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George Combe and common sense

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Abstract. This article examines the history of two fields of enquiry in late eighteenth- and early nineteenth-century Scotland: the rise and fall of the common sense school of philosophy and phrenology as presented in the works of George Combe. Although many previous historians have construed these histories as separate, indeed sometimes incommensurate, I propose that their paths were intertwined to a greater extent than has previously been given credit. The philosophy of common sense was a response to problems raised by Enlightenment thinkers, particularly David Hume, and spurred a theory of the mind and its mode of study. In order to succeed, or even to be considered a rival of these established understandings, phrenologists adapted their arguments for the sake of engaging in philosophical dispute. I argue that this debate contributed to the relative success of these groups: phrenology as a well-known historical subject, common sense now largely forgotten. Moreover, this history seeks to question the place of phrenology within the sciences of mind in nineteenth-century Britain.

Phrenology has received the attentions of many different historians in favour of many theories over the past forty years. Robert Young, David de Giustino and Terry Parssinen have taken phrenology seriously as an attempted science rather than merely dismissing it as a pseudoscience, and have seen its place at the beginning of much larger historical trends within physiology and social reform.[1] From the sociology of scientific knowledge, Steven Shapin has offered phrenology as one of the best ways to examine the relationship between scientific and social interests, as well as the knowledge-generating powers of scientific controversy.[2] Roger Cooter has examined how phrenology appealed to many different social groups in its popular forms, and has provided an excellent biobibliography, and Thomas Gieryn has offered it as an example of the dynamic construction of demarcation boundaries.[3] But these interpretations have not been without criticism. Geoffrey Cantor posited that phrenology cannot be understood by its

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1 Robert Young, *Mind, Brain and Adaptation in the Nineteenth Century*, Oxford: Clarendon Press, 1970; T.M. Parssinen, 'Popular science and society: the phrenology movement in early Victorian Britain', *Journal of Social History* (1974) 8, pp. 1–20; David de Giustino, *Conquest of Mind: Phrenology and Victorian Social Thought*, London: Croom Helm, 1975.

2 Steven Shapin, 'The politics of observation: cerebral anatomy and social interests in the Edinburgh phrenology disputes', in Roy Wallis (ed.), *On the Margins of Science: The Social Construction of Rejected Knowledge*, Keele: University of Keele Press, 1979, pp. 139–178.

3 Roger Cooter, *The Cultural Meaning of Popular Science: Phrenology and the Organization of Consent in Nineteenth-Century Britain*, Cambridge: Cambridge University Press, 1984; Cooter, *Phrenology in the British Isles: An Annotated, Historical Biobibliography and Index*, London: Scarecrow Press, 1998; Thomas Gieryn,

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sociological character alone: class and interests do not explain the conceptual matters that were at stake.[4] Echoing these sentiments, that intellectual context is needed alongside the social, John van Wyhe has suggested that George Combe was personally more responsible for the fate of phrenology in Britain than was his social class: Combe's self-righteousness caused a schism within the movement that hamstrung phrenology's success.[5] Similarly, David Stack's biography of Combe appoints him as one of the intelligentsia of the Victorian era, but with the important caveat that his opinions were sought on pressing social concerns of the age rather than on his science.[6] These authors agree that, viewed as a collection of ideas rather than as an immutable science, phrenology ceases to be an isolated aberration and becomes a world view held by many in the early nineteenth century: complementary to some, contradictory to others.

Yet a consistent theme throughout these different interpretations of phrenology is that it dramatically altered how the sciences viewed humanity: that instead of seeing ourselves as outside nature we were firmly within it. As Robert Young wrote in 1970, 'Gall convinced the scientific community once and for all that "the brain is the organ of the mind"'.[7] Indeed, Van Wyhe's book explicitly addressed this topic: *Phrenology and the Origins of Victorian Scientific Naturalism*. More recently, and somewhat more reservedly, Fernando Vidal places phrenology on the dubious path to contemporary 'brainhood' and the making of the 'cerebral subject'.[8] However far the influences of phrenology spread, the early nineteenth century is seen as a turning point for theories of man: from spiritual creations to biological creatures, from fallen angels to clever brutes.

However, it is important to note that such accounts have contextualized phrenology in terms of later nineteenth-century physiology, when theories of the brain had already trumped immaterial theories of the mind. Little attention has been given to how phrenology related to the theories of mind that preceded it: the common sense school of Thomas Reid, Dugald Stewart and Thomas Brown. Indeed, Cantor has argued that phrenology was incommensurable with metaphysics, one of many areas of irresolvable conflict.[9] Conversely, historians of philosophy have considered the notions that these thinkers inherited, upheld, developed or repudiated, but no attempt has been made to relate these to phrenology. Only David Stack has suggested that George Combe tried to continue the intellectual traditions of the Scottish Enlightenment and produce a social

'Boundary-work and the demarcation of science from non-science: strains and interests in the professional ideologies of scientists', *Amercian Sociological Review* (1983) 48, pp. 781–795.

4 G.M. Cantor, 'The Edinburgh phrenology debate: 1803–1828', *Annals of Science* (1975) 32, pp. 195–218; Cantor, 'A critique of Shapin's social interpretation of the Edinburgh phrenology debate', *Annals of Science* (1975) 32, pp. 245–256.

5 John van Wyhe, *Phrenology and the Origins of Victorian Scientific Naturalism*, Aldershot: Ashgate, 2004.

6 David Stack, *Queen Victoria's Skull: George Combe and the Mid-Victorian Mind*, London: Hambledon Continuum, 2008.

7 Young, op. cit. (1), p. 3.

8 Fernando Vidal, 'Brainhood: anthropological figure of modernity', *History of the Human Sciences* (2009) 22(1), pp. 5–36.

9 Cantor, 'The Edinburgh phrenology debate', op. cit. (4), p. 196; Cantor, 'A critique of Shapin's social interpretation', op. cit. (4), pp. 204–208.

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and moral philosophy.[10] This point deserves further development, since the speed with which Combe developed his phrenological theory for a general public, and indeed any chance he had in winning acceptance for it, was founded on how similar – and therefore to Combe's detractors how perverse – phrenology was to the mental philosophies already prevalent within nineteenth-century Scottish culture.

The purpose of this article, therefore, is threefold. First, to examine the theories of the common sense school, to outline their programme of philosophical and social betterment, to explain their theories of mind at the heart of this project, and to examine the means by which they thought it must be studied in contradistinction to the natural sciences. Second, to show how George Combe appropriated these theories to construct his own system of phrenology, a system which relied more on Combe's pronouncements of social good than on anatomical investigations of the brain. Finally, to investigate how both the common sense school and George Combe's phrenology were altered when Combe sparred with the *Edinburgh Review*'s Francis Jeffrey. Contrary to Cantor's belief, both groups concerned themselves with the ideas of the other, and incommensurability began only when Combe believed that he had bested the common sense school at their own game. Yet, in contrast to the descriptions of Young, Van Wyhe, Vidal and others, this did little to convince people that the brain was the best means to study the mind. Combe only exacerbated problems which already existed within the common sense school, and his solution became a warning of where this philosophical project might lead. In other words, this article explains how the mind was not reduced to the brain.

Thomas Reid and the Scottish Enlightenment

What distinguished the Enlightenment as a pan-European enterprise, or even as a series of unprecedented intellectual debates, remains a topic for discussion amongst historians.[11] However, there can be no doubt that knowledge of the mind was at its heart, taking its place in the 'science of man'.[12] The 'science of man' included within its purview the study of history, political and economic theory, aesthetics, philology, rhetoric, moral philosophy and metaphysics.[13] The philosophy of mind, or pneumatics, was central for two reasons. On the one hand, as Stephen Gaukroger has explained, philosophies of perception were the basis for other forms of natural

10 Stack, op. cit. (6), pp. 33–46.

11 See Dorinda Outram, *The Enlightenment*, 2nd edn, Cambridge: Cambridge University Press, 2005.

12 Other works which stress this point include Roger Smith, *Between Mind and Nature: A History of Psychology*, London: Reaktion Books, 2012; Fernando Vidal, *The Sciences of the Soul: The Early Modern Origins of Psychology* (trans. Saskia Brown), Chicago: The University of Chicago Press, 2011; Roger Smith, *The Fontana History of the Human Sciences*, London: Fontana, 1997; Gary Hatfield, 'The workings of the intellect: mind and psychology', in Patricia Easton (ed.), *Logic and Workings of the Mind: The Logic of Ideas and Faculty Psychology in Early Modern Philosophy*, Atascadero, CA: Ridgeview, 1997, pp. 21–45; Hatfield, 'Remaking the science of mind: psychology as natural science', in Christopher Fox, Roy Porter and Robert Wokler (eds.), *Inventing Human Science: Eighteenth-Century Domains*, Berkeley: University of California Press, 1995, pp. 184–231.

13 Vidal, op. cit. (12), pp. 243–282.

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philosophy: 'Sensibility is not an added extra: it is what underlies our cognitive life'.[14] On the other hand, insights into the mind could be extrapolated from the human to the Divine. As Alexander Broadie has written,

> if scientific study of the physical world can yield up knowledge of God, then scientific study of the human mind can be no less effective at yielding up this knowledge, and perhaps would be even more effective, as enabling us to extrapolate from a scientifically grounded understanding of the nature of the human mind to the nature of God's.[15]

The Scottish Enlightenment in particular had its unique character, although historians have yet to agree on its precise nature.[16] For John Robertson, the Scottish Enlightenment was driven by new professional classes that were interested in moral philosophy, history and political economy.[17] Thomas Dixon echoed Roger Emerson and Paul Wood's view of the Scottish Enlightenment that 'the "science of mind" methodology and rhetoric was designed to draw on the success and status of the physical sciences'.[18] For Richard Sher, the Scottish Enlightenment mirrored that on the Continent: a cosmopolitan, sociable and intellectually fecund intelligentsia that firmly believed in human improvement.[19] For Nicolas Phillipson, the Scottish science of man tended to focus on those topics which the *philosophes* believed were threatened following the union with England: history, and political and moral philosophy; medicine and the natural sciences; political, economic and civic virtue.[20] But for philosophers of the late eighteenth century, even these enquiries were outweighed by three more immediate concerns. First, as we will see, they wished to counteract those philosophers who they found obscene and politically dangerous. Second, they needed to temper their public pronouncements lest those who controlled university appointments – the university masters, town councils, private patrons, political and ecclesiastical dynasties and, when Westminster took strict control over Scottish affairs during the wars with Revolutionary

14 Steven Gaukroger, *The Collapse of Mechanism and the Rise of Sensibility: Science and the Shaping of Modernity, 1680–1760*, Oxford: Oxford University Press, 2011, pp. 389–420, 393.

