modern science differently.

Therefore, in Chapter Four, I deliberately turned to explore liberative discourse, particularly Dalit reflections, on nature in the context of modern science. A brief overview of the current debates revealed that the conversations on nature in liberative discourse were entangled in the politics of development and ecology. The Gandhian approach, a leading voice in the field, exposed the incursions of modern science as destructive to indigenous communities, including Dalits, and the environment. This had a follow-up from Christian theological conversations on nature, where the dualism inherent to modern science was placed against

the holistic native conceptions of nature. Theologically, this meant that notions that drive a deep wedge between God, humanity and nature were rejected in favour of a holistic relationality between the three. For many ecofeminists, ecotheologians and Dalit theologians, the panentheistic model of God-world relationship held a promise of deep relationality. From here, I picked up several building blocks for an Indian Christian theology of nature in my stride, such as the image of the world as God's body and the longing for a God who is intrinsically and materially connected to his creation. However, adding new voices to the discussion, I also pointed out that Dalit thinkers were not *en bloc* in favour of such deep relationality; rather, contemporary Dalit literature on environment and science indicates that some forms of holism are a hotbed of pseudosciences and oppressive for Dalits. These voices complexify the liberative discourse on science, religion and nature in India, and yet (as in chapter two) are required to be included if the discussion on nature is to be truly postcolonised. Having investigated the liberative discourse, therefore, I concluded that for Dalits themselves, the pantheistic and panentheistic images of God-world relationality are not entirely healthy for liberation; rather, they would need a model of God-world relationality that avoids the pitfalls of both holism and dualism.

I found in Colin Gunton the claim that such an understanding of relationality was possible through a Trinitarian theology of nature, to which I turned in Chapter Five. Having justified the possibility and desirability of having Gunton in this intercultural dialogue, I explored his model of God-world relationship, where otherness is necessary to proper relationality. Gunton traces the relationality based on otherness, in creatio ex nihilo, which sets God and creation as distinct from one another. However, his most significant contribution to the theology of nature is his utilisation of the Irenaean analogy of God-world relationality, whereby God engages with the world through his two hands: the Son and the Spirit. Furthermore, the involvement of the Spirit in the life of the Son, from his birth, temptations, death, resurrection and ascension, all serve to exemplify God's relationship with the entire creation. While helpful in maintaining a distinction between God and the world, Gunton's work remains open to the critics of Social Trinitarianism who argue that the ontological priority given to relationality in intra-trinitarian relations jeopardises or at least overlooks the unity of God. Conversely, his emphasis on relatedness in otherness is open to criticism from ecofeminists, ecotheologies and certain Dalit theological streams, who view otherisation negatively and regard oneness as a hallmark of holism. I have argued that Gunton's stress on otherisation as a prerequisite for relationality divulges his own cultural bias, and that his

contribution would be enhanced by incorporating the emphasis on ontological connection between God and the material world, found in various ecotheologies, ecofeminist, Dalit and Panentheistic perspectives. This means that a proper understanding of relationality between God and the material world needs to highlight both his ontological distinction from and ontological homogeneity with the material world. I have argued that this can be achieved, not by turning to panentheism, but by returning to incarnation.

However, before fleshing out the implications of incarnation for the theology of the material world in the context of India, in Chapter Six, I take a detour to gather and examine the insights yielded by preceding discussions concerning our methodologies of intercultural theology and critical realism. The chapter concludes that all foregoing discourses on nature, are deeply embedded in specific cultural locations, and are influenced by given power structures, personal ambitions and commitment to certain religious idioms. However, the interlocutors themselves do not consider their convictions to be mere consequences of their cultural location; rather, they hold them to correspond with reality. Consequently, they hold them with a universal intent, which supplies them with a motivation for dialogue and a possibility of conversion of the other. Furthermore, they hold that science, like their religious idiom, reveals the reality of nature as it is, and therefore, the engagement with it is logical and promising. While these factors enhance the possibility of a fruitful trilogue between science and different religious traditions, the possibility of pseudoscience and pseudo-theologies points to the need for a stringent point of reference in the dia/trilogue. This is where interreligious dialogue and intercultural theology can benefit from the methodology of critical realism, which emphasises both the cultural embeddedness of theories and the epistemic priority of the reality that those theories aim to describe. What this means for an intercultural theology of nature is that while being informed by different contexts, its conclusions are always dictated by the reality of the Triune God. With this, I return to the theology of the material world that is by now enriched by the intercultural gleanings and is based on the action of the Trinitarian God towards His creation.

