

Brain laterality and religious awareness*

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Abstract: Iain McGilchrist's *The Master and His Emissary* makes an important distinction between two different human ways of relating to the world, which may be described respectively as a 'connected' mode, and an 'abstracted' mode. In this paper, three questions are raised about this. First, how far does the distinction really depend on the scientific findings about brain laterality that McGilchrist invokes? Second, what are its implications for the current practice of philosophy in general and philosophy of religion in particular, especially in the anglophone world? And third, what lessons can be drawn about the status of religious thought and practice in the modern scientific age?

Keywords: brain science; hemisphere; meaning; phenomenology; religious experience.

1. *Two ways of relating to the world*

One of philosophy's traditional goals is that of helping us to achieve a better self-understanding, and in his remarkable study *The Master and His Emissary* Iain McGilchrist significantly furthers this goal by exploring two distinctive ways in which human beings become aware of the reality around them. He introduces the distinction by drawing on recent research in neurophysiology and psychology as evidence that the left hemisphere of the brain plays a major role in the exercise of our logical and conceptual abilities, while the right hemisphere is associated with more intuitive, imaginative, and holistic forms of awareness.

In his subsequent paper 'Cerebral lateralization and religion',¹ McGilchrist makes it clear that the relevant distinction should be construed, as it were, as an *adverbial* one rather than a functional one: 'the differences are not in what "functions" the two hemispheres carry out, since both are clearly involved in every brain process, but in the *manner* in which they each engage with the world.'² Moreover, to forestall any critics who might be inclined to suspect that his way of talking commits the 'homunculus' fallacy (that of attributing to part of the brain what is properly an attribute of the whole person), McGilchrist also makes it clear that in using sentences where the left or right hemisphere appears as the subject of a mentalistic verb he is merely employing a convenient shorthand: '[Such] formulations should be understood as avoiding the repetition of such cumbersome locutions as 'a subject relying on the cognitive faculties of the left [or right] hemisphere believes... etc.'³

With these clarifications and caveats in place, the reader is well placed to appreciate the importance of the central distinction made in *The Master and His Emissary* between two characteristic ways in which we humans relate to the world. There is what might be called a *connected* mode, where things are 'allowed to be present to us in all their embodied particularity, with all their ... their interconnectedness'; and an *abstracted* mode, where the world is seen as 'compartmentalized, fragmented... essentially lifeless', and in relation to which we feel 'detached' and 'powerful'.⁴ There is a clear implicit warning here for our contemporary culture about allowing

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¹ Iain McGilchrist, 'Cerebral lateralization and religion: a phenomenological approach', *Religion, Brain & Behavior*, Special Issue on Neuroscience, Spiritual Practice and Cultural Meaning, 2017.

² McGilchrist, 'Cerebral lateralization', penultimate paragraph (tenses changed and emphasis supplied).

³ McGilchrist, 'Cerebral lateralization', section b, paragraph 5.

⁴ Iain McGilchrist, *The Master and His Emissary: The Divided Brain and the Making of the Western World* (New Haven: Yale University Press, 2009), p. 93.

the manipulative, analytic, ‘left-brain’ modes of cognition to become over-dominant, with the associated risk of losing an important part of what makes us distinctively human – our sense of ourselves as intimately connected to the world of which we are a part.

I should like to raise three discussion points about McGilchrist’s thesis of a fundamental distinction between two human modes of relating to the world. First, how far does the thesis really depend on the scientific findings about brain laterality that he invokes? Second, what are its implications for the current practice of philosophy, especially in the anglophone world? And third, what lessons can be drawn about the status of religious thought and practice in the modern scientific age?

2. *How much hinges on the brain science?*

Much of *The Master and his Emissary* is what I should call ‘humane’ philosophizing: McGilchrist develops his thesis by unfolding a wealth of material from literature, art, music and cultural history, thus exemplifying a most welcome turn towards a richer and broader conception of philosophical understanding, in contrast to the austere technical, science-based methodology that dominates so much contemporary philosophy.⁵ But this in turn prompts one to ask how far McGilchrist’s insights into our different ways of relating to the world really depend on the neurophysiological and experimental findings he expounds. Could they not stand independently, as purely humanistic *aperçus* into the human condition?