15 Alexander Broadie, 'The human mind and its powers', in Broadie (ed.), *The Cambridge Companion to the Scottish Enlightenment*, Cambridge: Cambridge University Press, 2003, pp. 60–78, 61–62.

16 Indeed, Paul Wood has suggested that the notion of the Enlightenment itself was invented by Dugald Stewart. See Paul Wood, 'Dugald Stewart and the invention of "the Scottish Enlightenment"', in Wood (ed.), *The Scottish Enlightenment: Essays in Reinterpretation*, Rochester, NY: University of Rochester Press, 2000, pp. 1–35.

17 John Robertson, 'The Scottish contribution to the Enlightenment', in Wood, *The Scottish Enlightenment*, op. cit. (16), pp. 37–62.

18 Thomas Dixon, *From Passions to Emotions: The Creation of a Secular Psychological Category*, Cambridge: Cambridge University Press, 2003, p. 118; Roger Emerson, 'Science and the origins and concerns of the Scottish Enlightenment', *History of Science* (1988) 26, pp. 333–366; Paul Wood, 'Science and the pursuit of virtue in the Aberdeen Enlightenment', in M.A. Stewart (ed.), *Studies in the Philosophy of the Scottish Enlightenment*, Oxford: Oxford University Press, 1991, pp. 127–150; Wood, 'The natural history of man in the Scottish Enlightenment', *History of Science* (1989) 27, pp. 89–123.

19 Richard Sher, 'Science and medicine in the Scottish Enlightenment: the lessons of book history', in Wood, *The Scottish Enlightenment*, op. cit. (16), pp. 99–156.

20 Nicholas Phillipson, 'The Scottish Enlightenment', in Roy Porter and Mikuláš Teich (eds.), *The Enlightenment in National Context*, Cambridge: Cambridge University Press, 1981, pp. 19–40.

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France, the Tory peer Henry Dundas – took umbrage at their espoused doctrines and moved against them.[21] Third, they had to attract students to their classes since, although studying philosophy was compulsory for a Scottish degree, many students simply did not intend to graduate and merely paid for each course they attended.[22] The task of the philosopher in late eighteenth-century Scotland, therefore, included the responsibility to educate the upcoming generations of Christian gentlemen, but in ways that were both thought-provoking and entertaining.

The Reverend Thomas Reid embodied all these elements of the Scottish Enlightenment. Against the Presbyterian notion that divine grace was given to those whom God had elected for salvation (and was evidenced by their virtue), Reid agreed that redemption was available to all. Education was the key to unlocking the divine power within:

> There are . . . powers, of which nature hath only planted the seeds in our minds, but hath left the rearing of them to human culture. It is by the proper culture of these that we are capable of all those improvements in intellectuals, in taste, and in morals, which exalt and dignify human nature: while, on the other hand, the neglect or perversion of them makes its degeneracy and corruption.[23]

Yet if the fate of the Enlightenment rested on the philosophy of mind, then Reid believed that this mission had been threatened by a number of sceptical attacks, particularly from David Hume:

> if it is indeed what the *Treatise of Human Nature* makes it, I find I have been only in an enchanted castle, imposed by spectres and apparitions. I blush inwardly to think how I have been deluded; I am ashamed of my frame, and can hardly forbear expostulating with my destiny: Is this thy pastime, O Nature, to put such tricks upon a silly creature, and then to take off the mask, and shew him how he hath been befooled?[24]

Reid freely admitted that Hume possessed the finest mind in metaphysics, but argued that he had been led astray by philosophical scepticism. Both Hume and Berkeley had 'conveyed to me no light, but darkness; I can conceive no otherwise of it, than as an odd and obscure circumlocution'.[25] An 'excess of refinement' had led to a flight of metaphysical fancy.

21 See Roger Emerson, *Academic Patronage in the Scottish Enlightenment: Glasgow, Edinburgh and St. Andrews*, Edinburgh University Press, 2008; Emerson, 'Politics and the Glasgow professors, 1690–1800', in Andrew Hook and Richard Sher (eds.), *The Glasgow Enlightenment*, East Linton: Tuckwell Press, 1995, pp. 21–39; Donald Withrington, 'Education and society in the eighteenth century', in Nicholas Phillipson and Rosalind Mitchison (eds.), *Scotland in the Age of Improvement: Essays in Scottish History in the Eighteenth Century*, Edinburgh: Edinburgh University Press, 1970, pp. 169–199. For a sympathetic account of Henry Dundas see Michael Fry, *The Dundas Despotism*, Edinburgh: Edinburgh University Press, 1992.

22 J.B. Morrell, 'The University of Edinburgh in the late eighteenth century: its scientific eminence and academic structure', *Isis* (1971) 62(2), pp. 158–171.

23 Thomas Reid, *An Inquiry into the Human Mind on the Principles of Common Sense*, 5th edn, Edinburgh: Bell & Bradfute, and William Creech, 1801, pp. 6–7.

24 Reid, op. cit. (23), p. 28.

25 Reid, op. cit. (23), p. 49.

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Indeed when, in 1764, Reid, now regent at King's College Aberdeen, published *An Inquiry into the Human Mind on the Principles of Common Sense*, this concern for metaphysical excess became a new standard for philosophical reasoning:

> If there are certain principles, as I think there are, which the constitution of our nature leads us to believe, and which we are under a necessity to take for granted in the common concerns of everyday life, without being able to give a reason for them; these are what we call the principles of common sense; and what is manifestly contrary to them, is what we call absurd.[26]

These were to be Reid's foundations of philosophy: unreasonable, since their truth could not be justified on more fundamental principles; undeniable without betraying 'heaven and earth, body and spirit'. In his own words, Reid wanted to save metaphysics from 'the ridicule and contempt of sensible men'.[27]

Where philosophers had gone wrong, Reid believed, was by adopting the 'way of ideas': particularly that which had been developed by John Locke. The principal idea which he challenged was that of 'simple apprehensions', the raw ideas obtained from the senses on which the mind operates. For Reid, this was merely a fiction. Just as the pain of gout carried with it a belief in toes, a faith in the external world was inherent to the mind's eye:

> So that here, instead of saying, that the belief or knowledge is got by putting together and comparing the simple apprehensions, we ought to say, that the simple apprehension is performed by resolving and analysing a natural and original judgement.[28]

Judgement acted in all processes of thought, Reid concluded, not just on the products of a passive *sensorium commune*.[29] Reid's *Inquiry* was an analysis of all the senses – smell, taste, hearing, touch and sight – as the products of the mind which is active in perception.

Thomas Reid and common sense philosophy

Moreover, Reid's investigation suggested to him that other parts 'of that furniture which nature hath given to the human understanding' could be revealed.[30] Yet outside his lectures in Glasgow – where he had been appointed professor of moral philosophy following his *Inquiry* – this project was not made public for over twenty years.[31] It was only when he retired from teaching in 1780 that he published his *Essays on the Intellectual Powers of Man*, a full account of his philosophy of common sense – his vision of what mental philosophy was and what it should be.

26 Reid, op. cit. (23), p. 52.

27 Reid, op. cit. (23), p. 42.

28 Reid, op. cit. (23), pp. 44–45.

29 On the *sensorium commune* see Karl Figlio, 'Theories of perception and the physiology of mind in the late eighteenth century', *History of Science* (1975) 12, pp. 177–212.

30 Reid, op. cit. (23), p. 472. The phrase 'furniture of the mind' originated with George Turnbull. See Wood, op. cit. (18), p. 132.

31 On Reid's appointment to the Glasgow chair, see Paul Wood, '"The fittest man in the kingdom": Thomas Reid and the Glasgow Chair of Moral Philosophy', *Hume Studies* (1997) 23, pp. 277–313.

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All philosophy, Reid believed, suffered from a certain irredeemable ambiguity of words, except perhaps one: mathematics.[32] The reason for mathematicians' success was their 'wisdom to define accurately the terms they use, and lay down, as axioms, the first principles on which their reasoning is grounded'.[33] Newton, too, had provided an example which metaphysicians could emulate, 'by laying down the common principles and axioms, on which the reasonings in natural philosophy are built'.[34] It was an example which Reid thought philosophy should follow, by laying down a number of 'clear definitions and self-evident axioms'.[35] But Reid also noticed a problem with this: numbers and mathematical operations were relatively easy to define, whereas for mental philosophy this simple act had run them into difficulty.

In milder instances, this meant that mental phenomena were described in terms that were ill-defined: this had been his issue with Locke's concept of 'ideas'. Referring to the historian and philosopher Jakob Brucker, Reid believed that there were as many different definitions of 'ideas' as there were philosophers who used the term.[36] But the worst cases, Reid thought, were those in which the terms were too precise: as with perception, false analogies led to false conclusions. Analogies could only work when substances were of a similar nature, and nothing in nature resembled the immaterial mind. Although deliberation may be thought of as weighing different motives as if on a scale, this was hardly a useful image:

> on this foundation some of the schoolmen maintained, that, if a hungry ass were placed between two bundles of hay equally inviting, the beast must stand still and starve to death, being unable to turn to either, because there are equal motives to both.[37]

No understanding of the mind could be developed using terms borrowed from natural philosophy. Those which attempted to do so – using models based on brains, nerves, animal spirits or vibrations – did more to hinder mental philosophy than help it. They ultimately created a barren mental landscape.