Having established these methodologies, Chapter Seven offers a constructive proposal for a theology of the material world, interweaving themes and motifs gathered from the preceding three discourses on nature. Here, I propose the material Christ, the Godbody, as the locus for the theology of the material world. Following it, I draw from several episodes from the life of Jesus, elaborating on their significance for our understanding of the material world we inhabit. Towards the end of the chapter, I briefly describe how this contextual theology of the

material world provides a footing for me, as a researcher, and hopefully for other Indian as well as non-Indian Christians, to engage with the diverse voices explored in this research.

Nederlandse Samenvatting

De centrale doelstelling van dit onderzoek was het verkennen van de mogelijke bijdrage van een intercultureel theologisch gesprek aan de contextuele theologie van de natuur in India en daarbuiten. Om dit te bereiken, heb ik een dialoog tot stand gebracht tussen drie aparte discoursen – interreligieus, bevrijdend en Trinitair – en het onderzoek gepositioneerd binnen het domein van wetenschap en religie.

In de inleiding heb ik de recente sociologische studies en postmoderne benaderingen van de wetenschap geanalyseerd en betoogd dat deze een vruchtbare ruimte bieden om op creatieve wijze een theologie van de natuur te formuleren. Deze nieuwe ruimte is niet belast met oude stereotypen, zoals het conflict tussen wetenschap en religie, is open voor gemarginaliseerde stemmen en heeft het potentieel om interreligieus dialoog over de natuur te stimuleren. Dat dit zowel in India als in de bredere westerse context het geval is, baant de weg voor een zinvol intercultureel dialoog over de natuur. Vervolgens heb ik betoogd dat er in de Indiase context minstens twee discoursen zijn waarin over de natuur wordt gediscussieerd. Het eerste is een reeks interreligieuze uitwisselingen tussen Advaitische en Indiase christelijke denkers aan de vooravond van de moderne wetenschap in India. Het tweede discours komt voort uit Dalit-perspectieven op de natuur. Verder voegde ik het Trinitarische discours over de natuur toe, dat met name te vinden is in het werk van Colin Gunton, in de context van wetenschap en religie in het Westen. In de daaropvolgende hoofdstukken worden thema's en motieven met betrekking tot de natuur onderzocht die in elk van deze discoursen naar voren komen, waarna ik ze met elkaar verweef om onze belangrijkste onderzoeksvraag te beantwoorden. In hetzelfde inleidende hoofdstuk introduceer ik ook het onderzoek als een onderwerp van contextuele theologie en de methode van triangulatie. Daarnaast rechtvaardig ik de methodologie van interculturele theologie en kritisch realisme die ik in dit project heb gevolgd. Vervolgens beschrijf ik de relevantie van het onderwerp, de belangrijkste termen, de beperkingen van het onderzoek en de structuur van het onderzoek.

In hoofdstuk twee heb ik de postmoderne benaderingen verder geanalyseerd en betoogd dat de dialoog tussen wetenschap en religie in India sterk wordt beïnvloed door postkoloniale benaderingen, wat een grondige verdieping in haar belangrijkste principes vereiste aan het begin van het onderzoek. Vervolgens heb ik me beziggehouden met haar beweringen en haar conclusies kritisch getoetst in de Indiase context. Ik heb de postkoloniale diagnose van de moderne wetenschap gepresenteerd als een gewelddadig en onderdrukkend mechanisme dat, vanaf haar begin in de metropool tot aan de overdracht naar de koloniën en nu via de oorspronkelijke instellingen, een instrument blijft van het rijk (Empire) om te controleren en uit te buiten. Postkoloniale conclusies hebben de discussie over wetenschap zowel gepolitiseerd als gepluraliseerd, waardoor nieuwe mogelijkheden voor de dialoog tussen wetenschap en religie zijn ontstaan. Niettemin heb ik, gebruik makend van verschillende recente studies, een historisch, contextueel en filosofisch onderzoek naar postkoloniale conclusies geïnitieerd. Het onderzoek bracht de ambivalente aard van postkoloniale theorie aan het licht en de dringende noodzaak om deze verder te postkoloniseren om relevant en effectief te zijn. Ik heb dit nagestreefd door andere gemarginaliseerde stemmen mee te nemen, waaronder die welke de postkoloniale conclusies betwisten, waardoor een genuanceerder beeld ontstaat van de Indiase realiteit en de dialoog over de natuur die daardoor wordt gevormd.

