

# *Essays in Honor of Alister McGrath*

With Bethany Sollereder, "Introduction to *Essays in Honor of Alister McGrath*"; Peter Harrison, "What is Natural Theology? (And Should We Dispense with It?); John Hedley Brooke, "Revisiting William Paley"; Helen De Cruz, "A Taste for the Infinite: What Philosophy of Biology Can Tell Us about Religious Belief"; Michael Ruse, "The Dawkins Challenge"; Donovan O. Schaefer, "The Territories of Thinking and Feeling: Rethinking Religion, Science, and Reason with Alister McGrath"; Andrew Pinsent, "Alister McGrath and Education in Science and Religion"; Andrew Davison, "Science and Specificity: Interdisciplinary Teaching between Theology, Religion, and the Natural Sciences"; Victoria Lorrimar, "Does an Inklings Belong in Science and Religion? Human Consciousness, Epistemology, and the Imagination"; and Alister E. McGrath, "Response: Science and Religion—The State of the Art."

## DOES AN INKLING BELONG IN SCIENCE AND RELIGION? HUMAN CONSCIOUSNESS, EPISTEMOLOGY AND THE IMAGINATION

by Victoria Lorrimar 

*Abstract.* How do we come to *know* things, and how are such epistemological questions treated in the field of science and religion? Recent critiques of science and religion methodology argue for an anti-essentialist approach to science and religion that acknowledges their different epistemic territories and promotes interdisciplinarity. This article operates in such a vein, considering the contributions of Owen Barfield, member of the Inklings, an Oxford literary group, to the study of human consciousness, epistemology and metaphysics, and apologetics, all topics with particular relevance to science and religion. Barfield's understanding of the evolution of human consciousness as revealed by the history of language has scientific import, and may be developed by more intentional cross-disciplinary collaborations between psychological and cognitive scientists and humanities scholars. His approach to mythopoesis and the imagination resists scientific reductionism, and can inform epistemological dialogue between science and religion, as well as contemporary apologetics.

*Keywords:* Owen Barfield; epistemology; human consciousness; imagination; Inklings; methodology of science and religion

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How do we come to *know* things? How much weight do we give to suspicions, hunches, intuition—*inklings*—in our scholarly investigations? Do we expect different answers to this question depending on whether the scholar is a scientist or a theologian?

Such epistemological questions occupy a central place in the science and religion field. In fact, one means by which theologians in the twentieth century in particular pursued legitimacy in the academy was what Joshua Reeves (2019, 122) terms the “credibility strategy,” the recruitment of scientific methodology to justify theological claims. Reeves critiques the foundation of scientific essentialism which he argues underlies the entire field of science and religion, considering the work of Nancey Murphy, Alister McGrath, and J. Wentzel Van Huyssteen as representative of different approaches to understanding the essence of science (method, realism, and rationality, respectively).

Although Reeves’ overall argument against scientific essentialism is sound, the selection of McGrath as an example was perhaps unfortunate. In the same year as Reeves’ book was published, McGrath’s *The Territories of Human Reason* (2019) also came off the press. In it, McGrath develops his earlier thought on methodology in science and religion, arguing for multiple situated rationalities and expressing an anti-essentialist stance toward both science and religion (2019, 14). Perhaps in spite of his rigorous scientific training, in a number of his works and academic interests McGrath reveals that it is possible to do productive work in the science and religion field without defending the scientific validity of theological claims. Already interdisciplinary in nature, the field invites input from yet further subject areas, and McGrath’s diverse interests across science and the humanities inform his thinking about methodology in science and religion. Taking this broad interdisciplinary approach as a model here, key contributions from a group of scholars of literature with a keen interest in religion are drawn on as an example of how approaches with different epistemic profiles can come together in interesting ways.

The Inklings, an Oxford literary group whose most well-known members included C. S. Lewis and J. R. R. Tolkien, are enjoying somewhat of a renaissance in scholarship. They have inspired publication after publication, some verging on the hagiographical; from Roger Lancelyn Green and Walter Hooper’s 1974 biography of Lewis less than ten years after his death to the numerous Inklings-oriented walking guides to Oxford that have sprung up in more recent years. Though clearly an admirer, McGrath’s biographical writings on C. S. Lewis (2013a, 2013b) are more critical than many in the genre.

What have the Inklings to do with science and religion? None of the key members were scientifically trained, and Charles Williams and Owen Barfield, the group’s core members apart from Lewis and Tolkien, were both associated with esoteric traditions (Rosicrucianism and

Anthroposophy, respectively) that tended toward the pseudoscientific at times. The group were writing in the Romantic tradition in an era that preferred realism and empiricism. Taylor and Taylor, editors of a volume of Barfield's poetry and dramas, describe the Inklings as writing from "a desire to change the landscape of banality and empirical compulsion that seemed to define contemporary society" (Barfield 2020, 3). This going against the grain was a self-conscious, perhaps even polemical, project. Lewis, in an effusive review of the first volume of Tolkien's *The Lord of the Rings* in 1954, welcomed Tolkien's unashamed heroic romance at a time he described as "almost pathological in its anti-romanticism" (Lewis 1954, 31). In an unpublished essay, Barfield referred to the "creeping sclerosis" afflicting contemporary literature and mindset, the obstructing and arresting of which is the responsibility of the true poet.<sup>1</sup>

The members of the Inklings varied in their engagement with science. Tolkien and Lewis mostly confined their critique of science to its cultural elevation. Lewis, for example, traces the transformation of the scientific theory of evolution into a cultural metanarrative in his essay "The Funeral of a Great Myth" (2000b). Tolkien's literature is often read as a critique of industrialization and the technological destruction of nature.<sup>2</sup> Perhaps the Inklings to have produced the work most relevant for the study of science and religion is Owen Barfield. At the very least, his engagement with scientific theory was the most comprehensive and enduring. His theories surrounding the evolution of consciousness are admired by thinkers as diverse as physicist David Bohm and novelist Saul Bellow, however, his ideas have not received a great deal of attention from the academy.

Accordingly, the remainder of this article will focus on the main ideas put forward by Owen Barfield, which will be examined with a view to their fruitfulness for several areas of interest in science and religion: the study of human consciousness, metaphysics and epistemology, and apologetics.

#### OWEN BARFIELD

Isaiah Berlin famously categorized intellectual personality type according to a line from ancient Greek poet Archilochus: "The fox knows many things, but the hedgehog knows one big thing" (2013, 1). The hedgehog type, according to Berlin, adopts or strives toward a "single organizing principle" that orders all of their thought (1953, 2). Barfield owned to his own classification as a hedgehog (Lachman 2009), and that single principle that governed his thinking over decades was undoubtedly the evolution of human consciousness as reflected in the history of language.