Despite these limitations, between language that was too loose and too specific, Reid believed that a general description of the mind could be made. The mind was 'that in him

32 As many historians have attested, Reid took an interest in the mathematical problems of his day. See, for example, Paul Wood, 'Thomas Reid and the culture of science', in Terence Cuneo and René van Woudenberg (eds.), *The Cambridge Companion to Thomas Reid*, Cambridge: Cambridge University Press, 2004, pp. 53–76; Niccolò Guicciardini, 'Thomas Reid's mathematical manuscripts: a survey', *Reid Studies* (2001) 4(2), pp. 71–86.

33 Thomas Reid, *Essays on the Intellectual Powers of Man*, Edinburgh: John Bell, 1785, p. 9.

34 Reid, op. cit. (33), p. 37.

35 Larry Laudan has suggested that Reid began a tradition that continues to describe Newton as a methodological, as well as scientific, genius. See L.L. Laudan, 'Thomas Reid and the Newtonian turn of British methodological thought', in Robert Butts and John Davis (eds.), *The Methodological Heritage of Newton*, Oxford: Basil Blackwell, 1970, pp. 101–131. See also Patricia Fara, *Newton: The Making of Genius*, London: Macmillan, 2002; Richard Yeo, 'Genius, method, and morality: images of Newton in Britain, 1760–1860', *Science in Context* (1988) 2, pp. 257–284.

36 Reid, op. cit. (33), p. 23. On Jakob Brucker's 1732 work *Philosophical History of the Theory of Ideas* and other eighteenth-century histories of association see Vidal, op. cit. (12), pp. 171–176.

37 Reid, op. cit. (33), p. 56. Reid's target here was Francis Hutcheson's *Inquiry into the Original of Our Ideas of Beauty and Virtue*, London: J. Darby, 1725.

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which thinks, remembers, reasons, wills. The essence both of body and of mind is unknown to us. We know certain properties of the first, and certain operations of the last, and by these only can we define or describe them'.[38] What should guide this selection of mental faculties and the definitions given to them, according to Reid, was not the reductive concepts of philosophy but the language of the vulgar. The populace had no need for philosophical contrivances: their language was based on everyday needs and occurrences. Mental philosophy, therefore, was to be formed not from the precepts of logic but by common experience: 'They are facts of which every man must judge by what he feels; and they admit of no other proof but an appeal to every man's own reflection'.[39] Indeed, this had implications for a range of philosophical debates: for instance, Reid considered beauty not just to be in the eye of the beholder since the vulgar labelled certain objects and shapes beautiful.[40]

The rest of Reid's philosophy – indeed, the rest of Reid's career as a philosopher – was an investigation into the powers of the mind according to these principles of common sense. His *Essays on the Intellectual Powers* extended this analysis further to include memory, conception, judgement, reasoning and taste. His 1788 *Essays on the Active Powers of Man* discussed the will, the instincts and the passions.[41] Moreover, it was from these original powers that other facets of the mind developed: imagination from conception; liberty from the will; space from touch; time, causality and identity from memory. Through the principles of common sense, Reid had created a topography of the mind: from its roots in fundamental, unassailable and loosely defined powers the mind developed the rich variety of human abilities. Extending the notion further, even faith, reason, aesthetics and all the hallmarks of civilization arose from these primitive faculties.

Broadly speaking, the response to Reid's works was enthusiastic.[42] His attempts to rescue metaphysics from scepticism and the general contempt of the public were appreciated. Reid's *Inquiry*, the London-based *Monthly Review* remarked in 1764, was 'a very laudable attempt ... in which every friend of truth must wish him success'.[43] His *Essays on the Intellectual Powers* provoked similar reactions. In 1786 the *Scots Magazine* judged that this was 'a system of eminent merit with regard to the operations of the human understanding; and we have no doubt but that the new views which are here laid open will occasion a considerable revolution in the philosophy of mind'.[44] Indeed, common sense was adopted by others as their main line of attack not only against scepticism, but also against materialism and immorality.[45]

38 Reid, op. cit. (33), p. 13.

39 Reid, op. cit. (33), p. 306.

40 Reid, op. cit. (33), p. 719.

41 Thomas Reid, *Essays on the Active Powers of Man*, Edinburgh: John Bell, 1788.

42 One notable exception was Joseph Priestley, who detected not only loose thinking but a slight against his own materialist theory of the mind. Joseph Priestley, *An Examination of Reid, Beattie and Oswald*, 2nd edn, London: J. Johnson, 1775.

43 Anon, 'An enquiry into the human mind, on principles of common sense', *Monthly Review* (1764) 30, pp. 358–378, 359.

44 Anon, 'Essays on the intellectual powers of man', *Scots' Magazine* (1786) 48, pp. 638–642, 642.

45 See, for example, James Beattie, *Elements of Moral Science*, Edinburgh: T. Cadell, 1790–1793; James Oswald, *Appeal to Common Sense in Behalf of Religion*, 2 vols., London: J. Hughes, 1766–1772.

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Dugald Stewart and philosophy of mind

When Reid died in 1796, eight years after publishing his *Essays on the Active Powers of Man*, he left behind him a number of disciples willing to adopt and extend his doctrine. One of these was the chair of pneumatics and moral philosophy at the University of Edinburgh, Dugald Stewart. Stewart was devoted to Reid and his memory: in 1803 he published a biography of Reid, not only in honour of his philosophical acumen but because it seemed that his philosophy was of national importance in these troubled times. Writing on the heady days of 1792–1793 from the safety of 1828, Stewart noted,

> The danger with which I conceived the youth of this country to be threatened by that inundation of sceptical or rather atheistical publications which were then imported from the Continent, was immensely increased by the enthusiasm which, at the dawn of the French Revolution, was naturally generated in young and generous minds.

In an age of excessive zeal and revolutionary rhetoric, Stewart believed that the calming influence of Reid's philosophy was more necessary than ever.[46]

But while Stewart admired Reid, he did more than merely parrot his philosophy. On the one hand, the optimism that Enlightenment thinkers had placed in the ability of reason to improve society was tempered in Stewart's philosophy in light of the Revolution. The promise of social reform was still central to his 1792 work *Elements of the Philosophy of the Human Mind*, but as a way to ameliorate one's own defects: 'It ought not to be the leading object of any one, to become an eminent metaphysician, mathematician, or poet; but to render himself happy as an individual, and an agreeable, a respectable, and an useful member of society'.[47] The role of education in Stewart's philosophy was to control early experiences and harness talents, thereby improving society:

> surely the great aim of an enlightened and benevolent philosophy, is not to rear a small number of individuals, who may be regarded as prodigies in an ignorant and admiring age, but to diffuse, as widely as possible, that degree of cultivation which may enable the bulk of a people to possess all the intellectual and moral improvement of which their nature is susceptible.[48]

The Marquis de Condorcet was right to believe that the wealth of a society could be measured by the happiness of its people. But Stewart countered that happiness could only be achieved by enriching their mental powers to their natural limits. The French Revolution had failed – Stewart's work appeared not long after the September massacres in Paris – because it offered a vision of social reform and political power by 'violent and

46 Dugald Stewart, *The Philosophy of the Active and Moral Powers of Man*, Edinburgh: Adam Black, 1828, p. vi.

47 Dugald Stewart, *Elements of the Philosophy of the Human Mind*, 3 vols., Edinburgh: W. Creech, 1792–1827, vol. 1, p. 23.

48 Stewart, op. cit. (47), p. 27.

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sanguinary means alone'.[49] In contrast, Stewart's philosophy would offer progressive, legitimate – but, more importantly, gradual – social change.[50]

On the other hand, while Stewart praised Reid's work, the object of his philosophy was very different. Where Reid had used common sense to adjudicate on matters such as scepticism, mechanics and taste, for Stewart these matters were irrelevant. Yet by narrowing his focus from philosophy in general to the philosophy of mind in particular, Stewart began to elaborate upon Reid's original postulates, changing them in the process. For instance, while his *Elements* followed the layout of Reid's *Intellectual Powers* – in turn considering perception, judgement (attention, in Stewart's parlance), conception, abstraction, memory, imagination – still Stewart reduced the number of original powers, and also considered the varieties of human experience that operated within these powers. Abstraction was a power common to all, but prowess in this area depended upon the tasks required by everyday life:

> the speculative farmer reduces the infinite variety of soils to a few general descriptions; the physician, the infinite variety of bodily constitutions to a few temperaments; and the moralist, the infinite variety of human characters to a few of the ruling principles of action.[51]

Stewart believed that experience determined not only which intellectual powers were developed, but also in what particular ways they were cultivated. It was not, as Reid had suggested, a process better accounted for by the power of habit, because this term referred to more than just a single mental operation. Practice made the work of the mechanic, the orator and the accountant perfect: 'it appears to me more precise and more satisfactory, to state the principle itself as a law of our constitution, than to slur it over under the concise appellation of *habit*, which we apply in common to mind and to body'.[52] Indeed, this principle was called the 'association of ideas'. It operated according to its own laws; without it poetry would not please and oratory would not persuade.[53] In other words, Reid had tried to discover the furniture of the mind; Stewart wanted to know how it could be arranged.

Other alterations, however, suggested much larger differences of opinion between Stewart and his mentor. To begin with, mathematics was not to be the model by which the philosophy of mind was guided. As Richard Olson has detailed, by the late eighteenth century a dispute had arisen between French advocates of the symbolic

49 Stewart, op. cit. (47), p. 257.

50 This endorsement of Condorcet led two Lords of Session to call on Stewart to retract these statements and to reaffirm that his students were bring taught 'a love and a veneration for the British constitution'. William Hamilton, *The Collected Works of Dugald Stewart*, 11 vols., Edinburgh: Thomas Constable & Co, 1858, vol. 10, pp. lxx–lxxv. On Stewart's politics and political theory see Stefan Collini, Donald Winch and John Burrow, *That Noble Science of Politics: A Study in Nineteenth-Century Intellectual History*, Cambridge: Cambridge University Press, 1983, pp. 23–62.

51 Stewart, op. cit. (47), p. 226. Humanity, as Steven Shapin and Barry Barnes have pointed out, was not regarded as a universal whole during this period but as a number of different 'types' which guided pedagogical discussion. See Steven Shapin and Barry Barnes, 'Head and hand: rhetorical resources in British pedagogical writing 1770–1850', *Oxford Review of Education* (1976) 2, pp. 231–254.