In hoofdstuk drie heb ik me verdiept in de concrete geschiedenis van interreligieuze ontmoetingen tussen advaita-denkers en moderne Indiase christelijke denkers aan het begin van de moderniteit. Het hoofdstuk begint met een historisch onderzoek naar de opkomst van Advaita in een koloniale context, haar verwevenheid met de wetenschappelijke ontdekkingen en haar implicaties voor de interreligieuze dialoog. We constateren dat groeiend realisme, met name in de schaduw van de evolutietheorie, de interreligieuze dialoog beïnvloedt. Thema's zoals de realiteit van de materiële wereld, haar doel, cyclische tijd en creatio ex nihilo, worden centrale kwesties in de dialoog tussen advaitische en moderne Indiase christelijke gesprekspartners. De analyse laat zien hoe beide gesprekspartners worstelden met machtsverhoudingen als ook met het verzoenen van wetenschappelijke beweringen met de leer van hun eigen religieuze tradities. Het bevestigde de sociale inbedding van alle dialoog tussen wetenschap en religie. Het wees er echter ook op dat de interreligieuze dialoog niet kan worden gereduceerd tot machtsverhoudingen, maar dat religieuze toewijding en de acceptatie van wetenschap als een venster op de waarheid over de natuur ook een belangrijke rol spelen in de motivatie voor dialoog. Een goed begrip van de opvattingen van de

gesprekspartners over de natuur vereist daarom een bredere kijk op de factoren dan alleen machtsstrijd. Anderzijds heb ik ook verschillende thema's en motieven blootgelegd die uit deze episode van interreligieus dialoog over de natuur naar voren kwamen en die cruciaal zouden zijn voor de ontwikkeling van een Indiaas christelijk perspectief op de natuur. Ondanks deze bijdrage, betekende het feit dat deze interreligieuze dialoog over de aard van de natuur plaatsvond tijdens de bloeitijd van de moderne wetenschap en beperkt was tot een selecte groep mensen, dat het gesprek moest worden uitgebreid met andere gemarginaliseerde stemmen die mogelijk anders op de moderne wetenschap hebben gereageerd.

Daarom heb ik me in hoofdstuk vier bewust gericht op het verkennen van het bevrijdende discours, met name Dalit-reflecties, over de natuur in de context van de moderne wetenschap. Een beknopt overzicht van de huidige debatten bracht aan het licht dat de gesprekken over de natuur in het bevrijdende discours verstrengeld waren met de politiek van ontwikkeling en ecologie. De Gandhiaanse benadering, een toonaangevende stem op dit gebied, onthulde het destructieve effect van de invasie van de moderne wetenschap voor inheemse gemeenschappen, waaronder Dalits, en het milieu. Dit kreeg een vervolg in christelijke theologische discussies over de natuur, waarin het dualisme dat inherent is aan de moderne wetenschap werd afgezet tegen holistische oorspronkelijke opvattingen over de natuur. Theologisch gezien betekende dit dat opvattingen die een diepe kloof tussen God, de mensheid en de natuur creëren, werden verworpen ten gunste van een holistische relationaliteit tussen deze drie. Voor veel ecofeministen, ecotheologen en Dalit-theologen bevatte het panentheïstische model van de relatie tussen God en de wereld een belofte van diepe relationaliteit. Vandaaruit heb ik verschillende bouwstenen voor een Indiase christelijke theologie van de natuur opgepikt en meegenomen, zoals het beeld van de wereld als het lichaam van God en het verlangen naar een God die intrinsiek en materieel verbonden is met zijn schepping. Door nieuwe stemmen aan de discussie toe te voegen, wees ik er echter ook op dat Dalit-denkers niet unaniem voorstander waren van een dergelijke diepe relationaliteit; uit hedendaagse Dalit-literatuur over milieu en wetenschap blijkt juist dat sommige vormen van holisme een broedplaats zijn voor pseudowetenschappen en onderdrukkend voor Dalits. Deze stemmen maken het bevrijdende discours over wetenschap, religie en natuur in India complexer, maar moeten (zoals in hoofdstuk twee) worden meegenomen als de discussie over de natuur echt postkoloniaal wil zijn. Na onderzoek van het bevrijdende discours kwam ik daarom tot de conclusie dat voor Dalits zelf de pantheïstische en panentheïstische beelden van de relationaliteit tussen God en de wereld niet geheel gezond zijn voor bevrijding; zij

hebben eerder behoefte aan een model van relationaliteit tussen God en de wereld dat de valkuilen van zowel holisme als dualisme vermijdt.