Others have given more comprehensive biographies of Barfield,<sup>3</sup> a few pertinent facts must suffice here. Barfield and Lewis met as undergraduates at Oxford, so Barfield was a part of the Inklings from the group's beginning. Barfield studied language and literature and was profoundly

influenced by Romantic poetry, particularly Coleridge (Barfield 1971). Barfield was actually the first of the Inklings to publish a work of fantasy with *The Silver Trumpet* in 1925. This was followed closely by early philosophical treatises *History in English Words* (1926) and *Poetic Diction* (1928), in which we may find all the elements of his “one big idea” already. However, despite early promise, Barfield was unable to secure an academic post, and spent much of his life working as a solicitor. It was only upon his retirement from the legal profession at age 60 that he enjoyed a second career in academia, publishing seminal works such as *Saving the Appearances* (1957) and undertaking visiting lectureships and professorships in the United States.

One thing that significantly distinguished Barfield from his fellow Inklings was his commitment to Anthroposophy. Anthroposophy is a form of Western esotericism founded by Rudolf Steiner, an Austrian-born philosopher and self-designated clairvoyant. The movement grew out of theosophy, and was particularly influenced by the thought of German poet Johann Wolfgang von Goethe. The goal of Anthroposophy is to investigate spiritual experience scientifically, and emphasizes individual freedom and the unlimited nature of knowledge.<sup>4</sup> Steiner’s legacy is far-reaching—the Anthroposophical Society of Great Britain attributes cultural innovations in the areas of education, agriculture, medicine, architecture, science, and the arts to the movement he founded. In particular, Barfield was drawn to Steiner’s ideas about the evolution of human consciousness, his argument that over time humans became estranged from the spiritual world and their divine origins through an increasing preoccupation with sense perception and materialism (Steiner 1922, 264). The influence of Steiner will be revisited as Barfield’s thought is outlined below.

#### TERMINOLOGY

Barfield is profoundly interested in *how* we come to know things, not just what can be known. His typology of thinking is organized according to the object of thought, and a brief introduction is necessary to follow his understanding of consciousness and potential contribution to science and religion scholarship. The terminology is unfamiliar because Barfield intends it to be so, rather than to risk partial or assumed understanding regarding more familiar terms. Barfield describes three different kinds of mental activity or thinking: figuration, alpha-thinking and beta-thinking, and the relationship of each to “representations.”

Figuration is the act of transforming sense-data into “representations” or mental pictures. It is unconsciously done, and relies on mental activity (including memory, imagination and emotion) to convert whatever it is that is “unrepresented” into phenomena for us, for example, the smell of coffee (Barfield 1965, 20, 24). Barfield distinguishes between private

representations, the product of dreams or hallucination, and shared, or collective, representations. The familiar world that most of us perceive and accept as real is actually a “system of collective representations” (1965, 20).

Alpha-thinking is the thinking *about* the representations that arise from figuration. It is a more conscious process than figuration in that we are reflecting on and theorizing about representations, and their relationship to one another, but less conscious in that we treat the representations as completely independent of us, rather than involving our own mental activity (Barfield 1965, 24). Alpha-thinking is the main activity of most scientific investigation, or the study of history. Beta-thinking occurs when our thinking is directed at the nature of perception or the process of thinking, and therefore consciously reflects on the involvement of our own minds in the forming of representations and our thinking about them (Barfield 1965, 25).

Because our representations are a combination of both whatever is entirely independent of our sensation and perception and therefore unrepresented (Barfield sometimes refers to this unrepresented as “particles”) and the work of our minds to organize this into recognizable objects, we *participate* in the phenomena we perceive. And what stands behind the phenomena?

Physical science postulates an unrepresented, as a something which is independent of our consciousness in a way, or to an extent to which the phenomena are not. Our consciousness is, however, not independent of *it*; for it is in response to its stimulus that our senses and our figuration and thinking together construct the phenomenal world. (Barfield 1965, 153)

Barfield’s “one big thing” that he knows concerns the relationship between phenomena and the mind, and the way that we have experienced or understood this relationship throughout history.

#### EVOLUTION OF CONSCIOUSNESS

For Barfield, the evolution of language gives us a window into the evolution of consciousness itself. The use of language reflects the way in which the user(s) perceive the world; therefore changes in language use must reflect changes in perception of the world (Treinen 2020, 58). “Language contemplated is a mirror of my consciousness and its evolution” (Barfield 1981, 61). Language and art traffic in the collective representations of their time (Barfield 1965, 72–73). The world we live in is simply the sum of our collective representations, and therefore it is accurate to say that we do not live in the same world as humans of earlier times. Early humans did not look at the same phenomena as we do and reason about it differently (e.g., by attributing spirits as cause), their representations were

different because they were generated by different minds. For this reason, we cannot impose our present structures of thought onto past epochs (di Fuccia 2016, 29).

How were earlier minds different to ours? “Before the scientific revolution the world was more like a garment men wore about them than a stage on which they moved” (Barfield 1965, 94). Barfield (1965, 76–77) attempts to reconstruct the collective representations of the mediaeval world in an evocative description of light from living heavenly bodies, the four elements of the earth experienced inwardly as the four humors, creature and cosmos woven together by “invisible threads.”

Barfield charts the course of human consciousness from this state, which he terms “original participation,” to one characterized by alpha-thinking. And the effect of alpha-thinking is to destroy the experience of participation in phenomena—in order to study phenomena we separate it as object distinct from the observing subject (Barfield 1965, 43).

A shift of consciousness away from original participation toward alpha-thinking began with the birth of philosophy, with a movement from a focus on the inner to the outer world evident in the thought of Aristotle when compared with that of Plato (Barfield 1967a, 107). Systematic alpha-thinking began with astronomy, according to Barfield (1965, 43). Francis Bacon’s distinction between ancient and modern, and notion of “progress,” are key milestones in this evolutionary process, as is the Cartesian divide between mind and body. Barfield describes its culmination at the end of the nineteenth century as “a system of thought which only interests itself in phenomena to the extent that they can be grasped as independent of consciousness” (1965, 43).

Barfield describes the evolution of consciousness as “the progressive decline of participation” (1965, 105). He summarizes his argument helpfully:

... the evolution of nature is correlative to the evolution of consciousness; and... the evolution of consciousness hitherto can best be understood as a more or less continuous progress from a vague but immediate awareness of the ‘meaning’ of phenomena towards an increasing preoccupation with the phenomena themselves. The earlier awareness involved experiencing the phenomena as representations; the latter preoccupation involves experiencing them, non-representationally, as objects in their own right, existing independently of human consciousness. (Barfield 1965, 142)

No longer conscious of our participation in phenomena, we perceive them differently. And to treat phenomena as objects completely independent of us is to make them into idols, according to Barfield. This is the “besetting sin” of science—the attribution to phenomena of the ultimate independence which is only true of the “unrepresented” (Barfield 1965, 62). Our

collective representations are falsely granted objective reality (Reilly 1976, 53).

Not only does Barfield chart a decline in participation throughout history, but this is accompanied by a growing emphasis on inwardness and the self. Thus, he describes the Reformation, and its preoccupation with inner grace, as “another manifestation of that steady shifting inward of the center of gravity of human consciousness” already identified in modern science (1967, 158).