It is worth comparing McGilchrist’s ideas here with the prophetic ruminations of Friedrich Nietzsche, over a hundred years earlier. Nietzsche spoke in *Human, All too Human* of the limitations, and even ‘impoverishment’, that might be produced by a culture dominated by scientific explanations – and he certainly did not have to have access to the results of modern brain science in order to be alert to this danger. But he did nevertheless speculate about a possible basis for it in brain physiology: ‘A higher culture must give to man a double brain, as it were two brain-ventricles, one for the perceptions of science, the other for those of non-science: lying beside one another, separable, capable of being shut off: this is a demand of health.’⁶

The phrase ‘a demand of health’ is a curious one. One might suppose that the malaise of our modern culture is precisely the stark separation between these two modes of awareness (what Nietzsche calls ‘scientific’ and ‘non-scientific’ thinking, respectively), and that a more healthy culture would find a way of integrating them more effectively. But Nietzsche’s remark about the ‘two brain ventricles’ seems designed to make a different point: that despite the dangers of impoverishment due to one side dominating, each of the two separate modes of thinking is still required for humans to flourish; and, what is more, if they are to function properly they need to operate with some degree of functional autonomy. Thus, our logical and analytic capacities need to be to some extent insulated or ‘shut off’ from affective disturbance if they are to work efficiently.

However that may be, the position taken by McGilchrist and others influenced by him⁷ on the need to challenge what they term ‘left-brain hegemony’ does not seem ultimately to hinge on the precise details as to how the brain is configured. For the crucial point at issue is not a neurological one, but what might be called a psycho-ethical or spiritual one: that our ultimate flourishing as human beings depends on our being able to integrate our detached and analytic modes of relating to the world with our more direct and intuitive modes of awareness.

This is not to say, however, that the scientific study of the brain has no relevance to the psychological-cum-moral task of striving for an integrated vision of the world. For the wiring of the

⁵ See John Cottingham, ‘What is Humane Philosophy and Why is it At Risk’, *Philosophy*, Supplement 65, *Conceptions of Philosophy* (Royal Institute of Philosophy, 2009), pp. 1-23.

⁶ Friedrich Nietzsche, *Human, All too Human* [*Menschliches, Allzumenschliches*, 1878], trans. R. J. Hollingdale, (Cambridge: Cambridge University Press, 1996), Part I, p. 251.

⁷ See for instance Eleonore Stump, *Wandering in Darkness* (Oxford: Oxford University Press, 2010), pp. 26–27; Graham Ward, *Unbelievable: Why We Believe and Why We Don’t* (London: Tauris, 2014), pp. 7, 10, 12, 31.

brain, shaped by the long history of its evolution, is an integral part of our nature as biological creatures, and our human ways of perceiving and understanding the world must inevitably be conditioned and mediated by that history. The point was in fact explicitly anticipated by Carl Jung in a paper written early in his career:

Just as the human body represents a whole museum of organs, with a long evolutionary history behind them, so we should expect the mind to be organized in a similar way ... We receive along with our body a highly differentiated brain which brings with it its entire history, and when it becomes creative it creates out of this history – out of the history of mankind ... that age-old natural history which has been transmitted in living form since the remotest times, namely the history of the brain structure.⁸

This fits in well with the scientific findings to which McGilchrist refers. Science has revealed that we are not pure ‘mental beings’ or abstracted intellects who can direct our consciousness to the world in ways uniquely determined by the rational will. Rather, our mental capacities and faculties depend on highly complex subsystems in the brain, which, if they are to do their job, need to operate in some measure independently of one another, and whose effects on the way we experience the world are far from transparent to consciousness.

So the scientific findings do indeed have an authentic place in the argument. Pointing to the bilateral structure of the brain, and the different modes of awareness and engagement associated with this, reduces the temptation to see our consciousness as arising from an indivisible unitary centre of awareness and decision-making (as Descartes, for example, supposed), to which we have transparent access at each moment; for what we naively take to be unproblematic awareness of the world in fact depends on a finely tuned and constantly interacting coalition of relatively autonomous subsystems. This in turn should generate humility about the danger of mistaking the thin surface of our logical abstractions and analytic dissections of a given phenomenon for a complete and self-sufficient grasp of its nature and significance. To achieve an adequate apprehension of reality, intellectual analysis and abstraction alone can never be enough. Or as McGilchrist puts it, *both* modes of ‘being in the world’, the analytic and the intuitive, are ‘essential’ for the healthy functioning of the human being as a whole.⁹

