Guest editorial essay

Reid on perception

“All that we know of nature, or of existences, may be compared to a tree, which hath its root, trunk, and branches. In this tree of knowledge, perception is the root, common understanding is the trunk, and the sciences are the branches.” (Reid 1764, page 424)

This year many meetings will celebrate the tercentenary of the birth of Thomas Reid (figure 1). One, organised by the British Society for the History of Philosophy, was suitably divided between Aberdeen and Glasgow. Reid was born in Strachan (in the north-east of Scotland) on 26 April 1710 and entered the ministry after studying at Marischal College, Aberdeen. In 1752 he became professor of philosophy at King’s College, Aberdeen, and he was appointed successor to Adam Smith as professor of moral philosophy at Glasgow University in 1764—the same year his Inquiry into the Human Mind was published. He remained staunchly religious throughout his life and his advocacy of science often sat uneasily with his beliefs. Kantor summarised it well: “Almost every page of Reid’s writings testifies to his intellectual dualism. On the one hand, he displays his knowledge and approval of the natural scientists, while on the other, he vigorously parades his religious convictions” (1969, page 145).

Mental processes have been deliberated upon in philosophy for many centuries and numerous insights, particularly regarding the senses, have been derived from observation
of natural phenomena. When observation was wedded with experiment more systematic efforts were made to examine mental phenomena. The modern phase of psychology is considered to have been formulated in the eighteenth century: “A new ‘science’ came into being—the ‘science’ of the mental or psychic life. This new ‘science,’ whose organization is to be credited to the German Christian Wolff (1679–1754) and to the Scotsman Thomas Reid (1710–1796), consisted primarily of a systematization of the materials which came to be the contents of psychological treatises” (Kantor 1969, page 134). In the early 1730s, Wolff wrote two works which included psychology in their titles, one on empirical and the other on rational psychology. The terms used by Reid and his colleagues were mental and moral philosophy or the philosophy of the human mind.

The quotation at the head of this editorial indicates Reid’s eloquent appraisal of the importance of the senses and perception to human understanding. He reacted to philosophical scepticism and to idealism by arguing that the evidence of external reality is provided by the common activities of the senses and is supported by common sense intuition. McCosh (1875) has surveyed what he called Scottish philosophy, and he marked its identity: it “possesses a unity, not only in the circumstance that its expounders have been Scotchmen, but also and more specially in its method, its doctrines, and its spirit” (page 6). The Scottish philosophy involved a grounding in observation, but what was observed was consciousness. Indeed, the observational link between physiology and philosophy was artfully articulated by Reid: “All that we know of the body, is owing to anatomical dissection and observation, and it must be by an anatomy of the mind that we can discover its powers and principles” (1764, page 5). One of those mental anatomists was David Hume (1711–1776; figure 2). He stands in the empiricist line from John Locke through George Berkeley, and he rejected the rationalist notions of cause and effect in favour of scepticism. Hume proposed that while events occur in sequence the perception of causality is a consequence of repeated mental associations

Figure 2. [In colour online, see http://dx.doi.org/10.1068/p3904ed] Towering Hume by Nicholas Wade. The portrait of David Hume is embedded in a photograph of his eponymous Tower in George Square, Edinburgh University.
between contiguous impressions, and the true nature of causality could never be known—
hence he is often referred to as the sceptical philosopher. While he accepted that all
experience derives from the senses, he did not make appeal to a higher perceiver, as
Berkeley had; rather he considered that external reality is unknowable. Hume was born
and died in Edinburgh, though he spent much of his life in England and France.

Hume's science was modelled more closely on the inductive approach of Francis
Bacon than on the deductive method of Isaac Newton, and Hume did much to foster a
realisation that all areas of human endeavour require an understanding of human
nature. He placed great emphasis on the association of ideas and, despite its origins in
Greek philosophy, he considered it to be his most important contribution to establish-
ing a science of the mind. It has had a profound impact on psychology, particularly
on behaviourism. Hume referred to it initially as the connection of ideas, but he later
used the term association of ideas, as had Locke earlier. He stated that the three
principles of association are resemblance, contiguity in time or place, and cause and
effect. Contiguity referred to the likelihood of remembering experiences that occurred
frequently together; the sight of a glass of beer can evoke its bitter taste. Association by
cause and effect was considered to be the most important; events that occur in sequence,
and may appear to be causally related, are recalled together. The stone thrown in the
water is linked with the ripples it sets in train.

Reid's descriptive psychology could be studied by reflection on mental activity, by
an analysis of the use of language, and by observations of behaviour. Reid provided a
bridge between the extreme rationalists and empiricists. His belief in the power of
reason was tempered by a desire to accumulate evidence empirically. He conducted
experiments on space perception to show how people with squints gradually overcome
double vision: “We see, therefore, that one who squints, and originally saw objects
double by reason of that squat, may acquire such habits, that when he looks at an
object with his best eye, he shall have no distinct vision with the other at all” (Reid
1764, page 356). This was supported by evidence from examinations of the visual acuity
in each eye of twenty such individuals.