#### ANCIENT SEMANTIC UNITY

It is through reading poetry that Barfield came to these conclusions. He describes a “felt change of consciousness,” whereby the accustomed consciousness is, for a moment, “shed like an old garment” and one perceives in “a new and strange light” (Barfield 1973, 49). Consciousness continues to evolve, but our own experience must be disrupted for us to comprehend this truth. Having experienced that disruption, Barfield notes that language from earlier human history is more figurative than that of today.<sup>5</sup> The meanings of words have shifted over time from the concrete to the abstract (Barfield 1965, 117). Barfield highlights “heart” and “blood” as examples of this evolutionary process still underway, with both physiological and emotional/psychological meanings associated with each term in contemporary usage; in earlier times they had a single unified meaning that did not make this distinction (1965, 80–83, 118).

Over time, that ancient semantic unity polarized into an outer and inner meaning (Barfield 1965, 122). Barfield gives perhaps the clearest example of what he means by ancient semantic unity in his treatment of *pneuma* or *spiritus*.

We must... imagine a time when ‘spiritus’ or πνεῦμα, or older words from which these had descended, meant neither *breath*, nor *wind*, nor *spirit*, nor yet all three of these things, but when they simply had *their own old peculiar meaning*, which has since, in the course of the evolution of consciousness, crystallized into the three meanings specified. (Barfield 1973, 81)

Looking at language prior to this fragmentation or crystallization, “we find an inner meaning transpiring or showing some way through the outer” (Barfield 1967, 58). This process of dividing the earlier figurative meaning into the inner and outer arises as part of the evolution of human consciousness, and the development of the discursive mind (Barfield 1965, 122).

Barfield challenges the theory that contemporary abstract word meanings were acquired as a result of metaphorical extension. Historically, language was *more* metaphorical, not less—the transition of meanings from outer to inner “point us back, not to metaphor, but to participation”

(Barfield 1965, 118).<sup>6</sup> Indeed, it is the very decline in participation that makes metaphor possible—as phenomena are stripped of the consciousness that produces them, they become images at the disposal of the imagination for creative speech (Barfield 1965, 126).

Verlyn Flieger (1981, 48) gives a helpful summary of the concept of ancient semantic unity:

In that primal, non-particularized, non-fragmented world view each word had its own unified meaning embodying a multiplicity of concepts for which modern man, no longer able to participate in such a world, must use many different words.

#### BARFIELD'S INFLUENCE

This notion of ancient semantic unity had a deep impact on Tolkien, he confided in correspondence with Lewis that his whole outlook had been modified as a result. Flieger (2002, 9) describes Tolkien's understanding of language:

Words were for Tolkien not simply a window on the past but the key to that lost relationship between humanity and God of which a sense of the Fall is only memory. Words are the clearest record of that “long defeat” of which he wrote, and we may imagine that he saw them also as the vehicles for the “glimpses of final victory” for which he hoped.

Language, for Tolkien, is what confers the ability to become sub-creators. Through language one can create a fantasy world, words can be used to modify perception (Flieger 2002, 40). Furthermore, language itself is what provides epistemic access to the world—names should be related to their referents through “right reasoning” rather than “idle fancy” (Zimmer 2004, 55).

Tolkien uses the metaphor of refracted light in his poem “Mythopoeia” (2001) to illustrate his famous notion of “sub-creation.” Flieger (2002, 47) interprets the poem's metaphor of “splintering light to many hues” as “splintering original perception into many concepts and words.” In this way, the imagination is used to “particularize and make manifest fragments of original truth” (Flieger 2002, 47). The splintering of light to many hues refers to the use of words imaginatively in the making of secondary worlds, and in the process “expressing some fragment of divine truth through fantasy” (Flieger 1981, 52). This imagery aligns so closely with Barfield's ancient semantic unity that Raimund Kern and Clive Tolley (1992) describe “Mythopoeia” as the poetic version of Barfield's argument in *Poetic Diction*.

B. S. W. Barootes (2014, 116–17) picks up on a similar theme, arguing that there is a “clear pattern of progressive diminution of the creative and performative powers of language” in Tolkien's *Legendarium*. He traces a



shift away from metaphor in Tolkien's work, a "progressive displacement from primal unity" (Barootes 2014, 117). Barootes (2014, 129) sums up the present state of language, acutely represented by Tolkien, as "a painful reminder of the very separation between words and their referents that it seeks to overcome."

Given that Barfield's philosophy cannot be extricated from his Anthroposophic belief, which Tolkien certainly did not share, we must take care against equating Barfield and Tolkien too closely. From Tolkien's work, it seems he aligns with Barfield's perspective on language and metaphor, without following him into more esoteric theological terrain.

Lewis, too, acknowledged a debt to Barfield in his own thought. In the preface of *The Allegory of Love*, he expressed his desire to amplify Barfield's theory (Lewis 1935, xviii). We can detect this influence in other works by Lewis, for example, he portrays the interconnection of language and meaning imaginatively in *Out of the Silent Planet*, as the philologist Ransom asks about the different languages of the three rational species. The language of the species known most for their philosophical and scientific understanding is not used by other species "for you can change their knowledge into any words and it is still the same" (Lewis 2013a, 104–105). Neither is the language of the species best known for their craftsmanship spoken more widely, for their real communication is via what they make. It is the language of the *hrossa*, the singers and poets, that all the species speak, because "they have more words and better" and the particularities of the language are essential to meaning (Lewis 2013a, 104–105). Lewis' protagonist Ransom also makes a passing reference to "Barfield's 'ancient unities'" in *That Hideous Strength*, another demonstration of the esteem Lewis held toward his theory (Lewis 2013b, 596).

Though the mutual respect and influence between Barfield and Lewis was considerable, they were not always in agreement. Prior to Lewis' conversion, first to theism and then to Christianity in 1930, he disagreed vehemently with Barfield over Anthroposophy's claims via correspondence, and conversion did not make him any more amenable to the subject (Johnson 2010, 8–9). Given how central the philosophy and Steiner's work were for Barfield it is no surprise that we see greater divergences of thought between the two Inklings—so much so that Lewis refers to Barfield as his "antiself" (1955, 199). Morris and Wendling (1989, 151–52) trace certain epistemological differences between the two: Lewis maintained a stronger notion of objects as external to the self, whereas Barfield strove to unite subject with object in his understanding of perception. For Lewis, metaphor did not signify participation; at best it could serve as a bridge across the divide between object and observer. Gilbert Meilaender (1978, 345) describes the disagreement over the immanence of God in humans between the two thinkers; Lewis takes much more care to preserve the creature/Creator boundary and rejects Barfield's more esoteric

understanding of the incarnation as the transformation of divine consciousness into human.

Yet we might detect the influence of Barfield in Lewis' well-known essay on metaphor and meaning "Bluspels and Flalansferes" (1969). All thought is metaphorical, Lewis argues, and meaning depends on acknowledging and understanding this (1969, 45–47). The imaginative generation of new metaphors is the way toward increased meaning, and Lewis hints at the close of the essay to the truthfulness of original metaphors and the metaphysical implications in seeming compatibility with Barfield's ancient semantic unity principle (Lewis 1969, 50).