3. *The lessons for philosophy and for religion*

That proper human understanding requires the deployment of all our mental faculties, not just a favoured subset, carries important implications for the practice of philosophy. To those familiar with the predominant style of philosophizing in the anglophone world today, there is something instantly recognizable in McGilchrist’s description of the exclusively ‘left-brain’ mode of cognition, one that is ‘explicitly abstracted, compartmentalised, fragmented, static and ... essentially lifeless.’¹⁰ It calls to mind that ‘hypertrophy of the logical faculty’ that Nietzsche famously criticized in Socrates,¹¹ which enables its practitioners to dissect and analyse certain segments of reality with great clarity and precision, but at the cost of a certain emotional and imaginative aloofness. In somewhat similar vein, Eleonore Stump has recently deplored the ‘cognitive hemianopia’ of much contemporary analytic philosophy – its blindness to the kinds of insight associated with the right cerebral hemisphere, and its unwarranted tendency to ‘suppose that

⁸ Carl Jung, ‘The Role of the Unconscious’ [‘Über das Unbewußte’, 1918], in C. G. Jung, *Collected Works* (revised edition, London: Routledge, 1967-77), Vol. 10, p. 12; McGilchrist explicitly refers to this passage in *Master and Emissary*, p. 8.

⁹ McGilchrist, *Master and Emissary*, p. 93.

¹⁰ McGilchrist, *Master and Emissary*, p. 93.

¹¹ Friedrich Nietzsche, *Twilight of the Idols* [*Götzen-Dämmerung* 1889], Section 3 (‘The Problem of Socrates’), §4.

left-brain skills alone will reveal to us all that is philosophically interesting about the world'.¹² Stump makes a powerful case for supposing that philosophy, if it is to achieve a richer awareness of the world, especially in the moral and religious domains, needs to draw on additional resources, including for example those arising from our responses to the multiple resonances of literary, and scriptural, narrative. For a great deal of moral and religious discourse is *multilayered* – it carries a rich charge of symbolic significance that resonates with us on many different levels of understanding, not all of them fully grasped by the reflective, analytic mind. Any plausible account of the human condition must make space for the crucial role of imaginative, symbolic, and poetic forms of understanding in deepening our awareness of ourselves and the reality we inhabit. This in turn suggests that it is a serious error to try to reduce all moral and religious thinking to a bald set of factual assertions whose literal propositional content is then to be clinically isolated and assessed.¹³

Anti-religious writers like Richard Dawkins have tended to portray religious thought as if it were primarily aimed at advancing rival explanations to those offered by modern science. On this picture, the 'God hypothesis'¹⁴ is supposed to provide a quasi-scientific explanation for the workings of the cosmos; and setting things up in this manner paves the way for Dawkins to argue that authentic scientific theories which unfold the hidden mechanisms and forces of nature – the workmanlike 'cranes' that do the explanatory lifting (to use Daniel Dennett's image) – are incomparably more rigorous and intellectually satisfying than the 'skyhooks' of the theologians, which attempt to short-circuit all the hard work of empirical scientific research by appealing to miraculous solutions from on high.¹⁵ All this has had the effect of reinforcing the widespread popular conception that science and religion are in competition. But even a cursory acquaintance with the great bulk of religious writings suggests they are not really about analysing and explaining the world in the manner of modern science and technology, but are part of a quest for attunement with, or connection with, reality as a whole. There are of course differing views among the world's religions as to what that reality ultimately amounts to, and there could certainly be points of friction between a scientific conception of the nature of that reality and the conception presupposed in a religious quest for attunement; but the most prominent goals of the religious quest, such as those related to the purification of the self, and the search to align oneself with the good, are orthogonal to the explanatory goals of science, and there is widespread agreement that they cannot be pursued via the critical scrutiny of the intellect alone.

The last point has important implications for theistic forms of religion. If something like the Judaeo-Christian worldview is correct, then one ought to expect that humans have been given the wherewithal to achieve some awareness of God. But it does not follow that the divine presence will be universally and readily detectable: the ancient Judaeo-Christian idea of the *Deus absconditus* (the 'hidden God')¹⁶ suggests a deity who is less interested in proving his existence or demonstrating his power than in the moral conversion and freely given love of his creatures, and in guiding aright the steps of those who 'seek him with all their heart', in Pascal's phrase.¹⁷ And as soon as we start to think about the means of such conversion, it becomes clear that it could never operate through detached intellectual argument alone, or through the dispassionate evaluation of 'spectator evidence', to use Paul Moser's label.¹⁸ Hence those who insist on casting the 'God question' in a form that is apt for evaluation by 'left brain skills' alone may be missing the core

¹² Stump, *Wandering in Darkness*, pp. 24–25.