Reid is considered to be the founder of the Scottish common sense school of philosophy
and he was followed by Dugald Stewart (1753–1828), Thomas Brown (1778–1820), and
William Hamilton (1788–1856), all of whom taught at Edinburgh University (see figure 3).

**Figure 3.** Common sense philosophers by Nicholas Wade. Left, Monument to philosophy. The
Dugald Stewart monument on Calton Hill in Edinburgh was erected in honour of the professor
of philosophy at its University; it was built in 1831 and occupies a commanding view of the city.
Centre, Brownian emotion. The portrait of Thomas Brown is derived from a frontispiece engraving
in Welsh (1825), together with the title page of his book on the Philosophy of the Human Mind
(Brown 1820). Right, Hamilton’s Works. William Hamilton presented many of his ideas in support
of common sense philosophy in lengthy and erudite footnotes to Reid’s (1846) works.
In formalising this ‘common sense school’ they were opposed to associationism, particularly when it was couched in physiological language. Reid’s school of thought provided much for his followers to pursue. Brett’s (1962) assessment of the common sense philosophers who followed was only a trifle unjust: “Dugald Stewart corrects Reid, Brown corrects Stewart, and Hamilton corrects everybody” (page 444).

Reid made an explicit separation between the processes of sensation and perception that is now embedded in the language of psychology: “Although there is no reasoning in perception, yet there are certain means and instruments, which, by the appointment of nature, must intervene between the object and our perception of it; and by these our perceptions are limited and regulated. First, If the object is not in contact with the organ of sense, there must be some medium which passes between them. Thus, in vision, the rays of light; in hearing, the vibrations of elastic air; in smelling, the effluvia of the body smelled, must pass from the object to the organ; otherwise we have no perception. Secondly, There must be some action or impression upon the organ of sense, either by the immediate application of the object, or by the medium that goes between them. Thirdly, The nerves which go from the brain to the organ, must receive some impression by means of that which was made upon the organ; and probably, by means of the nerves, some impression must be made upon the brain. Fourthly, The impression made upon the organ, nerves, and brain, is followed by a sensation. And, last of all, This sensation is followed by the perception of the object” (Reid 1764, pages 424 – 425). Sensations referred to the immediate actions of the senses, whereas perceptions are always associated with objects that continue to exist whether or not they are perceived. Perceptions, like some faculties, could be innate or acquired: “Of the various powers and faculties we possess, there are some which nature seems both to have planted and reared, so as to have left nothing to human industry ... There are other powers, of which nature hath only planted the seeds in our minds, but hath left the rearing of them to human culture” (1764, page 7).

Although Reid questioned the five-fold classification of the senses, he retained this structure for his Inquiry, and one sense was accorded most space. His final chapter ‘Of seeing’ spanned 333 pages as compared to 130 for all the other senses. This reflected his regard for its importance: “Of the faculties called the five senses, sight is without doubt the noblest” (1764, page 168). The faculty of seeing was also the sense most closely related to thought and it fused Reid’s vision with his religion: “The evidence of reason is called seeing, not feeling, smelling, or tasting. Yea we are wont to express the manner of the divine knowledge by seeing, as that kind of knowledge which is most perfect in us” (page 172).

Nicholas J Wade
School of Psychology, University of Dundee, Dundee DD1 4HN, Scotland; e-mail: n.j.wade@dundee.ac.uk

References
Brett G S, 1962 Brett’s History of Psychology Ed. R S Peters (London: Allen and Unwin)
Brown T, 1820 Sketch of a System of the Philosophy of the Human Mind (Edinburgh: Bell, Bradfute, Manners and Miller, and Waugh and Innes)
Hamilton W, 1846 The Works of Thomas Reid, D.D. (Edinburgh: MacLachlan, Stewart)
Kantor J R, 1969 The Scientific Evolution of Psychology volume 2 (Chicago, IL: Principia Press)
McCosh J, 1875 The Scottish Philosophy. Biographical, Expository, Critical from Hutcheson to Hamilton (London: Macmillan)
Reid T, 1764 An Inquiry into the Human Mind, on the Principles of Common Sense (Edinburgh: Kincaid and Bell)
Reid T, 1810 An Inquiry into the Human Mind, on the Principles of Common Sense 6th edition (Edinburgh: Bell and Bradfute, and Creech)
Reid T, 1821 An Inquiry into the Human Mind, on the Principles of Common Sense (London: Bumpus, Sharpe, Samms, Warren, and Reilly)
Welsh D, 1825 Account of the Life and Writings of Thomas Brown, M.D. (Edinburgh: Tait)

© 2010 a Pion publication