#### FINAL PARTICIPATION

Barfield followed Steiner in his understanding of the evolution of human consciousness as divided into distinct stages. In Barfield's schema, the first stage of "original participation" gave way to the second stage of idolatry, a mechanomorphic understanding of consciousness that is by-and-large still operative. The third stage, the notion of "final participation," is Barfield's prescription for the way out of the idolatry of present human consciousness. Final participation is an act of "systematic imagination," a state Barfield describes as "to be able to experience the representations as idols, and then to be able also to perform the act of figuration consciously, so as to experience them as participated; that is imagination" (1965, 147).

The imagination is powerful, according to Barfield, because the images that art presents can actually alter the way that we see the world over time (1965, 146). Though imagination and goodness are not synonymous, and the morality of imagination is subtle, Barfield contends that they are nevertheless related (1965, 161). Imagination counters what Barfield considers to be the "besetting sin" of literalness or idolatry (1965, 162). Final participation comes with existential responsibility, the shape of the world depends in part on human volition (Barfield 1965, 186). Final participation is nothing less than the kingdom of God, and thus remains mysterious to us (Barfield 1965, 182).

#### BARFIELD AND SCIENCE AND RELIGION

What are we to make of this vision of future human consciousness? The credibility of Barfield's ideas remains disputed, given his Anthroposophic association. He endorses Steiner's "spiritual science" and its applications, including biodynamic agriculture, anthroposophic medicine, and Waldorf-Steiner education models (Barfield 1984, 589). Does this negate the value of Barfield's work entirely for the science and religion field? In describing the significance of Steiner for Barfield, Barfield's statement that "some of my most daring and (as I thought) original conclusions were *his* premises" is often cited (1944, 8–9). This may be taken to

mean that Steiner is the greater genius, his contributions eclipsing those of Barfield. But farther is not always truer, and perhaps we may locate some of Steiner's more dubious proposals as unreasonable extrapolations from his more modest and cogent premises.

Michael di Fuccia (2016, 26–27) identifies several parallels between Steiner and Barfield's theories on the evolution of consciousness. Both considered humans to have become less conscious of their divine origins over time, both viewed empiricism as the culmination of this deterioration in the connection to the spiritual, and both believed this awareness of connection was retrievable through the sustained effort of the imagination. However, di Fuccia argues that the more "fantastical" elements of Steiner's theory are not present in Barfield's work (2016, 26). Barfield's ideas must be evaluated on their own merits, not prematurely dismissed because of some overlap with Steiner. Even if Barfield were enamored of Steiner's more contentious claims, this would recommend discernment rather than outright rejection when it comes to judging Barfield's own ideas. The emphasis on the imagination as a way forward in Barfield's vision of "final participation," for example, may be helpful even if the more esoteric elements of the concept are less convincing.

In some ways, Barfield's intellectual history aligns with a number of other metanarratives describing the history of ideas, even as it turns them on their head. His notion of original participation, and its gradual waning, is similar to the disenchantment thesis first propounded by German sociologist Max Weber and taken up by the Frankfurt School.<sup>7</sup> Weber (2013) argues that the world has become disenchanted through a rationalization process produced by science and aided and abetted by the Protestant Reformation. Charles Taylor (2007, 280) also takes up this terminology of disenchantment, arguing that the cosmos is as a result "dissolved" into causal explanations as the sacred gives way to a multiplicity of secular worldviews. But the differences are substantial. Weber sees Enlightenment thought as eroding the plausibility of spiritual causes, whereas Barfield insists that plausibility is not the concern because the phenomena themselves are different; it is rather the presumption and idolatry of divorcing the material world from the consciousness that contributes to its creation that he criticizes.

We might also look at histories of human creativity, tracing the trajectory of artistry from mimicry to co-creation. Barfield (1965, 128–29) describes this shift in Neo-Platonic and Romantic notions of art. Trevor Hart (2014, 2) describes a similar semantic shift in which the notion of creation began as the sole preserve of God, underscoring radical transcendence, but expanded over time to include human artistry. He traces how the metaphor of God as divine artist originates in scripture, how the idea of human art as faithful mimesis is transformed through the Renaissance and the Romantic era to the idea of the artist or poet as "creator," and is

completely reversed by the time of the Enlightenment such that “human artistry was pictured now in terms of God’s artistry rather than vice versa” (Hart 2014, 40). Barfield’s metanarrative of human consciousness and its evolution can accommodate multiple emphases in the history of ideas.<sup>8</sup>

So, what might an Inkling contribute to science and religion? Barfield’s writings have implications that stem well beyond the fields of literature and theology; here their value for the study of human consciousness, metaphysics and epistemology, and apologetics will be outlined.

### HUMAN CONSCIOUSNESS

The study of human consciousness attracts scientists, philosophers, and theologians. Barfield’s proposal is one of several hypotheses concerning the evolution of consciousness, a puzzle that has prompted some creative responses at the intersection of these fields of study. Psychologist Julian Jaynes approached the problem via a consideration of auditory verbal hallucinations, and his resultant ideas are akin to Barfield’s in the breadth of disciplines they draw upon and attempt to integrate. Like Barfield, Jaynes concluded from a study of ancient language and literature that early humans possessed a different mentality to contemporary humans (Jaynes 1977, 82). Jaynes describes a mental state similar to Barfield’s notion of original participation, in which people experienced the voices of the gods and muses directly. He termed this the “bicameral mind,” arguing that the informed right hemisphere of the brain “spoke” commands to the left that were heard and interpreted as divine communications (Jaynes 1977, 163). Consciousness arose as a result of the breakdown of this bicameral brain, according to Jaynes, as a new mentality replaced these auditory experiences.

These similarities aside, there are substantial divergences between Jaynes’ bicameral mind and Barfield’s original participation. Where Jaynes likens the earlier experiences of humans to what we would describe today as hallucinations, Barfield calls for us to examine what we mean by the idea of reality. If reality is really the phenomenal world of collective representations, then the gods and spirits of the world at the time of *The Iliad* were *real*, not hallucinatory. Unlike Barfield, Jaynes gives little consideration to what might come next in the evolution of consciousness. In terms of critical reception, Jayne’s theory has been controversial since its inception; it has been suggested that neuroimaging studies support aspects of Jaynes’ hypothesis (Sher 2000, 240) but the scientific jury is very much still out when it comes to bicameral brain functioning.

Richard Dawkins (2006, 392) concludes of Jaynes’ bicameral mind theory of human consciousness that it is “either complete rubbish or a work of consummate genius.” At times, these words resonate when reading Barfield’s equally grand history of ideas and knowledge, dazzling in

their implications yet removed from empirical verification. Here, Barfield's exposition of theory and notion of "saving the appearances" is of value; Barfield describes how theories can be adopted as explanatory frameworks without asserting their objective truthfulness (Barfield 1965, 50–51). We return to the notion of multiple rationalities spread across the epistemic landscape; not all forms and means of knowledge are empirically verifiable.