52 Stewart, op. cit. (47), p. 282, italics in original.

53 Stewart, op. cit. (47), p. 291.

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method of mathematics and the British defenders of the ostensive methods; in other words, between algebra and geometry.[54] For Stewart, the issue was relatively straightforward: algebra could lead to 'the most paradoxical and absurd conclusions', whereas in geometrical demonstrations 'the diagrams to which our attention is directed, serve as a continual check on our reasoning powers'.[55] Yet what both positions in this debate revealed was that mathematics required its own intellectual powers; that it was itself an abstraction. For Stewart's philosophy, physics was to be its guide; Newton's success, that he proved the existence of gravity without speculating upon its ultimate nature.[56]

Of course, using physics as a model by which mental philosophy could be investigated caused its own problems, especially for those like Stewart who wished to keep the physical and mental worlds distinct. Stewart wished to borrow only the methods of the natural sciences – the use of hypothesis and analogy – rather than the subject matter. Indeed, there were only eleven circumstances in which the mind could be studied using the tools of the outside world: by improving or preserving the senses; by discovering the history of enthusiasm and imagination, of conception and heredity, of madness, dreams, music, customs and habits; by examining natural languages, signs, physiognomy and the powers of imitation and of memory.[57] Yet these were the conditions in which mind and matter were connected, and all that could be found was the laws that regulated this union. They should not be mistaken, Stewart warned, for the objects they represented. It was here that common language let the philosopher down: 'It is owing to the same circumstance, that we have scarcely any appropriated language with respect to mind, and that the words which express its different operations, are almost all borrowed from objects of our senses'.[58] Moreover, Stewart elaborated, this common language ensnared the thought of the common people. Mental philosophy required a strict regime of self-reflection: 'And unless he submit in this manner to bring all his opinions to the test of a severe examination, his ingenuity, and his learning, instead of enlightening the world, will only enable him to give an additional currency, and an additional authority, to established errors'.[59] This was a step beyond what Reid had planned for his mental philosophy and social reform. For Reid, once terms had been clarified then a mental philosophy could be constructed. Few may have the ability to analyse themselves, but the seeds to do so had been planted in the minds of everyone, waiting to sprout. Conversely, there were fewer restrictions in Stewart's philosophy – after all, hypotheses and analogies could now be applied to the mind – but he was more cautious of its outcomes. Reid's axioms brought small certainties. Stewart's laws afforded greater leaps, but with no way to know whether this was forwards or backwards.

54 See Richard Olson, *Scottish Philosophy and British Physics, 1750–1880*, Princeton, NJ: Princeton University Press, 1975, pp. 55–93.
55 Stewart, op. cit. (47), p. 176.
56 Stewart, op. cit. (47), p. 7.
57 Stewart, op. cit. (47), pp. 11–12.
58 Stewart, op. cit. (47), p. 13.
59 Stewart, op. cit. (47), p. 32.

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The Academy of Physics (1797–1800): cuckoos in the nest

Moreover, despite these differences between Reid's and Stewart's philosophies – the turn towards physics and the association of ideas, the repudiation of common language and common people – the public response to Stewart's work was similar to that which had greeted Reid's. Indeed, Stewart was increasingly coupled with Reid as the very notion of a 'common sense philosophy' was brought into question. Interestingly, these criticisms came from two of Stewart's former students: Francis Jeffrey and Thomas Brown. The two had been involved in the Academy of Physics, a learned society for students which counted many future prominent Scottish figures as members, and through which the editorial spirit of the *Edinburgh Review* was fashioned. While the 'physics of mind' was a topic for discussion, this precluded debating its unknowable essence: political economy, geology and chemistry were the members' chief concerns. Moreover, the only course more popular than Professor Stewart's on moral philosophy was Professor Robison's on natural philosophy.[60] As David Wilson has detailed, Robison's views on natural philosophy were strikingly different to Stewart's: Newton's laws were not the foundations of physics, but this did not mean it was any easier to establish their truth; chemistry, as with physiology, was not a science since it must speculate on 'insensible motions of invisible particles'.[61] As we shall see, both Jeffrey and Brown adapted Robison's natural philosophy to assess Stewart's scientific ambitions for his mental philosophy. In all cases, he was found wanting.

The first opportunity to publicly criticize Stewart's pretensions came in 1803 when he published his biography, *Account of the Life and Writings of Thomas Reid*. As Paul Wood has described, this work served many purposes for Stewart: it tied his philosophy with Reid, creating the notion of a 'common sense school' in the process, and it helped soften his reputation as a Whig during the regime of Henry Dundas.[62] But for Jeffrey, writing in the *Edinburgh Review*, Stewart's work merely showed how little he understood inductive philosophy.

Philosophers from Hume to Condorcet, Jeffrey wrote, had disagreed about every aspect of metaphysics except one: that its study was important and that striking new developments were soon approaching. But this was a fantasy, based on a false analogy with the sciences. The success of the sciences, according to Jeffrey, was based on their ability to arrange and combine phenomena, 'to disclose their most hidden properties and relations': in short, on experiment.[63] Moreover, experiments proved the direct utility of the sciences since by manipulating the material world we increase our power over it. Yet mental philosophy had neither of these elements of the experimental sciences. On the

60 See G.N. Cantor, 'The Academy of Physics at Edinburgh, 1797–1800', *Social Studies of Science* (1975) 5, pp. 109–134.

61 On Robison's natural philosophy see David B. Wilson, *Seeking Nature's Logic: Natural Philosophy in the Scottish Enlightenment*, University Park: Pennsylvania State University Press, 2009, pp. 201–271.

62 Paul Wood, 'The hagiography of common sense: Dugald Stewart's account of the life and writings', in Alan Holland (ed.), *Philosophy, Its History and Historiography*, Dordrecht: D. Reidel, 1985, pp. 305–322.

63 [Francis Jeffrey], 'Account of the life and writings of Thomas Reid', *Edinburgh Review* (1804) 3(6), pp. 269–287, 273. On Francis Jeffrey's life and work see Henry Cockburn, *Life of Francis Jeffrey*, Edinburgh: Adam and Charles Black, 1872.

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one hand, metaphysicians could only observe the mind: 'we cannot decompose our perceptions in a crucible, nor divide our sensations with a prism'.[64] On the other hand, the observations made by philosophers had not – indeed, could not – reveal anything new about the mind. People knew their own minds without study, without the aid of a philosopher. A metaphysician, Jeffrey continued, was not an experimental philosopher but a grammarian, 'who arranges into technical order the words of a language which is spoken familiarly by all his readers; or … [an] artist who exhibits to them a correct map of a district with every part of which they were previously acquainted'.[65] Profound reasonings only led back to the 'the creed and the ignorance of the vulgar'; errors of opinion did not require metaphysical principles to be corrected. In short, the value of philosophy was only the simple pleasure of intellectual exertion.

According to the philosopher and historian G. E. Davie, it is impossible to overestimate the importance of Jeffrey's attack on Stewart, both on his biography of Reid and on his *Philosophical Essays*. Together, Davie wrote, these reviews 'galvanised the Scottish intellectual establishment as nothing had done since the challenge of David Hume'.[66] Interestingly enough, it was to David Hume that Thomas Brown devoted a part of his attention in 1805 when he became embroiled in the 'Leslie affair', the attempt by the moderates within the Church of Scotland to assert control over Edinburgh University under the pretext of philosophical debate.[67] Indeed, the tone that Brown took during this debate was precisely that which he had developed in 1798 when he published his *Observations on the Zoonomia of Erasmus Darwin, M.D*. When, in 1808, ill-health forced Stewart to relinquish most of his teaching duties, he gave these to his former student, and while in 1810 they shared the chair of moral philosophy, Brown had effectively taken over Stewart's role in the university.[68] This was another opportunity to present the philosophical theory he had developed over a decade previously.

Yet the first work to outline a complete version of Brown's mental philosophy was his *Sketch of a System of the Philosophy of the Human Mind*, only published in 1820. Here Brown pointed out 'the great defect of the System of Philosophy of Mind, which has been generally prevalent in the northern part of the Island, so as to distinguish it as the seat of a particular School of Metaphysics'. The main problem, Brown observed,

> seems to me to be a redundancy of division, arising partly indeed from imperfect analyses of the complex phenomena of thought which a nicer observation might have shewn to be in their elements the same, but still more from indistinct notions attached to the words *Faculty*

64 [Jeffrey], op. cit. (63), p. 275.

65 [Jeffrey], op. cit. (63), p. 276.

66 G.E. Davie, *The Social Significance of the Scottish Philosophy of Common Sense*, Dundee: University of Dundee Press, 1973, p. 16. See also Cristina Paoletti, 'Common sense in the public sphere: Dugald Stewart and the *Edinburgh Review*', *History of European Ideas* (2012) 38(1), pp. 162–78. [Francis Jeffrey], 'Stewart's philosophical essays', *Edinburgh Review* (1810) 17(33), pp. 167–211.

67 On the Leslie affair see J.B. Morrell, 'The Leslie affair: careers, kirk and politics in Edinburgh in 1805', *Scottish History Review* (1975) 54(157), pp. 63–82; John G. Burke, 'Kirk and causality in Edinburgh, 1805', *Isis* (1970) 61(3), pp. 340–354.

68 On this transition see Thomas Dixon, *Thomas Brown: Selected Philosophical Writings*, Exeter: Imprint Academic, 2010, p. 16.