¹³ For further development of this line of argument, see John Cottingham, *Philosophy of Religion: Towards a More Humane Approach* (Cambridge: Cambridge University Press, 2014), Ch. 1.

¹⁴ Richard Dawkins, *The God Delusion* (London: Transworld, 2006), Ch. 2.

¹⁵ Daniel Dennett, *Intuition Pumps* (London: Allen Lane, 2013), Ch. 6, §38.

¹⁶ See Isaiah 45:15. For more on the 'hiddenness' of God, see Daniel Howard-Snyder and Paul Moser (eds.), *Divine Hiddenness* (Cambridge: Cambridge University Press, 2002).

¹⁷ Blaise Pascal, *Pensées* [1670], ed. L. Lafuma (Paris: Seuil, 1962), no. 427.

¹⁸ Paul Moser, *The Elusive God: Reorienting Religious Epistemology* (Cambridge: Cambridge University Press, 2008), p. 47.

issue that is at stake in the adoption of a religious worldview. The question is not ‘Can I, while scrutinizing the data and remaining aloof and wholly in charge, satisfy myself of the rational acceptability of belief in God?’. To cast the question in this way would be to insist on working with an ‘epistemology of control’, where what may actually be needed is an ‘epistemology of receptivity’.¹⁹ And this in turn might require a process of attunement, or *Stimmung*, to use a Heideggerian term,²⁰ a moral and spiritual opening of the self to the presence of the divine.

All this is consistent with what McGilchrist has to say about the need for openness to ‘intimations of the divine’ and the kind of ‘active passivity’ that is required for this.²¹ But I think it is worth ending on a note of caution regarding the extent to which brain science might help us here. For although (as I argued in the previous section) McGilchrist seems justified in holding that the findings of brain science may in a general way enrich our grasp of how humans are able relate to the world, there is I think a danger that some defenders of religion might be tempted to fasten eagerly on laterality, or other brain studies, as somehow providing the physiological key to religious practices (like prayer and meditation), and thereby bestowing some ‘empirical validity’ on religious experience (just as, conversely, there are those reductionists who imagine that discovering a physiological grounding for religious experience might somehow undermine it). McGilchrist himself could certainly not be accused of reasoning in either of these mistaken ways, but the kind of claim he makes at the end of his essay, namely that ‘one would expect [the right hemisphere] to be more open to intimations of the divine’,²² needs in my view to be handled very carefully. The history of religious experience surely indicates a wide range of ways in which human beings have come to awareness of God – ‘whether at once, as once at a crash Paul, or as Austin a lingering-out sweet skill . . .’, as Gerard Manley Hopkins puts it;²³ and in any case we need to remember that any religious outlook worth its salt will have to take account of *all* the ways in which human beings relate to the world – a point that McGilchrist himself implicitly acknowledges.²⁴

There are two more general points, distinct but related, that it might be worth adding here in drawing to a close. First, while all that we think and feel evidently requires brain activity, the task of interpreting and evaluating our human thoughts and feelings takes us into a *space of meanings*, which necessarily lies outside the domain of brain science. ‘Meanings’, as the American philosopher Hilary Putnam once trenchantly observed, ‘ain’t in the head’.²⁵ However closely you monitor or analyse the activities of the brain, you will never uncover the *significance* of the religious (or indeed musical or literary or artistic or scientific) thoughts and feelings that are being entertained. Second, it has been a commonplace of much philosophy of mind, from Nagel’s famous ‘bat’ article onwards, that the most exhaustive brain science can never capture the qualitative dimension of consciousness as presented to the experiencing subject.²⁶ Some recent philosophers of mind appear to think this problem can be addressed by tacking ‘phenomenology’ on to neurophysiological research, as if the dimension of *how it looks or feels to the subject* can somehow be married up with the scientific analysis of the brain events.²⁷ But even if this could be

¹⁹ For this distinction, see John Cottingham, *How to Believe* (London: Bloomsbury, 2015), Ch. 1.

²⁰ See Martin Heidegger, *Being and Time* [*Sein und Zeit*, 1927], trans. J. Macquarrie and E. Robinson (New York: Harper and Row, 1962), H 137. See also George Steiner, *Heidegger* (London: Fontana, 2nd edn, 1992), p. 55.

²¹ McGilchrist, ‘Cerebral Lateralization’, section 4 and section 3.