Barfield's ideas on human consciousness align better, perhaps, with Iain McGilchrist's more recent work in the acclaimed *The Master and His Emissary* (2009). According to McGilchrist (2009, 3), there are two "fundamentally opposed realities" or modes of experiencing the world that are rooted in separate hemispheres of the brain, and which have been locked in a "power struggle" key to understanding contemporary Western culture. The left hemisphere approaches the world, according to McGilchrist, in a verbal, analytic and abstract fashion, concerned with categories and "decontextualized, disembodied thinking" (2009, 137). In contrast, the right hemisphere "sees the whole" and recognizes patterns (McGilchrist 2009, 47–48). Drawing on a fable that he attributes to Nietzsche, in which an emissary gradually comes to see himself in the role of the wise master he represents, McGilchrist suggests that in our contemporary experience the "emissary" (left hemisphere) has also apparently usurped the place of the "master" (right hemisphere). The result is:

An increasingly mechanistic, fragmented, decontextualised world, marked by unwarranted optimism mixed with paranoia and a feeling of emptiness, has come about, reflecting... the unopposed action of a dysfunctional left hemisphere. (McGilchrist 2009, 6)

Surprisingly, McGilchrist does not reference Barfield,<sup>9</sup> though he does discuss Jaynes' work and we might speculate as to his assessment of Barfield based on his critique of Jaynes. McGilchrist affirms Jaynes' instinct that changes in mentality and experience of "the voices of the gods" throughout the history of human consciousness are both linked to the relationship between the two hemispheres of the brain, but contends that his thesis is "back to front" (McGilchrist 2009, 262). Jaynes locates these changes in mentality with the merging of the two hemispheres, whereas McGilchrist argues instead for an increased separation of the chambers of the mind. His description of the outcome of this hemispheric separation is very similar to Barfield's account of the effect that alpha thinking has on our perception of phenomena; he argues that it "made possible a standing outside of the "natural" frame of reference, the common-sense everyday way in which we see the world" (McGilchrist 2009, 262).

Although McGilchrist's work has received much praise, it also has its critics. Kenan Malik (2013) points to McGilchrist's problematic attribution of agency to each brain hemisphere, when it is only at the level of the

whole person that awareness can be spoken of meaningfully.<sup>10</sup> Though McGilchrist overreaches with respect to some of the scientific claims he makes, implying that neurological phenomena are *driving* complex social and intellectual changes, his general description of Western culture as in thrall to a mechanistic and decontextualized rationality resonates with Barfield's own conclusions. The metaphor of the master and the emissary, even untethered from specific claims concerning changes in brain lateralization, is illuminating.

Perhaps, the disputed claims of Jaynes and McGilchrist regarding the physiological changes in the brain responsible for the emergence or evolution of consciousness validate Barfield's more philosophical posture. He makes no conjectures concerning brain biology, and confines his speculations to the effects of the evolution of consciousness rather than the physiological causes. This is not to say that Barfield shies away from ideas of scientific import—he applies his logic to Darwinian evolution and is not timid when it comes to the scientific implications of his proposal. But he acknowledges the limitations of his own expertise. In a review of Jayne's seminal work, which would likely also extend to McGilchrist's claims, Barfield queries "why all this stress on the not-very-relevant physical brain?" (1979, 604).

#### METAPHYSICS AND EPISTEMOLOGY

Barfield is less concerned with the biological aspects of consciousness; his interests are directed more to the metaphysical implications. In acknowledging the mentality of phenomena, Barfield is not expounding a version of idealism, but rather sees the unity of object and subject in a Coleridgean sense. Barfield's "felt change of consciousness" relates to Coleridge's more grandiose description of the primary imagination, at work in perception, as "a repetition in the finite mind of the eternal act of creation in the infinite I AM" (Coleridge 1965, 167). Tolkien (1981, 194) expresses a similar notion, arguing that truth may be elucidated through myth, the exemplification of something in "unfamiliar embodiments." Indeed, Tolkien's neologism "eucatastrophe" parallels Barfield's "felt change of consciousness"; he describes knowing something with certainty via "a direct appreciation of the mind" yet without logical argument (Tolkien 1981, 101). Unsurprisingly, Lewis (2000a, 141) approaches myth from a similar perspective, seeing it as the means for uniting propositional truth and experiential reality, and describing it as a "real though unfocused gleam of divine truth falling on the human imagination" (2002, 218n).

Though they differed in many particulars, all members of the Inklings, not surprisingly for a literary club, shared a belief in the power and appeal of the imagination in a time when "fantasy" was very much out of favor. They not only theorized about the role of the imagination,

all of them to one degree or another produced works of mythopoesis that applied those theoretical insights. Rather than write an expository essay decrying scientism or materialism, Tolkien (2001a, 83) wrote a poem instead: “a star’s a star, some matter in a ball, compelled to courses mathematical.” Lewis’ novel *That Hideous Strength* satirizes scientism, and the imaginative medium gives it all the more power. Though very few of Barfield’s creative writings were published during his lifetime, his many works of mythopoesis imaginatively express his philosophy of poetics and ideas about the evolution of consciousness (Barfield 2020, 5–6).

How does this shared love for myth, and belief in its epistemic significance, relate to religious conviction? Where was the common ground between Tolkien, the devout Roman Catholic who mostly avoided explicit theologizing, Lewis, atheist-turned-dogmatic-Anglican steadily becoming perhaps England’s best known theologian and apologist, and Barfield, New Age philosopher? It appears they had an inclusive and expansive outlook on religion at least when it came to membership within the Inklings—in inviting Charles Williams (who was himself a more mystical Anglican with a strong interest in the occult) to take part, Lewis (2004, 183) wrote that the main requirements were “a tendency to write, and Christianity.” Though these thinkers differed somewhat on finer points of theology, all placed the Christian faith at the center of their ideas around imagination, truth, and mythopoesis. Lewis (2000a), learning from his companions, came to see Christianity as the myth that actually happened; in the incarnation “myth became fact.” The gospel is the “Great Eucatastrophe,” according to Tolkien, the echo of which may be discerned in works of fantasy (2001b, 71, 73). Even Barfield (1965, 185), whose religious convictions were the farthest from mainstream Christianity, maintained that it is in Christ that “we participate finally the Spirit we once participated originally.” Christ is so central to his understanding of the evolution of human consciousness, that it was his philological conclusions that led to his conversion to Christianity (Barfield 1977, 236).

Of course, a consideration of metaphysics takes us beyond the topics of myth, literature, language, and religion. Barfield (1965, 53) wades into the murky topic of epistemology in science, querying the relation of scientific theories to truth. Through his study of ancient language and literature, Barfield challenges the assumption of progress inherent in philology (1981, 47), with the implied extension being to decouple the rise of modern science from the myth of progress. For Barfield, modern science is premised on the separation between the human subject and the world as object, capable of investigation. This is one of the advantages of alpha-thinking and the self-consciousness it produces, and Barfield praises the benefits of science while also acknowledging the dangers and blinds pots (1965, 185).

For example, Barfield speculates over the timing of the rise of evolutionary theory in relation to the perception of natural phenomena. The theory of evolution developed at a time where human participation in phenomena (i.e., that our consciousness shapes our perception of things) was least acknowledged. “Thus the phenomena *themselves* are idols, when they are imagined as enjoying that independence of human perception which can in fact only pertain to the unrepresented” (Barfield 1965, 62). His criticism is directed at *scientism* rather than science; take for instance these words from one of his characters in the fictional 1960s dialogue *Worlds Apart*: “first they insist on cutting out awe and reverence and wisdom and substituting sophistication as the goal of knowledge; and then they talk about this method with reverence and awe...” (1964, 21–22). Barfield’s critiques of Darwinian evolution do not amount to a rejection of science, and are not religiously motivated—he seeks to expose to false premise of complete separation between organisms and their environment and would likely take a more positive view toward the developments of the extended evolutionary synthesis (Barfield 1964, 159).