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> or *Power* of the Mind, and to the processes that are termed *Operations* or *Acts* of those Powers, by which a sort of mystery has been thrown over the simple sequences of the Phenomena of the Mind, the relations of which to each other or to certain bodily changes, are all which those words can be justly employed to denote.[69]

The philosophies of Reid and Stewart rested on the same contradiction: if the nature of the mind was unknowable, then no distinction could be drawn between its essences and accidents. Philosophers thought they had discovered the foundations of knowledge, the eternal and original intellectual powers. But as the *British Review* had countered in 1815, one man's *ipse dixit* was no substitute for reason.[70] What Reid and Stewart had really found were merely antecedent and consequent mental states. As Brown had written in 1798, Newton succeeded because he did not create hypotheses to explain the motion of bodies, but simply labelled the process 'gravitation'. Physics had flourished because all the powers it studied – impulse, gravity, chemical affinity – were merely shorthand for different changes of motion.[71]

Metaphysics would similarly blossom, Brown believed, if it were to examine changing states of mind. 'Association of Ideas' was an inadequate notion of the study of the mind, Brown believed, since it applied only to 'conceptions' – those 'faint seeming copies' of the 'affections of sense' – and because it implied a mysterious, unconscious agent which was doing the associating.[72] Brown's alternative, 'phenomena of suggestion', encompassed a wider range of mental tools: resemblance, contiguity, contrast, proximity, feelings of relation ('which constitute our judgement'), emotions, temper and disposition, the state of the body, and general habits. These suggestions may arise in the individual mind, from objects in the external world, or from the language used to describe either. Many suggestions may arise even within the same object: what was once abstraction was now the combination of resemblance and contrast. 'Laws of Suggestion' were merely abstractions which arose as one state of mind transformed into the next. The rich eloquences of poetry – metaphor, analogy, alliteration, assonance and rhyme – were especially powerful since they exercised such control over the train of thought.[73]

Yet Brown noted that such analyses of mind were only virtual, not real. The mind was not like matter, in which complex phenomena could be broken down into their constituent parts. There was no distinction between simple and complex thoughts, only states of mind.[74] Indeed, for all its similarities Brown suggested that chemistry was the natural science which the philosophy of mind should emulate. Like the chemist,

69 Thomas Brown, *Sketch of a System of the Philosophy of the Human Mind*, Edinburgh: Bell & Bradfute, Manners & Miller, and Waugh & Innes, 1820, p. x.

70 Anon., 'Elements of the philosophy of the human mind', *British Review* (1815) 6, pp. 170–200, 189.

71 Thomas Brown, *Observations on the Zoonomia of Erasmus Darwin, M.D.*, Edinburgh: Mundell & Son, 1798, pp. ix–x

72 Brown, op. cit. (69), p. 187.

73 Brown, op. cit. (69), pp. 185–230. Indeed, Brown's lectures were littered with verse, and he published numerous volumes of poetry. See Alma Rands, 'Thomas Brown's theories of association and perception as they relate to his theories of poetry', *Journal of Aesthetics and Art Criticism* (1970) 28, pp. 473–483.

74 Brown, op. cit. (69), pp. 19–20.

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the mental philosopher gains knowledge through comparing substances, by noting their interactions and the different forms they can take:

> Almost every feeling is susceptible of this reflective analysis, in some greater or less degree; inquirer after inquirer, in the field of mind, may evolve to us unsuspected elements of thought and passion, as chemist after chemist, in the world of matter, presents to us elements that have never been perceived by us, in substances which may have been before us from the moment of our birth.[75]

The chemist did not create anything new, but through his manipulations brought what was hidden into the light. The mind may not have such depths, but through self-reflection the great varieties of human experience could be noticed and noted down.

What this mental philosophy meant for social betterment, how Brown overcame the problems that Jeffrey had identified with the philosophy of Reid and Stewart, did not become clear until the posthumous publication of Brown's *Lectures on the Philosophy of the Human Mind* later in 1820. In Brown's view, Jeffrey had mistakenly distinguished between natural and mental science based upon the objects which they could manipulate; utility was related to power. For Brown, this overlooked the essential unity of these two sciences, that the natural world was investigated by man. Both objects of these sciences – the material and the immaterial – required examination for any to succeed: the mind of the astronomer needed as much refinement as his telescope.[76] Yet while this move may seem like a return to the world of Reid and the Enlightenment, where the science of mind was the font from which all others flowed, Brown's philosophy was much more radical than this. If the mind were an instrument, then it was honed by every endeavour that humanity could undertake. Moreover, self-reflection was possible at all times since everyone has 'that universe of thought, which is the true home and empire of the mind'.[77] As Brown had told his audience:

> The science of mind, is the science of yourselves; of all who surround you; of every thing which you enjoy or suffer, or hope or fear: so truly the science of your very being, that it will be impossible for you to look back on the feelings of a single hour, without constantly retracing phenomena that have been here, to a certain extent, the subject of your analysis and arrangement.

In other words, Brown's mental science was an entirely personal affair. The phenomena of the human mind were so varied, the purposes for which they were analysed so particular, that there was little need for the mental philosopher. From his lectures, Brown hoped that his students would develop a 'philosophic spirit' rather than gain 'any limited acquirements in philosophy'.[78] Ethics, for Brown the 'great doctrine of moral obligation', still led to error; well-intentioned benevolence could be as destructive as intentional tyranny. Regulations produced by 'generous projectors' tended to repress the virtues they were trying to stimulate, to increase the misery they were trying to relieve.

75 Brown, op. cit. (69), p. 22.

76 Thomas Brown, *Lectures on the Philosophy of the Human Mind*, 4 vols., Edinburgh: W. & C. Tait, 1820, vol. 1, p. 20.

77 Brown, op. cit. (76), p. 19.

78 Brown, op. cit. (76), pp. 13–14.

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Instead, Brown insisted that practical ethics were more important, that intellectual analysis of our own happiness and suffering could lead to a more general inquiry of 'what are the *means best* calculated for producing the *greatest amount* of social *good*'.[79] Reflection was always a personal process, but once the self was analysed then this spirit blossomed out to include others, creating with it a natural sense of empathy. This, for Brown, was the basis of civil society, of politics and ultimately of humility before God. Social reform could not be imposed from the lecture podium, Brown concluded, where an audience is merely the passive receiver of opinion. Only self-reflecting individuals, who had reformed themselves, could hope to change society.

George Combe's phrenology

When, in 1816, George Combe was invited to a friend's house, witnessed Johannes Spurzheim dissect a brain, and was converted to the principles of craniology, Edinburgh was already familiar with metaphysical debate. It was already familiar with phrenology as well, even if through the *Edinburgh Review*, which had already brought its physiological pretensions into question on two previous occasions.[80] Physiologists had already decided against phrenology; their opinion would not change throughout the nineteenth century.[81] Combe himself had no medical training; for this he relied on his brother Andrew. What George offered instead was a version of phrenology that borrowed heavily from the intellectual debates that had already taken place within the University of Edinburgh and in the Scottish presses. For Combe, phrenology was a means to walk through – indeed, to transcend – the muddles of metaphysics.

When Combe first outlined the principles of Gall and Spurzheim's new science in 1817, he was careful to align phrenology with the methodological standards already set by mental philosophers: observable facts, general rules and just inferences were the basis of phrenology as much as they were of mental science. But instead of studying immaterial principles of the mind, phrenologists examined the more salient features by which the mind could be studied. On the one hand, the anatomy of the brain could be observed much more easily: 'the brain is double, or consists of a right and left lobe, corresponding to, but independent of each other'.[82] It was natural for Gall to conclude from this, Combe elaborated, that the brain was a collection of independent 'organs': thirty-three mental faculties distributed over the head, each of which could be identified

79 Brown, op. cit. (76), p. 10, italics in original.

80 See [Thomas Brown], 'Lettre de Charles Villers à Georges Cuvier', *Edinburgh Review* (1803) 1, pp. 147–160; [John Gordon], 'The doctrines of Gall and Spurzheim', *Edinburgh Review* (1815) 25(49), pp. 227–268.

81 See John Barclay, *An Inquiry into Opinions Concerning Life and Organization*, Edinburgh: Bell & Bradfute, Waugh & Innes, 1822, pp. 372–381; Peter Roget, *Treatises on Physiology and Phrenology*, Edinburgh: Adam & Charles Black, 1838; [William Benjamin Carpenter], 'Mr. Noble on the brain and its physiology', *British and Foreign Medical Review* (1846) 22, pp. 488–544.

82 George Combe, 'Explanation of the physiognomical system of Drs. Gall and Spurzheim', *Scots Magazine & Edinburgh Literary Miscellany* (1817) 79, pp. 242–250, 244–245. On the implications of the two cerebral hemispheres for later nineteenth-century neuroscience see Anne Harrington, *Medicine, Mind and the Double Brain: A Study in Nineteenth-century Thought*, Princeton: Princeton University Press, 1987.

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by a sizable lump on the skull which corresponded to talent or propensity. On the other hand, what these organs represented was individual differences rather than human commonalities. Where Reid and Stewart took conception to be a basic power from which a range of specific thoughts were produced, Combe scattered this ability throughout the phrenological organs, including locality, veneration and cautiousness. The organs common to man and animals – amativeness, philoprogenitiveness (love of children), combativeness, secretiveness and constructiveness, for example – were located at the base of the skull, those of knowledge and reflection – including causality, wit, comparison, language and order – could be found near the forehead.[83] Phrenology was inherently public in nature: each demonstration identified personal shortcomings through a measure of social talents; each reading was both proof and practice.[84]

For Combe, this method of examining the mind was in direct contrast to those provided by the mental philosophers, in particular by Dugald Stewart. To reveal the unjustifiable foundations of reason, Reid and Stewart had posited that only self-reflection was necessary, that introspection was the key to self-knowledge. But when in 1819 Combe published his *Essays on Phrenology*, he hit upon a contradiction. While both remonstrated that the mind was ineffable, with an inexplicable confidence in their methods they still tried to find its deeper structures:

> it was impossible for them, by such means, to discover the plurality of the faculties or their functions. By reflection, we discover only the kinds of feelings we experience, and the kinds of ideas we form; but in this way, or from this source, we learn nothing of the plurality or distinct functions of the faculties themselves.[85]

Yet this had been Brown's point: consciousness was a single entity, an indivisible whole. According to Combe, Stewart's philosophy struggled with the number and primacy of mental powers only because he claimed to discover faculties which Brown pointed out were laws. Attention, for example, was not an original faculty of the mind as Stewart had supposed: 'It would be as philosophical to call Relaxation or Contraction muscles, or to call Digestion an organ of the abdomen, as to call Attention a faculty of the mind'.[86] Introspection could detect the activities of the mind, but not the faculties that underpinned and sustained them.