Ik vond bij Colin Gunton de stelling dat een dergelijk begrip van relationaliteit mogelijk was door middel van een trinitaire theologie van de natuur, waarop ik in hoofdstuk vijf ben ingegaan. Na een rechtvaardiging van de mogelijkheid en wenselijkheid om Gunton te gebruiken in dit interculturele dialoog, heb ik zijn model van de relatie tussen God en de wereld onderzocht, waarin anders-zijn noodzakelijk is voor werkelijke relationaliteit. Gunton traceert de relationaliteit op basis van anders-zijn in creatio ex nihilo, die God en de schepping van elkaar onderscheidt. Zijn belangrijkste bijdrage aan de theologie van de natuur is echter zijn gebruik van de Irenaeïsche analogie van de relationaliteit tussen God en de wereld, waarbij God met de wereld omgaat via zijn twee handen: de Zoon en de Geest. Bovendien illustreert de betrokkenheid van de Geest in het leven van de Zoon, vanaf zijn geboorte, beproevingen, dood, opstanding en hemelvaart, Gods relatie met de hele schepping. Hoewel Guntons werk nuttig is om een onderscheid te bewaren tussen God en de wereld, blijft het vatbaar voor critici van het sociaal trinitarisme, die betogen dat de ontologische prioriteit die wordt gegeven aan relationaliteit in intra-trinitaire relaties de eenheid van God in gevaar brengt of op zijn minst over het hoofd ziet. Omgekeerd staat zijn nadruk op verbondenheid in anders-zijn open voor kritiek van ecofeministen, ecotheologen en bepaalde Dalit-theologische stromingen, die het ‘anders maken’ (otherisation) negatief beoordelen en eenheid beschouwen als een kenmerk van holisme. Ik heb betoogd dat Guntons nadruk op het ‘anders maken’ (otherisation), als voorwaarde voor relationaliteit, zijn eigen culturele vooringenomenheid onthult en dat zijn bijdrage zou worden versterkt door daarin de nadruk op de ontologische verbinding tussen God en de materiële wereld op te nemen, die te vinden is in verschillende ecotheologische, ecofeministische, Dalit- en panentheïstische perspectieven. Dit betekent dat een goed begrip van de relationaliteit tussen God en de materiële wereld zowel zijn ontologische onderscheiding van als zijn ontologische homogeniteit met de materiële wereld moet benadrukken. Ik heb betoogd dat dit kan worden bereikt, niet door terug te keren naar het panentheïsme, maar door terug te keren naar de incarnatie.

Voordat ik echter, in hoofdstuk zes, de implicaties van incarnatie voor de theologie van de materiële wereld in de context van India uitwerk, neem ik een uitstapje om de inzichten te verzamelen en te onderzoeken die voortkomen uit eerdere discussies met betrekking tot onze methodologieën van interculturele theologie en kritisch realisme. Het hoofdstuk concludeert

dat alle voorgaande discussies over de natuur diep verankerd zijn in specifieke culturele contexten en beïnvloed worden door bepaalde machtsstructuren, persoonlijke ambities en toewijding aan bepaalde religieuze idiomen. De gesprekspartners zelf beschouwen hun overtuigingen echter niet als louter een gevolg van hun culturele context, maar zien ze als een weerspiegeling van de werkelijkheid. Bijgevolg hanteren ze deze overtuigingen met een universele intentie, wat hen motiveert tot dialoog en een mogelijkheid tot bekering van de ander. Bovendien zijn zij van mening dat de wetenschap, net als hun religieuze idioom, de werkelijkheid van de natuur onthult zoals die is, en dat het daarom logisch en veelbelovend is om zich daarmee bezig te houden. Hoewel deze factoren de kans op een vruchtbare trilogie tussen de wetenschap en verschillende religieuze tradities verhogen, wijst de mogelijkheid van pseudowetenschap en pseudotheologieën op de noodzaak van een strikt referentiepunt in de dia/trilogie. Hier kunnen de interreligieuze dialoog en de interculturele theologie profiteren van de methodologie van het kritisch realisme, dat zowel de culturele verankering van theorieën als de epistemische prioriteit van de werkelijkheid die deze theorieën trachten te beschrijven, benadrukt. Voor een interculturele theologie van de natuur betekent dit dat, hoewel zij wordt gevoed door verschillende contexten, haar conclusies altijd worden bepaald door de realiteit van de Drie-eenheid. Hiermee kom ik terug op de theologie van de materiële wereld, die nu is verrijkt door de interculturele inzichten en gebaseerd is op het handelen van de Drie-eenheid ten opzichte van Zijn schepping.

Na deze methodologieën te hebben vastgesteld, biedt hoofdstuk zeven een constructief voorstel voor een theologie van de materiële wereld, waarin thema's en motieven uit de voorgaande drie discoursen over de natuur met elkaar worden verweven. In dit hoofdstuk stel ik de materiële Christus, het Goddelijke Lichaam (Godbody), voor als de locus voor de theologie van de materiële wereld. Vervolgens put ik uit verschillende episodes uit het leven van Jezus en ga ik dieper in op hun betekenis voor ons begrip van de materiële wereld waarin we leven. Tegen het einde van het hoofdstuk beschrijf ik kort hoe deze contextuele theologie van de materiële wereld mij als onderzoeker, en hopelijk ook andere Indiase en niet-Indiase christenen, een basis biedt om in gesprek te gaan met de diverse stemmen die in dit onderzoek aan bod komen.