Barfield deploys scientific knowledge to critique social scientific conclusions. With respect to the common understanding of pre-history, he writes that:

We have chosen to form a picture, based very largely on modern physical science, of a phenomenal earth existing for millions of years before the appearance of consciousness. The same physical science tells us that the phenomenal world is correlative to consciousness. The phenomena attributed to these millions of years are therefore, in fact, abstract models or ‘idols of the study’. (Barfield 1965, 135)

In tracing the evolution of human consciousness, Barfield is not nostalgic for an earlier consciousness—he makes it clear that he is not advocating for a return to original participation (1965, 45). He neither exalts the contemporary consciousness nor despises it—de Lange (2006, 97) argues that he recognizes the equal validity of the various states of human consciousness that have existed in history. Lewis (1955, 156) describes the way in which Barfield cured him of “chronological snobbery,” the belief that our present ideas and understanding are superior to all those that came before them. The problem lies in considering our present state of consciousness to be the pinnacle of evolution, rather than an essential stage on the way to another goal. In fact, it is the decline in participation and rise in self-consciousness that brings imagination into being—only once phenomena can be detached as images from their original participation can they be available for human creativity (Barfield 1965, 128–129). The scientific revolution frees us for final participation.



Although many epistemological claims concerning science and religion seek to establish the primacy of one over the other, or uphold the validity of each as distinct but equal sources of knowledge, Barfield draws a very different conclusion. All knowledge comes via “the right interaction of rational and poetic principles,” contends Barfield, thus “there is no distinction between Science and Poetry, as kinds of knowing” (1973, 138–39). The disproportionate emphasis on the rational in modern scientific method may be useful for *testing*, but it tells us nothing about the *nature* of knowledge itself (Barfield 1973, 139). Barfield’s project is essentially to unite poetic and rational thought; he was driven to answer the question of how it was that poetry, springing from the inner subjective self, could give insight into objective realities.

Several analyses have found the work of Michael Polanyi to be a helpful interlocutor with Barfield in the endeavor to unite object and subject in epistemology. Morris Berman (1988) draws on both scholars in his proposals for a post-Cartesian science. The Inklings subscribed to a view of knowledge that is still developing in the field of science and religion, a view akin to Polanyi’s “tacit knowledge,” in which “we know more than we can tell” (1967, 4). Reeves, too, though he does not engage the work of the Inklings, suggests that Polanyi’s emphasis on the tacit and embodied dimensions of scientific practice might round out some of the rational deficits arising from a neglect of language’s impact on practice (Reeves 2019, 8); deficits that are also addressed by the Inklings’ scholarship on language.

It is telling that Barfield not only considers the achievement of “final participation” to be the work of the imagination, but also declares this to be the task of science (1984, 588). The moral imperative to deploy the imagination is not the preserve of ethicists, philosophers, or theologians, but extends to scientists and technologists (Barfield 1984, 589). Science requires not only, or even most importantly, better instruments, but rather “the human mind should become increasingly aware of its own creative activity” (Barfield 1973, 28).

According to Hipolito, Barfield “explains how imagination discovers truth and formulates it into valid conceptual structures” (Hipolito 1993, 35). Though Barfield would disagree with much scholarship on metaphor, his understanding of the relationship between imagination and morality is supported by more recent developments in cognitive science.<sup>11</sup> Philosopher Mark Johnson (1993, ix–x) makes the case that:

We human beings are imaginative creatures, from our most mundane, automatic acts of perception all the way up to our most abstract conceptualization and reasoning. Consequently, our moral understanding depends in large measure on various structures of imagination, such as images, image schemas, metaphors, narratives, and so forth. Moral reasoning is thus basically an imaginative activity, because it uses imaginatively struc-

tured concepts and requires imagination to discern what is morally relevant in situations, to understand empathetically how others experience things, and to envision the full range of possibilities open to us in a particular case.

An attentiveness to the moral imagination gives us insight into the way that prototype concepts operate in our moral deliberation, the kinds of frames we apply to situations, and the underlying metaphors that are definitive to our basic moral concepts and values. We might probe the possibility of changing certain metaphors, and what this might do to our moral reasoning. This recognition of the imagination and its role in morality manifests in the fantasy writing of the Inklings.

### APOLOGETICS

This epistemological approach to imagination has crucial implications for apologetics, another area that is often concerned with the relationship between science and religion. Barfield provides the solution and the justification for why apologetics must be imaginative, an approach that we see reflected in McGrath's work even as he develops Lewis' apologetic legacy. McGrath considers the apologetic implications of Lewis' understanding of myth as primary, with doctrines of secondary importance in the Christian faith. The emphasis ought not to be on compelling skeptics to accept Christian *beliefs* as true, rather "they need to discover the 'myth', the grand narrative, the 'big picture'" before they can appreciate the place of belief and narrative in upholding this narrative (McGrath 2013b, 68). Lewis therefore commends the imaginative narrative as the appropriate vehicle for apologetics, a project which McGrath terms "remythologization" (2013b, 71). McGrath has been shaped by thinkers such as Lewis, and Iris Murdoch, to see faith and virtue as things to be inculcated via the imagination. His approach to natural theology in particular demonstrates this, highlighting the role of the Christian *imaginarium* in our conception of nature and calling for a renewal of imagination in theology in order to address its blind spots (McGrath 2016, 48).

In his consideration of imaginative apologetics, Andrew Davison (2011, 59) draws attention to the dearth of contemporary fiction engaging in apologetics through appeal to the imagination. Fiction can serve as a mediator for dialogue between theology and science. Flieger (1981, 55) gives reasons for why the fantasy genre is best suited for conveying certain truths—it is the natural vehicle of a mythic mode of thought that no longer prevails, it allows a "re-creation of that original participation of man with his world which Barfield postulated." The Inklings model the fruitfulness of creative writing for expressing religious ideas and promoting dialogue and, even if contemporary apologetics has evolved since their time, there is still a need for imaginative approaches to today's issues.<sup>12</sup>

## CONCLUSION

In a recent assessment of the science and religion field, Joshua Reeves concludes that “the field of science and religion has reached a level of maturity where it can recognize its deficiencies without fear of being delegitimized” (2019, 136). These deficiencies include a historical tendency to reduce theological claims to scientific statements, and an associated distrust or neglect of the role of the imagination. Furthermore, Reeves (2019, 129–34) proposes three strategies to advance the field from its present state: (1) scholars could act as “historians of the present,” adopting a descriptive approach that examines the categories of “science” and “religion” and questions underlying assumptions, (2) scholars of science and religion could embed themselves in specific programs of scientific research rather than attend to generalized notions of how science and religion relate to one another, and (3) methodological discussions might continue, but reformed in alignment with an anti-essentialist approach to science.