Such a conceptually dubious practice, Combe elaborated, only served to hide the real foundations of mental science. Whereas philosophers talked 'mystically of the "tortuous windings of the human heart"', the 'vulgar' were already familiar with judging people according to their talents and dispositions.[87] Indeed, since they were aware that every person had their intellectual limits, their expectations of self-improvement were more

83 Combe, op. cit. (82), pp. 247–248.

84 Roger Cooter puts the number at over 233 public lecturers of phrenology up to 1860. See Cooter, *The Cultural Meaning of Popular Science*, op. cit. (3), pp. 272–300. See John van Wyhe, 'The diffusion of phrenology through public lecturing', in Aileen Fyfe and Bernard Lightman (eds.), *Science in the Marketplace: Nineteenth-Century Sites and Experiences*, Chicago: The University of Chicago Press, 2007, pp. 60–96. On Combe's phrenological lectures see Stack, op. cit. (6), pp. 50–53.

85 George Combe, *Essays on Phrenology*, Edinburgh: Bell & Bradfute, 1819, p. 34.

86 Combe, op. cit. (85), pp. 38–39.

87 Combe, op. cit. (85), pp. 16–17.

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realistic than Stewart's utopia: 'they never believed, that, after the faculties are fully developed, an individual may, by exertions of the will, become great in a department of philosophy or science, for which he had previously no natural capacity'.[88] This was the vulgar's claim to competence: without a powerful metaphysical argument to the contrary, it should be regarded as a self-evident truth.[89] Of course, this had been Reid's argument back in 1764: philosophy without humanity was meaningless, even dangerous. Combe had adopted this idea just as he did, from Brown, the notion of an indivisible consciousness. Just as the differences between Reid and Stewart paled when compared with Brown, so too did the notion of a 'common sense school' strengthen when compared with Combe's phrenology. Doctrinal differences could be pushed aside, all philosophies ransacked to help the cause of phrenology.

If consciousness were the only arbiter of the outside world, Combe asked,

> Could we, by such reflection, have discovered either the existence or the functions of the senses? Impossible. We should, on such a supposition, have had the *impressions* received by means of the senses, divided into classes, according to the fancy of each metaphysician who studied them; but they would not have been divided and classed exactly as nature has divided them.[90]

This comparison was more than a rhetorical flair. Combe was advocating that the mind should be studied in precisely the same way as the senses. All that consciousness offered was a jumble of mental states from which no hierarchical order could be found; phrenology offered to find order within the mind just as the other sciences had found it in nature. But these were also inexplicable facts of nature, not for the phrenologist to understand: their 'only object is to ascertain the circumstances under which it manifests its Powers; and they do so, by observing Facts submitted by the Author of Nature, to the cognizance of our faculties'.[91] Stewart had posited something similar: laws of union between mind and matter, worlds which were distinct yet somehow connected. But for Combe, this was a matter of faith: no man could possibly know how the spirit communed with the flesh. This was ultimately a matter of trust, in God the creator, in Nature the provider, and in the wisdom of the people, albeit with phrenological guidance. In other words, Combe had erected another standard to which mental scientists should aspire: Reid favoured the axiomatic precision of mathematics; Stewart looked for the conceptual simplicity of physics; Brown looked to the complexity of chemistry. Combe claimed for his science the experimental fecundity of physiology, mysticism triumphing over materialism.

Indeed, Combe's patience with metaphysical speculation only wore thinner over time. In 1820 a correspondent to the *Edinburgh Magazine* attempted to reconcile phrenology with metaphysics, suggesting that all mental sciences ultimately relied on consciousness. Combe accepted that such a union could exist, but that metaphysics should be given no quarter: 'it is not to be concealed that metaphysical opinions must, in the first instance, yield to phrenological observations. In every case where metaphysical analysis is

88 Combe, op. cit. (85), p. 19.
89 Combe, op. cit. (85), p. 21.
90 Combe, op. cit. (85), p. 48, italics in original.
91 Combe, op. cit. (85), p. 2.

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inconsistent with the result of observation, *it must be erroneous*'.[92] However, other phrenologists were not so dismissive of the metaphysicians and at least tried to show them the error of their ways. Sir George Mackenzie wrote to his friend Stewart asking him to reconsider his earlier opposition to 'the craniologists'. Stewart's wife responded that her husband's opinions had been formed over fifteen years ago and that 'whatever they are, have been the result of too much reflection to be easily changed, and he must leave it to those who come after him to judge of their truth'.[93] Abdication, in this case, was just as helpful as acquiescence.

Moreover, since Brown had already died, it was even simpler to appropriate his memory for phrenology's cause. His biographer David Welsh noted how very few changes were necessary for Brown's theory to agree with Combe's: 'instead of the feelings and thoughts being merely the relations of the simple substance mind to its former states or external objects, they are the relations of the simple substance mind to certain portions of the encephalon'.[94] Welsh also explained away an article that Brown had written against phrenology in 1803 for the *Edinburgh Review* by noting that it was based on a work by Charles Villers, 'that superficial writer', who had outlined the system 'in such a shape that it is not to be wondered at that it should have been rejected'.[95] Brown could hardly be blamed for criticizing such a flimsy account, Welsh concluded, and if alive he would have welcomed the advances that phrenologists had made. This point may have had some effect on Combe. When in 1825 he published the second edition of his *Essays on Phrenology* – retitled *A System of Phrenology* – he paid 'a humble tribute' to Brown: 'His powers of analysis are unrivalled, and his eloquence is frequently splendid. His "Lectures" will remain a monument of what the human mind was capable of accomplishing, in investigating its own constitution, by an imperfect method'.[96] The backhanded compliment was intentional. However problematic Brown's theory may have been for other philosophers – and soon after Brown's death Stewart made his reservations clear[97] – this was to mark the end of their particular means of studying the mind. Indeed, such was Combe's confidence that phrenology had defeated the common sense philosophers that when he published his *System of Phrenology*

92 George Combe, 'Letter from the author of Essays on Phrenology', *Edinburgh Magazine and Literary Miscellany* (1820) 7, pp. 43–46, 46, italics in original. The original letter to which Combe responded was published as anon., 'An attempt to reconcile metaphysics and phrenology', *Edinburgh Magazine and Literary Miscellany* (1820) 6, pp. 395–405.

93 Stewart had suffered a stroke earlier in the year and had developed rheumatism in his writing hand. This correspondence was published after Stewart's death: anon., 'Correspondence between Sir G. S. Mackenzie, BART. and the late Dugald Stewart, Esq.' *Phrenological Journal and Miscellany* (1831–1832) 7, pp. 303–309.

94 David Welsh, *Account of the Life and Writings of Thomas Brown*, Edinburgh: W. & C. Tait, 1825, p. 521.

95 Welsh, op. cit. (94), p. 520; [Brown], op. cit. (80), pp. 147–160.

96 George Combe, *A System of Phrenology*, Edinburgh: John Anderson, 1825, p. 251.

97 Brown was pointedly left out of Stewart's *Dissertation*, a conjectural history which created a vision of the Scottish Enlightenment. In 1827 Stewart admitted that Brown was 'a person of rare and admirable talents', but that he was also 'too confident in his rapid judgements, too ready to conclude that there were no difficulties in his way when he was unable to see them; and not sufficiently aware, that . . . the success of our inquiries depends on that capacity of *patient thinking*'. Dugald Stewart, *Elements of the Philosophy of the Human Mind*, 3 vols., London: John Murray, 1792–1827, pp. 501–502.

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in 1825 he omitted these metaphysical queries entirely: 'as the opponents have left the field, these appeared no longer necessary and their place is supplied by what I trust will be found more interesting matter'.[98] Moreover, this stance had an effect on some who had previously admired Stewart's philosophy. In 1836 William Pulteney Alison, the Edinburgh professor of medicine, wrote to the phrenologist Patrick Neill and noted that 'the differences of mental constitution in different individuals, form a branch of study of the mind which has been more fully illustrated by some phrenologists than I believe it ever was before'.[99] The common sense school was to be subsumed into this new science.

A metaphysical attack: Francis Jeffrey

Yet for Francis Jeffrey, enough was enough. He had already published two criticisms of phrenology for his *Edinburgh Review*, but following Combe's complete dismissal of metaphysics he anonymously went into print himself: 'This is', he began, 'a long, sober, argumentative exposition of a very fantastical, and, in our humble judgment, most absurd hypothesis'. Combe's attempt to redress phrenology may have given it the garb of a mental science, but in Jeffrey's opinion this had merely so 'disguis[ed] its inherent absurdity as to afford a decent apology for those who are determined, or at least very willing, to believe'.[100] It was not so much that phrenology contained some misguided inferences or observations, but that the entire theory was based on simplifications and contradictions, and crowned with such bravado. According to Jeffrey, Combe had revealed his incompetence in four ways. To begin with, the phrenological organs could only exist if the term 'organ' were stripped of any former meaning. For instance, whereas the phrenological organs could be larger according to use and ability, this did not occur with the senses. Contrary to the fairy tale 'Red Riding Hood', in which the Big Bad Wolf tries to explain away his physiognomical differences from the grandmother he recently devoured, bigger eyes were not all the better to see you with. Moreover, the senses were not an independent unit; the eye did not 'see' without the brain and nerves, and none could exist at all without the sustenance provided by other parts of the body.[101] But more importantly for Jeffrey, Combe's suggestion that we are not aware of our sense organs was completely ridiculous. The mind is acutely and continually aware of them and of whence they originate. This was to him an edict of common sense. The comparison broke down completely: the mind was not just another organ.[102]

But the disdain that Combe held for any metaphysical question or for any carefully reasoned argument also led Jeffrey to question the phrenological organs themselves. In some cases, the phrenologists were downright naive: hope and cautiousness were two

98 Combe, op. cit. (96), pp. vi–vii.

99 [William Pulteney Alison], 'Comparative merits of the mental philosophy of the school of Reid and Stewart, and of the phrenologists', *Phrenological Journal and Miscellany* (1836–1837) 10, pp. 301–336, 313. As phrenologists were wont to do, Neill passed this correspondence on to Combe and had it published against Alison's wishes. Combe at least did the courtesy of assigning him the penname 'Academicus' and Neill 'Consiliarius'.