²² McGilchrist, ‘Cerebral Lateralization’, final paragraph.

²³ Gerard Manley Hopkins, ‘The Wreck of the Deutschland’, stanza 10; in *Poems (1876–1889)*, ed. W. H. Gardner (Harmondsworth: Penguin, 1953), p. 15. For the conversions referred to cf. Acts 9:1–9, (for Saul/Paul), and for ‘Austin’ (Augustine), *Confessions*, e.g. Book VII.

²⁴ See above, footnote 9.

²⁵ Hilary Putnam, ‘Reference and Truth’ in *Philosophical Papers*, Vol. 3 (Cambridge: Cambridge University Press, 1985), pp. 65–86.

²⁶ Thomas Nagel, ‘What is it like to be a bat?’ [1974], in *Mortal Questions*, Cambridge: Cambridge University Press, 1979), Ch. 12.

²⁷ Compare Evan Thompson, *Mind in Life* (Cambridge, Mass: Harvard University Press, 2007).

done, the motivation for such a ‘phenomenological turn’ seems radically confused. For it appears to depend on the mistaken assumption that phenomenal qualities are ‘on display in the shop window of the mind’, to use Fred Dretske’s phrase.²⁸ In other words, though they pride themselves on having long since abandoned Cartesian dualism, many modern researchers (I do not at all mean to suggest McGilchrist is one) still seem to cling to the idea of a privately accessible Cartesian theatre of the mind, a phenomenal ‘shop window’, whose contents the subject can be asked to report on, and which the neurologist can then proceed to investigate in physical terms. But any ‘heterophenomenology’ to use Daniel Dennett’s term²⁹ – that is to say any first person public reports that subjects may produce about their experiences – will necessarily be take us into the public, socially mediated arena of shared language; and understanding the meaning of what is so reported will necessarily take us into an irreducibly distinct domain from that of the physical structures investigated by the brain scientist – into the complex social network of human interaction that generates all our conceptual resources and allows us to describe and interpret our relations to each other and the world.

To return finally to laterality, the fact that we humans are physically, cerebrally, equipped to apprehend the world in very different, distinct, but perhaps complementary ways is something the philosopher of religion ought to find interesting and important; but the question of how we are to *interpret* these different modes of awareness, and what is disclosed by them, necessarily takes us outside science. There is nothing mysterious or ‘spooky’ about this: we are biological creatures, and all that we do and think is mediated by the way in which our biological equipment, including our brains, is structured; but the *meaning* of what we do or think necessarily outstrips such mediation. The task is not to deny the physical mediation, or wish to be angelic intelligences free of the body; that would be to negate our humanity, just as it would be equally a denial of our humanity to suppose we can reduce our being in the world to the functioning of our cerebral equipment. To be human is to accept our creatureliness and our embodiment. And if theism is true, then there will be nothing in that embodiment that need prevent us from reaching beyond ourselves, from growing in knowledge and love of the good, or from trusting that, for this all-important goal, the equipment we have been given is, to borrow a phrase from the second epistle of Peter, ‘all that we need’.³⁰

²⁸ For Dretske, awareness of phenomenal properties (that one is experiencing redness, or the taste of strawberries) ‘is not achieved by a process of direct inward inspection’. It is a ‘much more indirect process, a process that requires the possession and use of the concept needed to think that something is (or looks) red ... Qualia necessarily remain “hidden”, inaccessible, until one acquires the conceptual resources for becoming aware of them.’ Fred Dretske, ‘Phenomenal Externalism’, *Philosophical Issues*, 7 (1996), p. 156.

²⁹ Daniel Dennett, ‘Who’s On First? Heterophenomenology Explained’, *Journal of Consciousness Studies*, *Special Issue: Trusting the Subject? (Part 1)*, 10, No. 9-10, October 2003, pp. 19–30.

³⁰ 2 Peter 1:3. I am grateful for helpful discussion of an earlier draft of this paper by participants at the symposium on ‘Ascetical Practice in a Secular Culture: A New Approach to Prayer and the Brain’, held at the Villa Palazzola, Italy, 21-3 September of 2014 under the auspices of the John Templeton Foundation’s Humble Approach Initiative. I am also grateful to Iain McGilchrist and Philip McCosker for subsequent stimulating discussions, and to two anonymous readers for the present special issue for most acute and helpful observations which I have tried to address, albeit briefly and imperfectly given the constraints of space.