How might these strategies incorporate insights from the Inklings? McGilchrist (2009, 135) attests to the impossibility, identified earlier, of articulating an alternative “truth” from the analytical using the tools of philosophy, restricted as they are by the particular limitations of philosophical discourse’s terms of reference and epistemology. Eleanore Stump (2010, 60) makes a similar point with her contrast of “Dominican” (propositional) and “Franciscan” (intuitive) approaches to knowledge, arguing that it is not fruitful to “attempt to show the philosophical importance of Franciscan knowledge by Dominican means.” Yet the very attempt to do so, contends McGilchrist, witnesses powerfully to the reality of an alternate way of construing the world (2009, 135).

It is in such an alternative that McGilchrist locates the potential for overcoming dichotomous thinking. We may consider the creative and philosophical writings of the Inklings, especially those of Barfield, as part of McGilchrist’s prescription for overcoming these destructive dichotomies in Western thought. These thinkers sought to portray an alternate picture of the world that does not cleave subject from object, that does not relegate imagination to whimsy, but also does not reject science as a source of knowledge. Barfield gives us the tools to situate science properly in our epistemological framework, to neither eschew it nor to uncritically elevate it, and fiction may be a productive medium for the descriptive work of Reeve’s first strategic direction for science and religion.<sup>13</sup>

The discussion around the evolution of human consciousness in particular recommends greater collaboration between scientists and theologians, in line with Reeves’ second strategy. Few scholars combine the literary and philosophical breadth with the neuroscientific and psychological expertise required to develop accounts of the evolution of consciousness that integrate cultural and linguistic history with brain development. McGrath

acknowledges these constraints more generally, and alternatively promotes transdisciplinary approaches in science and religion (2019, 26); a joint program of research including theologians, philosophers, neuroscientists and more would be a fruitful example when it comes to questions of human consciousness. If the work of humanities scholars such as Barfield, capable of critiquing materialistic philosophy and scientific thought without dismissing science itself as a worthwhile source of knowledge, were tempered with more sophisticated knowledge of relevant scientific subdisciplines, then pseudoscientific outcomes will be less of a concern.

To answer the original question, scientists and theologians might work in different epistemic configurations, but ought to recognize they individually offer only partial answers to the question of how we know things. In addressing similar concerns around scientific reductionism in theology to those identified by Reeves, Taede Smedes argues that the science and religion field is presently in a “mid-life crisis.” Reeves has offered several ways out, and the interdisciplinarity of Barfield’s scholarship could take more sophisticated form in intentional collaborative research programs; Barfield himself may be less interested in or qualified to undertake empirical research, but rather than dismiss the physical brain as irrelevant to the investigation of human consciousness, for example, he might have partnered with those more appropriately trained to produce scholarship less vulnerable to an assessment of pseudoscience. Finally, we must not overlook the value of mythopoesis—if science and religion is to outgrow its origin story in logical positivism then, like Barfield, I have an inkling that imagination will be a part of the solution.

## NOTES

1. Excerpts from Barfield’s essay “Poetic License” are reproduced by Taylor and Taylor in an introduction to his poem *Riders on Pegasus* (Barfield 2020, 174).
2. The relationship between technology and nature in Tolkien’s work is complicated, however, Joshua Hren (2018) reads in Tolkien a diagnosis and critique of the technocratic paradigm.
3. Perhaps, the most significant is Simon Blaxland de Lange (2006).
4. See <http://www.anthroposophy.org.uk/>
5. By figurative, Barfield intends to distinguish the ancient meaning from the purely literal or metaphorical, a divide which did not yet exist (1967, 58).
6. This is also the main argument of *Poetic Diction* (1973).
7. Of course, the disenchantment thesis is not accepted uncritically, for example, Jenkins (2000).
8. Jesuit Philosopher Pierre Teilhard de Chardin’s understanding of the evolution of consciousness would be another interesting comparison, however, it is likely that Barfield would have considered his ideas too Darwinian, and he implies criticism of similar ideas in *Worlds Apart* (1964).
9. McGilchrist does quote Barfield at the beginning of a later essay (2012), however, he does not engage Barfield’s thought at all.
10. To be fair, McGilchrist (2009, 461–62) closes his book with an acknowledgment that the neurological specifics of his argument may prove unnecessary to an ac-

count of the history of human culture and philosophy, and would be content if his description of brain hemispheres were to serve only as a metaphor for the dichotomies we experience.

11. George Lakoff and Mark Johnson's *Metaphors We Live By* (2003) demonstrates from a range of research perspectives that metaphors operate unconsciously, at the level of concept rather than just language, and are fundamentally embodied. This work would make an interesting conversation partner with Barfield, comparing the notion of original participation could be compared with the construal of metaphor as projection from more directly embodied concepts (Lakoff and Johnson 2003, 497), however, such exploration would warrant its own research project.

12. See Bailey (2020) for an account of contemporary apologetics and the need for imagination.

13. See Lorrimar (2020) for further treatment of imagination and methodology in science and religion and the potential contribution of fiction.

## REFERENCES

- Bailey, Justin Ariel. 2020. *Reimagining Apologetics: The Beauty of Faith in a Secular Age*. Grand Rapids, MI: IVP Academic.
- Barfield, Owen. 1944. *Romanticism Comes of Age*. London: Anthroposophical Society.
- Berlin, Isaiah. 2013. *The Hedgehog and the Fox: An Essay on Tolstoy's View of History*, Michael Ignatieff, Princeton, NJ: Princeton University Press.
- . 1964. *Worlds Apart: A Dialogue of the 1960's*. Middletown, CT: Wesleyan.
- . 1965. *Saving the Appearances: A Study in Idolatry*. New York, NY: Harcourt, Brace & World.
- . 1967a. *History in English Words*. Grand Rapids, MI: Eerdmans.
- . 1967b. *Speaker's Meaning*. Middletown, CT: Wesleyan.
- . 1971. *What Coleridge Thought*. Middletown, CT: Wesleyan.
- . 1973. *Poetic Diction: A Study of Meaning*, 3rd ed. Middletown, CT: Wesleyan.
- . 1977. *The Rediscovery of Meaning: And Other Essays*. Middletown, CT: Wesleyan.
- . 1979. "The Origin of Consciousness in the Breakdown of the Bicameral Mind (Review)." *Teachers College Record* 80 (3): 602–4.
- . 1981. *History. Guilt and Habit*. Middletown, CN: Wesleyan.
- . 1984. "Imagination and Science." *Journal of the American Academy of Religion* 52 (3): 585–89.
- . 2020. *The Tower: Major Poems and Plays*. Edited by Leslie Taylor and Jefferey Taylor. Anderson, SC: Parlor.
- Barootes, B. S. W. 2014. "'He Chanted a Song of Wizardry': Words with Power in Middle-Earth." In *Tolkien in the New Century: Essays in Honour of Tom Shippey*, edited by John Houghton, Janet Croft, Nancey Martsch, John Rateliff, and Robin Reid, 115–31. Jefferson, NC: McFarland & Company.
- Berman, Morris. 1988. *The Re-Enchantment of the World*. New York: Bantam.
- Coleridge, Samuel Taylor. 1965. *Biographia Literaria*. Edited by George Watson. London: Dent.
- Davison, Andrew, ed. 2011. *Imaginative Apologetics: Theology, Philosophy and the Catholic Tradition*. London: SCM.
- Dawkins, Richard. 2006. *The God Delusion*. Boston: Houghton Mifflin.
- Di Fuccia, Michael. 2016. *Owen Barfield: Philosophy, Poetry, and Theology*. Eugene, OR: Wipf & Stock.
- Flieger, Verlyn. 1981. "Barfield's 'Poetic Diction' and Splintered Light." *Studies in the Literary Imagination* 14 (2): 47–66.
- . 2002. *Splintered Light: Logos and Language in Tolkien's World*. Kent, OH: Kent State.
- Hart, Trevor. 2014. *Making Good: Creation, Creativity, and Artistry*. Waco, TX: Baylor.
- Hipolito, T. A. 1993. "Owen Barfield's Poetic Diction." *Renascence* 46 (1): 3–38.
- Hren, Joshua. 2018. "Tolkien and the Technocratic Paradigm." *New Blackfriars* 99 (1079): 97–107.
- Jaynes, Julian. 1977. *The Origin of Consciousness in the Breakdown of the Bicameral Mind*. Boston, MA: Houghton Mifflin.