100 [Francis Jeffrey], 'A System of Phrenology', *Edinburgh Review* (1826) 44(88), pp. 253–318, 253.

101 [Jeffrey], op. cit. (100), pp. 256–257.

102 [Jeffrey], op. cit. (100), p. 260.

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directly opposed states of mind – one was simply the negation of the other – so it was ridiculous to think of these as two separate faculties.[103] There were graver issues as well. Phrenologists believed that they were the inheritors of mental philosophy, Jeffrey recounted, but greater than their forebears because their science did not 'rest on fantastical and arbitrary abstractions, but on a correct observation of the varieties of actual character'.[104] In truth they were not as systematic as they pictured themselves. There was no legitimate criterion for the award of a bump to one feature of the mind and not to another. Philoprogenitiveness (love of one's children), for example, was an original power in Combe's system, while philadelphia (brotherly love) was not. Without reflecting on these choices, any mental state could be dissected and turned into a basic power: 'A taste for French wines, or black tea – for puns or charades – for pugilism, genealogy, prosody, whizgigs, or fish sauces', indeed any of the most insignificant capacities were entitled to be stamped upon the head.[105] Despite their protests to the contrary, it seemed to Jeffrey that the phrenologists' list of mental powers was just as arbitrary as any that had come before.

Indeed, Jeffrey continued, not only did phrenologists have no way of assigning primacy to any of their organs; but also in most cases this was simply impossible. If bumps on the head were supposed to indicate fundamental principles of the mind, then these ought to be relatively simple powers: complexity was to flow from them but it was not to be present at the fount. Yet curiously, when Jeffrey examined Combe's list of powers he discovered that they were much more complex than any that either Reid or Stewart had described:

> love of Approbation presupposes an habitual communication of sentiments with other men, – Veneration, a custom of observing and comparing the powers of different beings, – Acquisitiveness, the general development of the idea of property – and Cautiousness, an experience of the occasions and consequences of many forms of danger.[106]

Mental powers were supposed to be the original building blocks of the mind, but compared with sight – an undisputed original power – these faculties were hardly independent. They not only required other mental processes to precede them, but it seemed that they could only be cultivated through contact with others. These were social values, Jeffrey concluded, not primitive, universal faculties.

Indeed, according to Jeffrey this emphasis on the biological and social worlds missed out completely what the phrenologists were purporting to explain. Analogies with the natural world – a tendency against which the common sense philosophers had warned – produced only simple minds. For instance, benevolence had been regarded as a universal affection which could be modified by experience, education, culture and taste: familial love was directed by feelings of responsibility, authority and gratitude, whereas fraternal love by patriotic sentiments, both very different sources whence their feelings towards the opposite sex arose. There was nothing, Jeffrey wrote, 'very oracular or profound in

103 [Jeffrey], op. cit. (100), pp. 283–284.
104 [Jeffrey], op. cit. (100), p. 268.
105 [Jeffrey], op. cit. (100), p. 269.
106 [Jeffrey], op. cit. (100), p. 263.

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this plain exposition of very familiar phenomena'. Indeed, it was the task of mental philosophy to record its natural history.[107] But Combe's phrenology did not recognize the richness of this psychological tapestry, the connections between these sentiments: benevolence ('a triangular bump on the upper part of the forehead') was independent of the love of children (at the back of the skull) and love of women ('just above the nape of the neck'); fidelity was not due to favourable events or a good character but based on another bump completely – constancy.[108] Memory, once thought to be a primitive power itself, was now scattered to a range of other specific types of memory: music was recalled by the organ of tune, words were remembered by the faculty of language, a memory for places reflected an enlarged organ of locality ('whatever that may mean').[109] Instead of a sophisticated model of the mind replete with universal sentiments and room for individual peculiarities, Combe had offered a hopelessly crude analysis: simplistic in places, inexplicable in others. In Jeffrey's view, Reid's efforts to protect mental philosophy from undue influence were completely justified, particularly from such unworthy upstarts as phrenology.

Combe's reply

The phrenologists' response to Jeffrey's attack was suitably irritated. Writing under the pseudonym 'Metaphysico-Phrenologist' in his own newspaper, William Ritchie derided Jeffrey's knowledge of metaphysics. Combe, he parried, was just the last of a long line of philosophers including Pythagoras and Epicharmus, Plato and Aristotle, Reid and Stewart, who had described mental powers. The reviewer was 'shallow in his philosophy, ignorant of his subject'.[110] Combe, addressing Jeffrey as the reviewer, echoed these sentiments: not only was he unsuited to pass judgement on phrenology – 'the sad contempt which you entertain for Phrenology has kept you sadly ignorant of its history and progress'[111] – but his metaphysics were riddled with error and inconsistency. Benevolence was indeed a complex feeling, Combe agreed, yet unless there was an object to be benevolent towards – such as children, authority, the opposite sex or one's country – then the term had no meaning at all.[112] Combe also found occasion to evoke God, especially when His divine goodness could explain why the phrenological organs seemed tailored for social situations:

> If the creator framed man for the obvious purpose of living on society, – of comparing himself with other beings, – of subsisting upon property, and of occasionally encountering dangers, what could be more reasonable than to bestow on him, in anticipation of these circumstances, the primitive faculties and organs to which you here object?[113]

107 [Jeffrey], op. cit. (100), p. 265.
108 [Jeffrey], op. cit. (100), pp. 265–266.
109 [Jeffrey], op. cit. (100), p. 267.
110 A Metaphysico-Phrenologist [William Ritchie], 'Phrenology – Edinburgh Review', *The Scotsman*, 25 October 1826, pp. 673–674.
111 George Combe, 'Letter from George Combe to Francis Jeffrey, Esq.', *Phrenological Journal and Miscellany* (1826–1827) 4, pp. 1–82 , 3.
112 Combe, op. cit. (111), p. 37.
113 Combe, op. cit. (111), p. 36.

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The trinity that Combe had invoked to protect phrenology from charges of materialism – God, Nature and the people – had now found another, more general, purpose. Instead of being simply a philosophical cudgel, it could be used to attack those who questioned his science as well.

But the majority of what Combe offered in response to Jeffrey's attack was not based on these metaphysical disputes. Instead Combe's reply – distributed first as a pamphlet around Edinburgh and later published in the *Phrenological Journal and Miscellany* – took a position that he believed would not only thwart Jeffrey but also permanently establish the credibility of phrenology. Whereas appeals to consciousness had once been the arbiter of metaphysical speculation on the mind, now the very legitimacy of such a term could be questioned under the 'well-established principle in physiology, that *different* functions are never performed by the *same organ*'.[114] Philosophical disquisitions on the relationship between hope and despair were all well and good, but in terms of the human body such analyses did not matter: 'Fear, when violently excited, is an overwhelming passion; Hope, when high upon the tiptoe, is a prodigiously strong positive emotion; and both give rise to the most extensive consequences in human affairs'.[115] Consciousness and sensory impressions may be omnipresent, but they are always supported by the body:

> if we cannot discover the existence even of such palpable organs as the auditory and olfactory nerves by means of simple consciousness or feeling, but must resort to observation to find them out, it is not wonderful that we should not be conscious of the internal organs of the mind, or that observation should not be requisite to determine them also.[116]

Jeffrey's objection that the mental organs were not similar to the sense organs was technically correct, Combe believed, so long as the nerves and brain that turned light into sight were ignored. The notion that vision might be processed by a range of different faculties – colour, form, size, etc. – might seem absurd to metaphysicians, 'but in point of principle it is not more so than the institution of one set of nerves to move the hand, and another set to feel with, after it is put in motion'.[117] If a faithful model of the mind was going to be constructed then these had to be taken into account. Considered as a system, the size of the mental organs or the nerves connecting them was an excellent way – *ceteris paribus* – of determining the strength of a particular disposition: the 'Red Riding Hood' standard was true after all. '"Grand Mamma Wolf" really turns out to be a sounder physiological authority than the "oracle" of the Edinburgh Review!'[118]

Moreover, Combe had learnt of monomania, a new cerebral disease found in patients by Pinel and Esquirol in France, by Rush in the United States and by John Haslam in England. Crucially, it affected only part of a person's mental faculties.[119] Just as the

114 Combe, op. cit. (111), p. 35, italics in original.
115 Combe, op. cit. (111), p. 46.
116 Combe, op. cit. (111), p. 15.
117 Combe, op. cit. (111), p. 41.
118 Combe, op. cit. (111), p. 54.
119 On Pinel and monomania see Jan Goldstein, *Console and Classify: The French Psychiatric Profession in the Nineteenth Century*, London: The University of Chicago Press, 1985.

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mental organs blossomed into maturity at their own rate, so too could they decay in their own time. Combe's brother Andrew, a physician in Edinburgh, had used this theory to repudiate the Edinburgh anatomist John Barclay, and George simply reprinted his entire argument:

> Pinel, Crichton, and many other very eminent and very philosophical men, have laboured to reconcile some species of insanity to the metaphysical systems, which they had severally adopted; but, with all their genius, and with all their unwearied industry, they have hitherto laboured in vain.[120]

Phrenology was not just a speculative theory, George continued, but a necessary principle without which the findings of such eminent physicians would be wasted or held as mere curiosities. Phrenology was the grand theory that united all these disparate medical and physiological discoveries into a single, biological system of mind.

Epilogue

Of course, the incongruity between the tone of Jeffrey's questions and the style of Combe's response was deliberate. Combe was not offering another set of principles to help direct research: phrenologists were simply not using metaphysical theories as a guide any more. It was at this point that the metaphysicians and the phrenologists parted ways. Not only did they disagree on every subject, but they no longer shared any common points of reference. The *Edinburgh Review*, however, did print a short acknowledgement of Combe's pamphlet and with it his 'entirely sophistical and evasive' reply: 'not one of our substantial objections is at all affected by his answers'.[121] Otherwise, the *Review* wanted to assure Combe that 'we have no wish or intention to reply, though every new step that is taken in the discussion impresses us with a deeper sense of the utter absurdity of the hypothesis'.[122] Both cared too little to argue on topics they knew their opponent would never agree upon, and so both kept to their own respective societies.