- Jenkins, Richard. 2000. "Disenchantment, Enchantment and Re-Enchantment: Max Weber at the Millennium." *Max Weber Studies* 1 (1): 11–32.
- Johnson, Mark. 1993. *Moral Imagination: Implications of Cognitive Science for Ethics*. Chicago: University of Chicago Press.
- Johnson, Wendell. 2010. "When Anthroposophy Meets Romanticism: The Theology of Owen Barfield." *Renascence* 63 (1): 5–12.
- Kern, Raimund, and Clive Tolley. 1992. "Tolkien's 'Essay on Man': A Look at Mythopoeia." *Inklings: Jahrbuch für Literatur und Ästhetik* 10:1–39.
- Lachman, Gary. 2009. "Owen Barfield and the Evolution of Consciousness." *The Owen Barfield World Wide Website: Barfield Scholarship*. [http://owenbarfield.org/BARFIELD/Barfield\\_Scholarship/Lachman.html](http://owenbarfield.org/BARFIELD/Barfield_Scholarship/Lachman.html).
- de Lange, Simon Blaxland. 2006. *Owen Barfield, Romanticism Come of Age: A Biography*. Forest Row: Temple Lodge.
- Lakoff, George, and Mark Johnson. [1980] 2003. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lewis, C. S. 1955. *Surprised by Joy*. New York, NY: Harcourt, Brace and World.
- . 1969. "Blusbels and Flalansferes: A Semantic Nightmare." In *The Importance of Language*, edited by Max Black, 36–50. Ithaca, NY: University of Cornell.
- . 2000a. "Myth Became Fact." In *Essay Collection and Other Short Pieces*, edited by Lesley Walmsley, 138–42. London: HarperCollins.
- . 2000b. "The Funeral of a Great Myth." In *Essay Collection and Other Short Pieces*, Lesley Walmsley, 22–32. London: HarperCollins.
- . 2002. *Miracles*. London: HarperCollins.
- . 2004. *The Collected Letters of C.S. Lewis*. Edited by Walter Hooper. San Francisco: HarperCollins.
- . 2013a. "Out of the Silent Planet." In *The Space Trilogy*, 1–146. London: HarperCollins.
- . 2013b. "That Hideous Strength." In *The Space Trilogy*, 343–718. London: HarperCollins.
- Lewis, C. S. 1935. *The Allegory of Love*. London: Oxford University Press.
- Lewis, C. S. The Gods Return to Earth, Time and Tide, 14 August 1954.
- Lorrimar, Victoria. 2020. "Science and Religion: Moving Beyond the Credibility Strategy." *Zygon: Journal of Religion and Science* 55 (3): 812–23.
- Malik, Kenan. 2013. "Split Brain, Split Views: Debating Iain McGilchrist." *Pandaemonium*. <https://kenanmalik.wordpress.com/2013/02/24/splitbrain-split-views-debating-iain-mcgilchrist/>.
- McGilchrist, Iain. 2009. *The Master and His Emissary: The Divided Brain and the Making of the Western World*. New Haven, CT: Yale University Press.
- McGrath, Alister. 2013a. *C.S. Lewis: A life: Eccentric Genius, Reluctant Prophet*. Carol Stream, IL: Tyndale House.
- . 2013b. *The Intellectual World of C.S. Lewis*. Chichester, UK: Wiley-Blackwell.
- . 2016. *Re-Imagining Nature: The Promise of a Christian Natural Theology*. Hoboken, NJ: Wiley-Blackwell.
- . 2019. *The Territories of Human Reason: Science and Theology in an Age of Multiple Rationalities*. Oxford: Oxford University Press.
- Meilaender, Gilbert. 1978. "C. S. Lewis: The Recent Literature." *The Thomist* 42 (2): 337–47.
- Morris, Francis, and Ronald Wendling. 1989. "Coleridge and 'The Great Divide' between C. S. Lewis and Owen Barfield." *Studies in the Literary Imagination* 22 (2): 149–59.
- Polanyi, Michael. 1967. *The Tacit Dimension*. New York: Anchor Books.
- Reeves, Joshua. 2019. *Against Methodology in Science and Religion: Recent Debates on Rationality and Theology*. London: Routledge.
- Reilly, Robert. 1976. *Romantic Religion: A Study of Barfield, Lewis, Williams and Tolkien*. Athens, GA: University of Georgia Press.
- Sher, Leo. 2000. "Neuroimaging, Auditory Hallucinations, and the Bicameral Mind." *Journal of Psychiatry and Neuroscience* 25 (3): 239–40.
- Steiner, Rudolf. *Occult Science: An Outline*. New York: Anthroposophic Press.
- Stump, Eleanore. 2010. *Wandering in Darkness: Narrative and the Problem of Suffering*. Oxford: Oxford University Press.

- Taylor, Charles. 2007. *A Secular Age*. Cambridge, MA: Harvard University Press.
- Tolkien, J. R. R. 1981. *The Letters of J. R. R. Tolkien*. Edited by Humphrey Carpenter and Christopher Tolkien. London: Allen & Unwin.
- . 2001a. "Mythopoeia." In *Tree and Leaf*, 83–90. London: HarperCollins.
- . 2001b. "On Fairy-Stories." In *Tree and Leaf*, 1–81. London: HarperCollins.
- Treinen, Max. 2020. "Owen Barfield and the Evolution of Consciousness." *Cosmos and History: The Journal of Natural and Social Philosophy* 16 (1): 47–70.
- Weber, Max. 2013. "Science as a Vocation." In *From Max Weber: Essays in Sociology*, edited by H. Gerth and C. Mills, 129–56. London: Routledge.
- Zimmer, Mary. 2004. "Creating and Re-Creating Worlds with Words: The Religion and Magic of Language in The Lord of the Rings." In *Tolkien and the Invention of Myth: A Reader*, edited by Jane Chance, 49–60. Lexington, KY: University of Kentucky Press.