Yet while Combe may have felt victorious after his intellectual clash with Jeffrey, this victory was somewhat pyrrhic. The causes of this downfall were twofold. One of these, as John van Wyhe has detailed, was the split of the membership of the Edinburgh Phrenological Society which Combe had orchestrated. By November 1830, the evangelicals had deserted the society, and rumours of atheism descended upon Combe.[123] Otherwise, while Combe had picked out the inconsistencies of the common sense school in a very public and rancorous spectacle, the topics and language of philosophical debate in Scotland had already begun to spread and change during the late 1820s and early 1830s. As Thomas Dixon has described, during the nineteenth century Brown's mental science was press-ganged into the traditions of social positivists

120 Combe, op. cit. (111), p. 25.

121 [Francis Jeffrey], 'Note to the article on phrenology in no. 88', *Edinburgh Review* (1826) 45, pp. 248–253, 252.

122 Combe, op. cit. (111), p. 248.

123 Van Wyhe, op. cit. (5), pp. 96–126.

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James and John Stuart Mill, and the psychologists Alexander Bain, Herbert Spencer and William James.[124] According to Nicholas Phillipson, 'the pursuit of [the science of man] passed out of the salons and universities of Scotland to Prussia and to the lusher pastures of Hegel's Heidelberg and Berlin. For it was in these universities that the future of the Science of man was to lie'.[125] Indeed, for Emanuele Mortera and Jonathan Friday, aligning Scottish philosophy to German philosophy had already begun with Stewart: the 'fundamental laws of human belief' he examined in the second, 1814, volume of his *Elements* sound far too Kantian to be coincidental.[126]

The most prominent of these revisionists was Sir William Hamilton, Edinburgh professor of universal history, who had already had a very public and acrimonious dispute with Combe the year before he began his philosophical project.[127] According to Hamilton, common sense philosophy did not need to be abandoned, merely tinkered with. Reid's philosophy need only be expressed in terms provided by the 'new German school': Kant, Fichte, Schelling and Hegel. Where Reid had stated that it was from consciousness that knowledge of matter and mind flowed, Hamilton explained that '[s]ubject and object, mind and matter, are known only in correlation and contrast – and in the same common act: while knowledge, as at once a synthesis and an antithesis of both, may be indifferently defined an antithetic synthesis, or a synthetic antithesis of its terms'.[128] Hamilton's 'philosophy of the unconditioned' was not an account of the furniture of the mind and its arrangements: indeed, this was not considered philosophic, merely 'faculty psychology'. Against Brown, Hamilton sought to analyse perception and the certainty that can be derived from it. As such, Hamilton's philosophy was a return to earlier traditions of the Scottish Enlightenment, even if the language he used was not.

Indeed, another went further to transform Scottish philosophy – James Frederick Ferrier, a philosopher largely unknown during his own lifetime who inspired, however, many late nineteenth- and early twentieth-century thinkers.[129] Like Reid, Stewart and Brown, Ferrier wished to lay down principles by which the mind could be studied.

124 Dixon, op. cit. (68), pp. 4–6.

125 Nicholas Phillipson, 'The pursuit of virtue in Scottish University Education: Dugald Stewart and Scottish moral philosophy in the Enlightenment', in Phillipson (ed.), *Universities, Society, and the Future*, Edinburgh: Edinburgh University Press, 1983, pp. 82–101, 100.

126 Emanuele Mortera, 'Stewart, Kant, and the reworking of common sense', *History of European Ideas* (2012) 38(1), pp. 122–142; Jonathan Friday, 'Dugald Stewart on Reid, Kant and the refutation of Idealism', *British Journal for the History of Philosophy* (2005) 13, pp. 263–286.

127 For Hamilton, phrenology could be refuted using its own shaky foundations without the need for metaphysical discussion. See Van Wyhe, op. cit. (5), pp. 85–92.

128 [William Hamilton], 'Philosophy of perception. Reid and Brown', *Edinburgh Review* (1830) 52(103), pp. 158–207, 165. On Hamilton's philosophy and its relation to Kant see Ralph Jessop, 'The logic of Sir William Hamilton: tunnelling through sand to place the keystone in the aristotelic arch', in Dov M. Gabbay and John Woods (eds.), *British Logic in the Nineteenth Century*, Amsterdam: Elsevier, 2008, pp. 93–163; David Attis, 'Hamilton, William (1788–1856)', in W.J. Mander and Alan Sell (eds.), *Dictionary of Nineteenth-Century British Philosophers*, 2 vols., Bristol: Thoemmes Press, 2002, vol. 1, pp. 483–489; John Veitch, *Memoir of Sir William Hamilton, Bart.*, Edinburgh: William Blackwood & Sons, 1869.

129 On Ferrier and his philosophy see Jennifer Keefe, 'Ferrier, common sense and consciousness', *Journal of Scottish Philosophy* (2007) 5(2), pp. 169–185; Bernard Mayo, 'The moral and physical order: a reappraisal of Jame Frederick Ferrier', *Journal of Scottish Philosophy* (2007) 5(2), pp. 159–167.

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However, neither were these, for Ferrier, the unjustifiable foundations of mind, nor were his methods scientific. Indeed, writing in 1838 he denied the value of any 'science of mind' since any such determinism robbed humanity of its freedom: 'Man is a "living soul;" but science has been trained among the dead'.[130] Metaphysicians had committed a gross error by confounding the objects of consciousness with consciousness itself: the 'mind' had been conflated with the 'I', mere states of mind with the conscientious, morally responsible individual. 'Attention' was the absorption of the self into the studying object, 'instinct' was merely unconscious reason. Moreover, Ferrier warned, the metaphysicians' error was all the more dangerous since it 'must end in obliterating every thing like science, morality, and even man himself, as far as his true and peculiar character is concerned – substituting in place of him a machine, an automaton, of which the law of causality composes and regulates the puppet-strings'.[131] The analysis of the human mind, Ferrier concluded, was not the science of human nature. What distinguished man from beasts was liberty and goodness, neither of which was universal. Moral philosophy was not based on mental philosophy but on the history of consciousness, of the liberty gained by defying the senses and the passions. For Ferrier, in what conditions consciousness arose – from the Fall of Man to the present – was a subject for philosophical analysis. In other words, not only did common sense have another new meaning, but it also removed the foundations of the Scottish Enlightenment from underneath it.

This flurry of intellectual development – which, as Thomas De Quincey noted, saw 'a German philosophy refracted through a Scottish medium'[132] – stands in stark contrast to the fate of George Combe's social and moral philosophy. When in 1836 Combe applied for the Edinburgh chair of moral philosophy – making one last failed attempt to gain the trappings of the establishment's respect – he was defeated by William Hamilton. Indeed, in contrast with the passionate debates he had stirred in the 1820s, by the middle of the century the most common response was polite bewilderment. When in 1840 Combe published his *Moral Philosophy*, the *Edinburgh Review* took a more courteous view than it had previously done over a decade ago: 'we have not the slightest intention of treating him disrespectfully as a man, or member of society'.[133] Judged as a work of moral philosophy, however, there was a simple reason why phrenology could be safely ignored: 'we entirely deny that a knowledge of our *mental* constitution in particular, is in any considerable degree necessary either for the discovery of human duty, or the furtherance of human welfare'.[134] From the 1840s, phrenology may have no longer

130 [James Frederick Ferrier], 'An introduction to the philosophy of consciousness', *Blackwood's Edinburgh Magazine* (1838–1839) 43(268), pp. 187–201, 192; 43(270), pp. 437–452; 43(272), pp. 784–791; 44(274), pp. 234–244; 44(276), pp. 539–552; 45(280), pp. 201–211; 45(281), pp. 419–430.

131 [Ferrier], op. cit. (130), 43 (270), p. 440.

132 As quoted in G.E. Davie, *The Democratic Intellect: Scotland and Her Universities in the Nineteenth Century*, Edinburgh: Edinburgh University Press, 1982, p. 282.

133 [Alexander Smith], 'Moral philosophy', *Edinburgh Review* (1842) 74(150), pp. 376–414, 376. See also George Combe, *Moral Philosophy: or, The Duties of Man considered in His Individual, Social or Domestic Capacities*, Edinburgh: Maclachlan, Stewart & Co, 1840.

134 [Smith], op. cit. (133), p. 382, italics in original.

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stirred fierce disapproval, but this was not because it had gained respectability. It was just horribly old-fashioned.

As this article has tried to show, the connections between George Combe's phrenology and his metaphysical predecessors was complicated and, for a discipline which itself came to few agreements, ever-changing. Emulating the mental philosophies may have let Combe raise a plausible alternative to them, but the same resemblances that allowed him to construct and promulgate his philosophy were also those which gave the most powerful grounds for dismissal. Combe's tendency to ignore the problems that were central to metaphysics made him appear naive: his *ipse dixit*, particularly on the connection of mind and matter, seemed a step too far. Yet as a result of these confrontations, both mental philosophy and phrenology were dramatically altered. As we have seen, mental philosophers were careful to regard the mind as distinct from the natural world, but were amenable to the methods of the natural sciences. Following Jeffrey's match with Combe, these ties with the natural world were broken, the mind itself set aside in order to study the origins of knowledge and the self. While still remaining resolutely Scottish, Hamilton and Ferrier transformed common sense into a form of German Idealism. Kant's philosophy replaced Reid's as the answer to Hume, and common sense eventually sank beneath historical purview. Conversely, Combe based his phrenology on physiology, a discipline which had already rejected him, and which, because of Combe's dealings, now lost what little place it had gained from Stewart within the philosophy of mind. In short, what Combe achieved was to inadvertently clear the middle ground between the natural and the social sciences.

The extent to which Combe in particular – or phrenology in general – convinced the intellectual community that the brain was the organ of the mind was minimal. Indeed, his efforts had the opposite effect, pushing philosophical studies of the mind away from the natural world completely. Combe did not initiate the notion of 'brainhood' which has continued into the present day. This is not the place to construct a history of the 'cerebral subject', but perhaps it is a first step towards a more complicated and interesting story.

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